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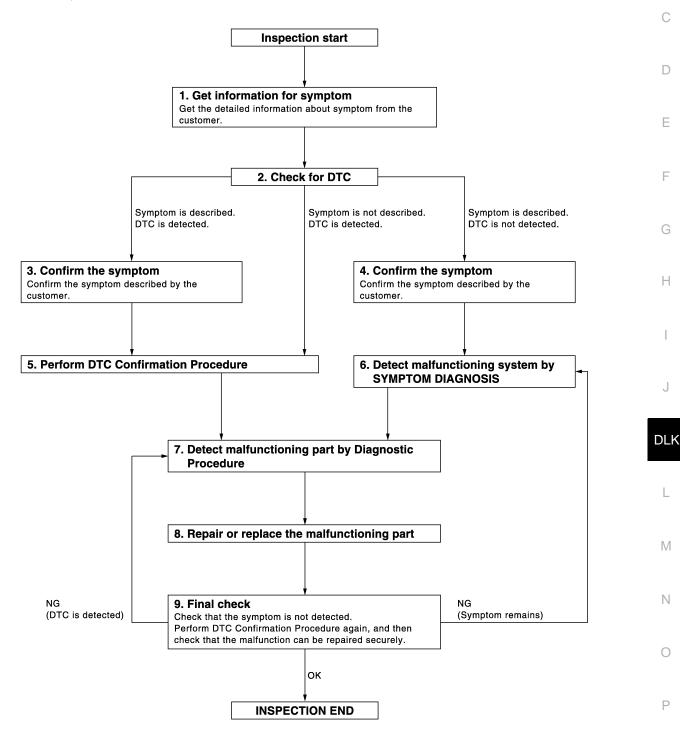
Α

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

OVERALL SEQUENCE



JMKIA3620GB

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK FOR DTC

- Check BCM for DTC.
- 2. Perform the following procedure if DTC is displayed.
- Record DTC and freeze frame data (print them out with CONSULT-III).
- Erase DTC
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
- 3. Check related service bulletins for information.

Are any symptoms described or any DTC detected?

Symptom is described, DTC is displayed>>GO TO 3.

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

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

3.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

Connect CONSULT-III to the vehicle in the "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 the "DATA MONITOR" mode and check real time diagnosis results. Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again. At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to DLK-136, "DTC Inspection Priority Chart" (BCM) determine trouble diagnosis order.

NOTE:

Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check. If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

YES >> GO TO 7.

NO >> Refer to GI-34, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

>> GO TO 7.

7. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

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

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check voltage of related BCM terminals using CONSULT-III.

8.repair or replace the malfunctioning part

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

>> GO TO 9.

9. FINAL CHECK

When DTC is detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction is completely repaired.

When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 7.

YES (Symptom remains)>>GO TO 6.

>> INSPECTION END NO

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

INFOID:0000000005048021

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

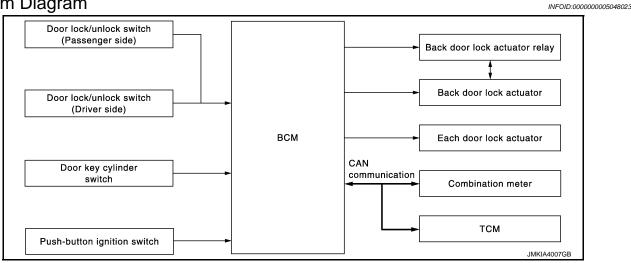
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement

Refer to CONSULT-III operation manual for the NATS-IVIS/NVIS.

SYSTEM DESCRIPTION

POWER DOOR LOCK SYSTEM

System Diagram



System Description

INFOID:0000000005048024

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

- The door lock and unlock switch (driver side) is build into power window main switch.
- The door lock and unlock switch (passenger side) is build into front power window switch (passenger side).
- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all doors and fuel lid lock actuator are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all doors and fuel lid lock actuator are unlocked.

Door Key Cylinder Switch

- With the door key inserted in the door key cylinder on driver side, turning it to "LOCK", locks door lock actuator of all doors and fuel lid lock actuator.
- With the door key inserted in the door key cylinder on driver side, turning it to "UNLOCK" once unlocks the
 driver side door, turning it to "UNLOCK" again within 60 seconds after the first unlock operation unlocks all of
 the other doors actuator and fuel lid lock actuator. (SELECTIVE UNLOCK OPERATION)

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-PORT". Refer to <u>DLK-38</u>, "DOOR LOCK: <u>CONSULT-III Function</u> (<u>BCM - DOOR LOCK</u>)".

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock*1

All doors are locked when the vehicle speed reaches 24 km/h (15 MPH) or more.

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

P Range Interlock Door Lock*2

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

Setting change of Automatic Door Lock/Unlock Function

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

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POWER DOOR LOCK SYSTEM

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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

(P) With CONSULT-III

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

Without CONSULT- III

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

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

 $OFF \rightarrow ON$: 2 blinks $ON \rightarrow OFF$: 1 blink

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock*1

All doors are unlocked when the power supply position is changed from ON to OFF.

BCM outputs the unlock signal to all door lock actuators when it detects that the power supply position is changed from ignition switch ON to OFF.

P Range Interlock Door Unlock*2

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

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

Setting change of Automatic Door Lock/Unlock Function

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

NOTE:

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

(P) With CONSULT- III

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

⋈ Without CONSULT- III

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

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

 $OFF \rightarrow ON$: 2 blinks $ON \rightarrow OFF$: 1 blink

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

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

[WITH INTELLIGENT KEY SYSTEM]

Component Parts Location

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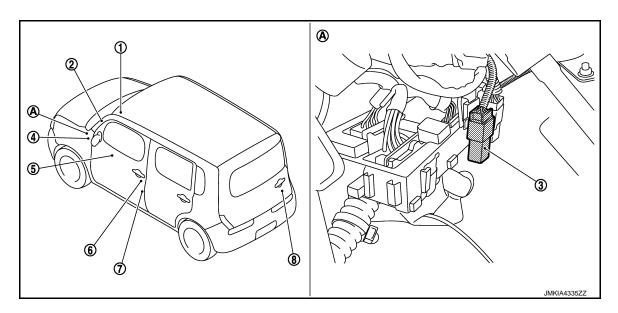
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- 1. Push-button ignition switch (push switch) M101
- 4. BCM M68, M69, M70, M71
 Refer to BCS-9, "Component Parts
 Location"
- 7. Front door switch (driver side) B34
- A. Behind the instrument lower panel LH (Left side)
- 2. Combination meter M34
- Power window main switch (door lock and unlock switch) D5, D6
- 8. Back door lock assembly D106
- 3. Back door lock actuator relay M90
 - Front door lock assembly (driver side) D9

Component Description

INFOID:0000000005048026

Item	Function
BCM	Controls the door lock function
Door lock and unlock switch	Inputs lock or unlock signal to BCM
Door lock actuator	Inputs lock/unlock signal from BCM and locks/unlocks each door
Door key cylinder switch	Built-in driver side door lock assembly Inputs lock or unlock signal to power window main switch Power window main switch transmits door lock/unlock signal to BCM
Combination meter	Transmits vehicle speed signal to CAN communication line
TCM*	Transmits shift position signal to BCM via CAN communication line
Back door lock actuator relay	Controls the back door lock/unlock operation
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM

^{*:} With CVT models

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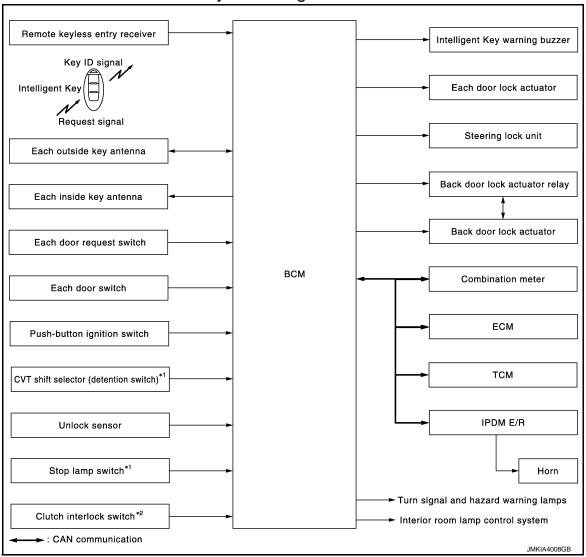
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INTELLIGENT KEY SYSTEM INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM: System Diagram

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- *1: With CVT models
- *2: With M/T models

INTELLIGENT KEY SYSTEM : System Description

INFOID:0000000005048028

 The Intelligent Key system is a system that makes it possible to lock and unlock the door locks (door lock/ unlock function) by carrying the Intelligent Key, which operates based on the results of electronic ID verification using two-way communication between the Intelligent Key and the vehicle (BCM).
 CAUTION:

The driver should always carry the Intelligent Key

- The settings for each function can be changed with CONSULT-III.
- If an Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It is possible to perform a diagnosis on the system and register an Intelligent Key with CONSULT-III.

Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch	DLK-20
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key	DLK-25

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Function	Description	Refer
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle	<u>DLK-30</u>
Warning	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver	DLK-32
Engine start	The engine can be turned on while carrying the Intelligent Key	SEC-10
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state	INL-5
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds	SEC-20

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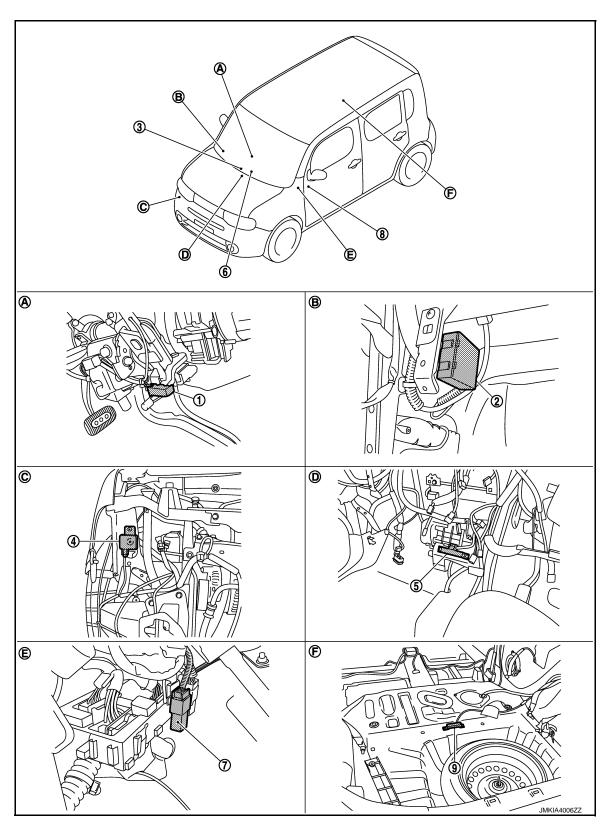
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INTELLIGENT KEY SYSTEM: Component Parts Location

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- CVT shift selector (detention switch)* M58
- 4. Intelligent Key warning buzzer E25
- 2. Remote keyless entry receiver M52 3.
- Push-button ignition switch M101
- 5. Inside key antenna (instrument cen- 6. ter) M105
- Combination meter M34

Behind the instrument lower panel

< SYSTEM DESCRIPTION >

Behind the audio unit

[WITH INTELLIGENT KEY SYSTEM]

- 7. Back door lock actuator relay M90
 8. BCM M68, M69, M70, M71
 9. Inside key antenna (luggage room)
 B82

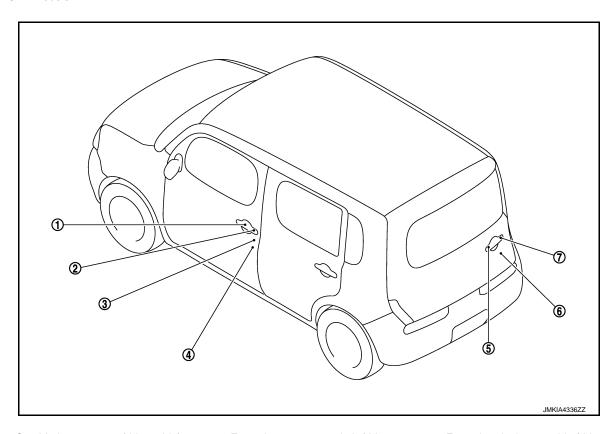
 A. Integrated in CVT shift selector
 B. View with glove box assembly removed
- LH (Left side)

E.

F. View with rear seat removed

*: With CVT models

D.



- Outside key antenna (driver side) D12
- 4. Front door switch (driver side) B34
- 7. Back door request switch D107
- Front door request switch (driver side) D11
- . Outside antenna (back door) D108
- Front door lock assembly (driver side) D9
- Back door lock assembly D106

INTELLIGENT KEY SYSTEM: Component Description

INFOID:0000000005048030

Item	Function
BCM	Controls the Intelligent Key system
IPDM E/R	Sounds horn via CAN communication between BCM
Door lock actuator	Inputs lock/unlock signal from BCM and locks/unlocks each door
Door switch	Inputs door open/close condition to BCM
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM
Door request switch	Inputs lock/unlock operation to BCM
Intelligent Key	Transmits button operation to remote keyless entry receiver
Outside key antenna	Detects if Intelligent Key is outside the vehicle
Inside key antenna	Detects if Intelligent Key is inside the vehicle
Unlock sensor	Detects door lock condition of driver door
CVT shift selector (detention switch)*	Detects the P range position of CVT selector lever

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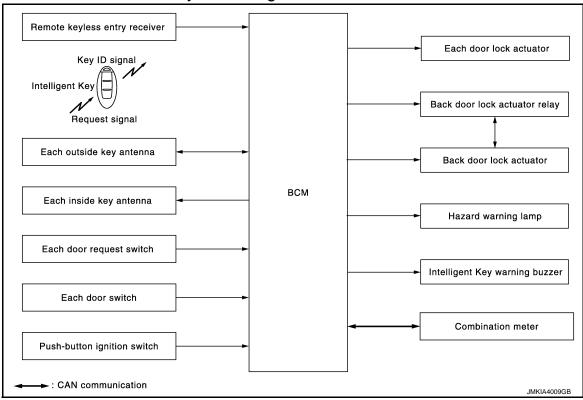
Item	Function
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound
Hazard warning lamp	Warns the user of the door lock/unlock condition and inappropriate operations with the lamps blink
Back door lock actuator relay	Controls the back door lock/unlock operation
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM

^{*:} With CVT models

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION: System Diagram

INFOID:0000000005048031



DOOR LOCK FUNCTION: System Description

INFOID:0000000005048032

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

OPERATION DESCRIPTION

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

OPERATION CONDITION

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

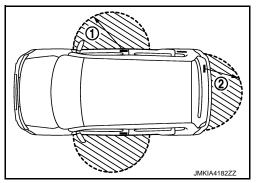
[WITH INTELLIGENT KEY SYSTEM]

Each request switch operation	Operation condition
Lock	 All doors are closed P position warning is not activated Panic alarm is not activated Intelligent Key is outside the vehicle Intelligent Key is within outside key antenna detection area
Unlock	 Panic alarm is not activated Intelligent Key is outside the vehicle Intelligent Key is within outside key antenna detection area *

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



SELECTIVE UNLOCK FUNCTION

Lock Operation

When an LOCK signal is sent from door request switch, all doors will be locked.

Unlock Operation

- When an UNLOCK signal from driver side door request switch is transmitted, driver side door unlocks. When another UNLOCK signal is transmitted within 60 seconds, passenger side door, rear doors and back door unlocks.
- When an UNLOCK signal from passenger side door request switch is transmitted, passenger side door unlocks. When another UNLOCK signal is transmitted within 60 seconds, driver side door, rear doors and back door unlocks.
- When an UNLOCK signal from back door request switch is transmitted, back door unlocks. When another UNLOCK signal is transmitted within 60 seconds, driver side door, passenger side door and rear doors unlocks.

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-PORT". Refer to DLK-38, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

HAZARD AND BUZZER REMINDER FUNCTION

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

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

Operating Function of Hazard and Buzzer Reminder

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

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

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

How to Change Hazard and Buzzer Reminder Mode

Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

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< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

AUTO DOOR LOCK FUNCTION

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

Operating condition	Door switch is ON (door is open)Door is lockedPush switch is pressed

Auto door lock mode can be changed by the "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-40. "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

LIST OF OPERATION RELATED PARTS

Parts marked with \times are the parts related to operation.

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

DOOR LOCK FUNCTION: Component Parts Location

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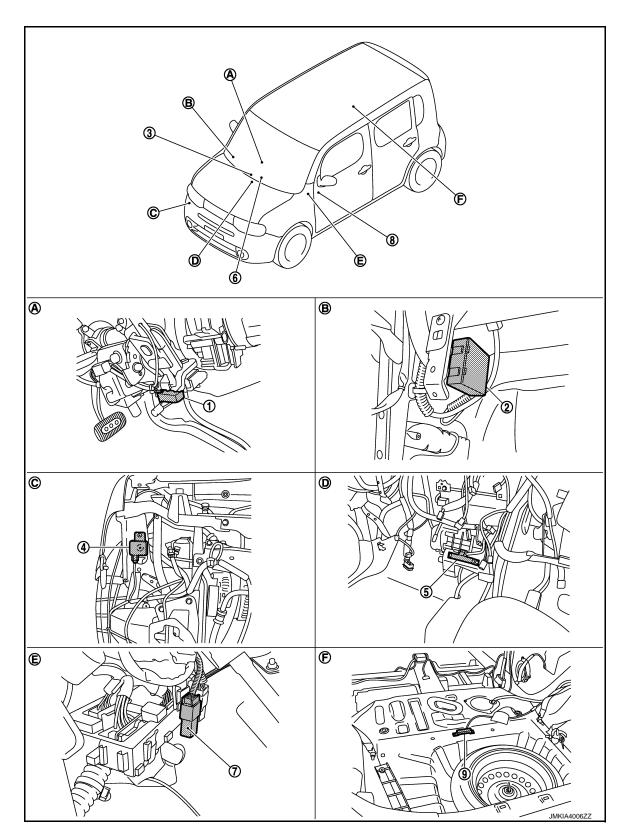
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- CVT shift selector (detention switch)* M58
- 4. Intelligent Key warning buzzer E25
- 2. Remote keyless entry receiver M52 3.
- Push-button ignition switch M101
- 5. Inside key antenna (instrument cen- 6. ter) M105
- Combination meter M34

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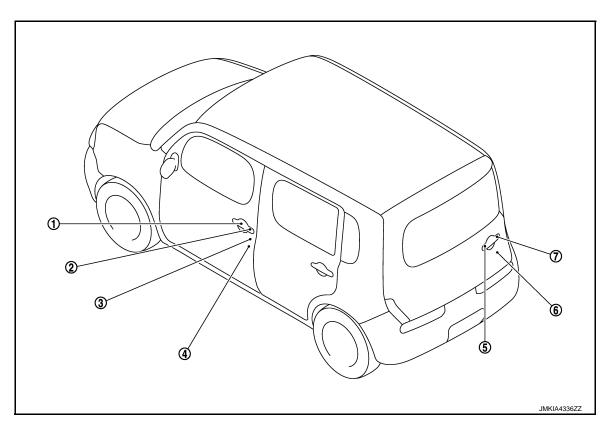
[WITH INTELLIGENT KEY SYSTEM]

- 7. Back door lock actuator relay M90 8. BCM
- BCM M68, M69, M70, M71 Refer to BCS-82, "Removal and Installation"
- Inside key antenna (luggage room) B82

- A. Integrated in CVT shift selector
- B. View with glove box assembly removed
- C. View with front bumper removed

- D. Behind the audio unit
- E. Behind the instrument lower panel LH (Left side)
- F. View with rear seat removed

*: With CVT models



- Outside key antenna (driver side) D12
- 4. Front door switch (driver side) B347. Back door request switch D107
- Front door request switch (driver side) D11
- 5. Outside antenna (back door) D108
- Front door lock assembly (driver side) D9
- 6. Back door lock assembly D106

DOOR LOCK FUNCTION: Component Description

INFOID:0000000005048034

Item	Function
BCM	Controls the door lock function
Door lock actuator	Inputs lock/unlock signal from BCM and locks/unlocks each door
Door switch	Inputs door open/close condition to BCM
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM
Door request switch	Inputs lock/unlock operation to BCM
Intelligent Key	Transmits button operation to remote keyless entry receiver
Outside key antenna	Detects if Intelligent Key is outside the vehicle
Inside key antenna	Detects if Intelligent Key is inside the vehicle
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Item	Function					
Back door lock actuator relay	Controls the back door lock/unlock operation					
Hazard warning lamp	Warns the user of the door lock/unlock condition and in appropriate operations with the lamps blink					

REMOTE KEYLESS ENTRY FUNCTION

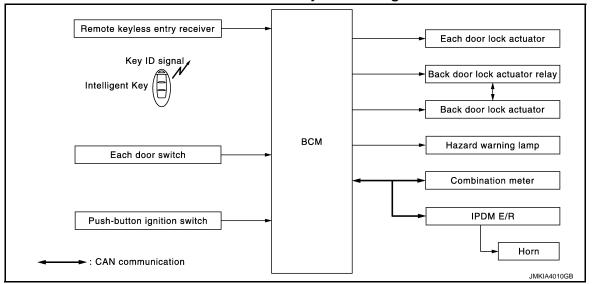
REMOTE KEYLESS ENTRY FUNCTION: System Diagram

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REMOTE KEYLESS ENTRY FUNCTION: System Description

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

OPERATION

Remote keyless entry system controls operation of the following items.

- Door lock/unlock
- Selective unlock
- Hazard and horn reminder
- Auto door lock

OPERATION AREA

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

DOOR LOCK/UNLOCK FUNCTION

- When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal transmitted from Intelligent Key to BCM via remote keyless entry receiver.
- When BCM receives the door lock/unlock signal, it operates all door lock actuators and the hazard lamp (lock: 2 times, unlock: 1 time) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 2 times) as a reminder

OPERATION CONDITION

Remote controller operation	Operation condition					
Lock	Panic alarm is not activatedP position warning is not activated					
Unlock	Panic alarm is not activated					

SELECTIVE UNLOCK FUNCTION

- When an LOCK signal is transmitted from Intelligent Key, all doors are locked.
- When an UNLOCK signal is transmitted from Intelligent Key once, driver side door is unlocked.

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< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

 Then, if an UNLOCK signal is transmitted from Intelligent Key again within 60 seconds, all other doors are unlocked.

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-PORT". Refer to <u>DLK-38</u>, "DOOR LOCK: <u>CONSULT-III Function (BCM - DOOR LOCK)"</u>.

HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by Intelligent Key, BCM blinks hazard warning lamps as a reminder and transmits horn chirp signal to IPDM E/R. IPDM E/R sounds horn as a reminder.

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

Operating Function of Hazard and Horn Reminder

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

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

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

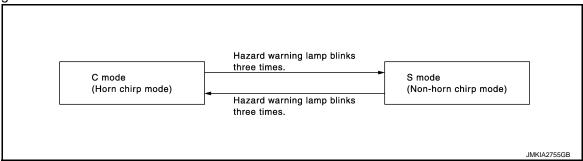
How to change hazard and horn reminder mode

(III) With CONSULT-III

Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

Without CONSULT-III

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



AUTO DOOR LOCK FUNCTION

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

Operating condition	Door switch is ON (door is open)Door is lockedPush switch is pressed
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Auto door lock mode can be changed by the "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-40</u>, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

Parts marked with \times are the parts related to operation.

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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

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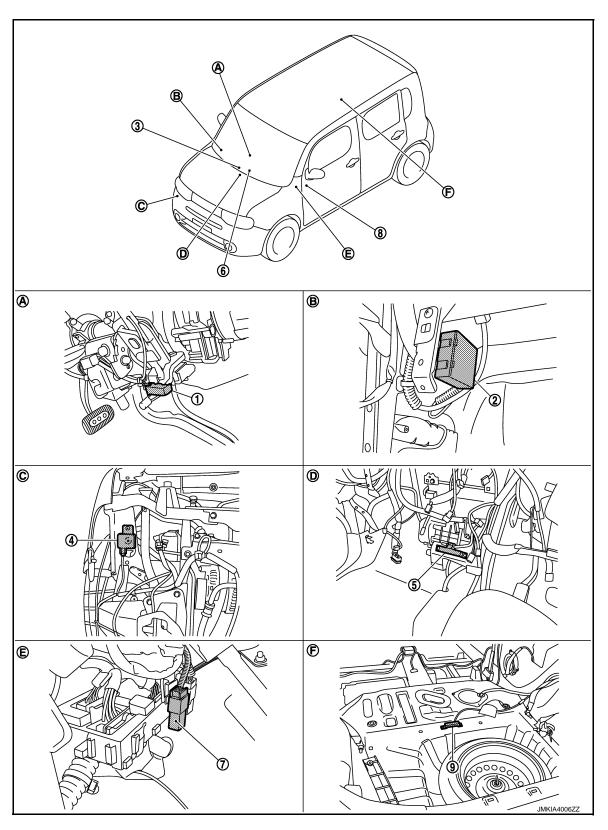
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REMOTE KEYLESS ENTRY FUNCTION : Component Parts Location

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- CVT shift selector (detention switch)* M58
- 4. Intelligent Key warning buzzer E25
- 2. Remote keyless entry receiver M52 3.
- Push-button ignition switch M101
- 5. Inside key antenna (instrument cen- 6. ter) M105
- Combination meter M34

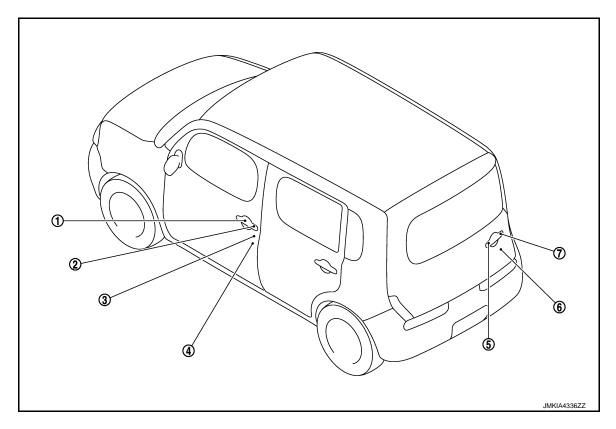
< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

BCM M68, M69, M70, M71 Back door lock actuator relay M90 8. Inside key antenna (luggage room) Refer to BCS-82, "Removal and Installation" A. Integrated in CVT shift selector В. View with glove box assembly re-C. View with front bumper removed moved Behind the audio unit Behind the instrument lower panel D. E. View with rear seat removed

LH (Left side)

*: With CVT models



- Outside key antenna (driver side) D12
- 4. Front door switch (driver side) B34
- Back door request switch D107
- Front door request switch (driver side) D11
- 5. Outside antenna (back door) D108
- Front door lock assembly (driver side) D9
- 6. Back door lock assembly D106

REMOTE KEYLESS ENTRY FUNCTION : Component Description

INFOID:0000000005048042

Item	Function
BCM	Controls the door lock function and trunk open function
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM
Door lock actuator	Outputs lock/unlock signal from BCM and locks/unlocks each door
Door switch	Inputs door open/close condition to BCM
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM
Intelligent Key	Transmits button operation to remote keyless entry receiver
Back door lock actuator relay	Controls back door lock/unlock operation
Push-button ignition switch	Input push-button ignition switch ON/OFF condition to BCM
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound
Hazard warning lamp	Warns the user of the door lock/unlock condition and in appropriate operations with the lamps blink

KEY REMINDER FUNCTION

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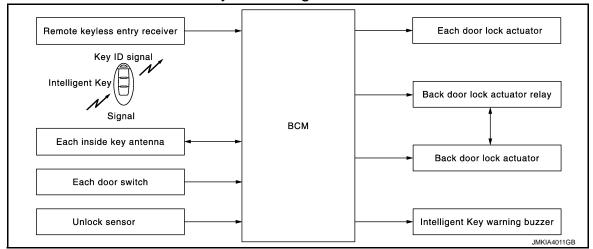
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KEY REMINDER FUNCTION: System Diagram

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KEY REMINDER FUNCTION: System Description

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Key reminder is the function that prevents the key from being left in the vehicle. Key reminder has the following 2 functions.

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

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

CAUTION:

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

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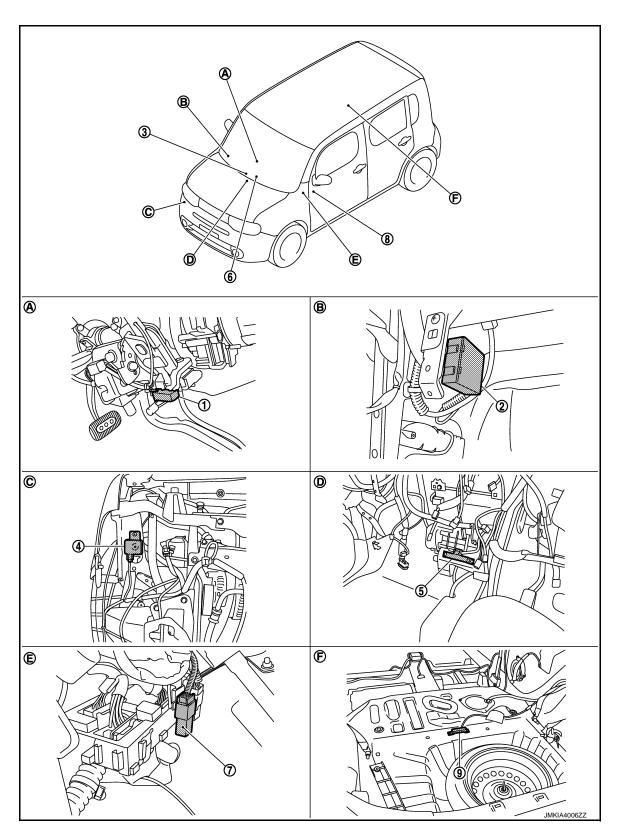
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- CVT shift selector (detention switch)* M58
- 4. Intelligent Key warning buzzer E25
- 2. Remote keyless entry receiver M52 3.
- Push-button ignition switch M101
- 5. Inside key antenna (instrument cen- 6. ter) M105
- Combination meter M34

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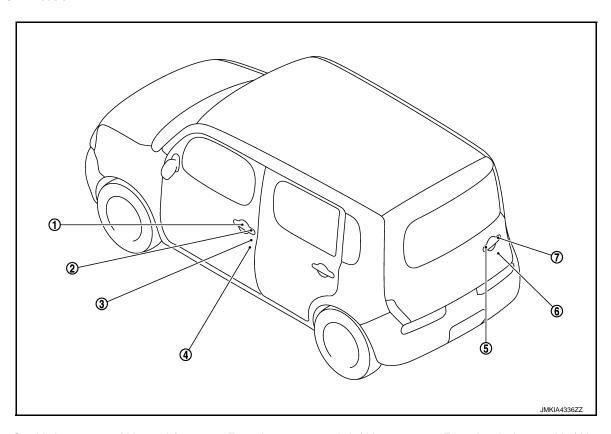
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[WITH INTELLIGENT KEY SYSTEM]

7.	Back door lock actuator relay M90	8.	BCM M68, M69, M70, M71 Refer to BCS-82, "Removal and Installation"	9.	Inside key antenna (luggage room) B82
A.	Integrated in CVT shift selector	B.	View with glove box assembly removed	C.	View with front bumper removed
D.	Behind the audio unit	E.	Behind the instrument lower panel	F.	View with rear seat removed

LH (Left side)

*: With CVT models



- Outside key antenna (driver side) D12
- 4. Front door switch (driver side) B34
- 7. Back door request switch D107
- Front door request switch (driver side) D11
- 5. Outside antenna (back door) D108
- Front door lock assembly (driver side) D9
- 6. Back door lock assembly D106

WARNING FUNCTION

WARNING FUNCTION: System Description

INFOID:0000000005048046

OPERATION DESCRIPTION

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

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

OPERATION CONDITION

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

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Warning/Infor	mation functions	Operation procedure						
Intelligent Key system ma	lfunction	When a malfunction is detected on BCM, "KEY" warning lamp illuminates						
	For internal	Ignition switch: ACC positionDoor switch (driver side): ON (Door is open)						
OFF position warning	For external*	OFF position warning (For internal) is in active mode, driver side door is closed NOTE: OFF position (For external) active only when each of the sequence occurs as below: P position warning \rightarrow ACC warning \rightarrow OFF position warning (For internal) \rightarrow OFF position warning (For internal)						
D monition warning*	 Shift position: Except P position Engine is running to stopped (Ignition switch is ON to OFF) 							
P position warning* For external		Warning is activated when driver door is closed from the open position while the P position warning (for inside vehicle) is ON						
ACC warning*	ı	 When P position warning is in active mode, shift position changes P position Ignition switch: ACC position 						
	Door is open to close	 Ignition switch: Except LOCK position Door switch: ON to OFF (Door is open to close) Intelligent Key cannot be detected inside the vehicle 						
Take away warning	Door is open	 Door switch: ON (Door is open) Key ID verification every 5 seconds when registered Intelligent Key cannot be detected inside the vehicle 						
	Push button-ignition switch operation	 Ignition switch: Except LOCK position Press push-button ignition switch Intelligent Key cannot be detected inside the vehicle 						
Door lock operation warni	ng	When door lock operation is requested while door lock operating condition of door request switch not satisfied						
Engine start information	Ignition switch is ON position	 Ignition switch: ON position Shift position: P position* Engine is stopped 						
Engine start information	Ignition switch is except ON position	 Ignition switch: Except ON position Shift position: P position* Intelligent Key can be detected inside the vehicle 						
Intelligent Key low battery warning		When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON						
Key ID warning		When registered intelligent Key cannot be detected inside the vehicle after ignition switch is turned ON						

^{*:} M/T models do not apply.

WARNING METHOD

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

Warning/Information functions			Shift P	Warning	Engine start	
		"KEY" warn- ing lamp	warning lamp	Combination meter buzzer	Intelligent Key warning buzzer	operation in- dicator lamp
Intelligent Key system malfunction		Indicate	_	_	_	_
OFF position warning	For internal	_	_	Activate	_	_
	For external*	_	_	_	Activate	_
P position warning*	For internal	Plink (vallow)	Indicate	Activate	_	_
	For external	Blink (yellow)	_	_	Active	_
ACC warning*		_	_	Activate	_	_

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Warning/Information functions			Shift P	Warning	Engine start	
		"KEY" warn- ing lamp	warning lamp	Combination meter buzzer	Intelligent Key warning buzzer	operation in- dicator lamp
	Door is open to close		_	Activate	Activate	_
Take away warning	Door is open	Blink (yellow)	_	_	_	_
	Push-ignition switch operation	(),	_	Activate	_	_
Door lock operation warning		_	_	_	Activate	_
Key ID warning		Blink (yellow)	_	_	_	_
Engine start information		_	_	_	_	Indicate
Intelligent Key low battery warning		Blink (green)	_	_	_	_

^{*:} M/T models do not apply.

LIST OF OPERATION RELATED PARTS

Parts marked with \times are the parts related to operation.

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

WARNING FUNCTION: Component Parts Location

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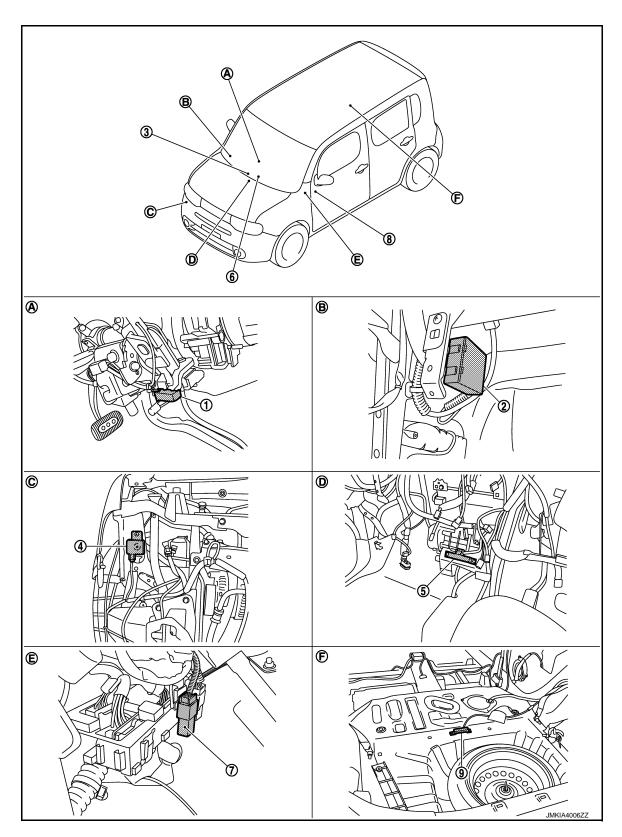
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 CVT shift selector (detention switch)* M58

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- 4. Intelligent Key warning buzzer E25
- 2. Remote keyless entry receiver M52 3.
- Push-button ignition switch M101
- 5. Inside key antenna (instrument cen- 6. ter) M105
- Combination meter M34

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< SYSTEM DESCRIPTION >

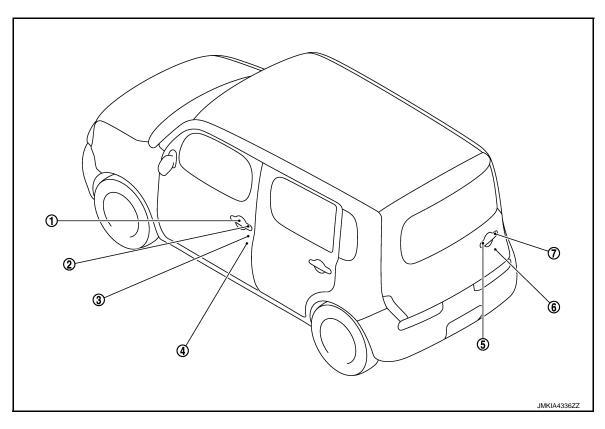
[WITH INTELLIGENT KEY SYSTEM]

- 7. Back door lock actuator relay M90
- 8. BCM M68, M69, M70, M71 Refer to BCS-82, "Removal and Installation"
- Inside key antenna (luggage room) B82

- A. Integrated in CVT shift selector
- B. View with glove box assembly removed
- C. View with front bumper removed

- D. Behind the audio unit
- E. Behind the instrument lower panel LH (Left side)
- F. View with rear seat removed

*: With CVT models



- Outside key antenna (driver side) D12
- 4. Front door switch (driver side) B34
- 7. Back door request switch D107
- Front door request switch (driver side) D11
- 6. Outside antenna (back door) D108
- Front door lock assembly (driver side) D9
- 6. Back door lock assembly D106

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

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APPLICATION ITEM

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

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	Read and save the vehicle specification.Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

				x: Applicable item
System	Sub system selection item	Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Automatic air conditioner	AIR CONDITONER		×	×
Intelligent Key system Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	ВСМ	×		
NVIS - NATS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT-III.

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[WITH INTELLIGENT KEY SYSTEM]

CONSULT screen item	Indication/Unit	Description			
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected			
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected			
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")		
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)		
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"		
	ACC>ON		While turning power supply position from "ACC" to "IGN"		
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)		
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)		
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)		
	ACC>OFF		While turning power supply position from "ACC" to "OFF"		
	OFF>LOCK	Power position status of the moment a particular DTC is detected	While turning power supply position from "OFF" to "LOCK"		
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"		
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"		
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode		
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode		
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)		
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)		
	ACC		Power supply position is "ACC" (Ignition switch ACC)		
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)		
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)		
	CRANKING		Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 			

DOOR LOCK

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

INFOID:0000000005048054

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

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

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Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operation with this mode On: Operate Off: Non-operation
AUTOMATIC DOOR LOCK SE- LECT	Automatic door lock function mode can be selected from the following in this mode VH SPD: All doors are locked when vehicle speed more than 24km/h (15MPH) PRANGE*: All doors are locked when shifting the selector lever from P position to other than the P position
AUTOMATIC DOOR UNLOCK SELECT	 Automatic door unlock function mode can be selected from the following in the mode MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF MODE 2*: All doors are unlocked when shifting the selector lever from any position other than the P to P position MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF MODE 4*: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position MODE 5: This item is displayed, but cannot be monitored MODE 6: This item is displayed, but cannot be monitored
AUTOMATIC LOCK/UNLOCK SET	Automatic door lock/unlock function mode can be selected from the following in this mode. Off: non-operational Unlock Only: door unlock operation only Lock Only: door lock operation only Lock/Unlock: lock/unlock operation

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

DATA MONITOR

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

ACTIVE TEST

Test item	Description
DOOR LOCK	This test is able to check door lock/unlock operation The all door lock actuators are locked when "ALL LOCK" on CONSULT-III screen is touched The all door lock actuators are unlocked when "ALL UNLK" on CONSULT-III screen is touched The door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT-III screen is touched The door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT- III screen is touched The door lock actuator (other) is unlocked when "OTR ULK" on CONSULT-III screen is touched

INTELLIGENT KEY

[WITH INTELLIGENT KEY SYSTEM]

WORK SUPPORT

Monitor item	Description
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode
AUTO LOCK SET	Auto door lock time can be changed in this mode • MODE 1: OFF • MODE 2: 30 sec • MODE 3: 1 minute • MODE 4: 2 minutes • MODE 5: 3 minutes • MODE 6: 4 minutes • MODE 7: 5 minutes
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch mode can be changed to operation in this mode On: Operate Off: Non-operation
ENGINE START BY I-KEY	Engine start function mode can be changed to operation with this mode On: Operate Off: Non-operation
TRUNK/GLASS HATCH OPEN	NOTE: This item is displayed, but cannot be monitored
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode • MODE 1: 0.5 sec • MODE 2: Non-operation • MODE 3: 1.5 sec
TRUNK OPEN DELAY	NOTE: This item is displayed, but cannot be monitored
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operation with this mode On: Operate Off: Non-operation
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operation with this mode On: Operate Off: Non-operation
HAZARD ANSWER BACK	Hazard reminder function mode by door request switch and Intelligent Key button can be selected from the following with this mode Lock Only: Door lock operation only Unlock Only: Door unlock operation only Lock/Unlock: Lock/unlock operation Off: Non-operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode Horn Chirp: Sound horn Buzzer: Sound Intelligent Key warning buzzer Off: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operation with this mode On: Operate Off: Non-operation
SHORT CRANKING OUTPUT	Starter motor can operate during the times below
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode On: Operate Off: Non-operation

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Refer to DLK-138, "DTC Index".

DATA MONITOR

Monitor Item	Condition
REQ SW -DR	Indicates [On/Off] condition of door request switch (driver side)
REQ SW -AS	Indicates [On/Off] condition of door request switch (passenger side)
REQ SW -BD/TR	Indicates [On/Off] condition of back door request switch
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
CLUTCH SW*1	Indicates [On/Off] condition of clutch switch
BRAKE SW 1	Indicates [On/Off]*2 condition of brake switch power supply
BRAKE SW 2	Indicates [On/Off] condition of brake switch
DETE/CANCL SW	Indicates [On/Off] condition of P position
SFT PN/N SW	Indicates [On/Off] condition of P or N position
S/L -LOCK	Indicates [On/Off] condition of steering lock unit (LOCK)
S/L -UNLOCK	Indicates [On/Off] condition of steering lock unit (UNLOCK)
S/L RELAY -F/B	Indicates [On/Off] condition of steering lock relay
UNLK SEN -DR	Indicates [On/Off] condition of driver door UNLOCK status
PUSH SW -IPDM	Indicates [On/Off] condition of push-button ignition switch
IGN RLY1 -F/B	Indicates [On/Off] condition of ignition relay 1
DETE SW -IPDM	Indicates [On/Off] condition of P position
SFT PN -IPDM	Indicates [On/Off] condition of P or N position
SFT P -MET	Indicates [On/Off] condition of P position
SFT N -MET	Indicates [On/Off] condition of N position
ENGINE STATE	Indicates [Stop/Stall/Crank/Run] condition of engine states
S/L LOCK-IPDM	Indicates [On/Off] condition of steering lock unit (LOCK)
S/L UNLK-IPDM	Indicates [On/Off] condition of steering lock unit (UNLOCK)
S/L RELAY-REQ	Indicates [On/Off] condition of steering lock relay
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [Km/h]
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [Km/h]
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver side door status
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger side door status
ID OK FLAG	Indicates [Set/Reset] condition of key ID
PRMT ENG STRT	Indicates [Set/Reset] condition of engine start possibility
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be monitored
RKE-LOCK	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key
RKE-TR/BD	NOTE: This item is displayed, but cannot be monitored
RKE-PANIC	Indicates [On/Off] condition of PANIC button of Intelligent Key
RKE-MODE CHG	Indicates [On/Off] condition of MODE CHANGE signal from Intelligent Key
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored

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ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation On: Operate Off: Non-operation
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation On: Operate Off: Non-operation
INSIDE BUZZER	This test is able to check warning chime in combination meter operation • Take out: Take away warning chime sounds when CONSULT-III screen is touched • Key: Key warning chime sounds when CONSULT-III screen is touched • Knob: OFF position warning chime sounds when CONSULT-III screen is touched
INDICATOR	This test is able to check warning lamp operation KEY ON: "KEY" Warning lamp illuminates when CONSULT-III screen is touched "KEY" Warning lamp blinks when CONSULT-III screen is touched
INT LAMP	This test is able to check interior room lamp operation On: Operate Off: Non-operation
LCD	This test is able to check meter display information BP N: Engine start operation indicator lamp indicate when CONSULT-III screen is touched BP I: Engine start operation indicator lamp indicate when CONSULT-III screen is touched ID NG: This item is displayed, but cannot be monitored ROTAT: This item is displayed, but cannot be monitored SFT P: Shift P warning lamp indicate when CONSULT-III screen is touched INSRT: This item is displayed, but cannot be monitored BATT: Key warning lamp indicator when CONSULT-III screen is touched NO KY: This item is displayed, but cannot be monitored OUTKEY: Engine start operation indicator lamp indicate when CONSULT-III screen is touched LK WN: Engine start operation indicator lamp indicate when CONSULT-III screen is touched
FLASHER	This test is able to check security hazard lamp operation The hazard lamps are activated after "LH/RH/Off" on CONSULT-III screen is touched
HORN	This test is able to check horn operation The horn is activated after "ON" on CONSULT-III screen is touched
P RANGE	This test is able to check CVT shift selector power supply On: Operate Off: Non-operation
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation Push-ignition switch illumination illuminates when "ON" on CONSULT-III screen is touched
PUSH SWITCH INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT-III screen is touched
TRUNK/BACK DOOR	NOTE: This item is displayed, but cannot be monitored

TRUNK

TRUNK: CONSULT-III Function (BCM - TRUNK)

INFOID:0000000005048056

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

^{*1:} It is displayed but does not operate on M/T models.

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

DATA MONITOR

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

ACTIVE TEST

Test item	Description	
TRUNK/GLASS HATCH	NOTE: This item is displayed, but cannot be monitored	F

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DTC/CIRCUIT DIAGNOSIS

B2621 INSIDE ANTENNA

Description

- Detects whether Intelligent Key is inside the vehicle.
- · Installed in the instrument center.

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (instrument center) is sent to BCM	Inside key antenna (instrument center) Between BCM ~ Inside key antenna (instrument center)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "Work Support" of "INTELLIGENT KEY".
- 2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-44, "Diagnosis Procedure"</u>.

NO >> Inside key antenna (instrument center) is OK.

Diagnosis Procedure

INFOID:0000000005048065

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(-)	Condition	Signal (Reference value)	
Connect	or	Terminal		When Intelligent Key is in the antenna detection area	(V) 15 10 5 0
Instrument center	M71	84, 85	Ground	When Intelligent Key is not in the antenna detection area	JMKIA3839GB (V) 15 10 500 ms JMKIA3838GB

Is the inspection result normal?

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

2.CHECK INSIDE KEY ANTENNA CIRCUIT

- 1. Disconnect BCM connector and inside key antenna (instrument center) connector.
- Check continuity between BCM harness connector and inside key antenna (instrument center) harness connector.

ВСМ		Inside key antenna	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M71	84	M105	1	Existed
IVI7 I	85	WITOS	2	Existed

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Crawad	Continuity	
M71	84	Ground	Not existed	
IVI / I	85		inot existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(-)	Condition	Signal (Reference value)	
Connect	or	Terminal			
Instrument center	M71	84, 85	Ground	When Intelligent Key is in the antenna detection area.	(V) 15 10 5 0 JMKIA3839GB
				When Intelligent Key is not in the antenna detection area.	(V) 15 10 500 ms JMKIA3838GB

Is the inspection result normal?

- YES >> Replace inside key antenna (instrument center). Refer to <u>DLK-220, "INSTRUMENT CENTER: Removal and Installation"</u>.
- NO >> Replace BCM. Refer to BCS-82, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

Revision: 2009 March **DLK-45** 2009 Z12

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B2622 INSIDE ANTENNA

Description INFOID:000000005048066

- Detects whether Intelligent Key is inside the vehicle.
- · Installed in the luggage room.

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (luggage room) is sent to BCM	Inside key antenna (luggage room) Between BCM ~ Inside key antenna (luggage room)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on "Work Support" of "INTELLIGENT KEY".
- 2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-46</u>, "<u>Diagnosis Procedure</u>".

NO >> Inside key antenna (luggage room) is OK.

Diagnosis Procedure

INFOID:0000000005048068

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(–)	Condition	Signal (Reference value)	
Con	nector	Terminal			
Luggage	M71	86, 87	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
room		35, 61	Sidulia	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 MKIA3836GB

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (luggage room) connector.

B2622 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

ВСМ		Inside key antenr	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M71	86	B82	1	Existed
IVI7 I	87	D02	2	LXISIGU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	0	Continuity	
M71	86	Ground	Not existed	
IVI / I	87		Not existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${f 3.}$ CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace inside key antenna (luggage room). (New antenna or other antenna)
- 2. Connect BCM connector and inside key antenna (luggage room) connector.

3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(–)	Condition	Signal (Reference value)	
Conr	nector	Terminal			,
Luggage	M71	86, 87	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB
room	WIT I	30, 07	Glound	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room). Refer to <u>DLK-221, "LUGGAGE ROOM: Removal and Installation"</u>.

NO >> Replace BCM. Refer to BCS-82, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

B2626 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2626 OUTSIDE ANTENNA

Description INFOID:0000000005152920

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

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is outside key antenna DTC detected?

YES >> Refer to DLK-48, "Diagnosis Procedure".

NO >> Outside key antenna (driver side) is OK.

Diagnosis Procedure

INFOID:0000000005152922

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector Terminal		(–)	Condition	Signal (Reference value)	
Driver side	M71	78, 79	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (driver side) connector.

B2626 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Check continuity between BCM harness connector and outside key antenna (driver side) harness connector.

В	CM	Outside key ante	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M71	78	D12	1	Existed
1017-1	79	DIZ	2	LXISIGU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M71	78	Giodila	Not existed	
1917 1	79		140t CAISteu	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${f 3.}$ CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM Connector Terminal		(-)	Condition	Signal (Reference value)	
Driver side	M71	78, 79	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB
		, ,		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB

Is the inspection result normal?

YES >> Replace outside key antenna (driver side). Refer to <u>DLK-208, "OUTSIDE HANDLE : Removal and Installation".</u>

NO >> Replace BCM. Refer to BCS-82, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

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B2627 OUTSIDE ANTENNA

Description INFOID.000000005152923

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

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is outside key antenna DTC detected?

YES >> Refer to <u>DLK-50, "Diagnosis Procedure"</u>.

NO >> Outside key antenna (passenger side) is OK.

Diagnosis Procedure

INFOID:0000000005152925

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector Terminal		(-)	Condition	Signal (Reference value)	
Com	lector	Termina		When Intelligent Key is in the antenna detection area	(V) 15 10 5 0
Passenger side	M71	80, 81	Ground	When Intelligent Key is not in the antenna detection area	JMKIA3839GB (V) 15 10 5 0 JMKIA3838GB

Is the inspection result normal?

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

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (passenger side) connector.

B2627 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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Check continuity between BCM harness connector and outside key antenna (passenger side) harness connector.

В	СМ	Outside key anteni	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M71	80	D32	1	Existed
1017-1	81	D32	2	LAISIGU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M71	80	Giodila	Not existed	
1017 1	81		Not existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${f 3.}$ CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

- 1. Replace outside key antenna (passenger side). (New antenna or other antenna)
- 2. Connect BCM connector and outside key antenna (passenger side) connector.

3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(–)	Condition	Signal (Reference value)	
Conr	nector	Terminal			
Passenger	M71	80, 81	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
side				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 500 ms

Is the inspection result normal?

YES >> Replace outside key antenna (passenger side). Refer to <u>DLK-208, "OUTSIDE HANDLE : Removal and Installation"</u>.

NO >> Replace BCM. Refer to BCS-82, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

B2628 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2628 OUTSIDE ANTENNA

Description INFOID:000000005152934

- Detects whether Intelligent Key is outside the vehicle.
- Integrated in the outside handle (back door).

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause
B2623	OUTSIDE ANTENNA	An excessive high or low voltage from outside key antenna (back door) is sent to BCM	Outside key antenna (back door) Between BCM – Outside key antenna (back door)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Disconnect outside key antenna (back door) connector.
- 2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

Is outside key antenna DTC detected?

YES >> Refer to <u>DLK-52</u>, "<u>Diagnosis Procedure</u>".

NO >> Outside key antenna (back door) is OK.

Diagnosis Procedure

INFOID:0000000005152936

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(–) Condition		Signal (Reference value)	
Conn	nector	Terminal			(Notoronos valas)
Back door	M71	82, 83	Ground	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
		33,00		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (back door) connector.

B2628 OUTSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Check continuity between BCM harness connector and outside key antenna (back door) harness connector.

В	СМ	Outside key ant	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M71	82	D108	1	Existed	
IVI/ I	83	D 100	2	Existed	

3. Check continuity between BCM harness connector and ground.

В	CM		
Connector	Terminal	Ground	Continuity
M71	82 Clound		Not existed
1917 1	83		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${f 3.}$ CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

	(+) BCM		(-)	Condition	Signal (Reference value)
Conr	nector	Terminal		When Intelligent Key is in the antenna detection area	(V) 15 10 5 0
Back door	M71	82, 83	Ground	When Intelligent Key is not in the antenna detection area	1 S JMKIA3839GB (V) 15 10 500 ms JMKIA3838GB

Is the inspection result normal?

YES >> Replace outside key antenna (back door). Refer to <u>DLK-215, "OUTSIDE HANDLE : Removal and</u> Installation".

NO >> Replace BCM. Refer to BCS-82, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE): Diagnosis Procedure

INFOID:0000000005154963

1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.
Battery power supply	G
battery power suppry	8

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

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

(+)	(-)	Voltage	
В	CM		(Approx.)	
Connector	Terminal	Ground		
M70	70	Glound	Pottoni voltogo	
WITO	57		Battery voltage	

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.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M70	67		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR SWITCH

Detects door open/close condition.

Component Function Check

1. CHECK FUNCTION

Check ("DOOR SW-DR", "DOOR SW-AS", "DOOR SW-RL", "DOOR SW-RR", "DOOR SW-BK") in "Data Monitor" mode with CONSULT-III.

Monitor item		Condition	Status
DOOR SW-DR	Driver side door	Open	ON
DOOK SW-DR	Driver side door	Closed	OFF
DOOR SW-AS	December side door	Open	ON
DOOK SW-AS	Passenger side door	Closed	OFF
DOOR SW-RL	Rear door LH	Open	ON
	Rear door Lm	Closed	OFF
DOOR SW-RR	Rear door RH	Open	ON
DOOK SW-KK	Real dool Rh	Closed	OFF
DOOD OW DV	Back door	Open	ON
DOOR SW-BK	Dack door	Closed	OFF

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-55</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK DOOR SWITCH INPUT SIGNAL

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

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[WITH INTELLIGENT KEY SYSTEM]

	(+)					
	Door switch		(–)	Con	dition	Signal (Reference value)
Conne	ector	Terminal				,
Driver side	B34	2		Driver door switch	OFF (When driver door closed)	(V) 15 10 5 0 + + 10ms PKIB4960J 7.0 - 8.0 V
					ON (When driver door opened)	0 V
Passenger side	B27	2		Passenger door switch	OFF (When passenger door closed)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
			Ground		ON (When pas- senger door opened)	0 V
Rear LH	B71	2		Rear LH door switch	OFF (When rear LH door closed)	(V) 15 10 5 0 ++10ms PKIB4960J 7.0 - 8.0 V
						0 V
Rear RH	B53	2		Rear RH door switch	OFF (When rear RH door closed)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
					ON (When rear RH door opened)	0 V

[WITH INTELLIGENT KEY SYSTEM]

	(+) Door switch		(-)	Condition		Signal (Reference value)
Conne	ector	Terminal				
Back door	B75	2	Ground	Back door switch	OFF (When back door closed)	(V) 15 10 5 0 PKIB4960J 9.5 - 10.0 V
					ON (When back door opened)	0 V

Is the inspection result normal?

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

2.check door switch circuit

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

Door switch			BC	BCM		
Con	nector	Terminal	Connector	Terminal	Continuity	
Driver side	B34		M69	47		
Passenger side	B27		M68	12		
Rear LH	B71	2	M69	48	Existed	
Rear RH	B53		M68	13		
Back door	B75		M69	43		

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

Door switch				Continuity
Con	nector	Terminal	-	Continuity
Driver side	B34			
Passenger side	B27		Ground	
Rear LH	B71	2		Not existed
Rear RH	B53			
Back door	B75			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

3.check door switch

Refer to DLK-58, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch. Refer to <u>DLK-219</u>, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

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DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Component Inspection

INFOID:0000000005048076

1. CHECK DOOR SWITCH

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

Door switch		Condition		Continuity
Terminal				Continuity
2	Ground part of door switch	Door switch	Pressed	Not existed
2	2 Ground part of door switch		Released	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunction door switch. Refer to DLK-219, "Removal and Installation".

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Description

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Transmits door lock/unlock operation to BCM.

DRIVER SIDE: Component Function Check

INFOID:0000000005152927

1. CHECK FUNCTION

Check "CDL LOCK SW "and "CDL UNLOCK SW" in BCM "Data Monitor" mode using CONSULT-III.

Monitor item	Con	Status	
CDL LOCK SW		LOCK	ON
	Door lock and unlock switch	UNLOCK	OFF
CDL UNLOCK SW	DOOF TOCK AND UNIOCK SWITCH	LOCK	OFF
		UNLOCK	ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-59</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000005152928

1. CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

(+	(+) Power window main switch		Signal	
Power window			(Reference value)	
Connector	Terminal		(
	6			
D5	18	Ground	(V) 15 10 10 ms JPMIA0012GB 1.0 - 1.5 V	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2.check door lock and unlock switch circuit

- 1. Disconnect BCM connector and front power window switch (passenger side) connector.
- 2. Check continuity between BCM harness connector and power window main switch harness connector.

В	CM	Power window main switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
M69	45	D5	18	Existed
1009	46	D5	6	LXISIEU

Check continuity between BCM harness connector and ground.

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< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

-	ВСМ		Continuity
Connector	Terminal	Ground	Continuity
M69	45		Not existed
MOS	46		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

	(+) BCM		Signal (Reference value)	
Connector	Terminal		(1.10.0.000 10.100)	
	45			
M69	46	Ground	(V) 15 10 10 ms JPMIA0012GB 1.0 - 1.5 V	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace BCM. Refer to BCS-82, "Removal and Installation".

4. CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

Power window main switch			Continuity
Connector	Terminal	Ground	Continuity
D6	17		Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK DOOR LOCK AND UNLOCK SWITCH

Refer to DLK-60, "DRIVER SIDE: Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace power window main switch. Refer to PWC-100, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE: Component Inspection

INFOID:0000000005152929

1. CHECK DOOR LOCK AND UNLOCK SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect power window main switch (door lock and unlock switch) connector.

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

3. Check continuity between power window main switch (door lock and unlock switch) terminals.

Power windo	Power window main switch		Condition	
Terminal		Condition		Continuity
6		Door lock and unlock switch	LOCK	Existed
0	17		UNLOCK	Not existed
10	18		LOCK	Existed
10			UNLOCK	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power window main switch. Refer to <u>PWC-100</u>, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE: Description

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE: Component Function Check

INFOID:0000000005152931

INFOID:0000000005152930

1. CHECK FUNCTION

Check "CDL LOCK SW" and "CDL UNLOCK SW" in BCM "Data Monitor" mode using CONSULT-III.

Monitor item	Con	Status	
ODL LOCK OW		LOCK	ON
CDL LOCK SW	Door lock and unlock switch	UNLOCK	OFF
CDL UNLOCK SW	Door lock and unlock switch	LOCK	OFF
		UNLOCK	ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-61</u>, "PASSENGER SIDE : <u>Diagnosis Procedure"</u>.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000005152932

1. CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

- 2. Disconnect front power window switch (passenger side) connector.
- 3. Check signal between front power window switch (passenger side) harness connector and ground using oscilloscope.

	(+) Front power window switch (passenger side)		Signal (Reference value)	
Connector	Terminal		(Itolololoo valuo)	
	1			
D25	2	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V	

Is the inspection result normal?

YES >> GO TO 4.

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< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NO >> GO TO 2.

2.check door lock and unlock switch circuit

- 1. Disconnect BCM connector and power window main switch connector.
- Check continuity between BCM harness connector and front power window switch (passenger side) harness connector.

В	CM	Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M69	45	D25	1	Existed
MOS	46	D25	2	LXISIEG

3. Check continuity between BCM connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M69	45		Not existed
MOS	46		inot existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.check bcm output signal

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

-	(+) BCM		Signal (Reference value)	
Connector	Terminal		(ixelefice value)	
	45			
M69	46	Ground	(V) 15 10 10 ms JPMIA0012GB 1.0 - 1.5 V	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace BCM. Refer to BCS-82. "Removal and Installation".

4.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between front power window switch (passenger side) harness connector and ground.

Front power window switch (passenger side)			Continuity
Connector	Terminal	Ground	Continuity
M25	3		Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK DOOR LOCK AND UNLOCK SWITCH

Check front power window switch (passenger side).

Refer to DLK-63, "PASSENGER SIDE: Component Inspection".

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace front power window switch (passenger side). Refer to PWC-100, "Removal and Installa-

6. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

PASSENGER SIDE: Component Inspection

INFOID:0000000005152933

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1. CHECK DOOR LOCK AND UNLOCK SWITCH

- Turn ignition switch OFF.
- 2. Disconnect front power window switch (passenger side) connector.
- Check continuity between front power window switch (passenger side) terminals.

Front power window switch (passenger side)		Condition		Continuity
Terminal				
1	1		LOCK	Existed
ı	3	Door lock and unlock switch	UNLOCK	Not existed
2			LOCK	Not existed
			UNLOCK	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front power window switch (passenger side). Refer to PWC-100, "Removal and Installation".

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< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR LOCK ACTUATOR

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000005048083

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE: Component Function Check

INFOID:0000000005048084

1. CHECK FUNCTION

- 1. Use CONSULT-III to perform Active Test ("DOOR LOCK").
- 2. Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-64</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000005048085

${f 1}$.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

Front door lo	+) ock assembly er side)	(Condition		Voltage (V) (Approx.)	
Connector	Terminal				
D9	1	Ground	Ground Door lock and unlock switch	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
D9	2	Giouna	Door lock and unlock switch	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

Is the inspection result normal?

YES >> Replace front door lock assembly (driver side). Refer to <u>DLK-206, "DOOR LOCK: Removal and Installation".</u>

NO >> GO TO 2.

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

- Disconnect BCM connector and all door lock actuator connector.
- Check continuity between BCM harness connector and front door lock assembly (driver side) harness connector.

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M70	65	D9	1	Existed
IVI7O	66	D9	2	LAISIEU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M70	65	Ground	Not existed	
	66	Not exis	Not existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

PASSENGER SIDE

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

PASSENGER SIDE: Description

Locks/unlocks the door with the signal from BCM.

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PASSENGER SIDE: Component Function Check

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INFOID:0000000005048088

INFOID:0000000005048086

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1. CHECK FUNCTION

- 1. Use CONSULT-III to perform Active Test ("DOOR LOCK").
- Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-65</u>, "PASSENGER SIDE : <u>Diagnosis Procedure"</u>.

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PASSENGER SIDE: Diagnosis Procedure

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)				
	Front door lock assembly (passenger side)		Condition		Voltage (V) (Approx.)
Connector	Terminal				
D28	5	Ground	Door lock and unlock switch	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
D20	6	Giouna		Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

Is the inspection result normal?

YES >> Replace front door lock assembly (passenger side). Refer to <u>DLK-206, "DOOR LOCK: Removal and Installation"</u>.

NO >> GO TO 2.

2.check door lock actuator circuit

1. Disconnect BCM connector and all door lock actuator.

Check continuity between BCM harness connector and front door lock assembly (passenger side) harness connector.

BCM		Front door lock assembly (passenger side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
M70	59	D28	6	Existed
	65	D20	5	LXISIEU

Check continuity between BCM harness connector and ground.

	ВСМ		Continuity	
Connector	Terminal	Ground	Continuity	
M70	59	Ground	Not existed	
IVI / U	65		NOT existed	

DLK-65

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

REAR LH

Revision: 2009 March

REAR LH: Description

Locks/unlocks the door with the signal from BCM.

INFOID:0000000005048089

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< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

REAR LH: Component Function Check

INFOID:0000000005048090

1. CHECK FUNCTION

- 1. Use CONSULT-III to perform Active Test ("DOOR LOCK").
- 2. Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-67, "REAR RH: Diagnosis Procedure".

REAR LH: Diagnosis Procedure

INFOID:0000000005048091

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Rear door lock assembly LH		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(лфрюх.)
D65	1	Ground	Door lock and unlock switch	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$
D05	2	Giodila	DOOL LOCK AND UNIOCK SWITCH	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

YES >> Replace rear door lock assembly LH. Refer to <u>DLK-210, "DOOR LOCK : Removal and Installation"</u>.

NO \gg GO TO 2.

2.check door lock actuator circuit

- Disconnect BCM connector and all door lock actuator connector.
- Check continuity between BCM harness connector and rear door lock assembly LH harness connector.

BCM		Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M69	55	D65	2	Existed
M70	65	D03	1	LXISIEU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M69	55	Ground	Not existed	
M70	65		INOL EXISTED	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

REAR RH

REAR RH: Description

INFOID:0000000005048092

INFOID:00000000005048093

Locks/unlocks the door with the signal from BCM.

REAR RH: Component Function Check

1. CHECK FUNCTION

1. Use CONSULT-III to perform Active Test ("DOOR LOCK").

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[WITH INTELLIGENT KEY SYSTEM]

Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-67, "REAR RH: Diagnosis Procedure".

REAR RH: Diagnosis Procedure

INFOID:000000000504809

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1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)			Condition		Voltage (V)
Rear door lock assembly RH		(-)			(Approx.)
Connector	Terminal				(11 - /
D45	5	Ground	Door lock and unlock switch	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
D45	6	Ground	Door lock and unlock switch	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

Is the inspection result normal?

YES >> Replace rear door lock assembly RH. Refer to DLK-210, "DOOR LOCK: Removal and Installation".

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

Disconnect BCM connector and all door lock actuator connector.

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

BCM		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M69	55	D45	6	Existed
M70	65	043	5	Existed

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector Terminal		Ground	Continuity
M69	M69 55		Not existed
M70	65		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

BACK DOOR

BACK DOOR: Description

Locks/unlocks the door with the signal from BCM.

BACK DOOR: Component Function Check

1. CHECK FUNCTION

- Use CONSULT-III to perform Active Test ("DOOR LOCK").
- Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Back door lock actuator is OK.

NO >> Refer to DLK-68, "BACK DOOR: Diagnosis Procedure". DLK

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INFOID:0000000005151045

INFOID:0000000005151046

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR: Diagnosis Procedure

INFOID:0000000005151047

1. CHECK BACK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(-	+)				V-16 () ()	
Back door lo	ock assembly	(–)	Condition		Voltage (V) (Approx.)	
Connector	Terminal				(11 - 7	
D106	2	Ground	Door lock and unlock switch	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$	
D100	3	Giouna	Door lock and unlock switch	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$	

Is the inspection result normal?

YES >> Replace back door lock assembly. Refer to DLK-214, "DOOR LOCK: Removal and Installation".

NO-1 >> GO TO 2 (lock signal).

NO-2 >> GO TO 3 (unlock signal).

2.CHECK BACK DOOR LOCK ACTUATOR LOCK CIRCUIT

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

В	CM	Back door lo	ock assembly	Continuity
Connector	Terminal	Connector Terminal		Continuity
M70	65	D106	3	Existed

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Connector Terminal		Continuity
M70	65		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

3.check back door lock actuator unlock circuit

- 1. Remove back door lock actuator relay connector.
- Check continuity between back door lock actuator relay harness connector and back door lock assembly harness connector.

Back door loc	Back door lock actuator relay		Back door lock assembly		
Connector	Terminal	Connector Terminal		Continuity	
M90	3	D106	2	Existed	

3. Check continuity between BCM harness connector and ground.

Back door lock	k actuator relay		Continuity
Connector	Terminal	Ground	Continuity
M90	3		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-34, "Intermittent Incident"

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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>> INSPECTION END

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BACK DOOR LOCK ACTUATOR RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR LOCK ACTUATOR RELAY

Description INFOID:000000005151051

Controls back door lock actuator lock/unlock operation.

Component Function Check

INFOID:0000000005151052

1. CHECK FUNCTION

- 1. Use CONSULT-III to perform Active Test ("DOOR LOCK").
- 2. Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Back door lock actuator relay is OK.

NO >> Refer to <u>DLK-68</u>, "BACK DOOR : <u>Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000005151053

1. CHECK FUSE

- 1. Turn ignition switch OFF.
- 2. Check 10 A fuse, [No. 14, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.check back door lock actuator relay power circuit

- Remove back door lock actuator relay.
- Check voltage between back door lock actuator relay harness connector and ground.

(+)		V I	
Back door lock	actuator relay	(–)	Voltage (V) (Approx.)	
Connector	Terminal		(
M90	2	Ground	Pottory voltage	
- WI90	5	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BACK DOOR LOCK ACTUATOR RELAY CIRCUIT 1

- 1. Install the back door lock relay.
- Check voltage between BCM harness connector and ground.

(+) BCM		(–) Con		dition	Voltage (V) (Approx.)
Connector	Terminal				(11 - 7
M70	72	Ground	Door lock and un-	LOCK	Battery voltage
IVI7 U	WI70 72		lock switch	UNLOCK	0

Is the inspection result normal?

YES >> GO TO 6.

NO-1 (when voltage is fived at 12V)>>Replace BCM. Refer to BCS-82, "Removal and Installation".

NO-2 (when voltage is fived at 0V)>>GO TO 4.

4. CHECK BACK DOOR LOCK ACTUATOR RELAY CIRCUIT 1

- 1. Disconnect BCM connector.
- 2. Check voltage between BCM harness connector and ground.

BACK DOOR LOCK ACTUATOR RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

(+) BCM		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(44)
M70	72	Cround	Door lock and un-	LOCK	Battery voltage
IVI / U	12	Ground lock switch		UNLOCK	0

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> GO TO 5.

5.CHECK BACK DOOR LOCK ACTUATOR RELAY CIRCUIT 2

Remove back door lock actuator relay.

Check continuity between BCM harness connector and back door lock actuator relay harness connector.

Back door lock a	ctuator relay	ВСМ		Continuity
Connector	Terminal	Connector Terminal		Continuity
M90	1	M70	72	Existed

Check continuity between BCM harness connector and ground.

Back door lock actuator relay			Continuity
Connector Terminal		Ground	Continuity
M90	1		Not existed

Is the inspection result normal?

YES >> Replace back door lock actuator relay.

NO >> Repair or replace harness.

6.CHECK BACK DOOR LOCK ACTUATOR RELAY GROUND CIRCUIT

Check continuity between back door lock actuator relay harness connector and ground.

Back door lock actuator relay			Continuity
Connector	Terminal	Ground	Continuity
M90	4		Existed

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7.CHECK BACK DOOR LOCK ACTUATOR RELAY

Check back door lock actuator relay. Refer to DLK-71, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace back door lock actuator relay.

8. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-34, "Intermittent Incident"

>> INSPECTION END

Component Inspection

1. CHECK BACK DOOR LOCK ACTUATOR RELAY

1. Turn ignition switch OFF.

Revision: 2009 March

- Remove back door lock actuator relay.
- Check continuity between back door lock actuator relay terminals.

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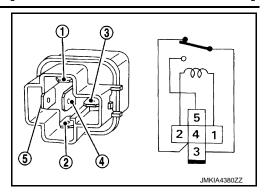
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BACK DOOR LOCK ACTUATOR RELAY

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Back door lock actua- tor relay		Condition	Continuity
Terminal			
3	4	12 V direct current supply between terminals 1 and 2	Not existed
		No current supply	Existed
	5	12 V direct current supply between terminals 1 and 2	Existed
		No current supply	Not existed



Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace back door lock actuator relay.

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR KEY CYLINDER SWITCH

Description INFOID:0000000005048105

Transmits lock/unlock operation to BCM.

Component Function Check

INFOID:0000000005048106

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1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check ("KEY CYL LK-SW", "KEY CYL UN-SW") in "Data Monitor" mode using CONSULT-III.

Monitor item	Cor	Status	
KEY CYL LK-SW	Lock		ON
	- Driver side door key cylinder	Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

Is the inspection result normal?

YES >> Door key cylinder switch is OK.

NO >> Refer to <u>DLK-73</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005048107

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect front door lock assembly (driver side) connector.

3. Check voltage between front door lock assembly (driver side) harness connector and ground.

(+)			V II 0.0
Front door lock ass	embly (driver side)	(-)	Voltage (V) (Approx.)
Connector	Terminal		(ipplox.)
D9	5	Ground	(V) ₁₅ 10 5 0 ++10ms JPMIA0587GB 8.0 - 8.5 V
	6		Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

Disconnect BCM connector.

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

В	СМ	Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
M68	7	D9	5	Existed
IVIOO	8	D9	6	LAISIEU

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M68	7	Ground	Not existed
IVIOO	8		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly (driver side) harness connector and ground.

Front door lock as:	sembly (driver side)		Continuity	
Connector	Terminal	Ground	Continuity	
D9	4		Existed	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-74, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-206, "DOOR LOCK: Removal and Installation".</u>

5. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005048108

1. CHECK DOOR KEY CYLINDER SWITCH

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

Front door lock ass	embly (driver side)	Condition		Continuity
Terminal		Condition		Continuity
5		Driver side door key cylinder	Unlock	Existed
3	6		Neutral / Lock	Not existed
6		Driver side door key cylinder	Lock	Existed
O			Neutral / Unlock	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-206, "DOOR LOCK: Removal and Installation".</u>

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY RECEIVER

Description INFOID:0000000005048109

Receives Intelligent Key operation and transmits to BCM.

Component Function Check

INFOID:0000000005048110

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1. CHECK FUNCTION

Check ("RKE OPE COUN1") in BCM "Data Monitor" mode using CONSULT-III.

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

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.

NO >> Refer to <u>DLK-75, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000005048111

1. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

Remote keyles	+) as entry receiver	(-)	Condition	Signal (Reference value)
Connector	Terminal			
M52	2	Ground	Waiting	(V) 15 10 5 0 MKIA3838GB
02	_	O. Gaine	Signal receiving	(V) 15 10 5 0 1 ms JMKIA3841GB

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

В	M Remote keyless entry receiver		Remote keyless entry receiver	
Connector	Terminal	Connector Terminal		Continuity
M68	20	M52	2	Existed

3. Check continuity between BCM harness connector and ground.

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM			Continuity
Connector	Terminal	Ground	Continuity
M68	20		Not existed

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

3.check remote keyless entry receiver power supply

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

-	(+) Remote keyless entry receiver		Signal (Reference value)
Connector	Terminal	-	(Notoronoo valuo)
M52	4	Ground	(V) 15 10 5 0 JMKIA3838GB

Is the inspection result normal?

YES >> GO TO 5. NO >> GO TO 4.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

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

В	ВСМ		Remote keyless entry receiver	
Connector	Terminal	Connector Terminal		Continuity
M68	19	M52	4	Existed

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M68	19		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

5. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT 1

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

В	СМ	Remote keyles	s entry receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M68	18	M52	1	Existed

3. Check continuity between BCM harness connector and ground.

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M68	18		Existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT 2

- Connect BCM connector.
- Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M68	18		Existed

Is the inspection result normal?

>> Replace remote keyless entry receiver. Refer to DLK-223, "Removal and Installation".

NO >> Replace BCM. Refer to BCS-82, "Removal and Installation".

7.CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI OUTPUT SIGNAL

- Connect BCM and remote keyless entry receiver connector.
- Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

	+) s entry receiver	(–)	Condition	Signal (Reference value)
Connector	Terminal			(1.6.6.6.1.66 14.146)
			Waiting	0 V
M52	3	Ground	Signal receiving	(V) 15 10 5 0 5 0 JMKIA3838GB

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace remote keyless entry receiver. Refer to <u>DLK-223, "Removal and Installation"</u>.

8.CHECK REMOTE KEYLESS ENTRY RECEIVER RSSI CIRCUIT

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

В	CM	Remote keyles	s entry receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M68	22	M52	3	Existed

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M68	3		Existed

Is the inspection result normal?

>> Replace BCM. Refer to BCS-82, "Removal and Installation". YES

NO >> Repair or replace harness. DLK

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BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR REQUEST SWITCH

Description INFOID:0000000005048116

Transmits lock/unlock operation to BCM.

Component Function Check

INFOID:0000000005048117

1. CHECK FUNCTION

Check ("REQSW-BD/TR") in "Data Monitor" mode using CONSULT-III.

Monitor item	Condit	ion	Status
REQSW-BD/TR	Back door request switch	Pressed	ON
KEQ3W-DD/TK	Back door request switch	Released	OFF

Is the inspection result normal?

YES >> Back door request switch is OK.

NO >> Refer to <u>DLK-78</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005048118

1. CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

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

(Back door re	+) equest switch	(-)	Voltage (V) (Approx.)
Connector	Terminal		(11 - 7
D107	1	Ground	Battery voltage

Is the inspection result normal?

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

2. CHECK BACK DOOR REQUEST SWITCH CIRCUIT

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

В	СМ	Back door re	equest switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M70	77	D107	1	Existed

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M70	77		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair harness or connector.

3.check back door request switch ground circuit

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

BACK DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Connector Terminal Ground Existed D107 2 Existed	Back	door request switch			Continuity
inspection result normal? > >> GO TO 4. >> Repair or replace harness. HECK BACK DOOR REQUEST SWITCH to DLK-79. "Component Inspection". inspection result normal? >> GO TO 5. >> Replace back door request switch. Refer to DLK-215. "OUTSIDE HANDLE: Removal and lation". HECK INTERMITTENT INCIDENT to GI-34. "Intermittent Incident". >> INSPECTION END Inponent Inspection HECK BACK DOOR REQUEST SWITCH Turn ignition switch OFF. Disconnect back door request switch connector. Check continuity between back door request switch terminals. Back door request switch Terminal Condition Continuity Pressed Existed	Connector	Term	ninal Grou	ınd	Continuity
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To GI-34. "Intermittent Incident". >> INSPECTION END INFOID:0000 HECK BACK DOOR REQUEST SWITCH Furn ignition switch OFF. Disconnect back door request switch connector. Check continuity between back door request switch terminals. Back door request switch		dok door request sv	WILON: PROTOT TO DETRIZATO, C	OTOIDE TITAL	DEE : Nomovar and
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Back door request switch Terminal Condition Continuity Pressed Existed			TCH		
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[WITH INTELLIGENT KEY SYSTEM]

DOOR REQUEST SWITCH

Description INFOID:000000005048124

Transmits lock/unlock operation to BCM.

Component Function Check

INFOID:0000000005048125

1. CHECK FUNCTION

Check ("REQ SW -DR" or "REQ SW -AS") in "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
REQ SW -DR	Driver side deer request switch	Pressed	ON
REQ 3W -DR	Driver side door request switch		OFF
REQ SW -AS	Passenger side door request switch	Pressed	ON
REQ 3W -A3		Released	OFF

Is the inspection result normal?

YES >> Front door request switch is OK.

NO >> Refer to <u>DLK-80</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005048126

1. CHECK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+) Front door request switch		(-)	Voltage (V) (Approx.)	
Connector		Terminal		(.FF. 9/4)
Driver side	D11	2	Cround	Pottony voltage
Passenger side	D31	2	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR REQUEST SWITCH CIRCUIT

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

Front door request switch		В	Continuity				
Con	nector	Terminal	Connector Terminal		Continuity		
Driver side	D11	2 M70		75 M70			Existed
Passenger side	D31	2	2 M70		Existed		

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

Front door request switch				Continuity	
Coni	nector	Terminal	Ground	Continuity	
Driver side	D11	2	Ground	Not existed	
Passenger side	D31	2		INOL EXISTED	

Is the inspection result normal?

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Repair or replace harness.

3.check door request switch ground circuit

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

Front door request switch				Continuity	
Connector		Terminal	Ground	Continuity	
Driver side	D11	4	Giodila	Existed	
Passenger side	D31	,		Existed	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK DOOR REQUEST SWITCH

Refer to DLK-81, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front door request switch. Refer to <u>DLK-208, "OUTSIDE HANDLE : Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK DOOR REQUEST SWITCH

- Turn ignition switch OFF.
- Disconnect malfunctioning front door request switch connector.
- Check continuity between malfunctioning front door request switch terminals.

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

Is the inspection result normal?

YES >> INSPECTION END

NO

>> Replace malfunctioning front door request switch. Refer to <u>DLK-208</u>, "<u>OUTSIDE HANDLE</u>: Removal and Installation".

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INFOID:0000000005048127

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[WITH INTELLIGENT KEY SYSTEM]

UNLOCK SENSOR

Description INFOID:0000000005048128

Detects door lock condition of driver side door.

Component Function Check

INFOID:0000000005048129

1. CHECK FUNCTION

Check ("UNLK SEN -DR") in BCM "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
UNLK SEN -DR	Driver side door	Lock	OFF
	Driver side door	Unlock	ON

Is the inspection result normal?

YES >> Unlock sensor is OK.

NO >> Refer to <u>DLK-82</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005048130

1. CHECK UNLOCK SENSOR INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect front door lock assembly (driver side) connector.
- Check signal between front door lock assembly (driver side) harness connector and ground with oscilloscope.

Front door lock ass	eembly (driver side) Terminal	(-)	Signal (Reference value)
D9	3	Ground	(V) 15 10 5 0 +-10ms PKIB4960J

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK UNLOCK SENSOR CIRCUIT

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

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
M68	31	D9	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Connector Terminal		Continuity	
M68	31		Not existed	

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-82</u>, "Removal and Installation".

NO >> Repair or replace harness.

3.check unlock sensor ground circuit

Check continuity between front door lock assembly (driver side) harness connector and ground.

Front door lock assembly (driver side)			Continuity
Connector	Terminal	Ground	Continuity
D9	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK UNLOCK SENSOR

Refer to DLK-83, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-206, "DOOR LOCK : Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK UNLOCK SENSOR

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

Front door lock as	Front door lock assembly (driver side)		Condition	
Ter	Terminal			
2	3 4		Unlock	Existed
3	4	Driver side door	Lock	Not existed

Is the inspection result normal?

NO

YES >> INSPECTION END

>> Replace front door lock assembly (driver side). Refer to <u>DLK-206, "DOOR LOCK: Removal and Installation".</u>

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INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY WARNING BUZZER

Description INFOID:0000000005048135

Answers back and warns for an inappropriate operation.

Component Function Check

INFOID:0000000005048136

1. CHECK FUNCTION

- 1. Use CONSULT-III to perform BCM Active Test ("OUTSIDE BUZZER").
- 2. Touch "ON" to check that it works normally.

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.

NO >> Refer to <u>DLK-84, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000005048137

1. CHECK FUSE

- 1. Turn ignition switch OFF.
- 2. Check 10 A fuse, [No. 14, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

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

(+)			\/-\{\-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Intelligent Key	warning buzzer	(–)	Voltage (V) (Approx.)	
Connector	Connector Terminal		(11 - 7	
E25	1	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${f 3.}$ CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

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

В	ВСМ		warning buzzer	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M70	93	E25	3	Existed

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M70	93		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK INTELLIGENT KEY WARNING BUZZER

Refer to DLK-85, "Component Inspection".

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-82, "Removal and Installation".

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-222</u>, "Removal and Installation".

Component Inspection

1. CHECK INTELLIGENT KEY WARNING BUZZER

- 1. Turn ignition switch OFF.
- 2. Disconnect Intelligent Key warning buzzer connector.
- 3. Connect battery power supply directly to Intelligent Key warning buzzer terminals and check the operation.

Intelligent Key	Intelligent Key warning buzzer		
Terr	Terminal		
(+)	(-)		
1	3	Buzzer sounds	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-222</u>, "Removal and Installation".

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INTELLIGENT KEY

Description INFOID:0000000005048139

The following functions are available when having and carrying electronic ID.

- Door lock/unlock
- Engine start

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

Component Function Check

INFOID:0000000005048140

1. CHECK FUNCTION

Check ("RKE OPE COUN1") in Data Monitor mode using CONSULT-III.

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

Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Refer to DLK-86, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005048141

1. CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to DLK-224, "Removal and Installation".

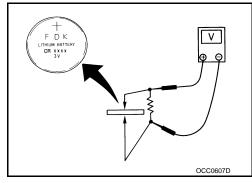
Standard : Approx. 2.5 - 3.0V

Is the measurement value within the specification?

>> Replace Intelligent Key. YES

NO

>> Replace Intelligent Key battery. Refer to DLK-224, "Removal and Installation".



BUZZER (COMBINATION METER)

IWITH INTELLIGENT KEY SYSTEM

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KEY WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY WARNING LAMP

Description INFOID:0000000005048161

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000005048162

1. CHECK FUNCTION

- 1. Use CONSULT-III to perform Active Test ("INDICATOR").
- 2. Touch "KEY IND" or "KEY ON" to check that it works normally.

Is the inspection result normal?

YES >> Key warning lamp is OK.

NO >> Refer to <u>DLK-88</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005048163

1. CHECK KEY WARNING LAMP

Refer to MWI-4, "Work flow".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

HAZARD FUNCTION

_	DT	C/CI	RCI	IIT	$\Delta I \Delta$	GNC	212	_

[WITH INTELLIGENT KEY SYSTEM]

HAZARD FUNCTION	А
Description INFOID:0000000005048164	A
Performs answer-back for each operation with number of blinks.	В
Component Function Check	
1. CHECK FUNCTION	С
 Use CONSULT-III to perform Active Test ("FLASHER"). Touch "LH" or "RH" to check that it works normally. Is the inspection result normal? YES >> Hazard warning lamp circuit is OK. NO >> Refer to <u>DLK-89</u>, "<u>Diagnosis Procedure</u>". 	D
Diagnosis Procedure	Е
1. CHECK HAZARD SWITCH CIRCUIT Refer to EXL-67, "Component Function Check".	F
Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace harness.	G
2. CHECK INTERMITTENT INCIDENT	Н
Refer to GI-34, "Intermittent Incident".	- 11
>> INSPECTION END	I
	J

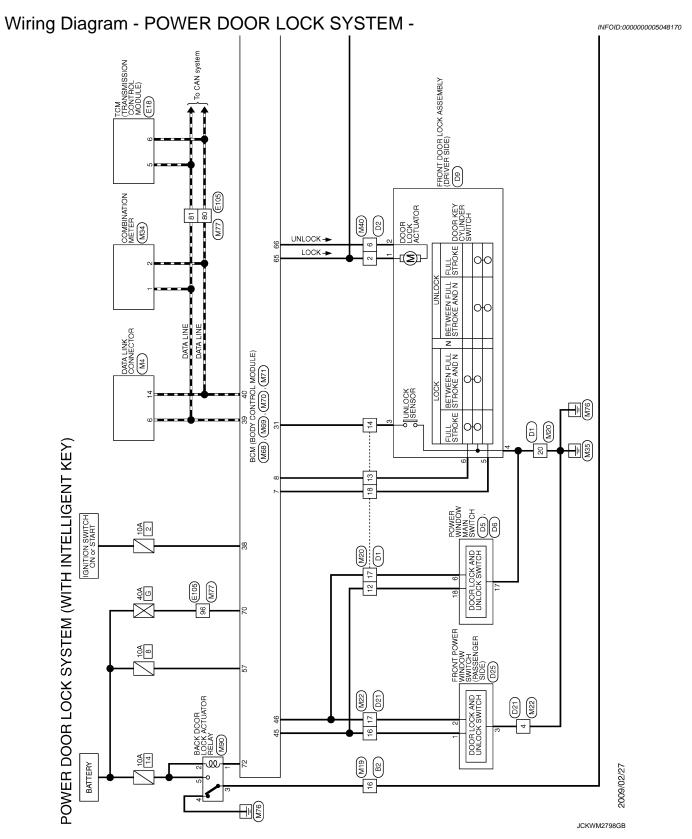
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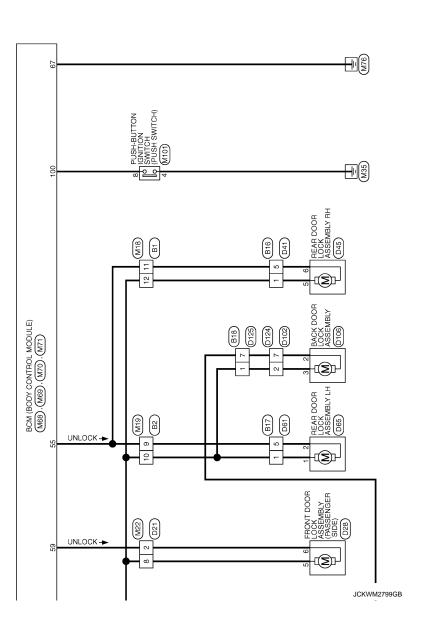
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POWER DOOR LOCK SYSTEM (WITH INTELLIGENT KEY)	INTELLIGE	ENT KEY)			
Connector No. B1	Connector No.	B2	Connector No. B16		Connector No. B17
Connector Name WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name WIRE TO WIRE	WIRE	Connector Name WIRE TO WIRE
Connector Type NS16MW-CS	Connector Type	NS16MW-CS	Connector Type NS10FW-CS	cs	Connector Type NS10FW-CS
賃	售		晉		番
1. 2. 3. —— 4. 5. 6. 7 8. 9.10.11.12.13.1415.16	H.S.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	H.S. 109	8765	4 3 <u> </u>
2	<u> </u>	Or Signal Mana [Gaarification]	<u>a</u>	Cinnal Nama [Sasaification]	<u></u>
of Wire G	هٔ ا		- o		of Wire
12 V –	10 16 B		5 G	1	- 2
[Ī		
Connector No. B18	Connector No.	D1 WIPE TO WIPE	Connector No. D2	H. W.	Connector No. D5
	Connector Type			CS	
	4				
H.S. 1 2 3 4 5 6	H.S.	5 4 3 2 1	H.S.		HS. [123 [] 567
7 8 9 10 11 12 13 19 20 14 15 16 17 18	50	19 13 12 11 10 9 8 7 18 17 16 15 14 8 7	10 9	8765	8 9 10 11 12 13 15 16
Terminal Golor Signal Name [Specification]	Terminal Golor No. of Wire	or Signal Name [Specification]	Terminal Color No. of Wire	Signal Name [Specification]	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification]
т	т	1	┰	1	т
7 B -[With Intelligent Key]	Н		e SB	1	
	14 G	1 1			
	╀	1			
	20 B	1			

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< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Connector No. D25 Connector Name FRONT POWER WINDOW SWITCH (PASSENGER SIDE) Connector Type NS12FW-CS T 2	Color Signal Name [Specification] Name Specification] GR	Connector No. D81 Connector Name WIRE TO WIRE Connector Type INSTOMM-GS LAS 1 2 3 4 5 6 7 8 9 10	Terminal Color Signal Name (Scredification) 1 V 5 C		A B C
Connector No. D21 Connector Name WIRE TO WIRE Connector Type NH10FW-CS10 Connector Type A	Terminal Color Signal Name [Specification] Terminal Color Color	Connector No. 045 Connector Type EUGFGY-RS A.A. A.A. A.A. A.A. A.A. A.A. A.A. A.	Terminal Color No. of Wire Signal Name [Specification] T		E F G
H INTELLIGENT KEY) Connector No. D9 Connector Name FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) Connector Type EOFFCY-RS MA. (123456)	Color Color No. Color No. Color Of Wire Signal Name [Specification]	Connector No. D41 Connector Name WIRE TO WIRE Connector Type NS10MW-CS H.S. 1 2 3 4 5 6 7 8 9 10	Terminal Color Signal Name (Specification)		J DLK
POWER DOOR LOCK SYSTEM (WITH Connector No. D6 Connector Name POWER WINDOW MAIN SWITCH Connector Type INSIGNEY-CS	Terminal Color Signal Name [Specification] 17 B	Connector No. D28 Connector Name FRONT DOOR LOCK ASSEMBLY Connector Type EUGFGY-RS H.S. H.S.	Terminal Color Signal Name [Specification]	JCKWM2801GB	M N
					Р

Di06 Connector No. D124 BACK DOOR LOCK ASSEMBLY Connector Name WRE TO WIRE	Connector Type	2 3	E105 Oormector No. M4	WIRE TO WIRE Connector Name DATA LINK CONNECTOR TH80AMV-CS16-TM4 Connector Type BD16FW	H.S. (14 16)	Signal Name [Specification] Terminal Color Signal Name [Specification]	
Connector No.		Terminal Color No. Of Wire 2 GR 3 Y	Connector No.	Connector Name Connector Type	H.S.	Terminal Color No. of Wire	000
H INTELLIGENT KEY) Connector No. D102 Connector Name WIPE TO WIPE			Connector No. E18	Connector Name TCM (TRANSMISSION CONTROL MODULE) Connector Type TK24FW	1 2 3 4 5 6 1 10 11 12 13 14 15 18 18 19 20 21 22 1	Terminal Color Signal Name [Specification]	
POWER DOOR LOCK SYSTEM (WITH Connector No. D65 Connector Name REAR DOOR LOCK ASSEMBLY LH		Terminal Color Signal Name [Specification]	Connector No. D125	Connector Name WIRE TO WIRE Connector Type NH10FW-CS10	20 19 13 12 11 10 9 8 7	Terminal Color Signal Name [Specification]	

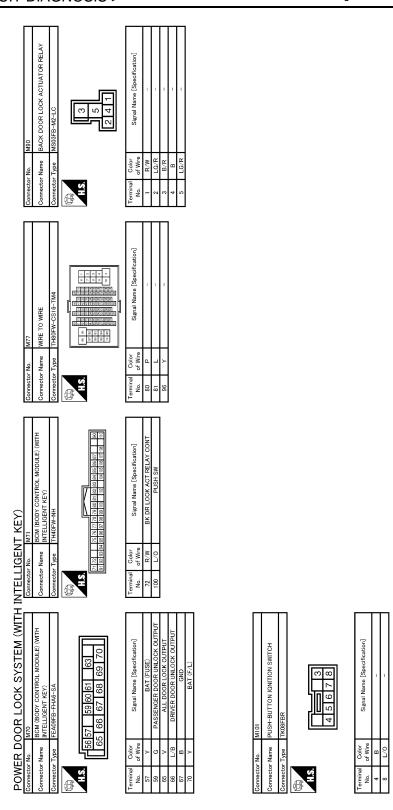
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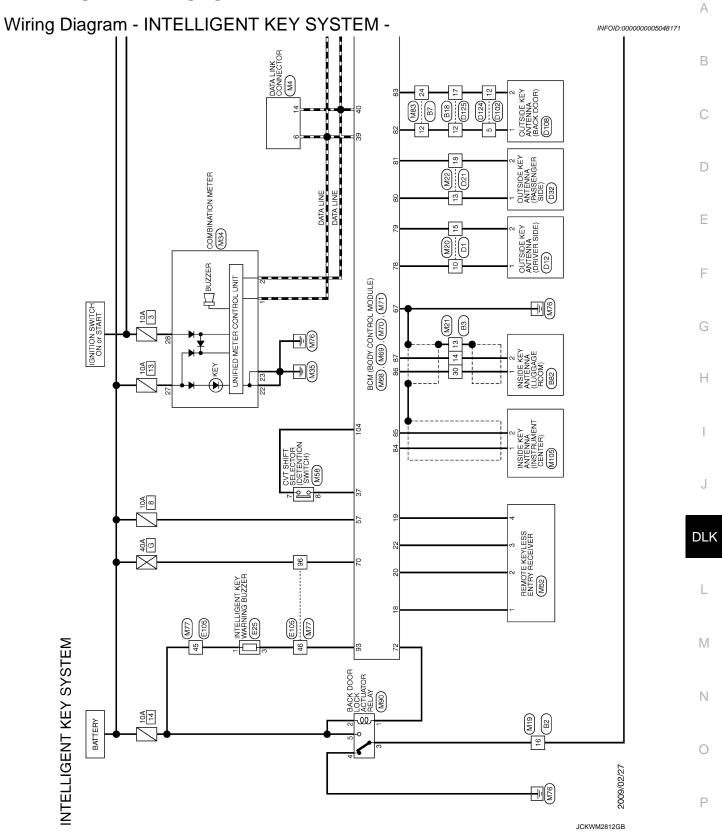
[WITH INTELLIGENT KEY SYSTEM]

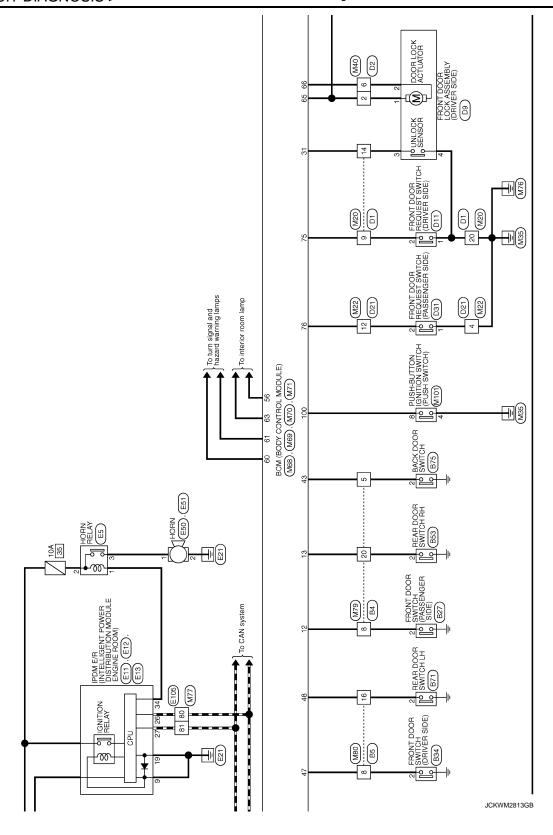
Multiple Multiple	Connector No. M69 Connector Name BCM (BODY CONTROL MODULE) (WITH BCM (BODY CONTROL MODULE) (WITH COnnector Type FEA/95W-FHA6-SA WAS A STATE OF THE BCM (BCM CONTROL MODULE) (WITH BCM CONTROL MODULE)	No. Orlor Signal Name [Specification] No. Orlow Wise Orlow	A B C
Miles Miles Miles	Connector No. M68 Connector Name BOM (BODY CONTROL MODULE) (WITH Connector Type TH40FB-NH	Color Signal Name [Specification] Color Signal Name [Specification] The New York UNLOCK SW Structure	E F G
NTELLIGENT KEY) Connector No. Mills	Connector No. M40 Connector Name WIRE TO WIRE Connector Type NISTOMW-CS H.S. 1 2 3 4 5 6 7 8 9 10	Terminal Color No. Signal Name [Specification]	J DLK
Connector No. M18 NS16FW-CS Connector Type NS16FW-CS	Connector No. M34 Connector Name COMBINATION METER Connector Type TH40FW-NH 1.5. A.6. (A) (B) (B) (B) (B) (B) (B) (B)	Terminal Color No. of Wire Signal Name [Specification] 1 L CANH-H CANH-L CANH-L	M N O
			Р

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D41) BACK DOOR LOCK ASSEMBLY (D106) BCM (BODY CONTROL MODULE)
(M69), (M69), (M70), (M71) REAR DOOR LOCK ASSEMBLY LH D65 BE SE (ELM) B17 D01 (3) JCKWM2814GB В

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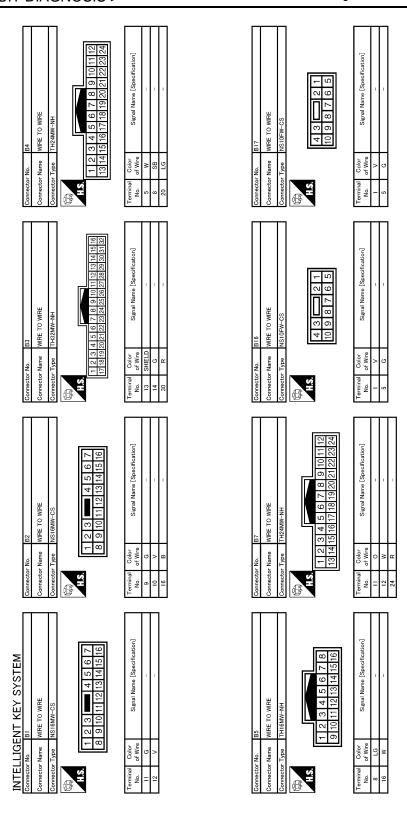
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bion]	ation]	А
REAR DOOR SWITCH RH A03FW Signal Name [Specification]	NE TO WIRE 10FN-CS10 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	В
B53 A03FW	0	С
Ocurrector No. Connector Type Connector Type No. Color N	Connector No. Connector No. Connector Type Terminal No. 9 9 9 14 14 14 15 15 15 16 17 18 19 19 19 19 10 10 10 10 10 10	D
DRIVER SIDE)	UGGAGE ROOM) Pecification	Е
FRONT DOOR SWITCH (DRIVER SIDE) A03FW Signal Name [Specification]	INSIDE KEY ANTENNA (LUGGAGE ROOM) RKODFL Signal Name [Specification]	F
Color of Wire	No. Type G Odior G Wire R	G
Connecto Con	Commetto Commetto No. 1	Н
OOR SWITCH (PASSENGER	Signal Name [Specification]	I
BEZT FRENUT DOOR SWITCH (PASSENGER SUDE) AUGFW Signal Name [Specification]	BACK DOOR SWITCH AXISTED Signal Name	J
Connector No.	Connector No.	DLK
[2] Q Q		L
	Signal Name (Specification)	M
ENT K WIRE TO NHIDMW 12 9 9 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B71 A035FW	N
INTELLIGE Connector No.	Connector No. Connector Name Connector Type Connector Type Of Wire No. Of Wire 2 Wire	0
	JCKWM2816GB	Р

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INTELLIGENT KEY SYSTEM	Connector No. D9 Connector No. D9 Connector Name FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) Connector Type E10FGY-RS Connector Type E10FGY-RS Connector Type	Connector No. D11 Connector Name FROMT DOOR REQUEST SWTCH Connector Type RROZEGY RR	Connector No. D12 Connector Type RK02MGY M.S. A. Oolor Terminal Color No. of Wire Signal Name [Specification]
ector Ne	2 SB	2 BR	Cornector No. D32 Connector Name OUTSIDE KEY ANTENNA (PASSENGER Connector Name SUE) Connector Type RYCOMGY
l II———II	\$1. \$1.	#8.	HS HS
Terminal Color Signal Name Specification Color Col	Terminal Color Signal Name [Specification] Color Col	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 1 2 LG	Terminal Color Signal Name [Specification]

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< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

WYELLOGENY KEY SYSTEM Control to the Control to th	DDS FEAR DOOR LOOK ASSEMBLY LH EDBFGY-RS	Signal Name [Specification]	DIOS OUTSIDE KEY ANTENNA (BACK DOOR) RKOZMGY	Signal Name [Specification] -		A B
NTELLIGENT KEY SYSTEM Connector the part of the pa	Connector No. Connector Name Connector Type H.S.		Connector No. Connector Name Connector Type			D
MTELLOCATY KEY SYSTEM Connector Name		roffcation	МТСН	offcaton)		Е
WTELLGENT KEY SYSTEM Conceach the District Owner Conceach th	<u>ლ</u> გ	Signal Name (Spe	2FGY	Signal Name (Spe		F
MITELLIGENT KEY SYSTEM Connector No. 100 Connec			9 9			
UNTELLIGENT KEY SYSTEM Connector Name Wile TO WIRE Connector Name Wile TO WIRE Connector Name Wile TO WIRE Connector Name Co						Н
INTELLIGENT KEY SYSTEM Connector No. Connector No. Conne	OOOR LOCK ASSEMBLY RH	Signal Name [Specification]	DOOR LOCK ASSEMBLY	Signal Name [Specification]		J
INTELLIGENT KEY SYSTEM Connector Number Mister to Wife Connector Number Mister to Wife Connector Number Mister to Wife Connector Number Connector N		Terminal Color No. of Wire 5 W 6 P		Terminal Color No. of Wire 2 GR 3 Y		DLK
Connector Name WIRE TO CONNECTOR NAME TO CONNECT						L
Connector Name WIRE TO CONNECTOR NAME TO CONNECT	WRE CS 7 8 9 10	Signal Name [Specification	9 10 14 4	Signal Name (Specification		M
JCKWM2818GB	10 Paris 10 Paris		D102 WIRE TO NS12MW 1 2			Ν
	Oonnector Na. Connector Tyr	Terminal CA No. of 17	Connector No.			0
11					JCKWM2818GB	Р

Revision: 2009 March **DLK-103** 2009 Z12

Connector No. E11	Connector Name DISTRIBUTION MODULE ENGINE ROOM) Connector Tune MOBER IC		Terminal Color Nice Signal Name (Specification) 9 B/W -	Connector No. E50 Connector Name HORN Connector Type PDIFB-A	Terminal Color Signal Name [Specification] No. of Wine 1
Connector No. E5	Connector Name HORN RELAY	HS.	Terminal Color Signal Name [Specification] No. of Wife Signal Name [Specification] 2 C C C C C C C C C	Connector No. E25 Connector Name INTELLIGENT KEY WARNING BUZZER Connector Type RRGGFBR H.S.	Terminal Color Signal Name Specification 1
Connector No. D125	Connector Name WIRE TO WIRE	┐╟ ─── ║	Terminal Color Signal Name [Specification] No. of Vifice Signal Name [Specification] T GR	Connector No. E13 Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) Connector Type THIZPW-NH M.S. 28 27 26 25 24 34 33 31 30	Terminal Color Signal Name [Specification] 26 P - -
INTELLIGENT KEY SYSTEM Connector No. D124	Connector Name WIRE TO WIRE	1 —	Terminal Color Signal Name [Specification]	Connector No. E12 Connector Name IPDM ER (INTELLIGENT POWER Connector Type INSOEBR-CS WSGEBR-CS LST 19 18	Terminal Color No. of Wire 19 B./W

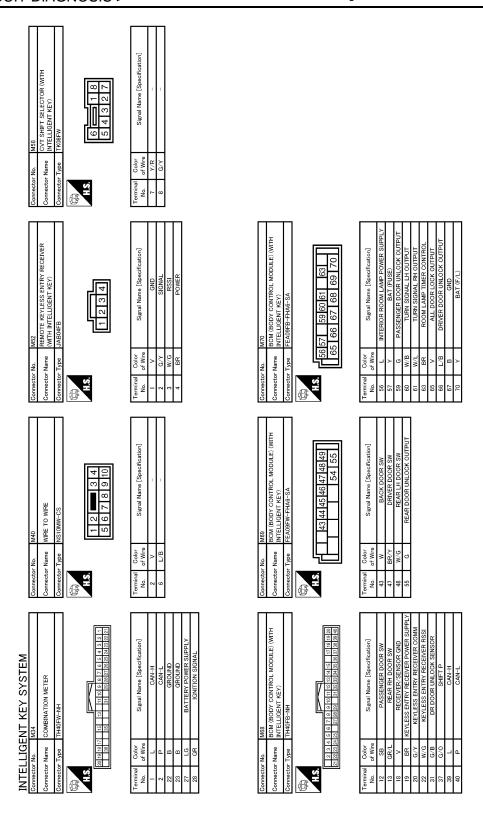
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< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

No. M16 Name WIRE TO WIRE Type NS16FW-CS 7 6 5 4	No. M22 Name WIRE TO WIRE Type INH10MW-CS10 1 2 3 4 5 6 7 8 91 011 1213 19 20 Color Signal Name (Specification) of Wire B	A B	
Connector No. Connector Name Connector Type H.S. Terminal Color No. 11 G G 12 V	Connector No.	D	
IK CONNECTOR 14 16 7 8 Signal Name [Specification]	WARE NH 10 9 8 7 6 5 4 3 2 1 20 25 24 25 22 21 20 19 18 17 Signal Name (Specification)	Е	
	MRE 4H 4H 6H	F	
No. Type Color of Wire	- No 15ypee - 15yp	G	
Connecto Con	Connector Connector Framinal No. 113 114 30	Н	
TO WIRE WW-CS16-TMA WW-CS16-T	WRE 4 5 6 10 11 12 13 19 20 15 16 17 118 19 20 15 16 17 118 19 20 15 16 17 118 19 20 15 16 17 18 19 20 15 16 17 18 19 20 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	J	
W WRE TO THE SOMW.	M20 WIRE TO STATE TO		
Connector No. Connector Name Connector Type Terminal Color No. 45 V Ve. 45 V Ve. 80 P P 80 P P 81 L	Connector No. Connector Name Connector Type Terminal Color No. of Wire 10	DL	K
		L	
INTELLIGENT KEY SYSTEM Jonnector No. A.S. A.S. A.S. A.S. A.S. B.W. Commetter Signal Name [Specification] Commetter Signal Name [Specification]	WIRE CS 13 12 11 10 9 8 Signal Name [Specification]	М	
HORN AND THE POLICE OF THE POL	M19 WRE TO NSIGFW-	N	
INTELLIGE Connector No Connector Type Connector Typ	Connector No. Connector Name Connector Type Solver Solve	0	
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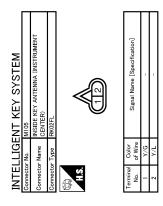
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[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

Connector No. M79	ector ector	No. of Wire Signal Name Lyberingation 1	A B C
Connector No. M77 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Type TH80PW-CS i6-TM4 Th80PW-CS i6-TM4	No. M90 Name BACK DOOR LOCK ACTUATOR RELAY Type MS03FB-M2-LC 2 4 1 Oolor Science Manage Coordinated		E F G
85 Y/L ROOM ANT- 87 L LUGGAGE ROOM ANT- 87 L LUGGAGE ROOM ANT- 98 GR/W F-KEV WARN BUZZER 100 L/O PUSH SW 104 Y/R CVT SHIFT SELECTOR POWER SUPPLY	Connector No. M83 Connector Name WIRE TO WIRE Connector Type ITH24FW-NH 12 11 10 9 8 7 6 5 4 3 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	s. g	J DLK
INTELLIGENT KEY SYSTEM Connector Name M71 Connector Name M71 Connector Name M71 Connector Type INTELLIGENT KEY) Connector Type Connector T		No of Wire No	M N
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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value INFOID:0000000005154952

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
FR WIPER TI	Front wiper switch HI	On
ED WIDED LOW	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
FR WIFER IN	Front wiper switch INT/AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIFER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
DD WIDED ON	Other than rear wiper switch ON	Off
RR WIPER ON	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
NN WIFEN STOP	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
TORN SIGNAL K	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
TORN SIGNAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAWIF SW	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
TII DEAW OW	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
TILAD LAWIF SW T	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
TILAD LAWIF SW 2	Lighting switch 2ND	On
DASSING SW	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LIGHT SW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
TINTOG SW	Front fog lamp switch ON	On

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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DOOR SW-DR	Driver door closed	Off
DOOK SW-DK	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
DOOK SW-AS	Passenger door opened	On
OOD SW DD	Rear RH door closed	Off
DOOR SW-RR	Rear RH door opened	On
OOD SW DI	Rear LH door closed	Off
DOOR SW-RL	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
JOOK SW-BK	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
DL LOCK SVV	Power door lock switch LOCK	On
SDL LINILOCK SW	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
VEV CVI LINI CW	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
DEAD DEE CW	Rear window defogger switch OFF	Off
REAR DEF SW	Rear window defogger switch ON	On
R/BD OPEN SW	NOTE: The item is indicated, but not monitored.	Off
FRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
TANLONI OLO	Blower fan OFF	Off
FAN ON SIG	Blower fan ON	On
ALD COMP OW	Air conditioner OFF (A/C switch indicator OFF)	Off
AIR COND SW	Air conditioner ON (A/C switch indicator ON)	On
	LOCK button of the key is not pressed	Off
RKE-LOCK	LOCK button of the key is pressed	On
	UNLOCK button of the key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the key is pressed	On
NE TO OD	BACK DOOR OPEN button of the key is not pressed	Off
RKE-TR/BD	BACK DOOR OPEN button of the key is pressed	On
DICE DANIC	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
N/E MODE OUG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
RKE-MODE CHG	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
ODTI OEN (DTOT)	Bright outside of the vehicle	Close to 5 V
OPTI SEN (DTCT)	Dark outside of the vehicle	Close to 0 V
	Bright outside of the vehicle (Lighting switch AUTO)	Close to 5 V
OPTI SEN (FILT)	Dark outside of the vehicle (Lighting switch AUTO)	Close to 1.50 V

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
OPTICAL SENSOR	NOTE: The item is indicated, but not monitored.	Off
RAIN SENSOR	NOTE: The item is indicated, but not monitored.	Off
DEO CW DD	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
DEO CW AC	Passenger door request switch is not pressed	Off
REQ SW -AS	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
REQ 3W -BD/TR	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
1 0011 000	Push-button ignition switch (push switch) is pressed	On
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
BRAKE SW 1	The brake pedal is not depressed	Off
DRAKE SW I	The brake pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 2	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
DETE/CANCL SW	Selector lever in P position	Off
DETE/CANCE SW	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
SI I FIVIN SW	Selector lever in P or N position	On
S/L -LOCK	Steering is locked	Off
3/L -LOOK	Steering is unlocked	On
S/L -UNLOCK	Steering is unlocked	Off
S/L -OINLOOK	Steering is locked	On
S/L RELAY-F/B	Steering is unlocked	Off
O/E REE/RI 17B	Steering is locked	On
UNLK SEN -DR	Driver door is locked	Off
ONLIN DIN	Driver door is unlocked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
1 OOI 1 OW -II DIW	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
OR INCIT 17D	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
DETE OVV -II DIVI	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
O. I I IV II DIVI	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
Ç. 11 ME1	Selector lever in P position	On

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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
SFT N -MET	Selector lever in any position other than N	Off
SEL IN -INIE I	Selector lever in N position	On
	Engine stopped	Stop
ENCINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	Steering is locked	Off
S/L LOCK-IPDIVI	Steering is unlocked	On
C/L LINILY IDDM	Steering is unlocked	Off
S/L UNLK-IPDM	Steering is locked	On
C/L DELAY DEO	Steering is unlocked	Off
S/L RELAY-REQ	Steering is locked	On
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Steering is locked	Reset
ID OK FLAG	Steering is unlocked	Set
DDMT ENC CTDT	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONFOMIDALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
CONFRM ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM IDA	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIDM ID2	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
CONFIRM ID3	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIDM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
CONFIRM ID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
CONFIRMIDI	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
NOT REGISTERED	BCM detects registered key ID, or BCM does not detect key ID.	ID OK
NOT REGISTERED	BCM detects non-registration key ID.	ID NG
TD 4	The ID of fourth key is not registered to BCM	Yet
TP 4	The ID of fourth key is registered to BCM	Done
TD 0	The ID of third key is not registered to BCM	Yet
TP 3	The ID of third key is registered to BCM	Done
TD 0	The ID of second key is not registered to BCM	Yet
TP 2	The ID of second key is registered to BCM	Done
TD /	The ID of first key is not registered to BCM	Yet
TP 1	The ID of first key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID DECOT ELA	ID of front LH tire transmitter is registered	Done
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet
ID DECOTED!	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
ID DECCE DD4	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
ID DECOT DI 4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
DUZZED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

DLK

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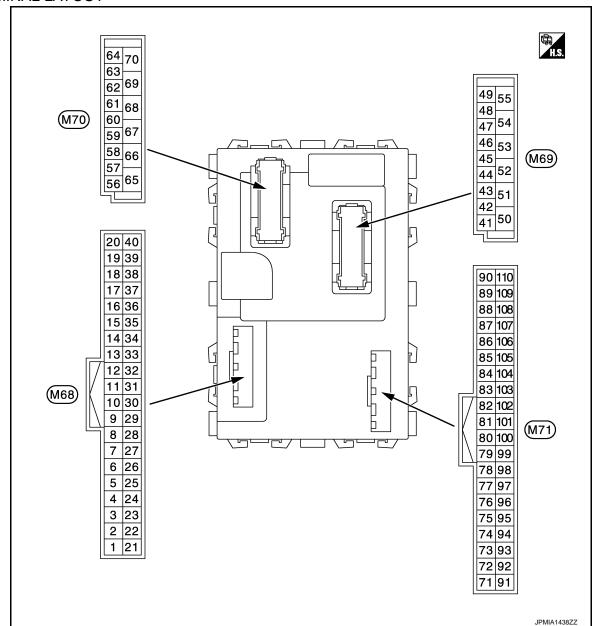
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TERMINAL LAYOUT



NOTE:

Connector color

M68, M70: Black

• M69, M71: White

PHYSICAL VALUES

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF	0 V
					Turn signal switch RH	
					Lighting switch HI	(V) 15
2 (BR/W)	Ground	Combination switch INPUT 5	Input	Combination switch (Wiper intermit-	Lighting switch 1ST	10 5 0 ++10ms PKIB4958J 1.0 V
(DK/W)				tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 +10 ms JPMIA0342JP 2.0 V
					All switch OFF	0 V
					Turn signal switch LH	
					Lighting switch PASS	(V) 15
3 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch (Wiper intermit-	Lighting switch 2ND	10 5 0 PKIB4958J
(7		_	INPUT 4 (VVI)	tent dial 4)	Front fog lamp switch ON	(V) 15 10 5 0 PKIB4956J 0.8 V
					All switch OFF	0 V
					Front wiper switch LO	
			Combination	Front wiper switch MIST	(V) 15	
4	Ground	Combination switch	Input	switch	Front wiper switch INT	10
(L/Y) Ground	Giound	Ground INPUT 3		(Wiper intermit- tent dial 4)	Lighting switch AUTO	0 → →10ms
						PKIB4958J 1.0 V

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch (Wiper intermittent dial 4) Rear washer ON (Wiper intermittent dial 4)	(V) 15 10 5
5 (G)	Ground	Combination switch INPUT 2	Input	Combination switch	Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	PKIB4958J
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 10 10 10 10 10 10 10 10 10 10 10 10
					All switch OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5 0
				Wiper intermittent dial 3 (All switch OFF)	PKIB4958J	
6 (L/R)	Ground	Combination switch INPUT 1	Input	Combination switch	Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2	(V) 15 10 5 0 ++10ms PKIB4952J 1.9 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 10 10 10 10 10 10 10 10 10 10 10 10

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description				Value	
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)	
7 (W/R)	Ground	Door key cylinder switch UNLOCK	Input	Door key cylinder switch	NEUTRAL position	(V) 15 10 5 0 JPMIA0587GB 8.0 - 8.5 V	
					UNLOCK position	0 V	
8	0	Door key cylinder	l	Door key cylin-	NEUTRAL position	12 V	
(W/B)	Ground	switch LOCK	Input	der switch	LOCK position	0 V	
9	Ground	Stop Jamp quitab 1	lanut	Stop lamp	OFF (Brake pedal is not depressed)	0 V	
(R)	Giound	Stop lamp switch 1	Input	switch	ON (Brake pedal is depressed)	Battery voltage	
10 (V/W)	Ground	Tire pressure warning check switch	Input	Ignition switch Ol	FF	(V) 15 10 10 ms JPMIA0012GB 1.0 - 1.5 V	
11 (L/Y)	Ground	ACC feedback	Input	Ignition switch Of Ignition switch AG		0 V Battery voltage	
12 (SB)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	
					ON (When passenger door opened)	0 V	
13 (GR/L)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closed) ON (When rear RH door	(V) 15 10 5 0 *** 10ms PKIB4960J 7.0 - 8.0 V	
					opened) When bright outside of the	0 V	
14	Ground	Optical sensor	Input	Ignition switch	vehicle When dark outside of the	Close to 5 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
15 (W/L)	Ground	Rear window defog- ger switch	Input	Rear window defogger switch	Not pressed	(V) 15 10 10 ms JPMIA0012GB 1.0 - 1.5 V
					Pressed	0 V
17 (R/G)	Ground	Optical sensor pow- er supply	Output	Ignition switch	OFF, ACC	0 V 5 V
18 (V)	Ground	Receiver and sensor ground	Input	Ignition switch O		0 V
19 (BR)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch O	FF	(V) 15 10 5 0 JMKIA3838GB
20	Ground	Remote keyless en-		Waiting		(V) 15 10 5 0 JMKIA3838GB
(G/Y)	Glound	try receiver commu- nication	Input	Signal receiving		(V) 15 10 5 0 1 ms JMKIA3841GB
21 (P/L)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
22 (W/G)	Ground	Remote keyless entry receiver RSSI	Input	Waiting Signal receiving		0 V (V) 15 10 5 0 JMKIA3838GB

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. Description (Wire color)		Description				Value	
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	
					ON	0 V	
23 (R/Y)	Ground	Security indicator lamp	Output	Security indicator	Blinking (Ignition switch OFF)	(V) 15 10 5 0 JPMIA0590GB	
					OFF	12.0 V Battery voltage	
24*	Ground	Dongle link	Input/	Ignition switch O		5 V	
(GR/R)			Output		Ignition switch is pressed	Just after pressing ignition	
25 (LG)	Ground	NATS antenna amp.	Input/ Output	During waiting	while inserting the key into the key slot.	switch. Pointer of tester should move.	
27 (Y/G)	Ground	A/C switch	Input	Air conditioner	OFF (A/C switch indicator: OFF)	(V) 15 10 5 10 ms JPMIA0012GB	
					ON (A/C switch indicator: ON)	1.0 - 1.5 V 0 V	
					OFF	0 V	
28 (G/W)	Ground	Blower fan switch	Input	Blower fan	ON	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	
29 (L/W)	Ground	Hazard switch	Input	Hazard switch	OFF ON	12 V 0 V	
31 (G/B)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 ****10ms PKIB4960J 7.0 - 8.0 V	
					UNLOCK status (Unlock sensor switch ON)	0 V	

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< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	
+ (vvire	color)	Signal name	Input/ Output	Condition		(Approx.)	
-					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 +-10ms PKIB4960J 7.0 - 8.0 V	
32 (LG)	Ground	Combination switch OUTPUT 5	Output	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	AN	
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5	
					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	0	
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 ++10ms PKIB4960J 7.0 - 8.0 V	
33 (Y/L)	Ground	Combination switch OUTPUT 4	Output	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	7.0 0.0 1	
,					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10	
					Rear wiper switch INT (Wiper intermittent dial 4)	0	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	PKIB4958J	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	Λ
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
			Cope		All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 ***10ms PKIB4960J 7.0 - 8.0 V	В
34 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)		
()					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10	Е
					Rear washer switch ON (Wiper intermittent dial 4)	5 0	F
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	PKIB4958J 1.2 V	G
35	Crowd	Combination switch	Output	Combination switch	All switch OFF	(V) 15 10 5 0 ++10ms PKIB4960J 7.0 - 8.0 V	H
(R/L)	Ground	OUTPUT 2	Output	(Wiper intermit- tent dial 4)	Lighting switch 2ND	(1)	
				,	Lighting switch PASS Front wiper switch INT	10 h h h h h h h h h	DL
					Front wiper switch HI	5 0 ++10ms PKIB4958J 1.2 V	L
36	Ground	Combination switch	Output	Combination switch	All switch OFF	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	M N
(L/O)	Giodila	OUTPUT 1	Output	(Wiper intermit- tent dial 4)	Turn signal switch RH	(V)	Р
				,	Turn signal switch LH Front wiper switch LO	(V) 15 10 5	
					(Front wiper switch MIST) Front washer switch ON	0 → +10ms PKIB4958J 1.2 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
37 (G/O)	Ground	Selector lever P position switch	Input	Selector lever	P position Any position other than P	0 V 12 V
38 (O)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V Battery voltage
39 (L)	Ground	CAN-H	Input/ Output		_	—
40 (P)	Ground	CAN-L	Input/ Output		_	_
43 (W)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	(V) 15 10 5 0 + 10ms PKIB4960J 9.5 - 10.0 V
					ON (When back door opened)	0 V
44 (LG)	Ground	Rear wiper stop position	Input	Ignition switch ON	Rear wiper stop position Any position other than rear wiper stop position	12 V 0 V
45 (GR)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch	NEUTRAL position	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V
					LOCK position	0 V
46 (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch	NEUTRAL position	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V
					UNLOCK position	0 V
47 (BR/Y)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	(V) 15 10 5 0 10ms PKIB4960J 7.0 - 8.0 V
					ON (When driver door opened)	0 V

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		0 111		Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
48 (W/G)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closed)	(V) 15 10 5 0 ++10ms PKIB4960J
						7.0 - 8.0 V
					ON (When rear door LH opened)	0 V
49				Luggage room	Back door is closed (Back door lamp turns OFF)	12 V
(Y)	Ground	Luggage room lamp	Output	lamp switch DOOR position	Back door is opened (Back door lamp turns ON)	0 V
54	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
(L/W)	0.00		- Caipai	Trou. Impor	ON (Activated)	12 V
55	Ground	Rear door UNLOCK	Output	Rear door	UNLOCK (Actuator is activated)	12 V
(G)	Ground	Real door onlook	Output	ixeai dooi	Other then UNLOCK (Actuator is not activated)	0 V
					np battery saver is activated. room lamp power supply)	0 V
56 (L)	Ground	Interior room lamp power supply	Output	vated.	np battery saver is not acti- rior room lamp power sup-	12 V
57 (Y)	Ground	Battery power sup- ply	Input	Ignition switch O	FF	Battery voltage
59	Ground	Passenger door UN-	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
(G)	Giouna	LOCK	Output	i asserigei uuul	Other then UNLOCK (Actuator is not activated)	0 V
					Turn signal switch OFF	0 V
60 (W/B)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1s PKIC6370E

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< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
61 (W/L)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 15 15 10 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10
63		Interior room lamp		Interior room	OFF	6.0 V 12 V
(BR)	Ground	Interior room lamp timer control	Output	lamp	ON	0 V
65	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	12 V
(V)	Ground	All doors LOCK	Output	All doors	Other then LOCK (Actuator is not activated)	0 V
66	Ground	Driver door UN-	Output	Driver door	UNLOCK (Actuator is activated)	12 V
(L/B)	Ground	LOCK	Output	Dilver door	Other then UNLOCK (Actuator is not activated)	0 V
67 (B)	Ground	Ground	Output	Ignition switch ON		0 V
68 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		12 V
69 (L/W)	Ground	P/W power supply (BAT)	Output	Ignition switch O	FF	12 V
70 (Y)	Ground	Battery power sup- ply	Input	Ignition switch O	FF	Battery voltage
71	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 + 0.2s OCC3881D
(R)	5.54.14	er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0 ••• 0.2s OCC3880D
72	Ground	Back door lock actuator relay control	Output	Back door	LOCK (Actuator is activated) Other than LOCK (Actuator is not activated)	0 V Battery voltage
(R/W)				i e e e e e e e e e e e e e e e e e e e	ioi io noi activateu)	
(R/W) 75	Ground	Driver door request	Input	Driver door re-	ON (Pressed)	0 V

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

	nal No. color)	Description			O a region	Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
76	Ground	Passenger door re-	Input	Passenger door	ON (Pressed)	0 V	
(G)	Ground	quest switch	mpat	request switch	OFF (Not pressed)	12 V	
77	Ground	Back door request	Input	Back door re-	ON (Pressed)	0 V	
(W)	Cround	switch	mpat	quest switch	OFF (Not pressed)	12 V	
78	Carried	Driver door antenna	0.4.4	When the driver door request	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 5 0 JMKIA3838GB	
(LG)	Ground	(+)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	
79	Ground	Driver door antenna	Output	When the driver door request	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 MKIA3838GB	
(V)	5.53.10	(-)		switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	

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< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value			
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)			
80	Ground	Passenger door an-	Output	When the passenger door request switch is	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB			
(BR/Y)	Clound	tenna (+)	Curput	quest switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB			
81	Ground	Passenger door an-	Output	When the passenger door request switch is	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB			
(L/Y)		tenna (-)	o a pa	operated with ignition switch OFF	operated with ignition switch	ignition switch	ignition switch OFF Wh	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
82	Ground	Back door antenna	Output	When the back door request	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB			
(W/B)	Cround	(+)	Сири	switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB			

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	Λ
+ (VVire	color)	Signal name	Input/ Output		Condition	(Approx.)	Α
83	Occupati	Back door antenna (-		When the back door request	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB	B C D
(B/W)	Ground		Output	switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	E F
84	Ground	Room antenna (+)	Output	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 50 500 ms JMKIA3838GB	G H I
(Y/G)		(Instrument panel)		OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 S JMKIA3839GB	J DLK
85	Ground	Room antenna (-)	Output	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB	M
(Y/L)	Sissing	(Instrument panel)	Сири	OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA3839GB	Р

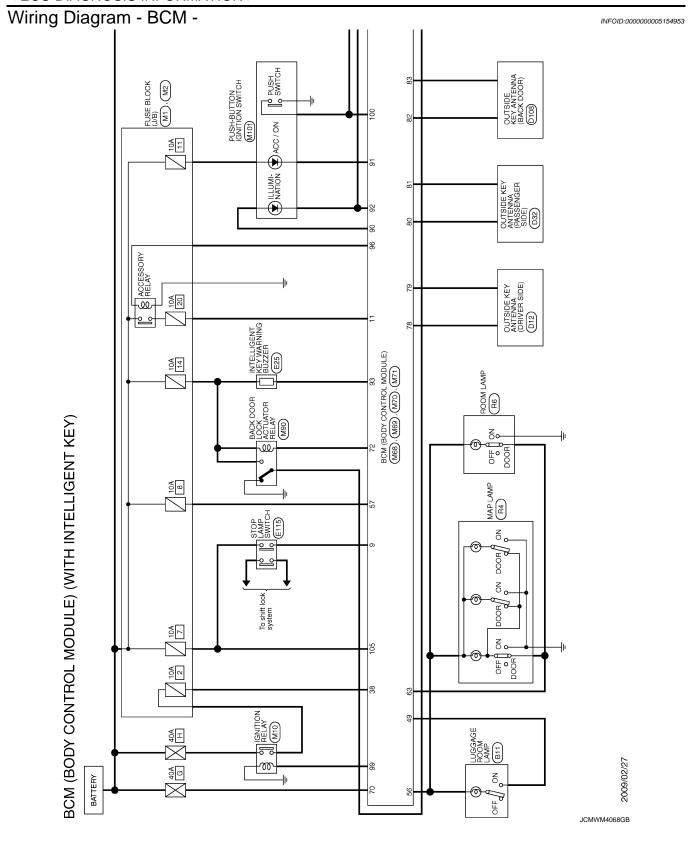
	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
86	Ground	Luggage room an-	Output	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB
(P)		tenna (+)		OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
87	Ground	Luggage room an-	Output	Ignition switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA3838GB
(L)	Glound	tenna (-)	Output	OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
90	Ground	Push-button ignition	Output	Push-button ig-	ON	12 V
(W/L)	Ground	switch illumination	Output	nition switch illu- mination	OFF	0 V
91 (Y)	Ground	ACC/ON indicator lamp	Output	Ignition switch	OFF	Battery voltage
		lamp			ACC or ON OFF	0.5 V 0 V
92 (BR/R)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 15 10 5 10 10 ms JPMIA1554GB 6.0 - 7.0 V

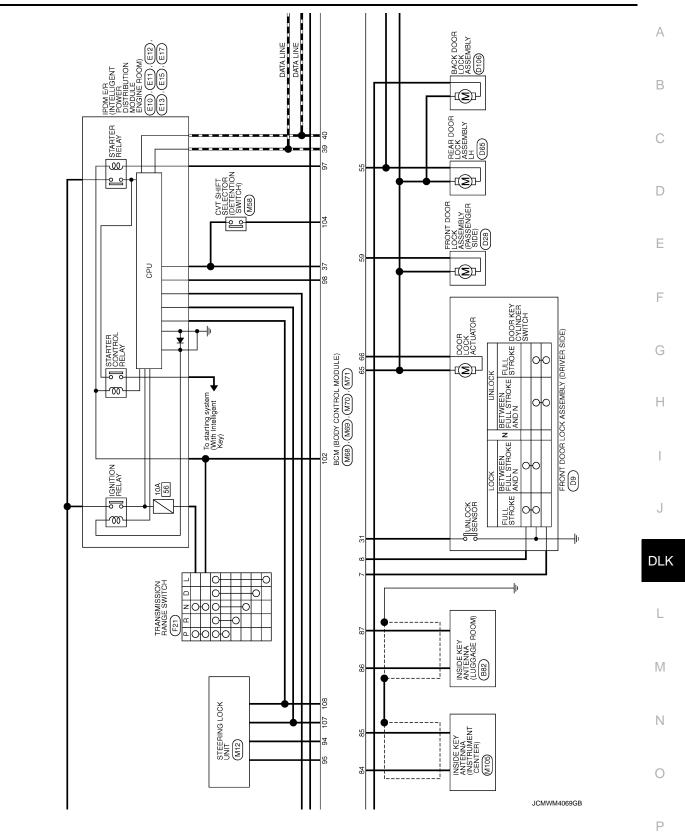
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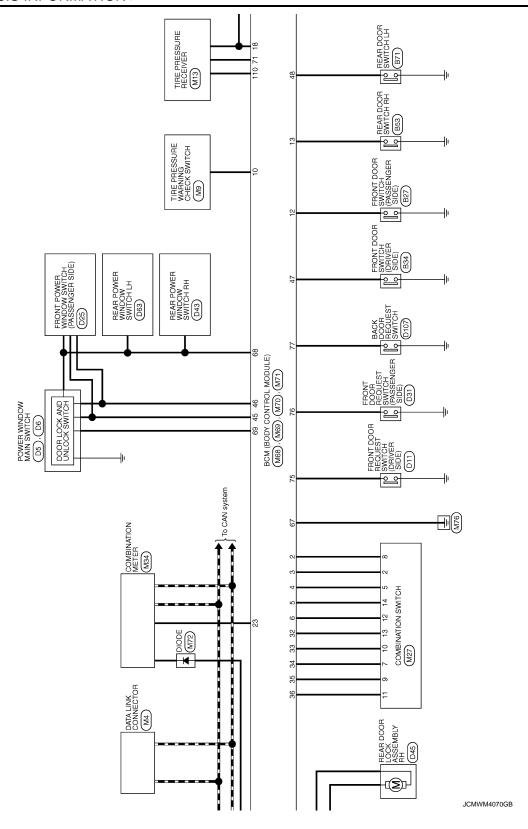
[WITH INTELLIGENT KEY SYSTEM]

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
93	Ground	Intelligent Key warn-	Output	Intelligent Key	Sounding	0 V
(GR/W)	Olouliu	ing buzzer	Output	warning buzzer	Not sounding	12 V
					LOCK status	12 V
94 (Y/R)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 ms JMKIA0066GB
					For 15 seconds after UN- LOCK	12 V
					15 seconds or later after UNLOCK	0 V
95	Ground	Steering lock unit	Output	Ignition switch	OFF or ACC	12 V
(W/G)	Ciound	power supply		iginuon switch	ON	0 V
96	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(BR/W)	Ciodila	, too roley control	Juipui	-grader switch	ACC or ON	12 V
97	Ground	Starter relay control	Output	Ignition switch	When selector lever is in P or N position	Battery voltage
(L/R)	Giodila	Starter relay control	Output	ON	When selector lever is not in P or N position	0 V
98	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	12 V
(BR)	Giodila	E/R) control	Output	Igrillion Switch	ON	0 V
99	Ground	Ignition relay control	Output	Ignition switch	OFF or ACC	0 V
(W/R)	Oround	ignition rolay control	Output	ignition ownon	ON	12 V
100	Ground	Push-button ignition	Innut	Push-button ig- nition switch	Pressed	0 V
(L/O)	Giouna	switch (push switch)	Input	(push switch)	Not pressed	12 V
102	Ground	Selector lever P/N	Innut	Soloator lavor	P or N position	Battery voltage
(G)	Giound	position	Input	Selector lever	Except P and N positions	0 V
104 (Y/R)	Ground	CVT shift selector (detention switch) power supply	Output	Ignition switch O	N	12 V
105 (B/O)	Ground	Stop lamp switch 2	Input	Ignition switch O	FF	Battery voltage
106	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(Y/B)	Giodild	lay control	Output	iginuon switch	ON	12 V
107	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V
(L/W)	Ciound	tion No. 1	mput	Clooning look	UNLOCK status	12 V
108	Ground	Steering lock condi-	Input	Steering lock	LOCK status	12 V
(P/L)		tion No. 2			UNLOCK status	0 V
110	Ground	Tire pressure receiv-	Output	Ignition switch	OFF or ACC	0 V
(BR/W)		er power supply	- 10 -		ON	5 V

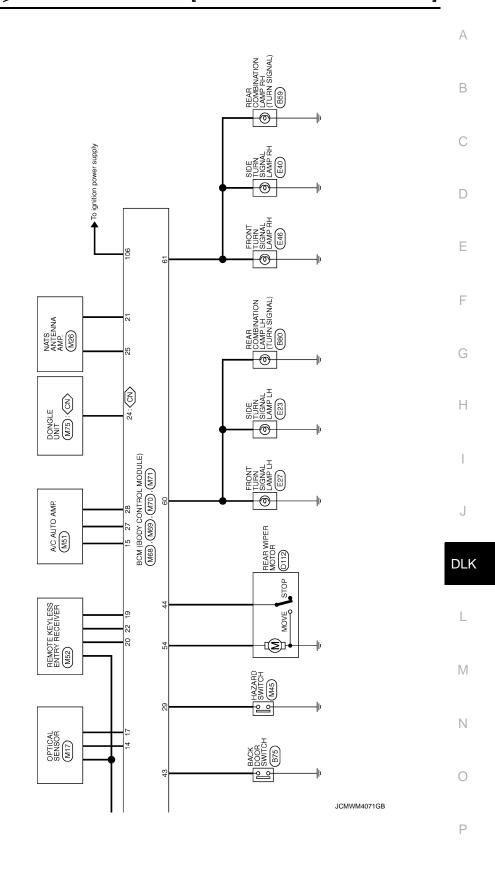
^{*:} For Canada



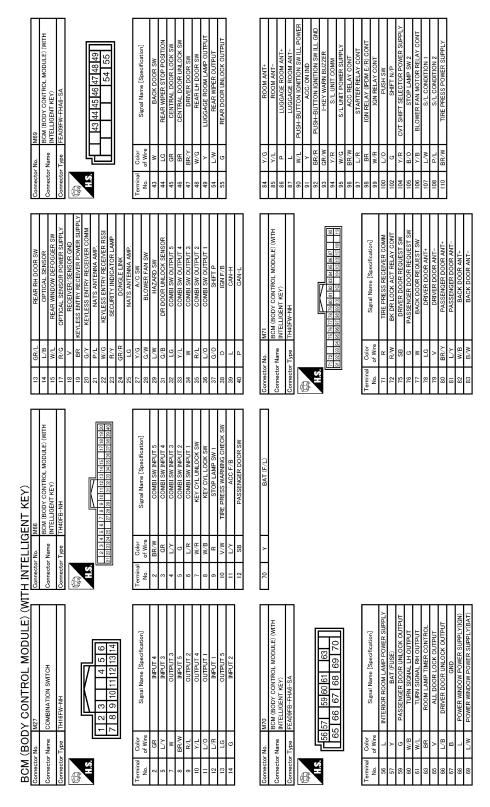




CN): For Canada



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JCMWM4072GB

INFOID:0000000005154954

Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Display contents of CONSULT	Fail-safe	Cancellation	А
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	When communication between BCM and steering lock unit are communicated normally.	
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	When communication between BCM and steering lock unit are communicated normally.	В
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC	
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC	С
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$	
B2196: DONGLE NG	Inhibit engine cranking	Erase DTC	Г
B2198: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC	L
B2557: VEHICLE SPEED	Inhibit steering lock	When the following CAN signal status (vehicle speed signal) becomes consistent • Vehicle speed signal (ABS) • Vehicle speed signal (Meter)	Е
B2601: SHIFT POSITION	Inhibit steering lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN) 	F
B2602: SHIFT POSITION	Inhibit steering lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Vehicle speed: 4 km/h (2.5 MPH) or more 	G
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P position switch signal: Except P position (12 V) - Selector lever P/N position signal: Except P and N positions (0 V) • Status 2 - Ignition switch is in the ON position - Selector lever P position switch signal: P position (0 V) - Selector lever P/N position signal: P or N positions (12 V)	I
B2604: PNP/CLUTCH SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (12 V) Shift position signal (CAN): P or N position Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) Shift position signal (CAN): Except P and N position 	DL
B2605: PNP/CLUTCH SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (12 V) - Interlock/PNP switch signal (CAN): ON	N N
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN) 	Р
B2609: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status	
B260B: STEERING LOCK UNIT	Inhibit steering lock	Erase DTC	

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Display contents of CONSULT	Fail-safe	Cancellation
B260D: STEERING LOCK UNIT	Inhibit steering lock	Erase DTC
B260F: ENG STATE SIG LOST	Inhibit engine cranking	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B26EF: STRG LCK RELAY OFF	Inhibit engine cranking	When the following conditions are fulfilled • Steering lock relay signal (CAN): ON • Steering lock unit status signal (CAN): ON
B26F0: STRG LCK RELAY ON	Inhibit engine cranking	When the following conditions are fulfilled • Steering lock relay signal (CAN): OFF • Steering lock unit status signal (CAN): OFF
B26F1: IGN RELAY OFF	Inhibit engine cranking	When the following conditions are fulfilled Ignition switch ON signal (CAN: Transmitted from BCM): ON Ignition switch ON signal (CAN: Transmitted from IPDM E/R): ON
B26F2: IGN RELAY ON	Inhibit engine cranking	When the following conditions are fulfilled Ignition switch ON signal (CAN: Transmitted from BCM): OFF Ignition switch ON signal (CAN: Transmitted from IPDM E/R): OFF
B26F3: START CONT RLY ON	Inhibit engine cranking	When the following conditions are fulfilled • Starter control relay signal (CAN: Transmitted from BCM): OFF • Starter control relay signal (CAN: Transmitted from IPDM E/R): OFF
B26F4: START CONT RLY OFF	Inhibit engine cranking	When the following conditions are fulfilled • Starter control relay signal (CAN: Transmitted from BCM): ON • Starter control relay signal (CAN: Transmitted from IPDM E/R): ON
B26F7: BCM	Inhibit engine cranking by Intelligent Key sys- tem	When room antenna and luggage room antenna functions normally
U0415: VEHICLE SPEED	Inhibit steering lock	When vehicle speed signal (Meter) (CAN) is received normally

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

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.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

- 1. More than 1 minute is passed after the rear wiper stop.
- 2. Turn rear wiper switch OFF.
- Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:0000000005154955

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Priority	DTC	
1	B2562: LOW VOLTAGE	
	U1000: CAN COMM CIRCUIT	
2	U1010: CONTROL UNIT (CAN)	
	B2192: ID DISCORD BCM-ECM	
	B2193: CHAIN OF BCM-ECM	
3	B2195: ANTI-SCANNING	
	B2196: DONGLE NG	
	B2198: NATS ANTENNA AMP	
	B2013: ID DISCORD BCM-S/L	
	B2014: CHAIN OF S/L-BCM	
	B2553: IGNITION RELAY	
	B2555: STOP LAMP B2556: BUGLI BTN ICN CW	
	B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED	
	B2601: SHIFT POSITION	
	B2602: SHIFT POSITION	
	B2603: SHIFT POSI STATUS	
	B2604: PNP/CLUTCH SW	
	B2605: PNP/CLUTCH SW	
	B2608: STARTER RELAY	
	B2609: S/L STATUS	
	B260B: STEERING LOCK UNIT B260C: STEERING LOCK UNIT	
	B260C: STEERING LOCK UNIT B260D: STEERING LOCK UNIT	
	B260F: ENG STATE SIG LOST	
	B2612: S/L STATUS	
	• B2614: BCM	
4	• B2615: BCM	
	• B2616: BCM	
	• B2618: BCM	
	• B2619: BCM	
	B261A: PUSH-BTN IGN SW B	
	B26E9: LOCK MALFUNCTION B26EF: STRG LCK RELAY OFF	
	B26F0: STRG LCK RELAY ON	
	B26F1: IGN RELAY OFF	
	B26F2: IGN RELAY ON	
	B26F3: START CONT RLY ON	_
	B26F4: START CONT RLY OFF	
	B26F5: STRG LCK STS SW	
	• B26F6: BCM	
	• B26F7: BCM	
	B26F8: BCM B	
	B26FC: KEY REGISTRATION C4720: VHCI SPEED SIG ERP	
	C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED	
	- 00413. VEHICLE OF LED	

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Priority	DTC
5	C1704: LOW PRESSURE FL C1705: LOW PRESSURE RR C1707: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1711: [NO DATA] RR C1711: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FR C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1720: [CODE ERR] FR C1721: [CODE ERR] RR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FR C1726: [BATT VOLT LOW] FR C1727: [BATT VOLT LOW] RR
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA
7	B2626: OUTSIDE ANTENNA B2627: OUTSIDE ANTENNA B2628: OUTSIDE ANTENNA

DTC Index

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>BCS-18, "COMMON ITEM"</u>.

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM	_	_	_	_	BCS-39
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-40
U0415: VEHICLE SPEED	×	_	×	_	BCS-41
B2013: ID DISCORD BCM-S/L	×	×	×	_	SEC-45
B2014: CHAIN OF S/L-BCM	×	×	×	_	SEC-46
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-35
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-37
B2195: ANTI-SCANNING	×	_	_	_	SEC-38
B2196: DONGLE NG	×	_	_	_	<u>SEC-39</u>

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

		Freeze Frame Data		Tiro processes	
CONSULT display	Fail-safe	Vehicle Speed Odo/Trip Meter Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2198: NATS ANTENNA AMP	×	_	_	_	SEC-41
B2553: IGNITION RELAY	_	×	×	_	PCS-78
B2555: STOP LAMP	_	×	×	_	SEC-49
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-51
B2557: VEHICLE SPEED	×	×	×	_	SEC-53
B2562: LOW VOLTAGE	_	×	_	_	BCS-42
B2601: SHIFT POSITION	×	×	×	_	SEC-54
B2602: SHIFT POSITION	×	×	×	_	SEC-57
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-60
B2604: PNP/CLUTCH SW	×	×	×	_	SEC-65
B2605: PNP/CLUTCH SW	×	×	×	_	SEC-68
B2608: STARTER RELAY	×	×	×	_	SEC-70
B2609: S/L STATUS	×	×	×	_	SEC-72
B260B: STEERING LOCK UNIT	×	×	×	_	SEC-75
B260C: STEERING LOCK UNIT	_	×	×	_	SEC-76
B260D: STEERING LOCK UNIT	×	×	×	_	SEC-77
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-78
B2612: S/L STATUS	×	×	×	_	SEC-79
B2614: BCM		×	×		PCS-80
B2615: BCM	_	×	×	_	PCS-83
B2616: BCM	_	×	×	_	PCS-86
B2618: BCM	_	×	×	_	PCS-89
B2619: BCM	×	×	×	_	SEC-82
B261A: PUSH-BTN IGN SW		×	×		PCS-90
B2621: INSIDE ANTENNA	_	×	_	_	DLK-44
B2622: INSIDE ANTENNA	_	×	_	<u> </u>	DLK-46
B2626: OUTSIDE ANTENNA	_	×	_	_	DLK-48
B2627: OUTSIDE ANTENNA	_	×	_	_	DLK-50
B2628: OUTSIDE ANTENNA	_	×	_	_	DLK-52
B26E9: LOCK MALFUNCTION	_	×	× (Turn ON for 15 seconds)	_	SEC-83
B26EF: STRG LCK RELAY OFF	×	×	×	_	SEC-84
B26F0: STRG LCK RELAY ON	×	×	×	_	SEC-86
B26F1: IGN RELAY OFF	×	×	×	_	PCS-92
B26F2: IGN RELAY ON	×	×	×	_	PCS-95
B26F3: START CONT RLY ON	×	×	×	_	SEC-87
B26F4: START CONT RLY OFF	×	×	×	_	SEC-88
B26F5: STRG LCK STS SW		×	×		SEC-90
B26F6: BCM		×	×		PCS-98
B26F7: BCM	×	×	×		SEC-93
B26F8: BCM		×	×	<u> </u>	SEC-94

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< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B26FC: KEY REGISTRATION	_	×	×	_	SEC-95
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	\\/T 4.0
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-16</u>
C1707: LOW PRESSURE RL	_	_	_	×	
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	\/\T 40
C1710: [NO DATA] RR	_	_	_	×	<u>WT-18</u>
C1711: [NO DATA] RL	_	_	_	×	
C1712: [CHECKSUM ERR] FL	_	_	_	×	
C1713: [CHECKSUM ERR] FR	_	_	_	×	WT Of
C1714: [CHECKSUM ERR] RR	_	_	_	×	<u>WT-21</u>
C1715: [CHECKSUM ERR] RL	_	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	_	×	W/T O4
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>WT-24</u>
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1720: [CODE ERR] FL	_	_	_	×	
C1721: [CODE ERR] FR	_	_	_	×	W/T OC
C1722: [CODE ERR] RR	_	_	_	×	<u>WT-26</u>
C1723: [CODE ERR] RL	_	_	_	×	
C1724: [BATT VOLT LOW] FL	_	_	_	×	
C1725: [BATT VOLT LOW] FR	_	_	_	×	W/T OO
C1726: [BATT VOLT LOW] RR	_	_	_	×	<u>WT-29</u>
C1727: [BATT VOLT LOW] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-32</u>
C1734: CONTROL UNIT	_	_	_	×	WT-34

DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH < SYMPTOM DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

SYMPTOM DIAGNOSIS Α DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH В **ALL DOOR** ALL DOOR: Description INFOID:0000000005048179 All doors do not lock/unlock using door lock and unlock switch. ALL DOOR: Diagnosis Procedure INFOID:0000000005048180 1. CHECK POWER SUPPLY AND GROUND CIRCUIT Check power supply and ground circuit. Е Refer to DLK-54, "BCM (BODY CONTROL MODULE): Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. F NO >> Repair or replace the malfunctioning parts. 2.CHECK DOOR LOCK AND UNLOCK SWITCH Check door lock and unlock switch. • Driver side: Refer to DLK-59, "DRIVER SIDE: Component Function Check". • Passenger side: Refer to DLK-61, "PASSENGER SIDE: Component Function Check". Н Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CHECK DOOR LOCK ACTUATOR Check front door lock assembly (driver side). Refer to DLK-206, "DOOR LOCK: Removal and Installation". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. DLK 4. CONFIRM THE OPERATION Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident". >> GO TO 1. NO DRIVER SIDE **DRIVER SIDE**: Description INFOID:0000000005048181 N Driver side door does not lock/unlock using door lock and unlock switch. **DRIVER SIDE**: Diagnosis Procedure INFOID:0000000005048182 1. CHECK DOOR LOCK ACTUATOR Check front door lock assembly (driver side). Р Refer to DLK-64, "DRIVER SIDE: Component Function Check". Is the inspection result normal? YFS >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION Confirm the operation again.

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH < SYMPTOM DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000005048183

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

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000005048184

1. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (passenger side).

Refer to <u>DLK-65</u>, "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-34, "Intermittent Incident".

NO >> GO TO 1.

REAR LH

REAR LH: Description

INFOID:0000000005048185

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

REAR LH: Diagnosis Procedure

INFOID:0000000005048186

1. CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly LH.

Refer to DLK-66, "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-34, "Intermittent Incident".

NO >> GO TO 1.

REAR RH

REAR RH: Description

INFOID:0000000005048187

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

REAR RH: Diagnosis Procedure

INFOID:0000000005048188

1. CHECK DOOR LOCK ACTUATOR

Check rear door lock assembly RH.

Refer to DLK-66, "REAR RH: Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH SYMPTOM DIAGNOSIS - [WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >	[WITH INTELLIGENT KEY SYSTEM]
2.CONFIRM THE OPERATION	
Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-34, "Intermittent NO >> GO TO 1. BACK DOOR	
BACK DOOR : Description	INFOID:000000005087563
Back door does not lock/unlock using door lock and unlock switch.	
BACK DOOR : Diagnosis Procedure	INFOID:000000005087564
1. CHECK BACK DOOR LOCK ACTUATOR RELAY	
Check back door lock actuator relay. Refer to DLK-70. "Component Function Check". Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK DOOR LOCK ACTUATOR	
Check back door lock assembly. Refer to DLK-67, "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 inspection result normal? YES >> Check intermittent incident. Refer to GI-34, "Intermittent incident."	it Incident".
NO >> GO TO 1.	D
	r

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION [WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERA-

Diagnosis Procedure

TION

INFOID:0000000005048190

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

>> Refer to DLK-141, "ALL DOOR: Diagnosis Procedure". NO

2. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to DLK-73, "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-34, "Intermittent Incident".

NO >> GO TO 1.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

[WITH INTELLIGENT KEY SYSTEM] < SYMPTOM DIAGNOSIS > DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH Α **ALL DOOR** ALL DOOR: Description INFOID:000000000504819 В All doors do not lock/unlock using all door request switches. ALL DOOR: Diagnosis Procedure INFOID:0000000005048192 CHECK REMOTE KEYLESS ENTRY FUNCTION Check remote keyless entry function. D Does door lock/unlock with Intelligent Key button? YES >> GO TO 2. NO >> Refer to DLK-25, "REMOTE KEYLESS ENTRY FUNCTION: System Description". Е 2.check "Lock/unlock by I-key" setting in "work support" Check "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT". F Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT". 3.check door switch Check door switch. Н Refer to DLK-55, "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-34, "Intermittent Incident". DLK NO >> GO TO 1. DRIVER SIDE **DRIVER SIDE: Description** INFOID:00000000005048193 All doors do not lock/unlock using driver side door request switch. M DRIVER SIDE: Diagnosis Procedure INFOID:0000000005048194 ${f 1}$.CHECK DRIVER SIDE DOOR REQUEST SWITCH Check driver side door request switch. Refer to DLK-80, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK OUTSIDE KEY ANTENNA Check outside key antenna (driver side). Refer to DLK-48, "DTC Logic". Is the inspection result normal? YES >> GO TO 3.

>> Repair or replace the malfunctioning parts.

NO

3.CONFIRM THE OPERATION

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH [WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

Confirm the operation again.

Is the result normal?

>> Check Intermittent Incident. Refer to GI-34, "Intermittent Incident". YES

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000005048195

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

PASSENGER SIDE: Diagnosis Procedure

INFOID:00000000005048196

1. CHECK PASSENGER SIDE DOOR REQUEST SWITCH

Check passenger side door request switch.

Refer to DLK-80, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (passenger side).

Refer to DLK-50, "DTC Logic".

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-34, "Intermittent Incident".

NO >> GO TO 1.

BACK DOOR

BACK DOOR: Description

INFOID:0000000005087565

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

BACK DOOR: Diagnosis Procedure

INFOID:0000000005087566

CHECK BACK DOOR REQUEST SWITCH

Check back door request switch.

Refer to DLK-78, "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 (back door).

Refer to <u>DLK-52</u>, "<u>DTC Logic</u>".

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?

>> Check Intermittent Incident. Refer to GI-34, "Intermittent Incident".

DLK-146 Revision: 2009 March 2009 Z12

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH [WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

NO >> GO TO 1.

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DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:0000000005048198

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-141</u>, "ALL <u>DOOR</u>: <u>Diagnosis Procedure"</u>.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.check intelligent key

Check Intelligent Key.

Refer to DLK-86, "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-34, "Intermittent Incident".

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000005087655 1. CHECK "DOOR LOCK-UNLOCK SET" SETTING IN "WORK SUPPORT" В Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to DLK-38, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)". C Is the inspection result normal? YES >> GO TO 2. NO >> Set "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT". 2.CONFIRM THE OPERATION D Confirm the operation again. Is the result normal? Е YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident". NO >> GO TO 1. F Н J DLK M Ν

DLK-149 Revision: 2009 March 2009 Z12

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE [WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPER-ATF

Diagnosis Procedure

INFOID:0000000005048212

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

>> Refer to DLK-141, "ALL DOOR: Diagnosis Procedure". NO

2.check "automatic lock/unlock select" setting in "work support"

Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

Refer to DLK-38, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

3.check "automatic door lock select" setting in "work support"

Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".

Refer to DLK-38, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".

4. CHECK VEHICLE SPEED SIGNAL

Check combination meter for DTC.

Refer to MWI-62, "DTC Index".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident, Refer to GI-34, "Intermittent Incident",

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE Α Diagnosis Procedure INFOID:0000000005048214 1. CHECK POWER DOOR LOCK OPERATION В Check power door lock operation. Does door lock/unlock with door lock and unlock switch? YES >> GO TO 2. NO >> Refer to DLK-141, "ALL DOOR: Diagnosis Procedure". 2.check "automatic lock/unlock select" setting in "work support" D Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to DLK-38, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)". Is the inspection result normal? Е YES >> GO TO 3. NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". 3.CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT" F Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-38</u>, "<u>DOOR LOCK</u>: <u>CONSULT-III Function</u> (<u>BCM - DOOR LOCK</u>)". Is the inspection result normal? YES >> GO TO 4. NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". Н 4.CHECK BCM Check BCM for DTC. Refer to DLK-138, "DTC Index". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. ${f 5.}$ CONFIRM THE OPERATION Confirm the operation again. DLK Is the result normal? YES >> Check intermittent incident, Refer to GI-34, "Intermittent Incident", NO >> GO TO 1. M Ν

Revision: 2009 March **DLK-151** 2009 Z12

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OP-FRATE

Diagnosis Procedure

INFOID:0000000005048216

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to DLK-141, "ALL DOOR : Diagnosis Procedure".

2. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

Refer to DLK-38, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

3.check "automatic door lock select" setting in "work support"

Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".

Refer to DLK-38, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".

f 4.CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".

Refer to DLK-38, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".

CHECK TCM

Check TCM for DTC.

Refer to TM-174, "DTC Index".

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-34, "Intermittent Incident".

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

1. CHECK "AUTO LOCK SET" SETTING IN "WORK SUPPORT"

Check "AUTO LOCK SET" setting in "WORK SUPPORT".

Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "AUTO LOCK SET" setting in "WORK SUPPORT".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

NO >> GO TO 1.

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Revision: 2009 March **DLK-153** 2009 Z12

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HAZARD AND HORN REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

HAZARD AND HORN REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005048224

1. CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"

Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".

Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT".

2.CHECK "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT".

Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".

Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".

3.CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 4.

NO >> Check BCM for DTC. Refer to <u>DLK-138</u>, "<u>DTC Index</u>".

4. CHECK HAZARD FUNCTION

Check hazard function.

Refer to DLK-89, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5. CHECK HORN FUNCTION

Check horn function.

Refer to SEC-115, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK DOOR SWITCH

Check door switch.

Refer to DLK-55, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Diagnosis Procedure	INFOID:0000000005048226
	INFOID.0000000000046220
1.CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"	
Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Set "HAZARD ANSWER BACK" in "WORK SUPPORT".	
2.CHECK "ANS BACK I-KEY LOCK" SETTING IN "WORK SUPPORT"	
Check "ANS BACK I-KEY LOCK" setting in "WORK SUPPORT".	
Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Set "ANS BACK I-KEY LOCK" in "WORK SUPPORT".	
3.CHECK "ANS BACK I-KEY UNLOCK" SETTING IN "WORK SUPPORT"	
Check "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT".	
Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".	
Is the inspection result normal? YES >> GO TO 4.	
NO >> Set "ANS BACK I-KEY UNLOCK" in "WORK SUPPORT".	
4.CHECK POWER POSITION	
Check if ignition switch position is changing or not.	
Does ignition switch position change?	
YES >> GO TO 5. NO >> Check BCM for DTC. Refer to <u>DLK-138, "DTC_Index"</u> .	
5. CHECK HAZARD FUNCTION	
Check hazard function.	_
Refer to DLK-89, "Component Function Check". Is the inspection result normal?	
YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	
6.CHECK DOOR SWITCH	
Check door switch. Refer to DLK-55, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 7.	
NO >> Repair or replace the malfunctioning parts.	
CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer. Refer to DLK-84, "Component Function Check".	
Check Intelligent Key warning buzzer. Refer to <u>DLK-84, "Component_Function_Check"</u> . Is the inspection result normal?	
Refer to DLK-84, "Component Function Check". Is the inspection result normal? YES >> GO TO 8.	
Refer to DLK-84, "Component Function Check". Is the inspection result normal?	

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YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY REMINDER FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Diagnosis Procedure	INFOID:0000000005048228
1.CHECK "ANTI KEY LOCK IN FUNCTI" SETTING IN "WORK SUPPORT"	
Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".	
Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)". s the inspection result normal?	
YES >> GO TO 2.	
NO >> Set "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".	
2.CHECK DOOR SWITCH	
Check door switch. Refer to DLK-55, "Component Function Check".	
s the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK INSIDE KEY ANTENNA	
Check inside key antenna.	
Instrument center: Refer to DLK-44, "DTC Logic".	
Luggage room: Refer to <u>DLK-46, "DTC Logic"</u> . s the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	
1.CHECK UNLOCK SENSOR	
Check unlock sensor. Refer to DLK-82, "Component Function Check".	
s the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts. CONFIRM THE OPERATION	
Confirm the operation again. s the result normal?	
YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".	
NO >> GO TO 1.	

Revision: 2009 March **DLK-157** 2009 Z12

OFF POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005048234

1. CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2

NO >> Check BCM for DTC. Refer to DLK-138, "DTC Index".

2. CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to DLK-84, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CHECK DOOR SWITCH

Check door switch (driver side).

Refer to DLK-55, "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-34, "Intermittent Incident".

P POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Diagnosis Procedure	INFOID:000000000504823
1.check power position	
Check if ignition switch position is changing or not.	
Does ignition switch position change?	
YES >> GO TO 2.	
NO >> Check BCM for DTC. Refer to <u>DLK-138, "DTC_Index"</u> .	
2.CHECK DETENTION SWITCH	
Check BCM for DTC. Refer to <u>DLK-138</u> , " <u>DTC Index"</u> .	
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts. 3.CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer. Refer to <u>DLK-84, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4.CHECK BUZZER (COMBINATION METER)	
Check buzzer (combination meter).	
Refer to <u>DLK-87, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	
5.CHECK DOOR SWITCH	
Check door switch (driver side).	
Refer to <u>DLK-55</u> , "Component Function Check". <u>Is the inspection result normal?</u>	
YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	
6.CHECK INSIDE KEY ANTENNA	
Check inside key antenna.	
 Instrument center: Refer to <u>DLK-44, "DTC Logic"</u>. Luggage room: Refer to <u>DLK-46, "DTC Logic"</u>. 	
Is the inspection result normal?	
YES >> GO TO 7. NO >> Repair or replace the malfunctioning parts.	
7.CHECK KEY WARNING LAMP	
Check key warning lamp.	
Refer to DLK-88, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 8. NO >> Repair or replace the malfunctioning parts.	
8.CHECK SHIFT P WARNING LAMP	
-	

P POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> GO TO 9.

NO >> Repair or replace the malfunctioning parts.

9.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

ACC WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

ACC WARNING DOES NOT OPERATE	A
Diagnosis Procedure	
1. CHECK POWER POSITION	В
Check if ignition switch position is changing or not.	_
Does ignition switch position change?	
YES >> GO TO 2.	C
NO >> Check BCM for DTC. Refer to <u>DLK-138, "DTC_Index"</u> .	
2.CHECK BUZZER (COMBINATION METER)	D
Check buzzer (combination meter).	
Refer to DLK-87, "Component Function Check".	
Is the inspection result normal?	Е
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK DETENTION SWITCH	F
Check BCM for DTC.	_
Refer to <u>DLK-138, "DTC_Index"</u> .	
Is the inspection result normal?	G
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	Н
4.CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	I
YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident". NO >> GO TO 1.	
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Revision: 2009 March **DLK-161** 2009 Z12

TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TAKE AWAY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005048240

1. CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2

NO >> Check BCM for DTC. Refer to <u>DLK-138</u>, "<u>DTC Index</u>".

2.check door switch

Check door switch.

Refer to DLK-55, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

${f 3.}$ CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to DLK-44, "DTC Logic".
- Luggage room: Refer to DLK-46, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

${f 5.}$ CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to DLK-84, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK KEY WARNING LAMP

Check key warning lamp.

Refer to MWI-4, "Work flow".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPE	RATE
Diagnosis Procedure	INFOID:0000000005048242
1. CHECK "LO- BATT OF KEY FOB WARN" SETTING IN "WORK SUPPORT"	
Check "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT". Refer to DLK-40, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Set "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT".	
2.CHECK INTELLIGENT KEY	
Check Intelligent key. Refer to DLK-86, "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-88, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4.CHECK INSIDE KEY ANTENNA	
Check inside key antenna.	
 Instrument center: Refer to <u>DLK-44, "DTC Logic"</u>. Luggage room: Refer to <u>DLK-46, "DTC Logic"</u>. 	
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-34, "Intermittent Incident". NO >> GO TO 1.	

Revision: 2009 March **DLK-163** 2009 Z12

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005048244

1. CHECK DOOR LOCK FUNCTION

Check door lock function.

Does door lock/unlock using door request switch?

YES >> GO TO 2.

NO >> Refer to <u>DLK-145</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to DLK-84, "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-34, "Intermittent Incident".

KEY ID WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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SYMPTOM DIAGNOSIS >	[WITH INTELLIGENT RET STSTEM]
EY ID WARNING DOES NOT OPERATE	
Diagnosis Procedure	INFOID:000000005048246
.CHECK INTELLIGENT KEY	
Check Intelligent Key. Refer to DLK-86, "Component Function Check".	
the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
NO >> Repair or replace the malfunctioning parts. CHECK KEY WARNING LAMP	
Check key warning lamp. Refer to DLK-88, "Component Function Check".	-
the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
CONFIRM THE OPERATION	
onfirm the operation again. the result normal? YES >> Check intermittent incident. Refer to GI-34, "Intermitter	ot Incident"
NO >> GO TO 1.	

Revision: 2009 March **DLK-165** 2009 Z12

KEY WARNING LAMP DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY WARNING LAMP DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:0000000005048248

1. CHECK KEY WARNING LAMP

Check key warning lamp.

Refer to DLK-88, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

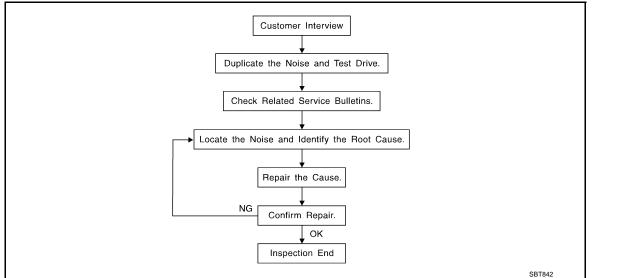
2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

Work Flow



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to DLK-171, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics
 are provided so the customer, service adviser and technician are all speaking the same language when
 defining the noise.
- Squeak (Like tennis shoes on a clean floor)
 Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
- higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
 Creak (Like walking on an old wooden floor)
 Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent
- 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.
- Thurst of Heavy, muffled knock noise)
 Thurst of Heavy, muffled knock noise)
- Thump characteristics include softer knock/dead sound often brought on by activity.

 Buzz (Like a bumblebee)
- Buzz characteristics include high frequency rattle/firm contact.
 Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when the repair is reconfirmed.

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< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

- 1) Close a door.
- 2) Tap or push/pull around the area where the noise appears to be coming from.
- 3) Rev the engine.
- 4) Use a floor jack to recreate vehicle "twist".
- 5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).
- 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.
- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.

If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
- Removing the components in the area that is are suspected to be the cause of the noise.
 Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise.
 Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks.
 Refer to <u>DLK-169</u>, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- Separate components by repositioning or loosening and retightening the component, if possible.
- Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.

CAUTION:

Never use excessive force as many components are constructed of plastic and may be damaged.

Always check with the Parts Department for the latest parts information.

The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100×135 mm $(3.94 \times 5.31$ in)/76884-71L01: 60×85 mm $(2.36 \times 3.35$ in)/76884-

71L02:15 \times 25 mm (0.59 \times 0.98 in)

INSULATOR (Foam blocks)

Insulates components from contact. Can be used to fill space behind a panel.

73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97 \times 1.97 in)/73982-

50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97 \times 1.97 in)

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick, 30×50 mm (1.18 \times 1.97 in)

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications.

 $68370-4B000: 15 \times 25 \text{ mm} (0.59 \times 0.98 \text{ in}) \text{ pad/}68239-13E00: 5 \text{ mm} (0.20 \text{ in}) \text{ wide tape roll}$

The following materials, not found in the kit, can also be used to repair squeaks and rattles.

UHMW (TEFLON) TAPE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE Α Used in place of UHMW tape that is be visible or does not fit. Will only last a few months. SILICONE SPRAY Used when grease cannot be applied. В **DUCT TAPE** Used to eliminate movement. CONFIRM THE REPAIR Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet. Inspection Procedure D INFOID:0000000005092297 Refer to Table of Contents for specific component removal and installation information. INSTRUMENT PANEL Е Most incidents are caused by contact and movement between: 1. The cluster lid A and instrument panel F Acrylic lens and combination meter housing Instrument panel to front pillar garnish Instrument panel to windshield Instrument panel mounting pins Wiring harnesses behind the combination meter 7. A/C defroster duct and duct joint These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness. CAUTION: Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible. CENTER CONSOLE Components to pay attention to include: 1. Shifter assembly cover to finisher A/C control unit and cluster lid C Wiring harnesses behind audio and A/C control unit The instrument panel repair and isolation procedures also apply to the center console. DOORS Pay attention to the following: Finisher and inner panel making a slapping noise Inside handle escutcheon to door finisher N Wiring harnesses tapping 4. Door striker out of alignment causing a popping noise on starts and stops Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise. TRUNK Р Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer. In addition look for the following:

1. Trunk lid dumpers out of adjustment

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

DLK-169

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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
- Sunvisor shaft shaking in the holder
- Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it's important to note the position the seats in and the load placed on the seat when the noise occurs. These conditions should be duplicated when verifying and isolating the cause of the noise. Cause of seat noise include:

- Headrest rods and holder
- A squeak between the seat pad cushion and frame
- The rear seatback lock and bracket

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

- 1. Any component mounted to the engine wall
- 2. Components that pass through the engine wall
- Engine wall mounts and connectors
- 4. Loose radiator mounting pins
- 5. Hood bumpers out of adjustment
- 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.

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Diagnostic Worksheet

SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

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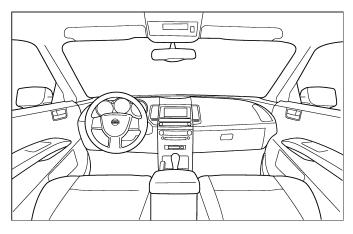
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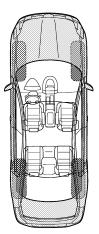
Dear Nissan Customer:

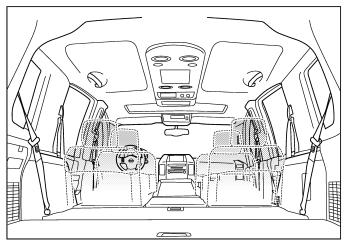
We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be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

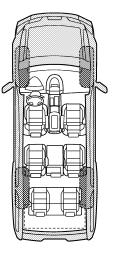
I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configu

The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.









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

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< SYMPTOM DIAGNOSIS >

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	noise occurs:			
II. WHEN DOES IT OCCUR? (please c anytime 1st time in the morning only when it is cold outside only when it is hot outside	heck the boxes that apply) after sitting out in the rain when it is raining or wet dry or dusty conditions other:			
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE			
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:				
☐ other: ☐ after driving miles or n TO BE COMPLETED BY DEALERSHI Test Drive Notes:				
after driving miles or n TO BE COMPLETED BY DEALERSHI	P PERSONNEL YES NO Initials of perso			
after driving miles or n TO BE COMPLETED BY DEALERSHI	P PERSONNEL YES NO Initials of perso performing			

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PRECAUTION

PRECAUTIONS

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

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

air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

- 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 AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

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

Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

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NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work.
 If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

This vehicle is equipped with a push-button ignition switch and a steering lock unit.

If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

- 2. Turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)
- 3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
- 4. Perform the necessary repair operation.

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PRECAUTIONS

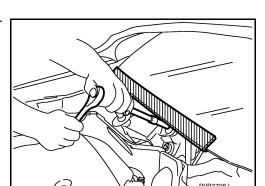
< PRECAUTION >

[WITH INTELLIGENT KEY SYSTEM]

- 5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
- Perform self-diagnosis check of all control units using CONSULT-III.

Precaution for Procedure without Cowl Top Cover

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



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Work

- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operational.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.

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PREPARATION

[WITH INTELLIGENT KEY SYSTEM]

PREPARATION

PREPARATION

Special Service Tools

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

Tool number (Kent-Moore No.) Tool name		Description	
(J-39570) Chassis ear	SIIAO993E	Locates the noise	
(J-43980) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairs the cause of noise	

Commercial Service Tools

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

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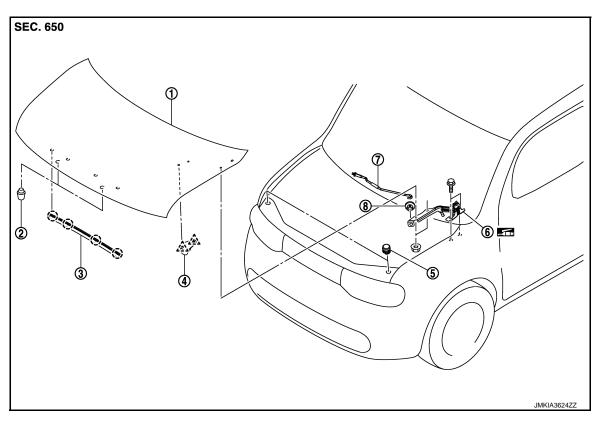
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REMOVAL AND INSTALLATION

HOOD

HOOD ASSEMBLY

HOOD ASSEMBLY: Exploded View



- 1. Hood assembly
- 4. Clamp
- 7. Hood support rod
- (_): Clip ___: Pawl

- 2. Hood bumper rubber (hood side)
- 5. Hood bumper rubber (body side)
- 8. Grommet

- 3. Radiator core seal
- 6. Hood hinge

HOOD ASSEMBLY: Removal and Installation

Refer to GI-4, "Components" for symbols in the figure.

REMOVAL

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

WARNING:

Bodily injury may occur if no supporting rod is holding hood open when removing hood stay.

Remove hood hinge mounting nuts on the hood to remove the hood assembly. CAUTION:

Perform work with 2 workers, because of its heavy weight.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Perform work with 2 workers, because of its heavy weight.
- Check hood hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, apply touch-up paint (the body color) onto the heads of hood hinge mounting bolts and nuts.

• After installing, perform hood fitting adjustment. Refer to <u>DLK-177, "HOOD ASSEMBLY: Adjustment".</u>

HOOD ASSEMBLY: Adjustment

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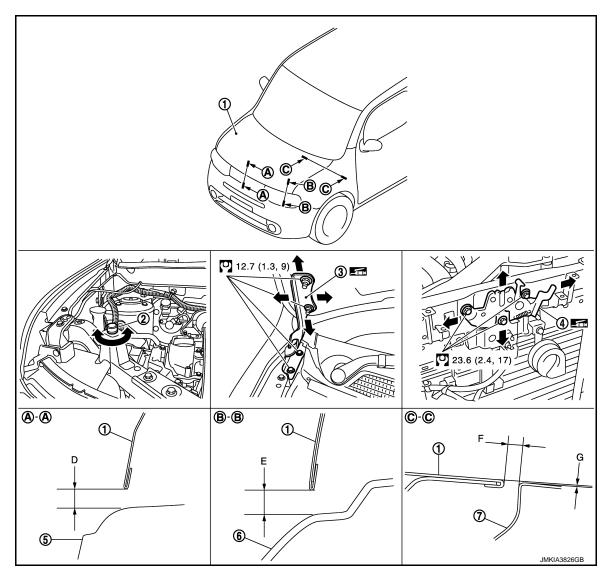
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1. Hood assembly

Front fender

- 4. Hood lock assembly
- 2. Hood bumper rubber
- Front grille

- 3. Hood hinge
- 6. Front combination lamp

Refer to GI-4, "Components" for symbols in the figure.

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

					Unit: mm (in)
Portion	1			Standard	Difference (RH/LH)
Hood – Front grille	A – A	D	Clearance	6.0 - 10.0 (0.236 - 0.394)	< 2.0 (0.079)
Hood – Front combination lamp	B – B	E	Clearance	6.0 - 10.0 (0.236 - 0.394)	< 2.0 (0.079)
Hood – Front fender	C-C	F	Clearance	2.5 – 4.5 (0.098 – 0.177)	< 1.0 (0.039)
		G	Surface height	-1.0 -1.0 (-0.039 -0.039)	_

- 1. Remove hood lock and adjust the surface height of hood, front grill and front fender according to the fitting standard dimension, by rotating hood bumper rubber (body side).
- Loosen hood hinge mounting nuts on the hood.
- Check that hood lock primary latch is securely engaged with striker by dropping hood from approximately 200 mm (7.874 in) height or by pressing lightly on the hood.
 CAUTION:

Never drop hood from a height of 300 mm (11.811 in) or more

- 4. Install as static closing face of hood is 94–490 N (9.6 50.0 kg, 21.1 110 lb).
- 5. After adjustment tighten lock bolts to the specified torque.

CAUTION:

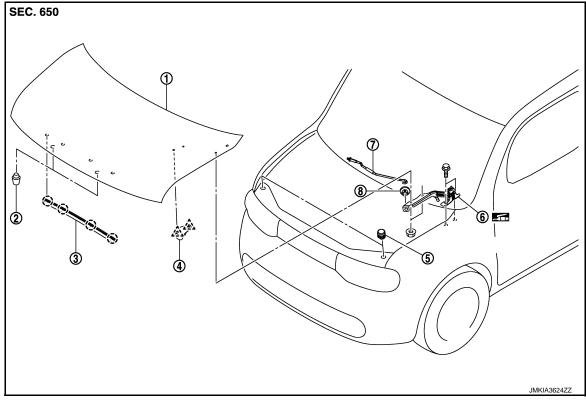
- Check hood hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, apply touch-up paint (the body color) onto the heads of hood hinge mounting bolts and nuts.

HOOD HINGE

HOOD HINGE: Exploded View

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- 1. Hood assembly
- 4. Clamp
- 7. Hood support rod
- 2. Hood bumper rubber (hood side)
- 5. Hood bumper rubber (body side)
- 8. Grommet

- 3. Radiator core seal
- Hood hinge

(_): Clip _^: Pawl

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE: Removal and Installation

REMOVAL

- Remove hood assembly. Refer to <u>DLK-176</u>, "HOOD ASSEMBLY: Removal and Installation".
- Remove front fender. Refer to <u>DLK-183, "Removal and Installation"</u>.

- Remove cowl top. Refer to EXT-20, "Removal and Installation"
- Remove hood hinge mounting bolts, and then remove hood hinge.

INSTALLATION

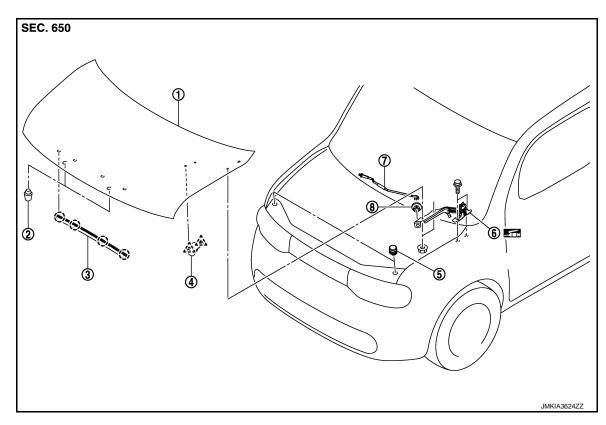
Install in the reverse order of removal.

CAUTION:

- Check hood hinge rotating part for poor lubrication. If necessary, apply grease.
- After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts
- After installation, perform hood fitting adjustment. Refer to DLK-177, "HOOD ASSEMBLY: Adjustment".

HOOD SUPPORT ROD

HOOD SUPPORT ROD: Exploded View



- Hood assembly
- Clamp
- Hood support rod
- (): Clip

<u>∠</u>`_: Pawl

- Hood bumper rubber (hood side)
- Hood bumper rubber (body side)
- Grommet

- Radiator core seal
- Hood hinge

HOOD SUPPORT ROD: Removal and Installation

REMOVAL

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

Bodily injury may occur if no supporting rod is holding the hood open when removing the hood support rod.

Pull hood support rod from grommet and remove.

Refer to GI-4, "Components" for symbols in the figure.

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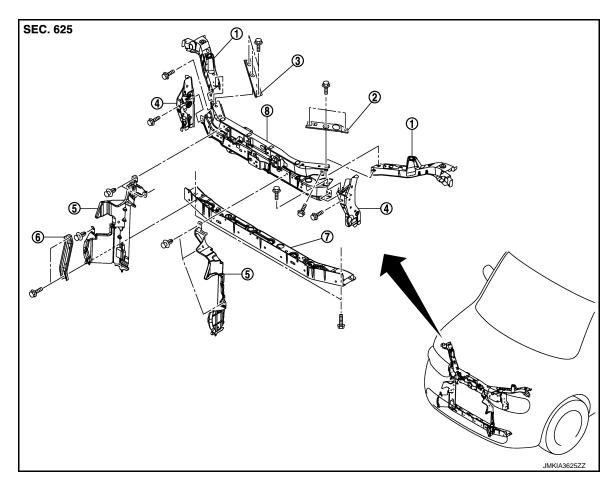
[WITH INTELLIGENT KEY SYSTEM]

INSTALLATION

Install in the reverse order of removal.

RADIATOR CORE SUPPORT

Exploded View



- 1. Radiator core support side
- 4. Radiator core reinforcement side
- 7. Radiator core support lower
- Radiator core support upper bracket 3. (LH)
- 5. Air guide
- Radiator core support upper
- Radiator core support upper bracket (RH)
- Radiator core lower stay

Removal and Installation

RADIATOR CORE SUPPORT UPPER

REMOVAL

- Remove front bumper fascia and bumper reinforcement. Refer to EXT-13, "Removal and Installation".
- Remove hood lock. Refer to <u>DLK-204, "Removal and Installation"</u>.
- Remove front combination lamps (LH/RH). Refer to <u>EXL-205</u>. "Removal and Installation".
- Remove air guide.
- 5. Remove horn. Refer to HRN-5, "Removal and Installation".
- Remove crash zone sensor. Refer to <u>SR-16, "Removal and Installation"</u>.
- 7. Remove ambient sensor. Refer to HAC-145, "Removal and Installation".
- 8. Disconnect all harness from radiator core support upper.
- Remove air duct assembly. Refer to <u>EM-24, "Removal and Installation"</u>.
- 10. Remove radiator core support upper bracket (LH/RH).
- 11. Remove mounting bolts, and then remove radiator core support upper.

INSTALLATION

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RADIATOR CORE SUPPORT

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

Install in the reverse order of removal.

CAUTION:

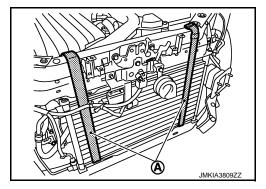
- · After installation, adjust the following parts.
- Front combination lamp: Refer to EXL-201, "Aiming Adjustment Procedure".

RADIATOR CORE SUPPORT LOWER

REMOVAL

- Remove front bumper fascia and bumper reinforcement. Refer to EXT-13, "Removal and Installation".
- 2. Remove air guide.
- 3. Remove radiator core lower stay.
- 4. Remove clips of fender protector.
- 5. Remove floor under cover. Refer to EXT-23, "Removal and Installation".
- Use a belts (A) to suspend it to prevent it from falling. CAUTION:

Never damage radiator and condenser.



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

INSTALLATION

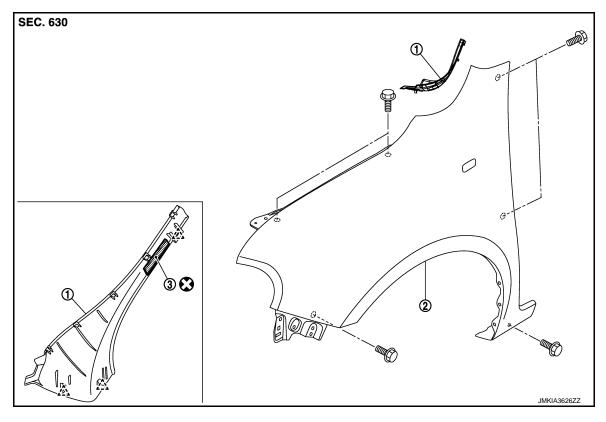
Install in the reverse order of removal.

CAUTION:

- After installation, adjust the following parts.
- Front combination lamp: Refer to EXL-201, "Aiming Adjustment Procedure".

FRONT FENDER

Exploded View INFOID:0000000005092319



Front fender cover

Front fender assembly

Doube-faced adhesive tape [t: 2.0 mm (0.079 in)]

六:Pawl

Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

CAUTION:

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

REMOVAL

- 1. Remove side turn signal lamp. Refer to EXL-212, "Removal and Installation".
- Remove front grille. Refer to <u>EXT-18</u>, "Removal and Installation".
- Remove front bumper fascia. Refer to <u>EXT-13</u>, "Removal and Installation".
- Remove front combination lamp. Refer to EXL-205, "Removal and Installation". 4.
- 5. Remove clips and screws of fender protector. Refer to EXT-22, "FENDER PROTECTOR: Removal and Installation".
- Remove front fender cover.
- 7. Remove mounting bolts and remove front fender. **CAUTION:**

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

INSTALLATION

Install in the reverse order of removal.

CAUTION:

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FRONT FENDER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.
- · After installation, adjust the following part.
- Hood assembly: Refer to <u>DLK-177, "HOOD ASSEMBLY: Adjustment"</u>.
 Front door: Refer to <u>DLK-186, "DOOR ASSEMBLY: Adjustment"</u>.
- Front combination lamp: Refer to EXL-200, "Description".

[WITH INTELLIGENT KEY SYSTEM]

FRONT DOOR DOOR ASSEMBLY

DOOR ASSEMBLY: Exploded View

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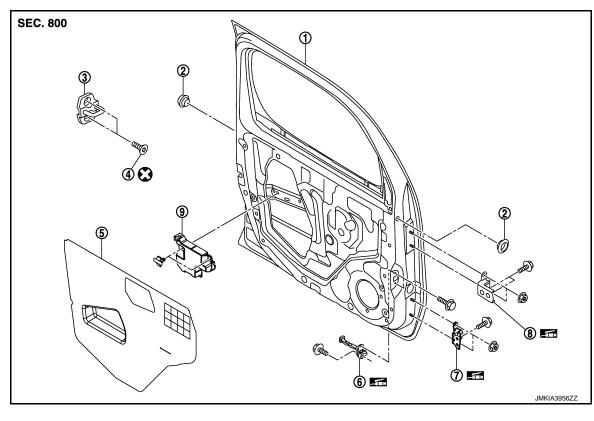
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- 1. Front door panel
- 4. TORX bolt
- 7. Door hinge (lower)
- 2. Grommet
- 5. Sealing screen
- Door hinge (upper)
- 3. Door striker
- Door check link

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY: Removal and Installation

CAUTION:

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

REMOVAL

- 1. Remove mounting bolts of door check link on the vehicle.
- Remove front door harness grommet, and then pull out the harness from the vehicle. 2.
- 3. Disconnect front door harness connector.
- Remove door hinge mounting nuts (door side), and then remove door assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check front door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
 After installation, perform the fitting adjustment. Refer to DLK-186, "DOOR ASSEMBLY: Adjust-
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

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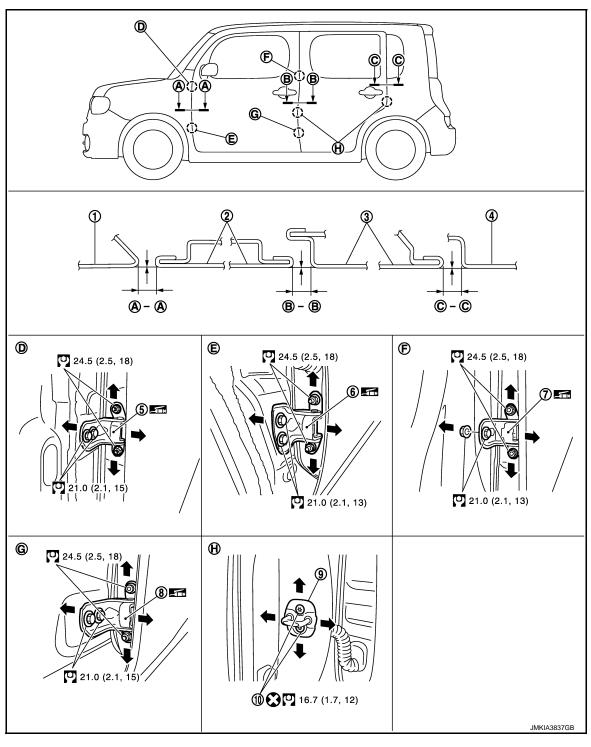
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INFOID:0000000005092322

DLK-185 Revision: 2009 March 2009 Z12 DOOR ASSEMBLY: Adjustment

INFOID:0000000005092323



- 1. Front fender
- 4. Body side outer
- 7. Rear door hinge (upper)
- 10. TORX bolt

- 2. Front door
- Front door hinge (upper)
- 8. Rear door hinge (lower)
- 3. Rear door
- 6. Front door hinge (lower)
- 9. Door striker

Refer to GI-4, "Components" for symbols in the figure.

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

[WITH INTELLIGENT KEY SYSTEM]

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Unit						
Portion		Clearance	Surface height			
Front fender – Front door	A – A	3.5 - 5.5 (0.138 - 0.217)	- 1.0 - 1.0 (- 0.039 - 0.039)			
Front door – Rear door	B – B	3.4 - 5.4 (0.134 - 0.213)	- 1.0 – 1.0 (- 0.039 – 0.039)			

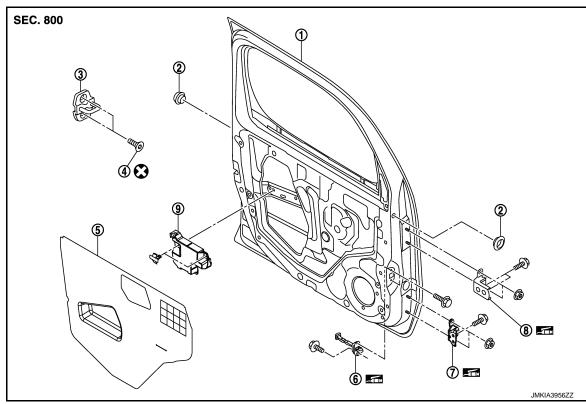
- Remove front fender. Refer to <u>DLK-183</u>, "Removal and Installation". 1.
- Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of front door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- 5. Loosen door hinge mounting bolts on body side.
- 6. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- Install front fender. Refer to refer to DLK-183, "Removal and Installation".

DOOR STRIKER ADJUSTMENT

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

DOOR STRIKER

DOOR STRIKER: Exploded View



- 1. Front door panel
- 4. TORX bolt
- 7. Door hinge (lower)
- 2. Grommet
- 5. Sealing screen
- Door hinge (upper)

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER: Removal and Installation

REMOVAL

DLK-187 Revision: 2009 March 2009 Z12

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Door striker

Door check link

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< REMOVAL AND INSTALLATION >

Remove TORX bolts, and then remove door striker.

INSTALLATION

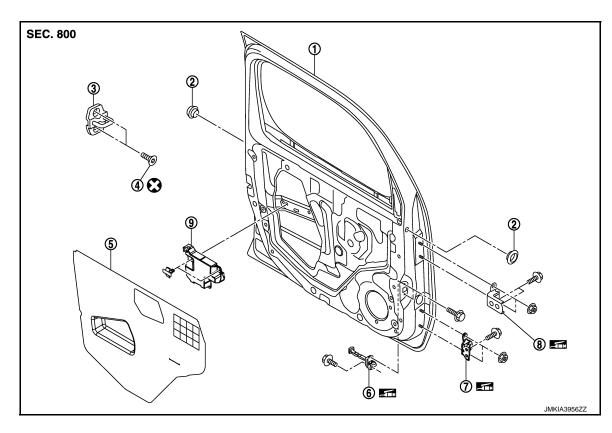
Install in the reverse order of removal.

CAUTION:

- Check front door open/close, lock/unlock operation after installation.
- After installation, be sure to perform the fitting adjustment. Refer to <u>DLK-186, "DOOR ASSEMBLY:</u>
 <u>Adjustment".</u>

DOOR HINGE

DOOR HINGE: Exploded View



- 1. Front door panel
- 2. Grommet

3. Door striker

4. TORX bolt

5. Sealing screen

6. Door check link

- 7. Door hinge (lower)
- 8. Door hinge (upper)

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE: Removal and Installation

REMOVAL

CAUTION:

- Perform work with 2 workers, because of its heavy weight.
- When removing and installing front door assembly, support door with a jack and shop cloth to protect door and body.
- 1. Remove front fender. Refer to DLK-183, "Removal and Installation".
- 2. Remove front door assembly. Refer to <u>DLK-185</u>, "DOOR ASSEMBLY: Removal and Installation".
- 3. Remove front door hinge mounting bolts (body side), and then remove front door hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

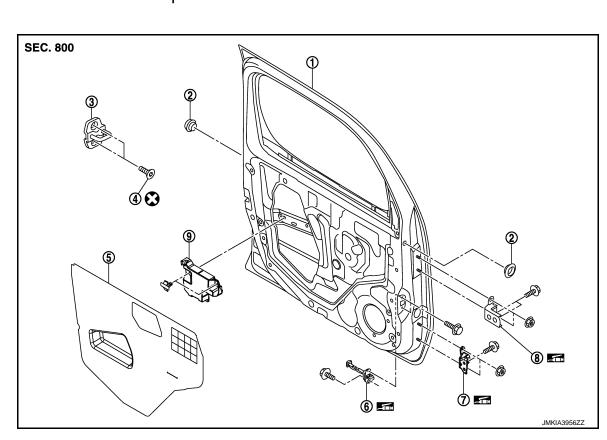
• Check front door open/close, lock/unlock operation after installation.

Revision: 2009 March **DLK-188** 2009 Z12

[WITH INTELLIGENT KEY SYSTEM]

- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-186, "DOOR ASSEMBLY: Adjust-</u>
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts. DOOR CHECK LINK

DOOR CHECK LINK: Exploded View



- 1. Front door panel
- 4. TORX bolt
- 7. Door hinge (lower)
- 2. Grommet
- 5. Sealing screen
- Door hinge (upper)

8.

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK: Removal and Installation

REMOVAL

- Remove front door finisher. Refer to <u>INT-11</u>, "Removal and Installation".
- Fully close the front door window.
- Remove sealing screen.

NOTE:

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

- 4. Remove front door speaker. Refer to AV-131, "Removal and Installation".
- 5. Remove mounting bolts of door check link on the vehicle.
- 6. Remove mounting bolts of door check link on door panel.
- 7. Take door check link out from the hole of door panel.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check front door open/close operation after installation.

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Door striker Door check link

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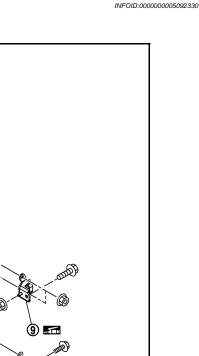
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2009 Z12

REAR DOOR DOOR ASSEMBLY

SEC. 820

DOOR ASSEMBLY: Exploded View



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- 1. Rear door panel
- 4. TORX bolt
- 7. Door check link

- 2. Grommet
- 5. Sealing screen (upper)
- B. Door hinge (lower)
- 3. Door striker
- 6. Sealing screen (lower)
- 9. Door hinge (upper)

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY: Removal and Installation

CAUTION:

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

REMOVAL

- 1. Remove rear door harness grommet, and then pull out door harness from the vehicle.
- Disconnect rear door harness connector.
- 3. Remove mounting bolts of door check link on the vehicle.
- 4. Remove door hinge mounting nuts (door side), and then remove rear door assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check rear door open/close, lock/unlock operation after installation.
- · Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-191, "DOOR ASSEMBLY: Adjust-ment"</u>.
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

DOOR ASSEMBLY: Adjustment

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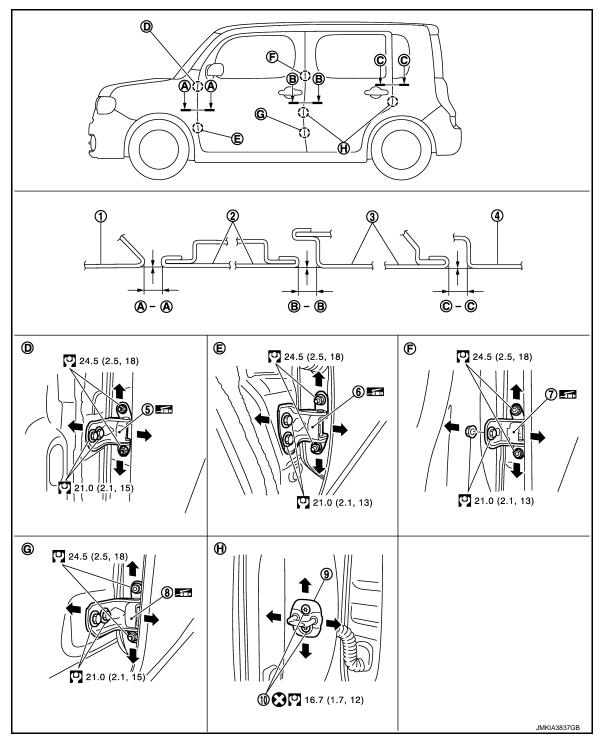
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- Front fender
- 4. Body side outer
- 7. Rear door hinge (upper)
- TORX bolt

- 2. Front door
- Front door hinge (upper)
- 8. Rear door hinge (lower)
- 3. Rear door
- 6. Front door hinge (lower)
- Door striker

Refer to GI-4, "Components" for symbols in the figure.

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

[WITH INTELLIGENT KEY SYSTEM]

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	Unit: r						
Portion		Clearance	Surface height				
Front door – Rear door	B – B	3.4 - 5.4 (0.134 - 0.213)	-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)				

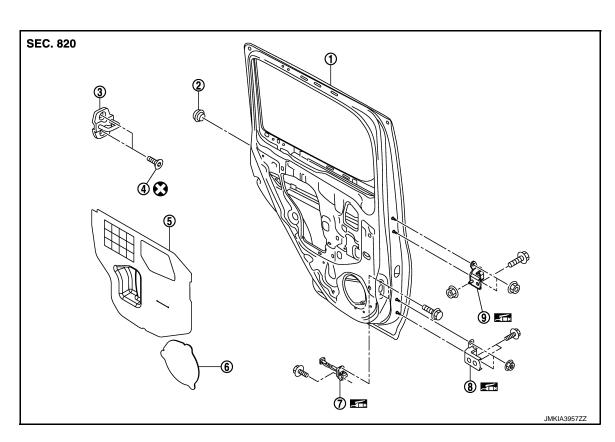
- Remove center pillar garnish (upper/lower). Refer to <u>INT-15, "Removal and Installation"</u>.
- 2. Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of rear door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- 5. Loosen door hinge mounting nuts and bolts on body side.
- 6. Raise rear door at rear end to adjust clearance of rear door according to the fitting standard dimension.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- 8. Install center pillar garnish (upper/lower). Refer to INT-15. "Removal and Installation".

DOOR STRIKER ADJUSTMENT

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

DOOR STRIKER

DOOR STRIKER: Exploded View



- 1. Rear door panel
- 4. TORX bolt
- 7. Door check link

- 2. Grommet
- 5. Sealing screen (upper)
- 8. Door hinge (lower)
- 6. Door fillige (lower
- 3. Door striker
- 6. Sealing screen (lower)
- 9. Door hinge (upper)

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER: Removal and Installation

REMOVAL

Remove TORX bolts, and then remove door striker.

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< REMOVAL AND INSTALLATION >

INSTALLATION

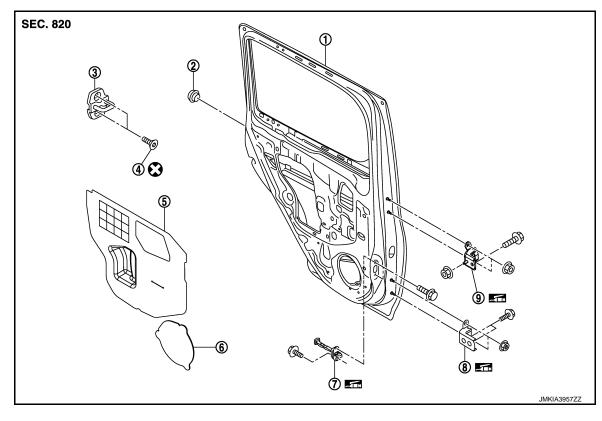
Install in the reverse order of removal.

CAUTION:

- Check rear door open/close, lock/unlock operation after installation.
- After installation, be sure to perform the fitting adjustment. Refer to DLK-191, "DOOR ASSEMBLY: Adjustment".

DOOR HINGE

DOOR HINGE: Exploded View



- 1. Rear door panel
- TORX bolt 4.
- Door check link

- 2. Grommet
- 5. Sealing screen (upper)
- Door hinge (lower)
- Door striker 3.
- 6. Sealing screen (lower)
- Door hinge (upper)

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE: Removal and Installation

CAUTION:

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

REMOVAL

- Remove rear door assembly. Refer to DLK-190, "DOOR ASSEMBLY: Removal and Installation".
- Remove center pillar garnish (upper/lower). Refer to INT-15, "Removal and Installation". 2.
- Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

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

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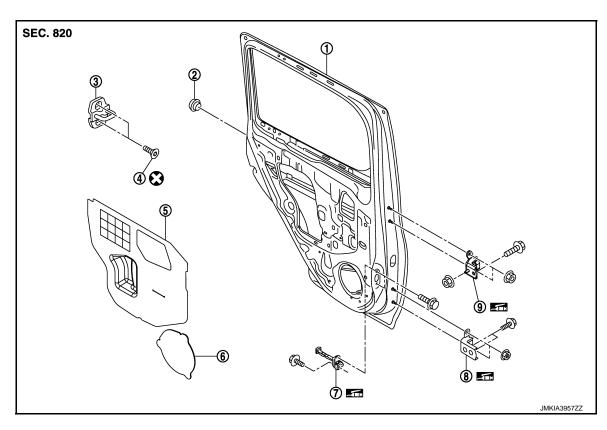
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- When removing and installing rear door assembly, perform the fitting adjustment. Refer to <u>DLK-191</u>, <u>"DOOR ASSEMBLY: Adjustment"</u>.
- After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts.
 DOOR CHECK LINK

DOOR CHECK LINK: Exploded View



- 1. Rear door panel
- TORX bolt
- 7. Door check link

- 2. Grommet
- 5. Sealing screen (upper)
- 8. Door hinge (lower)
- Door striker
- 6. Sealing screen (lower)
- 9. Door hinge (upper)

Refer to $\underline{\text{GI-4, "Components"}}$ for symbols in the figure.

DOOR CHECK LINK: Removal and Installation

REMOVAL

- 1. Remove rear door finisher. Refer to INT-13, "Removal and Installation".
- Fully close the rear door window.
- 3. Remove rear door speaker. Refer to AV-133, "Removal and Installation".
- 4. Remove mounting bolts of the check link on the vehicle.
- 5. Remove mounting bolts of the check link on door panel.
- Take door check link out from the hole of door panel.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check rear door open/close operation after installation.

[WITH INTELLIGENT KEY SYSTEM]

BACK DOOR BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY: Exploded View

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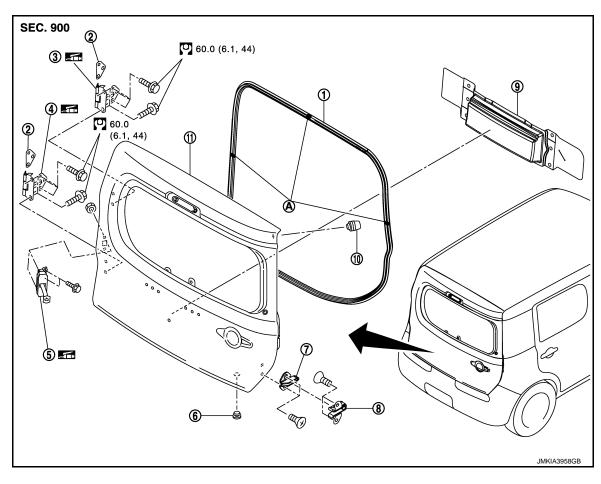
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- Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- 5. Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- 9. Sealing screen
- A : Center mark

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR ASSEMBLY: Removal and Installation

CAUTION.

Perform work with 2 workers, because of its heavy weight.

REMOVAL

- 1. Remove back door finisher lower. Refer to INT-26, "Removal and Installation".
- Remove luggage side finisher (LH) (upper/lower). Refer to <u>INT-23, "Removal and Installation"</u>.

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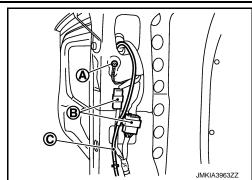
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BACK DOOR

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

3. Remove ground bolt (A) and disengage connections of harness connectors (B) and rear washer hose (C).



- 4. Remove back door harness grommet, and then pull out the harness from the vehcle.
- 5. Support back door with the proper material to prevent it from falling.
- 6. Remove mounting bolt of door check link on the vehcle.
- 7. Remove back door hinge mounting bolts (back door side), and then remove back door assembly.
- 8. Remove the following parts after removing back door assembly.
 - Back door finisher upper
 - · Sealing screen
 - Dovetail (male)
 - Dovetail (female)
 - Door check link
 - Grommet
 - Bumper rubber

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check back door open/close, lock/unlock operation after installation.
- After installation, perform fitting adjustment. Refer to <u>DLK-197, "BACK DOOR ASSEMBLY: Adjust-ment"</u>.

BACK DOOR ASSEMBLY: Adjustment

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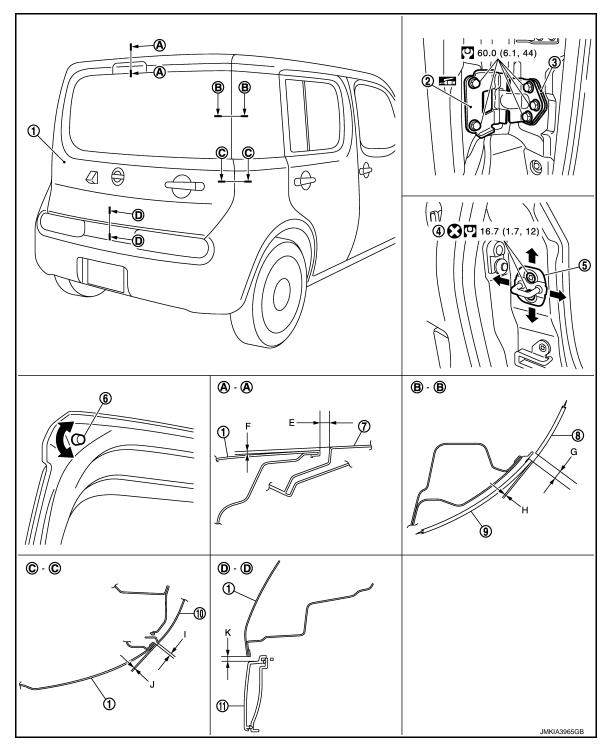
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- 1. Back door panel
- 4. TORX bolt
- 7. Roof panel
- 10. Body side outer panel
- 2. Back door hinge
- 5. Back door striker
- 8. Side window glass
- 11. Back door finisher

- 3. Shim (door hinge assembly parts)
- 6. Back door bumper rubber
- 9. Back door glass

Refer to GI-4, "Components" for symbols in the figure.

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

[WITH INTELLIGENT KEY SYSTEM]

					Unit: mm (in)
Portio	Standard	Difference (RH/LH)			
Back door – Roof	A – A	E	Clearance	6.1 - 9.9 (0.240 - 0.390)	_
		F	Surface height	-0.6 - 1.4 (-0.024 - 0.055)	_
Side window glass – Back door glass	B – B	G	Clearance	4.4 – 8.4 (0.173 – 0.331)	< 2.0 (0.079)
		Н	Surface height	0 - 2.0 (0 - 0.079)	_
Body side outer panel – Back door	C – C		Clearance	4.0 - 6.0 (0.157 - 0.236)	< 1.0 (0.039)
		J	Surface height	-1.0 - 1.0 (-0.039 - 0.039)	_
Back door – Back door finisher	D – D	K	Clearance	5.0 - 9.0 (0.197 - 0.354)	_

- 1. Loosen back door striker mounting bolts.
- 2. Loosen bumper rubber.
- Adjust right and left clearances and clearances between rear bumper to the standard value specified in the table, by taping back door striker using a rubber hammer and adjusting back door striker and bumper rubber.
- 4. Finally tighten back door hinge, bumper rubber, and back door striker.

CAUTION

- Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, apply touch-up paint (the body color) onto the head of back door hinge mounting nuts.

BACK DOOR STRIKER ADJUSTMENT

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

BACK DOOR STRIKER

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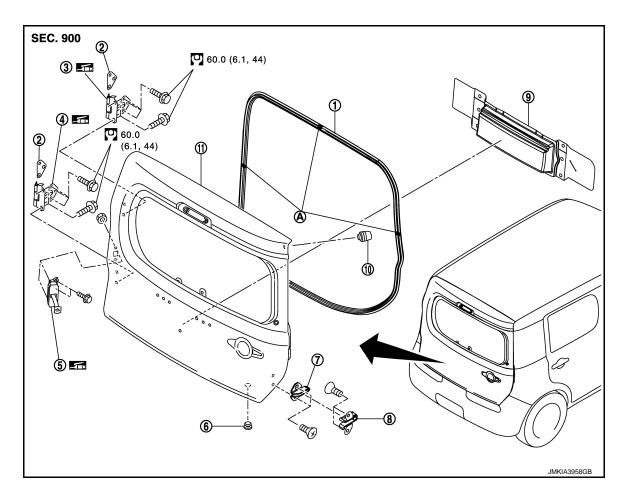
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BACK DOOR STRIKER: Exploded View



- Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- 9. Sealing screen
- A : Center mark

Refer to $\underline{\mbox{GI-4. "Components"}}$ for symbols in the figure.

BACK DOOR STRIKER: Removal and Installation

REMOVAL

Remove mounting bolts, and then remove back door striker.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check back door open/close operation after installation.
- When removing and installing back door striker, be sure to perform the fitting adjustment. Refer to <u>DLK-197, "BACK DOOR ASSEMBLY: Adjustment"</u>.

BACK DOOR HINGE

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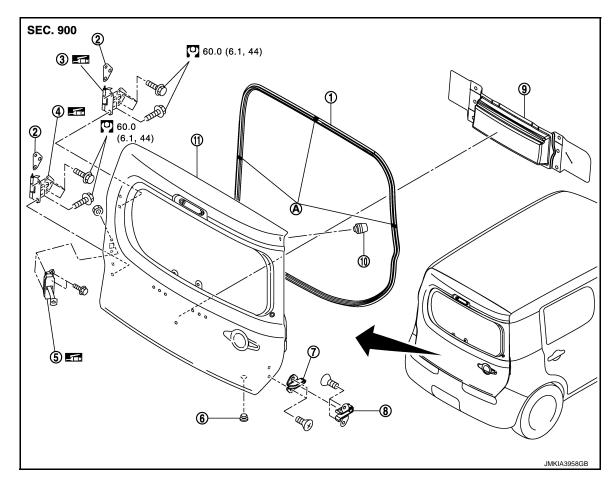
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BACK DOOR HINGE: Exploded View

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- Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- Shim (door hinge assembly parts)
- 5. Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- Sealing screen
- A : Center mark

Refer to $\underline{\mbox{Gl-4, "Components"}}$ for symbols in the figure.

BACK DOOR HINGE: Removal and Installation

CAUTION:

Perform work with 2 workers, because of its heavy weight.

REMOVAL

- Remove back door assembly. Refer to <u>DLK-195</u>, "BACK <u>DOOR ASSEMBLY</u>: Removal and Installation".
- 2. Remove back door hinge mounting bolts (body side), and then remove back door hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check back door open/close operation after installation.
- Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.
- When removing and installing back door assembly, perform the fitting adjustment. Refer to <u>DLK-197</u>, "BACK DOOR ASSEMBLY: Adjustment".
- After installation, apply touch-up paint (the body color) onto the head of back door hinge mounting nuts.

DOOR CHECK LINK

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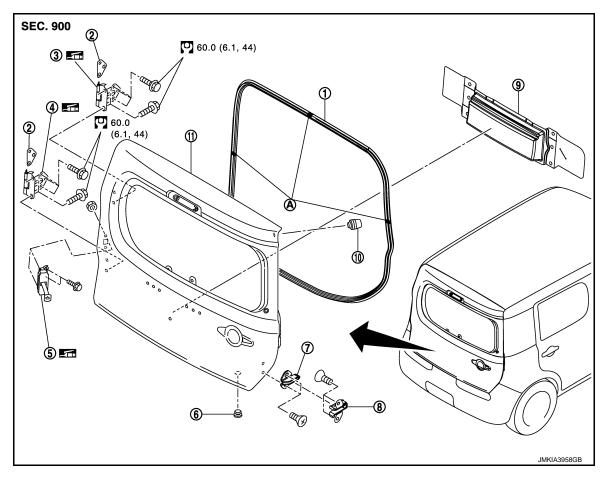
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DOOR CHECK LINK: Exploded View



- Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- 9. Sealing screen
- A : Center mark

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK: Removal and Installation

REMOVAL

- Remove back door finisher lower. Refer to <u>INT-26, "Removal and Installation"</u>.
- 2. Remove sealing screen.

NOTE:

Cut the butyl-tape so that some part of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

- 3. Remove mounting bolts of door check link on the vehicle.
- 4. Remove mounting nuts of door check link on the back door panel.
- 5. Take door check link out from the hole of back door panel.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check back door open/close operation after installation. DOVETAIL

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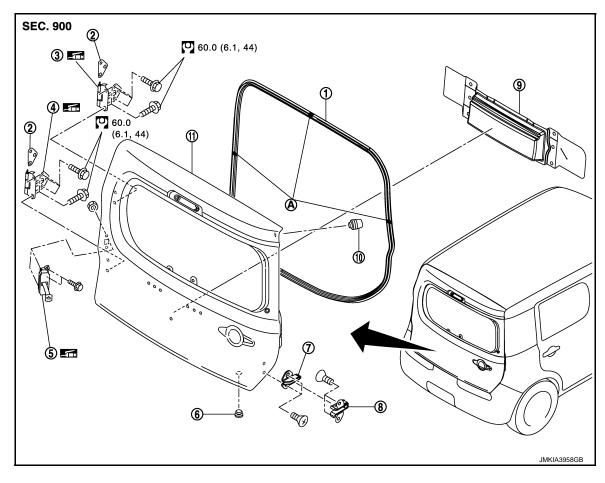
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DOVETAIL: Exploded View

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- 1. Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- 5. Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- Sealing screen
- A : Center mark

Refer to $\underline{\text{GI-4. "Components"}}$ for symbols in the figure.

DOVETAIL: Removal and Installation

REMOVAL

- Remove mounting bolts, and then remove dovetai (male).
- 2. Remove mounting bolts, and then remove dovetai (female).

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check back door open/close operation after installation.

BACK DOOR WEATHER-STRIP

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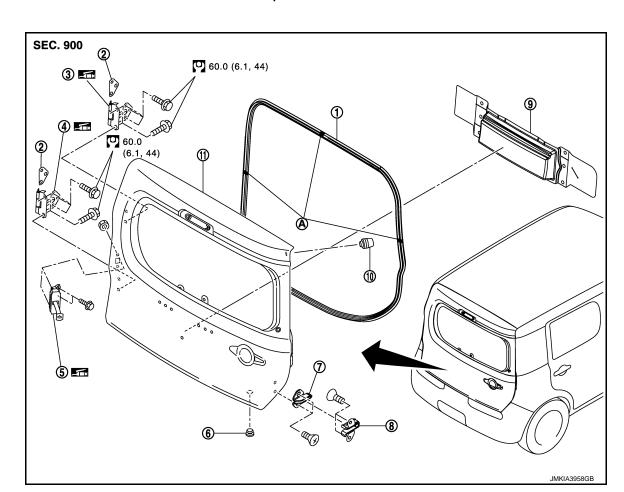
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BACK DOOR WEATHER-STRIP: Exploded View



- Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- Sealing screen
- A : Center mark

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR WEATHER-STRIP: Removal and Installation

REMOVAL

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

CAUTION:

Never pull strongly on weather-strip.

INSTALLATION

- 1. Working from the upper section, align weather-strip center mark (A) with vehicle center mark (cutting position) and install weather-strip onto the vehicle.
- 2. Pull weather-strip gently to ensure that there is no loose section.

NOTE:

Make sure that weather-strip is fit tightly at each corner and luggage rear plate.

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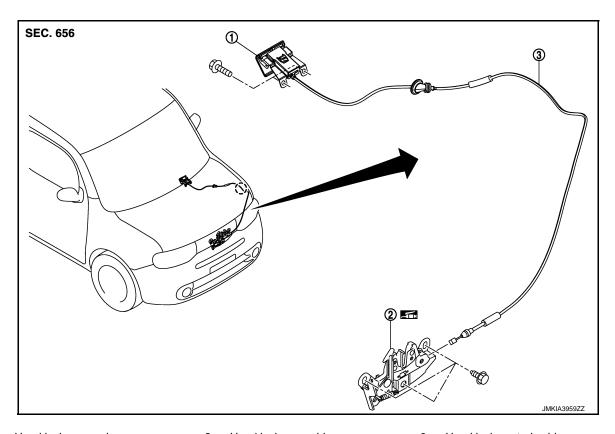
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HOOD LOCK

Exploded View



- Hood lock opener lever
- 2. Hood lock assembly
- 3. Hood lock control cable

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Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

REMOVAL

- 1. Remove front grille. Refer to EXT-18, "Removal and Installation".
- 2. Remove mounting bolts, and then remove hood lock assembly.
- 3. Disconnect hood lock cable from hood lock assembly.
- 4. Remove hood lock cable clip.
- Remove fender protector (LH). Refer to <u>EXT-22</u>, "<u>FENDER PROTECTOR</u>: Removal and Installation".
- 6. Remove hood lock opener lever.
- 7. Disconnect hood lock cable from hood lock opener lever.
- Remove grommet on the lower dash, and pull the hood lock control cable toward the passenger compartment.

CAUTION:

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

INSTALLATION

Install in the reverse order of removal.

CAUTION:

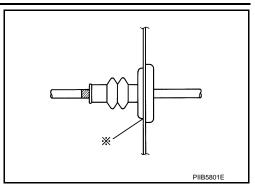
Never to bend cable too much, keeping the radius 100 mm (3.937 in) or more.

HOOD LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

 Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.



- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood fitting adjustment. Refer to DLK-177, "HOOD ASSEMBLY: Adjustment".
- After installation, perform hood lock control inspection. Refer to <u>DLK-205</u>, "Inspection".

Inspection INFOID:0000000005092353

NOTE:

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

- 1. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] by hood weight.
- 2. While operating hood opener, carefully check that the front end of hood is raised by approximately 20.0 mm (0.787 in). Also check that hood opener returns to the original position.
- 3. Check that hood opener operating is condition 49 N (5.0 kg, 11.0 lb) or below.
- 4. Install so that static closing face of hood is 94 − 490 N·m (9.6 − 50.0 kg-m, 69 − 361 ft − lb). **NOTE:**
 - Exert vertical force on right side and left side of hood lock.
 - Never press simultaneously both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

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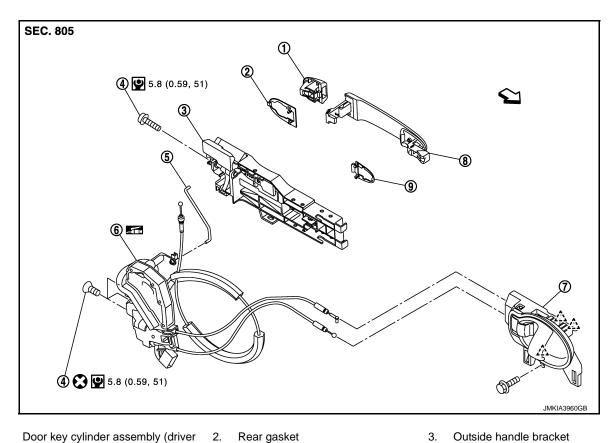
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FRONT DOOR LOCK DOOR LOCK

DOOR LOCK: Exploded View

INFOID:0000000005092354

INFOID:0000000005092355



- Door key cylinder assembly (driver side)
 - Outside handle escutcheon (passenger side)
- 4. TORX bolt

- 5. Key rod (driver side)
- 8. Outside handle

- Door lock assembly
 Front gasket

,^\ : Pawl

7.

: Vehicle front

Inside handle

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK: Removal and Installation

REMOVAL

- 1. Remove front door finisher. Refer to INT-11, "Removal and Installation".
- 2. Remove sealing screen.

NOTE:

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

- 3. Remove front door glass. Refer to GW-18, "Removal and Installation".
- 4. Remove front door lower sash (rear). Refer to GW-18, "Removal and Installation".
- 5. Remove outside handle. Refer to DLK-208, "OUTSIDE HANDLE: Removal and Installation".
- 6. Remove inside handle. Refer to <u>DLK-207</u>, "INSIDE HANDLE: Removal and Installation".
- 7. Remove door lock assembly TORX bolts.
- 8. Disconnect door lock actuator connector, and then remove door lock assembly.

< REMOVAL AND INSTALLATION >

INSTALLATION

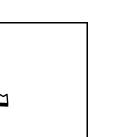
Install in the reverse order of removal.

CAUTION:

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

INSIDE HANDLE

INSIDE HANDLE: Exploded View



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1. Door key cylinder assembly (driver side)

Outside handle escutcheon (passen-

Rear gasket

Outside handle bracket

ger side) 4. TORX bolt

Key rod (driver side)

6. Door lock assembly

7. Inside handle Outside handle

Front gasket

: Pawl $\langle \neg$: Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE: Removal and Installation

INFOID:0000000005092357

REMOVAL

- Remove front door finisher. Refer to INT-11, "Removal and Installation".
- 2. Remove inside handle mounting bolts, slide handle toward rear of vehicle, disengage handle from door panel, and remove inside handle.

INSTALLATION

Install in the reverse order of removal.

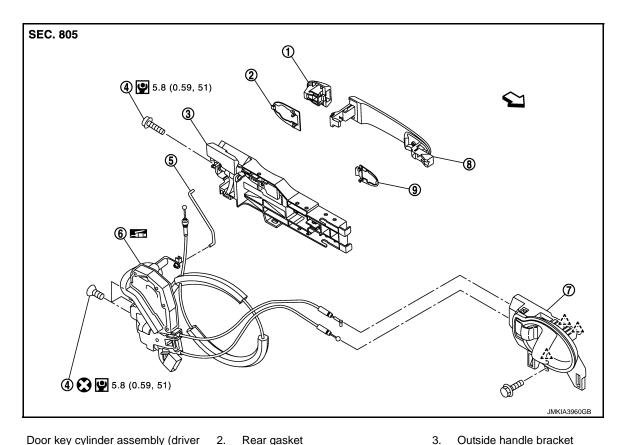
CAUTION:

Check door open/close, lock/unlock operation after installation.

OUTSIDE HANDLE

OUTSIDE HANDLE: Exploded View

INFOID:0000000005092414



- Door key cylinder assembly (driver side)
 - Outside handle escutcheon (passenger side)
- 4. TORX bolt

- 5. Key rod (driver side)
- 8. Outside handle

- 6. Door lock assembly
- 9. Front gasket

- ·^ : Pawl
- : Vehicle front

Inside handle

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE: Removal and Installation

INFOID:0000000005092359

REMOVAL

7.

- 1. Remove front door finisher. Refer to INT-11, "Removal and Installation".
- 2. Fully close the front door glass.
- 3. Remove sealing screen.

NOTE:

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

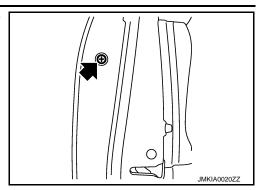
- 4. Remove front door lower sash (rear). Refer to GW-18, "Removal and Installation".
- 5. Disconnect key rod (driver side).
- 6. Disconnect door antenna and door request switch connector and remove harness clamp (with Intelligent Key system) on outside handle bracket.

FRONT DOOR LOCK

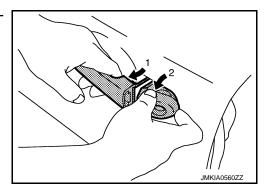
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

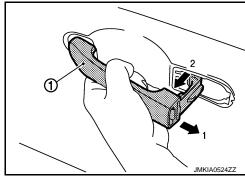
Remove door side grommet, and loosen TORX bolt from grommet hole.



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



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



- 10. Remove front gasket and rear gasket.
- 11. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 12. Reach in to separate outside handle cable connection on outside handle bracket.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

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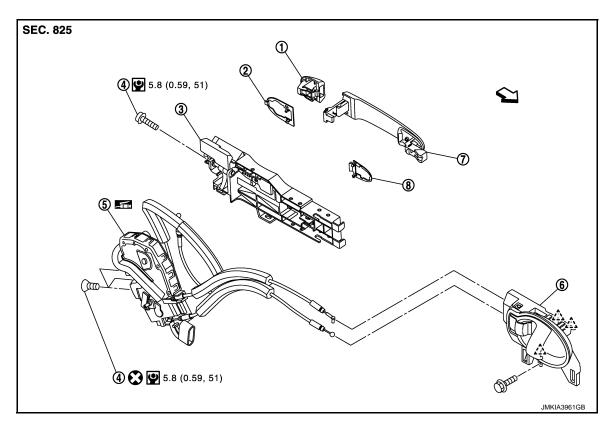
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REAR DOOR LOCK DOOR LOCK

DOOR LOCK: Exploded View

INFOID:0000000005092360

INFOID:0000000005092361



- 1. Outside handle escutcheon
- TORX bolt
- 7. Outside handle
- _^_ : Pawl
- ∠
 ¬ : Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

- 2. Rear gasket
- 5. Door lock assembly
- 8. Front gasket

- 3. Outside handle bracket
- 6. Inside handle

DOOR LOCK: Removal and Installation

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REMOVAL

- Remove rear door finisher. Refer to <u>INT-13, "Removal and Installation"</u>.
- 2. Remove sealing screen.

NOTE:

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

- Remove rear door glass. Refer to <u>GW-23</u>, "Removal and Installation".
- 4. Remove outside handle. Refer to DLK-212, "OUTSIDE HANDLE: Removal and Installation".
- 5. Remove inside handle. Refer to DLK-211, "INSIDE HANDLE: Removal and Installation".
- 6. Remove door lock assembly TORX bolts.
- 7. Disconnect door lock actuator connector, and then remove door lock assembly.

INSTALLATION

Install in the reverse order of removal.

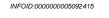
CAUTION:

• Check door open/close, lock/unlock operation after installation.

. Check door lock cable is properly engaged with outside handle bracket.

INSIDE HANDLE

INSIDE HANDLE: Exploded View



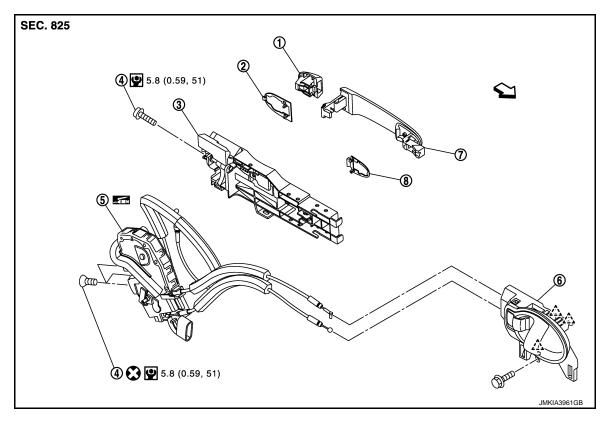
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- 1. Outside handle escutcheon
- TORX bolt 4.
- Outside handle 7.
- : Pawl
- : Vehicle front

- 2. Rear gasket
- 5. Door lock assembly
- Front gasket

- Outside handle bracket
- Inside handle 6.

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE: Removal and Installation

REMOVAL

- 1. Remove rear door finisher. Refer to INT-13, "Removal and Installation".
- Remove inside handle mounting bolts, slide handle toward rear of vehicle, disengage handle from door panel, and remove inside handle.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check door open/close, lock/unlock operation after installation.

OUTSIDE HANDLE

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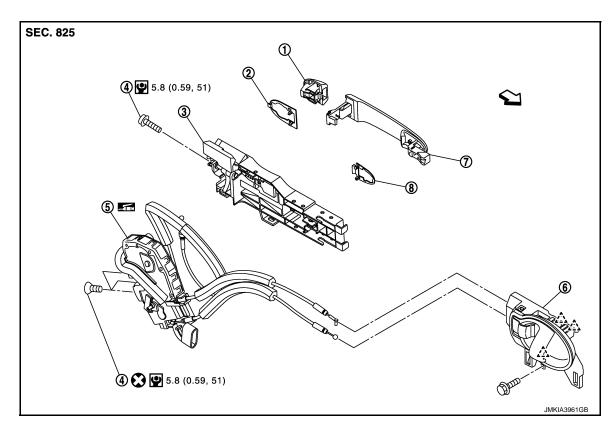
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OUTSIDE HANDLE: Exploded View

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- 1. Outside handle escutcheon
- 4. TORX bolt
- 7. Outside handle
- ^` : Pawl
- $\ \ \, \ \ \, : \mbox{Vehicle front}$

Refer to GI-4, "Components" for symbols in the figure.

- 2. Rear gasket
- 5. Door lock assembly
- 8. Front gasket

- 3. Outside handle bracket
- 6. Inside handle

OUTSIDE HANDLE: Removal and Installation

REMOVAL

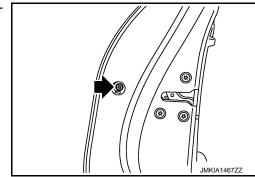
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- Remove rear door finisher. Refer to <u>INT-13, "Removal and Installation"</u>.
- 2. Fully close rear door glass.
- 3. Remove sealing screen.

NOTE:

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

Remove door side grommet, and loosen TORX bolt from grommet hole.

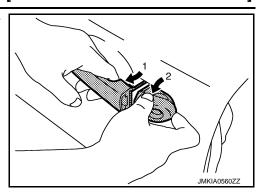


REAR DOOR LOCK

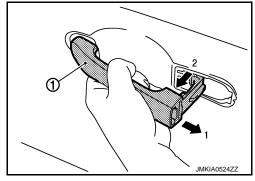
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

While pulling outside handle, remove outside handle escutcheon



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



- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 9. Reach in to separate outside handle cable connection on outside handle bracket.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

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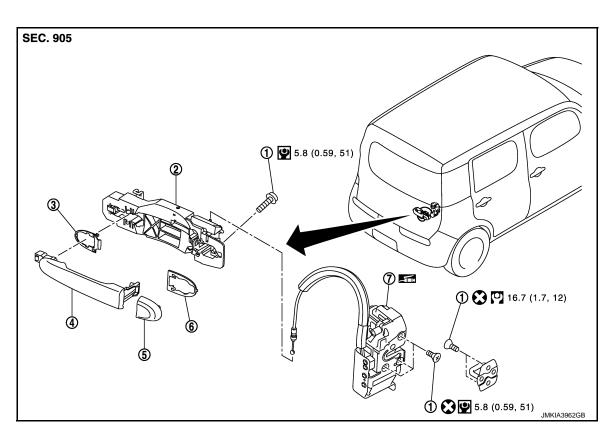
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BACK DOOR LOCK

DOOR LOCK

DOOR LOCK: Exploded View



- 1. TORX bolt
- 4. Outside handle
- 7. Back door lock assembly
- 2. Outside handle bracket
- 5. Outside handle escutcheon
- 3. Rear gasket
- 6. Front gasket

DOOR LOCK: Removal and Installation

Refer to GI-4, "Components" for symbols in the figure.

REMOVAL

- 1. Remove back door finisher lower. Refer to INT-26, "Removal and Installation".
- 2. Remove sealing screen.

NOTE:

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

- 3. Remove back door outside handle. Refer to <u>DLK-215, "OUTSIDE HANDLE: Removal and Installation"</u>.
- 4. Remove back door lock assembly mounting bolts.
- 5. Disconnect harness connector from back door lock assembly.
- 6. Remove back door lock assembly.

INSTALLATION

Install in the reverse order of removal.

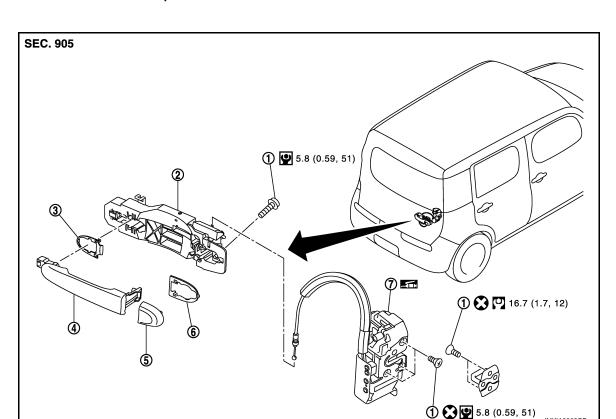
CAUTION:

- Check back door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

OUTSIDE HANDLE

INFOID:0000000005092417

OUTSIDE HANDLE: Exploded View



- TORX bolt
- 4. Outside handle
- Back door lock assembly
- Outside handle bracket
 - Outside handle escutcheon
- Rear gasket 3.
- Front gasket

OUTSIDE HANDLE: Removal and Installation

Refer to GI-4, "Components" for symbols in the figure.

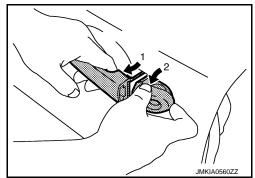
REMOVAL

- Remove back door finisher lower. Refer to <u>INT-26, "Removal and Installation"</u>.
- 2. Remove sealing screeen.

NOTE:

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

- 3. Disconnect back door antenna and back door request switch connector and remove harness clamp (with intelligent key system) on outside handle bracket.
- 4. Remove mounting bolt of outside handle bracket.
- 5. While pulling outside handle, remove outside habdle escutch-



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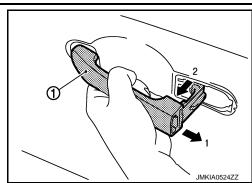
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BACK DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

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



- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 9. Reach in to separate outside handle cable connection on outside handle bracket.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check back door open/close operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

EMERGENCY LEVER

EMERGENCY LEVER: Unlock procedures

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UNLOCK PROCEDURES

NOTE:

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

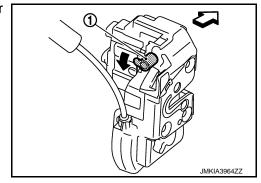
- 1. Remove back door finisher lower. Refer to INT-26, "Removal and Installation".
- Remove sealing screen.

NOTE:

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

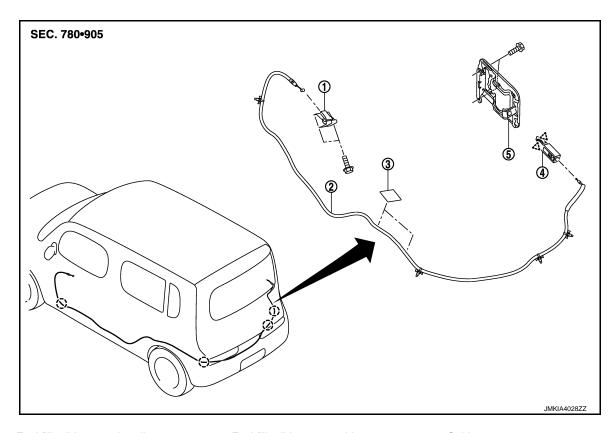
3. From inside the vehicle, rotate emergency lever (1) toward lower direction and unlock.

< ; Vehicle front



FUEL FILLER LID OPENER

Exploded View INFOID:0000000005092372



- Fuel filler lid opener handle
- Fuel filler lid lock assembly
- : Clip 八: Pawl

- Fuel filler lid opener cable 2.
- Fuel filler lid assembly
- Cable protector

Removal and Installation

REMOVAL

FUEL FILLER LID

- Fully open fuel filler lid.
- Remove mounting screws, and then remove fuel filler lid.

FUEL FILLER LID OPENER CABLE

- 1. Fully open fuel filler lid.
- Remove dash side finisher (LH). Refer to <u>INT-15, "Removal and Installation"</u>.
- 3. Remove front kicking plate inner (LH). Refer to INT-15, "Removal and Installation".
- Remove center pillar lower garnish (LH). Refer to <u>INT-15, "Removal and Installation"</u>.
- Remove rear kicking plate inner (LH). Refer to INT-15, "Removal and Installation".
- 6. Remove luggage side finisher (LH) (upper/lower). Refer to INT-23, "Removal and Installation".
- 7. Remove center seat belt retractor. Refer to SB-11, "SEAT BELT RETRACTOR: Removal and Installation".
- Remove fuel filler lid opener cable from fuel filler lid opener handle.

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8. Remove mounting bolts, and then remove fuel filler lid opener handle.

10. Push fuel filler lid lock assembly front the vehicle, while pushing the pawls.

FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

- 11. Remove fuel filler lid opener cable from fuel filler lid lock assembly.
- 12. Pull up floor trim. Refer to INT-18, "Removal and Installation".
- 13. Remove fuel filler lid opener cable mounting clips.
- 14. Remove fuel filler lid opener cable.

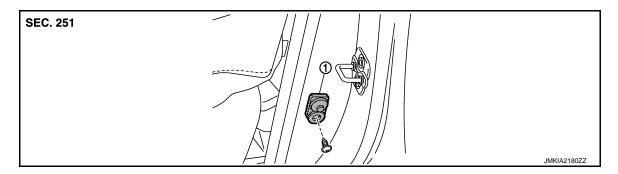
INSTALLATION

Install in the reverse order of removal.

[WITH INTELLIGENT KEY SYSTEM]

DOOR SWITCH

Exploded View

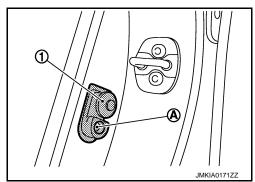


1. Door switch

Removal and Installation

REMOVAL

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



INSTALLATION

Install in the reverse order of removal.

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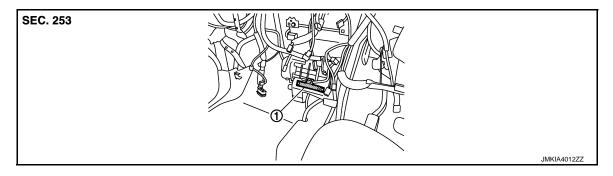
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INSIDE KEY ANTENNA INSTRUMENT CENTER

INSTRUMENT CENTER: Exploded View

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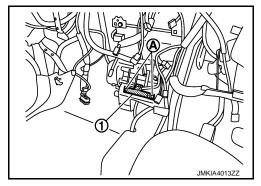
Inside key antenna (instrument center)

INSTRUMENT CENTER: Removal and Installation

INFOID:0000000005048292

REMOVAL

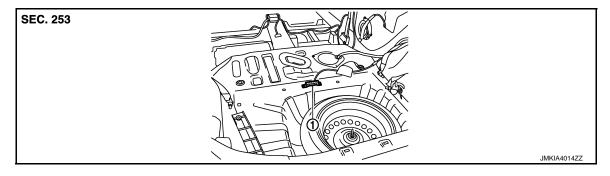
- 1. Remove the audio unit. Refer to AV-130, "Removal and Installation".
- 2. Remove the inside key antenna (instrument center) mounting screw (A), and then remove inside key antenna (instrument center) (1).



INSTALLATION
Install in the reverse order of removal.
LUGGAGE ROOM

LUGGAGE ROOM: Exploded View

INFOID:0000000005087657



1. Inside key antenna (luggage room)

INSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

LUGGAGE ROOM: Removal and Installation

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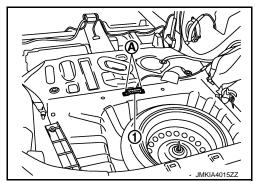
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REMOVAL

- 1. Remove the luggage floor finisher front. Refer to INT-23, "Removal and Installation".
- 2. Remove the inside key antenna (luggage room) mounting clip (A), and then remove inside key antenna (luggage room) (1).



INSTALLATION

Install in the reverse order of removal.

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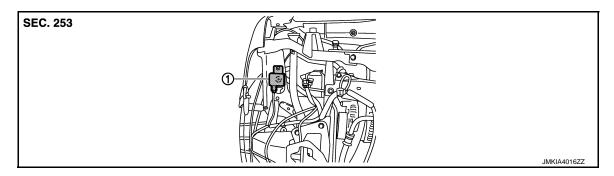
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INTELLIGENT KEY WARNING BUZZER

Exploded View



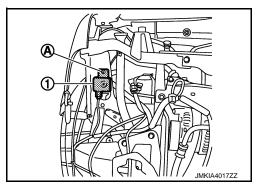
1. Intelligent Key warning buzzer

Removal and Installation

INFOID:0000000005048304

REMOVAL

- 1. Remove the front bumper. Refer to EXT-13, "Removal and Installation".
- 2. Remove the Intelligent Key warning buzzer mounting bolt (A), and then remove the Intelligent Key warning buzzer (1).



INSTALLATION

Install in the reverse order of removal.

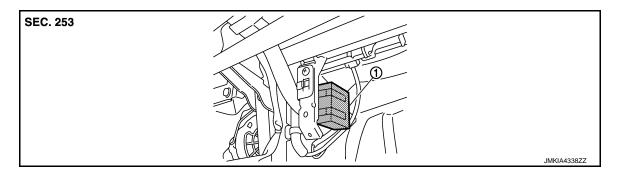
REMOTE KEYLESS ENTRY RECEIVER

< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY RECEIVER

Exploded View

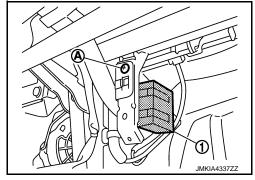


1. Remote keyless entry receiver

Removal and Installation

REMOVAL

- 1. Remove the glove box assembly. Refer to IP-13, "Removal and Installation".
- 2. Remove the remote keyless entry receiver mounting bolt (A), and then remove remote keyless entry receiver (1).



INSTALLATION

Install in the reverse order of removal.

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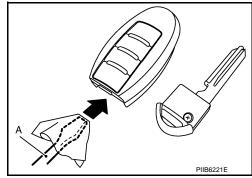
INTELLIGENT KEY BATTERY

Removal and Installation

- Release the lock knob at the back of the Intelligent Key and remove the mechanical key.
- Insert a flat-blade screwdriver (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.

CAUTION:

- Do not touch the circuit board or battery terminal.
- The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.



3. Replace the battery with new one.

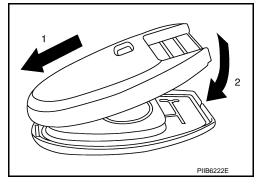
Battery replacement

:Coin-type lithium battery (CR2025)

4. Align the tips of the upper and lower parts, and then push them together until it is securely closed.

CAUTION:

- When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
- After replacing the battery, check that all Intelligent Key functions work normally.



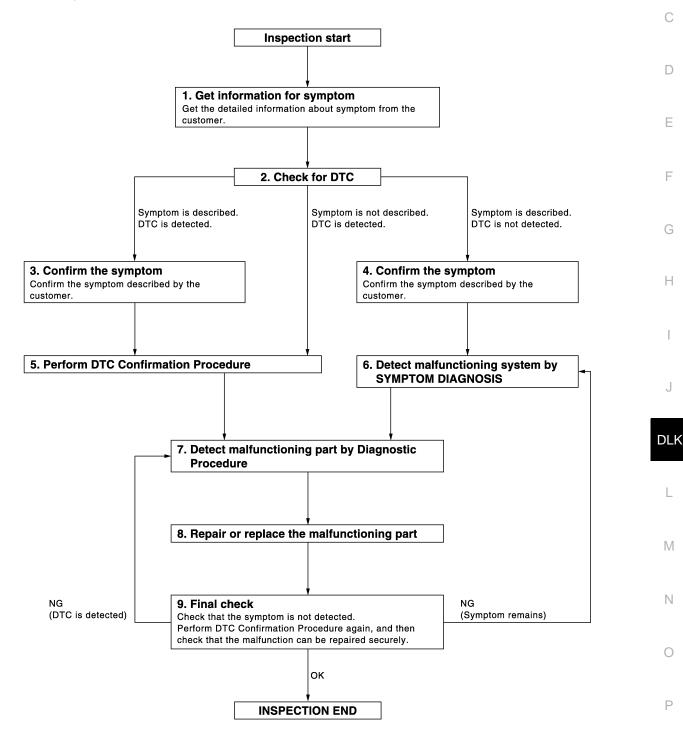
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

OVERALL SEQUENCE



JMKIA3620GB

DIAGNOSIS AND REPAIR WORK FLOW

[WITHOUT INTELLIGENT KEY SYSTEM]

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2. CHECK FOR 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-299, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 7.

NO >> Refer to GI-34, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to Symptom Diagnosis 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.

f 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.

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

INFOID:0000000005048327

Perform the system initialization when replacing or registering keyfob and ignition key.

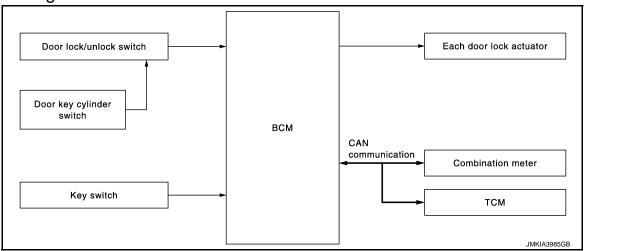
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement

Refer to the CONSULT-III Operation Manual-NATS.

SYSTEM DESCRIPTION

POWER DOOR LOCK SYSTEM

System Diagram



System Description

INFOID:0000000005048330

INFOID:0000000005048329

DOOR LOCK FUNCTION

- The door lock and unlock switch (driver side) is build into power window main switch.
- The door lock and unlock switch (passenger side) is on door trim.
- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all doors are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all doors and are unlocked.

Door Key Cylinder

- With the door key inserted in the door key cylinder on driver side, turning it to "LOCK", will lock door lock actuator of all doors.
- With the door key inserted in the door key cylinder on driver side, turning it to "UNLOCK" once unlocks the
 driver side door lock actuator; turning it to "UNLOCK" again within 60 seconds after the first unlock operation
 unlocks all of the other doors. (SELECTIVE UNLOCK OPERATION)

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-PORT". Refer to <u>DLK-237</u>, "DOOR LOCK: <u>CONSULT-III Function</u> (BCM - DOOR LOCK)".

KEY REMINDER FUNCTION

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

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock*1

All doors are locked when the vehicle speed reaches 15 miles or more.

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

P Range Interlock Door Lock*2

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

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

Setting change of Automatic Door Lock/Unlock Function

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POWER DOOR LOCK SYSTEM

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

(P) With CONSULT-III

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

⋈ Without CONSULT- III

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

- 1. Close all doors (door switch OFF)
- Turn ignition switch ON
- Press and hold the door lock and unlock switch for 5 seconds or more in the lock direction within 20 seconds after turning the ignition switch ON.
- 4. The switching is completed when the hazard warning lamp blinks.

 $OFF \rightarrow ON$: 2 blinks $ON \rightarrow OFF$: 1 blink

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock*1

All doors are unlocked when the power supply position is changed from ON to OFF.

BCM outputs the unlock signal to all door lock actuators when it detects that the power supply position is changed from ignition switch ON to OFF.

P Range Interlock Door Unlock*2

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

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

Key out Interlock Door Unlock

When ignition key is removed from ignition knob switch, all doors unlock.

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

Setting change of Automatic Door Lock/Unlock Function

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

(P) With CONSULT- III

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

(R) Without CONSULT- III

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

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

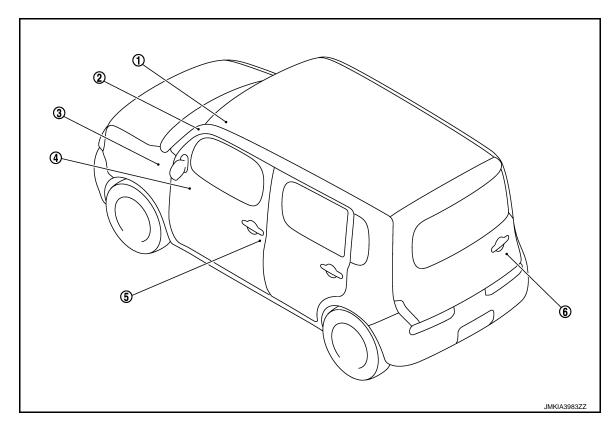
 $\begin{array}{ll} \mathsf{OFF} \to \mathsf{ON} & : 2 \; \mathsf{blinks} \\ \mathsf{ON} \to \mathsf{OFF} & : 1 \; \mathsf{blink} \\ \end{array}$

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

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

Component Parts Location

INFOID:0000000005048331



- 1. Key switch M24
- 4. Power window main switch (door lock and unlock switch) D5, D6
- Combination meter M34
 Refer to MWI-8, "METER SYSTEM:
 Component Parts Location"
 - Front door lock assembly (driver side) D9
- . BCM M65, M66, M67 Refer to BCS-148, "Removal and Installation"
- . Back door lock assembly D106

Component Description

INFOID:0000000005048332

Item	Function
BCM	Controls the door lock function and room lamp function
Door lock and unlock switch	Input lock or unlock signal to BCM
Door lock actuator	Input lock/unlock signal from BCM and locks/unlocks each door
Door switch	Input door open/close condition to BCM
Door key cylinder switch	Input lock or unlock signal to power window main switch Power window main switch transmits door lock/unlock signal to BCM
TCM	Transmit shift position signal to BCM via CAN communication line
Key switch	Input ignition switch ON/OFF condition to BCM

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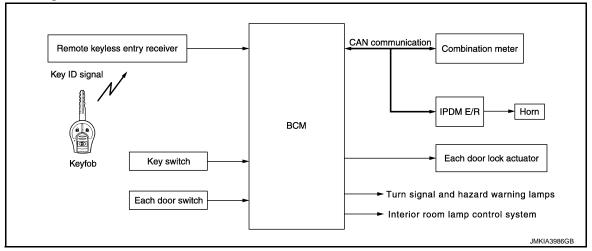
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System Diagram

INFOID:0000000005048333



System Description

INFOID:0000000005048334

DOOR LOCK AND UNLOCK OPERATION

- When door lock and unlock button of keyfob is pressed, door lock and unlock signal transmits from keyfob to BCM via remote keyless entry receiver.
- When BCM receives the door lock and unlock signal, it operates door lock actuator, flashes the hazard lamp (lock: 2 times, unlock: 1 time) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 1 time) as a reminder.

OPERATION CONDITION

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

Remote controller operation	Operation condition
Lock/unlock	Key switch is off

OPERATION AREA

To ensure that the keyfob works effectively, use within 100 cm (3 ft) range of each door, however the operable range may differ according to surroundings.

SELECTIVE UNLOCK OPERATION

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.

HAZARD AND HORN REMINDER

When the doors are locked or unlocked by keyfob, power is supplied to sound horn and flash hazard warning lamps as a reminder

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

How to Change Hazard and Horn Reminder Modes

With CONSULT-III

Hazard reminder has modes 1, 2, 3 and 4, and horn reminder can be turned ON/OFF with any lock mode.

Hazard reminder setting	Mode 1		Mode 2		Mode 3		Mode 4	
Keyfob operation	Lock	Unlock	Lock	Unlock	Lock	Unlock	Lock	Unlock
Hazard warning lamp blink	_		_	Once	Twice	_	Twice	Once

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Horn reminder setting	ON		OFF	=
Keyfob operation	Lock	Unlock	Lock	Unlock
Horns sound	Once	_	_	_

Hazard and horn reminders do not operate if any door switch is ON (any door is OPEN).

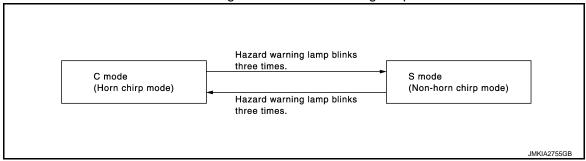
Hazard reminder can be changed using "HAZARD LAMP SET" mode in "WORK SUPPORT".

Horn reminder can be changed using "HORN CHIRP SET" mode in "WORK SUPPORT".

Refer to DLK-238, "MULTI REMOTE ENT: CONSULT-III Function (BCM - MULTI REMOTE ENT)".

Without CONSULT-III

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



AUTO DOOR LOCK FUNCTION

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

Operating condition	 Door switch is ON (door is open) Door is locked Push switch is pressed Ignition switch is ON
 	11 11 (ALITECT CON OFT)

Auto door lock mode can be changed by the "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-238</u>, "MULTI REMOTE ENT: CONSULT-III Function (BCM - MULTI REMOTE ENT)".

INTERIOR ROOM LAMP CONTROL FUNCTION

Interior room lamp is controlled according to door lock/unlock state, refer to INL-5, "System Description".

REGISTER, CHECK, AND ERASURE OF REMOTE CONTROLLER ID

- Remote controller ID can be registered by key operation and can be registered, checked, and erased using CONSULT-III.
- Remote controller ID can be registered by key operation or CONSULT-III. A maximum of 5 IDs can be registered. Operative number of IDs is always amaximum total of 5. When a 6th ID registration is performed, the oldest ID among the 5 registered IDs is automatically erased. (Initially saved data is automatically erased.)

Remote controller ID registration with key

When recording a new remote controller ID after replacing BCM, or when maintaining a previously recorded ID and newly adding a remote controller, keep the remote controller within the effective range and register the new controller by performing the following procedure.

NOTE:

- Always remove and insert key slowly and carefully within a 10 second period. If this procedure is performed too quickly, remote controller ID registration mode may not be entered.
- After a new remote controller is registered, be sure to check the operation.

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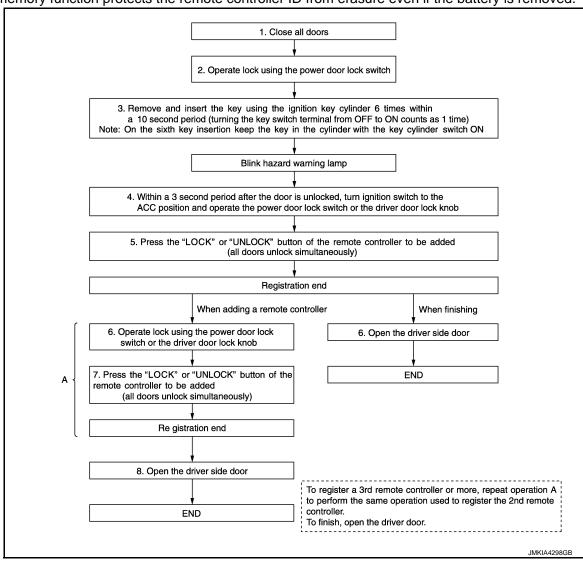
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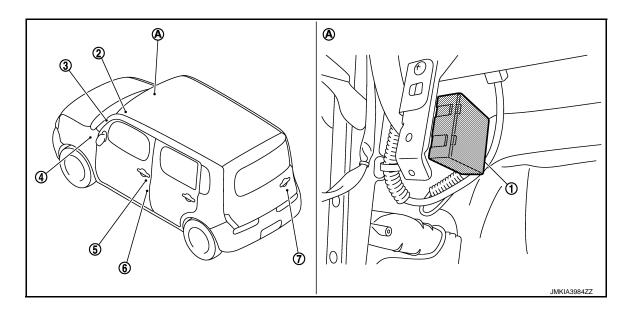
[WITHOUT INTELLIGENT KEY SYSTEM]

• The memory function protects the remote controller ID from erasure even if the battery is removed.



Component Parts Location

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< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Remote keyless entry receiver M61 2. Key switch M24 Combination meter M34 Refer to MWI-8, "METER SYSTEM: Component Parts Location"

- BCM M65, M66, M67
- Front door lock assembly (driver side) D9
- Front door switch (driver side) B34

7. Back door lock assembly D106

Component Description

Item	Function
BCM	Controls the door lock and unlock function.
Door lock actuator	Output lock / unlock signal from BCM and locks and unlocks each door.
Remote keyless entry receiver	Receives lock/unlock signal from the key fob, and then transmits to BCM.
Key fob	Transmits button operation to remote keyless entry receiver.
Door switch	Inputs door open/close condition to BCM
Key switch	Inputs key insert/remove signal to BCM

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< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000005154964

APPLICATION ITEM

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

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	Read and save the vehicle specification.Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode			
System	Sub system selection item	Work Support	Data Monitor	Active Test	
Door lock	DOOR LOCK	×	×	×	
Rear window defogger	REAR DEFOGGER		×	×	
Warning chime	BUZZER		×	×	
Interior room lamp control	INT LAMP	×	×	×	
Remote keyless entry system	MULTI REMOTE ENT	×	×	×	
Exterior lamp	HEAD LAMP	×	×	×	
Wiper and washer	WIPER	×	×	×	
Turn signal and hazard warning lamps	FLASHER		×	×	
Automatic air conditioner Manual air conditioner	AIR CONDITONER		×	×	
Combination switch	COMB SW		×		
Body control system	BCM	×			
NVIS - NATS	IMMU	×	×	×	
Interior room lamp battery saver	BATTERY SAVER	×	×	×	
Back door	TRUNK		×		
Vehicle security system	THEFT ALM	×	×	×	
RAP system	RETAINED PWR		×	×	
Signal buffer system	SIGNAL BUFFER		×	×	
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×	
Panic alarm system	PANIC ALARM			×	

DOOR LOCK

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

INFOID:0000000005048343

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

WORK SUPPORT

Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operate with this mode On: Operate Off: Non-operation
AUTOMATIC DOOR LOCK SE- LECT	Automatic door lock function mode can be selected from the following in this mode • VH SPD: All doors are locked when vehicle speed more than 24km/h (15MPH) • P RANGE: All doors are locked when shifting the selector lever from P position to other than the P position
AUTOMATIC DOOR UNLOCK SELECT	 Automatic door unlock function mode can be selected from the following in the mode MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF MODE 2: All doors are unlocked when shifting the selector lever from any position other than the P to P position MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF MODE 4: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position MODE 5: Driver side door is unlocked when key out of key switch MODE 6: All doors are unlocked when key out of key switch
AUTOMATIC LOCK/UNLOCK SET	Automatic door lock/unlock function mode can be selected from the following in this mode Off: Non-operation Unlock Only: door unlock operation only Lock Only: door lock operation only Lock/Unlock: lock/unlock operation

DATA MONITOR

Monitor Item	Contents
IGN ON SW	Indicated [On/Off] condition of ignition switch in ON position
KEY ON SW	Indicated [On/Off] condition of key switch
DOOR SW-DR	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR	Indicated [On/Off] condition of rear door switch RH
DOOR SW-RL	Indicated [On/Off] condition of rear door switch LH
BACK DOOR SW	Indicated [On/Off] condition of back door switch
LOCK STATUS	Indicated [On/Off] condition of driver side door
ACC ON SW	Indicated [On/Off] condition of ignition switch in ACC position
KEYLESS LOCK	Indicated [On/Off] condition of lock signal from key fob
KEYLESS UNLOCK	Indicated [On/Off] condition of unlock signal from key fob
SHOCK SENSOR	NOTE: This item is displayed, but cannot be supported
CDL LOCK SW	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW	Indicated [On/Off] condition of unlock signal from door lock unlock switch

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< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item	Contents
KEY CYL LK-SW	Indicated [On/Off] condition of lock signal from door key cylinder
KEY CYL UN-SW	Indicated [On/Off] condition of unlock signal from door key cylinder
VEHICLE SPEED	Display the vehicle speed signal received from combination meter by numerical value [Km/h]

ACTIVE TEST

Test item	Description			
DOOR LOCK	This test is able to check door lock/unlock operation The all door lock actuators are locked when "ALL LCK" on CONSULT-III screen is touched The all door lock actuators are unlocked when "ALL UNLK" on CONSULT-III screen is touched The door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT-III screen is touched The door lock actuator (other) is unlocked when "OTR ULK" on CONSULT-III screen is touched			

MULTI REMOTE ENT

MULTI REMOTE ENT : CONSULT-III Function (BCM - MULTI REMOTE ENT)

INFOID:0000000005048345

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
KEY ON SW	Indicates [On/Off] condition of key switch
ACC ON SW	Indicates [On/Off] condition of ignition switch in ACC position
KEYLESS LOCK	Indicates [On/Off] condition of lock signal from keyfob
KEYLESS UNLOCK	Indicates [On/Off] condition of unlock signal from keyfob
KYLS TRNK/HAT	NOTE: This item is displayed, but cannot be tested
DOOR SW-DR	Indicates [On/Off] condition of front door switch (driver side)
DOOR SW-AS	Indicates [On/Off] condition of front door switch (passenger side)
DOOR SW-RR	Indicates [On/Off] condition of rear door switch RH
DOOR SW-RL	Indicates [On/Off] condition of rear door switch LH
BACK DOOR SW	Indicates [On/Off] condition of back door switch
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be tested
CDL LOCK SW	Indicates [On/Off] condition of door lock and unlock switch
CDL UNLOCK SW	Indicates [On/Off] condition of door lock and unlock switch
KEYLESS PANIC	Indicates [On/Off] condition of PANIC button of keyfob

ACTIVE TEST

< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Test item	Description
INT LAMP	This test is able to check interior room lamp operation On: Operate Off: Non-operation
FLASHER	This test is able to check flasher operation [LH/RH/Off]
HORN	This test is able to check horn operation On: Operate

WORK SUPPORT

Test item	Description			
REMO CONT IN REGIST	Keyfob ID code can be registered			
REMO CONT IN ERASUR	Keyfob ID code can be erased			
REMO CONT IN CONFIR	It can be checked whether Intelligent Key ID code is registered or not in this mode			
MULTI ANSWER BACK SET	NOTE: This item is displayed, but cannot be tested			
HORN CHIRP SET	Hazard and horn reminder function (horn operation) mode can be changed in this mode On: Operate Off: Non-operation			
HAZARD LAMP SET	Hazard and horn reminder function (hazard operation) mode can be changed in this mode • MODE1: Non-operation • MODE2: Unlock operation only • MODE3: Lock operation only • MODE4: Lock and unlock operation			
AUTO LOCK SET	Auto door lock time can be changed in this mode • MODE 1: Non-operation • MODE 2: 30 sec • MODE 3: 1 minute • MODE 4: 2 minute • MODE 5: 3 minute • MODE 6: 4 minute • MODE 7: 5 minute			
PANIC ALARM SET	Panic alarm button pressing time on keyfob remote control button can be selected from the following with this mode • MODE1: 0.5 sec • MODE2: Non-operation • MODE3: 1.5 sec			
TRUNK OPEN SET	NOTE: This item is displayed, but cannot be tested			

TRUNK

TRUNK: CONSULT-III Function (BCM - TRUNK)

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	Contents		
KEY ON SW	Indicates [On/Off] condition of key switch.		
LOCK STATUS	NOTE: This item is displayed, but cannot be monitored.		

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< SYSTEM DESCRIPTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item	Contents
VEHICLE SPEED	Indicates [Km/h] condition of vehicle speed signal from combination meter.
IGN ON SW	Indicates [On/Off] condition of ignition switch.
TRNK OPNR SW	NOTE: This item is displayed, but cannot be monitored.
KYLS TRNK/HAT	NOTE: This item is displayed, but cannot be monitored.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE): Diagnosis Procedure

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1. CHECK FUSES AND FUSIBLE LINK

Check that the following fuses and fusible link are not fusing.

Signal name	Fuses and fusible link No.	
Battery power supply	8	
battery power supply	G	
ACC power supply	20	
Ignition power supply	2	

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.

Disconnect BCM connectors.

3. Check voltage between BCM harness connector and ground.

Terminals		Ignition switch position			
(+)		(-)	ignition switch position		
ВСМ			OFF	ACC	ON
Connector	Terminal		OFF	ACC	
M67	70		Battery	Battery	Battery
	57		voltage	voltage	voltage
M65	11	Ground	Approx. 0 V	Battery voltage	Battery voltage
	38		Approx. 0 V	Approx. 0 V	Battery voltage

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.

ВСМ			Continuity
Connector Terminal		Ground	Continuity
M67 67			Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

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DOOR SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR SWITCH

Description INFOID:0000000005155433

Detects door open/close condition.

Component Function Check

INFOID:0000000005155434

1. CHECK FUNCTION

Check ("DOOR SW-DR", "DOOR SW-AS", "DOOR SW-RL", "DOOR SW-RR", "BACK DOOR SW") in "Data Monitor" mode with CONSULT-III.

Monitor item	Condition		Status
DOOR SW-DR	Driver side door	Open	ON
DOOK SW-DK		Closed	OFF
DOOR SW-AS	Passenger side door	Open	ON
DOOK SW-AS		Closed	OFF
DOOR SW-RL	Rear door LH	Open	ON
		Closed	OFF
DOOR SW-RR	Rear door RH	Open	ON
		Closed	OFF
BACK DOOR SW	Back door	Open	ON
		Closed	OFF

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-242</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005155435

1. CHECK DOOR SWITCH INPUT SIGNAL

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

DOOR SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

	(+)			Signal
	Door switch	1	(-)	(Reference value)
Conne	ector	Terminal		
Driver side	B34	2		(V) 15 10 5 0 +-10ms PKIB4960J 7.0 - 8.0 V
Passenger side	B27	2		(V) 15 10 5 0 ++10ms PKIB4960J 7.0 - 8.0 V
Rear LH	B71	2	Ground	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
Rear RH	B53	2		(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
Back door	B75	2		(V) 15 10 5 0 + 10ms PKIB4960J 9.5 - 10.0 V

Is the inspection result normal?

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

2. CHECK DOOR SWITCH CIRCUIT

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

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DOOR SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

Door switch		BC	Continuity		
Con	nector	Terminal	Connector	Terminal	Continuity
Driver side	B34		M66	47	
Passenger side	B27		M65	12	
Rear LH	B71	2	M66	48	Existed
Rear RH	B53		M65	13	
Back door	B75		M66	43	

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

Door switch				Continuity
Cor	nnector	Terminal	-	Continuity
Driver side	B34			
Passenger side	B27		Ground	
Rear LH	B71	2		Not existed
Rear RH	B53			
Back door	B75			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-148, "Removal and Installation".

NO >> Repair or replace harness.

3.check door switch

Refer to DLK-244, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch. Refer to <u>DLK-366, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005155436

1. CHECK DOOR SWITCH

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

Door switch		Condition		Continuity
Terminal				Continuity
2 Cround part of door quitab		Door switch	Pressed	Not existed
	2 Ground part of door switch		Released	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunction door switch. Refer to <u>DLK-366, "Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE: Description

INFOID:0000000005186152

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Transmits door lock/unlock operation to BCM.

DRIVER SIDE: Component Function Check

INFOID:0000000005186153

1. CHECK FUNCTION

Check "CDL LOCK SW "and "CDL UNLOCK SW" in BCM "Data Monitor" mode using CONSULT-III.

Monitor item	Con	Status	
CDL LOCK SW		LOCK	ON
CDL LOCK SW	- Door lock and unlock switch	UNLOCK	OFF
CDL UNLOCK SW		LOCK	OFF
CDL UNLOCK 3W		UNLOCK	ON

Is the inspection result normal?

>> Door lock and unlock switch is OK. YES

>> Refer to DLK-245, "DRIVER SIDE : Diagnosis Procedure". NO

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000005186154

1. CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

(+)	(+) Power window main switch		Signal (Reference value)	
Power window				
Connector	Terminal		(131313133)	
	6			
D5	18	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2.check door lock and unlock switch circuit

- Disconnect BCM connector and front power window switch (passenger side) connector.
- Check continuity between BCM harness connector and power window main switch harness connector.

BCM		Power window main switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M69	45	D5	18	Existed	
	46	D5	6	LAISIEU	

Check continuity between BCM harness connector and ground.

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< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

	ВСМ		Continuity
Connector	Terminal	Ground	Continuity
M69	45	Ground	Not existed
MOS	46		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

	(+) BCM Connector Terminal		Signal (Reference value)	
Connector				
	45			
M69	46	Ground	(V) 15 10 10 ms JPMIA0012GB 1.0 - 1.5 V	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace BCM. Refer to BCS-148, "Removal and Installation".

4. CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

Power windo	w main switch		Continuity
Connector	Terminal	Ground	Continuity
D6	17		Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK DOOR LOCK AND UNLOCK SWITCH

Refer to DLK-246, "DRIVER SIDE: Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace power window main switch. Refer to PWC-100, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE: Component Inspection

INFOID:0000000005186155

1. CHECK DOOR LOCK AND UNLOCK SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect power window main switch (door lock and unlock switch) connector.

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Check continuity between power window main switch (door lock and unlock switch) terminals.

Power window main switch Terminal		Condition		Continuity
0	UNLOCK	Not existed		
40	18	LOCK	Existed	
10		UNLOCK	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power window main switch. Refer to <u>PWC-100</u>, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Description

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE: Component Function Check

INFOID:0000000005186157

INFOID:0000000005186156

1. CHECK FUNCTION

Check "CDL LOCK SW" and "CDL UNLOCK SW" in BCM "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
CDL LOCK SW		LOCK	ON
	Door lock and unlock switch	UNLOCK	OFF
CDL UNLOCK SW	- Door lock and unlock switch	LOCK	OFF
CDL UNLOCK SW		UNLOCK	ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-247</u>, "PASSENGER SIDE : <u>Diagnosis Procedure"</u>.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000005186158

1. CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect front power window switch (passenger side) connector.
- 3. Check signal between front power window switch (passenger side) harness connector and ground using oscilloscope.

•	(+) Front power window switch (passenger side)		Signal (Reference value)
Connector	Terminal		(Neierence value)
	1		
D25	2	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V

Is the inspection result normal?

YES >> GO TO 4.

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< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NO >> GO TO 2.

2.check door lock and unlock switch circuit

- 1. Disconnect BCM connector and power window main switch connector.
- Check continuity between BCM harness connector and front power window switch (passenger side) harness connector.

BCM F		Front power window switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M69	45	D25	1	Existed
1009	46	. D25	2	LAISIEU

3. Check continuity between BCM connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M69	45	Ground	Not existed
IVIOS	46		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.check bcm output signal

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

-	(+) BCM		Signal (Reference value)	
Connector	Terminal	(-)	(Reference value)	
	45			
M69	46	Ground	(V) 15 10 10 ms JPMIA0012GB 1.0 - 1.5 V	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace BCM. Refer to BCS-148, "Removal and Installation".

4. CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between front power window switch (passenger side) harness connector and ground.

Front power window switch (passenger side)			Continuity
Connector	Terminal	Ground	Continuity
M25	3		Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK DOOR LOCK AND UNLOCK SWITCH

Check front power window switch (passenger side).

Refer to DLK-249, "PASSENGER SIDE: Component Inspection".

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace front power window switch (passenger side). Refer to PWC-100, "Removal and Installation"

6. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

PASSENGER SIDE: Component Inspection

INFOID:0000000005186159

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1. CHECK DOOR LOCK AND UNLOCK SWITCH

- Turn ignition switch OFF.
- 2. Disconnect front power window switch (passenger side) connector.
- 3. Check continuity between front power window switch (passenger side) terminals.

Front power window switch (passenger side)		Condition		Continuity
Terminal				
1			LOCK	Existed
ı	2	Door lock and unlock	UNLOCK	Not existed
2	switch	LOCK	Not existed	
2	2		UNLOCK	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front power window switch (passenger side). Refer to PWC-100, "Removal and Installation".

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DOOR LOCK ACTUATOR

[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

DOOR LOCK ACTUATOR

DRIVER SIDE

DRIVER SIDE : Description

INFOID:000000005155437

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE: Component Function Check

INFOID:0000000005155438

1. CHECK FUNCTION

- 1. Use CONSULT-III to perform BCM Active Test ("DOOR LOCK").
- 2. Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-250</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000005155439

${f 1}$.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

Front door lo	+) ock assembly er side)	(-)	Condition		(–) Condition		Voltage (V) (Approx.)
Connector	Terminal						
D9	1	Ground	Door lock and unlock switch	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$		
D9	2	Giouna	Door lock and unlock switch	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$		

Is the inspection result normal?

YES >> Replace front door lock assembly (driver side). Refer to <u>DLK-353</u>, "<u>DOOR LOCK</u>: Removal and Installation".

NO >> GO TO 2.

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

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

В	ВСМ		Front door lock assembly (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M67	59	D9	2	Existed
WO7	65	D9	1	LXISIEU

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M70	59	Ground	Not existed
IVI7 O	65		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-148, "Removal and Installation".

NO >> Repair or replace harness.

PASSENGER SIDE

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

PASSENGER SIDE: Description

INFOID:000000005155440

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE: Component Function Check

INFOID:0000000005155441

INFOID:0000000005155442

1. CHECK FUNCTION

- 1. Use CONSULT-III to perform Active Test ("DOOR LOCK").
- Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-251</u>, "PASSENGER SIDE : <u>Diagnosis Procedure"</u>.

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PASSENGER SIDE: Diagnosis Procedure

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)				
	Front door lock assembly (passenger side)		Condition		Voltage (V) (Approx.)
Connector	Terminal				
D28	5	Cround	Ground Door lock and unlock switch	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
D20	6	Giouna		Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

Is the inspection result normal?

YES >> Replace front door lock assembly (passenger side). Refer to <u>DLK-353, "DOOR LOCK: Removal and Installation"</u>.

NO >> GO TO 2.

2.check door lock actuator circuit

- Disconnect BCM connector and all door lock actuator connector.
- Check continuity between BCM harness connector and front door lock assembly (passenger side) harness connector.

В	CM	Front door lock assembly (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M67	65	D28	5	Existed
IVIOT	66	520	6	LAISIGU

3. Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector Terminal		Ground	Continuity	
M67	65	Ground	Not existed	
IVIO /	66		NOT EXISTED	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-148, "Removal and Installation".

NO >> Repair or replace harness.

REAR LH

REAR LH: Description

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Locks/unlocks the door with the signal from BCM.

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INFOID:0000000005155443

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

REAR LH: Component Function Check

INFOID:0000000005155444

1. CHECK FUNCTION

- 1. Use CONSULT-III to perform Active Test ("DOOR LOCK").
- 2. Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-253</u>, "<u>REAR RH</u>: <u>Diagnosis Procedure</u>".

REAR LH: Diagnosis Procedure

INFOID:0000000005155445

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+) Rear door lock assembly LH		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(/ ipprox.)
D65	1	Ground	Door lock and unlock switch	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$
	2			Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

YES >> Replace rear door lock assembly LH. Refer to <u>DLK-357</u>, "<u>DOOR LOCK</u>: <u>Removal and Installation</u>".

NO \gg GO TO 2.

2.check door lock actuator circuit

- 1. Disconnect BCM connector and all door lock actuator.
- Check continuity between BCM harness connector and rear door lock assembly LH harness connector.

В	CM	Rear door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M67	65	D65	1	Existed
	66	D03	2	

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	
M67	65		Not existed
IVIO 7	66		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-148, "Removal and Installation".

NO >> Repair or replace harness.

REAR RH

REAR RH: Description

INFOID:0000000005155446

INFOID:0000000005155447

Locks/unlocks the door with the signal from BCM.

REAR RH: Component Function Check

1. CHECK FUNCTION

1. Use CONSULT-III to perform Active Test ("DOOR LOCK").

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

2.	Touch "ALL LOCK" or "ALL UNLK" to check that it works normally	١.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-253, "REAR RH: Diagnosis Procedure".

REAR RH: Diagnosis Procedure

INFOID:000000000515544

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1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(-	(+)		Condition Voltage (V) (Approx.)		Voltago (V)
Rear door lock assembly RH		(-)			
Connector	Terminal				(11 /
D45	5	Ground	Door lock and unlock switch	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
D43	6	Ground	Door lock and unlock switch =	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

Is the inspection result normal?

YES >> Replace rear door lock assembly RH. Refer to DLK-357, "DOOR LOCK: Removal and Installation".

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

- Disconnect BCM connector and all door lock actuator.
- Check continuity between BCM harness connector and rear door lock assembly RH harness connector.

В	CM	Rear door lock assembly RH Connector Terminal		Continuity
Connector	Terminal			Continuity
M67	65	D45	5	Existed
IVIO /	66	043	6	LAISTEU

Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Connector Terminal		Continuity	
M67	65	Ground	Not existed	
IVIO 7	66		Not existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-148, "Removal and Installation".

NO >> Repair or replace harness.

BACK DOOR

BACK DOOR: Description

Locks/unlocks the door with the signal from BCM.

BACK DOOR: Component Function Check

INFOID:0000000005155450

1. CHECK FUNCTION

- Use CONSULT-III to perform Active Test ("DOOR LOCK").
- Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.

Is the inspection result normal?

YES >> Back door lock actuator is OK.

>> Refer to DLK-254, "BACK DOOR: Diagnosis Procedure". NO

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DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

BACK DOOR: Diagnosis Procedure

INFOID:000000000515545

1. CHECK BACK DOOR LOCK ACTUATOR INPUT SIGNAL

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

	+) ock assembly	(-)	y (–) Condition		Condition	
Connector	Terminal				(Approx.)	
D106	2	Ground	Door lock and unlock switch	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$	
D100	3	Ground	Door lock and unlock switch -	Lock	$0 \to \text{Battery voltage} \to 0$	

Is the inspection result normal?

YES >> Replace back door lock assembly. Refer to <u>DLK-361, "DOOR LOCK: Removal and Installation"</u>.

NO >> GO TO 2

2.CHECK BACK DOOR LOCK ACTUATOR CIRCUIT

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

В	СМ	Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M67	65	D106	3	Existed
IVIO7	66		2	LXISIGU

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Connector Terminal		Continuity
M67	65	Ground	Not existed
WOT	66		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-148, "Removal and Installation".

NO >> Repair or replace harness.

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR KEY CYLINDER SWITCH

Description INFOID:000000005186255

Transmits lock/unlock operation to BCM.

Component Function Check

INFOID:0000000005186256

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1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check ("KEY CYL LK-SW", "KEY CYL UN-SW") in "Data Monitor" mode using CONSULT-III.

Monitor item	Con	Status	
KEY CYL LK-SW		Lock	ON
	- Driver side door key cylinder	Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

Is the inspection result normal?

YES >> Door key cylinder switch is OK.

NO >> Refer to <u>DLK-255</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005186257

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

(+) Front door lock assembly (driver side)		(-)	Voltage (V) (Approx.)
Connector	Terminal		(Approx.)
D9	6	Ground	(V) ₁₅ 10 5 0 JPMIA0587GB 8.0 - 8.5 V Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

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

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M65	7	D9	5	Existed
MOS	8	D9	6	LAISIEU

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DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector Terminal		Ground	Continuity	
M65	7	Giodila	Not existed	
IVIOS	8		Not existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-148, "Removal and Installation".

NO >> Repair or replace harness.

3.check door key cylinder switch ground circuit

Check continuity between front door lock assembly (driver side) harness connector and ground.

Front door lock as	sembly (driver side)		Continuity
Connector	Terminal	Ground	Continuity
D9	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-256, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-353, "DOOR LOCK: Removal and Installation".</u>

5. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005186258

1. CHECK DOOR KEY CYLINDER SWITCH

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

Front door lock assembly (driver side) Terminal		Condition		Continuity
3	4	Driver side door key cylinder	Neutral / Lock	Not existed
6			Lock	Existed
6		Neutral / Unlock	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-353</u>, "<u>DOOR LOCK</u>: <u>Removal and Installation</u>".

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY RECEIVER

Description INFOID:0000000005048384

Receives Intelligent Key operation and transmits to BCM.

Component Function Check

INFOID:0000000005048385

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1. CHECK FUNCTION

Check ("RKE OPE COUN1") in MULTI REMOTE ENT Data Monitor mode using CONSULT-III.

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

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.

NO >> Refer to <u>DLK-257</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005048386

1. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

- Turn ignition switch OFF.
- 2. Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

(+) Remote keyless entry receiver		(–)	Condition	Signal (Reference value)
Connector	Terminal			(Reference value)
M61	2	Ground	Waiting	(V) 6 4 2 0 •••1.0ms
WOT	2	Glodila	Signal receiving	(V) 6 4 2 0 +1.0ms

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

В	CM	Remote keyles	s entry receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M65	20	M61	2	Existed

3. Check continuity between BCM harness connector and ground.

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M65	20		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-148, "Removal and Installation".

NO >> Repair or replace harness between BCM and remote keyless entry receiver.

3. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

- 1. Disconnect remote keyless entry receiver.
- Check signal between remote keyless entry receiver harness connector and ground using oscilloscope.

(+) Remote keyless entry receiver		(-)	Siç (Referen		
Connector	Terminal		(Notoronoc value)		
			Insert mechanical key into ignition key cylinder	0 V	
			Remove mechanical key from ignition key cylinder (Any door opened)	5 V	
M61	4	Ground	Remove mechanical key from ignition key cylinder (Any door closed)	(V) 6 4 2 0 ***0.2 s	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M61	19	M61	4	Existed

3. Check continuity between BCM connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M61	19		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-148, "Removal and Installation".

NO >> Repair or replace harness between BCM and remote keyless entry receiver.

5. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 3

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

В	CM	Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M65	18	M61	1	Existed

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. Check continuity between BCM harness connector and ground.

ВСМ			Continuity
Connector	Terminal	Ground	Continuity
M65	18		Existed

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Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

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6. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

- 1. Connect BCM connector.
- 2. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M65	18		Existed

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to <u>DLK-367</u>, "Removal and Installation".

NO >> Replace BCM. Refer to <u>BCS-148</u>, "Removal and Installation".

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INFOID:0000000005151211

INFOID:0000000005151212

KEY SWITCH

Description INFOID:0000000005151210

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

Component Function Check

1. CHECK FUNCTION

Check ("KEY ON SW") in BCM "DATA MONITOR" mode using CONSULT-III..

Monitor item		Status	
KEY ON SW	Kevfob	Inserted in key cylinder	ON
RET ON 3W	Reylob	Removed from key cylinder	OFF

Is the inspection result normal?

YES >> Key switch is OK.

NO >> Refer to <u>DLK-260, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1. CHECK FUSE

1. Turn ignition switch OFF.

Check 10 A fuse, [No.14, located in fuse block (J/B)].

Is fuse fusing?

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

NO >> GO TO 2.

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

- 1. Disconnect key switch connector.
- 2. Check voltage between key switch harness connector and ground.

Key	switch		Voltage (V)
Connector	Terminal	Ground	(Approx.)
M24	2		Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK KEY SWITCH CIRCUIT

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

Key	switch	В	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M24	1	M65	37	Existed	

3. Check continuity between key switch connector and ground.

Keys	switch		Continuity
Connector	Terminal	Ground	Continuity
M24	1		Not existed

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

KEY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

4. CHECK KEY SWITCH Refer to DLK-261, "Component Inspection". Is the inspection result normal? >> GO TO 5. YES NO >> Replace key switch. 5. CHECK INTERMITTENT INCIDENT Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

Component Inspection

COMPONENT INSPECTION

1. CHECK KEY SWITCH

- Turn ignition switch OFF.
- 2. Disconnect key switch connector.
- Check continuity between key switch terminals.

Key s	witch	Con	dition	Continuity
Term	inal	Con	ullon	Continuity
1	2	Keyfob	Inserted in key cylinder	Existed
I	2	Reylob	Removed from key cylinder	Not existed

Is the inspection result normal?

>> INSPECTION END YES NO >> Replace key switch.

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INFOID:0000000005151213

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BUZZER (COMBINATION METER)

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

BUZZER (COMBINATION METER)

Description INFOID:00000000005048413

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000005048414

1. CHECK FUNCTION

- 1. Check the operation with "INSIDE BUZZER" in the Active Test.
- 2. Touch "take out", "knob" or "key" on screen.

Is the inspection result normal?

Yes >> Buzzer (combination meter) is OK.

No >> Refer to <u>DLK-262</u>. "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005048415

1. CHECK METER BUZZER CIRCUIT

Refer to WCS-26, "Component Function Check".

Is the inspection result normal?

Yes >> GO TO 2.

No >> Repair or replace meter buzzer circuit.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-34, "Intermittent Incident".

>> INSPECTION END

HAZARD FUNCTION

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< DTC/CIRCUIT DIAGNOSIS >	[WITHOUT INTELLIGENT KEY SYSTEM]
HAZARD FUNCTION	
Description	INFOID:0000000005048416
Perform answer-back for each operation with number of blink	S.
Component Function Check	INFOID:000000005048417
1. CHECK FUNCTION	
Check hazard warning lamp ("FLASHER") in Active Test. Is the inspection result normal? YES >> Hazard warning lamp circuit is OK. NO >> Refer to DLK-263, "Diagnosis Procedure".	
Diagnosis Procedure	INFOID:000000005048418
1. CHECK HAZARD SWITCH CIRCUIT	
YES >> GO TO 2. NO >> Repair or replace hazard warning switch circuit. F 2.CHECK INTERMITTENT INCIDENT Refer to GI-34, "Intermittent Incident". >> INSPECTION END	Refer to EXL-214, "Removal and Installation".

DLK-263 2009 Z12 Revision: 2009 March

KEYFOB BATTERY

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

KEYFOB BATTERY

Description

Remote door lock and unlock control entry function available when operating on button.

Component Function Check

INFOID:0000000005048396

1. CHECK FUNCTION

Check door lock and unlock operation with keyfob button.

Is the inspection result normal?

YES >> Keyfob is OK.

NO >> Refer to <u>DLK-264, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000005048397

1. CHECK KEYFOB BATTERY

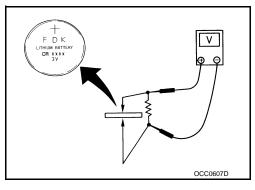
Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA.

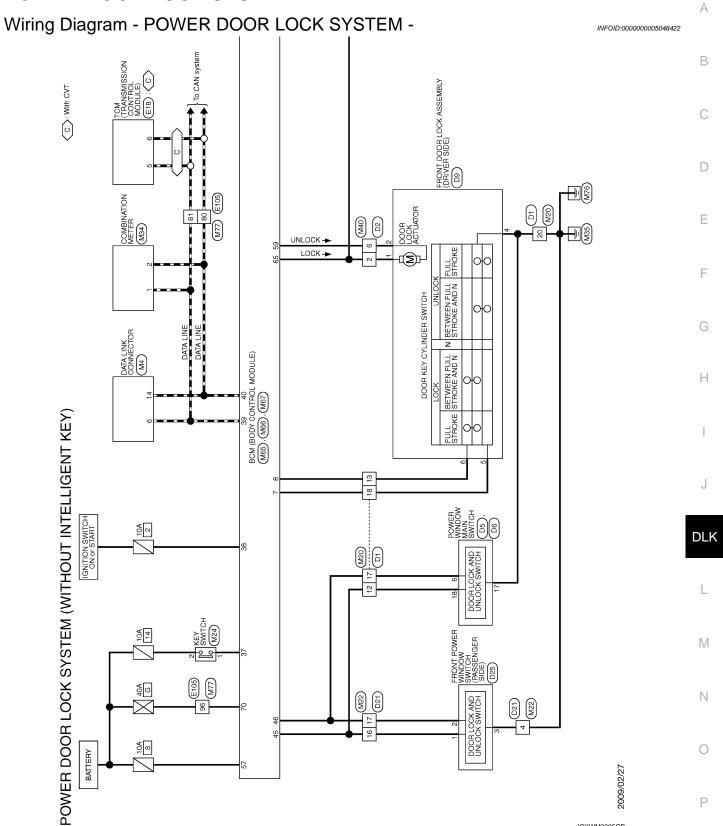
Standard: Approx. 2.5 - 3.0V

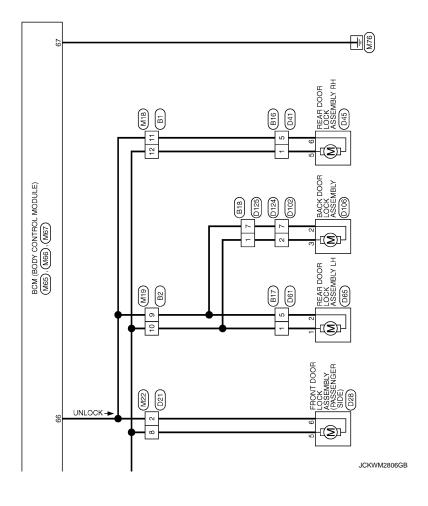
Is the measurement value within the specification?

YES >> Replace keyfob.

NO >> Replace keyfob battery. Refer to <u>DLK-368, "Removal and Installation"</u>.





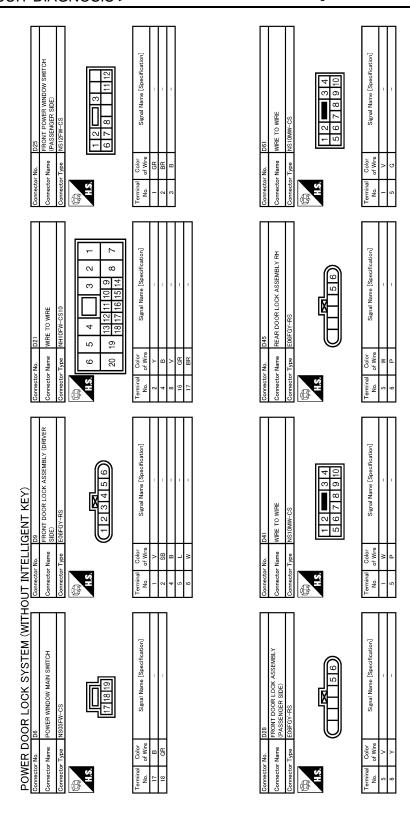


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[WITHOUT INTELLIGENT KEY SYSTEM]

	Specification]	и switch	Specification]		АВ
Corrector No. 817 Connector Name WIRE TO WIRE Connector Type NISTOFW-CS (10) 9 8 7 6	Color	D5 POWER V NS16FW-	O'Olor Signal Name [Specification] V		С
Connector No. Connector Name Connector Type	No.		6 6		D
	ecification)		eoification]		Е
1 TO WIRE DRW-CS 1 3	Signal Name [Specification]	D2 WIRE TO WIRE NSIDEW-CS 4 3 2 1 10 9 8 7 6 5	Signal Name (Specification)		F
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Оопп		Comm			Н
Y) 4 5 6 7 13 14 15 16	Signal Name [Specification]	2 01 1 2 8 7 7 7 7 8 4 7 7 7 8 9 9 9 9 7 9 7 9 9 9 9 9 9 9 9 9	Signal Name [Specification]		I
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©K SYSTEM E 12 13 14 15 16 7	Signal Name [Specification]	1 12 13 19 2 19 2 19 3 19 3 19 3 19 3 19	Signal Name (Specification)		M
R DOOR LOC No. Bi	Color Sign	MIRE TO WIRE TO NH10MW 2 3 8 9 9 8 14 14	O O O O O O O O O O		Ν
POWER DO Commerce Name Commerce Type	100. No. 12	Connector Non-Connector Type Connector Type Connecto	No.		0
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[WITHOUT INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

221	Signal Name [Specification]	MK CONNECTOR 14 16 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		A B
D124 wire To wire NS12FW-CS 12 11 10 9 8	Color of Wire GR	M4 bATA LIN o BDISEW o BDISEW o GDISEW o GDISEW		С
Connector No. Connector Nan Connector Typ	Terminal No.	Connector No.		D
MBLY	eoification]	ocification)		Е
DIOG BACK DOOR LOCK ASSEMBLY FEAGHEB-FHA2-LC	Signal Name (Specification)	WRE TO WRE THEOMW-CS16-TM4 THEOMW-CS16-		F
Connector No. D106 Connector Name BACK Connector Type FEA0	Color of Wire of Wire	No. O Color O Wine P P P P P P P P P P P P P P P P P P P		G
Com	No. 2 3 3 3 3	Connecto Con		Н
(7)	Signal Name [Specification]	E18 TYCA (TRANSMISSION CONTROL MODULE) TYCAPA 2 3 4 5 6 18 11112 131415 18 2021		I
IGENT KEY) Dioz WIRE TO WIRE INSIZAM-CS 1 2 3 6 6 7 8 9 10 11 12	Ш			J
Connector No Connector Name Connector Type M.S.	Terminal Color No. of Wire 2 Y 7 GR	Connector No. Connector Name Connector Type Terminal Color No. of Wire 5		DLK
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POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY) Connector No. D65 Connector Name REAR DOOR LOCK ASSEMBLY LH Connector Name WITHOUT INTELLIGENT KEY) Connector Name REAR DOOR LOCK ASSEMBLY LH Connector Name WITHOUT INTELLIGENT KEY) Connector Name ECORTOR LOCK ASSEMBLY LH Connector Type WITHOUT INTELLIGENT KEY) Connector Name Connector Name Connector Type NST3MM+CS Connector Type LOCK ASSEMBLY LH LOCK ASSEMBLY LH CAT IN TABLE TO WITHOUT INTELLIGENT TO THE TO WITHOUT TO THE TO	Signal Name [Specification]	E TO WIRE 1		M
NOOOR LC	Color of Wire	MINE TO NIN IN		N
Connector No. Connector Type	Terminal C No. of 2	Connector No. Connector Name Connector Type Connector Type Color C		0
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	WIRE TO WIRE	IOMW-CS10	3 4 5 9 10 11 12 13 14 15 16 17 18	Signal Name [Specification]	M65 ERM (EDV CONTROL MODULE) (WITHOUT INTELLIGENT KEY) THGFW-NH	E 7 6 9 10 11 12 13 14 15 17 18 18 18 18 18 18 18 18 18 18 18 18 18	Signal Name [Specification] KEY CYL UNLOCK SW KEY CYL LOCK SW KEY SWITCH	NDI
or No. M22	e.	Connector Type NH10MW-CS10	1 2 7 8	Color of Wire G G G N N N N N N N N N N N N N N N N	9 9	2 3 4 5	0 6 3 3 4	0
Connector No.	Connect	Connect	H.S.	Terminal No. 2 2 4 4 4 8 8 16 17	Connector No. Connector Name Connector Type	子 任 S.H	Terminal No.	38
rr No. M20	or Name WIRE TO WIRE	r Type NHIOMW-CS10	1 2 3 1 4 5 6 7 8 14 15 14 15 6	Color Signal Name [Specification] Color W/B	r No. M40 r Name WIRE TO WIRE NSIONW-CS	1 2 •• 3 4 5 6 7 8 9 10	Color Signal Name [Specification] of Wire V	
Connector No.	Connector Name	Connector Type	H.S.	Terminal No. 12 12 13 17 17 17 18 18 20	Connector No. Connector Name Connector Type	H.S.	Terminal No. 2	
OUT INTELLIGENT KEY) Connector No. M19	Connector Name WIRE TO WIRE	Connector Type NS16FW-CS	HS	Terminal Color Signal Name [Specification]	Gennestor No. M34 Connector Name COMBINATION METER Connector Type TH40FW-NH	M S	Terminal Color Signal Name [Specification] No. of Wre I. CANN-H CANN-H	
POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY) Connector No. M18 Connector No. M19	Connector Name WIRE TO WIRE	Connector Type NS16FW-CS	H.S. Z 6 5 4 3 2 1	Terminal Color Signal Name [Specification] Color Signal Name [Specification] 11 V C C C C C C C C C	Connector No. M24 Connector Name KEY SWITCH Connector Type TK06MGY	HS.	Terminal Color Signal Name [Specification] No. of Wire - 1 R/W - 2 LG/R -	

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POW	ER D	POWER DOOR LOCK SYSTEM (WITHOUT INTELLIGENT KEY)	OUT IN	TELLI	GENT KEY)			
Connector No.	r No.	M66	Connector No.		M67	Connector No.	or No.	M77
Connector Name	r Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY)	Connector Name	Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY)	Connect	Connector Name	WIRE TO WIRE
Connector	r Type	Connector Type FEA09FW-FHA6-SA	Connector Type		FEA09FB-FHA6-SA	Connect	or Type	Connector Type TH80FW-CS16-TM4
E.S.		50 43 44 45 46 47 48 49 54	H.S.	565	56 57 59 60 61 63 65 66 67 68 69 70	₽ HS		
Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]
42	GR	CENTRAL DOOR LOCK SW	57	\	BAT (FUSE)	80	۵	I
46	BR	CENTRAL DOOR UNLOCK SW	59	L/B	DRIVER DOOR UNLOCK OUTPUT	18	٦	-
			65	۸	ALL DOOR LOCK OUTPUT	96	Υ	
			99	G	PASSENGER DOOR, REAR DOOR UNLOCK OUTPUT			
			67	В	GND			
			70	Υ	BAT (F/L)			

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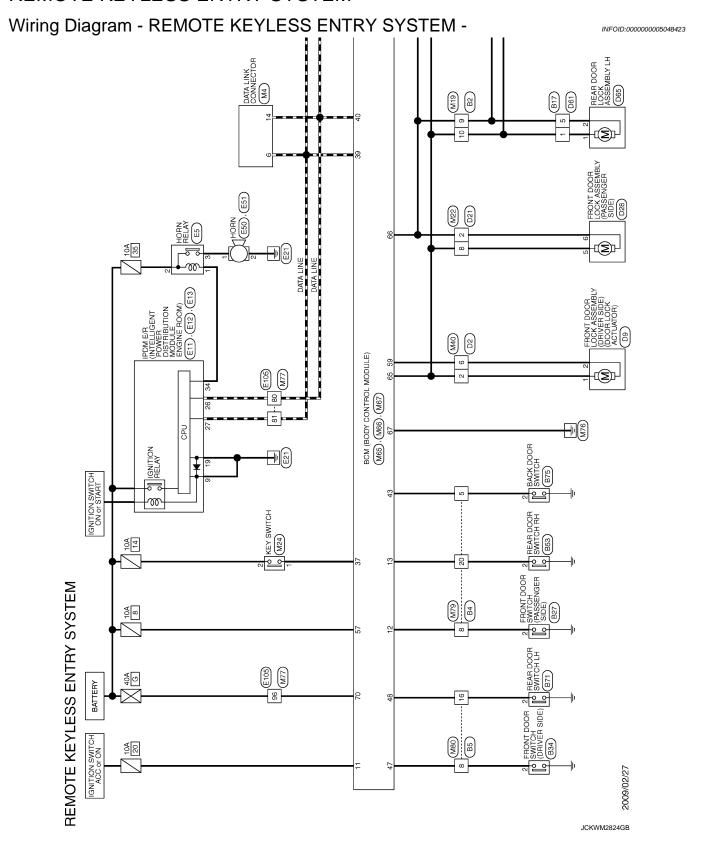
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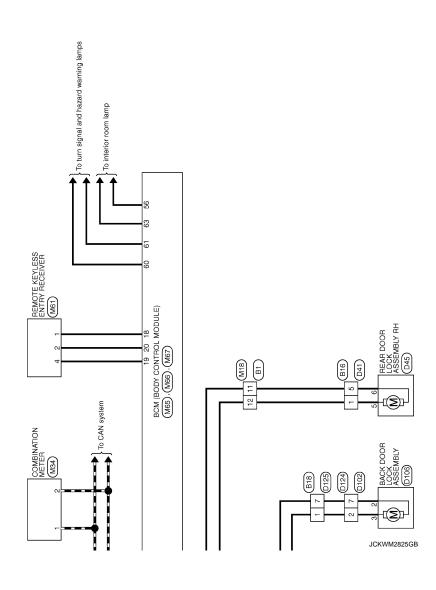
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[WITHOUT INTELLIGENT KEY SYSTEM]

Connector No. B5 Connector Name WIRE TO WIRE Connector Type THI BAW-NH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 8 LG -	Connector No. B27 Connector Name FRONT DOOR SWITCH (PASSENGER SIDE) Connector Type A03FW	Terminal Color Signal Name [Specification]
Connector No. B4 Connector Name WIRE TO WIRE Connector Type TH:LAMM-NH 1.2 3 4 5 6 7 8 9 1011112 13 14 15 16 17 18 19 20 21 22 23 24	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] No. of Wire Signal Name [Specification] No. of Wire No.	Connector No. B18 Connector Name WIRE TO WIRE Connector Type NHIOMW-CS10 1 2 3 4 5 6 7 8 910 11 12 13 19 20	Terminal Color Signal Name [Specification]
Connector No. 82 Connector Type NS16MW-CS H.S. (1 2 3	Terminal Color Signal Name [Specification]	Connector No. 817 Connector Type WIRE TO WIRE Connector Type NSIOFW-CS 4 3 2 1 10 9 8 7 6 5	Terminal Golor Signal Name [Specification] No. of Wire Signal Name [Specification]
Connector No. B1 Connector No. B1 Connector No. B1 Connector Name WIRE TO WIRE Connector Type NSI 6MW-CS	Terminal Color Signal Name [Specification] No. of Wire Ti G	Connector No. B16 Connector Name WIRE TO WIRE Connector Type NSIOFW-CS	Terminal Color Signal Name [Specification] No. of Wire V -

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< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

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Signal Name [Specification]	EGFGY-RS EGFGY-RS EGFGY-RS Signal Name [Specification]		В
B75 BACK DC A03FW	D28 FE0FGY-		С
Connector No. Connector Name Connector Type H.S. H.S. Terminal Color No. of Winner 2 W	Connector No. Connector Name Connector Type H.S. H.S. H.S. Color No. of Wire 5 V 6 V		D
ifeation]	2 1 1 2 S Z 1 T Z Z Z Z Z Z Z Z Z		Е
B71 AGSFW ACSFW Signal Name [Specification]	E TO WIRE 10FW-CS10 4		F
No. Name Type Oolor W	120 N N N N N N N N N N N N N N N N N N N		G
Connector No Connector Name Connector Type Terminal No. of W. 2 W	Connector No. Connector Type Connector Type No. No. Of Wife S.		Н
necification]	SEMBLY (DRIVER		I
REAR DOOR SWITCH RH A03PW Signal Name [Specification]	FROW DOOR LOCK ASSEMBLY (DRIVER SIDE) EGGFGV-RS TISIS Signal Name [Specification]		J
lor de la lor de	No. Name Type Color of Wire SB		DLK
	Connector No. Connector Type Terminal Col No. 1 0 N		L
RY SYSTE DRIVER SIDE) ecification]	Secffcation.		M
ESYLESS ENTRY SYST BEST AND THE STATE OF SWITCH (DRIVER SIDE) AND THE STATE OF STATE	7		
Name Type	Name WIRE T Type NS10F)		N
REMOTE Connector Name Connector Type Terminal No. 2 LG 2 LG	Connector No Connector Type Connector Type H.S. H.S. Terminal Color No. of Wr. 2 V 6 SB	JCKWM2827GB	0
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[WITHOUT INTELLIGENT KEY SYSTEM]

Connector No. DBS Connector Name REAR DOOR LOCK ASSEMBLY LH Connector Type EDBFGY-RS H.S.	Terminal Color Signal Name [Specification] O V	Connector No. D125 Connector Name WIRE TO WIRE Connector Type NHIGFW-CS10	20 19 1312 1110 9 8 7	Terminal Color Signal Name [Specification] No of Wire Signal Name [Specification] Y
Connector No. D61 Connector Name WIRE TO WIRE Connector Type NSI DMW-CS (1 2	Terminal Color Signal Name [Specification] No. of Wire T V -	Connector No. D124 Connector Name WIFE TO WIFE Connector Type NS12FW-CS	H.S. 5 4 1 3 2 1 1 1 2 11 10 9 8 7 6	Terminal Color Signal Name [Specification]
Connector No. D45 Connector Name REAR DOOR LOCK ASSEMBLY RH Connector Type E08FGY-RS H.S.	Terminal Color No. of Wire 5 W - 6 P	Connector No. D106	HS. (1213111)	Terminal Color Signal Name [Specification]
Connector No. D41 Connector Type NSIOMW-CS CONNECTOR NO. D41 CONNECTOR NO. D41	Terminal Golor Signal Name [Specification] No.	Connector No. D102 Connector Name WRE TO WIRE Connector Type NST2MW-CS	H.S. 1 2 3 — 4 5 6 7 8 9 10 11 12	Terminal Golor Signal Name [Specification]

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< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

. ROOM)	[io]			Α
E13 IPDM E/R (INTELLIGENT POWER INTELLIGENT POWER THI 2FW-NH E8 27 26 25 24 E8 33 31 30	Signal Name [Specification]	M4 BD16FW BD16FW Signal Name [Specification]		В
9 e	Color of Wire of Wire P	M4 BOATA LIN		С
Connector No. Connector Type Connector Type H.S.	Terminal No. 26 27 27 34	Connector Name Connector Type Connector Type H.S. Terminal Color No of Wirth		D
POWER ENGINE ROOM)	pecification]	Specification]		Е
E12 IPDM E/R (INTELLIGENT POWER INSURTHBUTTON MODULE ENGINE ROOM) INSURTHR-CS [22 21 19 18]	Signal Name [Specification]	WRE TO WRE THBOMW-CSIG-TM4 THBOMW-CSIG-TM4 THBOMW-CSIG-TM4 Signal Name (Specification)		F
ector No. ector Type	Terminal Color No. of Wire 19 B/W	ector Name ector Name of Wire of Wire of P LG LG LG		G
	<u>-</u>			Н
POWER POWER (INTELLIGENT POWER POST REALING MOBILE ENGINE ROOM) MOBIFIELICE (10 9 13 13 13 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Signal Name [Specification]	Signal Name [Specification]		I
E11 DISTRIBUTION M MOFFB-LC 10	Signal N	R N N N N N N N N N N N N N N N N N N N		J
Connector No. E11 Connector Name IPPO Connector Type M01 HS.	Terminal Color No. of Wire 9 B/W	Connector No. [55] Connector Name HO Connector Type P01 Terminal Color No. of Wire 2 B./W		DLK
STEM	E			L
INTRY S)	Signal Name [Specification]	Signal Name [Specification]		M
E5 HORN RELAY	Signal N			Ν
No. Name	Color of Wire	Name Type of Wire		0
REM Connects Connects Connects	Terminal No. 2	Connector Connector Connector Connector Terminal No.	JCKWM2829GB	U
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[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY SYSTEM	Connection No. 1110	C	Connection M.O.A.	
-	Т	Т	Г	
Connector Name WIRE TO WIRE	Connector Name WIKE TO WIKE	Connector Name WIKE 10 WIKE	Connector Name KEY SWITCH	
Connector type Institute Co	Connector type Institute to S	Connector type Introduction	Connector 19pe Trooman	
7 6 5 4 3 2 1 1615 1413 12 11 10 9 8	7 6 5 4 3 2 1 1615 1413 1211 10 9 8	H.S. 1 2 3 4 5 6 7 8 910111213 19 19 20 14115161718 19 20	12	
Terminal Color Signal Name (Specification) No. of Wire 11 G 12 V -	Terminal Color Signal Name [Specification] No. of Wire G G G G G G G G G	Terminal Color Signal Name [Specification] No. of Wire 2 G 8 V	Terminal Color Signal Name [Specification] No. of Wire R/W -	
$\overline{}$	т	Connector No. M61 DEMOTE KEYLESS ENITBY BECEIVED		
Connector Name COMBINATION METER Connector Type TH40FW-NH	Connector Name WIRE TO WIRE Connector Type NS10MW-CS	Connector Name (WITHOUT INTELLIGENT KEY) Connector Type TK04FW	Connector Name (WITHOUT INTELLIGENT KEY) Connector Type TH40FW-NH	
售	蛋	唇	1	
2. 2. 3. 4. 1. 1. 2. 3. 4. 3. 2. 4. 3. 2. 4. 3. 3. 4. 3. 3. 4. 3. 3. 4. 3. 3. 4. 3. 3. 4. 3. 3. 4. 3. 3. 3. 4. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	1 2 1 3 4 5 6 7 8 9 10	12 4	2 4 5 6 7 8 9 1011 22 31 41 5 17 18 19 20 21 4 5 6 7 8 9 1011 22 31 41 5 17 18 19 20 20 41 5 41 5 41 5 41 5 41 5 41 5 41 5 41	
Terminal Color Signal Name [Specification] No. of Wire	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification]	
П	2 V -	- ·	11 L/Y ACC	
2 P CAN-L	8 L/B =	+	SB	
		4 BR =	13 GR/L REAR RH DOOR SW 18 V RFCFIVER/SENSOR GND	
			BR KEY	
			20 G/Y KEYLESS ENTRY RECEIVER COMM	
			K/W	
			40 P CAN-L	

JCKWM2830GB

< DTC/CIRCUIT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3 2 1 1 15 14 13	feation]			А
7 6 5 4 4 10 10 10 10 10 10 10 10 10 10 10 10 10	Signal Name (Specification)			В
ector No. ector Type 12 11 24 23	Color No. of Wire Color No. of Wire S W S S S S S S S S			C
O O O O O O O O O O O O O O O O O O O				Е
WRE 516—TM4	Signal Name [Specification]			F
M777 WIRE TO V I TH80FW-C	Odlor V L L P Wire			G
Connector No. Connector Typ	Terminal No. 80 81 81 86 86			Н
OL MODULE) ENT KEY) [63 70	Signal Mame (Specification) INTERIOR ROOM LAMP POWER SUPPLY BAY (FUSE) DRIVER DOOR UNIOCK CUITUIT TURN SIGNAL, I'H GUITUIT TURN SIGNAL, I'H GUITUIT ROOM LAMP TIMER CONTROL ALL DOOR LOOK GUITUIT ALL DOOR LOOK GUITUIT ALL DOOR LOOK GUITUIT ALL DOOR LOOK GUITUIT GNU BAT (F/L).			I
M67 M67	N PAS			J
Connector No. Connector Type H.S. H.S.	Terminal Color No. 1 of Wire Sign V. 1 of Wire Sign V. 2 of Sign V. 3 of Sign V. 3 of Sign V. 4 of Sign V. 4 of Sign V. 5			DLK
STEM	2			L
NTRY SY ROL MODULE) GENT KEY) A 6 47 48 49	Signal Name [Specification] BACK DOOR SW DRIVER DOOR SW REAR LH DOOR SW	WIRE NH 113 12 11 10 9 Signal Name (Specification)		M
(EYLESS ENTRY S' M66 BEAN (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY) FEAUSTEW-THAG-SA [43] 44 45 46 47 48 49 [54]	Signal Nar BAC DRIVE REAR	M80 WRE TO WRE THIGFW-NH 5 6 5 4		N
	of Wire W W W/G	Night State of the		
Connector National Connector Type Has.	1 Graminal No. 43 47 48 48	Connector Na Connector Typ Con	JCKWM2831GB	0
			JONYTHIZOSTOD	Р

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[WITHOUT INTELLIGENT KEY SYSTEM]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
IGN ON SW	Ignition switch OFF or ACC	Off
IGN ON SW	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
CDL LOCK SW	Press door lock/unlock switch to the lock side	On
ODL HINI OOK OM	Door lock/unlock switch does not operate	Off
CDL UNLOCK SW	Press door lock/unlock switch to the unlock side	On
DOOD OW DD	Driver's door closed	Off
DOOR SW-DR	Driver's door opened	On
D000 0W 40	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
	Rear RH door closed	Off
DOOR SW-RR	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
LOCK STATUS	NOTE: The item is indicated, but not monitored.	Off
400 011 0111	Ignition switch OFF	Off
ACC ON SW	Ignition switch ACC or ON	On
KEVI FOO I OOK	"LOCK" button of key fob is not pressed	Off
KEYLESS LOCK	"LOCK" button of key fob is pressed	On
1/E)// E00 LINII 001/	"UNLOCK" button of key fob is not pressed	Off
KEYLESS UNLOCK	"UNLOCK" button of key fob is pressed	On
SHOCK SENSOR	NOTE: The item is indicated, but not monitored.	NORMAL
KEV OVI 1 K OW	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
1/5\/ 0\/ 11\ 0\M	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
VEHICLE SPEED	While driving	Equivalent to speed- ometer reading
DEAD DEE 3:::	Rear window defogger switch OFF	Off
REAR DEF SW	Rear window defogger switch ON	On
	NOTE:	Off
REVERSE SW CAN	The item is indicated, but not used.	On

< ECU DIAGNOSIS INFORMATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
TAIL LAMP SW	Lighting switch OFF	Off
AIL LAWIP SW	Lighting switch 1ST	On
R FOG SW	Front fog lamp switch OFF	Off
K FOG SW	Front fog lamp switch ON	On
BUCKLE SW	The seat belt (driver side) is fastened. [Seat belt switch (driver side) OFF]	Off
OURLE SW	The seat belt (driver side) is unfastened. [Seat belt switch (driver side) ON]	On
FRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
CC SW	Off	
OC 344	On	
YLS TRNK/HAT	NOTE: The item is indicated, but not monitored.	Off
EYLESS PANIC	PANIC button of key fob is not pressed	Off
LILLOS FAINIC	PANIC button of key fob is pressed	On
I BEAM SW	Lighting switch OFF	Off
I DEAW OW	Lighting switch HI	On
HEAD LAMP SW 1	Lighting switch OFF	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Lighting switch OFF	Off
LAD LAWIF SW 2	Lighting switch 2ND	On
AUTO LIGHT SW	Lighting switch OFF	Off
OTO LIGITI SW	Lighting switch AUTO	On
PASSING SW	Other than lighting switch PASS	Off
ASSING SW	Lighting switch PASS	On
R FOG SW	NOTE: The item is indicated, but not monitored.	Off
TIDNI CIONIAL D	Turn signal switch OFF	Off
URN SIGNAL R	Turn signal switch RH	On
LIDNI GLONIAL I	Turn signal switch OFF	Off
URN SIGNAL L	Turn signal switch LH	On
VD CW	Parking brake switch is OFF	Off
KB SW	Parking brake switch is ON	On
NOINE DUN	Engine stopped	Off
NGINE RUN	Engine running	On
ADTI OFN (DTOT)	Bright outside of the vehicle	Close to 5 V
PTI SEN (DTCT)	Dark outside of the vehicle	Close to 0 V
ADTI OEN /EUT\	Bright outside of the vehicle (Lighting switch AUTO)	Close to 5 V
PTI SEN (FILT)	Dark outside of the vehicle (Lighting switch AUTO)	Close to 1.50 V
IG SEN COND	NOTE: The item is indicated, but not monitored.	OFF
	Ignition switch OFF or ACC	Off
GN SW CAN	Ignition switch ON	On
	Front wiper switch OFF	Off
R WIPER HI	Front wiper switch HI	On
	Front wiper switch OFF	Off
R WIPER LOW	Front wiper switch LO	On

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< ECU DIAGNOSIS INFORMATION >

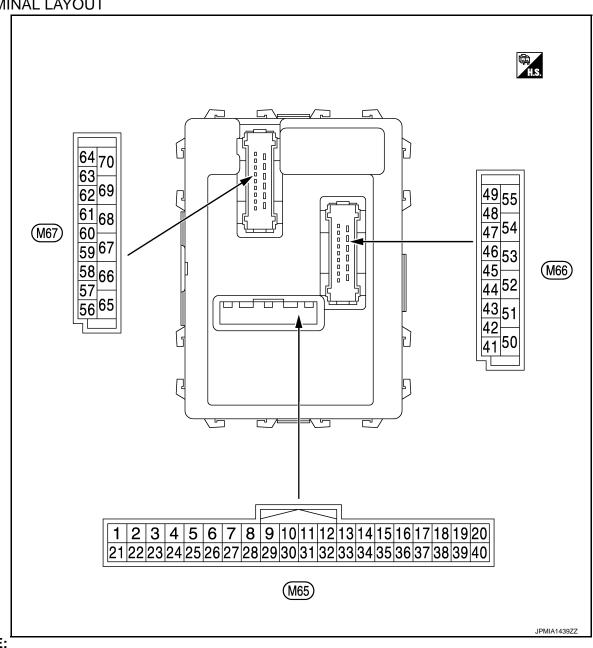
Monitor Item	Condition	Value/Status
FR WIPER INT	Front wiper switch OFF	Off
FR WIFER INT	Front wiper switch INT	On
ED WASHED SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
FR WIPER STOP	Any position other than front wiper stop position	Off
FR WIPER STOP	Front wiper stop position	On
DD WIDED ON	Rear wiper switch OFF	Off
RR WIPER ON	Rear wiper switch ON	On
DD WIDED INT	Rear wiper switch OFF	Off
RR WIPER INT	Rear wiper switch INT	On
DD 14/4 OL IED O14/	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
DD WIDED 0705	Rear wiper stop position	Off
RR WIPER STOP	Other than rear wiper stop position	On
RAIN SENSOR	Off	
	Hazard switch OFF	Off
HAZARD SW	Hazard switch ON	On
FAN ON SIG	Blower control dial OFF	Off
	Other than blower control dial OFF	On
	Air conditioner OFF (A/C switch indicator OFF) (Automatic air conditioner) A/C switch OFF (Manual air conditioner)	Off
AIR COND SW	Air conditioner ON (A/C switch indicator ON) (Automatic air conditioner) A/C switch ON (Manual air conditioner)	On
THERMO AMP	Ignition switch ON	Off
NOTE: At models with automatic air conditioner this item is not monitored.	Evaporator is extremely low temperature	On
FR DEF SW	Other than A/C mode defroster ON position	Off
I K DEI 3W	A/C mode defroster ON position	On
KEYLESS TRUNK	NOTE: The item is indicated, but not monitored.	Off
TRNK OPNR SW	NOTE: The item is indicated, but not monitored.	Off
TRNK OPN MNTR	NOTE: The item is indicated, but not monitored.	Off
HOOD SW	Close the hood	Off
HOOD SW	Open the hood	On
TDANODON DES	Other than the ignition switch is ON by key registered to BCM.	Off
TRANSPONDER	The ignition switch is ON by key registered to BCM.	On
INTELLI KEY	NOTE: The item is indicated, but not used.	Off
AUTO RELOCK	NOTE: The item is indicated, but not monitored.	Off

< ECU DIAGNOSIS INFORMATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item Condition		Value/Status
OIL PRESS SW	Ignition switch OFF or ACC Engine running	Off
	Ignition switch ON	On
BRAKE SW	Brake pedal is not depressed	Off
DRAKE SW	Brake pedal is depressed	On

TERMINAL LAYOUT



NOTE:

M65, M66: WhiteM67: Black

PHYSICAL VALUES

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Terminal No.		Description				Value	
(Wire	color)	Signal name	Input/ Output	Condition		(Approx.)	
					All switch OFF	0 V	
2 (BR/W) Ground				Turn signal switch RH			
				Lighting switch HI	(V) 15 10		
	Ground	Combination switch INPUT 5	Input	Combination switch (Wiper intermit-	Lighting switch 1ST	10 5 0 → +10ms 1.0 V	
		tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 10 ms JPMIA0342JP 2.0 V			
		Ground Combination switch InPUT 4	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V	
					Turn signal switch LH		
3 (GR) Gro					Lighting switch PASS	(V) 15	
	Ground				Lighting switch 2ND	10 5 0 PKIB4958J	
					Front fog lamp switch ON	(V) 15 10 5 0 ++10ms PKIB4956J 0.8 V	
					All switch OFF	0 V	
					Front wiper switch LO		
				Combination	Front wiper switch MIST	(V) 15	
4	Ground	Combination switch	Input	switch	Front wiper switch INT	10	
4 (L/Y)	Ground	Ground INPUT 3 Input	(Wiper intermittent dial 4)	Lighting switch AUTO	0 + 10ms PKIB4958J		
						1.0 V	

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description				Value	^
+ (VVire	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
5 (G)	Ground	Combination switch INPUT 2	Input	Combination switch	All switch OFF (Wiper intermittent dial 4) Front washer switch (Wiper intermittent dial 4) Rear washer switch ON (Wiper intermittent dial 4) Any of the condition below with all switch OFF Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6	0 V (V) 15 10 +-10ms PKIB4958J 1.0 V	B C D
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 •••10ms PKIB4956J 0.8 V	F
					All switch OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) Wiper intermittent dial 3 (All switch OFF)	0 V (V) 15 0 +10ms PKIB4958J 1.0 V	H J DLK
6 (L/R)	Ground	Combination switch INPUT 1		Combination switch	Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2	(V) 15 10 5 0 +-+10ms PKIB4952J 1.9 V	L M
				Any of the condition below with all switch OFF • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 0 +-10ms PKIB4956J 0.8 V	N O P	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
7 (W/R)	Ground	Door key cylinder switch UNLOCK	Input	Door key cylin- der switch	NEUTRAL position	(V) 15 10 5 0 ***-10ms PKIB4960J 7.0 - 8.0 V
					UNLOCK position	0 V
8	0	Door key cylinder	1	Door key cylin-	NEUTRAL position	12 V
(W/B)	Ground	switch LOCK	Input	der switch	LOCK position	0 V
9	Crownd	Cton large quitab	lanut	Stop lamp	OFF (Brake pedal is not depressed)	0 V
(R)	Ground	Stop lamp switch	Input	switch	ON (Brake pedal is depressed)	Battery voltage
10	Ground	Rear window defog-	Input	Rear window	OFF (Not pressed)	12 V
(W/L)	Giodila	ger switch	iriput	defogger switch	ON (Pressed)	0 V
11	Ground	Ignition switch ACC	Input	Ignition switch O	FF	0 V
(L/Y)	Ground	Ignition switch ACC	Input	Ignition switch ACC or ON		Battery voltage
12 (SB)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	(V) 15 10 5 0 +
					ON (When passenger door opened)	0 V
13 (GR/L)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closed)	(V) 15 10 5 0 +
					ON (When rear RH door opened)	0 V
14	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(L/B) Ground	ound Optical sensor	Input	Input ON	When dark outside of the vehicle	Close to 0 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	А										
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)	A										
15 (V/W)	Ground	Tire pressure warning check switch	Input	Ignition switch C)FF	(V) 15 10 10 ms JPMIA0012GB 1.0 - 1.5 V	B C D										
17 (R/G)	Ground	Optical sensor pow- er supply	Output	Ignition switch	OFF, ACC	0 V 5 V											
18	Ground	Receiver and sensor	Input	Ignition switch ON		0 V	Е										
(V)		ground	-		Insert mechanical key into ignition key cylinder	0 V	F										
19 (BR) Ground	Remote keyless en- try receiver power supply			Remove mechanical key from ignition key cylinder (Any door opened)	5 V	G											
		try receiver power	try receiver power	try receiver power	try receiver power	try receiver power	try receiver power	try receiver power	try receiver power	try receiver power	Input	Ignition switch OFF	Remove mechanical key from ignition key cylinder (Any door closed)	(V) 6 4 2 0 ***-0.2 S	Н		
	(G/X) Ground	Remote keyless en- try receiver commu- nication	und try receiver commu-	Ground try receiver commu-											Insert mechanical key into ignition key cylinder	0 V	J
					Input	Ignition switch OFF	Waiting	(V) 4 2 0 +1.0ms	DLK L								
					Signal receiving	(V) 6 4 2 0 +-1.0ms	M N										
21 (P/L)	Ground	Immobilizer anten- na (Clock)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	D										

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
+	color)	Signal name	Input/ Output	Condition		(Approx.)
					ON	0 V
23 (R/Y)	Ground	Security indicator	Input	Security indicator	Blinking (Ignition switch OFF)	(V) 15 10 5 0 1 s JPMIA0014GB
				OFF	12 V	
24 (GR/R)	Ground	Dongle link	Input/ Output	Ignition switch OFF		5 V
25 (LG)	Ground	Immobilizer anten- na (Rx, Tx)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
26* ¹	Ground	Thermo control amp.	Input	Ignition switch ON		0 V
(GR)				Evaporator is extremely low temperature		12 V
27 (Y/G)* ² (Y/R)* ³		A/C switch (Automatic air conditioner)	Input	A/C	OFF (A/C switch indicator: OFF)	(V) 15 10 5 10 ms JPMIA0012GB 1.0 - 1.5 V
	Ground				ON (A/C switch indicator: ON)	0 V
		A/C switch (Manual c air conditioner)	A/C switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V	
				ON	0 V	

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				W.L.	
(Wire	color)	Signal name	Input/ Output	Condition		Value (Approx.)	Α
		Blower fan switch			Blower fan switch OFF	0 V	В
28	Ground	(Automatic air conditioner)	Input	Fan switch	Blower fan switch ON	7.0 - 8.0 V	C
(G/W)	Giodna	Blower fan switch (Manual air condi-	mput	Fan switch	Blower fan switch OFF	(V) 15 10 5 0	E F
		tioner)			Blower fan switch ON	7.0 - 8.0 V	G
29	Ground	Hazard switch	Input	Hazard switch	OFF	Battery voltage	Н
(L/W)	0.00				ON	0 V	
					A/C mode defroster ON position	0 V	I
31 (G/Y)	Ground	Front defroster switch	Input	Ignition switch ON	Other than A/C mode de- froster ON position	(V) 15 10 5 0 JPMIA0589GB 8.0 - 9.0 V	J DLK
						(V)	L
					All switch OFF (Wiper intermittent dial 4)	15 10 5 0	M
20		Combination awitch		Combination		PKIB4960J 7.0 - 8.0 V	N
32 (LG)	Ground	Combination switch OUTPUT 5	Output	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)		0
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10	
					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	0 → 10ms PKIB4956J 1.0 V	Р

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description		Condition		Value
+ (Wire	color)	Signal name	Input/ Output			(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
33 (Y/L)	Ground	Combination switch OUTPUT 4	Output	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10
					Rear wiper switch INT (Wiper intermittent dial 4)	5
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	PKIB4958J 1.2 V
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 → 10ms PKIB4960J 7.0 - 8.0 V
34 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10
					Rear washer switch ON (Wiper intermittent dial 4)	5
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	PKIB4958J 1.2 V

< ECU DIAGNOSIS INFORMATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Terminal No. Description (Wire color)		1			Value	
+	- COIOI)	Signal name	Input/ Output		Condition	(Approx.)
				Combination	All switch OFF	(V) 15 10 5 0 ++10ms PKIB4960J
35	Ground	Combination switch	Output	switch		7.0 - 8.0 V
(R/L)		OUTPUT 2		(Wiper intermit- tent dial 4)	Lighting switch 2ND	(V)
				ŕ	Lighting switch PASS	(V) 15
					Front wiper switch INT	10
					Front wiper switch HI	→ +10ms PKIB4958J
						1.2 V
36	Ground	Combination switch	0.4.4	Combination switch	All switch OFF	(V) 15 10 5 0 ++10ms PKIB4960J 7.0 - 8.0 V
(L/O)	Giouria	OUTPUT 1	Output	(Wiper intermit- tent dial 4)	Turn signal switch RH	
				terit diai 4)	Turn signal switch LH	(V)
					Front wiper switch LO	10
					(Front wiper switch MIST) Front washer switch ON	0 → +10ms PKIB4958J
				Inport machanis	ol kov into ignitica kov ovije	1.2 V
37				der	al key into ignition key cylin-	Battery voltage
(R/W)	Ground	Key switch	Input	Remove mechanical key from ignition key cylinder		0 V
38	Ground	Ignition switch ON	Input	Ignition switch OFF or ACC		0 V
(O)	2.54114		-	Ignition switch ON		Battery voltage
39 (L)	Ground	CAN-H	Input/ Output		_	_
40 (P)	Ground	CAN-L	Input/ Output		_	_

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	nal No. color)	Description				Value
+	-	Signal name	Input/ Output	Condition		(Approx.)
43 (W)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	(V) 15 10 5 0 10ms PKIB4960J 7.0 - 8.0 V
					ON (When back door opened)	0 V
44		Rear wiper stop po-		Ignition switch	Rear wiper stop position	12 V
(LG)	Ground	sition	Input	ON	Any position other than rear wiper stop position	0 V
45 (GR)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch	NEUTRAL position	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V
					LOCK position	0 V
46 (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch	NEUTRAL position	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V
					UNLOCK position	0 V
47 (BR/Y)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	(V) 15 10 5 0 ++10ms PKIB4960J 7.0 - 8.0 V
					ON (When driver door opened)	0 V

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				V/-I	
(Wire	color)	Signal name	Input/ Output	Condition		Value (Approx.)	Α
48 (W/G)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closed)	(V) 15 10 5 0 +10ms PKIB4960J	В
					ON (When rear LH door opened)	7.0 - 8.0 V 0 V	D
				Luggage room	Back door is closed (Back door lamp turns OFF)	12 V	Е
49 (Y)	Ground	Luggage room lamp	Output	lamp switch DOOR position	Back door is opened (Back door lamp turns ON)	0 V	F
50* ¹	Ground	A/C indicator	Output	A/C indicator	OFF	12 V	
(SB)	Giodila	A/C indicator	Output	A/C indicator	ON	0 V	G
54	Ground	Rear wiper	Output	Ignition switch	Rear wiper switch OFF	0 V	
(L/W)	0.000	Treat inper		ON	Rear wiper switch ON	12 V	Н
					np battery saver is activated. room lamp power supply)	0 V	
56 (L)	Ground	Interior room lamp power supply	Output	vated.	rior room lamp power sup-	12 V	I
57 (Y)	Ground	Battery power sup- ply	Input	Ignition switch O	FF	Battery voltage	J
59	Ground	Driver door UN-	Output	Driver door	UNLOCK (Actuator is activated)	12 V	DLK
(L/B)	Cround	LOCK	Output	Dilver deer	Other then UNLOCK (Actuator is not activated)	0 V	
					Turn signal switch OFF	0 V	L
60 (W/B)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0	M
					Turn signal switch OFF	6.0 V	0
					. un oigna ownon or i		
61 (W/L)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1s PKIC6370E	Р
						6.0 V	

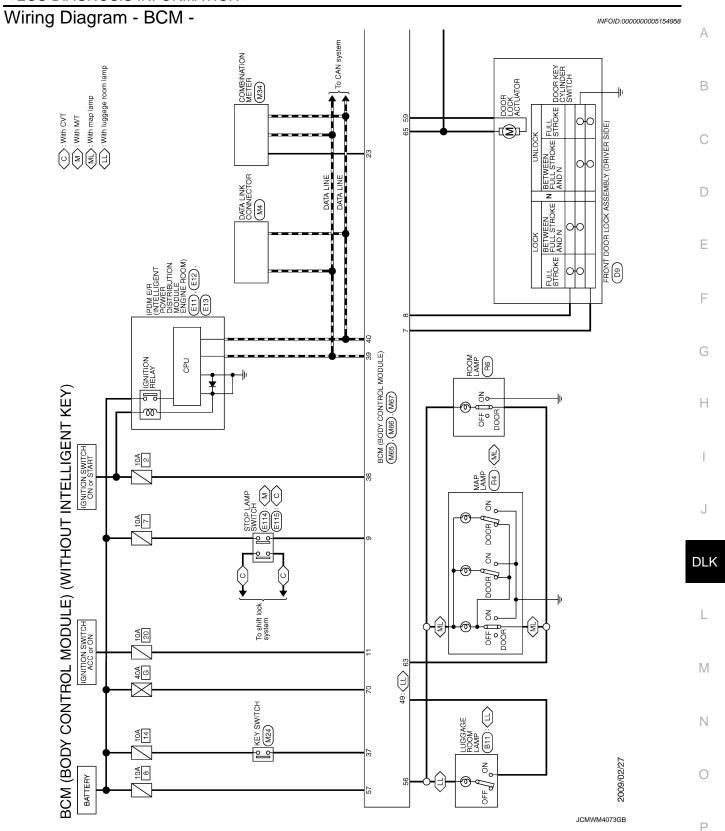
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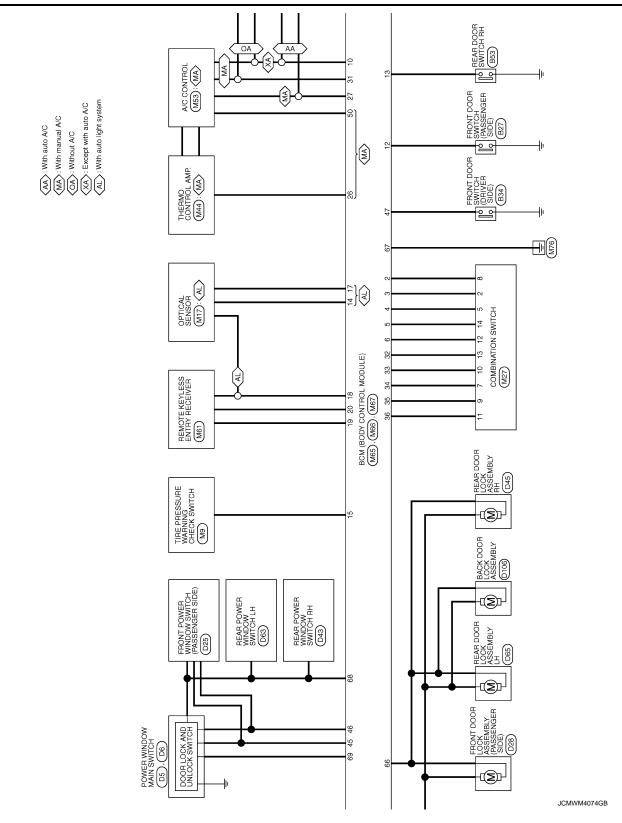
	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
63	Ground	Interior room lamp	Output	Interior room	OFF	12 V
(BR)	Ground	timer control	Output	lamp	ON	0 V
65	Cround	All doors LOCK	Quitnut	All doors	LOCK (Actuator is activated)	12 V
(V)	Ground	All doors LOCK	Output All doors		Other then LOCK (Actuator is not activated)	0 V
66	Cround	Passenger door and	Quitnut	Passenger door	UNLOCK (Actuator is activated)	12 V
(G)		Other then UNLOCK (Actuator is not activated)	0 V			
67 (B)	Ground	Ground	Output	Ignition switch ON		0 V
68 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		12 V
69 (L/W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V
70 (Y)	Ground	Battery power sup- ply	Input	Ignition switch OFF		Battery voltage

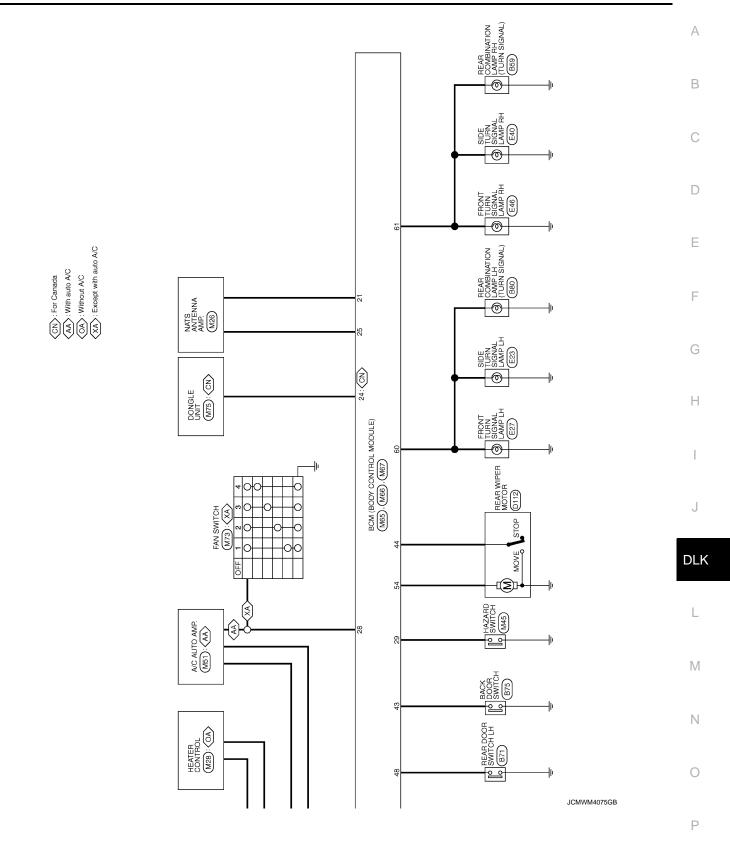
^{• *1:} Only manual air conditioner

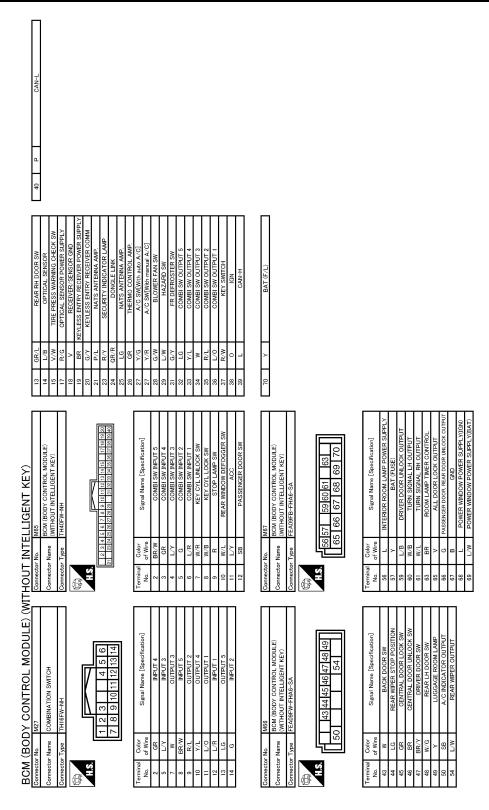
^{• *2:} Automatic air conditioner

^{• *3:} Manual air conditioner









JCMWM4076GB

Fail-safe

INFOID:0000000005154959

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

< ECU DIAGNOSIS INFORMATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2196: DONGLE NG	Inhibit engine cranking	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

- Pass more than 1 minute after the rear wiper stop.
- Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

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.

DTC Inspection Priority Chart

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 U1010: CONTROL UNIT (CAN)
2	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING B2196: DONGLE NG

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INFOID:0000000005154960

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< ECU DIAGNOSIS INFORMATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Priority	DTC
3	C1735: IGN CIRCUIT OPEN
4	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1717: [PRESSDATA ERR] FR C1719: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1720: [CODE ERR] FR C1721: [CODE ERR] RR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FR C1729: VHCL SPEED SIG ERR C1729: VHCL SPEED SIG ERR C1729: C1734: CONTROL UNIT

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.
- 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	Fail-safe	Tire pressure monitor warn- ing lamp ON	Reference
U1000: CAN COMM	_	_	BCS-116
U1010: CONTROL UNIT (CAN)	_	_	BCS-117
B2190: NATS ANTENNA AMP	×	_	<u>SEC-217</u>
B2191: DIFFERENCE OF KEY	×	_	SEC-220
B2192: ID DISCORD BCM-ECM	×	_	SEC-221
B2193: CHAIN OF BCM-ECM	×	_	SEC-223
B2195: ANTI SCANNING	×	_	SEC-224
B2196: DONGLE NG	×	_	<u>SEC-225</u>
C1704: LOW PRESSURE FL	_	×	
C1705: LOW PRESSURE FR	_	×	WIT 40
C1706: LOW PRESSURE RR	_	×	<u>WT-16</u>
C1707: LOW PRESSURE RL	_	×	

< ECU DIAGNOSIS INFORMATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

CONSULT display	Fail-safe	Tire pressure monitor warn- ing lamp ON	Reference	А
C1708: [NO DATA] FL	_	×		
C1709: [NO DATA] FR	_	×	WT-18	Е
C1710: [NO DATA] RR	_	×	<u>vv1-10</u>	
C1711: [NO DATA] RL	_	×		
C1712: [CHECKSUM ERR] FL	_	×		
C1713: [CHECKSUM ERR] FR	_	×	WT 21	
C1714: [CHECKSUM ERR] RR	_	×	<u>WT-21</u>	
C1715: [CHECKSUM ERR] RL	_	×		
C1716: [PRESS DATA ERR] FL	_	×		Е
C1717: [PRESS DATA ERR] FR	_	×	WT-24	
C1718: [PRESS DATA ERR] RR	_	×	<u>vv 1-24</u>	
C1719: [PRESS DATA ERR] RL	_	×		F
C1720: [CODE ERR] FL	_	×		
C1721: [CODE ERR] FR	_	×	WT-26	
C1722: [CODE ERR] RR	_	×	<u>vv 1-20</u>	
C1723: [CODE ERR] RL	_	×		
C1724: [BATT VOLT LOW] FL	_	×		-
C1725: [BATT VOLT LOW] FR	_	×	WT 20	
C1726: [BATT VOLT LOW] RR	_	×	<u>WT-29</u>	
C1727: [BATT VOLT LOW] RL	_	×		
C1729: VHCL SPEED SIG ERR	_	×	<u>WT-32</u>	
C1734: CONTROL UNIT	_	×	<u>WT-34</u>	
C1735: IGN CIRCUIT OPEN	_	_	BCS-118	

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH [WITHOUT INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

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

ALL DOOR

ALL DOOR: Description

INFOID:0000000005162177

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

ALL DOOR: Diagnosis Procedure

INFOID:0000000005048432

${f 1}$.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.

Refer to DLK-241, "BCM (BODY CONTROL MODULE): 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.

- Driver side: Refer to DLK-245, "DRIVER SIDE: Component Function Check".
- Passenger side: Refer to DLK-247, "PASSENGER SIDE: Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side).

Refer to DLK-250, "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-34, "Intermittent Incident".

NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE: Description

INFOID:0000000005162178

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

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000005048433

1. CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side).

Refer to DLK-250, "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.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH SYMPTOM DIAGNOSIS - IWITHOUT INTELLIGENT KEY SYSTEM

< SYMPTOM DIAGNOSIS >	[WITHOUT INTELLIGENT KEY SYSTEM]
Is the result normal? YES >> Check intermittent incident. Refer to GI-34, "Intern NO >> GO TO 1. PASSENGER SIDE	
PASSENGER SIDE : Description	INFOID:000000005162179
Passenger side door does not lock/unlock using door lock and PASSENGER SIDE : Diagnosis Procedure	unlock switch.
1. CHECK DOOR LOCK ACTUATOR	
Check door lock actuator (passenger side). Refer to <u>DLK-251</u> , " <u>PASSENGER SIDE</u> : Component Function ls the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	n Check".
Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-34, "Intermittent incident." NO >> GO TO 1. REAR LH	nittent Incident".
REAR LH: Description	INFOID:000000005162180
Rear LH side door does not lock/unlock using door lock and u REAR LH: Diagnosis Procedure	nlock switch.
1. CHECK DOOR LOCK ACTUATOR	•
Check door lock actuator (rear LH). Refer to DLK-252, "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	D
Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-34, "Intern NO >> GO TO 1. REAR RH	nittent Incident".
REAR RH : Description	INFOID:000000005162181
Rear RH side door does not lock/unlock using door lock and u	INFOID:000000005048436
1. CHECK DOOR LOCK ACTUATOR Check door lock actuator (rear RH). Refer to DLK-252, "REAR RH: Component Function Check" Is the inspection result normal? YES >> GO TO 2.	

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH [WITHOUT INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

2.confirm the operation

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

NO >> GO TO 1.

BACK DOOR

BACK DOOR: Description

INFOID:0000000005162182

Back door does not lock/unlock using door lock and unlock switch.

BACK DOOR: Diagnosis Procedure

INFOID:0000000005162183

1. CHECK DOOR LOCK ACTUATOR

Check back door lock assembly.

Refer to DLK-253, "BACK DOOR: 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 inspection result normal?

>> Check intermittent incident. Refer to GI-34, "Intermittent Incident". YES

NO >> GO TO 1.

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION [WITHOUT INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERA-

TION Diagnosis Procedure INFOID:0000000005048437

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Go to DLK-302, "ALL DOOR: Diagnosis Procedure".

2. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to DLK-255, "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-34, "Intermittent Incident".

NO >> GO TO 1.

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DLK-305 Revision: 2009 March 2009 Z12

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DOOR DOES NOT LOCK/UNLOCK WITH KEYFOB

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DOOR DOES NOT LOCK/UNLOCK WITH KEYFOB

Diagnosis Procedure

INFOID:0000000005048442

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Go to <u>DLK-302</u>, "ALL <u>DOOR</u>: <u>Diagnosis Procedure"</u>.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

Refer to DLK-257, "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-242, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CHECK KEYFOB BATTERY

Check keyfob battery.

Refer to DLK-264, "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-34, "Intermittent Incident".

NO >> GO TO 1.

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Diagnosis Procedure

[WITHOUT INTELLIGENT KEY SYSTEM]

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

1. CHECK "AUTO LOCK SET" SETTING WITH CONSULT-III

INFOID:0000000005048446

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Check "AUTO LOCK SET" setting in "WORK SUPPORT".

Refer to <u>DLK-238, "MULTI REMOTE ENT : CONSULT-III Function (BCM - MULTI REM</u>OTE ENT)".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "AUTO LOCK SET" in "WORK SUPPORT".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

NO >> GO TO 1.

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SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005155427

1. CHECK "DOOR LOCK-UNLOCK SET" SETTING IN "WORK SUPPORT"

Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT".

Refer to DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT".

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

NO >> GO TO 1.

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE [WITHOUT INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

Diagnosis Procedure

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPER-

ATF

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to DLK-302, "ALL DOOR: Diagnosis Procedure".

2.check "automatic lock/unlock select" setting in "work support"

Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

Refer to DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

3.check "automatic door lock select" setting in "work support"

Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".

Refer to DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".

4. CHECK VEHICLE SPEED SIGNAL

Check combination meter for DTC.

Refer to MWI-62, "DTC Index".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident, Refer to GI-34, "Intermittent Incident".

NO >> GO TO 1. DLK

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INFOID:0000000005162148

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IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005162149

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-302</u>, "ALL <u>DOOR</u>: <u>Diagnosis Procedure"</u>.

2.check "automatic lock/unlock select" setting in "work support"

Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

Refer to DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

3.CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".

Refer to DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".

4.CHECK BCM

Check BCM for DTC.

Refer to DLK-300, "DTC Index".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-34, "Intermittent Incident".

NO >> GO TO 1.

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DO	
ERATE	
Diagnosis Procedure	INFOID:000000005162150
1. CHECK POWER DOOR LOCK OPERATION	
Check power door lock operation.	
Does door lock/unlock with door lock and unlock switch?	
YES >> GO TO 2. NO >> Refer to DLK-302, "ALL DOOR : Diagnosis Procedure".	
2.CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"	
Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	
Refer to <u>DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)"</u> . Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	
3. CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"	
Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT". Refer to DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".	
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".	
4. CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"	
Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". Refer to DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".	
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".	
5.CHECK TCM	
Check TCM for DTC. Refer to TM-174, "DTC Index".	
Is the inspection result normal?	
YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	
6.CONFIRM THE OPERATION	
Confirm the operation again.	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-34, "Intermittent Incident"</u> .	
NO >> GO TO 1.	

KEY OUT INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

KEY OUT INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005179292

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-302</u>, "ALL <u>DOOR</u>: <u>Diagnosis Procedure"</u>.

2.CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

Refer to DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".

3.CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".

Refer to DLK-237, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".

4. CHECK KEY SWITCH

Check key switch.

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-34, "Intermittent Incident".

NO >> GO TO 1.

HAZARD AND HORN REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

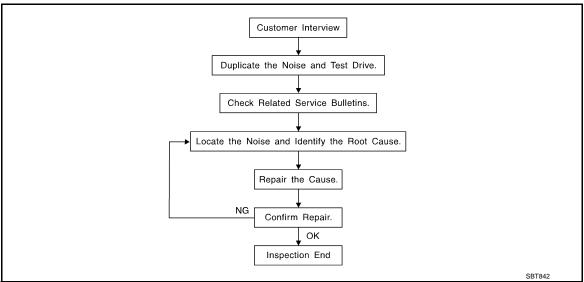
[WITHOUT INTELLIGENT KEY SYSTEM]

HAZARD AND HORN REMINDER DOES NOT OPERATE	<u>-</u>
Diagnosis Procedure	A 149
1. CHECK "HAZARD LAMP SET" SETTING IN "WORK SUPPORT"	В
Check "HAZARD LAMP SET" setting in "WORK SUPPORT". Refer to DLK-238, "MULTI REMOTE ENT : CONSULT-III Function (BCM - MULTI REMOTE ENT)".	_ C
Is the inspection result normal? YES >> GO TO 2. NO >> Set "HAZARD LAMP SET" setting in "WORK SUPPORT".	C
2. CHECK "HORN CHIRP SET" SETTING IN "WORK SUPPORT".	D
Check "HORN CHIRP SET" setting in "WORK SUPPORT". Refer to DLK-238 , "MULTI REMOTE ENT: CONSULT-III Function (BCM - MULTI REMOTE ENT)".	_ E
Is the inspection result normal?	
YES >> GO TO 3. NO >> Set "HORN CHIRP SET" setting in "WORK SUPPORT".	F
3.CHECK HAZARD WARNING LAMP	
Check hazard warning lamp. Refer to DLK-263, "Component Function Check".	G
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	Н
4.CHECK HORN	
Check horn. Refer to SEC-230, "Component Function Check".	_
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	J
5. CONFIRM THE OPERATION	
Confirm the operation again.	DL
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-34, "Intermittent Incident"</u> .	
NO >> GO TO 1.	L
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SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to DLK-318, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics
 are provided so the customer, service adviser and technician are all speaking the same language when
 defining the noise.
- Squeak (Like tennis shoes on a clean floor)
 Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
 higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
- Creak (Like walking on an old wooden floor)
 Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle (Like shaking a baby rattle)
 Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock (Like a knock on a door)
 - Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick (Like a clock second hand)
 Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump (Heavy, muffled knock noise)
 Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz (Like a bumblebee)
 Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician
 may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when the repair is reconfirmed.

SQUEAK AND RATTLE TRO < SYMPTOM DIAGNOSIS >	[WITHOUT INTELLIGENT KEY SYSTEM]
If the noise can be duplicated easily during the test drive, to cate the noise with the vehicle stopped by doing one or all of 1) Close a door.	
2) Tap or push/pull around the area where the noise appear3) Rev the engine.	s to be coming from.
 4) Use a floor jack to recreate vehicle "twist". 5) At idle, apply engine load (electrical load, half-clutch on N 6) Raise the vehicle on a hoist and hit a tire with a rubber has 	
 Drive the vehicle and attempt to duplicate the conditions the lf it is difficult to duplicate the noise, drive the vehicle slo vehicle body. 	ne customer states exist when the noise occurs.
CHECK RELATED SERVICE BULLETINS After verifying the customer concern or symptom, check AS	IST for Technical Service Bulletins (TSBs) related
to that concern or symptom. If a TSB relates to the symptom, follow the procedure to repo	,
LOCATE THE NOISE AND IDENTIFY THE ROOT CAL	JSE
 Narrow down the noise to a general area. To help ping (Chassis ear: J-39570, Engine ear and mechanics steth 	
2. Narrow down the noise to a more specific area and iden	· ·
 Removing the components in the area that is are suspected Do not use too much force when removing clips and fasted or lost during the repair, resulting in the creation of new no 	ners, otherwise clips and fastener can be broken
 Tapping or pushing/pulling the component that is are suspended not tap or push/pull the component with excessive force porarily. 	ected to be the cause of the noise.
 Feeling for a vibration by hand by touching the componer noise. 	nt(s) that is are suspected to be the cause of the
 Placing a piece of paper between components that are sus Looking for loose components and contact marks. Refer to DLK-316, "Inspection Procedure". 	spected to be the cause of the noise.
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 re- Insulate components with a suitable insulator such as unthane tape. A Nissan Squeak and Rattle Kit (J-43980) in Department. 	ethane pads, foam blocks, felt cloth tape or ure-
Department. CAUTION:	
Never use excessive force as many components are cor	nstructed of plastic and may be damaged.
NOTE: Always check with the Parts Department for the latest parts	nformation.
The following materials are contained in the Nissan Sque	

ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100×135 mm $(3.94 \times 5.31 \text{ in})/76884-71L01$: 60×85 mm $(2.36 \times 3.35 \text{ in})/76884-71L01$

71L02:15 \times 25 mm (0.59 \times 0.98 in)

INSULATOR (Foam blocks)

Insulates components from contact. Can be used to fill space behind a panel.

73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97 \times 1.97 in)/73982-

50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97 \times 1.97 in)

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick, 30 \times 50 mm (1.18 \times 1.97 in)

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications.

68370-4B000: 15 \times 25 mm (0.59 \times 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll

The following materials, not found in the kit, can also be used to repair squeaks and rattles.

UHMW (TEFLON) TAPE

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Insulates where slight movement is present. Ideal for instrument panel applications.

SILICONE GREASE

Used in place of UHMW tape that is be visible or does not fit. Will only last a few months.

SILICONE SPRAY

Used when grease cannot be applied.

DUCT TAPE

Used to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:0000000005092508

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

- 1. The cluster lid A and instrument panel
- 2. Acrylic lens and combination meter housing
- 3. Instrument panel to front pillar garnish
- 4. Instrument panel to windshield
- 5. Instrument panel mounting pins
- 6. Wiring harnesses behind the combination meter
- 7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

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

CENTER CONSOLE

Components to pay attention to include:

- 1. Shifter assembly cover to finisher
- A/C control unit and cluster lid C
- 3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the following:

- 1. Finisher and inner panel making a slapping noise
- Inside handle escutcheon to door finisher
- Wiring harnesses tapping
- 4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise.

TRUNK

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

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

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:

- Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
- 2. Sunvisor shaft shaking in the holder
- 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.

When isolating seat noise it's important to note the position the seats in and the load placed on the seat when the noise occurs. These conditions should be duplicated when verifying and isolating the cause of the noise. Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

- Any component mounted to the engine wall 1.
- 2. Components that pass through the engine wall
- 3. Engine wall mounts and connectors
- Loose radiator mounting pins
- 5. Hood bumpers out of adjustment
- Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

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Diagnostic Worksheet

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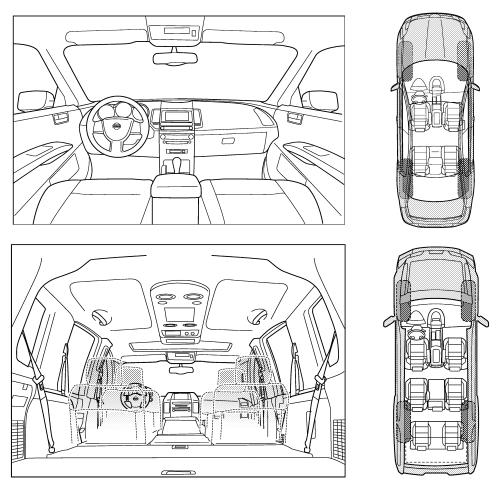
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Nissan Customer:

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

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



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

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

II. WHEN DOES IT OCCUR? (please of	heck 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:	IV. WHAT TYPE OF NOISE		
☐ through driveways ☐ over rough roads ☐ over speed bumps	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)		
☐ only about mph ☐ on acceleration ☐ coming to a stop			
☐ on turns: left, right or either (circle) ☐ with passengers or cargo ☐ other:	☐ buzz (like a bumble bee)		
after driving miles or r			
after driving miles or r TO BE COMPLETED BY DEALERSH		<u> </u>	
after driving miles or r TO BE COMPLETED BY DEALERSH		<u> </u>	
TO BE COMPLETED BY DEALERSH Test Drive Notes: Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired	P PERSONNEL YES NO Initials of person performing \[\begin{array}{c ccccccccccccccccccccccccccccccccccc		
TO BE COMPLETED BY DEALERSH Test Drive Notes: Vehicle test driven with customer - Noise verified on test drive	YES NO Initials of person performing		

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PRECAUTION

PRECAUTIONS

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

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

WARNING:

- 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 AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

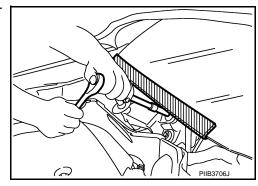
WARNING:

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

Precaution for Procedure without Cowl Top Cover

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



Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

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NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work.
 If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

This vehicle is equipped with a push-button ignition switch and a steering lock unit.

If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

PRECAUTIONS

[WITHOUT INTELLIGENT KEY SYSTEM] < PRECAUTION > If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation. Α **OPERATION PROCEDURE** Connect both battery cables. В NOTE: Supply power using jumper cables if battery is discharged. 2. Turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.) Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned. D 4. Perform the necessary repair operation. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering Е wheel will lock when the push-button ignition switch is turned to LOCK position.) 6. Perform self-diagnosis check of all control units using CONSULT-III. Work INFOID:0000000005048457 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. Н DLK

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[WITHOUT INTELLIGENT KEY SYSTEM]

PREPARATION

PREPARATION

Special Service Tools

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

Tool number (Kent-Moore No.) Tool name		Description
(J-39570) Chassis ear	SIIAO993E	Locating the noise
(J-43980) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairing the cause of noise

Commercial Service Tools

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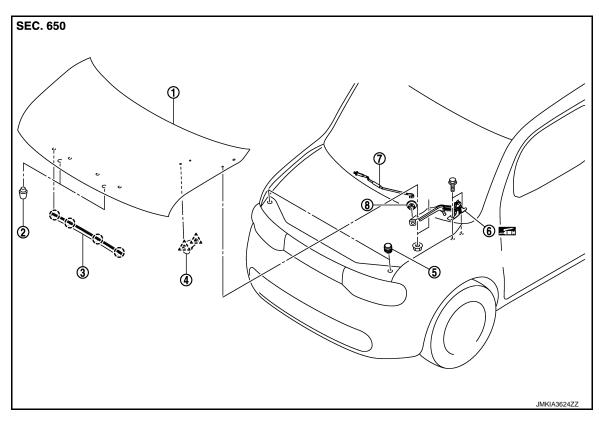
Tool name		Description
Engine ear	SIIA0995E	Locating the noise
Remover tool	PIIB7923J	Remove the clips, pawls, and metal clips
Power tool		
	PIIB1407E	

REMOVAL AND INSTALLATION

HOOD

HOOD ASSEMBLY

HOOD ASSEMBLY: Exploded View



- 1. Hood assembly
- 4. Clamp
- 7. Hood support rod
- (_): Clip
 _^\: Pawl

- 2. Hood bumper rubber (hood side)
- 5. Hood bumper rubber (body side)
- 8. Grommet

- 3. Radiator core seal
- 6. Hood hinge

HOOD ASSEMBLY: Removal and Installation

Refer to GI-4, "Components" for symbols in the figure.

REMOVAL

WARNING:

Bodily injury may occur if no supporting rod is holding hood open when removing hood stay.

2. Remove hood hinge mounting nuts on the hood to remove the hood assembly. **CAUTION:**

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

Perform work with 2 workers, because of its heavy weight.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Perform work with 2 workers, because of its heavy weight.
- Check hood hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, apply touch-up paint (the body color) onto the heads of hood hinge mounting bolts and nuts.

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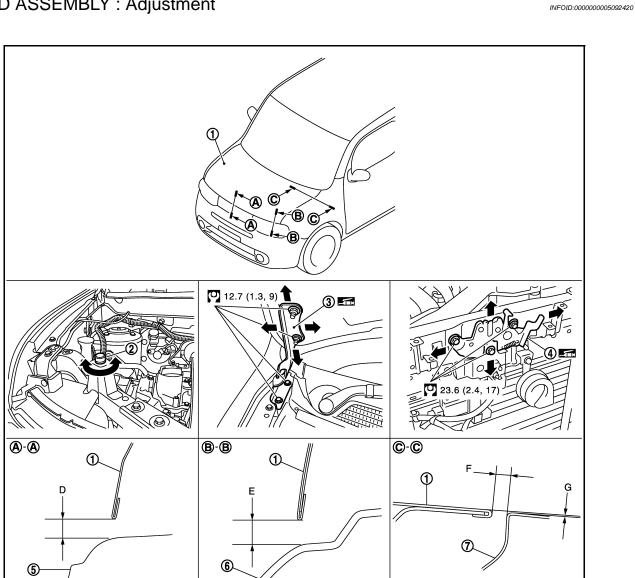
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• After installing, perform hood fitting adjustment. Refer to DLK-324, "HOOD ASSEMBLY: Adjustment".

HOOD ASSEMBLY: Adjustment



Hood assembly

Front fender

- Hood lock assembly
- Hood bumper rubber
- Front grille

- 3. Hood hinge
- Front combination lamp

Refer to GI-4, "Components" for symbols in the figure.

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

					Unit: mm (in)
Portion	า			Standard	Difference (RH/LH)
Hood – Front grille	A – A	D	Clearance	6.0 - 10.0 (0.236 - 0.394)	< 2.0 (0.079)
Hood – Front combination lamp	B-B	Ε	Clearance	6.0 - 10.0 (0.236 - 0.394)	< 2.0 (0.079)
Hood – Front fender C –	C C	F	Clearance	2.5 - 4.5 (0.098 - 0.177)	< 1.0 (0.039)
	C-C	G	Surface height	-1.0 -1.0 (-0.039 -0.039)	_

[WITHOUT INTELLIGENT KEY SYSTEM]

- 1. Remove hood lock and adjust the surface height of hood, front grill and front fender according to the fitting standard dimension, by rotating hood bumper rubber (body side).
- Loosen hood hinge mounting nuts on the hood.
- 3. Check that hood lock primary latch is securely engaged with striker by dropping hood from approximately 200 mm (7.874 in) height or by pressing lightly on the hood.

 CAUTION:

Never drop hood from a height of 300 mm (11.811 in) or more

- 4. Install as static closing face of hood is 94–490 N (9.6 50.0 kg, 21.1 110 lb).
- 5. After adjustment tighten lock bolts to the specified torque.

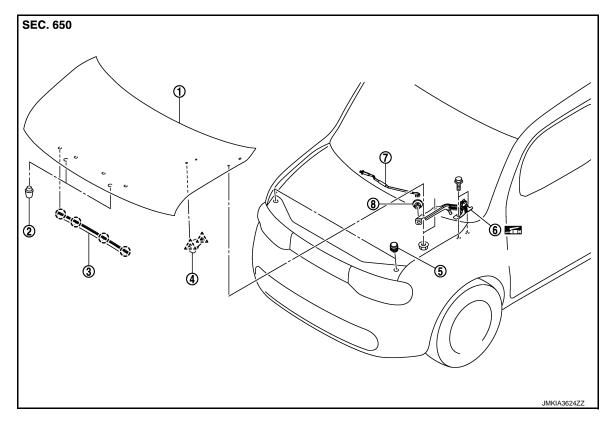
CAUTION:

- Check hood hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, apply touch-up paint (the body color) onto the heads of hood hinge mounting bolts and nuts.

HOOD HINGE

HOOD HINGE: Exploded View

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- 1. Hood assembly
- Clamp
- Hood support rod
- 2. Hood bumper rubber (hood side)
- 5. Hood bumper rubber (body side)
- 8. Grommet

- 3. Radiator core seal
- Hood hinge

(): Clip

,^∖ : Pawl

Refer to GI-4, "Components" for symbols in the figure.

HOOD HINGE: Removal and Installation

REMOVAL

- Remove hood assembly. Refer to <u>DLK-323</u>, "HOOD ASSEMBLY: Removal and Installation".
- Remove front fender. Refer to <u>DLK-330</u>, "Removal and Installation".

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- Remove cowl top. Refer to EXT-20, "Removal and Installation"
- Remove hood hinge mounting bolts, and then remove hood hinge.

INSTALLATION

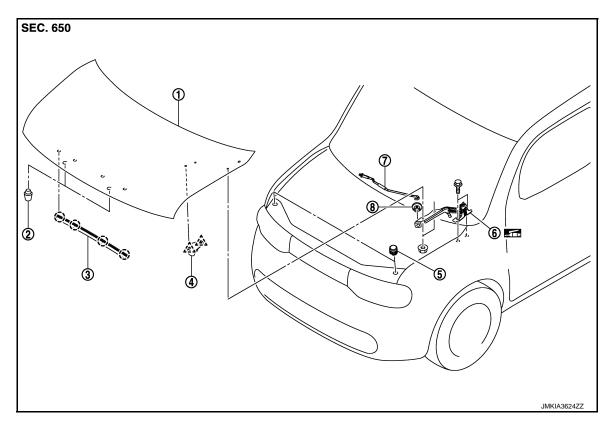
Install in the reverse order of removal.

CAUTION:

- Check hood hinge rotating part for poor lubrication. If necessary, apply grease.
- After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts
- After installation, perform hood fitting adjustment. Refer to DLK-324, "HOOD ASSEMBLY: Adjustment".

HOOD SUPPORT ROD

HOOD SUPPORT ROD: Exploded View



- 1. Hood assembly
- Clamp

(): Clip ∠_`\ : Pawl

- Hood support rod
- Hood bumper rubber (hood side)
- Hood bumper rubber (body side)
- Grommet

- 3. Radiator core seal
- Hood hinge 6.

Refer to GI-4, "Components" for symbols in the figure.

HOOD SUPPORT ROD: Removal and Installation

REMOVAL

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

Bodily injury may occur if no supporting rod is holding the hood open when removing the hood support rod.

2. Pull hood support rod from grommet and remove.

HOOD

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

INSTALLATION

Install in the reverse order of removal.

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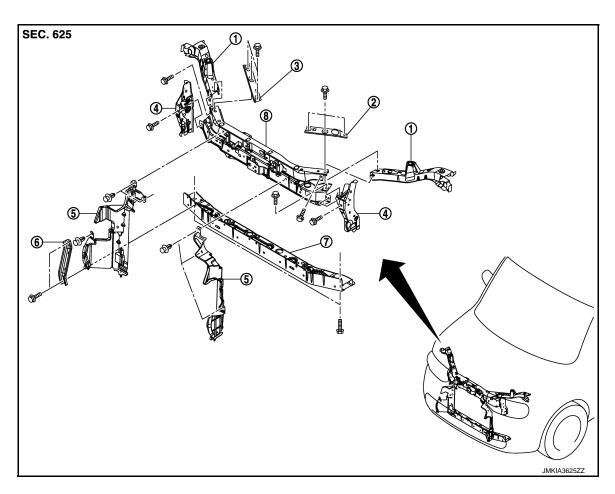
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RADIATOR CORE SUPPORT

Exploded View



- Radiator core support side
- 4. Radiator core reinforcement side
- 7. Radiator core support lower
- Radiator core support upper bracket 3. (LH)
- 5. Air guide
- 8. Radiator core support upper
- Radiator core support upper bracket (RH)
- 6. Radiator core lower stay

Removal and Installation

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RADIATOR CORE SUPPORT UPPER REMOVAL

- Remove front bumper fascia and bumper reinforcement. Refer to EXT-13, "Removal and Installation".
- 2. Remove hood lock. Refer to <u>DLK-351, "Removal and Installation"</u>.
- 3. Remove front combination lamps (LH/RH). Refer to EXL-205. "Removal and Installation".
- Remove air guide.
- 5. Remove horn. Refer to HRN-5, "Removal and Installation".
- 6. Remove crash zone sensor. Refer to SR-16, "Removal and Installation".
- 7. Remove ambient sensor. Refer to HAC-145, "Removal and Installation".
- 8. Disconnect all harness from radiator core support upper.
- 9. Remove air duct assembly. Refer to <a>EM-24. "Removal and Installation".
- 10. Remove radiator core support upper bracket (LH/RH).
- 11. Remove mounting bolts, and then remove radiator core support upper.

INSTALLATION

RADIATOR CORE SUPPORT

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Install in the reverse order of removal.

CAUTION:

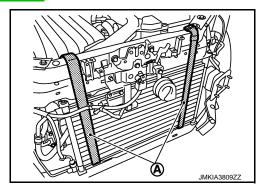
- After installation, adjust the following parts.
- Front combination lamp: Refer to EXL-201, "Aiming Adjustment Procedure".

RADIATOR CORE SUPPORT LOWER

REMOVAL

- 1. Remove front bumper fascia and bumper reinforcement. Refer to EXT-13, "Removal and Installation".
- 2. Remove air guide.
- 3. Remove radiator core lower stay.
- 4. Remove clips of fender protector.
- 5. Remove floor under cover. Refer to EXT-23, "Removal and Installation".
- Use a belts (A) to suspend it to prevent it from falling. CAUTION:

Never damage radiator and condenser.



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

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- After installation, adjust the following parts.
- Front combination lamp: Refer to EXL-201, "Aiming Adjustment Procedure".

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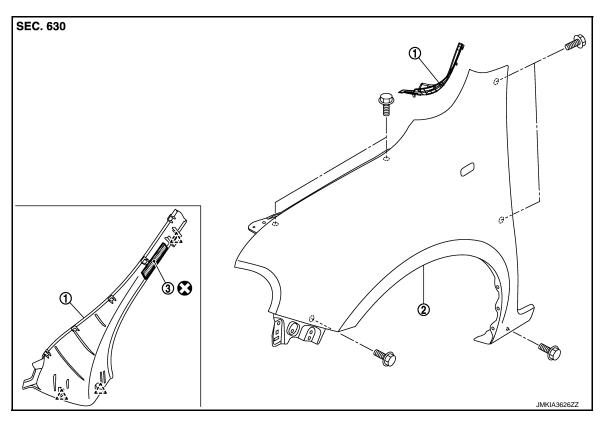
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FRONT FENDER

Exploded View



- 1. Front fender cover
- 2. Front fender assembly
- Doube-faced adhesive tape [t : 2.0 mm (0.079 in)]



Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

INFOID:0000000005092431

CAUTION:

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

REMOVAL

- 1. Remove side turn signal lamp. Refer to EXL-212, "Removal and Installation".
- 2. Remove front grille. Refer to <a>EXT-18, "Removal and Installation".
- 3. Remove front bumper fascia. Refer to EXT-13, "Removal and Installation".
- 4. Remove front combination lamp. Refer to EXL-205, "Removal and Installation".
- 5. Remove clips and screws of fender protector. Refer to EXT-22, "FENDER PROTECTOR: Removal and Installation".
- 6. Remove front fender cover.
- Remove mounting bolts and remove front fender. CAUTION:

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

INSTALLATION

Install in the reverse order of removal.

CAUTION:

FRONT FENDER

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

- After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.
- After installation, adjust the following part.
- Hood assembly: Refer to <u>DLK-324, "HOOD ASSEMBLY: Adjustment"</u>.
 Front door: Refer to <u>DLK-333, "DOOR ASSEMBLY: Adjustment"</u>.
- Front combination lamp: Refer to EXL-200, "Description".

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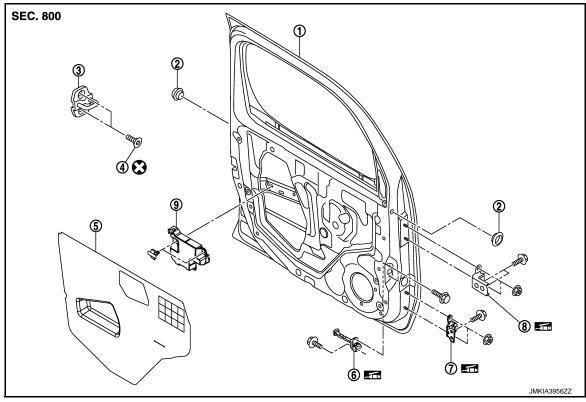
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FRONT DOOR DOOR ASSEMBLY

DOOR ASSEMBLY: Exploded View

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- 1. Front door panel
- 4. TORX bolt
- 7. Door hinge (lower)
- 2. Grommet
- 5. Sealing screen
- 8. Door hinge (upper)
- 3. Door striker
- 6. Door check link

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY: Removal and Installation

CAUTION:

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

REMOVAL

- 1. Remove mounting bolts of door check link on the vehicle.
- 2. Remove front door harness grommet, and then pull out the harness from the vehicle.
- Disconnect front door harness connector.
- 4. Remove door hinge mounting nuts (door side), and then remove door assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check front door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-333</u>, "<u>DOOR ASSEMBLY</u>: <u>Adjust-ment</u>".
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

DOOR ASSEMBLY: Adjustment

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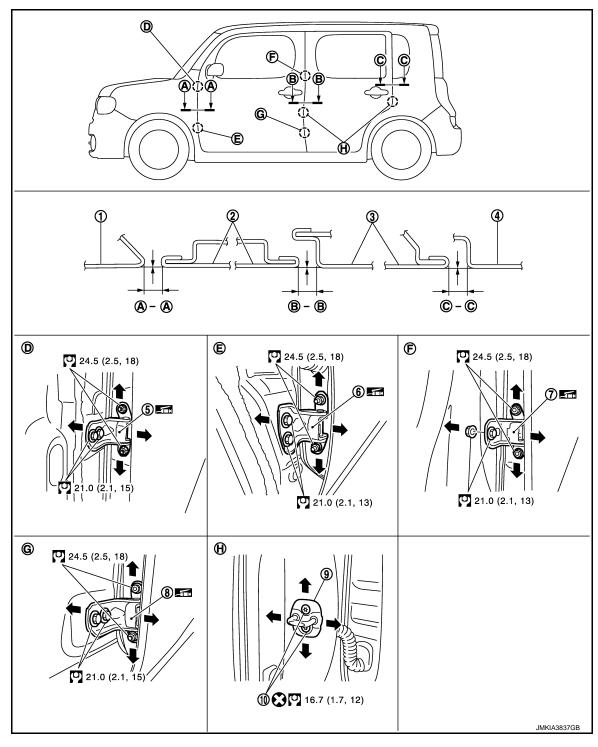
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- 1. Front fender
- Body side outer
- 7. Rear door hinge (upper)
- 10. TORX bolt

- 2. Front door
- Front door hinge (upper)
- 8. Rear door hinge (lower)
- Rear door
- 6. Front door hinge (lower)
- 9. Door striker

Refer to GI-4, "Components" for symbols in the figure.

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

[WITHOUT INTELLIGENT KEY SYSTEM]

Unit : m							
Portion		Clearance	Surface height				
Front fender – Front door	A – A	3.5 – 5.5 (0.138 – 0.217)	- 1.0 – 1.0 (- 0.039 – 0.039)				
Front door – Rear door	B – B	3.4 - 5.4 (0.134 - 0.213)	- 1.0 – 1.0 (- 0.039 – 0.039)				

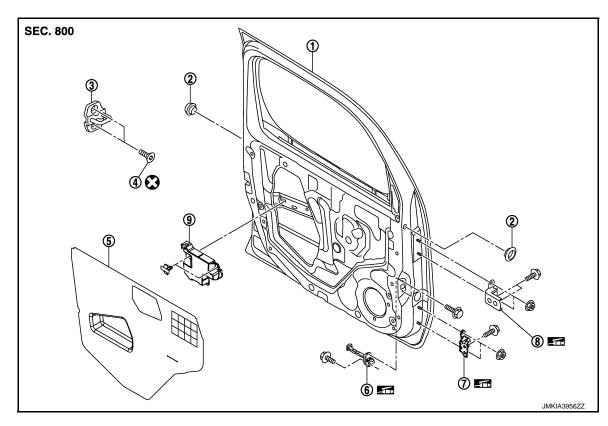
- 1. Remove front fender. Refer to <u>DLK-330, "Removal and Installation"</u>.
- 2. Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of front door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- 5. Loosen door hinge mounting bolts on body side.
- 6. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- Install front fender. Refer to refer to <u>DLK-330</u>, "Removal and Installation".

DOOR STRIKER ADJUSTMENT

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

DOOR STRIKER

DOOR STRIKER: Exploded View



- 1. Front door panel
- 4. TORX bolt
- 7. Door hinge (lower)
- 2. Grommet
- 5. Sealing screen
- Door hinge (upper)
- Door striker Door check link

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Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER: Removal and Installation

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Remove TORX bolts, and then remove door striker.

INSTALLATION

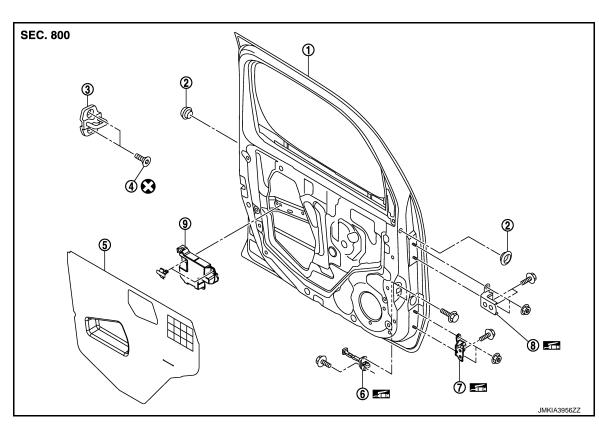
Install in the reverse order of removal.

CAUTION:

- Check front door open/close, lock/unlock operation after installation.
- After installation, be sure to perform the fitting adjustment. Refer to <u>DLK-333, "DOOR ASSEMBLY:</u> Adjustment".

DOOR HINGE

DOOR HINGE: Exploded View



- 1. Front door panel
- 2. Grommet

3 Door striker

4. TORX bolt 5. Sealing screen Door check link

- 7. Door hinge (lower)
- Door hinge (upper)

Refer to GI-4, "Components" for symbols in the figure.

DOOR HINGE: Removal and Installation

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REMOVAL

CAUTION:

- Perform work with 2 workers, because of its heavy weight.
- When removing and installing front door assembly, support door with a jack and shop cloth to protect door and body.
- Remove front fender. Refer to <u>DLK-330</u>, "Removal and Installation". 1.
- Remove front door assembly. Refer to <u>DLK-332</u>, "<u>DOOR ASSEMBLY</u>: <u>Removal and Installation</u>".
- 3. Remove front door hinge mounting bolts (body side), and then remove front door hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check front door open/close, lock/unlock operation after installation.

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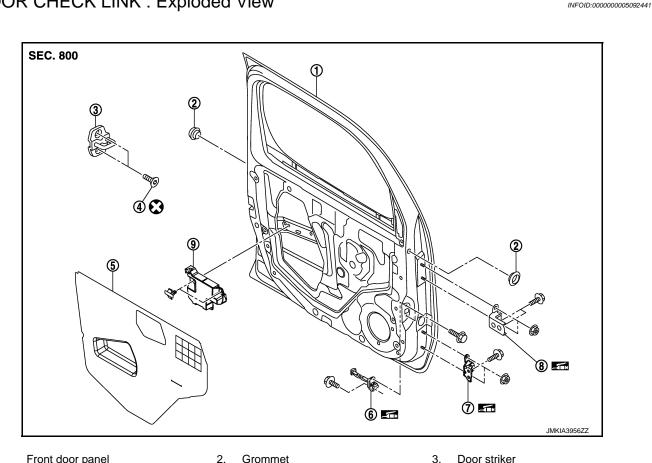
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- · Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-333, "DOOR ASSEMBLY: Adjust-</u>
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts. DOOR CHECK LINK

DOOR CHECK LINK: Exploded View



- 1. Front door panel
- 4. TORX bolt
- 7. Door hinge (lower)
- 2. Grommet
- 5. Sealing screen
- Door hinge (upper)
- Door check link

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Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK: Removal and Installation

REMOVAL

- 1. Remove front door finisher. Refer to INT-11, "Removal and Installation".
- Fully close the front door window.
- Remove sealing screen.

NOTE:

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

- 4. Remove front door speaker. Refer to AV-131, "Removal and Installation".
- 5. Remove mounting bolts of door check link on the vehicle.
- 6. Remove mounting bolts of door check link on door panel.
- 7. Take door check link out from the hole of door panel.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check front door open/close operation after installation.

DLK-336 Revision: 2009 March 2009 Z12

REAR DOOR

DOOR ASSEMBLY

DOOR ASSEMBLY: Exploded View

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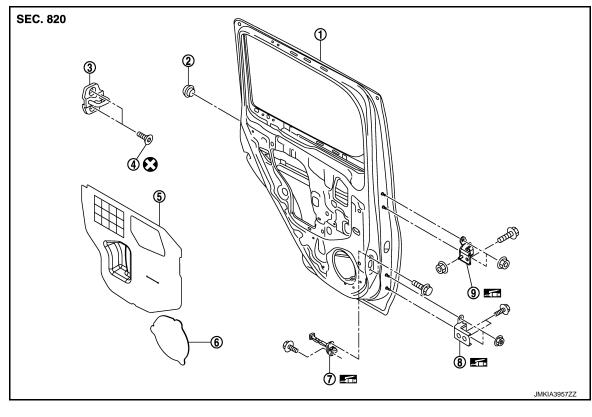
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- 1. Rear door panel
- 4. TORX bolt
- 7. Door check link

- 2. Grommet
- 5. Sealing screen (upper)
- Door hinge (lower)
- 3. Door striker
- Sealing screen (lower) 6.
- Door hinge (upper)

Refer to GI-4, "Components" for symbols in the figure.

DOOR ASSEMBLY: Removal and Installation

CAUTION:

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

REMOVAL

- 1. Remove rear door harness grommet, and then pull out door harness from the vehicle.
- Disconnect rear door harness connector. 2.
- 3. Remove mounting bolts of door check link on the vehicle.
- Remove door hinge mounting nuts (door side), and then remove rear door assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check rear door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
 After installation, perform the fitting adjustment. Refer to DLK-338, "DOOR ASSEMBLY: Adjust-
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

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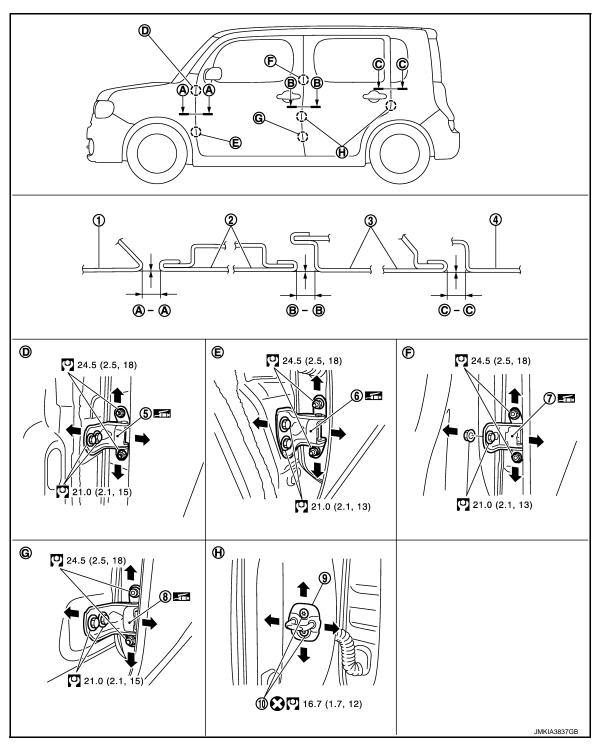
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DOOR ASSEMBLY: Adjustment

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- Front fender
- 4. Body side outer
- 7. Rear door hinge (upper)
- 10. TORX bolt

- 2. Front door
- 5. Front door hinge (upper)
- 8. Rear door hinge (lower)
- Rear door
- 6. Front door hinge (lower)
- 9. Door striker

Refer to GI-4, "Components" for symbols in the figure.

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

[WITHOUT INTELLIGENT KEY SYSTEM]

Unit: m						
Portion		Clearance	Surface height			
Front door – Rear door	B – B	3.4 - 5.4 (0.134 - 0.213)	-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)			

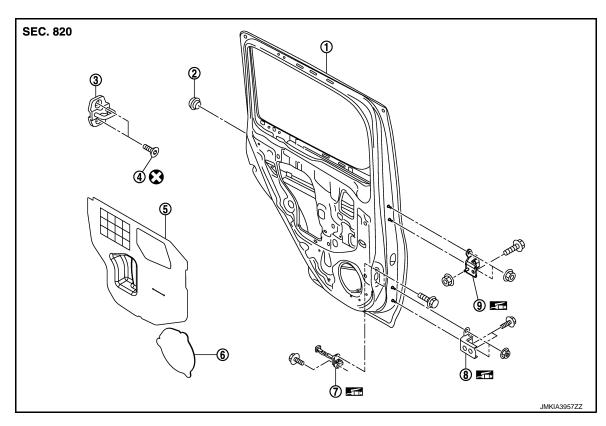
- Remove center pillar garnish (upper/lower). Refer to INT-15, "Removal and Installation". 1.
- 2. Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of rear door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- 5. Loosen door hinge mounting nuts and bolts on body side.
- 6. Raise rear door at rear end to adjust clearance of rear door according to the fitting standard dimension.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- Install center pillar garnish (upper/lower). Refer to INT-15, "Removal and Installation". 8.

DOOR STRIKER ADJUSTMENT

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

DOOR STRIKER

DOOR STRIKER: Exploded View



- 1. Rear door panel
- 4. TORX bolt
- 7. Door check link

- Grommet 2.
- 5. Sealing screen (upper)
- Door hinge (lower)
- Door striker 3.
- 6. Sealing screen (lower)
- Door hinge (upper)

Refer to GI-4, "Components" for symbols in the figure.

DOOR STRIKER: Removal and Installation

REMOVAL

Remove TORX bolts, and then remove door striker.

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INSTALLATION

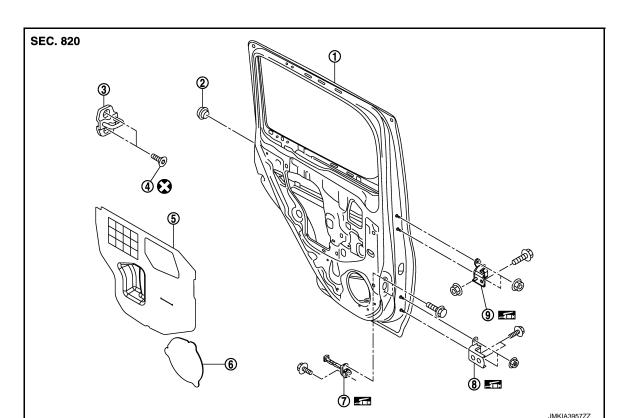
Install in the reverse order of removal.

CAUTION:

- Check rear door open/close, lock/unlock operation after installation.
- After installation, be sure to perform the fitting adjustment. Refer to DLK-338, "DOOR ASSEMBLY: Adjustment".

DOOR HINGE

DOOR HINGE: Exploded View



- 1. Rear door panel
- 4. TORX bolt
- Door check link

- 2. Grommet
- 5. Sealing screen (upper)
- Door hinge (lower)
- Door striker 3.
- 6. Sealing screen (lower)
- Door hinge (upper)

DOOR HINGE: Removal and Installation

Refer to GI-4, "Components" for symbols in the figure.

CAUTION:

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

REMOVAL

- Remove rear door assembly. Refer to <u>DLK-337</u>, "DOOR ASSEMBLY: Removal and Installation".
- Remove center pillar garnish (upper/lower). Refer to INT-15, "Removal and Installation".
- Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.

INSTALLATION

Install in the reverse order of removal.

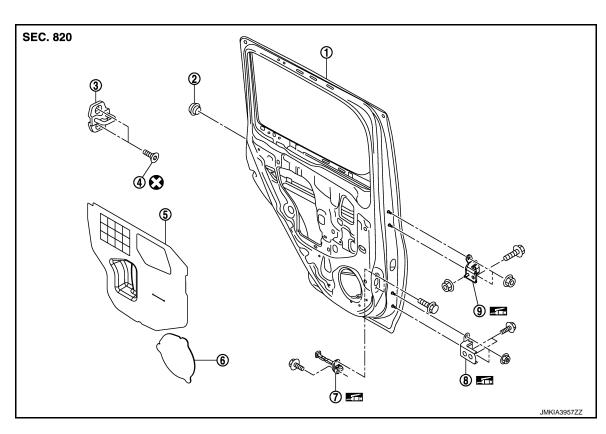
CAUTION:

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

[WITHOUT INTELLIGENT KEY SYSTEM]

- When removing and installing rear door assembly, perform the fitting adjustment. Refer to <u>DLK-338</u>, "DOOR ASSEMBLY: Adjustment".
- After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts.
 DOOR CHECK LINK

DOOR CHECK LINK: Exploded View



- Rear door panel
- TORX bolt
- 7. Door check link

- Grommet
- 5. Sealing screen (upper)
- 8. Door hinge (lower)
- Door striker
- 6. Sealing screen (lower)
- 9. Door hinge (upper)

Refer to $\underline{\mbox{GI-4, "Components"}}$ for symbols in the figure.

DOOR CHECK LINK: Removal and Installation

REMOVAL

- 1. Remove rear door finisher. Refer to INT-13, "Removal and Installation".
- 2. Fully close the rear door window.
- Remove rear door speaker. Refer to <u>AV-133, "Removal and Installation"</u>.
- 4. Remove mounting bolts of the check link on the vehicle.
- 5. Remove mounting bolts of the check link on door panel.
- Take door check link out from the hole of door panel.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check rear door open/close operation after installation.

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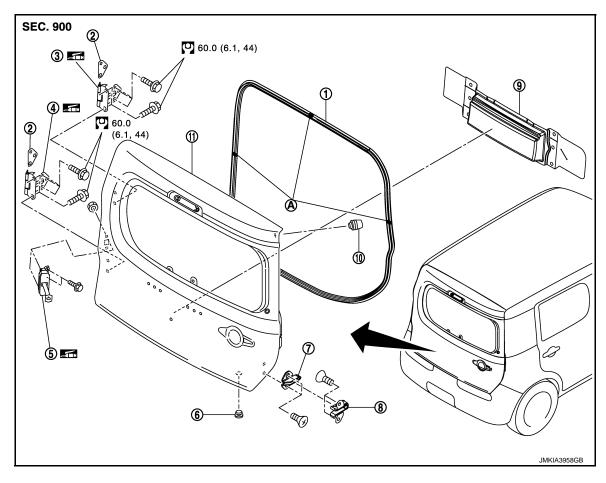
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Revision: 2009 March DLK-341 2009 Z12

BACK DOOR BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY: Exploded View

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- 1. Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- 5. Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- 9. Sealing screen
- A : Center mark

Refer to $\underline{\mbox{GI-4, "Components"}}$ for symbols in the figure.

BACK DOOR ASSEMBLY: Removal and Installation

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CAUTION:

Perform work with 2 workers, because of its heavy weight.

REMOVAL

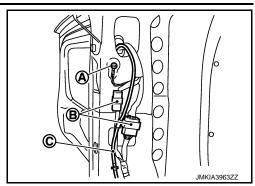
- 1. Remove back door finisher lower. Refer to INT-26. "Removal and Installation".
- Remove luggage side finisher (LH) (upper/lower). Refer to INT-23, "Removal and Installation".

BACK DOOR

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

Remove ground bolt (A) and disengage connections of harness connectors (B) and rear washer hose (C).



- 4. Remove back door harness grommet, and then pull out the harness from the vehcle.
- 5. Support back door with the proper material to prevent it from falling.
- 6. Remove mounting bolt of door check link on the vehcle.
- Remove back door hinge mounting bolts (back door side), and then remove back door assembly.
- 8. Remove the following parts after removing back door assembly.
 - Back door finisher upper
 - Sealing screen
 - Dovetail (male)
 - Dovetail (female)
 - Door check link
 - Grommet
 - Bumper rubber

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check back door open/close, lock/unlock operation after installation.
- After installation, perform fitting adjustment. Refer to DLK-344, "BACK DOOR ASSEMBLY: Adjustment".

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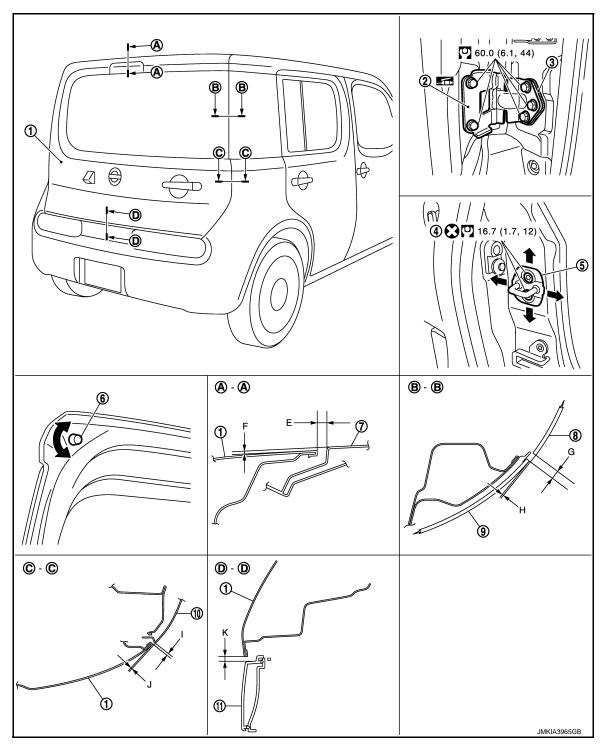
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BACK DOOR ASSEMBLY: Adjustment

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- 1. Back door panel
- 4. TORX bolt
- 7. Roof panel
- 10. Body side outer panel
- 2. Back door hinge
- 5. Back door striker
- 8. Side window glass
- 11. Back door finisher

- Shim (door hinge assembly parts)
- 6. Back door bumper rubber
- 9. Back door glass

Refer to GI-4, "Components" for symbols in the figure.

heck the clearance and the surface height between back do

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

[WITHOUT INTELLIGENT KEY SYSTEM]

					Unit: mm (in)
Portio	Standard	Difference (RH/LH)			
Back door – Roof	A – A	Е	Clearance	6.1 - 9.9 (0.240 - 0.390)	_
		F	Surface height	-0.6 - 1.4 (-0.024 - 0.055)	_
Side window glass – Back door glass	B – B	G	Clearance	4.4 - 8.4 (0.173 - 0.331)	< 2.0 (0.079)
		Н	Surface height	0 - 2.0 (0 - 0.079)	
Body side outer panel – Back door	C – C	1	Clearance	4.0 - 6.0 (0.157 - 0.236)	< 1.0 (0.039)
		J	Surface height	-1.0 - 1.0 (-0.039 - 0.039)	_
Back door – Back door finisher	D – D	K	Clearance	5.0 - 9.0 (0.197 - 0.354)	_

- Loosen back door striker mounting bolts.
- 2. Loosen bumper rubber.
- 3. Adjust right and left clearances and clearances between rear bumper to the standard value specified in the table, by taping back door striker using a rubber hammer and adjusting back door striker and bumper rubber.
- 4. Finally tighten back door hinge, bumper rubber, and back door striker.

- Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, apply touch-up paint (the body color) onto the head of back door hinge mounting nuts.

BACK DOOR STRIKER ADJUSTMENT

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

BACK DOOR STRIKER

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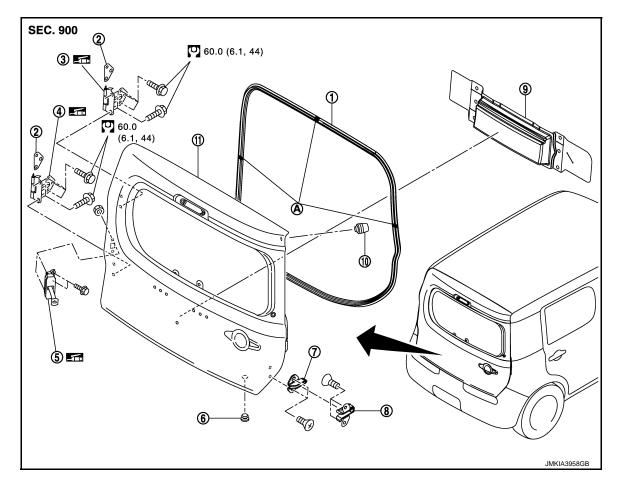
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BACK DOOR STRIKER: Exploded View

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- 1. Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- 5. Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- Sealing screen
- A : Center mark

Refer to $\underline{\text{GI-4, "Components"}}$ for symbols in the figure.

BACK DOOR STRIKER: Removal and Installation

REMOVAL

Remove mounting bolts, and then remove back door striker.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check back door open/close operation after installation.
- When removing and installing back door striker, be sure to perform the fitting adjustment. Refer to <u>DLK-344, "BACK DOOR ASSEMBLY: Adjustment"</u>.

BACK DOOR HINGE

BACK DOOR HINGE: Exploded View

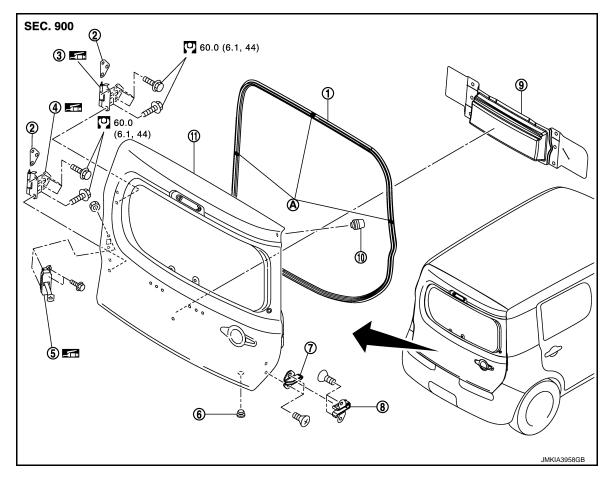


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- Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- 5. Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- 9. Sealing screen
- A : Center mark

Refer to GI-4, "Components" for symbols in the figure.

BACK DOOR HINGE: Removal and Installation

CAUTION:

Perform work with 2 workers, because of its heavy weight.

REMOVAL

- 1. Remove back door assembly. Refer to <u>DLK-342</u>, "BACK DOOR ASSEMBLY: Removal and Installation".
- 2. Remove back door hinge mounting bolts (body side), and then remove back door hinge.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check back door open/close operation after installation.
- Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.
- When removing and installing back door assembly, perform the fitting adjustment. Refer to <u>DLK-344</u>, "BACK DOOR ASSEMBLY: Adjustment".
- After installation, apply touch-up paint (the body color) onto the head of back door hinge mounting nuts.

DOOR CHECK LINK

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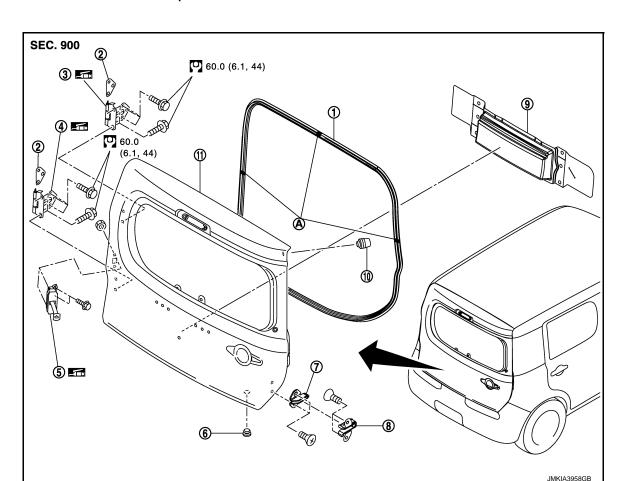
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DOOR CHECK LINK: Exploded View



- 1. Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- 5. Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- Sealing screen
- A : Center mark

Refer to GI-4, "Components" for symbols in the figure.

DOOR CHECK LINK: Removal and Installation

REMOVAL

- Remove back door finisher lower. Refer to INT-26, "Removal and Installation".
- 2. Remove sealing screen.

NOTE:

Cut the butyl-tape so that some part of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

- 3. Remove mounting bolts of door check link on the vehicle.
- 4. Remove mounting nuts of door check link on the back door panel.
- 5. Take door check link out from the hole of back door panel.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check back door open/close operation after installation. DOVETAIL

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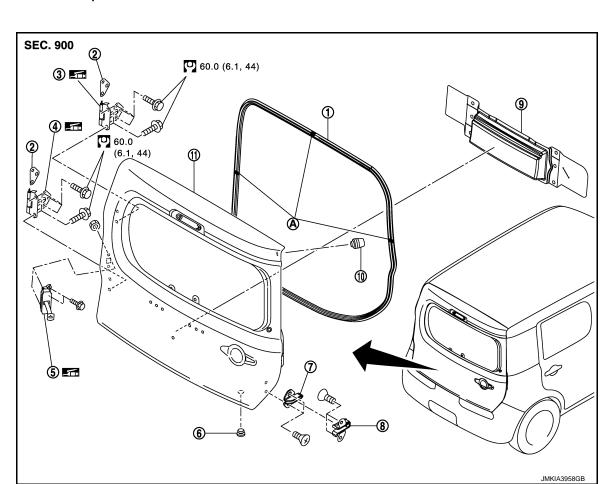
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DOVETAIL: Exploded View



- 1. Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- 9. Sealing screen
- A : Center mark

Refer to GI-4, "Components" for symbols in the figure.

DOVETAIL: Removal and Installation

REMOVAL

- 1. Remove mounting bolts, and then remove dovetai (male).
- 2. Remove mounting bolts, and then remove dovetai (female).

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check back door open/close operation after installation.

BACK DOOR WEATHER-STRIP

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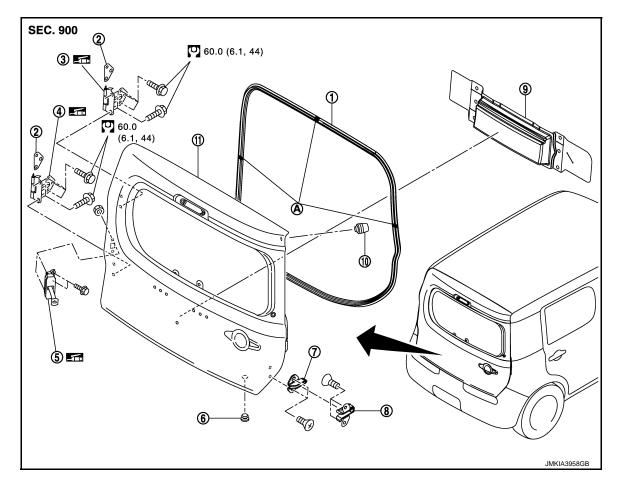
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BACK DOOR WEATHER-STRIP: Exploded View

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- Back door weather-strip
- 4. Back door hinge (lower)
- 7. Dovetail male
- 10. Bumper rubber

- 2. Shim (door hinge assembly parts)
- 5. Door check link
- 8. Dovetail female
- 11. Back door panel

- 3. Back door hinge (upper)
- 6. Grommet
- Sealing screen
- A : Center mark

BACK DOOR WEATHER-STRIP: Removal and Installation

REMOVAL

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

CAUTION:

Never pull strongly on weather-strip.

Refer to GI-4, "Components" for symbols in the figure.

INSTALLATION

- 1. Working from the upper section, align weather-strip center mark (A) with vehicle center mark (cutting position) and install weather-strip onto the vehicle.
- 2. Pull weather-strip gently to ensure that there is no loose section.

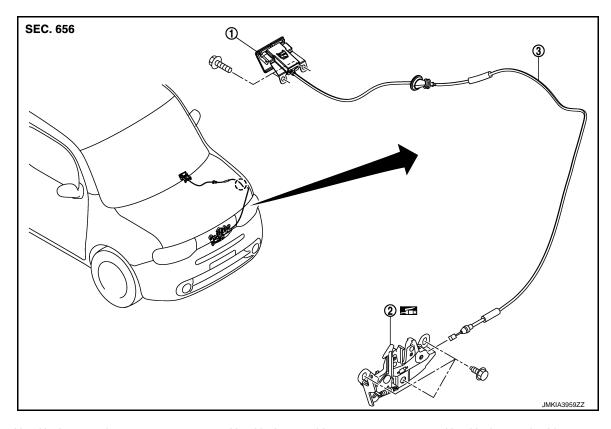
NOTE:

Make sure that weather-strip is fit tightly at each corner and luggage rear plate.

[WITHOUT INTELLIGENT KEY SYSTEM]

HOOD LOCK

Exploded View



- Hood lock opener lever
- Hood lock assembly
- 3. Hood lock control cable

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Refer to GI-4, "Components" for symbols in the figure.

Removal and Installation

REMOVAL

- 1. Remove front grille. Refer to EXT-18, "Removal and Installation".
- Remove mounting bolts, and then remove hood lock assembly.
- 3. Disconnect hood lock cable from hood lock assembly.
- 4. Remove hood lock cable clip.
- 5. Remove fender protector (LH). Refer to EXT-22, "FENDER PROTECTOR: Removal and Installation".
- 6. Remove hood lock opener lever.
- 7. Disconnect hood lock cable from hood lock opener lever.
- 8. Remove grommet on the lower dash, and pull the hood lock control cable toward the passenger compartment.

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CAUTION:

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

INSTALLATION

Install in the reverse order of removal.

CAUTION:

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

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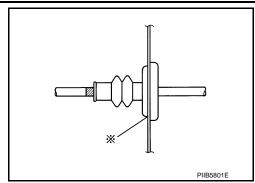
2009 Z12

HOOD LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

• Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.



- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-324, "HOOD ASSEMBLY: Adjust-ment".</u>
- After installation, perform hood lock control inspection. Refer to <u>DLK-352</u>, "Inspection".

Inspection INFOID:00000000005092478

NOTE:

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

- 1. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] by hood weight.
- 2. While operating hood opener, carefully check that the front end of hood is raised by approximately 20.0 mm (0.787 in). Also check that hood opener returns to the original position.
- 3. Check that hood opener operating is condition 49 N (5.0 kg, 11.0 lb) or below.
- Install so that static closing face of hood is 94 − 490 N·m (9.6 − 50.0 kg-m, 69 − 361 ft − lb).
 NOTE:
 - Exert vertical force on right side and left side of hood lock.
 - Never press simultaneously both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

FRONT DOOR LOCK DOOR LOCK

DOOR LOCK: Exploded View

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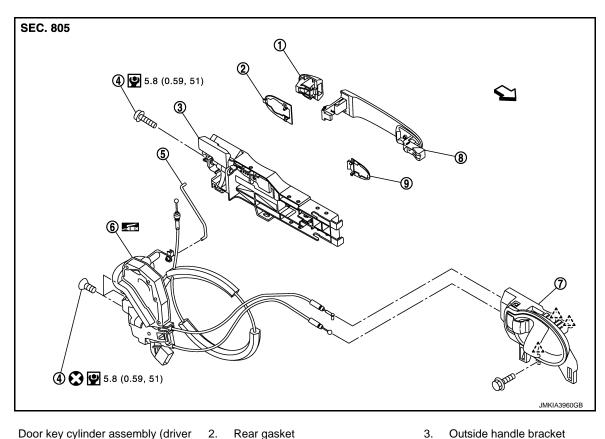
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Door key cylinder assembly (driver side)

Outside handle escutcheon (passenger side)

4. TORX bolt

5. Key rod (driver side)8. Outside handle

Door lock assembly

handle 9. Front gasket

?^` : Pawl

7.

: Vehicle front

Inside handle

Refer to GI-4, "Components" for symbols in the figure.

DOOR LOCK: Removal and Installation

REMOVAL

Remove front door finisher. Refer to <u>INT-11, "Removal and Installation"</u>.

2. Remove sealing screen.

NOTE:

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

- 3. Remove front door glass. Refer to GW-18, "Removal and Installation".
- 4. Remove front door lower sash (rear). Refer to GW-18, "Removal and Installation".
- 5. Remove outside handle. Refer to <u>DLK-355</u>. "OUTSIDE HANDLE: Removal and Installation".
- 6. Remove inside handle. Refer to <u>DLK-354</u>, "INSIDE HANDLE: Removal and Installation".
- 7. Remove door lock assembly TORX bolts.
- 8. Disconnect door lock actuator connector, and then remove door lock assembly.

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INSTALLATION

Install in the reverse order of removal.

CAUTION:

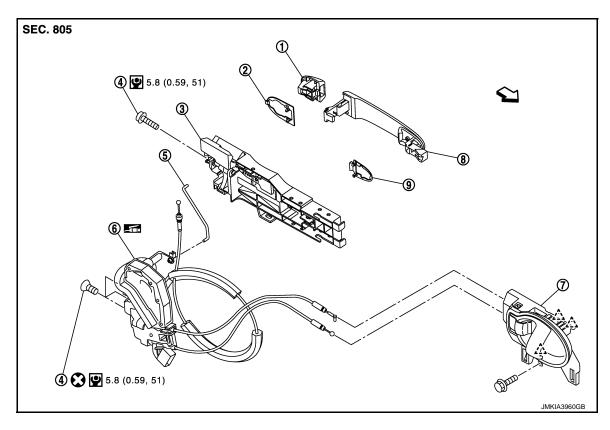
- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

INSIDE HANDLE

INSIDE HANDLE: Exploded View

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- 1. Door key cylinder assembly (driver
 - Rear gasket Outside handle escutcheon (passen-

Outside handle bracket

ger side) 4. TORX bolt

- Key rod (driver side)
- 6. Door lock assembly

7. Inside handle 8. Outside handle

Front gasket

: Pawl

 \Diamond : Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE: Removal and Installation

REMOVAL

- 1. Remove front door finisher. Refer to INT-11, "Removal and Installation".
- 2. Remove inside handle mounting bolts, slide handle toward rear of vehicle, disengage handle from door panel, and remove inside handle.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check door open/close, lock/unlock operation after installation.

OUTSIDE HANDLE

OUTSIDE HANDLE: Exploded View

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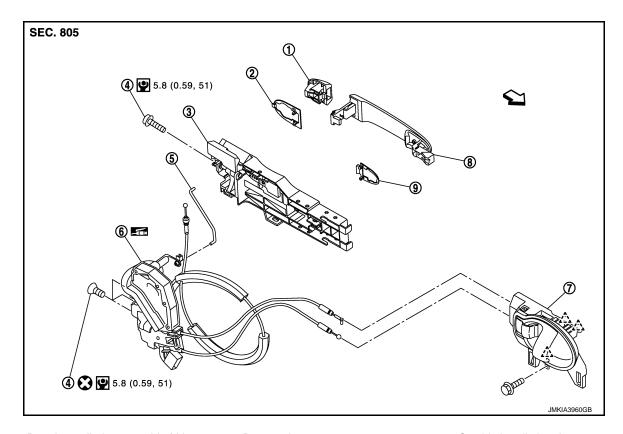
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Door key cylinder assembly (driver side)

Outside handle escutcheon (passenger side)

4. TORX bolt

7. Inside handle

∴ : Pawl

<a>: Vehicle front

. Rear gasket

5. Key rod (driver side)

8. Outside handle

3. Outside handle bracket

6. Door lock assembly

9. Front gasket

Refer to GI-4, "Components" for symbols in the figure.

OUTSIDE HANDLE: Removal and Installation

INFOID:0000000005092486

REMOVAL

1. Remove front door finisher. Refer to INT-11, "Removal and Installation".

- 2. Fully close the front door glass.
- Remove sealing screen.

NOTE:

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

- 4. Remove front door lower sash (rear). Refer to GW-18, "Removal and Installation".
- 5. Disconnect key rod (driver side).
- 6. Disconnect door antenna and door request switch connector and remove harness clamp (with Intelligent Key system) on outside handle bracket.

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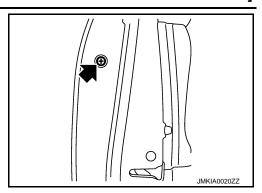
Revision: 2009 March **DLK-355** 2009 Z12

FRONT DOOR LOCK

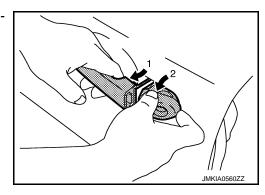
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

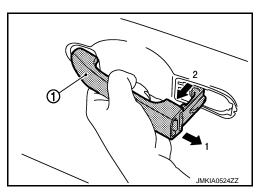
Remove door side grommet, and loosen TORX bolt from grommet hole.



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



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



- 10. Remove front gasket and rear gasket.
- 11. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 12. Reach in to separate outside handle cable connection on outside handle bracket.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

REAR DOOR LOCK

DOOR LOCK

DOOR LOCK: Exploded View

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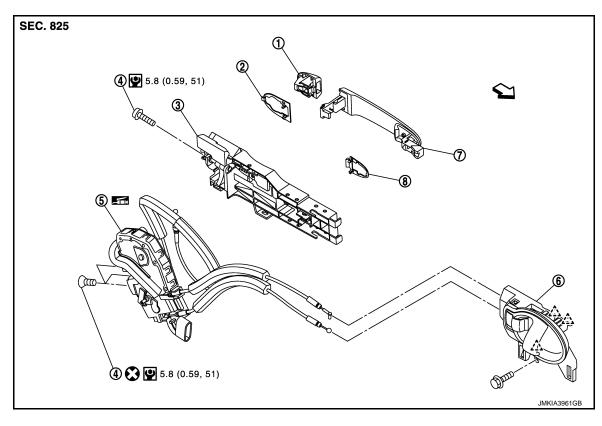
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- 1. Outside handle escutcheon
- 4. TORX bolt
- 7. Outside handle
- : Pawl
- : Vehicle front

Refer to GI-4, "Components" for symbols in the figure.

- 2. Rear gasket
- 5. Door lock assembly
- Front gasket

- 3. Outside handle bracket
- Inside handle

DOOR LOCK: Removal and Installation

REMOVAL

- Remove rear door finisher. Refer to INT-13, "Removal and Installation".
- 2. Remove sealing screen.

NOTE:

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

- 3. Remove rear door glass. Refer to GW-23, "Removal and Installation".
- 4. Remove outside handle. Refer to DLK-359, "OUTSIDE HANDLE: Removal and Installation".
- Remove inside handle. Refer to DLK-358, "INSIDE HANDLE: Removal and Installation".
- 6. Remove door lock assembly TORX bolts.
- 7. Disconnect door lock actuator connector, and then remove door lock assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check door open/close, lock/unlock operation after installation.

DLK-357 Revision: 2009 March 2009 Z12

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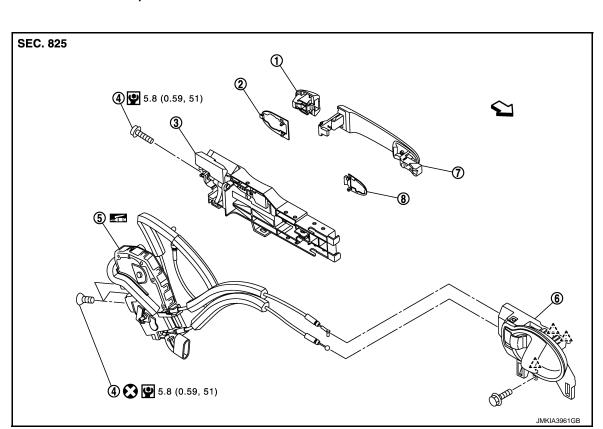
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. Check door lock cable is properly engaged with outside handle bracket.

INSIDE HANDLE

INSIDE HANDLE: Exploded View



- 1. Outside handle escutcheon
- 4.
- Outside handle 7.

- TORX bolt
- : Pawl
- : Vehicle front
- 2. Rear gasket
- 5. Door lock assembly
- Front gasket

- 3. Outside handle bracket
- Inside handle 6.

Refer to GI-4, "Components" for symbols in the figure.

INSIDE HANDLE: Removal and Installation

REMOVAL

- 1. Remove rear door finisher. Refer to INT-13, "Removal and Installation".
- Remove inside handle mounting bolts, slide handle toward rear of vehicle, disengage handle from door panel, and remove inside handle.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Check door open/close, lock/unlock operation after installation.

OUTSIDE HANDLE

OUTSIDE HANDLE: Exploded View

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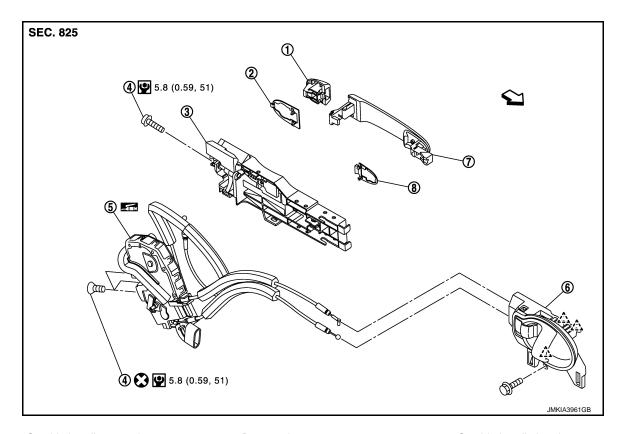
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- 1. Outside handle escutcheon
- 4. TORX bolt
- 7. Outside handle
- _^` : Pawl
- : Vehicle front

Refer to $\underline{\mbox{GI-4, "Components"}}$ for symbols in the figure.

- 2. Rear gasket
- 5. Door lock assembly
- 8. Front gasket

- Outside handle bracket
- 6. Inside handle

OUTSIDE HANDLE: Removal and Installation

SOTSIDE HANDLE. Removal and installation

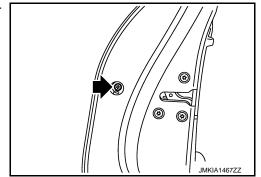
REMOVAL

- 1. Remove rear door finisher. Refer to INT-13, "Removal and Installation".
- 2. Fully close rear door glass.
- Remove sealing screen.

NOTE:

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

Remove door side grommet, and loosen TORX bolt from grommet hole.



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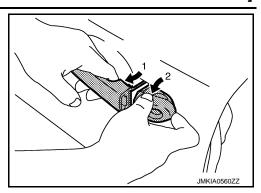
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REAR DOOR LOCK

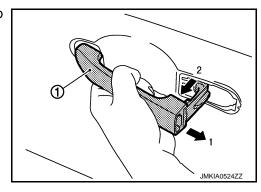
< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

5. While pulling outside handle, remove outside handle escutcheon



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



- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 9. Reach in to separate outside handle cable connection on outside handle bracket.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

BACK DOOR LOCK

DOOR LOCK

DOOR LOCK: Exploded View

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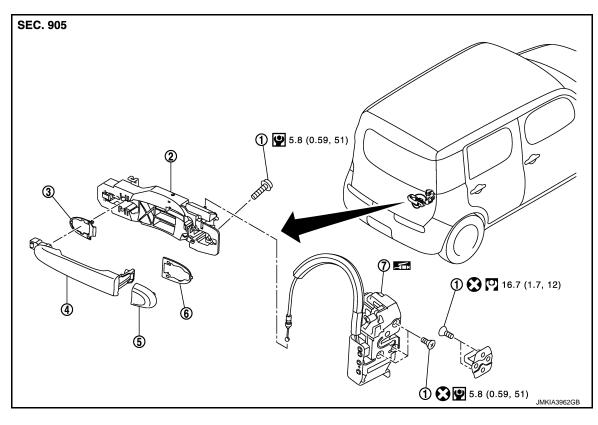
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- 1. TORX bolt
- 4. Outside handle
- 7. Back door lock assembly
- 2. Outside handle bracket
- Outside handle escutcheon
- 3. Rear gasket
- Front gasket

DOOR LOCK: Removal and Installation

Refer to GI-4, "Components" for symbols in the figure.

REMOVAL

Remove back door finisher lower. Refer to <u>INT-26, "Removal and Installation"</u>.

Remove sealing screen.

NOTE:

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

- 3. Remove back door outside handle. Refer to DLK-362, "OUTSIDE HANDLE: Removal and Installation".
- 4. Remove back door lock assembly mounting bolts.
- 5. Disconnect harness connector from back door lock assembly.
- 6. Remove back door lock assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- · Check back door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

OUTSIDE HANDLE

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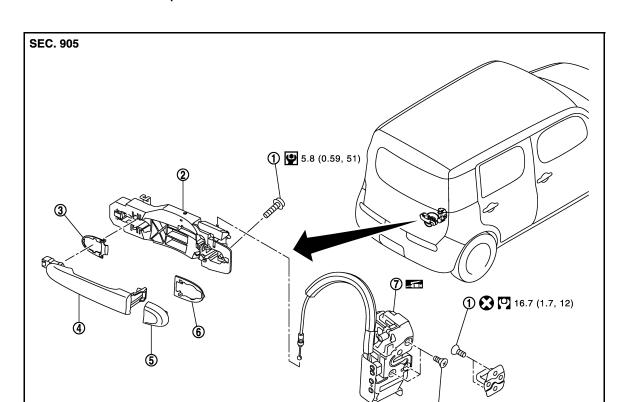
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OUTSIDE HANDLE: Exploded View



- 1. TORX bolt
- 4. Outside handle
- 7. Back door lock assembly
- 2. Outside handle bracket
 - 5. Outside handle escutcheon
- 3. Rear gasket

1 5.8 (0.59, 51)

6. Front gasket

OUTSIDE HANDLE : Removal and Installation

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Refer to GI-4, "Components" for symbols in the figure.

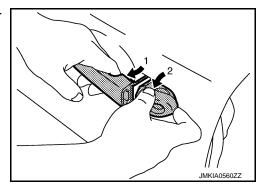
REMOVAL

- Remove back door finisher lower. Refer to <u>INT-26, "Removal and Installation"</u>.
- 2. Remove sealing screeen.

NOTE:

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

- 3. Disconnect back door antenna and back door request switch connector and remove harness clamp (with intelligent key system) on outside handle bracket.
- 4. Remove mounting bolt of outside handle bracket.
- While pulling outside handle, remove outside habdle escutcheon.

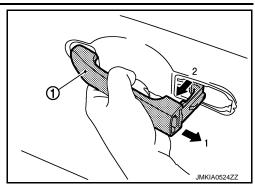


BACK DOOR LOCK

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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



- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 9. Reach in to separate outside handle cable connection on outside handle bracket.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check back door open/close operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

EMERGENCY LEVER

EMERGENCY LEVER : Unlock procedures

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UNLOCK PROCEDURES

NOTE:

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

- Remove back door finisher lower. Refer to <u>INT-26, "Removal and Installation"</u>.
- Remove sealing screen.

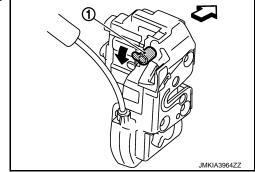
NOTE:

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

3. From inside the vehicle, rotate emergency lever (1) toward lower direction and unlock.

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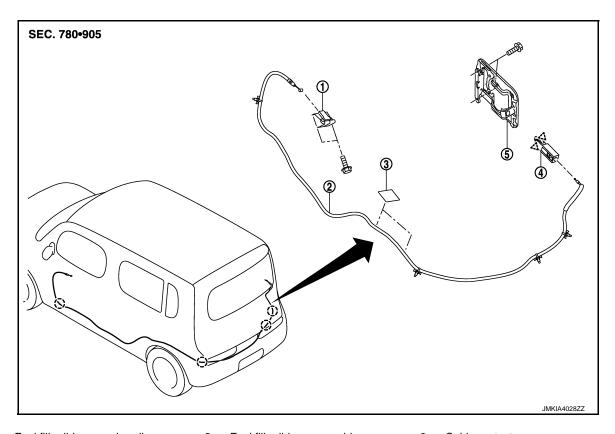
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FUEL FILLER LID OPENER

Exploded View



- Fuel filler lid opener handle
- 4. Fuel filler lid lock assembly
- () : Clip

- 2. Fuel filler lid opener cable
- 5. Fuel filler lid assembly

3. Cable protector

INFOID:0000000005092503

Removal and Installation

REMOVAL

FUEL FILLER LID

- Fully open fuel filler lid.
- 2. Remove mounting screws, and then remove fuel filler lid.

FUEL FILLER LID OPENER CABLE

- 1. Fully open fuel filler lid.
- 2. Remove dash side finisher (LH). Refer to INT-15, "Removal and Installation".
- 3. Remove front kicking plate inner (LH). Refer to INT-15, "Removal and Installation".
- 4. Remove center pillar lower garnish (LH). Refer to INT-15, "Removal and Installation".
- Remove rear kicking plate inner (LH). Refer to <u>INT-15, "Removal and Installation"</u>.
- 6. Remove luggage side finisher (LH) (upper/lower). Refer to INT-23, "Removal and Installation".
- 7. Remove center seat belt retractor. Refer to <u>SB-11, "SEAT BELT RETRACTOR: Removal and Installation"</u>.
- 8. Remove mounting bolts, and then remove fuel filler lid opener handle.
- 9. Remove fuel filler lid opener cable from fuel filler lid opener handle.
- 10. Push fuel filler lid lock assembly front the vehicle, while pushing the pawls.

FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

- 11. Remove fuel filler lid opener cable from fuel filler lid lock assembly.
- 12. Pull up floor trim. Refer to INT-18, "Removal and Installation".
- 13. Remove fuel filler lid opener cable mounting clips.
- 14. Remove fuel filler lid opener cable.

INSTALLATION

Install in the reverse order of removal.

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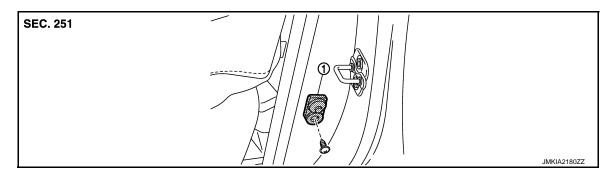
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DOOR SWITCH

Exploded View



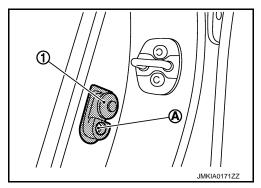
1. Door switch

Removal and Installation

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REMOVAL

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



INSTALLATION

Install in the reverse order of removal.

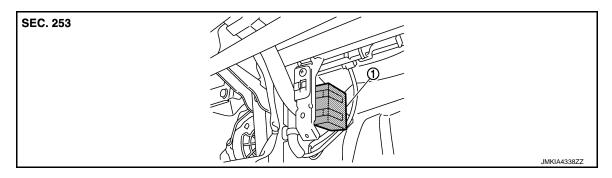
REMOTE KEYLESS ENTRY RECEIVER

< REMOVAL AND INSTALLATION >

[WITHOUT INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY RECEIVER

Exploded View

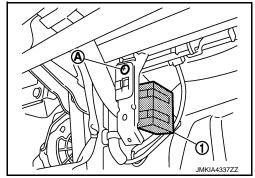


1. Remote keyless entry receiver

Removal and Installation

REMOVAL

- 1. Remove the glove box assembly. Refer to IP-13, "Removal and Installation".
- 2. Remove the remote keyless entry receiver mounting bolt (A), and then remove remote keyless entry receiver (1).



INSTALLATION

Install in the reverse order of removal.

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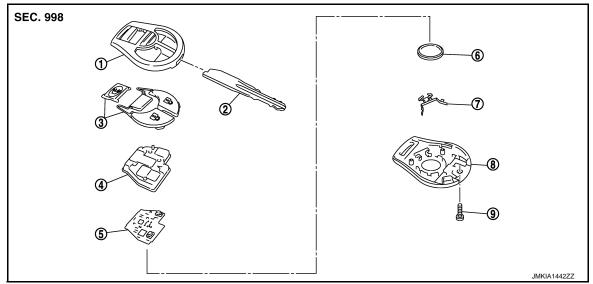
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Revision: 2009 March **DLK-367** 2009 Z12

KEYFOB BATTERY

Exploded View

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- 1. Upper case
- 4. Switch rubber
- 7. plate

- 2. Key
- Board surface
- 8. Lower case

- 3. Switch cover
- 6. Battery
- 9. Screw

Removal and Installation

INFOID:0000000005187210

REMOVAL

- 1. Remove screw (9) on the rear of keyfob.
- 2. Place the key with the lower case (8) facing up. Set a screw-driver wrapped with tape between upper case (1) and lower case (8) and then separate the lower case (8) from the upper case (1).

 CAUTION:
 - Do not touch the circuit board or battery terminal.
 - The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.
- 3. When replacing the circuit board assembly, remove circuit board assembly from the upper case (1). [Circuit board assembly: Switch rubber (4) + Board surface (5)]

Do not touch the printed circuits directly.

4. Remove the battery (6) from the lower case (8) and replace it.

Battery replacement : Coin-type lithium battery (CR1620)

CAUTION:

When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.

5. After replacement, fit the lower and upper cases together, part (4), (7) and tighten with the screw. **CAUTION:**

After replacing the battery, Be sure to check that door locking operates normally using the keyfob. Refer to <u>DLK-264</u>, "Component Function Check".

INSTALLATION

Install in the reverse order of removal.