

D

Е

F

Н

J

DLK

L

Ν

0

CONTENTS

INTELLIGENT KEY SYSTEM	TRUNK OP
BASIC INSPECTION6	TRUNK LID O
DIAGNOSIS AND REPAIR WORKFLOW 6 Work Flow6	TRUNK LID
INSPECTION AND ADJUSTMENT9	TRUNK LID
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT9 ADDITIONAL SERVICE WHEN REPLACING	Component TRUNK LID Component
CONTROL UNIT: Description9 ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement9	TRUNK REQ TRUNK RE TRUNK RE
FUNCTION DIAGNOSIS10	tion TRUNK RE
DOOR LOCK FUNCTION10	Component TRUNK RE
DOOR LOCK AND UNLOCK SWITCH10 DOOR LOCK AND UNLOCK SWITCH : System	Component
Diagram	INTELLIGEN INTELLIGE INTELLIGE INTELLIGE INTELLIGE
DOOR LOCK AND UNLOCK SWITCH: Component Description	WARNING F System Des Component
DOOR REQUEST SWITCH: System Diagram13 DOOR REQUEST SWITCH: System Description13 DOOR REQUEST SWITCH: Component Parts Location	KEY REMIN System Des Component
DOOR REQUEST SWITCH: Component Description18	INTEGRATE Component
INTELLIGENT KEY18 INTELLIGENT KEY : System Diagram18	DIAGNOSIS
INTELLIGENT KEY: System Description	COMMON ITE

TRUNK OPEN FUNCTION24
TRUNK LID OPENER SWITCH24 TRUNK LID OPENER SWITCH : System Diagram
TRUNK LID OPENER SWITCH: System Description
TRUNK REQUEST SWITCH
INTELLIGENT KEY
WARNING FUNCTION
KEY REMINDER FUNCTION45System Description45Component Parts Location45
INTEGRATED HOMELINK TRANSMITTER49 Component Description49
DIAGNOSIS SYSTEM (BCM)50
COMMON ITEM50 COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)50

DOOR LOCK	50	KEY SLOT	72
DOOR LOCK : CONSULT-III Function (BCM -		Description	72
DOOR LOCK)	50	Component Function Check	72
INTELLIGENT KEY	-4	Diagnosis Procedure	72
INTELLIGENT KEY : CONSULT-III Function	51	Component Inspection	73
	-4	1/5 / 6 // IND 5 D 6 // 1/5 C	
(BCM - INTELLIGENT KEY)	51	KEY CYLINDER SWITCH	
TRUNK	54	Description	
TRUNK: CONSULT-III Function (BCM - TRUNK).		Component Function Check	
		Diagnosis Procedure	
COMPONENT DIAGNOSIS	56	Component Inspection	
		Special Repair Requirement	75
U1000 CAN COMM CIRCUIT		UNLOCK SENSOR	77
Description			
DTC Logic		Description	
Diagnosis Procedure	56	Component Function Check	
HAGAG CONTROL HAUT (CAN)		Diagnosis Procedure	
U1010 CONTROL UNIT (CAN)		Component Inspection	/8
DTC Logic		TRUNK LID OPENER SWITCH	80
Diagnosis Procedure		Description	
Special Repair Requirement	57	Component Function Check	
B2621 INSIDE KEY ANTENNA 1	58	Diagnosis Procedure	
Description		Component Inspection	
DTC Logic		Component inspection	01
Diagnosis Procedure		TRUNK LID OPENER CANCEL SWITCH	82
Diagnosis Flocedure	50	Description	82
B2622 INSIDE KEY ANTENNA 2	60	Component Function Check	
Description	60	Diagnosis Procedure	
DTC Logic		Component Inspection	
Diagnosis Procedure			
•		TRUNK ROOM LAMP SWITCH	
B2623 INSIDE KEY ANTENNA 3		Description	
Description	62	Component Function Check	
DTC Logic	62	Diagnosis Procedure	
Diagnosis Procedure	62	Component Inspection	85
DOWED CURRY AND CROUND CIRCUIT		DOOR REQUEST SWITCH	07
POWER SUPPLY AND GROUND CIRCUIT			
Diagnosis Procedure	64	Description	
DOOR SWITCH	65	Component Function Check	
Description		Diagnosis Procedure	
Component Function Check		Component Inspection	89
Diagnosis Procedure		TRUNK OPENER REQUEST SWITCH	90
Component Inspection		Description	
Component inspection	07	Component Function Check	
DOOR LOCK AND UNLOCK SWITCH	68	Diagnosis Procedure	
		Component Inspection	
DRIVER SIDE		Component inspection	31
DRIVER SIDE : Description		DOOR LOCK ACTUATOR	92
DRIVER SIDE : Component Function Check			
DRIVER SIDE : Diagnosis Procedure	68	DRIVER SIDE	
DRIVER SIDE: Special Repair Requirement	69	DRIVER SIDE : Description	
DACCENCED CIDE		DRIVER SIDE : Component Function Check	
PASSENGER SIDE		DRIVER SIDE : Diagnosis Procedure	92
PASSENGER SIDE : Description	69	PASSENGER SIDE	00
PASSENGER SIDE :			
Component Function Check		PASSENGER SIDE: Description	93
PASSENGER SIDE : Diagnosis Procedure		PASSENGER SIDE :	
PASSENGER SIDE: Special Repair Requirement	71	Component Function Check	
	71	EASSENGER SIDE DISCONSIS PROCECURE	u.1

KEY REMINDER FUNCTION SYMPTOMS 176	DOOR	200
Symptom Table176	EDONT DOOR	200
HAZADD AND DUZZED DEMINDED EUNC	FRONT DOOR : Exploded View	
HAZARD AND BUZZER REMINDER FUNC- TION SYMPTOMS177	FRONT DOOR: Exploded viewFRONT DOOR: Removal and Installation	
	FRONT DOOR: Removal and installation	
Symptom Table177	·	
HAZARD AND HORN REMINDER FUNC-	REAR DOOR	
TION SYMPTOMS 178	REAR DOOR: Exploded View	
Symptom Table178	REAR DOOR : Removal and InstallationREAR DOOR : Adjustment	
SQUEAK AND RATTLE TROUBLE DIAG-	DOOR LOCK	207
NOSES 179	DOOR LOCK	207
Work Flow179	FRONT DOOR LOCK	207
Inspection Procedure181	FRONT DOOR LOCK: Exploded View	207
Diagnostic Worksheet183	FRONT DOOR LOCK : Removal and Installation.	
PRECAUTION185	REAR DOOR LOCK	
PRECAUTIONS 185	REAR DOOR LOCK : Exploded View	
Precaution for Supplemental Restraint System	REAR DOOR LOCK : Removal and Installation	210
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	TRUNK LID	213
SIONER"185	TRUNK LID ASSEMBLY	242
Precaution for Procedure without Cowl Top Cover. 185	TRUNK LID ASSEMBLY : Exploded View	
Precaution Necessary for Steering Wheel Rota-	TRUNK LID ASSEMBLY: Exploded view TRUNK LID ASSEMBLY: Removal and Installa-	213
tion after Battery Disconnect185	tion	21/
Work186	TRUNK LID ASSEMBLY : Adjustment	
PREPARATION187		
DDED A D A TION	TRUNK LID LOCK TRUNK LID LOCK : Exploded View	
PREPARATION	TRUNK LID LOCK: Exploded viewTRUNK LID LOCK: Removal and Installation	
Special Service Tools		
Commercial Service Tools187	TRUNK LID WEATHERSTRIP	216
ON-VEHICLE MAINTENANCE188	TRUNK LID WEATHERSTRIP: Exploded View TRUNK LID WEATHERSTRIP: Removal and In-	216
PRE-INSPECTION FOR DIAGNOSTIC 188	stallation	217
Basic Inspection188	DOOD SWITCH	040
ON-VEHICLE REPAIR190	Pemoval and Installation	
HOOD190	INSIDE KEY ANTENNA	210
HOOD ASSEMBLY190	INSTRUMENT CENTER	
HOOD ASSEMBLY : Exploded View190	INSTRUMENT CENTER: Exploded View	219
HOOD ASSEMBLY: Removal and Installation191	INSTRUMENT CENTER : Removal and Installa-	040
HOOD ASSEMBLY : Adjustment192	tion	219
HOOD LOCK CONTROL192	CONSOLE	219
HOOD LOCK CONTROL : Exploded View192	CONSOLE : Exploded View	219
HOOD LOCK CONTROL : Removal and Installa-	CONSOLE : Removal and Installation	219
tion193 HOOD LOCK CONTROL : Inspection195	TRUNK ROOM	219
HOOD LOCK CONTROL : Inspection195	TRUNK ROOM : Exploded View	
RADIATOR CORE SUPPORT 196	TRUNK ROOM : Removal and Installation	219
Exploded View196	OUTSIDE KEY ANTENNA	224
Removal and Installation196	OUTSIDE RET ANTENNA	22 1
FRONT FENDER199	DRIVER SIDE	
Exploded View199	DRIVER SIDE : Exploded View	
Removal and Installation199	DRIVER SIDE : Removal and Installation	221
Tomoval and motalidition	DASSENGED SIDE	221

PASSENGER SIDE: Exploded View221	TRUNK OPENER REQUEST SWITCH 224	
PASSENGER SIDE: Removal and Installation 221	Exploded View224	1
REAR BUMPER221	Removal and Installation224	
REAR BUMPER : Exploded View221	TRUNK LID OPENER SWITCH225	
REAR BUMPER: Removal and Installation 221	Exploded View225	3
INTELLIGENT KEY WARNING BUZZER 222	Removal and Installation225	
Exploded View222	TRUNK LID OPENER CANCEL SWITCH 226	
Removal and Installation222	Exploded View226	
KEY SLOT223	Removal and Installation226	
Exploded View223	REMOTE KEYLESS ENTRY RECEIVER 227)
Removal and Installation223	Exploded View227	
	Removal and Installation227	
	E	Ξ

DLK

J

F

G

Н

L

 \mathbb{N}

Ν

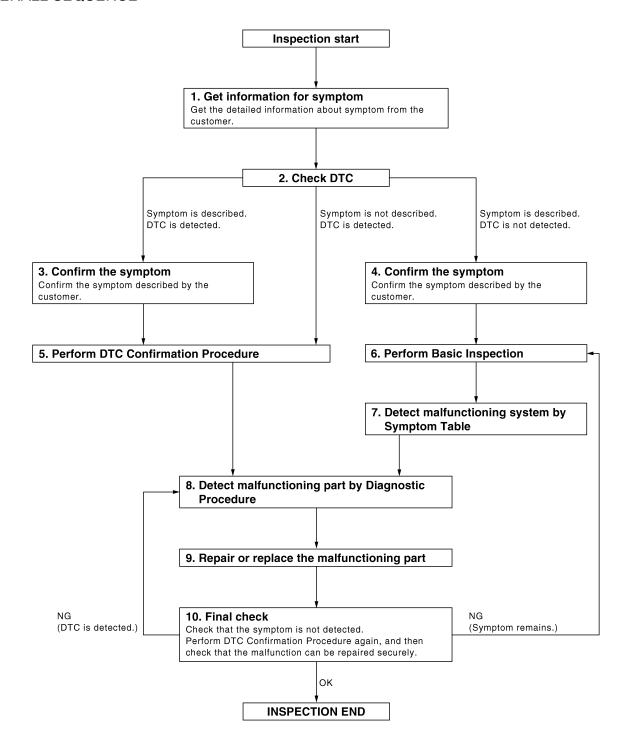
0

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[INTELLIGENT KEY SYSTEM]

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.check dtc

- 1. Check DTC.
- 2. Perform the following procedure if DTC is displayed.
- Record DTC and freeze frame data (Print them out with CONSULT-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.

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.

elation between the symptom and the condition when the symptom is detected

>> GO TO 5.

f 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. 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-163, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

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

Is DTC detected?

YES >> GO TO 8.

NO >> Refer to GI-39, "Intermittent Incident".

6.PERFORM BASIC INSPECTION

Perform DLK-188, "Basic Inspection".

Inspection End>>GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to <u>DLK-167</u>, "<u>Symptom Table</u>" based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

>> GO TO 8.

DLK

Α

В

D

Е

Н

L

M

Ν

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[INTELLIGENT KEY SYSTEM]

8. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

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

<u>Is malfunctioning part detected?</u>

YES >> GO TO 9.

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

9.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 10.

10. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.

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

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8.

YES (Symptom remains)>>GO TO 6.

NO >> INSPECTION END

INSPECTION AND ADJUSTMENT

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description NEFOLD-00000000981085 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 NEFOLD-00000000861086 Refer to the CONSULT-III operation manual for the initialization procedure.

DLK

J

Α

В

C

 D

Е

F

Н

M

L

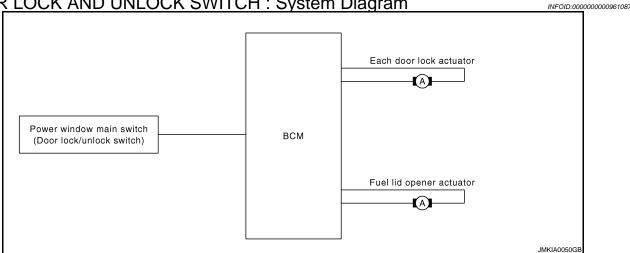
N

0

FUNCTION DIAGNOSIS

DOOR LOCK FUNCTION DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH: System Diagram



DOOR LOCK AND UNLOCK SWITCH: System Description

INFOID:0000000000961088

Switch	Input/output signal to BCM	BCM function	Actuator
Door lock and unlock switch (Driver side)			
Door lock and unlock switch (Passenger side)	Door lock/unlock signal	Door lock /unlock control	Door lock actuator
Door key cylinder switch			

DOOR LOCK FUNCTION

Functions Available by Operating the Door Lock and Unlock Switches on Driver Door and Passenger Door

- 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.

Functions Available by Operating the Key Cylinder Switch on Driver Door

 Interlocked with the locking operation of door key cylinder, door lock actuators of all doors and fuel lid lock actuator are locked.

Selective Unlock Operation

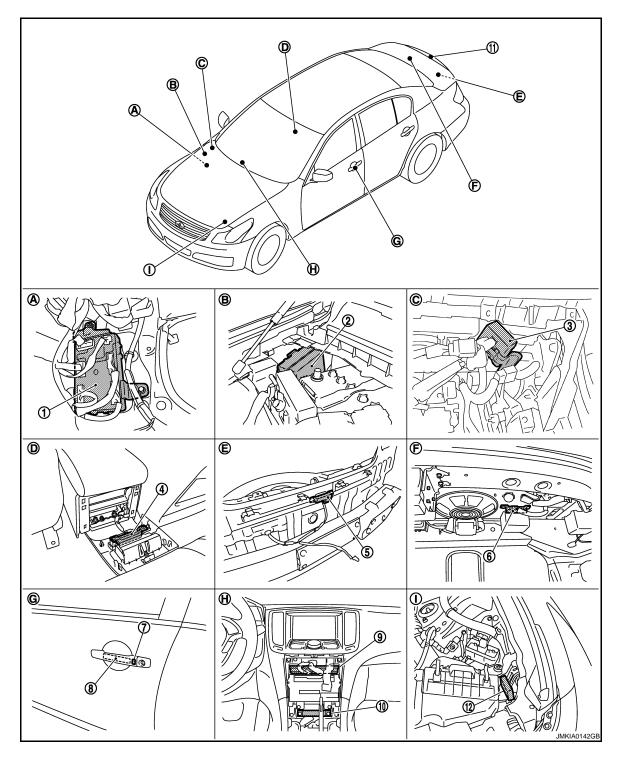
- When door key cylinder is unlocked, door lock actuator driver side and fuel lid lock actuator are unlocked.
- When door key cylinder is unlocked for the second time within 5 seconds after the first operation, door lock actuators on all doors are unlocked.

Select unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-PORT". Refer to DLK-50, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Key Reminder System

Refer to <u>DLK-45</u>, "System Description".

DOOR LOCK AND UNLOCK SWITCH: Component Parts Location



- **BCM** M118,M119,M120,M121,M122,M123
- Inside key antenna (console) M146
- 7. Front outside handle LH (request switch)
- 10. Inside key antenna (instrument center) M131
- A. Dash side lower (Passenger side).

- IPDM E/R E5,E6
- 5. Outside key antenna (rear bumper)
- 8. Front outside handle LH (outside key antenna) D14
- Trunk lid request switch B304
- Engine room dash panel (RH).

- 3. Remote keyless entry receiver M104
- Inside key antenna (trunk room) 6.
- 9. Unified meter and A/C AMP M66,M67
- 12. Intelligent Key warning buzzer (engine room) E57
- View with instrument assist lower panel removed.

Α

В

D

Е

F

Н

DLK

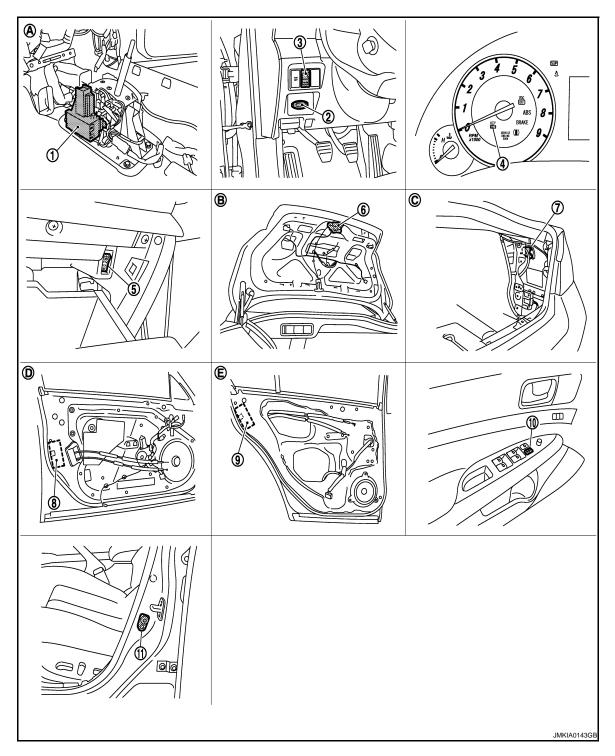
M

Ν

0

- View with console rear finisher removed. E.
 - View with rear bumper removed.

- View of front door LH.
- Behind cluster lid C.
- View with trunk rear finisher (upper) removed.
- I. View with hood seal assembly removed.



- A/T device (detention switch)
- Combination meter (Key warning lamp)
- 7. Fuel lid opener actuator B242
- 10. Power window main switch (door lock un- 11. Front door switch B16 lock switch) D8,D9
- 2. Key slot M22
- Trunk opener cancel switch M105 5.
- 3. Trunk lid opener switch M20
- Trunk lid lock assembly (trunk lid opener actuator) B303

- Front door lock assembly (driver side) D15 9. Rear door lock assembly D55

[INTELLIGENT KEY SYSTEM]

- View with center console assembly removed.
- View with trunk lid finisher removed.
- C. View with trunk side finisher removed.

- View with front door finisher removed.
- View with rear door finisher removed.

DOOR LOCK AND UNLOCK SWITCH: Component Description

INFOID:0000000000961090	

Α

В

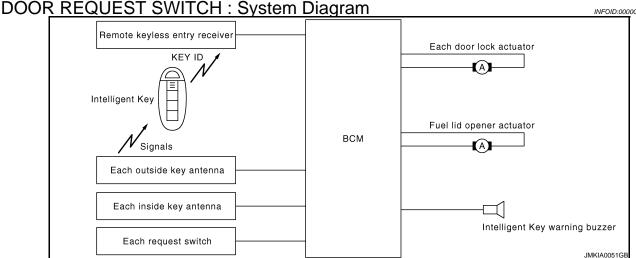
D

Е

Item	Function
BCM	Controls the door lock function and room lamp function.
Door lock and unlock switch	Transmits lock or unlock signal to BCM.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.
Door switch	Transmits door open/close condition to BCM.

DOOR REQUEST SWITCH

INFOID:000000000096109:



DOOR REQUEST SWITCH: System Description

INFOID:0000000000961092

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

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

The driver should always carry the Intelligent Key

- If an action that does not meet the operating conditions of the Intelligent Key system is taken, the buzzer goes off to inform the driver (Warning chime function).
- When a door lock is locked, unlocked or trunk open with request switch or remote controller button operation, the hazard lamps flash and the Intelligent Key warning buzzer or horn sounds (Hazard and buzzer/horn reminder function).
- The settings for each function can be changed with the 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 the CONSULT-III.

OPERATION DESCRIPTION/DOOR LOCK/UNLOCK

- 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.

DLK

M

Ν

< FUNCTION DIAGNOSIS >

• BCM sends the door lock/unlock signal and sounds Intelligent Key buzzer warning (lock: 2 time, unlock: 1 times) at the same time as a reminder.

OPERATION CONDITION

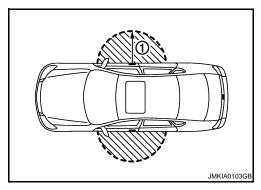
If the following conditions are not satisfied, door lock/unlock operation is not performed even if the request switch is operated.

Each request switch operation	Operation condition
Lock operation	 All doors are closed Ignition switch is in OFF position Intelligent Key is out of key slot Intelligent Key is outside the vehicle Intelligent Key is within outside key antenna detection area
Unlock Operation	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 and passenger door handles (1).



SELECTIVE UNLOCK FUNCTION

When an LOCK signal is sent from door request switch (driver side or passenger side), all doors will be locked. When an UNLOCK signal is sent from door request switch (driver side or passenger side) once, driver's door will be unlocked.

Then, if an UNLOCK signal is sent from door request switch (driver side and passenger side) again within 5 seconds, all other door will be unlocked.

HAZARD AND BUZZER REMINDER FUNCTION

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

When doors are locked, unlocked by each request switch, IPDM E/R honks Intelligent Key warning buzzer as a reminder and transmits hazard request signal to BCM via CAN communication line.

BCM flashes hazard warning lamps as a reminder.

Operating function of hazard and buzzer reminder

Operation	Hazard warning lamp flash	Intelligent Key warning buzzer honk
Unlock	Once	Once
Lock	Twice	Twice
Trunk open	_	Fourth times

How to change hazard and buzzer reminder mode

Refer to DLK-51, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

AUTO DOOR LOCK FUNCTION

When all doors are locked, ignition switch is in OFF position and key switch is OFF (Intelligent Key is not inserted in key slot), doors are unlocked with door request switch

When BCM does not receive the following signals within 60 seconds, all doors are locked.

- Door switch is ON (door is opened)
- Door is locked
- Ignition switch is ON (ignition switch is pressed)
- Key switch is ON (Intelligent Key is inserted in key slot)

DOOR LOCK FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Α

В

D

Е

F

Н

DLK

Ν

Р

Auto door lock mode can be changed by "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-51</u>. "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

ROOM LAMP OPERATION

When the following conditions are met:

- Condition of interior lamp switch is in DOOR position
- Door switch OFF (all the doors are closed)

Intelligent Key system turns on interior lamp (for 15 seconds) by receiving UNLOCK signal from door request switch. For detailed description, refer to INL-9, "System Description".

LIST OF OPERATION RELATED PARTS

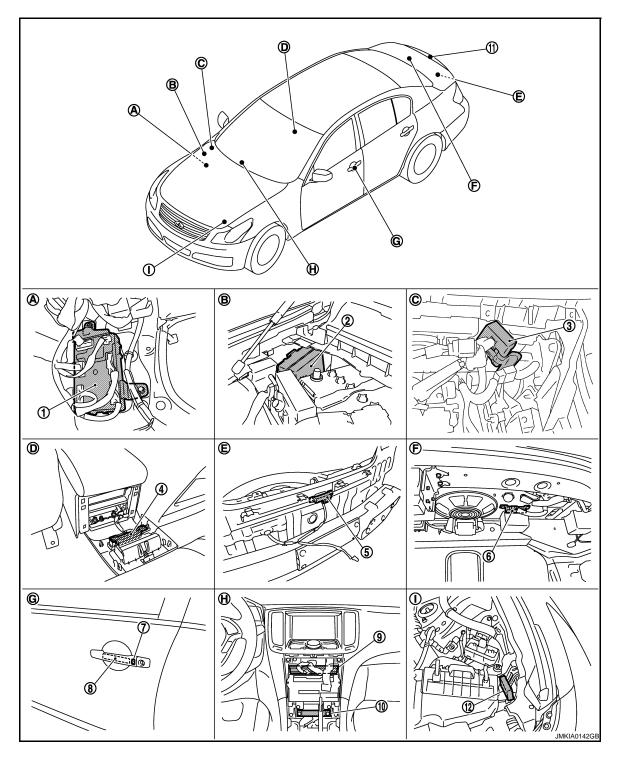
Parts marked with \times are the parts related to operation.

Door lock function	Intelligent Key	Key slot	Remote keyless entry receiver	Door switch	Door request switch (Driver, Passenger)	Door lock actuator	Inside key antenna	Outside key antenna (Driver, Passenger)	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Push-button ignition switch
Door lock/unlock function by request switch	×	×	×	×	×	×	×	×		×	×		
Hazard and buzzer reminder function for door lock/unlock operation									×	×	×	×	
Key reminder function	×	×	×	×	×	×	×	×	×	×	×	×	
Selective unlock function by request switch (Driver side)	×				×	×	×	×		×	×		
Selective unlock function by request switch (Passenger side)	×				×	×	×	×		×	×		
Auto door lock function	×	×		×	×	×				×	×		×

DOOR REQUEST SWITCH: Component Parts Location

INFOID:0000000000961093

DLK-15

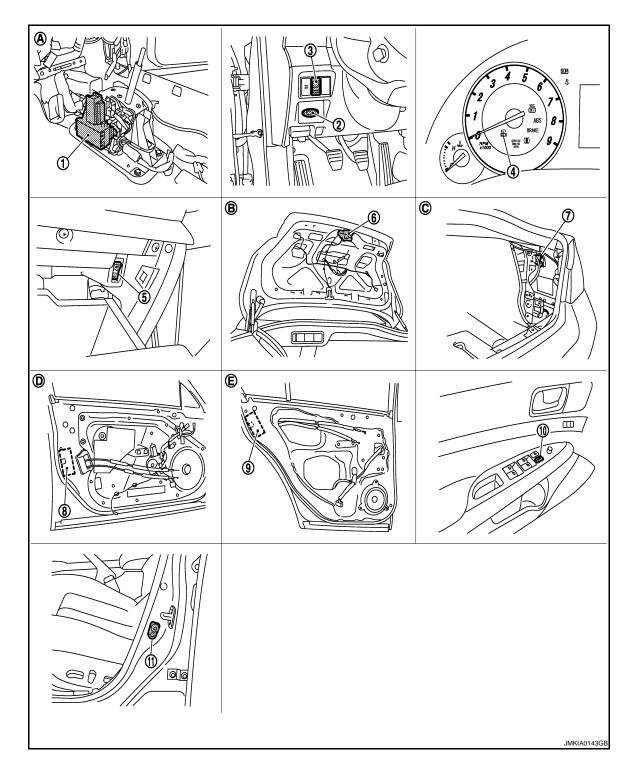


- BCM M118,M119,M120,M121,M122,M123
- 4. Inside key antenna (console) M146
- 7. Front outside handle LH (request switch)
 D13
- Inside key antenna (instrument center) M131
- A. Dash side lower (Passenger side).

- 2. IPDM E/R E5,E6
- 5. Outside key antenna (rear bumper)
- 8. Front outside handle LH (outside key antenna) D14
- 11. Trunk lid request switch B304
- B. Engine room dash panel (RH).

- 3. Remote keyless entry receiver M104
- 6. Inside key antenna (trunk room) B49
- Unified meter and A/C AMP M66,M67
- 12. Intelligent Key warning buzzer (engine room) E57
- View with instrument assist lower panel removed.

- View with console rear finisher removed. E.
 - View with rear bumper removed.
- G. View of front door LH.
- Behind cluster lid C.
- View with trunk rear finisher (upper) removed.
- ١. View with hood seal assembly removed.



- A/T device (detention switch)
- Combination meter (Key warning lamp) 4.
- 7. Fuel lid opener actuator B242
- 10. Power window main switch (door lock un- 11. Front door switch B16 lock switch) D8,D9
- 2. Key slot M22
- 5. Trunk opener cancel switch M105
- 3. Trunk lid opener switch M20
- Trunk lid lock assembly (trunk lid opener actuator) B303
- Front door lock assembly (driver side) D15 9. Rear door lock assembly D55

DLK-17

Α

В

D

Е

Н

DLK

M

Ν

0

[INTELLIGENT KEY SYSTEM]

- View with center console assembly removed.
- В. View with trunk lid finisher removed.
- C. View with trunk side finisher removed.

- D View with front door finisher removed.
- View with rear door finisher removed.

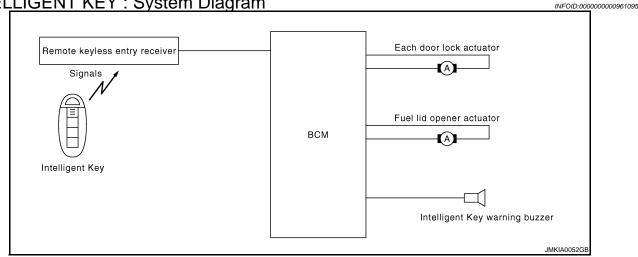
DOOR REQUEST SWITCH: Component Description

INFOID:0000000000961094

Item	Function
BCM	Controls the door lock function and room lamp function.
Door lock and unlock switch	Transmits lock or unlock signal to BCM.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.
Door switch	Transmits door open/close condition to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Request switch	Transmits 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.
Fuel lid opener actuator	Performs lock/unlock of the fuel lid.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.

INTELLIGENT KEY

INTELLIGENT KEY: System Diagram



INTELLIGENT KEY: System Description

INFOID:0000000000961096

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 DESCRIPTION/DOOR LOCK/UNLOCK FUNCTION

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

OPERATION CONDITION

Remote controller operation	Operation condition	Operation
Lock	All doors closed	All doors lock
Unlock	Intelligent Key is out of key slot	All doors unlock

[INTELLIGENT KEY SYSTEM]

OPERATION AREA

Operating Range

 To ensure the Intelligent Key works effectively, use within 80 cm range of each doors, however the operable range may differ according to surroundings.

SELECTIVE UNLOCK FUNCTION

When an LOCK signal is transmitted from Intelligent Key, all doors will be locked.

When an UNLOCK signal is transmitted from Intelligent Key once, driver's door will be unlocked.

Then, if an UNLOCK signal is transmitted from Intelligent Key again within 5 seconds, all other door will be unlocked.

HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by Intelligent Key, BCM flashes hazard warning lamps as a reminder and sends 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	Trunk open	Lock	Unlock	Trunk open				
Hazard warning lamp flash	Twice	Once	_	Twice	_	_				
Horn sound	Once	_	_	_	_	_				

Hazard and horn reminder does not operate if any door switch is ON (any door is OPEN).

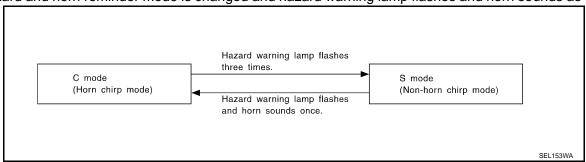
How to change hazard and horn reminder mode

With CONSULT-III

Refer to DLK-51, "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 flashes and horn sounds as follows:



AUTO DOOR LOCK FUNCTION

Auto Door Lock Function

When all doors are locked, ignition switch is OFF (ignition switch is not pressed) and key switch is OFF (Intelligent Key is not inserted in key slot), doors are unlocked with Intelligent Key button. When BCM does not receive the following signals within 30 seconds, all doors are locked.

- Door switch is ON (door is opened)
- Door is locked
- Ignition switch is ON
- Key switch is ON (Intelligent Key is inserted in key slot)

Auto door lock mode can be changed by "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to DLK-51, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

PANIC ALARM FUNCTION

When ignition switch is OFF (ignition switch is not pressed) and key switch is OFF (Intelligent Key is not inserted in key slot), BCM receives PANIC ALARM signal from Intelligent Key.

BCM turns on and off headlamp intermittently and transmits theft warning horn signal to IPDM E/R. Then, IPDM E/R turns on and off horn intermittently.

The headlamp flashes and the horn sounds intermittently.

The alarm automatically turns off:

- After 25 seconds
- When BCM receives any signal from Intelligent Key

DLK

Α

В

D

F

M

Ν

DOOR LOCK FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Panic alarm function mode can be changed by "PANIC ALARM SET" mode in "WORK SUPPORT". Refer to DLK-51, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

KEYLESS POWER WINDOW DOWN (OPEN) FUNCTION

All power windows open when the unlock button on Intelligent Key is activated and kept pressed for more than 3 seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed.

The power window opening stops when the following operations are performed:

- When the unlock button is kept pressed more than 15 seconds.
- When the ignition switch is turned ON while the power window opening is operated.
- When the unlock button is released.

While retained power operation activate, Keyless power window down (open) function cannot be operated. Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to DLK-51, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

ROOM LAMP ILLUMINATION OPERATION

When the following conditions are met:

- Condition of interior lamp switch is in DOOR position
- Door switch OFF (all the doors are closed)

Intelligent Key system turns on interior lamp (for 15 seconds) by receiving UNLOCK signal from Intelligent Key. For detailed description, refer to INL-9, "System Description".

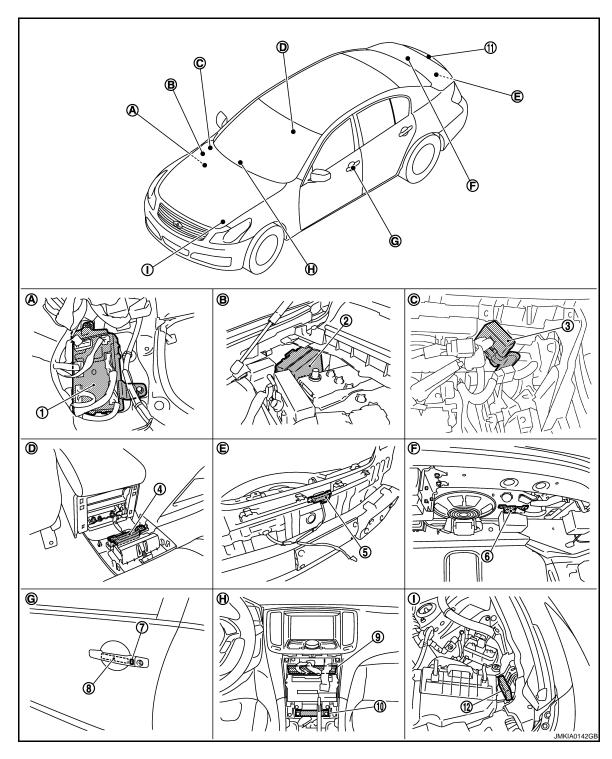
LIST OF OPERATION RELATED PARTS

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

Remote keyless entry functions	Intelligent Key	Key slot	Door request switch (Driver, Passenger)	Door switch	Door lock actuator	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamp	Horn	IPDM E/R	Head lamp
Door lock/unlock function by remote control button	×	×		×	×		×	×					
Hazard and horn reminder function	×					×	×	×	×	×	×	×	
Selective unlock function	×			×	×		×	×					
Keyless power window down (open) function	×	×					×	×					
Auto door lock function	×	×		×			×	×					
Panic alarm function	×		×				×	×			×	×	×

INTELLIGENT KEY: Component Parts Location

INFOID:0000000000961097



- **BCM** M118,M119,M120,M121,M122,M123
- Inside key antenna (console) M146
- 7. Front outside handle LH (request switch)
- 10. Inside key antenna (instrument center) M131
- A. Dash side lower (Passenger side).

- IPDM E/R E5,E6
- 5. Outside key antenna (rear bumper)
- 8. Front outside handle LH (outside key antenna) D14
- Trunk lid request switch B304
- Engine room dash panel (RH).

- 3. Remote keyless entry receiver M104
- Inside key antenna (trunk room) 6.
- 9. Unified meter and A/C AMP M66,M67
- 12. Intelligent Key warning buzzer (engine room) E57
- View with instrument assist lower panel removed.

Α

В

D

Е

F

Н

DLK

M

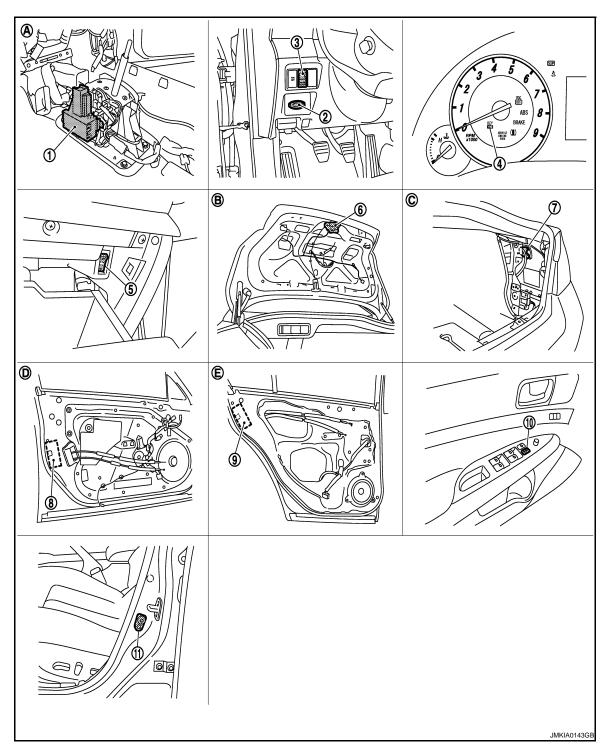
Ν

0

[INTELLIGENT KEY SYSTEM]

- View with console rear finisher removed. E.
 - View with rear bumper removed.

- View of front door LH.
- Behind cluster lid C.
- View with trunk rear finisher (upper) removed.
- I. View with hood seal assembly removed.



- A/T device (detention switch)
- Combination meter (Key warning lamp)
- 7. Fuel lid opener actuator B242
- 10. Power window main switch (door lock un- 11. Front door switch B16 lock switch) D8,D9
- 2. Key slot M22
- Trunk opener cancel switch M105 5.
- 3. Trunk lid opener switch M20
- Trunk lid lock assembly (trunk lid opener actuator) B303
- Front door lock assembly (driver side) D15 9. Rear door lock assembly D55

DOOR LOCK FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

- A. View with center console assembly removed.
- B. View with trunk lid finisher removed.
- C. View with trunk side finisher removed.

- D View with front door finisher removed.
- E View with rear door finisher removed.

INTELLIGENT KEY: Component Description

INFO	ID-000	ากกกกก	ากกดล	1008	

Item	Function
BCM	Controls the door lock function and room lamp function.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.
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.
Fuel lid opener actuator	Performs lock/unlock of the fuel lid.
Intelligent key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.

F

Α

В

С

D

Е

G

Н

J

DLK

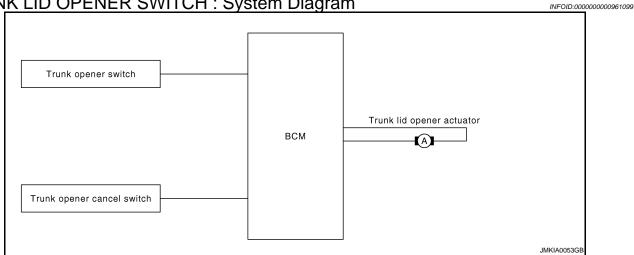
M

Ν

0

TRUNK OPEN FUNCTION TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH: System Diagram



TRUNK LID OPENER SWITCH: System Description

INFOID:0000000000961100

Switch	Input/output signal to BCM	BCM function	Actuator			
Trunk lid opener switch						
Trunk lid opener cancel switch	Trunk open signal	Trunk open control	Trunk lid opener actuator			
Door key cylinder switch						

TRUNK LID OPENER OPERATION

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

BCM can open trunk lid opener actuator when

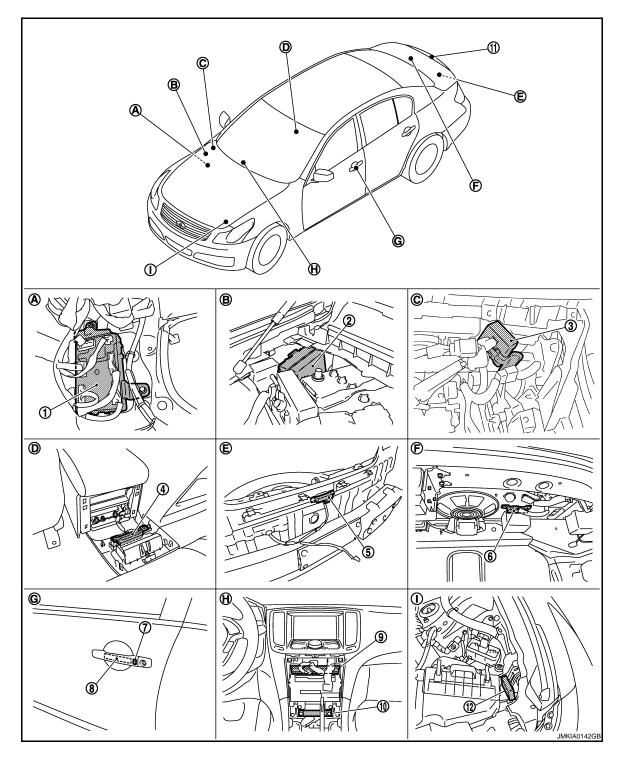
- vehicle speed is less than 5 km/h (3MPH)
- vehicle security system is disarmed or pre-armed phase

BCM does not open trunk lid opener actuator when

- trunk lid opener cancel switch is OFF (CANCEL)
- vehicle speed is more than 5 km/h (3MPH)
- vehicle security system is armed or alarm phase
- Intelligent Key is inserted in key slot

TRUNK LID OPENER SWITCH: Component Parts Location

INFOID:0000000000961101



- 1. BCM M118,M119,M120,M121,M122,M123
- 4. Inside key antenna (console) M146
- 7. Front outside handle LH (request switch)
 D13
- Inside key antenna (instrument center) M131
- A. Dash side lower (Passenger side).

- 2. IPDM E/R E5,E6
- 5. Outside key antenna (rear bumper)
- 8. Front outside handle LH (outside key antenna) D14
- 11. Trunk lid request switch B304
- B. Engine room dash panel (RH).

- Remote keyless entry receiver M104
- 6. Inside key antenna (trunk room)
 849
- Unified meter and A/C AMP M66,M67
- 12. Intelligent Key warning buzzer (engine room) E57
- View with instrument assist lower panel removed.

Α

В

C

D

Е

F

G

Н

J

DLK

M

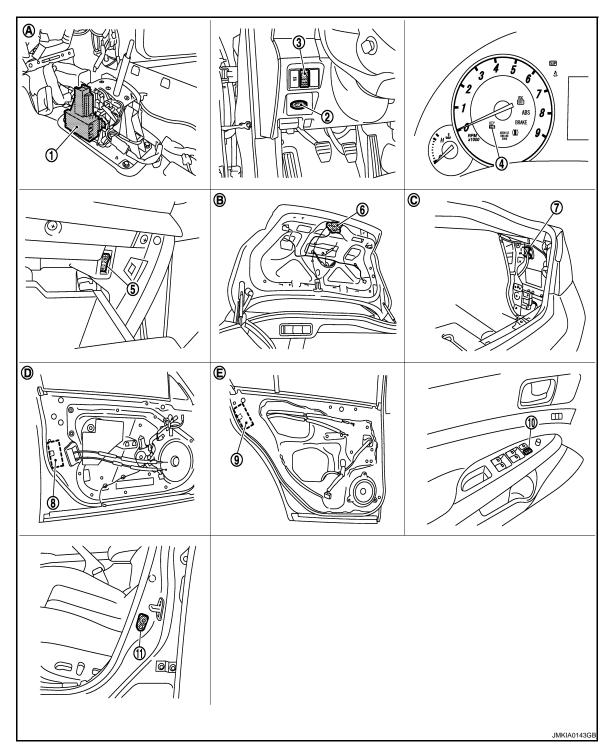
Ν

0

Р

- View with console rear finisher removed. E.
 - View with rear bumper removed.
- View with trunk rear finisher (upper) removed.

- View of front door LH.
- Behind cluster lid C.
- I. View with hood seal assembly removed.



- A/T device (detention switch)
- Combination meter (Key warning lamp)
- 7. Fuel lid opener actuator B242
- 10. Power window main switch (door lock un- 11. Front door switch B16 lock switch) D8,D9
- 2. Key slot M22
- Trunk opener cancel switch M105 5.
- 3. Trunk lid opener switch M20
- Trunk lid lock assembly (trunk lid opener actuator) B303
- Front door lock assembly (driver side) D15 9. Rear door lock assembly D55

TRUNK OPEN FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

- View with center console assembly removed.
- View with trunk lid finisher removed.
- C. View with trunk side finisher removed.

- View with front door finisher removed.
- View with rear door finisher removed.

TRUNK LID OPENER SWITCH: Component Description

INFOID:0000000000961102	

Α

В

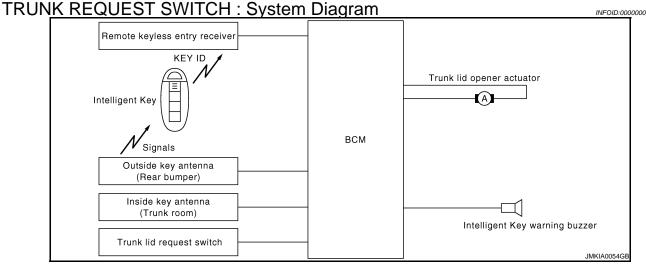
D

Е

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

TRUNK REQUEST SWITCH

INFOID:0000000000961103



TRUNK REQUEST SWITCH: System Description

INFOID:0000000000961104

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

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

CAUTION:

The driver should always carry the Intelligent Key

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

OPERATION DESCRIPTION/TRUNK OPEN

- When the BCM detects that trunk open request switch is pressed, it starts the outside key antenna (trunk room) and inside key antenna corresponding to the pressed trunk open request switch and transmits the request signal to the Intelligent Key. And then, check that the Intelligent Key is near the trunk.
- If the Intelligent Key is within the outside key antenna (trunk room) detection area, it receives the request signal and transmits the key ID signal to the BCM via remote keyless entry receiver.
- BCM receives the key ID signal and compares it with the registered key ID.
- BCM transmits the trunk open request signal and sounds Intelligent Key warning buzzer 4 times at the same time.

DLK

Ν

< FUNCTION DIAGNOSIS >

• When BCM receives the trunk open request signal, it operates the trunk lid opener actuator and opens the trunk.

OPERATION CONDITION

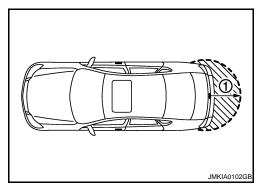
If the following conditions are not satisfied, trunk open operation is not performed even if the request switch is operated.

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

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



KEY REMINDER FUNCTION

Key remainder function	Operation condition	Operation
Trunk is closed	Right after trunk is closed under the following conditions Intelligent Key is inside trunk room All doors are closed All doors are locked	Trunk open 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 will be perform at these cases.

CAUTION:

- The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key cannot be detected, and this function will not operate when the Intelligent Key is on the instrument panel, rear parcel shelf, or in the glove box. Also, this system sometimes does not operate if the Intelligent Key is in the door pocket for the open door.
- When the key reminder function is operated when the trunk is opened/closed and the buzzers sound, if the following operations are performed, the key reminder function is cleared and buzzer sounds are stopped.
- Remote controller door lock button operation of Intelligent Key
- Remote controller door unlock button operation of Intelligent Key
- When the trunk is closed, the Intelligent Key is not inside the vehicle
- When any door is open

HAZARD AND BUZZER REMINDER FUNCTION

During trunk opening operation by request switch, the hazard warning lamps and Intelligent Key warning buzzer will flash or honk as a reminder.

When trunk open by each request switch, IPDM E/R honks Intelligent Key warning buzzer as a reminder and transmits hazard request signal to BCM via CAN communication line.

BCM flashes hazard warning lamps as a reminder.

Operating function of hazard and buzzer reminder

Operation	Hazard warning lamp flash	Intelligent Key warning buzzer honk					
Trunk open	-	Fourth					

TRUNK OPEN FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

(I) With CONSULT-III

Refer to DLK-51, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

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

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

TRUNK REQUEST SWITCH: Component Parts Location

INFOID:0000000000961105

DLK

J

Α

В

C

D

Е

F

G

Н

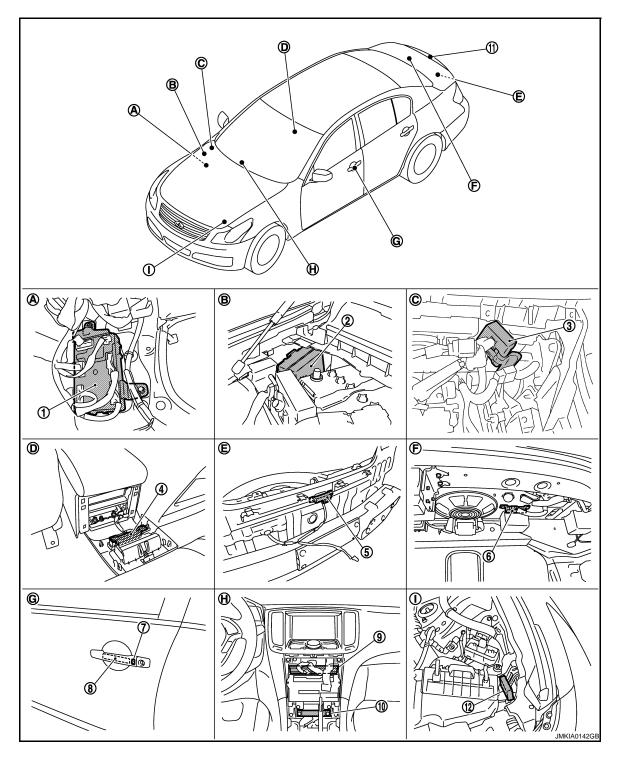
L

M

Ν

0

Ρ

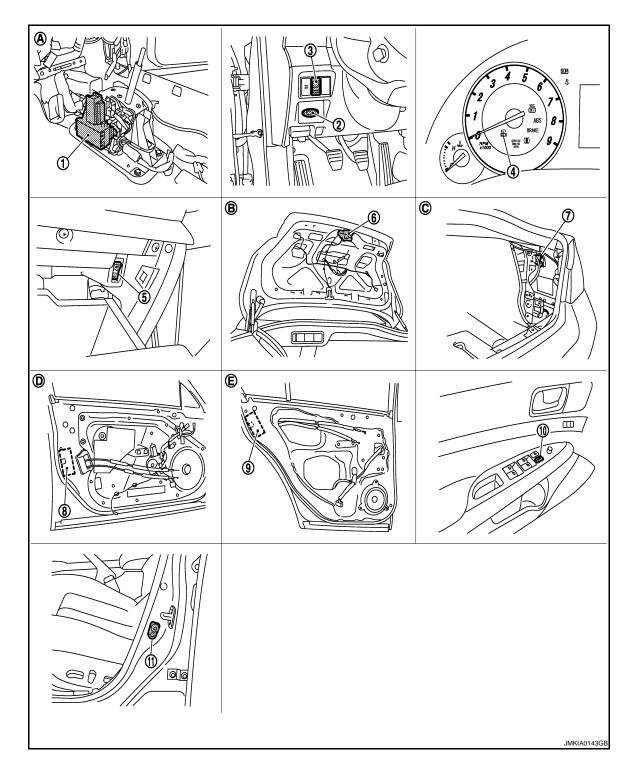


- 1. BCM M118,M119,M120,M121,M122,M123
- 4. Inside key antenna (console) M146
- 7. Front outside handle LH (request switch)
- Inside key antenna (instrument center) M131
- A. Dash side lower (Passenger side).

- 2. IPDM E/R E5,E6
- 5. Outside key antenna (rear bumper)
- 8. Front outside handle LH (outside key antenna) D14
- 11. Trunk lid request switch B304
- B. Engine room dash panel (RH).

- 3. Remote keyless entry receiver M104
- 6. Inside key antenna (trunk room) B49
- Unified meter and A/C AMP M66,M67
- 12. Intelligent Key warning buzzer (engine room) E57
- View with instrument assist lower panel removed.

- View with console rear finisher removed. E.
 - View with rear bumper removed.
- G. View of front door LH.
- Behind cluster lid C.
- View with trunk rear finisher (upper) removed.
- ١. View with hood seal assembly removed.



- A/T device (detention switch)
- Combination meter (Key warning lamp) 4.
- 7. Fuel lid opener actuator B242
- 10. Power window main switch (door lock un- 11. Front door switch B16 lock switch) D8,D9
- 2. Key slot M22
- 5. Trunk opener cancel switch M105
- 3. Trunk lid opener switch M20
- Trunk lid lock assembly (trunk lid opener actuator) B303
- Front door lock assembly (driver side) D15 9. Rear door lock assembly D55

В

Α

D

Е

Н

DLK

M

Ν

0

[INTELLIGENT KEY SYSTEM]

- View with center console assembly removed.
- В. View with trunk lid finisher removed.
- C. View with trunk side finisher removed.

- View with front door finisher removed.
- View with rear door finisher removed.

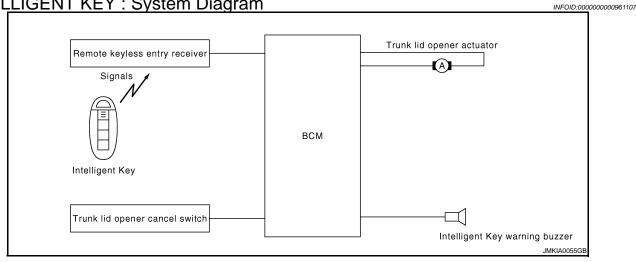
TRUNK REQUEST SWITCH: Component Description

INFOID:0000000000961106

Item	Function
BCM	Controls trunk open function.
Trunk lid opener actuator	Transmits trunk open operation to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Trunk request switch	Transmits trunk open 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.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.

INTELLIGENT KEY

INTELLIGENT KEY: System Diagram



INTELLIGENT KEY: System Description

INFOID:0000000000961108

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 trunk open button.

OPERATION DESCRIPTION/TRUNK OPEN FUNCTION

- When trunk button of the Intelligent Key is pressed, the trunk open signal is transmitted from the Intelligent Key to the BCM via remote keyless entry receiver.
- When BCM receives the trunk open request signal, it operates the trunk lid opener actuator and opens the trunk.

OPERATION CONDITION

Remote controller operation	Operation condition	Operation
Trunk open	Press and hold the trunk open button for 0.5 second or more	Trunk open

OPERATION AREA

- Operating Range
- To ensure the Intelligent Key works effectively, use within 80 cm range of each door, however the operable range may differ according to surroundings.

HAZARD AND HORN REMINDER FUNCTION

TRUNK OPEN FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

When doors are locked or unlocked by Intelligent Key. BCM flashes 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	Trunk open	Lock	Unlock	Trunk open			
Hazard warning lamp flash	Twice	Once	_	Twice	_	_			
Horn sound	Once	_	_	_	_	_			

Hazard and horn reminder does not operate if any door switch is ON (any door is OPEN).

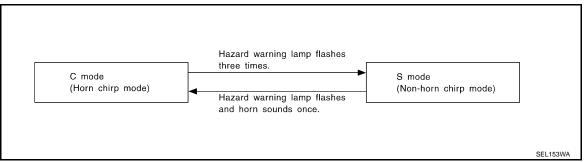
How to change hazard and horn reminder mode

With CONSULT-III

Refer to DLK-51, "INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY)".

Without CONSULT-III

When LOCK and UNLOCK signals are transmitted 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 flashes and horn sounds as follows:



LIST OF OPERATION RELATED PARTS

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

Remote keyless entry functions	Intelligent Key	Key slot	Trunk room lamp switch	Trunk lid opener actuator	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamp	Horn	IPDM E/R	Head lamp
Trunk open function by remote control button	×	×	×	×		×	×					
Hazard and horn reminder function	×				×	×	×	×	×	×	×	

INTELLIGENT KEY: Component Parts Location

INFOID:0000000000961109

DLK-33

Α

В

D

Е

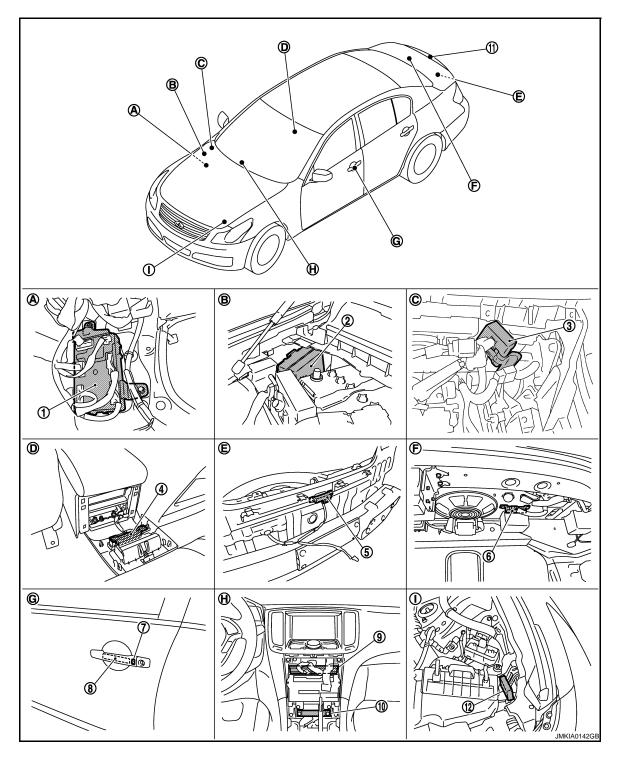
F

Н

DLK

M

Ν

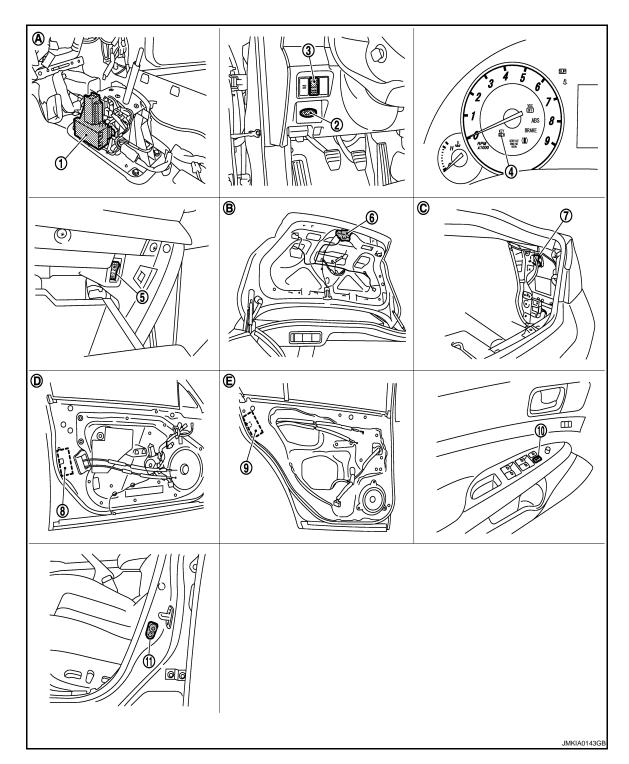


- 1. BCM M118,M119,M120,M121,M122,M123
- 4. Inside key antenna (console) M146
- 7. Front outside handle LH (request switch)
 D13
- Inside key antenna (instrument center) M131
- A. Dash side lower (Passenger side).

- 2. IPDM E/R E5,E6
- 5. Outside key antenna (rear bumper)
- 8. Front outside handle LH (outside key antenna) D14
- 11. Trunk lid request switch B304
- B. Engine room dash panel (RH).

- 3. Remote keyless entry receiver M104
- 6. Inside key antenna (trunk room) B49
- Unified meter and A/C AMP M66,M67
- 12. Intelligent Key warning buzzer (engine room) E57
- C. View with instrument assist lower panel removed.

- View with console rear finisher removed. E.
 - View with rear bumper removed.
- G. View of front door LH.
- Behind cluster lid C.
- View with trunk rear finisher (upper) removed.
- ١. View with hood seal assembly removed.



- A/T device (detention switch)
- Combination meter (Key warning lamp) 4.
- 7. Fuel lid opener actuator B242
- 10. Power window main switch (door lock un- 11. Front door switch B16 lock switch) D8,D9
- 2. Key slot M22
- 5. Trunk opener cancel switch M105
- Trunk lid lock assembly (trunk lid opener actuator) B303
- Front door lock assembly (driver side) D15 9. Rear door lock assembly D55

- 3. Trunk lid opener switch M20

Α

В

D

Е

Н

DLK

M

Ν

0

TRUNK OPEN FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

- A. View with center console assembly removed.
- B. View with trunk lid finisher removed.
- View with trunk side finisher removed.

- D View with front door finisher removed.
- E View with rear door finisher removed.

INTELLIGENT KEY: Component Description

INFOID:0000000000961110

Item	Function
BCM	Controls trunk open function.
Trunk lid opener actuator	Opens the trunk with the open signal from BCM.
Remote keyless entry receiver	Receives trunk open signal from the Intelligent Key, and then transmits to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.

WARNING FUNCTION

System Description

INFOID:0000000000961111

Α

В

D

Е

F

Н

DLK

M

Ν

Р

OPERATION DESCRIPTION

The warning function are as follows and are given to the user as warning information and warnings using combinations of Intelligent Key warning buzzer, KEY warning lamp, key slot illumination and combination meter display in combination meter.

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

OPERATION CONDITION

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

Warning/Info	rmation functions	Operation procedure
Intelligent Key system m	alfunction	When a malfunction is detected on BCM, "KEY" warning lamp will illuminate.
	For internal	Ignition switch: ACC position.Door switch (driver side): ON (Door is open).
OFF position warning	For external	OFF position warning (For internal) is in active mode, driver side door has been closed. NOTE: OFF position (For external) active only when each of the sequence has occurred as below: P position warning \rightarrow ACC warning \rightarrow OFF position warning (For internal) \rightarrow OFF position warning (For internal)
P position warning		 Shift position: Except P position Engine is running to stopped (Ignition switch is ON to OFF)
ACC warning		 During P position warning is in active mode, shift position has changed P position. Ignition switch: Except OFF position.
	Door is open to close	 Ignition switch: Except LOCK position. Door switch: ON to OFF (Door is open to close). Intelligent Key can not be detected inside the vehicle.
	Door is open	 Door switch: ON (Door is open) Key ID verification every 5 seconds when registered Intelligent Key can not be detected inside the vehicle.
Take away warning	Push-ignition switch operation	 Ignition switch: Except LOCK position. Press ignition switch. Intelligent Key can not be detected inside the vehicle.
	Take away through window	 Engine is running. Key ID verification every 30 seconds when registered Intelligent Key can not be detected inside the vehicle. After vehicle speed verification, the registered Intelligent Key can not be detect inside the vehicle.
	Intelligent Key is removed from key slot	When Intelligent Key is removed from key slot, Intelligent Key can not be detected inside the vehicle.

Warning/Inforn	nation functions	Operation procedure
Door look operation worn	Request switch operation	 When request switch is pushed (lock operation) under the following conditions. Door switch: ON (Any door is open). Intelligent Key is inside vehicle.
Door lock operation warning	Intelligent Key button operation	 When Intelligent Key button is pushed (lock operation) under the following conditions. Door switch: ON (Any door is open). For 3 seconds after Intelligent Key is removed from key slot.
Key warning		 Ignition switch is OFF position. Driver side door switch: ON (Driver side door is open). Intelligent Key is inserted in key slot.
Intelligent Key insert inforr	nation	 Door switch: ON to OFF (Door is open to close). Ignition switch: OFF to ON position. Intelligent Key is out of key slot. Intelligent Key can not be detected inside the vehicle.
	Ignition switch is ON position	Ignition switch: ON position.Shift position: P positionEngine is stopped
Engine start information	Ignition switch is except ON position	 Ignition switch: Except ON position. Shift position: P position Intelligent Key is inserted in key slot. Intelligent Key can be detected inside the vehicle.
Steering lock information		When steering lock can not be released after ignition switch is turned ON.
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 can not be detected inside the vehicle after ignition switch is turned ON.

WARNING METHOD

The following table shows the alarm or warning methods with chime. Meter display, "KEY" indicator or key slot illumination when the warning conditions are met.

					Warning	g chime
Warning/Information functions		"KEY" warn- ing lamp	Combination meter display	Key slot il- lumination	Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key system	m malfunction	Illuminate	_	_	_	_
OFF position warn-	For internal	_	_	_	Activate	_
ing	For external	_	_	_	_	Activate
P position warning		_	SHIFT JMKIA0037GB	_	Activate	_
ACC warning		_	PUSH JMKIA0047GB	_	Activate	_

					Warning	
Warning/Information functions		"KEY" warn- ing lamp	Combination meter display	Key slot il- lumination	Combination meter buzzer	Intelligent Key warning buzzer
	Door is open to close	_		Flash	Activate	Activate
	Door is open	_		Flash	_	_
Take away warning	Push-ignition switch operation	_	NO	Flash	Activate	_
and away warriing	Take away through window	_	NO KEY	Flash	Activate	_
	Intelligent Key is removed from key slot	_	JMKIA0036GB	Flash	_	_
Door lock operation	Request switch operation	_	_	_	_	Activate
varning	Intelligent Key operation	_	_	_	_	Activate
	l					
Key ID warning		_	NO KEY	_	_	_
			JMKIA0036GB			
Key warning		_		Flash	Activate	_
ntelligent Key insert	t information	_	JMKIA0035GB	Flash	_	_
Engine start infor	Automatic trans- mission models	_	BRAKE JMKIA0032GB	_	_	_
Engine start infor- mation			Simure00200			
	Manual trans- mission models	_	CLUCH 😃	_	_	_

				Warning chime			
Warning/Information functions	"KEY" warn- ing lamp	Combination meter display	Key slot il- lumination	Combination meter buzzer	Intelligent Key warning buzzer		
Steering lock information	_	JMKIA0033GB	_	_	_		
Intelligent Key low battery warning	_	JMKIA0048GB	_	_	_		

LIST OF OPERATION RELATED PARTS

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

Warnin	g function	Intelligent Key	Key slot	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	Combination meter display	Key slot illumination	Park position switch	"KEY" warning lamp
Intelligent Key system ma	Ifunction										×	×				×
OFF position warning	For internal				×					×	×	×				
	For external				×				×		×	×				
P position warning				×						×	×	×	×		×	
ACC warning				×						×	×	×	×		×	
	Door is open or close	×			×		×		×	×	×	×	×	×		
	Door is open	×			×		×				×	×	×	×		
Take away warning	Push-ignition switch operation	×		×			×			×	×	×	×	×		
.se and, naming	Take away through window	×					×			×	×	×	×	×		
	Intelligent Key is removed from key slot	×	×				×				×	×	×	×		
Door lock operation warning	ng	×	×		×	×	×	×	×		×	×				
Key ID warning		×	×	×			×				×	×	×			
Key warning		×	×		×					×	×	×	×	×		
Intelligent Key insert inform	nation	×	×	×	×		×				×	×	×	×		

WARNING FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Warning function		Intelligent Key	Key slot	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	Combination meter display	Key slot illumination	Park position switch	"KEY" warning lamp
Engine start information	Ignition switch is ON position	×	×	×			×				×	×	×		×	
Engine start information	Ignition switch is except ON position	×	×	×			×				×	×	×			
Steering lock information				×							×	×	×			
Intelligent Key low battery	warning	×					×				×	×	×			

Component Parts Location

INFOID:0000000000961112

G

Α

В

С

D

Е

F

Н

J

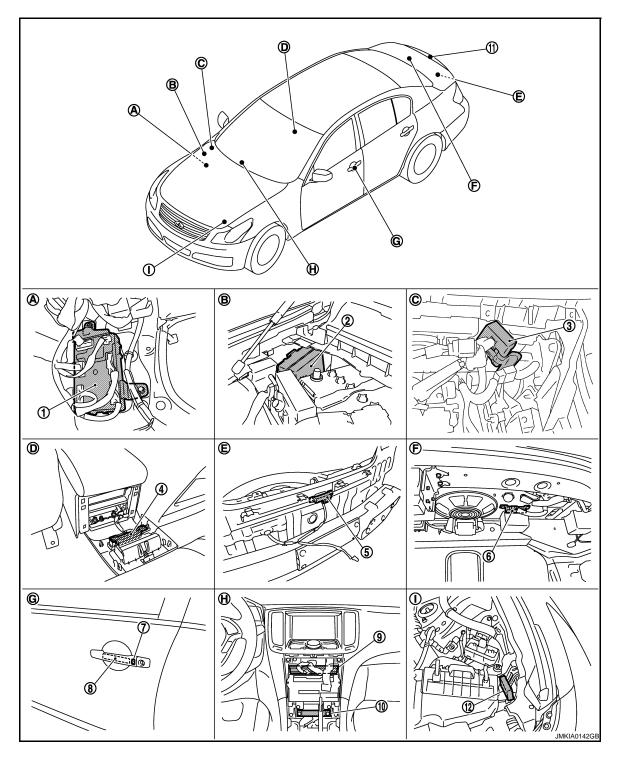
DLK

L

 \mathbb{N}

Ν

0

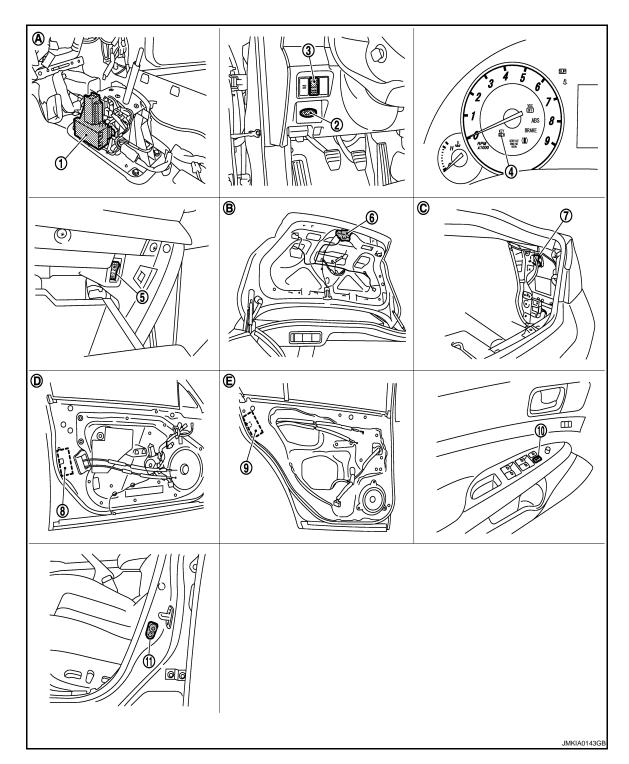


- 1. BCM M118,M119,M120,M121,M122,M123
- 4. Inside key antenna (console) M146
- 7. Front outside handle LH (request switch)
 D13
- Inside key antenna (instrument center) M131
- A. Dash side lower (Passenger side).

- 2. IPDM E/R E5,E6
- 5. Outside key antenna (rear bumper)
- 8. Front outside handle LH (outside key antenna) D14
- 11. Trunk lid request switch B304
- B. Engine room dash panel (RH).

- 3. Remote keyless entry receiver M104
- 6. Inside key antenna (trunk room) B49
- Unified meter and A/C AMP M66,M67
- 12. Intelligent Key warning buzzer (engine room) E57
- View with instrument assist lower panel removed.

- View with console rear finisher removed. E.
 - View with rear bumper removed.
- G. View of front door LH.
- Behind cluster lid C.
- View with trunk rear finisher (upper) removed.
- ١. View with hood seal assembly removed.



- A/T device (detention switch)
- Combination meter (Key warning lamp) 4.
- 7. Fuel lid opener actuator B242
- 10. Power window main switch (door lock un- 11. Front door switch B16 lock switch) D8,D9
- 2. Key slot M22
- 5. Trunk opener cancel switch M105
- 3. Trunk lid opener switch M20
- Trunk lid lock assembly (trunk lid opener actuator) B303
- Front door lock assembly (driver side) D15 9. Rear door lock assembly D55

Α

В

D

Е

Н

DLK

M

Ν

0

WARNING FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

- A. View with center console assembly removed.
- B. View with trunk lid finisher removed.
- View with trunk side finisher removed.

- D View with front door finisher removed.
- E View with rear door finisher removed.

KEY REMINDER FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

KEY REMINDER FUNCTION

System Description

INFOID:0000000000961113

Α

В

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

Key remainder function	Operation condition	Operation
Driver door closed*	Right after driver side door is closed under the following conditions Door lock operation is performed Driver side door is 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
Trunk is closed	Right after trunk is closed under the following conditions Intelligent Key is inside trunk room All doors are closed All doors are locked	Trunk open 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 will be 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 will not operate when the Intelligent Key is on the instrument panel, rear parcel shelf, or in the glove box. Also, this system sometimes does not operate if the Intelligent Key is in the door pocket for the open door.
- When the key reminder function is operated when the trunk is open/closed and the buzzers sound, if the following operations are performed, the key reminder function is cleared and buzzer sounds are stopped.
- Remote controller door lock button operation of Intelligent Key
- Remote controller door unlock button operation of Intelligent Key
- When the trunk is closed, the Intelligent Key is not inside the vehicle
- When any door is open

Component Parts Location

INFOID:0000000000961114

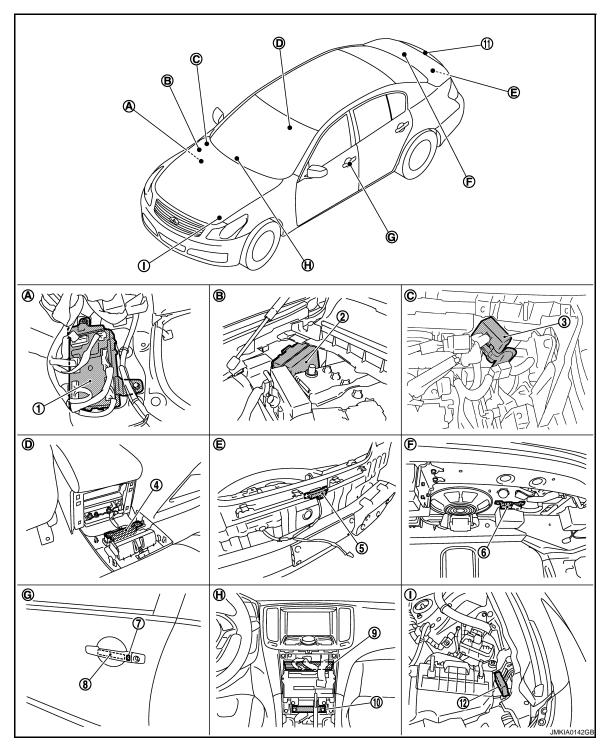
DLK

JLK

IVI

Ν

0



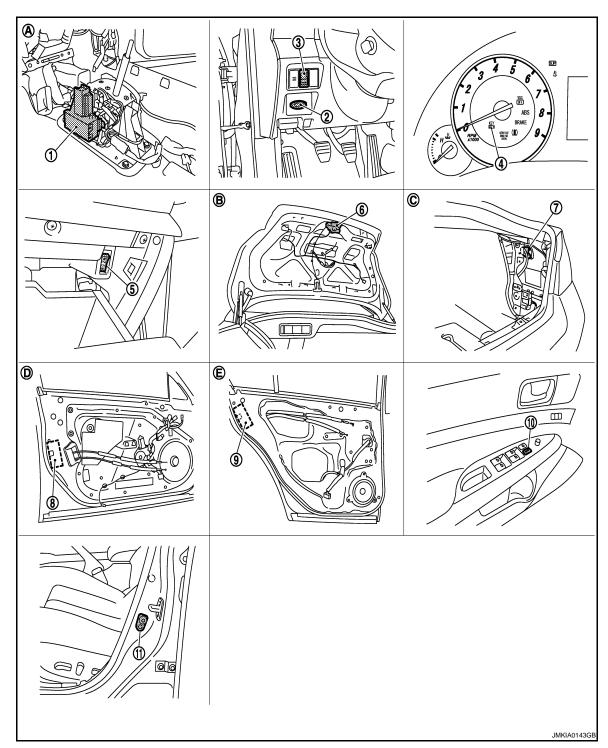
- 1. BCM M118,M119,M120,M121,M122,M123
- 4. Inside key antenna (console) M146
- 7. Front outside handle LH (request switch)
 D13
- Inside key antenna (instrument center) M131
- A. Dash side lower (Passenger side).

- 2. IPDM E/R E5,E6
- 5. Outside key antenna (rear bumper)
- 8. Front outside handle LH (outside key antenna) D14
- 11. Trunk lid request switch B304
- B. Engine room dash panel (RH).

- 3. Remote keyless entry receiver M104
- 6. Inside key antenna (trunk room) B49
- Unified meter and A/C AMP M66,M67
- 12. Intelligent Key warning buzzer (engine room) E57
- C. View with instrument assist lower panel removed.

- View with console rear finisher removed. E.
 - View with rear bumper removed.

- G. View of front door LH.
- Behind cluster lid C.
- View with trunk rear finisher (upper) removed.
- ١. View with hood seal assembly removed.



- A/T device (detention switch)
- Combination meter (Key warning lamp) 5. 4.
- 7. Fuel lid opener actuator B242
- 10. Power window main switch (door lock un- 11. Front door switch B16 lock switch) D8,D9
- 2. Key slot M22
- Trunk opener cancel switch M105
- 3. Trunk lid opener switch M20
- Trunk lid lock assembly (trunk lid opener actuator) B303
- Front door lock assembly (driver side) D15 9. Rear door lock assembly D55

В

Α

D

Е

Н

DLK

M

Ν

0

KEY REMINDER FUNCTION

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

- A. View with center console assembly removed.
- B. View with trunk lid finisher removed.
- View with trunk side finisher removed.

- D View with front door finisher removed.
- E View with rear door finisher removed.

INTEGRATED HOMELINK TRANSMITTER

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

INTEGRATED HOMELINK TRANSMITTER

Component Description

INFOID:0000000000961115

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

С

Α

В

D

Е

F

G

Н

J

DLK

L

M

Ν

0

COMMON ITEM

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

INFOID:0000000000961116

APPLICATION ITEM

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to BCS-74, "DTC Index".
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	This function is not used even though it is displayed.

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.

Custom	Cub quatam adjection 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	×	×	×					
Air conditioner*	AIR CONDITONER		×						
Intelligent Key system	INTELLIGENT KEY	×	×	×					
Combination switch	COMB SW		×						
BCM	BCM	×							
IVIS - NATS	IMMU		×	×					
Interior room lamp battery saver	BATTERY SAVER	×	×	×					
Trunk open	TRUNK		×						
Vehicle security system	THEFT ALM	×	×	×					
RAP system	RETAINED PWR		×						
Signal buffer system	SIGNAL BUFFER		×	×					
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×					

^{*:} This item is displayed, but is not used.

DOOR LOCK

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

INFOID:0000000000961117

BCM CONSULT-III FUNCTION

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

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

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) or not operate (WITHOUT) with this mode.
D/LOCK VHCL SPD AJT	Lock with speed customize function mode can be changed to operate (WITH) or not operate (WITHOUT) with this mode.

DATA MIONITOR

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 trunk opener 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	NOTE: This item is displayed, but cannot be monitored.
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 key cylinder.
KEY CYL UN-SW	Indicated [ON/OFF] condition of unlock signal from 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 "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

INTELLIGENT KEY: CONSULT-III Function (BCM - INTELLIGENT KEY) INFOID:00000000061118

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.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM.

DLK

Α

В

D

Е

F

Н

N/I

Ν

0

< FUNCTION DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

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

WORK SUPPORT

Monitor item	Description
REMO CONT ID CONFIR	It can be checked whether Intelligent Key ID code is registered or not in this mode.
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch (driver side, passenger side and trunk) mode can be changed to operate (ON) or not operate (OFF) in this mode.
ENGINE START BY I-KEY	Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode.
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by trunk opener request switch can be changed to operate (ON) or not operate (OFF) with this mode.
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. • 0.5 sec. • 1.5 sec. • OFF: Non-operation
PW DOWN SET	Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. • 3 sec. • 5 sec. • OFF: Non-operation
TRUNK OPEN DELAY	Trunk button pressing time on Intelligent Key button can be selected from the following with this mode. • 0.5 sec. • 1.5 sec. • OFF: Non-operation
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode.
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode.
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.
HAZARD ANSWER BACK	Hazard reminder function mode can be selected from the following with this mode. • LOCK ONLY: Door lock operation only • UNLOCK ONLY: Door unlock operation only • LOCK AND 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 operate (ON) or not operate (OFF) with this mode.
SHORT CRANKING OUTPUT	Starter motor can operate during the times below. • 70 msec • 100 msec • 200 msec
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.

SELF-DIAG RESULT

Refer to BCS-74, "DTC Index".

DATA MONITOR

Ρ

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 trunk opener request switch.
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.
CLUCH SW	Indicates [ON/OFF] condition of clutch switch.
BRAKE SW 1	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 (LOCK).
S/L -UNLOCK	Indicates [ON/OFF] condition of steering lock (UNLOCK).
S/L RELAY-F/B	Indicates [ON/OFF] condition of ignition switch.
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/START/CRANK/RUN] condition of engine states.
S/L LOCK-IPDM	Indicates [ON/OFF] condition of steering lock (LOCK).
S/L UNLOCK-IPDM	Indicates [ON/OFF] condition of steering lock (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 CVT 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.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.
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.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.
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	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.
RKE-PANIC	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.
RKE-P/W OPEN	Indicates [ON/OFF] condition of P/W DOWN signal from Intelligent Key.
RKE-MODE CHG	Indicates [ON/OFF] condition of MODE CHANGE signal from Intelligent Key.

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT-III screen is touched.
PW REMOTO DOWN SET	This test is able to check power window down operation. The power window down will be activated after "ON" on CONSULT-III screen is touched.

Test item	Description
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. Intelligent Key warning buzzer sounds when "ON" on CONSULT-III screen is touched.
INSIDE BUZZER	This test is able to check warning chime in combination meter operation. Take away warning chime sounds when "TAKE OUT" on CONSULT-III screen is touched. Key warning chime sounds when "KEY WARN" on CONSULT-III screen is touched. P position warning chime sounds when "P RNG WARN" on CONSULT-III screen is touched. ACC warning chime sounds when "ACC WARN" on CONSULT-III screen is touched.
INDICATOR	This test is able to check warning lamp operation. • "KEY" Warning lamp illuminates when "KEY IND ON" on CONSULT-III screen is touched. • "KEY" Warning lamp flashes when "KEY IND FSH" on CONSULT-III screen is touched.
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT-III screen is touched.
LCD	This test is able to check meter display information Engine start information displays when "BRAKE/P" on CONSULT-III screen is touched. Engine start information displays when "BRAKE/P/ON" on CONSULT-III screen is touched. Key ID warning displays when "KEY ID NG" on CONSULT-III screen is touched. Steering lock information displays when "STLCK RELES" on CONSULT-III screen is touched. Position warning displays when "P RNG IND" on CONSULT-III screen is touched. Intelligent Key insert information displays when "INSERT KEY" on CONSULT-III screen is touched. Intelligent Key low battery warning displays when "KEY BAT LOW" on CONSULT-III screen is touched. Take away through window warning displays when "TK AWAY WDW" on CONSULT-III screen is touched. Take away warning display when "TAKE AWAY" on CONSULT-III screen is touched. OFF position warning display when "IGN OFF WARN" on CONSULT-III screen is touched.
TRUNK/GLASS HATCH	This test is able to check trunk lid opener actuator open operation. This actuator opens when "ON" on CONSULT-III screen is touched.
FLASHER	This test is able to check security hazard lamp operation. The hazard lamps will be activated after "ON" on CONSULT-III screen is touched.
HORN	This test is able to check horn operation. The horn will be activated after "ON" on CONSULT-III screen is touched.
IGN CONT2	This test is able to check security hazard lamp operation. The hazard lamps will be activated after "ON" on CONSULT-III screen is touched.
P RANGE	This test is able to check A/T device power supply A/T device power is supplied when "ON" on CONSULT-III screen is touched.
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.
LOCK INDCATOR	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.
ACC INDCATOR	This test is able to check ACC indicator in push-ignition switch operation. LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT-III screen is touched.
IGNITION ON IND	This test is able to check INGITION ON indicator in push-ignition switch operation. LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT-III screen is touched.
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination flash when "ON" on CONSULT-III screen is touched.

TRUNK

TRUNK: CONSULT-III Function (BCM - TRUNK)

INFOID:0000000000961119

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.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

< FUNCTION DIAGNOSIS >

[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.
KEY CYL SW-TR	NOTE: This item is displayed, but cannot be monitored.
TR CANCEL SW	Indicates [ON/OFF] condition of trunk lid opener cancel switch.
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk lid opener switch.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk room lamp switch.
RKE-TR/BD	Indicates [ON/OFF] condition of trunk open signal from Intelligent Key remote controller button.

ACTIVE TEST

Test item	Description	F
TRUNK/GLASS HATCH	This test is able to check trunk open operation. Trunk open when "OPEN" on CONSULT-III screen is touched.	

G

Α

В

С

D

Е

Н

DLK

L

 \mathbb{N}

Ν

0

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description INFOID:0000000000001120

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to LAN-28, "CAN Communication Signal Chart".

DTC Logic

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:00000000000961122

1.PERFORM SELF DIAGNOSTIC

- 1. Turn ignition switch ON and wait for 2 second or more.
- 2. Check "Self Diagnostic Result".

Is "CAN COMM CIRCUIT" displayed?

YES >> Refer to LAN-18, "Trouble Diagnosis Flow Chart".

NO >> Refer to GI-39, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

U1010 CONTROL	. UNIT	(CAN))
---------------	--------	-------	---

DTC Logic

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:00000000000961124

Α

В

C

Е

Н

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

INFOID:0000000000961125

>> Replace BCM.

Special Repair Requirement

1. REQUIRED WORK WHEN REPLACING BCM

Initialize IVIS by CONSULT-III. For the details of initialization refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

DLK

M

Ν

0

B2621 INSIDE KEY ANTENNA 1

Description INFOID:000000000061126

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

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA 1 CIRCUIT	An excessive high or low voltage from inside antenna is sent to BCM.	Inside key antenna (instrument center) Between BCM and Inside key antenna (instrument center)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

(P) With CONSULT-III

- 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-58</u>, "<u>Diagnosis Procedure</u>".

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

Diagnosis Procedure

INFOID:0000000000961128

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

Terminals (+)			0:1		
		(–)	Condition	Signal (Reference value.)	
BCI	M connector	Terminal	(-)		, ,
M122	Instrument cen-	79	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB
WIZZ	ter	75	Clound	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 JMKIA0063GB

Is the inspection result normal?

YES >> Check the condition of harness and connector.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

B2621 INSIDE KEY ANTENNA 1

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Α

В

D

Е

F

Н

DLK

- 1. Disconnect BCM and inside key antenna connector.
- 2. Check continuity between BCM connector and inside key antenna connector.

BCM connector	Terminal	Inside key antenna connector		Terminal	Continuity
M122	78	M131	31 Instrument center	2	Existed
	79	WITST	mstrument center	1	Existed

3. Check continuity between BCM connector and ground.

ВС	CM connector	Terminal		Continuity
M122	Instrument conter	78	Ground	Not existed
IVITZZ	Instrument center	79		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness between BCM and inside key antenna.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

Terminals (-)				0:1	
		(_)	Condition	Signal (Reference value.)	
BCI	M connector	Terminal	()		,
M122	Instrument cen-	79	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 11 1 s JMKIA0062GB
WIIZZ	ter	79	Ciouna	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s

Is the inspection result normal?

YES >> Replace inside key antenna (instrument center). Refer to <u>DLK-219, "INSTRUMENT CENTER:</u> Removal and Installation".

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

Ν

M

B2622 INSIDE KEY ANTENNA 2

Description

Detects whether Intelligent Key is inside the vehicle. Installed in the console.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA 2 CIRCUIT	An excessive high or low voltage from inside antenna is sent to BCM.	Inside key antenna (console) Between BCM ~ Inside key antenna (console)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

(P) With CONSULT-III

- 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-60</u>, "<u>Diagnosis Procedure</u>".

NO >> Inside key antenna (console) is OK.

Diagnosis Procedure

INFOID:0000000000961131

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

Terminals					Cianal	
(+)		(–)	Condition	Signal (Reference value.)		
BCN	1 connector	Terminal	()		,	
M122	Console	73	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB	
WILE	GGIIGGIE	70	Giodila	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s JMKIA0063GB	

Is the inspection result normal?

YES >> Check the condition of harness and connector.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM and inside key antenna (console) connector.

B2622 INSIDE KEY ANTENNA 2

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

2. Check continuity between BCM connector and inside key antenna connector.

BCM connector	Terminal	Inside key antenna connector		Terminal	Continuity
M122	72	M146	46 Console	2	Existed
	73	101140		1	Existed

3. Check continuity between BCM connector and ground.

ВС	CM connector	Terminal		Continuity
M122	Console -	72	Ground	Not existed
W1122		73		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness between BCM and inside key antenna.

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

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

	Termi	inals			
	(+)		()	Condition	Signal (Reference value.)
BCI	M connector	Terminal	(–)		(Notoronoc Value.)
MAGG	Quarte	70	O	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB
M122	Console	73	Ground	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to <u>DLK-219, "CONSOLE : Removal and Installation"</u>.

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

Α

В

C

Е

D

G

I

Н

M

JMKIA0063GB

Ν

0

B2623 INSIDE KEY ANTENNA 3

Detects whether Intelligent Key is inside the vehicle. Installed in the trunk room.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA 3 CIRCUIT	An excessive high or low voltage from inside antenna is sent to BCM.	Inside key antenna (trunk room) Between BCM ~ Inside key antenna (trunk room)

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

(P) With CONSULT-III

- 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-62</u>, "<u>Diagnosis Procedure</u>".

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

Diagnosis Procedure

INFOID:0000000000961134

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

	Tern	ninals			0: 1
(+)		(–)	Condition	Signal (Reference value.)	
BCI	M connector	Terminal	(-)		(111111,
M121	Trunk room	35	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB
WIL	Hank (SSIII	60	Siguria	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Check the condition of harness and connector.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

B2623 INSIDE KEY ANTENNA 3

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

2. Check continuity between BCM connector and inside key antenna (trunk room) connector.

BCM connector	Terminal	Inside key antenna connector		Terminal	Continuity
M121	34	B49	Trunk room	2	Existed
IVITZT	35	D49	Trunk room	1	LXISIEU

3. Check continuity between BCM connector and ground.

ВС	CM connector	Terminal		Continuity
M121	Trunk room	34	Ground	Not existed
IVITZT	Trunk room	35		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness between BCM and inside key antenna (trunk room).

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

- 1. Replace inside key antenna (trunk room). (New antenna or other antenna)
- 2. Connect BCM and inside key antenna (trunk room) connector.
- 3. Check signal between BCM connector and ground with oscilloscope.

	Ter	minals			Signal	
	(+)		(-)	Condition	(Reference value.)	
BCI	M connector	Terminal	()		,	
M121	Trunk room	35	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB	
WIZI	Hankiooni	33	Cround	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s JMKIA0063GB	

Is the inspection result normal?

YES >> Replace inside key antenna (trunk room). Refer to <u>DLK-219, "TRUNK ROOM: Removal and Installation"</u>.

NO >> Replace BCM. Refer to <u>BCS-79</u>, "Removal and Installation".

Α

В

D

Е

F

G

Н

.

DLK

M

Ν

0

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000000961135

1. CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	K
11	Battery power supply	10

Is the fuse fusing?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

	Terminals		
(+	·)	(-)	Voltage (Approx.)
ВС	M		(Approx.)
Connector	Terminal	Ground	
M118	1	Ground	Pottory voltage
M119	11		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
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

DOOR SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

DOOR SWITCH Α Description INFOID:0000000000961136 Detects door open/close condition. В Component Function Check INFOID:0000000000961137 1. CHECK FUNCTION (II) With CONSULT-III Check door switches ("DOOR SW-DR", "DOOR SW-AS", "DOOR SW-RL" and "DOOR SW-RR") in Data Mon-D itor" mode with CONSULT-III. Monitor item Condition Е DOOR SW-DR DOOR SW-AS CLOSE \rightarrow OPEN: OFF \rightarrow ON DOOR SW-RL F DOOR SW-RR Is the inspection result normal?

YES >> Door switch is OK.

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

Diagnosis Procedure

1. CHECK DOOR SWITCH INPUT SIGNAL

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

DLK

INFOID:0000000000961138

IVI

Ν

0

	Terminals				
BCM connector	+) Terminal	(-)	Door co	ndition	Voltage (V) (Approx.)
Connector				OPEN	0
M123	150		Driver side	CLOSE	(V) 15 10 5 0 10 ms 10 ms
IVI123				OPEN	0
	124		Passenger side	CLOSE	(V) 15 10 5 0 10 ms JPMIA0011GB
		Ground		OPEN	0
M121	68		Rear RH	CLOSE	(V) 15 10 5 0 10 ms JPMIA0011GB
IVIIZI				OPEN	0
	69		Rear LH	CLOSE	(V) 15 10 5 0 10 ms JPMIA0011GB

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

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

BCM connector	Terminal	Door switch connector	Terminal	Continuity
M123	150	B16 (Driver side)		
IVITZS	124	B216 (Passenger side)	2	Existed
M121	68	B223 (Rear RH)	2	LXISIEG
IVITZT	69	B23 (Rear LH)		

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M422	150		
M123	124	Ground	Not existed
Mad	68		
M121	69		
ne inspection result normal?			
S >> GO TO 3.			
O >> Repair or replace harness	between BCM and door s	switch.	

Refer to DLK-67, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch. Refer to <u>DLK-218</u>, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK DOOR SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace malfunction door switch. Refer to <u>DLK-218</u>, "Removal and Installation".

DLK

J

Α

В

D

Е

F

Н

INFOID:0000000000961139

L

M

Ν

0

DOOR LOCK AND UNLOCK SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000000961140

Transmits door lock/unlock operation to BCM.

DRIVER SIDE: Component Function Check

INFOID:0000000000961141

1. CHECK FUNCTION

(P)With CONSULT-III

Check ("CDL LOCK SW", "CDL UNLOCK SW") in Data Monitor mode with CONSULT-III.

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

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

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

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000000961142

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

- 1. Read voltage signal between BCM connector and ground with oscilloscope when door lock and unlock switch (driver side) is turned "LOCK" or "UNLOCK".
- 2. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (driver side) is turned "LOCK" or "UNLOCK".

Terminal			a		
(+)		(-)	Condition	Signal (Reference value)	
BCM connector	Terminal	(–)		(**************************************	
M123	132	Ground	Door is closed	(V) 15 10 5 0 10 ms PIIA1297E	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

$2.\mathsf{CHECK}$ POWER WINDOW SWITCH GROUND

- Turn ignition switch OFF.
- 2. Disconnect power window main switch connector.
- 3. Check continuity between power window main switch connector and ground.

Power window main switch connector	Terminal		Continuity
D9	17	Ground	Existed

Is the inspection result normal?

YES >> GO TO 3.

DOOR LOCK AND UNLOCK SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

NO >> Repair or replace harness.

${f 3.}$ CHECK POWER WINDOW SERIAL LINK CIRCUIT

Disconnect BCM connector.

Check continuity between BCM connector and power window main switch connector.

BCM connector	Terminal	Power window main switch connector	Terminal	Continuity
M123	132	D8	14	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

DRIVER SIDE: Special Repair Requirement

INITIALIZATION PROCEDURE

 Disconnect battery minus terminal or power window main switch connector. Reconnect it after a minute or more.

2. Turn ignition switch ON.

- 3. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open)
- 4. Continue pulling the power window switch UP (AUTO-UP operation). Even after glass stops at fully closed position, keep pulling the switch for 3 seconds or more.
- 5. Inspect anti-pinch function.

CHECK ANTI-PINCH FUNCTION

- Fully open the door window.
- 2. Place a piece of wood near fully closed position.
- 3. Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm or 2 seconds without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

CAUTION:

- Do not check with hands and other part of body because they may be pinched. Do not get pinched.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-89, "Fail Safe"
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

PASSENGER SIDE

PASSENGER SIDE : Description

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE: Component Function Check

CHECK FUNCTION

(P)With CONSULT-III

Check ("CDL LOCK SW", "CDL UNLOCK SW") in Data Monitor mode with CONSULT-III.

DLK

Α

В

D

INFOID:00000000000961143

M

Ν

C

INFOID:0000000000961145

INFOID:0000000000961144

INFOID:0000000000961146

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

Is the inspection result normal?

< COMPONENT DIAGNOSIS >

YES >> Door lock and unlock switch is OK.

>> Refer to DLK-70, "PASSENGER SIDE: Diagnosis Procedure". NO

PASSENGER SIDE : Diagnosis Procedure

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

- Read voltage signal between BCM connector and ground with oscilloscope when door lock and unlock switch (passenger side) is turned "LOCK" or "UNLOCK".
- Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (passenger side) is turned "LOCK" or "UNLOCK".

	Terminal		Condition	a	
(+)		()		Signal (Reference value)	
BCM connector	Terminal	(–)		()))	
M123	132	Ground	Door is closed	(V) 15 10 5 0 PIIA1297E	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2.check power window switch ground

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

Front power window switch (passenger side) connector	Terminal		Continuity
D38	11	Ground	Existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

BCM connector	Terminal	Front power window switch (passenger side) connector	Terminal	Continuity
M123	132	D38	16	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

DOOR LOCK AND UNLOCK SWITCH

< COMPONENT	DIAGNOSIS >
4	

[INTELLIGENT KEY SYSTEM]

4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

YES >> INSPECTION END.

PASSENGER SIDE: Special Repair Requirement

INFOID:0000000000961147

Α

В

D

F

INITIALIZATION PROCEDURE

- Disconnect battery minus terminal or power window main switch connector. Reconnect it after a minute or more.
- 2. Turn ignition switch ON.
- 3. Operate power window switch to fully open the window. (This operation is unnecessary if the window is already fully open)
- 4. Continue pulling the power window switch UP (AUTO-UP operation). Even after glass stops at fully closed position, keep pulling the switch for 3 seconds or more.
- 5. Inspect anti-pinch function.

CHECK ANTI-PINCH FUNCTION

- 1. Fully open the door window.
- 2. Place a piece of wood near fully closed position.
- 3. Close door glass completely with AUTO-UP.
- Check that glass lowers for approximately 150 mm or 2 seconds without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

CAUTION:

- Do not check with hands and other part of body because they may be pinched. Do not get pinched.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-89, "Fail Safe"
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

DLK

J

N

0

KEY SLOT

Detect whether Intelligent Key is inserted.

Immobilizer antenna amp checks Intelligent Key transponder.

Component Function Check

INFOID:0000000000961149

1. CHECK FUNCTION

(P) With CONSULT-III

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

Monitor item	Condition	
KEY SW-SLOT	Key is inserted in key slot: ON	
KET OW GEOT	Key is removed from key slot: OFF	

Is the inspection result normal?

YES >> Key slot is OK.

NO >> Refer to <u>DLK-72</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000000961150

1. CHECK KEY SLOT POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect key slot connector.
- 3. Check voltage between slot connector and ground.

	Voltage (V) (Approx.)			
(+)				
Key slot connector	Terminal	(-)	(
M22	1	Cround	Pottory voltage	
IVIZZ	5	- Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace key slot power supply circuit.

2.CHECK KEY SLOT GROUND CIRCUIT

Check continuity between key slot connector and ground.

Key slot connector	Terminal	Ground	Continuity
M22	7	Oround	Existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace key slot ground circuit.

3. CHECK KEY SLOT CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM connector and key slot connector.

BCM connector	Terminal	Key slot connector	Terminal	Continuity
M123	121	M22	11	Existed

3. Check continuity between BCM connector and ground.

[INTELLIGENT KEY SYSTEM]

BCM connector	r le	erminal	Craund	Continuity
M123		121	Ground	Not existed
s the inspection result	normal?			
YES >> GO TO 4.				
<u> </u>	eplace harness be	etween BCM a	nd key slot.	
4.CHECK KEY SLOT				
Refer to DLK-73, "Com	ponent Inspection	<u>"</u> .		
s the inspection result	normal?			
YES >> GO TO 5.				
		_K-223, "Remo	oval and Installation".	
CHECK INTERMIT	TENT INCIDENT			
Refer to <u>GI-39, "Interm</u>	ittent Incident".			
	_			
>> INSPECTION	ON END			
Component Inspe	ction			INFOID:000000000096115
1.CHECK KEY SLOT				
Check key slot.				
Termi	nal		O an distant	Oznationsites
Key s	slot		Condition	Continuity
4	44	Intellig	ent Key inserted	Existed
1	11	Intellig	ent Key removed	Not existed
1	11 normal?		-	

DLK

M

L

Ν

0

KEY CYLINDER SWITCH

Power window main switch detects condition of the door key cylinder switch and transmits to BCM as the LOCK or UNLOCK signals.

Component Function Check

INFOID:00000000000961153

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check ("KEY CYL LK-SW", "KEY CYL UN-SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-III. Refer to <u>DLK-50</u>, "DOOR LOCK: CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition		
KEY CYL LK-SW	Lock	: ON	
RET CTL LR-SW	Neutral / Unlock	: OFF	
KEN CALLIN CW	Unlock	: ON	
KEY CYL UN-SW	Neutral / Lock	: OFF	

Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Refer to <u>DLK-74</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000000961154

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- Turn ignition switch ON.
- 2. Check voltage between power window main switch connector and ground.

Terminals					
(+)			Key position	Voltage (V)	
Power window main switch connector	Terminal	(–)	, ,	(Approx.)	
	4		Lock	0	
Do	4	4	Cround	Neutral / Unlock	5
D8 -	6	Ground 6	Unlock	0	
			Neutral / Lock	5	

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-126, "Removal and Installation". After that, Refer to PWC-16, "POWER WINDOW MAIN SWITCH: Special Repair Requirement".

NO >> GO TO 2.

2.CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect power window main switch connector and front door key lock assembly (driver side) (key cylinder switch) connector.
- 3. Check continuity between power window main switch connector and front door lock assembly (driver side) (key cylinder switch) connector.

Power window main switch connector	Terminal	Front door lock assembly (driver side) (key cylinder switch) connector	Terminal	Continuity
D8	4	D15	6	Existed
20	6	D15	5	

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

[INTELLIGENT KEY SYSTEM]

Power window main switch connector	Terminal		Continuity
D8	4	Ground	Not existed
20	6		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.check door key cylinder switch ground circuit

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

Front door lock assembly (driver side) connector	Terminal Ground		Continuity
D15	4	Ground	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO

NO

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to DLK-75, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

>> Replace front door lock assembly (driver side) (key cylinder switch). Refer to <u>DLK-207</u>, "<u>FRONT DOOR LOCK</u>: Removal and Installation". After that, Refer to <u>DLK-75</u>, "<u>Special Repair Requirement</u>".

Component Inspection

COMPONENT INSPECTION

1. CHECK DOOR KEY CYLINDER SWITCH

Check front door lock assembly (driver side) (key cylinder switch).

Terminal Front door lock assembly (driver side) (key cylinder switch) connector			
		Key position	Continuity
		Unlock	Existed
5	4	Neutral / Lock	Not existed
6	4	Lock	Existed
	Neutral / l	Neutral / Unlock	Not existed

Is the inspection result normal?

YES >> Key cylinder switch is OK.

>> Replace front door lock assembly (driver side) (key cylinder switch). Refer to <u>DLK-207</u>, "<u>FRONT DOOR LOCK</u>: Removal and Installation". After that, Refer to <u>DLK-75</u>, "<u>Special Repair Requirement</u>".

Special Repair Requirement

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-7</u>, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement".

Is the inspection result normal?

DLK

INFOID:0000000000961155

Α

В

D

Е

F

R/I

IVI

Ν

INFOID:0000000000961156

KEY CYLINDER SWITCH

[INTELLIGENT KEY SYSTEM]

YES >> Inspection end.

NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

Α

В

D

Е

F

Н

DLK

M

Ν

0

INFOID:0000000000961159

UNLOCK SENSOR

Description INFOID:000000000001157

Detects door lock condition of driver door.

Component Function Check

UNCTION CHECK

1. CHECK FUNCTION

(P) With CONSULT-III

Check unlock sensor ("DOOR STAT SW") in "Data Monitor" mode.

Monitor item	Condition
DOOR STAT SW	Front door lock (driver side) LOCK: OFF
DOOR STAT SW	Front door lock (driver side) UNLOCK: ON

Is the inspection result normal?

YES >> Unlock sensor is OK.

NO >> Refer to <u>DLK-77</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK UNLOCK SENSOR POWER SUPPLY

Check signal between BCM connector and ground with oscilloscope.

Terminals		Front door lock	V I 00	
(+)		(_)	(driver side)	Voltage (V) (Approx.)
BCM connector	Terminal	()	condition	, , ,
M123	119	Ground	Locked	(V) 15 10 5 0 10 ms JPMIA0011GB
			Unlocked	0

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2.check unlock sensor circuit

1. Turn ignition switch OFF.

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

BCM connector	Terminal	Front door lock assembly (driver side) connector	Terminal	Continuity
M123	119	D15	3	Existed

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M123	119	Orodiid	Not existed

Is the inspection result normal?

YES >> GO TO 3.

< COMPONENT DIAGNOSIS >

NO >> Repair or replace harness between BCM and front door lock assembly (driver side).

3. CHECK UNLOCK SENSOR GROUND CIRCUIT

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

Front door lock assembly (driver side) connector	Terminal	Ground	Continuity
D15	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

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

	Terminals	V II	
(+	(+)		Voltage (V) (Approx.)
BCM connector	Terminal	(–)	(, , , , , , , , , , , , , , , , , , ,
M123	119	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace BCM. BCS-79, "Removal and Installation"

5.CHECK UNLOCK SENSOR

Refer to DLK-78, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO

>> Replace front door lock assembly (driver side). Refer to DLK-207, "FRONT DOOR LOCK : Removal and Installation".

6. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

Component Inspection

INFOID:0000000000961160

1. CHECK UNLOCK SENSOR

Check unlock sensor.

Terminal Front door lock assembly (driver side)		Front door lock assembly (driver side) condition	Continuity	
		Tront door lock assembly (driver side) condition		
2	4	Unlock	Existed	
	4	Lock	Not existed	

Is the inspection result normal?

YES >> INSPECTION END.

UNLOCK SENSOR

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

NO	>> Replace front lock and Installation".	assembly (drive	r side). Refer to	DLK-207.	"FRONT DOOF	R LOCK : Remov	<mark>val</mark> A
							В
							С
							D
							Е
							F
							G
							Н
							I
							J
							DL
							L
							M
							Ν
							0
							Р

TRUNK LID OPENER SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

TRUNK LID OPENER SWITCH

Description

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000000961162

1. CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

Does trunk lid opener cancel switch turn ON (CANCEL)?

Yes >> Turn off trunk lid opener cancel switch.

No >> GO TO 2.

2. CHECK FUNCTION

(P) With CONSULT-III

Check trunk lid opener switch ("TR/BD OPEN SW") in "Data Monitor mode with CONSULT-III.

• When trunk lid opener switch is turned to "ON".

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

Is the inspection result normal?

YES >> Trunk lid opener switch is OK.

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

Diagnosis Procedure

INFOID:0000000000961163

1. CHECK TRUNK LID OPEN INPUT SIGNAL

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

	Terminals			
(-	+)		Condition of trunk lid opener switch	Voltage (V)
BCM connector	Terminal	(–)		(Approx.)
			ON (press and hold)	0
M121	67	Ground	OFF (release)	(V) 15 10 5 0 10 ms JPMIA0011GB

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 5.

2.check trunk lid opener switch circuit

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

TRUNK LID OPENER SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

BCM connector	Terminal	Trunk lid opener switch connector M20		Terminal	Continuity
M121	67			1	Existed
Check continuity bet	tween BCIVI cor	nnector and gi	rouna.		
BCM connector	r	Terminal	Ground	Continuity Not existed	
M121		67	Ground		
s the inspection result n	ormal?				
YES >> GO TO 3.					
NO >> Repair harn			CIDOLUT		
CHECK TRUNK LID					
Check continuity betwee	en trunk lid oper	ner switch con	nector and ground.		
Trunk lid opener s	witch	Terminal		Cor	ntinuity
M20		2	- Ground	Ex	xisted
s the inspection result n	ormal?		•		
YES >> GO TO 4.					
NO >> Repair or re	place harness.				
<u>.</u>	•				
1.CHECK TRUNK LID	OPENER SWIT	ГСН			
<u>.</u>					
1. CHECK TRUNK LID	onent Inspection				
LCHECK TRUNK LID Refer to DLK-81, "Composite inspection result named as the inspection result	onent Inspection	<u>on"</u> .			
A.CHECK TRUNK LID Refer to DLK-81, "Comp s the inspection result n YES >> GO TO 5. NO >> Replace true	onent Inspection ormal?	on". vitch. Refer to	DLK-225, "Removal	and Installation	<u>"</u> .
LCHECK TRUNK LID Refer to DLK-81, "Composite inspection result named as the inspection result	onent Inspection ormal?	on". vitch. Refer to	DLK-225, "Removal	and Installation	<u>"</u> .
A.CHECK TRUNK LID Refer to DLK-81, "Comp s the inspection result n YES >> GO TO 5. NO >> Replace true	onent Inspection ormal? Ink lid opener svent INCIDENT	on". vitch. Refer to	DLK-225, "Removal	and Installation	<u>)"</u> .
A.CHECK TRUNK LID Refer to DLK-81, "Composite inspection result not be seen to DLK-81, "Composite inspection result not be seen to DLK-81, "Composite inspection result not be seen to DLK-81, "Intermitting in the seen to DLK-81, "Intermitting in the seen in t	onent Inspection ormal? Ink lid opener svent includent	on". vitch. Refer to	DLK-225, "Removal	and Installation	· · · · · · · · · · · · · · · · · · ·
A.CHECK TRUNK LID Refer to DLK-81, "Comp s the inspection result n YES >> GO TO 5. NO >> Replace trun CHECK INTERMITTE Refer to GI-39, "Intermitted" >> INSPECTION	onent Inspection ormal? Ink lid opener system in the system of the syst	on". vitch. Refer to	DLK-225, "Removal	and Installation	<u>"</u> .
A.CHECK TRUNK LID Refer to DLK-81, "Composite inspection result not be seen to DLK-81, "Composite inspection result not be seen to DLK-81, "Composite inspection result not be seen to DLK-81, "Intermitting in the seen to DLK-81, "Intermitting in the seen in t	onent Inspection ormal? Ink lid opener system in the system of the syst	on". vitch. Refer to	DLK-225, "Removal	and Installation	
A.CHECK TRUNK LIDER Refer to DLK-81, "Compose the inspection result in YES >> GO TO 5. NO >> Replace trunce of the Component Inspection of the Component Inspection in the Component Inspection Ins	onent Inspection ormal? Ink lid opener sweet INCIDENT tent Incident. IN END. Ition	on". vitch. Refer to	DLK-225, "Removal	and Installation	
A.CHECK TRUNK LIDER Refer to DLK-81, "Compose the inspection result in YES >> GO TO 5. NO >> Replace trunction of the Component Inspection of	onent Inspection ormal? Ink lid opener sweet in the sweet incident. Ink lid opener sweet in the sweet incident. In END. It ion OPENER SWIT	on". vitch. Refer to	DLK-225, "Removal	and Installation	
A.CHECK TRUNK LID Refer to DLK-81, "Composite inspection result in YES >> GO TO 5. NO >> Replace trunce in YES in	onent Inspection ormal? Ink lid opener sweet INCIDENT tent Incident". IN END. Ition OPENER SWITTONERS.	on". vitch. Refer to	DLK-225, "Removal	and Installation	
A.CHECK TRUNK LIDER Refer to DLK-81, "Compose the inspection result in YES >> GO TO 5. NO >> Replace trunction of the Component Inspection of	onent Inspection ormal? Ink lid opener sweet INCIDENT tent Incident". IN END. Ition OPENER SWITTOFF. opener switch	vitch. Refer to		and Installation	
Refer to DLK-81, "Composite inspection result in YES >> GO TO 5. NO >> Replace truinous inspection result in YES >> GO TO 5. NO >> Replace truinous inspection result in YES >> GO TO 5. NO >> Replace truinous inspection result in YES >> INSPECTION INSPEC	onent Inspection ormal? Ink lid opener system Incident". In END. Ition OPENER SWITT OPENER SWIT	vitch. Refer to		and Installation	
Refer to DLK-81, "Composite inspection result in YES >> GO TO 5. NO >> Replace truin CHECK INTERMITTE >> INSPECTION COMPONENT INSPECTIO	onent Inspection ormal? Ink lid opener sweet Incident". In END. Ition OPENER SWITT OPENER SWITT	vitch. Refer to			
Refer to DLK-81, "Composite inspection result in YES >> GO TO 5. NO >> Replace truinous inspection result in YES >> GO TO 5. NO >> Replace truinous inspection result in YES >> GO TO 5. NO >> Replace truinous inspection result in YES >> INSPECTION INSPEC	onent Inspection ormal? Ink lid opener sweet Incident". In END. Ition OPENER SWITT OPENER SWITT	vitch. Refer to	connector.	C	INFOID:0000000
Refer to DLK-81, "Composite inspection result in YES >> GO TO 5. NO >> Replace truin CHECK INTERMITTE >> INSPECTION COMPONENT INSPECTIO	onent Inspection ormal? Ink lid opener sweet Incident". In END. Ition OPENER SWITT OPENER SWITT	vitch. Refer to	connector.	Co	INFOID:0000000

[INTELLIGENT KEY SYSTEM]

TRUNK LID OPENER CANCEL SWITCH

Description

Cancels trunk lid open operation.

Component Function Check

INFOID:0000000000961166

1. CHECK FUNCTION

(P) With CONSULT-III

Check trunk lid opener cancel switch ("TR CANCEL SW") in Data Monitor mode with CONSULT-III.

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

Is the inspection result normal?

YES >> Trunk lid opener cancel switch is OK.

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

Diagnosis Procedure

INFOID:0000000000961167

1. CHECK TRUNK LID OPENER CANCEL SIGNAL

1. Check voltage between BCM connector and ground.

	Terminals			
(-	+)		Condition of trunk lid opener	Voltage (V)
BCM connector	Terminal	(-)	cancel switch	(Approx.)
			ON (press and hold)	0
M123	129	Ground	OFF (cancel)	(V) 15 10 5 0 10 ms JPMIA0012GB

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 5.

2.CHECK TRUNK LID OPENER CANCEL SWITCH CIRCUIT

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

BCM connector	Terminal	Trunk lid opener cancel switch connector	Terminal	Continuity
M123	129	M105	1	Existed

Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M123	129	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

TRUNK LID OPENER CANCEL SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

${f 3.}$ CHECK TRUNK LID OPENER CANCEL SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch connector and ground.

Trunk lid opener cancel switch	Terminal	Ground	Continuity
M105	2	Ground	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK TRUNK LID OPENER CANCEL SWITCH

Refer to DLK-83, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener cancel switch. Refer to <u>DLK-226, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

Component Inspection

INFOID:0000000000961168

1. CHECK TRUNK LID OPENER CANCEL SWITCH

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

Ter	minal	Condition	Continuity	
Trunk lid o	pener switch	Condition	Continuity	
1	2	ON	Existed	
ı	2	OFF (cancel)	Not existed	

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace trunk lid opener cancel switch. Refer to <u>DLK-226, "Removal and Installation"</u>.

DLK

J

Α

В

D

Е

M

Ν

0

TRUNK ROOM LAMP SWITCH

Description

Detects trunk open/close condition.

Component Function Check

INFOID:0000000000961170

1. CHECK FUNCTION

(III) With CONSULT-III

Check ("TR/HAT MNTR") in Data Monitor mode with CONSULT-III.

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

Is the inspection result normal?

YES >> Trunk room lamp switch is OK.

NO >> Refer to <u>DLK-85</u>, "Component Inspection".

Diagnosis Procedure

INFOID:0000000000961171

1. CHECK TRUNK ROOM LAMP SWITCH INPUT SIGNAL

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

Terminals				
(+)		()	Trunk condition	Voltage (V) (Approx.)
BCM connector	Terminal	(-)		(+)
			OPEN	0
M121	50	Ground	CLOSE	(V) 15 10 5 0 10 ms JPMIA0011GB

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2.CHECK TRUNK ROOM LAMP SWITCH CIRCUIT

- 1. Disconnect BCM connector.
- Check continuity between BCM connector and trunk lid lock assembly (trunk room lamp switch) connector.

BCM connector	Terminal	Trunk lid lock assembly (trunk room lamp switch) connector	Terminal	Continuity
M121	50	B303	1	Existed

3. Check continuity between BCM connector and ground.

BCM connector	Terminal Ground		Continuity
M121	50	Ground	Not existed

TRUNK ROOM LAMP SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

YES >> GO TO 3.

NO >> Repair or replace harness between BCM and trunk room lamp switch.

3.CHECK TRUNK ROOM LAMP SWITCH GROUND CIRCUIT

Check continuity between trunk lid lock assembly connector and ground.

Trunk lid lock assembly (trunk room lamp switch) connector	Terminal	Ground	Continuity
B303	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace trunk room lamp switch ground circuit.

4. CHECK BCM OUTPUT SIGNAL

- Connect BCM connector.
- Check voltage between BCM connector and ground.

	Terminals	Voltage (V) (Approx.)		
(+)				(_)
BCM connector	Terminal	(-)	(,,	
M121	50	Ground	(V) 15 10 5 0 JPMIA0011GB	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

5. CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-85, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

>> Replace trunk lid lock assembly (trunk room lamp switch). Refer to DLK-216, "TRUNK LID LOCK NO : Removal and Installation".

6. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

Component Inspection

1. CHECK TRUNK ROOM LAMP SWITCH

- Turn ignition switch OFF.
- Disconnect trunk lid lock assembly (trunk room lamp switch) connector. 2.
- 3. Check trunk room lamp switch.

Terminal Trunk room lamp switch		Trunk condition	Continuity
		Trunk condition	Continuity
1	2	OPEN	Existed
I	2	CLOSE	Not existed

DLK

M

Ν

Р

INFOID:0000000000961172

Α

В

D

Е

F

Н

TRUNK ROOM LAMP SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace trunk lid lock assembly (trunk room lamp switch). Refer to <u>DLK-216. "TRUNK LID LOCK : Removal and Installation"</u>.

DOOR REQUEST SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

DOOR REQUEST SWITCH

Description INFOID:000000000001173

Transmits lock/unlock operation to BCM.

Component Function Check

1.check function

(P) With CONSULT-III

Check door request switch ("DR REQ SW" or "AS REQ SW") in Data Monitor mode.

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

Is the inspection result normal?

YES >> Door request switch is OK.

NO >> Refer to <u>DLK-87</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK DOOR REQUEST SWITCH OUTPUT SIGNAL

1. Turn ignition switch OFF.

2. Check voltage between BCM harness connector and ground.

	Terminals			_	
	(+)		(-)	Door request switch Condition	Voltage (V) (Approx.)
E	BCM connector Terminal		(-)		, , ,
				Pressed	0
M122	Door request switch (driver side)	101		Released	(V) 15 10 5 0 20 ms JMKIA0059GB
WITZZ			Ground	Pressed	0
	Door request switch (passenger side)	100		Released	(V) 15 10 5 0 20 ms

Is the inspection result normal?

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

2.check door request switch circuit

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

DLK

Α

В

D

Е

F

Н

INFOID:0000000000961174

INFOID:0000000000961175

M

N

BCM connector	Terminal	Front outside handle connector	Terminal	Continuity
M122	101	D13 (driver side)	1	Existed
IVITZZ	100	D43 (passenger side)	1	LXISIEU

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M122	101	Ground	Not existed
	100		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness between BCM and front outside handle.

3.check door request switch ground circuit

Check continuity between front outside handle connector and ground.

Front outside handle connector	Terminal	Ground	Continuity
D13 (driver side)	2		Existed
D43 (passenger side)	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

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

4. CHECK BCM OUTPUT SIGNAL

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

	Terminals	V 16 A A		
(+	(+)		Voltage (V) (Approx.)	
BCM connector	BCM connector Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	101			
M122	100	Ground	(V) 15 10 5 0 20 ms JMKIA0059GB	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace BCM. Refer to BCS-79. "Removal and Installation".

5. CHECK DOOR REQUEST SWITCH

Refer to DLK-89, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace malfunctioning front outside handle. Refer to <u>DLK-201, "FRONT DOOR: Removal and Installation"</u>.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

DOOR REQUEST SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

>> INSPECTION END

Component Inspection

INFOID:0000000000961176

1. CHECK DOOR REQUEST SWITCH

Check front outside handle (request switch).

Teri	minal	Door request switch condition	Continuity	
Front outside hand	dle (request switch)	Door request switch condition	Continuity	
1	2	Pressed	Existed	
ı	2	Released	Not existed	

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace malfunction front outside handle. Refer to <u>DLK-201, "FRONT DOOR: Removal and Installation"</u>.

F

Α

В

C

D

Е

G

Н

J

DLK

L

M

Ν

0

TRUNK OPENER REQUEST SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

TRUNK OPENER REQUEST SWITCH

Performs trunk lid open request when it is pressed.

Component Function Check

INFOID:0000000000961178

1. CHECK FUNCTION

(P) With CONSULT-III

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

Monitor item	Condition	
REQ SW -BD/TR	Trunk opener request switch is pressed: ON	
ILQ 3W -DD/ IX	Trunk opener request switch is released: OFF	

Is the inspection result normal?

YES >> Trunk opener request switch is OK.

NO >> Refer to <u>DLK-90, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000000961179

1. CHECK TRUNK OPENER REQUEST SWITCH OUTPUT SIGNAL

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

Terminals		T	V I 00	
(+)		()	Trunk lid opener request switch condition	Voltage (V) (Approx.)
BCM connector	Terminal	()		(11 - /
			Pressed	0
M121	61	Ground	Released	(V) 15 10 5 0 JPMIA0016GB

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2.check trunk opener request switch circuit

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

BCM connector	Terminal	Trunk request switch con- nector	Terminal	Continuity
M121	61	B304	1	Existed

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M121	61	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

TRUNK OPENER REQUEST SWITCH

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

NO >> Repair or replace harness between BCM and trunk opener request switch.

${f 3.}$ CHECK TRUNK OPENER REQUEST SWITCH GROUND CIRCUIT

Check continuity between trunk opener request switch connector and ground.

Trunk opener request switch connector	Terminal	Ground	Continuity
B304	2	Olouliu	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace trunk opener request switch ground circuit.

4. CHECK BCM OUTPUT SIGNAL

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

_	Terminals	Voltage (V) (Approx.)		
(+)			()	
BCM connector Terminal		(-)	(, prox.)	
M121	61	Ground	(V) 15 10 5 0 JPMIA0016GB	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace BCM. Refer to BCS-79, "Removal and Installation".

5.CHECK TRUNK OPENER REQUEST SWITCH

Refer to DLK-91, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace trunk opener request switch. Refer to <u>DLK-224, "Removal and Installation"</u>.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

Component Inspection

1. CHECK TRUNK OPENER REQUEST SWITCH

Check trunk opener request switch.

Terminal		Trunk opener request switch condition	Continuity	
Trunk opener	request switch	Trank opener request switch containon	Continuity	
1	2	Pressed	Existed	
1	2	Released	Not existed	

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace trunk opener request switch. Refer to DLK-224, "Removal and Installation".

DLK

M

Ν

Р

INFOID:0000000000961180

Α

В

D

Е

F

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

DOOR LOCK ACTUATOR

DRIVER SIDE

DRIVER SIDE: Description

INFOID:0000000000961181

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE: Component Function Check

INFOID:0000000000961182

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-92</u>, "<u>DRIVER SIDE</u>: <u>Diagnosis Procedure</u>".

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000000961183

1. CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			0 - 120 - 1 - 1 - 1 - 1	V. II 0.0
(+)		(-)	Condition of door lock and unlock switch	Voltage (V) (Approx.)
BCM connector	Terminal	(-)		, , ,
M119	8	Ground	Lock	$0 \to \text{Battery voltage} \to 0$
WITTS	9	Giodila	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM connector	Terminal	Door lock actuator con- nector	Terminal	Continuity
M119	8	D15	1	Existed
WITTS	9	D13	2	LAISIEU

4. Check continuity between BCM connector and ground.

BCM connector	Terr	Continuity	
M119	8	Ground	Not existed
WITIS	9	Oround	NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.check intermittent incident

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

PASSENGER SIDE

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

PASSENGER SIDE: Description

. . Booonplion

INFOID:0000000000961184

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE: Component Function Check

INFOID:0000000000961185

INFOID:0000000000961186

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-93</u>, "<u>PASSENGER SIDE</u>: <u>Diagnosis Procedure</u>".

D

Α

В

Е

F

PASSENGER SIDE: Diagnosis Procedure

1. CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

Terminals			On little of leaded as	V I 00	
(+)		(-)	Condition of door lock and unlock switch	Voltage (V) (Approx.)	
BCM connector	Terminal	(-)		(11 - 7	
M119	8	Ground	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$	
IVITTS	5	Glound	Unlock	0 o Battery voltage o 0	

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.check door lock actuator circuit

Disconnect BCM and front door lock actuator passenger side connectors.

2. Check continuity between BCM connector and front door lock actuator passenger side.

BCM connector	Terminal	Door lock actuator con- nector	Terminal	Continuity
M119	8	D45	2	Existed
IVITIS	5	D43	1	LAISIEU

3. Check continuity between BCM connector and ground.

BCM connector	Teri	Continuity	
M119	8	Ground	Not existed
	5	Ground	Not existed

DLK-93

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

REAR LH

REAR LH: Description

Locks/unlocks the door with the signal from BCM.

DLK

Ν./Ι

Ν

0

Р

INFOID:0000000000961187

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

REAR LH: Component Function Check

INFOID:0000000000961188

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

>> Refer to DLK-94, "REAR LH: Diagnosis Procedure". NO

REAR LH: Diagnosis Procedure

INFOID:0000000000961189

1. CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

Terminals			0 1111	V I. 00
(4	(+)		Condition of door lock and unlock switch	Voltage (V) (Approx.)
BCM connector	Terminal	()		(11 - /
M119	8	Ground	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
WITTE	10	Giodila	Unlock	0 o Battery voltage o 0

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM connector	Terminal	Door lock actuator con- nector	Terminal	Continuity
M119	M110		1	Existed
WITTS	10	D55	2	LXISIGU

3. Check continuity between BCM connector and ground.

BCM connector	Terr	Continuity	
M119	8	Ground	Not existed
WITIS	10	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

REAR RH

REAR RH: Description

INFOID:0000000000961190

INFOID:0000000000961191

Locks/unlocks the door with the signal from BCM.

REAR RH: Component Function Check

1. CHECK FUNCTION

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-95</u>, "<u>REAR RH</u>: <u>Diagnosis Procedure</u>".

REAR RH: Diagnosis Procedure

INFOID:0000000000961192

Α

В

D

Е

Н

1. CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)				
BCM connector	Terminal	(-)		, ,
M119	8	Ground	Lock	0 o Battery voltage o 0
	10	Giouna	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

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

BCM connector	Terminal	Door lock actuator con- nector	Terminal	Continuity
M119	8	D75	2	Existed
WITTS	10	D73	1	LXISTEG

3. Check continuity between BCM connector and ground.

BCM connector	Ten	Continuity	
M119	8	Ground	Not Existed
	10	Oround	NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

DLK

M

Ν

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

TRUNK LID OPENER ACTUATOR

Description

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000000961194

1. CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

Does trunk lid opener cancel switch turn OFF (CANCEL)?

Yes >> Turn on trunk lid opener cancel switch.

No >> GO TO 2.

2.check function

- 1. Perform Active Test ("TRUNK/GLASS HATCH") with CONSULT-III.
- 2. Touch "OPEN" and check that trunk lid opens.

Is the inspection result normal?

YES >> Trunk lid opener actuator is OK.

NO >> Refer to <u>DLK-96</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000000961195

1. CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			0 100	V 14 (A.D.)
(+)		(_)	Condition of trunk lid open- er switch	Voltage (V) (Approx.)
BCM connector	Terminal	(-)		() [
M120	23	Ground	ON	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM and trunk lid lock assembly (trunk lid opener actuator) connector.
- Check continuity between BCM connector and trunk lid lock assembly (trunk lid opener actuator) connector.

BCM connector	Terminal	Trunk lid lock assembly (trunk lid opener actuator) connector	Terminal	Continuity
M120	23	B303	3	Existed

4. Check continuity between BCM connector and ground.

BCM connector	Terr	Continuity	
M120	23	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

TRUNK LID OPENER ACTUATOR

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

>> INSPECTION END.

Α

В

С

D

Е

F

G

Н

J

DLK

L

 \mathbb{N}

Ν

0

Ρ

[INTELLIGENT KEY SYSTEM]

FUEL LID OPENER ACTUATOR

Linked to door lock actuator, lock/unlock fuel lid.

Component Function Check

INFOID:0000000000961197

1. CHECK FUNCTION

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

Is the inspection result normal?

YES >> Fuel lid opener actuator is OK.

NO >> Refer to <u>DLK-98</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000000961198

1. CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals			0 155 ()	V I 00
(+)		(-)	Condition of door lock and unlock switch	Voltage (V) (Approx.)
BCM connector	Terminal	(-)		(11 - /
M119	8	Ground	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
WITTE	9	Ground	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK FUEL LID OPENER ACTUATOR CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM and fuel lid lock actuator connector.
- 3. Check continuity between BCM connector and fuel lid lock actuator connector.

BCM connector	Terminal	Fuel lid lock actuator connector	Terminal	Continuity
M119	8	B242	2	Existed
WITTS	9	D242	1	LAISIEU

4. Check continuity between BCM connector and ground.

BCM connector	Terr	Continuity	
M119	8	Ground	Not existed
	9	Oround	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

INTELLIGENT KEY WARNING BUZZER

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY WARNING BUZZER

Description

Answers back and warns for an inappropriate operation.

Component Function Check

1.CHECK FUNCTION

(P) With CONSULT-III

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

Is the inspection result normal?

YES >> Intelligent Key warning buzzer (engine room) is OK.

NO >> Refer to <u>DLK-99</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK INTELLIGENT KEY WARNING BUZZER

Check voltage between BCM connector and ground.

	Terminals	, , , , ,) / I/ (A)		
(+)		(-)	Warning buzzer opera- tion condition	Voltage (V) (Approx.)	
BCM connector	Terminal	(-)		(11 - 7	
M121	64	Ground	Yes	0	
IVITZT	04	Giodila	No	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

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

(4	-)		Voltage (V)
Intelligent Key warning buzzer connector	Terminal	(–)	(Approx.)
E57	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace Intelligent Key warning buzzer power supply circuit.

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

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

BCM connector	Terminal	Intelligent Key warning buzzer connector	Terminal	Continuity
M121	64	E57	1	Existed

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M121	64	Oloulia	Not existed

DLK

Α

В

D

Е

F

Н

INFOID:0000000000961200

INFOID:0000000000961201

L

M

Ν

0

INTELLIGENT KEY WARNING BUZZER

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness between BCM and Intelligent Key warning buzzer.

4. CHECK INTELLIGENT KEY WARNING BUZZER

Check DLK-100, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

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

5. CHECK INTERMITTENT INCIDENT

Check GI-39, "Intermittent Incident".

>> INSPECTION END.

Component Inspection

INFOID:0000000000961202

1. CHECK INTELLIGENT KEY WARNING BUZZER

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

1 (BAT+) - 3 (BAT-) : the buzzer sounds

Is the inspection result normal?

YES >> INSPECTION END.

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

OUTSIDE KEY ANTENNA

Description INFOID:000000000001203

Detects whether Intelligent Key is outside the vehicle.

Integrated in front outside handle (driver side, passenger side) and installed in rear bumper.

Component Function Check

1. CHECK DOOR REQUEST SWITCH

Check that door request switch operates normally.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Inspect door request switch. Refer to <u>DLK-87, "Component Function Check"</u>.

2. CHECK FUNCTION

Be sure that Intelligent Key is in each outside key antenna detection range.

Does door lock/unlock when each request switch is pressed?

YES >> Outside key antenna is OK.

NO >> Refer to <u>DLK-101</u>. "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.

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

	Terr	ninals				0: 1	
(+)		(_)	C	Condition	Signal (Reference value.)		
BCN	/I connector	Terminal	(–)			(
	Driver side	77					
M122	Passenger side	75	Ground	und Request switch is pushed	When Intelligent Key is in the antenna detection area.	(V) 15 10 5 0 1 s JMKIA0061GB	
W122	Rear bumper	39	Glound		When Intelligent Key is not in the antenna detection area.	(V) 15 10 5 0 1 s	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

- Disconnect BCM and front outside handle connector.
- 2. Check continuity between BCM connector and outside key antenna connector.

DLK

Α

В

D

Е

Н

INFOID:0000000000961204

INFOID:0000000000961205

M

Ν

0

BCM connector	Terminal	Outside key antenna connector	Terminal	Continuity
M122	77	D14 (driver side)	1	
	76	D14 (dilver side)	2	
	75	D44 (passenger side)	1	Existed
	74	D44 (passenger side)	2	LAISIEU
M121	39	P62 (rear humper)	1	
	38	B63 (rear bumper)	2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity	
	74			
M122	75			
IVITZZ	76	Ground	Not evicted	
	77		Not existed	
M121	39			
IVITZT	38			

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness between BCM and outside key antenna.

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

	Terminals					
(+)		(-)	Condition		Signal (Reference value.)	
BCN	A connector	Terminal	(-)			(
	Driver side	77				
M122	Passenger side	75	Ground	Door request	When Intelligent Key is in the antenna detection area.	(V) 15 10 5 0 1 s JMKIA0061GB
IVITEE	Rear bumper	39	Ciouna	switch is pushed	When Intelligent Key is not in the antenna detection area.	(V) 15 10 5 0 1 s JMKIA0060GB

Is the inspection result normal?

YES >> Replace outside key antenna. Refer to <u>DLK-201</u>, "<u>FRONT DOOR</u>: <u>Removal and Installation</u>" (Driver side and passenger side), <u>DLK-221</u>, "<u>REAR BUMPER</u>: <u>Removal and Installation</u>" (Rear bumper)

NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

OUTSIDE KEY ANTENNA

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

>> INSPECTION END.

Α

В

С

D

Е

F

G

Н

J

DLK

L

 \mathbb{N}

Ν

0

REMOTE KEYLESS ENTRY RECEIVER

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY RECEIVER

Description INFOID:000000000961206

Receives Intelligent Key operation and transmits to BCM.

Component Function Check

INFOID:0000000000961207

1. CHECK FUNCTION

(P) With CONSULT-III

Check remote keyless entry receiver ("RKE OPE COUN1") in Data Monitor mode with 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-104</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000000961208

1. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

Terminals (+)				
			O a selection of	Signal
Remote keyless entry receiver connector	Terminal	(-)	Condition	(Reference value)
M104	2	Ground	Waiting (All door closed)	(V) 15 10 5 0 1 ms JMKIA0064GB
	2		When signal is received (All door closed)	(V) 15 10 5 0 1 ms JMKIA0065GB

Is the inspection result normal?

YES >> GO TO 7.

NO >> GO TO 2.

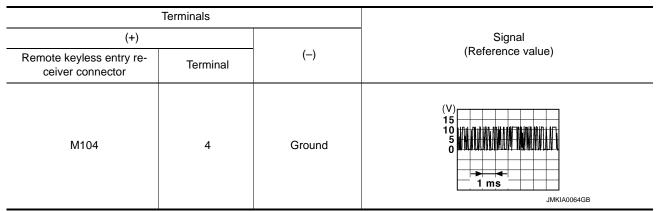
2.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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

REMOTE KEYLESS ENTRY RECEIVER

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]



Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M122	103	M104	4	Existed

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M122	103	Giodila	Not existed

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness between BCM and remote keyless entry receiver.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

Check continuity between remote keyless entry receiver connector and ground.

Remote keyless entry receiver connector	Terminal	Ground	Continuity
M104	1		Existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

Check continuity between BCM connector and remote keyless entry receiver connector.

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M123	137	M104	1	Existed

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness between BCM and remote keyless entry.

6.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 3

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

DLK

Α

В

D

Е

Ν

REMOTE KEYLESS ENTRY RECEIVER

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
M122	83	M104	2	Existed

2. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M122	83	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness between BCM and remote keyless entry.

7. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

INTELLIGENT KEY

Description

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

- Door lock/unlock and trunk open
- Engine start

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

Component Function Check

INFOID:0000000000961210

Α

В

D

1. CHECK FUNCTION

(P) With CONSULT-III

Check remote keyless entry receiver ("RKE OPE COUN1") in Data Monitor mode with 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 <u>DLK-107</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000000961211

INFOID:0000000000961212

1. CHECK INTELLIGENT KEY BATTERY

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

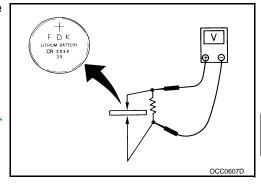
Standard: Approx. 2.5 - 3.0V

Is the measurement value within the specification?

YES >> Replace Intelligent Key.

NO >> Replace Intelligent Key battery. Refer to <u>DLK-107.</u>

"Component Inspection".



Component Inspection

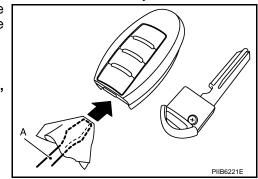
1. REPLACE INTELLIGENT KEY BATTERY

1. 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.



Replace the battery with new one.

DLK

Ν

Н

1E

INTELLIGENT KEY

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

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.

Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Check remote keyless entry receiver. Refer to <u>DLK-104</u>. "Component Function Check".

2 PIIB6222E

INFOID:0000000000961213

Special Repair Requirement

Refer to CONSULT-III Operation Manual NATS-IVIS/NVIS.

KEY SLOT ILLUMINATION

Description INFOID:000000000961214

Blinks when Intelligent Key insertion is required.

Component Function Check

1.check function

(P) With CONSULT-III

Check key slot illumination ("KEY SLOT ILLUMI") Active Test mode.

Is the inspection result normal?

YES >> Key slot function is OK.

NO >> Refer to <u>DLK-109</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK KEY SLOT ILLUMINATION OUTPUT SIGNAL

Check voltage between key slot connector and ground.

Terminals					
(+)			Condition	Key slot	Voltage (V)
Key slot connector	Terminal	(–)	Condition	illumination	(Approx.)
M22	6 Ground	Intelligent Key inserted	OFF	Battery voltage	
		Intelligent Key removed	ON	0	

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2.CHECK KEY SLOT POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- Disconnect key slot connector.
- 3. Check voltage between slot connector and ground.

	Terminals				
(-	+)	(_)	Voltage (V) (Approx.)		
Key slot connector	Terminal	(–)	(-FF / 5/11)		
M22	1	Ground	Pattory voltage		
IVIZZ	5	Ground	Battery voltage		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace key slot power supply circuit.

3.CHECK KEY SLOT GROUND CIRCUIT

Check continuity between key slot connector and ground.

Key slot connector	Terminal	Ground	Continuity
M22	7	Ground	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace key slot ground circuit.

DLK_

Α

В

D

Е

F

Н

INFOID:0000000000961215

INFOID:0000000000961216

M

Ν

KEY SLOT ILLUMINATION

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

4. CHECK KEY SLOT CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM and key slot connector.
- 3. Check continuity between BCM connector and key slot connector.

BCM connector	Terminal	Key slot connector	Terminal	Continuity
M122	92	M22	6	Existed

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M122	92	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness between BCM and key slot.

5. CHECK KEY SLOT

Refer to DLK-73, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace key slot. Refer to <u>DLK-223, "Removal and Installation"</u>.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END.

HORN FUNCTION

Description INFOID:0000000000961217

Perform answer-back for each operation with horn.

Component Function Check

1. CHECK FUNCTION

- Select "HORN" in "ACTIVE TEST" mode with CONSULT-III.
- Check the horn (high/low) operation.

Test item			Description		
HORN	ON	Horn relay 1 and 2	ON (for 20 ms)		

Is the operation normal?

YES >> INSPECTION END.

NO >> Go to DLK-111, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK HORN FUNCTION

Check horn function with horn switch

Do the horns sound?

YES >> GO TO 2.

NO >> Go to HRN-3, "Wiring Diagram - HORN -".

2.CHECK HORN RELAY POWER SUPPLY

- Turn ignition switch ON.
- 2. Perform "ACTIVE TEST" ("HORN") with CONSULT-III.
- Check voltage between horn relay 1 and 2 harness connector and ground.

Horn relay1/2		Ground Test item		Voltage (V)		
Connector	Terminal	Ground	rost nom		(Applox.)	
E11	1	Ground	HORN	ON	0 → Battery voltage →0	
E11				Other than above	0	
E18	3			ON	0 → Battery voltage →0	
				Other than above	0	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3. CHECK HORN RELAY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect IPDM E/R and horn relay 1 and 2 connector.
- Check continuity between IPDM E/R harness connector and horn relay 1 and 2 harness connector.

IPDM E/R		Horn rela	Continuity	
Connector	Terminal	Connector Terminal		Continuity
E46	44	E11	1	Existed
	45	E10	3	LXISIEU

Check continuity between driver seat control unit harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal	Orodina	Continuity

DLK-111

DLK

Α

В

D

Е

Н

INFOID:0000000000961218

INFOID:0000000000961219

Ν

HORN FUNCTION

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

E46	44	Ground	Not existed
E46	45	Giodila	NOT EXISTED

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace IPDM E/R.Refer to PCS-33, "Removal and Installation".

NO >> Repair or replace the malfunctioning parts.

COMBINATION METER DISPLAY FUI	
< COMPONENT DIAGNOSIS >	[INTELLIGENT KEY SYSTEM]
COMBINATION METER DISPLAY FUNCTION	Α
Description	INFOID:000000000961220
Displays each operation method guide and warning for system malfunction	. В
Component Function Check	INFOID:00000000961221
1.CHECK FUNCTION	С
With CONSULT-III Check the operation with ("LCD") in the Active Test.	D
Is each warning displayed on meter display?	
Is the inspection result normal? YES >> Meter display is OK. NO >> Refer to <u>DLK-113</u> , " <u>Diagnosis Procedure</u> ".	E
Diagnosis Procedure	INFOID:000000000961222 F
1. CHECK COMBINATION METER	
Refer to MWI-42, "DTC Logic".	G
Is the inspection result normal?	
YES >> GO TO 2. NO >> Check combination meter. Refer to MWI-35, "Diagnosis Descri	otion".
2. CHECK INTERMITTENT INCIDENT	
Refer to GI-39, "Intermittent Incident".	
>> INSPECTION END.	

DLK

J

L

 \mathbb{N}

Ν

 \circ

WARNING CHIME FUNCTION

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

WARNING CHIME FUNCTION

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000000961224

1. CHECK FUNCTION

(P) With CONSULT-III

- 1. Check the operation with "INSIDE BUZZER" in the Active Test.
- 2. Touch "TAKE OUT", "KNOB" or "KEY" on screen.

Is the inspection result normal?

Yes >> Warning buzzer into combination meter is OK.

No >> Refer to <u>DLK-114</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000000961225

1. CHECK METER BUZZER CIRCUIT

Refer to WCS-20, "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-39, "Intermittent Incident".

>> INSPECTION END.

< COMPONENT DIAGNOSIS > [INTELLIGENT KEY SYSTEM]	
< COMPONENT DIAGNOSIS > [INTELLIGENT KEY SYSTEM]	
HAZARD FUNCTION	۸
Description	А
Perform answer-back for each operation with number of blinks.	В
Component Function Check	
1.CHECK FUNCTION	С
Check hazard warning lamp ("FLASHER") in Active Test.	
Is the inspection result normal? YES >> Hazard warning lamp circuit is OK.	D
NO >> Refer to DLK-115, "Diagnosis Procedure".	
Diagnosis Procedure	Е
1. CHECK HAZARD SWITCH CIRCUIT	
Refer to EXL-83, "Component Function Check".	F
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace hazard warning switch circuit.	G
2. CHECK INTERMITTENT INCIDENT	
Refer to GI-39, "Intermittent Incident".	Н
>> INSPECTION END.	
>> INGLECTION LIND.	

DLK

J

L

 \mathbb{N}

Ν

0

INTEGRATED HOMELINK TRANSMITTER

Description INFOID:0000000000961229

Integrated Homelink Transmitter can store and transmit a maximum of 3 radio signals.

Allows operation of garage doors, gates, home and office lighting, entry door locks and security system, etc. Integrated Homelink Transmitter power supply uses vehicle battery, which enables it to maintain every program in case battery is discharged or removed.

Component Function Check

INFOID:0000000000961230

1. CHECK FUNCTION

Check that system receiver (garage door opener, etc.) operates with original hand-held transmitter.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Receiver or hand-held transmitter is malfunctioning.

2.check illuminate

- Turn ignition switch "OFF".
- Does red light of transmitter illuminate when any transmitter button is pressed?

Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to DLK-116, "Diagnosis Procedure".

3.CHECK TRANSMITTER

Check transmitter with Tool*.

*: For details, refer to Technical Service Bulletin.

Is the inspection result normal?

YES >> Receiver or hand-held transmitter malfunction, not vehicle related.

>> Replace auto anti-dazzling inside mirror (homelink universal transceiver). Refer to MIR-66. "Removal and Installation".

Diagnosis Procedure

NO

INFOID:0000000000961231

1. CHECK POWER SUPPLY

- Disconnect auto anti-dazzling inside mirror (homelink universal transceiver) connector.
- Check voltage between auto anti-dazzling inside mirror (home link universal transceiver) harness connector and ground.

Auto anti-dazzling inside mirror (Homelink universal transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)
R3	10	Ground	Ignition switch position: LOCK	Battery voltage
NO.	6	Ground	Ignition switch position: ON	Ballery Vollage

Is the inspection result normal?

YES >> GO TO 2.

NO

- >> Check the following.
 - 10A fuse [No. 3 located in the fuse block (J/B)]
 - 10A fuse [No. 6 located in the fuse block (J/B)]
 - Harness for open or short between fuse and auto anti-dazzling inside mirror (homelink universal transceiver).

2.CHECK GROUND CIRCUIT

Check continuity between auto anti-dazzling inside mirror (homelink universal transceiver) harness connector and ground.

INTEGRATED HOMELINK TRANSMITTER

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

0

Ρ

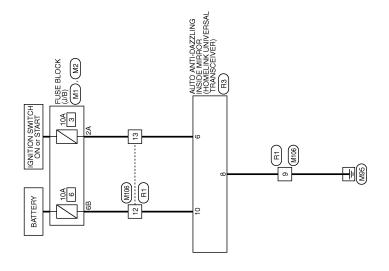
COMI CIVEINI DIAGNOSIS >			
Auto anti-dazzling inside mirror (Homelink universal transceiver) connector	Terminal	Ground	Continuity
M187	8	0.00	Existed
s the inspection result normal?			
YES >> GO TO 3.			
NO >> Repair harness. 3. CHECK INTERMITTENT INCIDENT			
Refer to GI-39, "Intermittent Incident".			
>> INSPECTION END.			

[INTELLIGEN

INTEGRATED HOMELINK TRANSMITTER SYSTEM

Wiring Diagram (BCM - INTEGRATED HOMELINK TRANSMITTER SYSTEM)

INFOID:0000000000961232

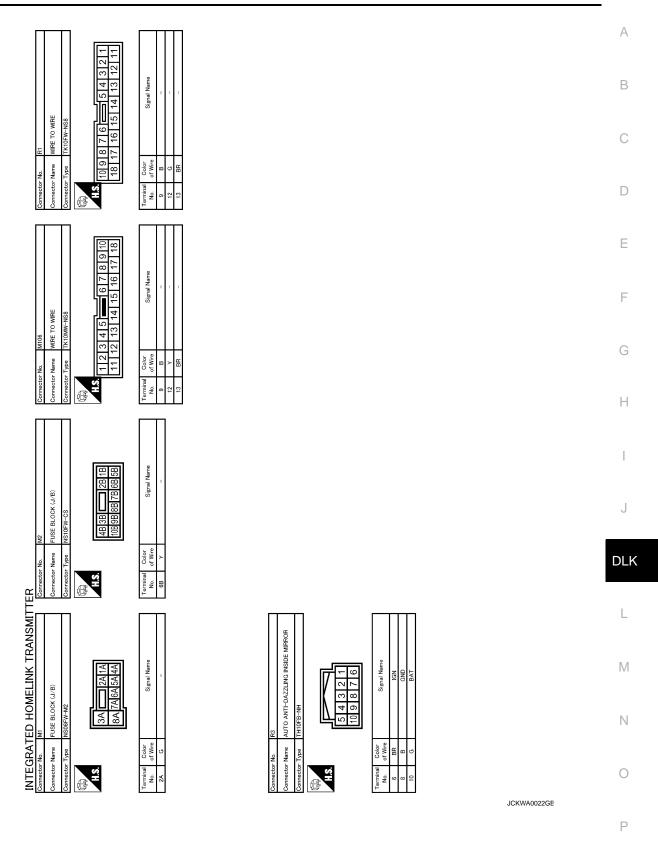


INTEGRATED HOMELINK TRANSMITTER

INTEGRATED HOMELINK TRANSMITTER SYSTEM

< COMPONENT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]



ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	OFF
FR WIPER HI	Front wiper switch HI	ON
FR WIPER 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	OFF
FR WIPER IN	Front wiper switch INT	ON
ED WIDED STOD	Front wiper is not in STOP position	OFF
FR WIPER STOP	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TUDN CIONAL D	Other than turn signal switch RH	OFF
TURN SIGNAL R	Turn signal switch RH	ON
TUDNI CIONIAL I	Other than turn signal switch LH	OFF
TURN SIGNAL L	Turn signal switch LH	ON
TAIL LAMB OW	Other than lighting switch 1ST and 2ND	OFF
TAIL LAMP SW	Lighting switch 1ST or 2ND	ON
LUDEANAONA	Other than lighting switch HI	OFF
HI BEAM SW	Lighting switch HI	ON
LIEAD LAMB OW 4	Other than lighting switch 2ND	OFF
HEAD LAMP SW 1	Lighting switch 2ND	ON
LIEAD LAMB OW O	Other than lighting switch 2ND	OFF
HEAD LAMP SW 2	Lighting switch 2ND	ON
DA COING OW	Other than lighting switch PASS	OFF
PASSING SW	Lighting switch PASS	ON
ALITO LICLIT CW	Other than lighting switch AUTO	OFF
AUTO LIGHT SW	Lighting switch AUTO	ON
ED EOC CW	Front fog lamp switch OFF	OFF
FR FOG SW	Front fog lamp switch ON	ON
RR FOG SW	NOTE: The item is indicated, but not monitored.	OFF
DOOD CW DD	Driver door closed	OFF
DOOR SW-DR	Driver door opened	ON
DOOD SW AC	Passenger door closed	OFF
DOOR SW-AS	Passenger door opened	ON
DOOR SW DD	Rear RH door closed	OFF
DOOR SW-RR	Rear RH door opened	ON

Monitor Item	Condition	Value/Status	_
DOOR SW-RL	Rear LH door closed	OFF	-
DOOR SW-RL	Rear LH door opened	ON	_
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	OFF	=
CDL LOCK CW	Other than power door lock switch LOCK	OFF	_
CDL LOCK SW	Power door lock switch LOCK	ON	_
	Other than power door lock switch UNLOCK	OFF	_
CDL UNLOCK SW	Power door lock switch UNLOCK	ON	_
VEV 0V/ 1 V 0W	Other than driver door key cylinder LOCK position	OFF	-
KEY CYL LK-SW	Driver door key cylinder LOCK position	ON	-
1/5/ 0// LINI 0//	Other than driver door key cylinder UNLOCK position	OFF	-
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	ON	-
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	OFF	-
HAZADD CM	Hazard switch is not pressed	OFF	_
HAZARD SW	Hazard switch is pressed	ON	_
REAR DEF SW	NOTE: The item is indicated, but not monitored.	OFF	=
H/L WASH SW	NOTE: The item is indicated, but not monitored.	OFF	=
TD CANCEL OW	Trunk lid opener cancel switch OFF	OFF	_
TR CANCEL SW	Trunk lid opener cancel switch ON	ON	_
ED/DD ODEN CW	Trunk lid opener switch OFF	OFF	_
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	ON	_
	Trunk lid closed	OFF	_
TRNK/HAT MNTR	Trunk lid opened	ON	-
DIVE I OOK	LOCK button of Intelligent Key is not pressed	OFF	
RKE-LOCK	LOCK button of Intelligent Key is pressed	ON	- [
OVE TIME OOK	UNLOCK button of Intelligent Key is not pressed	OFF	
RKE-UNLOCK	UNLOCK button of Intelligent Key is pressed	ON	_
OVE TO/DD	TRUNK OPEN button of Intelligent Key is not pressed	OFF	_
RKE-TR/BD	TRUNK OPEN button of Intelligent Key is pressed	ON	-
DIVE DANIE	PANIC button of Intelligent Key is not pressed	OFF	-
RKE-PANIC	PANIC button of Intelligent Key is pressed	ON	-
DICE DAM ODEN	UNLOCK button of Intelligent Key is not pressed	OFF	_
RKE-P/W OPEN	UNLOCK button of Intelligent Key is pressed and held	ON	-
OVE MODE OF S	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF	_
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON	=
ODTIONI OFNICE	Outside of the vehicle bright	Close to 5 V	_
OPTICAL SENSOR	Outside of the vehicle dark	Close to 0 V	-
	Driver door request switch is not pressed	OFF	-
REQ SW-DR	Driver door request switch is pressed	ON	_
	Passenger door request switch is not pressed	OFF	-
REQ SW-AS	Passenger door request switch is pressed	ON	-

Monitor Item	Condition	Value/Status
REQ SW-BD/TR	Trunk request switch is not pressed	OFF
ILLQ SW-DD/ IIX	Trunk request switch is pressed	ON
PUSH SW	Push-button ignition switch (push switch) is not pressed	OFF
FOSITOW	Push-button ignition switch (push switch) is pressed	ON
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	OFF
IGN ICLIZ -1/D	Ignition switch in ON position	ON
ACC RLY -F/B	Ignition switch in OFF position	OFF
ACC KLI -F/B	Ignition switch in ACC or ON position	ON
CLUCH SW	The clutch pedal is not depressed	OFF
CLUCH SW	The clutch pedal is depressed	ON
BRAKE SW 1	The brake pedal is not depressed	ON
DRAKE SW I	The brake pedal is depressed	OFF
DETE/CANCL SW	Selector lever in P position	OFF
DETE/CANCE SW	Selector lever in any position other than P	ON
CET DNI/NI CVA/	Selector lever in any position other than P and N	OFF
SFT PN/N SW	Selector lever in P or N position	ON
S/L -LOCK	Steering is locked	OFF
S/L -LOCK	Steering is unlocked	ON
0/1 1/1/1/ 001/	Steering is unlocked	OFF
S/L -UNLOCK	Steering is locked	ON
O/L DELAY E/D	Ignition switch is OFF or ACC position	OFF
S/L RELAY-F/B	Ignition switch is ON position	ON
	Driver door is unlocked	OFF
UNLK SEN-DR	Driver door is locked	ON
DUOLI OM IDDM	Push-button ignition switch (push-switch) is not pressed	OFF
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	ON
ION DIVA E/D	Ignition switch is OFF or ACC position	OFF
IGN RLY1 -F/B	Ignition switch is ON position	ON
DETE OW IDDM	Selector lever in P position	OFF
DETE SW -IPDM	Selector lever in any position other than P	ON
OFT DN IDDM	Selector lever in any position other than P and N	OFF
SFT PN -IPDM	Selector lever in P or N position	ON
OFT D. MET	Selector lever in any position other than P	OFF
SFT P -MET	Selector lever in P position	ON
OFT N. MET	Selector lever in any position other than N	OFF
SFT N -MET	Selector lever in N position	ON
	Engine stopped	STOP
ENONE OTATE	While the engine stalls	STALL
ENGINE STATE	At engine cranking	CRANK
	Engine running	RUN
0// 1 0 0// : 557	Steering is locked	OFF
S/L LOCK-IPDM	Steering is unlocked	ON
	Steering is unlocked	OFF
S/L UNLK-IPDM		

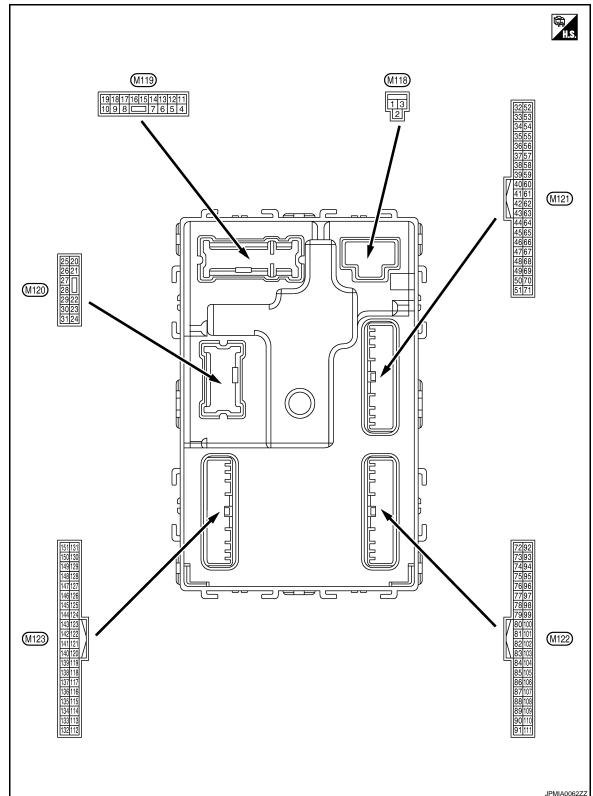
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[ÍNTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status			
S/L RELAY-REQ	Ignition switch in OFF or ACC position	OFF			
o/L RELAT-REQ	Ignition switch in ON position	ON			
/EH SPEED 1	While driving	Equivalent to speedometer reading			
/EH SPEED 2	While driving	Equivalent to speedometer reading			
	Driver door is locked	LOCK			
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY			
DOOK STAT-DIK	Driver door is unlocked	UNLK			
	Passenger door is locked	LOCK			
OOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY			
	Passenger door is unlocked	UNLK			
D 01/ 51 40	Ignition switch in ACC or ON position	RESET			
D OK FLAG	Ignition switch in OFF position	SET			
	The engine start is prohibited	RESET			
PRMT ENG STRT	The engine start is permitted	SET			
PRMT RKE STRT	NOTE:				
ZEV CW. CLOT	Intelligent Key is not inserted into key slot	OFF			
KEY SW -SLOT	Intelligent Key is inserted into key slot	ON			
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key			
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_			
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			
D REGST FL1	ID of front LH tire transmitter is registered	DONE			
J NEGOTTET	ID of front LH tire transmitter is not registered	YET			
D DECST ED4	ID of front RH tire transmitter is registered	DONE			
D REGST FR1	ID of front RH tire transmitter is not registered	YET			
D DECCT DD4	ID of rear RH tire transmitter is registered	DONE			
D REGST RR1	ID of rear RH tire transmitter is not registered	YET			
D DECCT DL4	ID of rear LH tire transmitter is registered	DONE			
D REGST RL1	ID of rear LH tire transmitter is not registered	YET			
MADAUNIO LANCO	Tire pressure indicator OFF	OFF			
VARNING LAMP	Tire pressure indicator ON	ON			
	Tire pressure warning alarm is not sounding	OFF			
BUZZER	Tire pressure warning alarm is sounding	ON			

TERMINAL LAYOUT



PHYSICAL VALUES

	Terminal No. Description (Wire color)		One Prince		Value			
+	- COIOI)	Signal name	Input/ Output		Condition	(Approx.)		
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage		
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage		
3 (O)	Ground	P/W power supply (RAP)	Output	Ignition switch ON	1	Battery voltage		
4	Ground	Interior room lamp	Output	After passing the in er operation time	nterior room lamp battery sav-	0 V		
(LG)	Ground	power supply	Output	Any other time after lamp battery save	er passing the interior room r operation time	Battery voltage		
5	Cround	Passenger door UN-	Output	December door	UNLOCK (Actuator is activated)	Battery voltage		
(V)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V		
7	Ground	Step lamp	Output	Step lamp	ON	0 V		
(Y)	Ground	Ctop lamp	Output	Clop lamp	OFF	Battery voltage		
8	Ground	All doors, fuel lid	Output	All doors, fuel lid	LOCK (Actuator is activated)	Battery voltage		
(V)	2.34.14	LOCK	LUCK	LOCK	- Supar	do 5.5, rdor rid	Other than LOCK (Actuator is not activated)	0 V
9		Driver door, fuel lid	Output	Driver door, fuel	UNLOCK (Actuator is activated)	Battery voltage		
(G)	Ground	UNLOCK	Output	lid	Other than UNLOCK (Actuator is not activated)	0 V		
10	Ground	Rear RH door and rear LH door UN-	Output	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage		
(BR)	Cround	LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V		
11 (R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage		
13 (B)	Ground	Ground	_	Ignition switch ON		0 V		
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 2 ms JSNIA0010GB		
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF ACC or ON	Battery voltage 0 V		

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	(V)
17 (W)	Ground	Turn signal (front RH)	Output	Ignition switch ON	Turn signal switch RH	10 5 0 1 s PKID0926E
					Turn signal switch OFF	0 V
18 (O)	Ground	Turn signal (front LH)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
19	Ground	Room lamp timer	Output	Interior room	OFF	Battery voltage
(V)	Ground	control	Output	lamp	ON	0 V
20 (V)	Ground	Turn signal (rear RH)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E
23 (G)	Ground	Trunk lid opening.	Output	Trunk lid	Open (Trunk lid opener actuator is activated) Close (Trunk lid opener ac-	Battery voltage 0 V
					tuator is not activated)	
25 (G)	Ground	Turn signal (rear LH)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch LH	0 V (V) 15 10 5 0 PKID0926E 6.5 V
30	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0 V
(R)	2.300			p	OFF	Battery voltage

Terminal No. (Wire color)		Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
34	Crown	Trunk room antenna	Outside	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
(SB) Ground	Giound	1 (-)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	
35 (V) Ground	Ground	Trunk room antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
	Ground				When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	
38	Ground	Rear bumper anten-	Outout	When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
(B)	Ground	na (-)	Output	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	

Signal name		inal No.	Description				Value
Ground Ground Rear bumper anten- Output When the trunk Indicate the property of th		e color) –	Signal name			Condition	
Second Starter relay control Starter relay control Cutput Input Second Input I		Ground	Poor humper enten	Qutput	lid request switch is operated with ignition switch		15 10 5 0
Ground First control Cutput Ignition switch ON OV	(W)	Glound	na (+)	Output		in the antenna detection	1 s
Ground First Control Countrol Coun	47		Ignition relay (IPDM			OFF or ACC	Battery voltage
Ground Request switch Input Switch Prunk room lamp switch Prunk room		Ground		Output	Ignition switch	ON	· -
Starter relay control Star		Ground		Input		OFF (Trunk is closed)	15 10 5 0 10 ms JPMIA0011GB
Ground Starter relay control Starter relay control Starter relay control Output Ignition switch OFF (M/T models) When the clutch pedal is not depressed When selector lever is in P or N position and the brake is depressed When selector lever is in P or N position and the brake is not depressed OV						ON (Trunk is open)	0 V
Starter relay control Output Ignition switch ON (A/T models) When selector lever is in P or N position and the brake is depressed When selector lever is in P or N position and the brake is not depressed OV			nd Starter relay control	Output	OFF (M/T mod-		Battery voltage
(SB) Ground Starter relay control Output Ignition switch ON (A/T models) Ignition switch ON (A/T models) Or N position and the brake is depressed When selector lever is in P or N position and the brake is not depressed ON (Pressed) OV OFF (Not pressed) 61 (W) Ground Trunk request switch Input Trunk request switch OFF (Not pressed) 7 (Not pressed) OV 64 Ground Request switch buzz- Output Request switch Sounding OV							0 V
or N position and the brake is not depressed ON (Pressed) ON (Pressed) OFF (Not pressed)		Ground				or N position and the brake	Battery voltage
Ground Trunk request switch Input Trunk request switch OFF (Not pressed) OFF (Not pressed) Ground Request switch buzz- Output Request switch Sounding 0 V						or N position and the brake	0 V
Ground Trunk request switch Input Trunk request switch OFF (Not pressed) Trunk request switch OFF (Not pressed) Ground Ground Request switch buzz- Output Request switch Sounding 0 V						ON (Pressed)	0 V
Ground Request Switch Buzz Output Request Switch		Ground	Trunk request switch	Input		OFF (Not pressed)	15 10 5 0 10 ms JPMIA0016GB
a Ground Output .	64	One	Request switch buzz-	0	Request switch	Sounding	0 V
	(V)	Ground	-	Output		Not sounding	Battery voltage

Terminal No. (Wire color)		Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	Δ
					Pressed	0 V	В
67 (GR) Ground	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Not pressed	10 5 0 JPMIA0011GB 11.8 V	C
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	F
					ON (When rear RH door opens)	11.8 V 0 V	(- -
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (When rear LH door opens)	0 V	DI
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0	L
72 (R)	Ground	Room antenna 2 (-) (center console)	Output	Ignition switch		JMKIA0062GB	N
		,	30.00.0)		When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0	
						1 s	F

	inal No.	Description				Value	
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	
73	Ground	Room antenna 2 (+)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	
(G)	Glodina	(center console)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 1 s JMKIA0063GB	
74	Ground	Passenger door antenna (-)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(SB)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
75	Ground	Passenger door antenna (+)		When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(BR)			Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	

	ninal No.	Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
76		Driver door antenna	0	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(V) Groun	Ground	(-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
77 (LG) Ground	Ground	Driver door antenna (+)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
	Glound				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
78 (Y)	Ground	Room antenna (-) (instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
	Giound				When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	

	inal No. e color)	Description				Value
+	- COIOT)	Signal name	Input/ Output		Condition	(Approx.)
79	Ground	Room antenna (+) (instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)					When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
80 (GR)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay (relay box) control	Output	Ignition switch	OFF or ACC	0 V Battery voltage
83	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB
(Y)	Glound			When operating e	ther button on Intelligent Key	(V) 15 10 5 0 1 ms JMKIA0065GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[ÎNTELLIGENT KEY SYSTEM]

	inal No.	Description				Value	/
(Wir	e color)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB	
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms 1.3 V	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB	(

DLK

L

 $|\!\!| \!\!|$

Ν

0

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
		Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0041GB 1.4 V
88	Ground				Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB
(V)					Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button ignition switch (push switch)	Pressed Not pressed	0 V Battery voltage
90 (P)	Ground	CAN - L	Input/ Output		_	_
91 (L)	Ground	CAN - H	Input/ Output		_	_
					OFF	0 V
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 1 s JPMIA0015GB
					ON	6.5 V Battery voltage
						-ano., ronago

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[ÎNTELLIGENT KEY SYSTEM]

0

Р

	inal No. e color)	Description	I		One distan	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
93	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	0 V
(V)	Giouria	ON INCICATOR IAMP	Output	ignition switch	ON	Battery voltage
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(O)	Ciouna	AGO IGIAY COITHOI	Output	ignition switch	ACC or ON	Battery voltage
96 (GR)	Ground	A/T device (detention switch) power supply	Output		_	Battery voltage
97	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V
(L)	Ground	tion No. 1	input	oteening lock	UNLOCK status	Battery voltage
98	Ground	Steering lock condi-	Input	Steering lock	LOCK status	Battery voltage
(P)	Ciouna	tion No. 2	input	Clocking look	UNLOCK status	0 V
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V
(R)	Ciouna	tion switch	input	Colodior level	Any position other than P	Battery voltage
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed) OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
					ON (Pressed)	0 V
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(O)	Cidana	lay control	Caipat	.9	ON	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	F	Battery voltage
106	Ground	Steering wheel lock	Output	Ignition switch	OFF or ACC	Battery voltage
(W)	Giodila	unit power supply	Output	ignition switch	ON	0 V

DLK-135

	inal No. e color)	Description	I		0 100	Value	
+	-	Signal name	Input/ Output	Condition		(Approx.)	
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB	
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB	
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB	
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB	

< ECU DIAGNOSIS >

	ninal No. re color)	Description			-	Value	
+	- COIOT)	Signal name	Input/ Output		Condition	(Approx.)	
	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB	
108					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB	
(R)					Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB	

DLK

Α

В

С

D

Е

F

G

Н

M

Ν

0

	inal No.	Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB	
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	
					Front wiper switch INT	(V) 15 10 2 ms JPMIA0038GB	
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB	
					Pressed	0 V	
110 (G)	Ground	Hazard switch	Input	Hazard switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0012GB	

	inal No.	Description	Ī			Value
+ (VVir	e color)	Signal name	Input/ Output		Condition	(Approx.)
					LOCK status	Battery voltage
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 ms JMKIA0066GB
					For 15 seconds after UN- LOCK	Battery voltage
				15 seconds or later after UNLOCK	0 V	
113	Ground	Optical sensor signal	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(P)	Ground	Option solisor signal	Прис	ON	When dark outside of the vehicle	Close to 0 V
114	Ground	Clutch interlock	Input	Clutch interlock	OFF (Clutch pedal is not depressed)	0 V
(R) Glound	switch	прис	switch	ON (Clutch pedal is depressed)	Battery voltage	
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
		Stop lamp switch 2		Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
118 (P)	Ground		Input		ON (Brake pedal is depressed)	Battery voltage
				ICC brake hold relay (With ICC)	OFF	0 V
					ON	Battery voltage
119 (SB)	Ground	Front door lock assembly driver side (unlock sensor)	Input	Driver door	LOCK status	(V) 15 10 5 0
					UNLOCK status	11.8 V
104				When Intelligent K	(ey is inserted into key slot	Battery voltage
121 (R)	Ground	Key slot switch	Input		ey is not inserted into key slot	0 V
122			_		OFF	0 V
(V)	Ground	ACC feedback signal	Input	Ignition switch	ACC or ON	Battery voltage
123	Graves	ICN foodback sizes!	Inn::4	Ignition quiteb	OFF or ACC	0 V
(W)	Ground	IGN feedback signal	Input	Ignition switch	ON	Battery voltage

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
129 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	ON (When passenger door opens) CANCEL	0 V (V) 15 10 5 10 ms JPMIA0012GB 1.1 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB
				Ignition switch OFI	T	0 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps OFF) ON (When tail lamps ON)	5.5 V NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15 10 5 0 JPMIA0159GB
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON OFF	0 V Battery voltage
137 (O)	Ground	Receiver and sensor ground	Input	Ignition switch ON		o v
138 (V)	Ground	Receiver and sensor power supply output	Output	Ignition switch	OFF ACC or ON	0 V 5.0 V

	inal No.	Description				Value	
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	
100					Standby state	(V) 6 4 2 0 • • 0.2s	
139 (L)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	When receiving the signal from the transmitter	(V) 6 4 2 0 ••• 0.2s OCC3880D	
140	0	Selector lever P/N	lanat	Calaataalaaaa	P or N position	12.0 V	(
(GR)	Ground	position signal	Input	Selector lever	Except P and N positions	0 V	
141 (G) Ground				ON	0 V		
	Ground	Security indicator signal	- Output	Security indicator	Blinking	(V) 15 10 5 0 1 s JPMIA0014GB	
					OFF	Battery voltage	D
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	0 V (V) 15 10 5 0 2 ms JPMIA0031GB	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Any of the conditions below with all switch OFF Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3 Wiper intermittent dial 6 Wiper intermittent dial 7	10.7 V 0 V (V) 15 10 5 0 2 ms JPMIA0032GB	

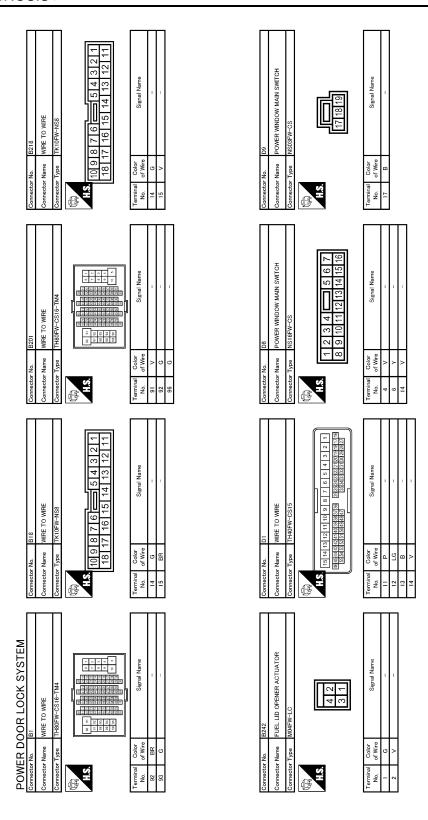
Term	inal No.	Description				
	e color)	Signal name	Input/		Condition	Value (Approx.)
+	_		Output		All switch OFF (Wiper intermittent dial 4)	0 V
444				O and in this	Front washer switch ON (Wiper intermittent dial 4)	(V) 15
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6	10 5 0 2 ms JPMIA0033GB 10.7 V
					All switches OFF	0 V
					Front wiper switch INT	
				Combination	Front wiper switch LO	(V)
145 (L)	Ground	Combination switch OUTPUT 3	Output	switch (Wiper intermit- tent dial 4)	Lighting switch AUTO	10 5 0 2 ms JPMIA0034GB
					All switch OFF	10.7 V
			Outrot	Combination switch	Front fog lamp switch ON	
		Combination switch			Lighting switch 2ND	(V) 15
146	Cround				Lighting switch PASS	10
(SB)	Ground	OUTPUT 4	Output	(Wiper intermit- tent dial 4)	Turn signal switch LH	0
149 (W)	Ground	Tire pressure warn- ing check switch	Input		_	5 V
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When driver door opens)	0 V
151	Ground	Rear window defog-			Active	0 V
(G) ger relay	Output	fogger	Not activated	Battery voltage		

[ÍNTELLIGENT KEY SYSTEM]

JCKWA0001GE

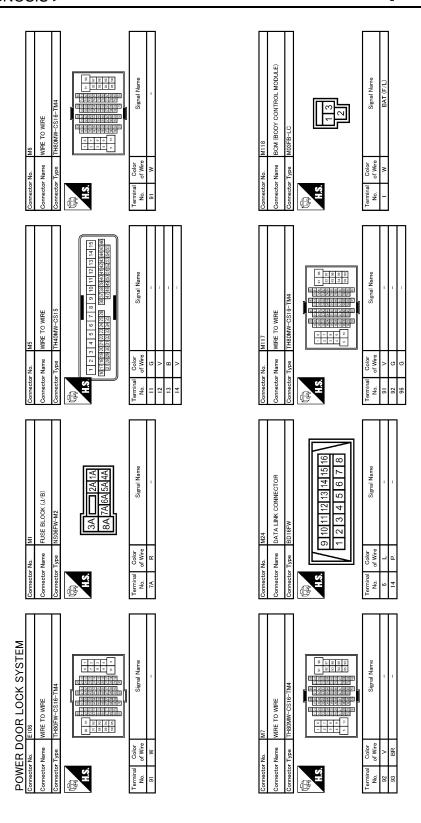
Р

Wiring Diagram — POWER DOOR LOCK SYSTEM -INFOID:0000000000961234 Α REAR DOOR LOCK ASSEMBLY RH В M117 B218 D71 C 15 B18 D51 (≥ [10] D ◆ ∩ИГОСК FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE) D45) To CAN system M124 [031] Е 12 M117 DATA LINK CONNECTOR M24 (BZ01 F DATA LINE DOOR LOCK ACTUATOR G FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) Н BCM (BODY CONTROL MODULE) (M118), (M12), (M122), (M123) J DLK 4-D1 POWER DOOR LOCK SYSTEM L E106 (M6) 404 A BATTERY POWER WINDOW MAIN SWITCH (D8), (D9) DOOR LOCK AND UNLOCK SWITCH 13 M5 M FRONT POWER WINDOW SWITCH (PASSENGER SIDE) (D38) DOOR LOCK AND UNLOCK SWITCH Ν 2006/09/15 0



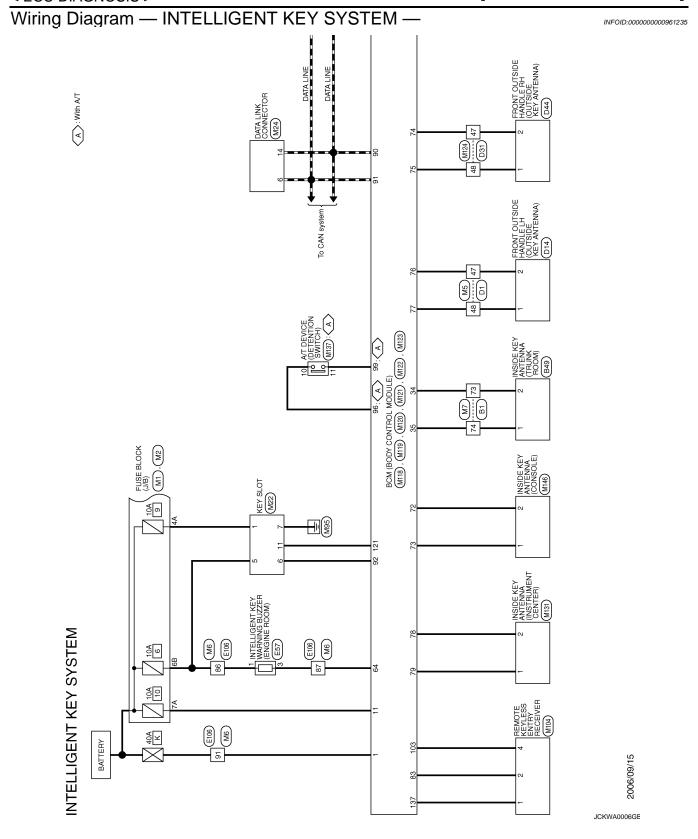
JCKWA0002GE

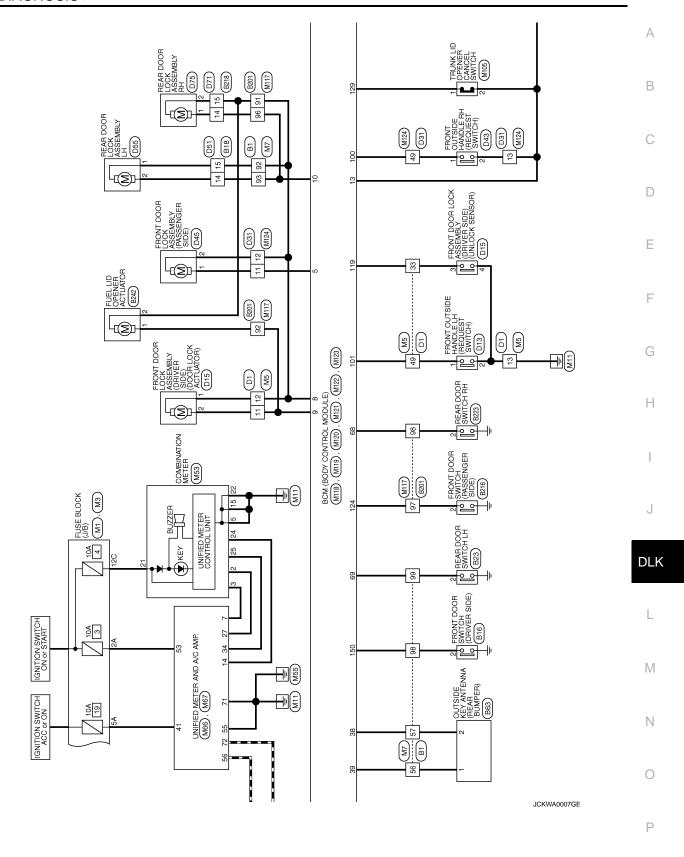
Connector No. D45 Connector Name (PASSEMBLY PRASSEMBLY PASSEMBLY P	O'Viro Signal Name O'Wiro	Connector No. 1075 Connector Name REAR DOOR LOOK ASSEMBLY RH Connector Type EDG-GY-RS LSD CAN CONTROL TYPE CON	of Wire Signal Name Of Wire		A B
Connector Nam Connector Typ	Terminal No.	Connector No. Connector Name Connector Type H.S.	Terminal No.		D
D38 FRONT POWER WINDOW SWITCH INSTIGEW-CS	Signal Name	17 8 9 10 16 17 18	Signal Name		Е
oower wind voer side) -cs 4 111213	Signal	WIRE -NS8 -1	Signal		F
	olor V V	D71 WIRE TO WIRE TK10MW-NS8 2 3 4 5 1	Color Glor		G
Connector No. Connector Name Connector Type H.S.	Color Colo	Connector No. Connector Name Connector Type H.S. 1	Color Colo		
					Н
	ame	ЕМВГУ ГН	ame l		I
Name MIRE TO WRE THA0PW-CS15 THA0PW-	Signal Name	R DOOR LOCK ASSI	Signal Name		J
10 10 10 10 10 10 10 10	Color of Wire P P P P V C C C C C C C C C C C C C C C	<u> </u>	Color of Wire		DLK
Connector No. Connector Type 15 14 15 14	Terminal No. 11 12 12 14 14	Connector No. Connector Type Connector Type H.S.	Terminal No.		
A DRIVER		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			L
OOR LOCK SYSTEM D15 FRONT DOOR LOCK ASSEMBLY (DRIVER SURE) FEGFGY-RS (123456)	Signal Name	6 7 8 9	Signal Name		M
LOCK Spoor Lock	Sign		Sign		
ăi I I I	Color Color	me WIRE TO WIRE Mark	Color Olor V C		Ν
POWER Connector No. Connector Name Connector Type H.S.	A Company of Company o	Connector No. Connector Type	Terminal Ci No. of 14 15		0
				JCKWA0003GE	Р
					P

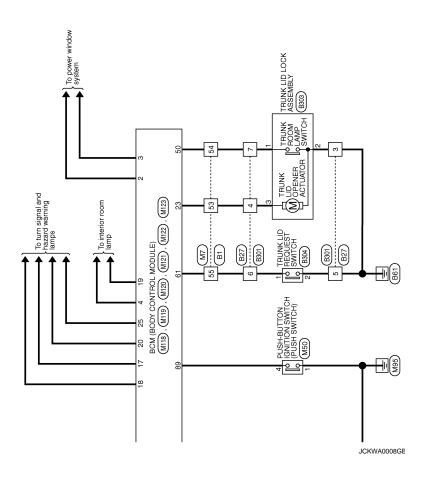


JCKWA0004GE

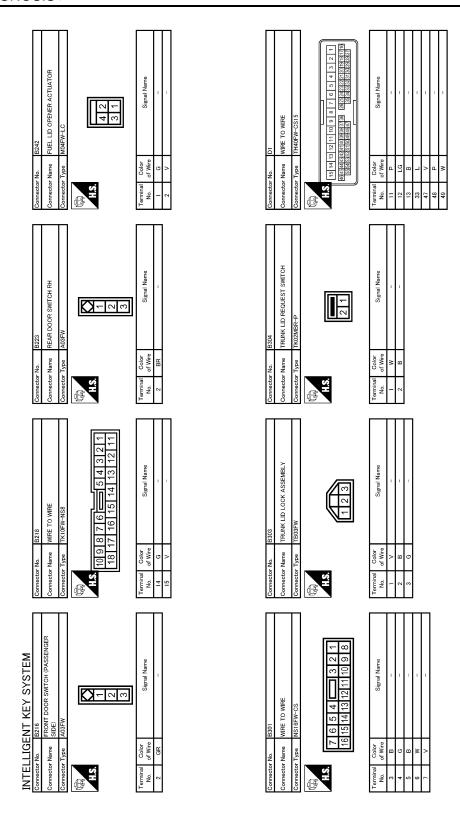
	S			А
	No. M124	Signal Name		В
	M124 Connector No. M124 Connector Name WIRE TO WIRE Connector Type TH4/DMN-CSIS			С
	Connection	No. 11 12 12 12 14 14 14 14 14 14 14 14 14 14 14 14 14		D
	DDULE) मारी तहां स्था प्रशास	EFIZAL LINK		Е
	M 123 TH40FG-NH TH40FG-NH TH6FG-NH TH6FG-NH TH6FG-NH TH6FG-NH TH6FG-NH THFFE THFFE THFFE THFFE THFFE THFFE THFFE	Signal Name POWER WINDOW SERAL LINK		F
	Type T100 128 128			G
	Connector No.	Terminal Color I 22 V		Н
	L MODULE)	Signal Name CAN-H CAN-H		I
	M 122 THAGEBANH THAGEBANH SIERE RE BESTER OF THE BESTER OF	Page 20		J
- 1	Connector No. M122 Connector Name BCM (Connector Type TH407 H.S. BERRER 1789	Terminal Color No. 191 L L L L L L L L L L L L L L L L L L		DLK
				L
SYSTEM	TROL MODULE) ■ 8 9 10 16 17 18 19	Signal Name DOOR LUNLOCK OUTUT (AS) DOOR LUNLOCK OUTUT (ALL) DOOR UNLOCK CUITUT (RR) DOOR UNLOCK CUITUT (RR) BAT (FLSE) GND		M
POWER DOOR LOCK SYSTEM	MI 19 BCM (BODY CONTROL MODULE) NS18FW-CS 5 6 7			Ν
POWER DO	Connector No.	Terminal Codor No. of Wire Of		0
1	<u> </u>		JCKWA0005GE	Р
				Ε'





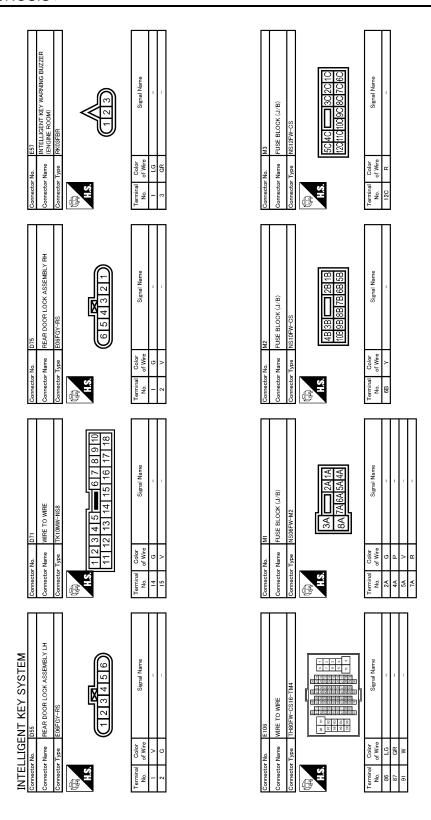


SWITCH LH Signal Name Signal Name	A B
Connector Name REAR DOOR SWITCH LH	C
BIS TIOFW-NSS TIOFW-NSS	E
Connector No. B18	G
FRONT DOOR SWITCH (DRIVER SIDE) AGBEW Signal Name Signal Name Signal Name Signal Name	I
Connector No. B16 Connector Name FRONT DC Connector Type A03FW Connector No. B49 Connector Name INSIDE KE Connector Name INSIDE KE Connector Name INSIDE KE Connector Type RR02FGY Terminal Color No. of Wire I.S. T. Color No. of Wire I.S. T. Color No. of Wire I.S. T. Color No. of Wire I.S. I.S. I.S. I.S. I.S. I.S. I.S. I.S	DLK
Now WRE Signal Name Signal Name Signal Name Signal Name Signal Name Signal Name	L M
NTELLIGENT KEY SYSTEM Connector Name WIRE TO WIRE	N O
JCKWA0009GE	Р



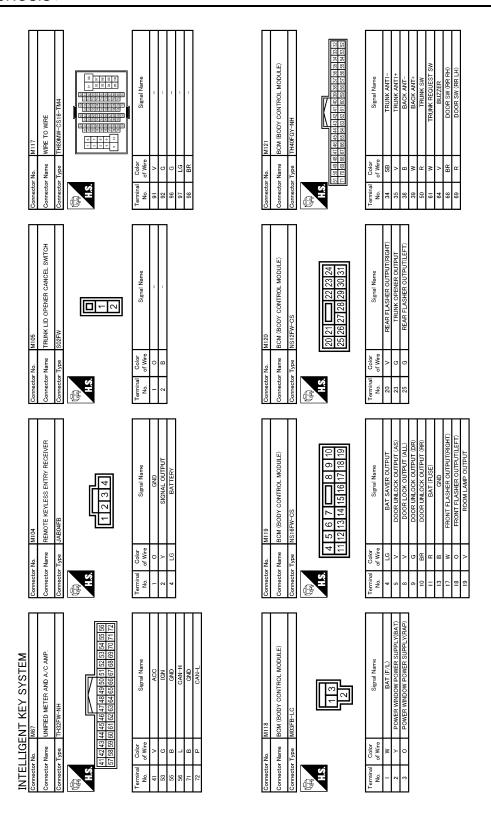
JCKWA0010GE

Name WIRE TO WIRE	Signal Name	D51 WIRE TO WIRE TKIOMW-NS8 3 4 5 6 7 8 9 10 12 13 14 15 16 17 18	Signal Name		A B
Connector No. D3 Connector Type TH	Terminal Color No. of Wire 11 P F 12 12 LG 13 47 V 48 P P 49 W	Corrector No. DSI Corrector Name WIFR Corrector Type TKI	Terminal Color No. of Wire 14 G 15		D
D16 FFRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) EUBFGY-RS 123456	Signal Name	ASSEMBLY 2 1	Signal Name		Е
	Color Color Sign	D45 FRONT DOOR LOCK ASSEMBLY PROSENGER SIDE) E06FGY-RS E06FGY-RS E66 5 4 3 2 1	Color Sign		F G
Connector No. Connector Type Connector Type H.S.	Terminal OO No Of V	Connector No. Connector Type	Terminal Co		Н
D14 FPONT OUTSIDE HANDLE LHYOUTSIDE KEY ANTENNA) RKOZMGY	Signal Name	D44 FROMT OUTSIDE HANDLE RH(OUTSIDE KEY ANTENNA) FRODMGY A (12)	Signal Name		J
Connector No. DI Connector Name RE Connector Type RR H.S.	Terminal Color No. of Wire 1 P P 2 V	Connector No. D44 Connector Name KEY Connector Type RKD	Terminal Color No. of Wire 1 P V V		DLK
INT KEY SYSTEM 013 FRONT OUTSIDE HANDLE LHREQUEST SWITCH) RNOZFL	Signal Name	D43 FROMT OUTSIDE HANDLE RH/REQUEST RNGFL) RNGFL	Signal Namo		L M
	O O O O O W		Dolor W W W		Ν
INTELLIG Connector No. Connector Type Connector Type	Terminal C No of 1 2 2 2	Connector No. Connector Name Connector Type H.S.	Terminal C No. of C 2 2 2	JCKWA0011GB	0
				-3.00.000	Р



JCKWA0012GE

	тот W-NH 2 3 4 5 6 8 9 10 11 12	Signal Name BAT ILL BAT ILL BAT ILL RND KEY SWITCH SIGNAL	M66 TH40GPW-NH TH40GPW-NH TH60GPW-NH TH	Signal Name COMM (AMP->METER) COMM (AMP->AMP) COMM (AMP->1.CD)		В
	Connector No. M22 Connector Name KFY SLOT Connector Type TH12FW-NN HS. T 2 2	Color No. of Wire	Connector No. Mide Connector Name UNIFIED ME Connector Type TH40FW-NN-NN-NN-NN-NN-NN-NN-NN-NN-NN-NN-NN-NN	Terminal Color No. of Wire No. of Wire 7		C
	\$ 288 \$ 200 \$ 0	Signal Name	METER TIPE STATES SECTIONS OF STATES SECTIONS OF SEC	Signal Name COMM (METER->AMP) COMM (AMP->METER) GND GND IGN IGN GND GND COMM (LCD->AMP) COMM (AMP->LCD)		E F
	Connector No. M7 Connector Name WIRE TO WIRE Connector Type TH80MV-CS16-TM4 H.S.	Color Color	Connector No. M53	No. of Whee Color No. of Whee Color of Whee Color Color of Whee Color of		G
	Comment		Common Co			Н
	M6 WRE TO WRE TH80MV-CS16-TM4 I I I I I I I I I I I I I I I I I I I	Signal Name	MSO PUSH-BUTTON IGNITION SWITCH TKOBFBR 1	Signal Name		J
	Connector No. Mis	Terminal Color No. Sec. Y No. Sec. Y Sec. Sec. Y Sec. Sec.	Commetor No. M50 Commetor Name PUSS Commetor Type TK08 H.S.	Terminal Color No. of Wire 1 B B 4 4 BRR		DLK
	10 12 13 14 15 15 16 16 17 16 17 16 17 16 17 16 17 16 17 16 17 16 17 16 17 17	Signal Name	270R 141516 6 7 8	Signal Name		L M
INTELLIGENT KEY SYSTEM	Name WIRE TO WIRE	Sign	No. M24 Name DATA LINK CONNECTOR Type 8018FW 1 2 3 4 5 6 7	Color Sig		Ν
INTEL	Connector No. Connector Type Connector Type	Termin al No. 11 11 11 13 33 33 447 449 48	Connector No. Connector Type H.S.	T dermin al. No. 6 6 6 14	JCKWA0013GE	0
					35	Р

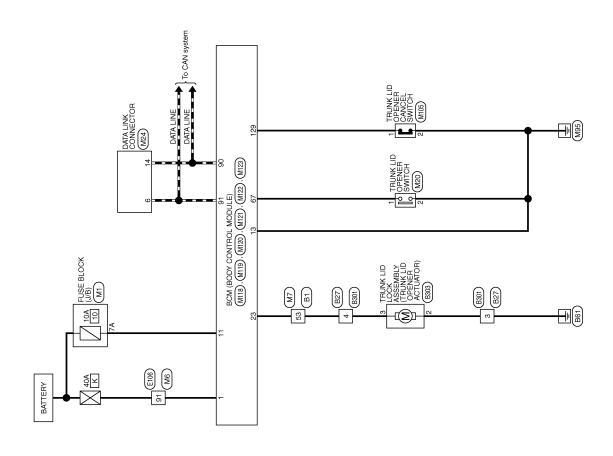


JCKWA0014GE

]			Α
Mi 24 Wike TO WIRE TH40MM-CS15 TH40M				В
inal inal	_			C
Ten T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>			
DOULE) DOULE) DISSISSION OF THE STATE OF THE	NSOLE)	94		Е
M123 BOM GRODY CONTROL MODULE) TH40FG-NH TH40FG-NH TH40FG-NH TH40FG-NH TH40FG-NH SIGNAL SIGNAL DR COMDITION SW KRY SMTCH SIGNAL DROCK SW (AS) TH2UK CAMCE US SERSER OFD SERSER OFD		Signal Name		F
148 128	1	Color of Wire		G
Connector No. Connector Name Connector Name Connector Type Connect	Connector No. Connector Name Connector Type	Terminal No. 1		Н
CANH KEY SLOT ILL A.T DEVICE SHIFT P AS REQUEST SW DR REQUEST SW KEYLESS TUNER POWER SUPPLY		Signal Name		Ι
A A AS	M137 A.T DEVICE THISPW-NH T 2 3 4)		J
J 9 8 & 9 9		Color R R R R		DLK
96 96 99 100 100 100 100 100 100 100 100 100	Connector No. Connector Name Connector Type H.S.	Terminal No. 0 10 10 11 11		
2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	F			L
Signal Name ROOM ANTZ-	HOOM AUTTI- ROOM AUTTI- ROOM AUTTI- ROOM AUTTI- ROOM AUTTI- END SW CAN-L CAN-L ROSE KEY ANTENNA (INSTRUMENT CENTER) RROSEGY	Signal Name		M
INTELLIGENT KEY SYSTEM	REVIESS REYANTEINI E KEY ANTEINI GGY			N
LIGENT No. M122		Color Of Wire PR		IN
INTELLIC Connector No. Connector Type Connector Type Integral No. 77 78 78 78 78 78 78 78 78 78 78 78 78	78 1.13 79 8R 79 8R 89 8P 90 PP Connector No. Connector Name (Connector Name (Terminal No. 2		0
			JCKWA0015GE	Р
				1

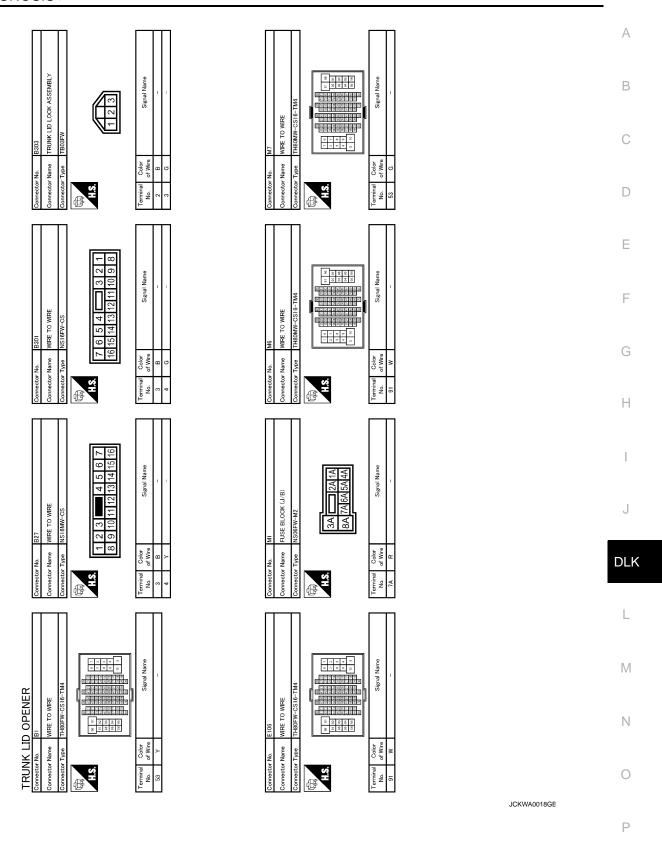
Wiring Diagram — TRUNK LID OPENER SYSTEM —

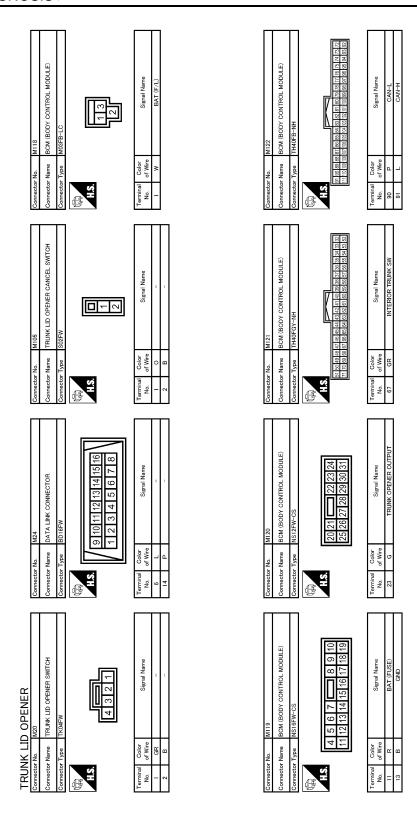
INFOID:0000000000961236



TRUNK LID OPENER







JCKWA0019GE

Α

В

С

D

Е

F

G

Н

J

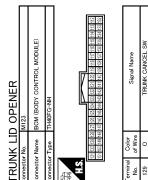
DLK

L

 \mathbb{N}

Ν

0



Fail Safe

O TRUM CANCEL SW

JCKWA0020GE

INFOID:0000000000961237

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTTENA AMP	Inhibit engine cranking	Erase DTC

Display contents of CONSULT	Fail-safe	Cancellation
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
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Starter control relay signal • Starter relay status signal
B2563: HI VOLTAGE	Inhibit engine cranking Inhibit steering lock	500 ms after the power supply voltage decreases to less than 18 V
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)
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 /h or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	 500 ms 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) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions is fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (battery voltage) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions is fulfilled • Ignition switch is in the ON position - 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 (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Display contents of CONSULT	Fail-safe	Cancellation
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)
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
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is 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 is 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)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)

DTC Inspection Priority Chart

INFOID:0000000000961238

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

Priority	DTC
1	B2562: LOW VOLTAGE B2563: HI VOLTAGE
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
3	B2190: NATS ANTTENA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM

DLK

L

M

0

Ν

Priority		ı	DTC	
4	B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSITION B2604: PNP SW B2605: PNP SW B2606: S/L RELAY B2607: S/L RELAY B2608: STARTER RELAY B2609: S/L STATUS B2608: STEERING LOCK UNIT B2600: STEERING LOCK UNIT B2600: STEERING LOCK UNIT B2600: STEERING LOCK UNIT B2600: STEERING LOCK UNIT B2601: ACC RELAY B2611: ACC RELAY B2612: S/L STATUS B2614: ACC RELAY B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2619: BCM B2619: BCM B2611: ACC RELAY CIRC B2616: IGN RELAY CIRC CB2616: IGN RELAY CIRC CB			
5	 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] RL C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1720: [CODE ERR] FR C1721: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL C1727: [BATT VOLT LOW] RL C1734: CONTROL UNIT 			
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA			

Α

В

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 \rightarrow ON again.
- 1 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 \rightarrow 2 \rightarrow 3...38 \rightarrow 39 after returning to the normal condition whenever ignition switch OFF \rightarrow ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch $\mathsf{OFF} \to \mathsf{ON}$ after returning to the normal condition if the malfunction is detected again.

CONSULT display	Fail-safe	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 CIRCUIT	_	_	_	BCS-33
U1010: CONTROL UNIT (CAN)	_	_	_	BCS-34
U0415: VEHICLE SPEED SIG	_	_	_	BCS-35
B2013: ID DISCORD BCM-S/L	×	_	_	<u>SEC-43</u>
B2014: CHAIN OF S/L-BCM	×	_	_	SEC-44
B2190: NATS ANTTENA AMP	×	_	_	<u>SEC-37</u>
B2191: DIFFERENCE OF KEY	×	_	_	SEC-40
B2192: ID DISCORD BCM-ECM	×	_	_	<u>SEC-41</u>
B2193: CHAIN OF BCM-ECM	×	_	_	<u>SEC-42</u>
B2553: IGNITION RELAY	_	_	_	PCS-48
B2555: STOP LAMP	_	_	_	<u>SEC-47</u>
B2556: PUSH-BTN IGN SW	_	×	_	<u>SEC-49</u>
B2557: VEHICLE SPEED	×	×	_	<u>SEC-51</u>
B2560: STARTER CONT RELAY	×	×	_	<u>SEC-52</u>
B2562: LOW VOLTAGE	_	_	_	BCS-36
B2563: HI VOLTAGE	×	×	_	BCS-37
B2601: SHIFT POSITION	×	×	_	<u>SEC-53</u>
B2602: SHIFT POSITION	×	×	_	<u>SEC-56</u>
B2603: SHIFT POSI STATUS	×	×	_	<u>SEC-58</u>
B2604: PNP SW	×	×	_	<u>SEC-61</u>
B2605: PNP SW	×	×	_	<u>SEC-63</u>
B2606: S/L RELAY	×	×	_	<u>SEC-65</u>
B2607: S/L RELAY	×	×	_	SEC-66
B2608: STARTER RELAY	×	×	_	SEC-68
B2609: S/L STATUS	×	×	_	SEC-70
B260A: IGNITION RELAY	×	×	_	PCS-50
B260B: STEERING LOCK VNIT	_	×	_	SEC-74
B260C: STEERING LOCK VNIT	_	×	_	SEC-75
B260D: STEERING LOCK VNIT	_	×	_	<u>SEC-76</u>
B260F: ENG STATE SIG LOST	×	×	_	SEC-77
B2611: ACC RELAY	_	_	_	PCS-52
B2612: S/L STATUS	×	×	_	SEC-79
B2614: ACC RELAY CIRC	_	×	_	PCS-54
B2615: BLOWER RELAY CIRC	_	×	_	PCS-57

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2616: IGN RELAY CIRC	_	×	_	PCS-60
B2617: STARTER RELAY CIRC	×	×	_	SEC-83
B2618: BCM	×	×	_	PCS-63
B2619: BCM	×	×	_	SEC-85
B261A: PUSH-BTN IGN SW	_	×	_	SEC-86
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	SEC-88
B2621: INSIDE ANTENNA	_	_	_	DLK-58
B2622: INSIDE ANTENNA	_	_	_	DLK-60
B2623: INSIDE ANTENNA	_	_	_	DLK-62
B26E1: ENG STATE NO RES	×	×	_	SEC-78
C1704: LOW PRESSURE FL	_	_	×	<u>WT-14</u>
C1705: LOW PRESSURE FR	_	_	×	<u>WT-14</u>
C1706: LOW PRESSURE RR	_	_	×	<u>WT-14</u>
C1707: LOW PRESSURE RL	_	_	×	<u>WT-14</u>
C1708: [NO DATA] FL	_	_	×	<u>WT-16</u>
C1709: [NO DATA] FR	_	_	×	<u>WT-16</u>
C1710: [NO DATA] RR	_	_	×	<u>WT-16</u>
C1711: [NO DATA] RL	_	_	×	<u>WT-16</u>
C1712: [CHECKSUM ERR] FL	_	_	×	<u>WT-19</u>
C1713: [CHECKSUM ERR] FR	_	_	×	<u>WT-19</u>
C1714: [CHECKSUM ERR] RR	_	_	×	<u>WT-19</u>
C1715: [CHECKSUM ERR] RL	_	_	×	<u>WT-19</u>
C1716: [PRESSDATA ERR] FL	_	_	×	<u>WT-22</u>
C1717: [PRESSDATA ERR] FR	_	_	×	<u>WT-22</u>
C1718: [PRESSDATA ERR] RR	_	_	×	<u>WT-22</u>
C1719: [PRESSDATA ERR] RL	_	_	×	<u>WT-22</u>
C1720: [CODE ERR] FL	_	_	×	<u>WT-24</u>
C1721: [CODE ERR] FR	_	_	×	<u>WT-24</u>
C1722: [CODE ERR] RR	_	_	×	<u>WT-24</u>
C1723: [CODE ERR] RL	_	_	×	<u>WT-24</u>
C1724: [BATT VOLT LOW] FL	_	_	×	<u>WT-27</u>
C1725: [BATT VOLT LOW] FR	_	_	×	<u>WT-27</u>
C1726: [BATT VOLT LOW] RR	_	_	×	<u>WT-27</u>
C1727: [BATT VOLT LOW] RL	_	_	×	<u>WT-27</u>
C1729: VHCL SPEED SIG ERR	_	_	×	<u>WT-30</u>
C1734: CONTROL UNIT	_	_	×	<u>WT-31</u>

INTELLIGENT KEY SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

ALL FUNCTIONS OF INTELLIGENT KEY SYSTEM DO NOT OPERATE

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-6, "Work Flow".</u>
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- "ENGINE START BY I-KEY" and "LOCK/UNLOCK BY I-KEY" are ON when setting on CONSULT-III.
- All doors are closed.

Symptom	Diagnosis/service procedure		Reference page
All function of Intelligent Key system does not operate.	1.	Check BCM power supply and ground circuit.	<u>DLK-64</u>
	2.	Check Intelligent Key battery inspection.	DLK-107
	3.	Check remote keyless entry receiver.	DLK-104
	4.	Check Intermittent Incident.	<u>GI-39</u>

DLK

J

Α

В

C

D

Е

F

Н

M

Ν

C

DOOR LOCK FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

DOOR LOCK FUNCTION SYMPTOMS DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH: Symptom Table

INFOID:0000000000961241

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-6, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- "LOCK/UNLOCK BY I-KEY" is ON when setting on CONSULT-III.
- Intelligent Key is out of key slot.
- · All doors are closed.

Symptom		Diagnosis/service pro	Reference page	
	1.	Check BCM Power supply and g	<u>DLK-64</u>	
Power door lock does not operate with door	2.	Check door lock and unlock swit	tch.	<u>DLK-68</u>
lock and unlock switch.	3.	Check door lock actuator (driver	side)	<u>DLK-92</u>
	4.	Check Intermittent Incident.		<u>GI-39</u>
Power door lock does not operate with door key cylinder operation. (Power door lock operate properly with door lock and unlock switch.)	1.	Check key cylinder switch.	Check key cylinder switch.	
	2.	Replace power window main switch.		<u>INT-10</u>
		Check door lock actuator.	Driver side	<u>DLK-92</u>
			Passenger side	DLK-93
Specific door lock actuator does not operate.	1.		Rear LH	DLK-94
			Rear RH	<u>DLK-94</u>
	2.	Check Intermittent Incident.		<u>GI-39</u>
Fuel lid opener actuator does not operate. (All door lock actuators operates normally.)	Check fuel lid lock actuator.		DLK-98	

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH: Symptom Table

INFOID:0000000000961242

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-6, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- "LOCK/UNLOCK BY I-KEY" is ON when setting on CONSULT-III.
- Intelligent Key is out of key slot.
- All doors are closed.

[INTELLIGENT KEY SYSTEM]

Symptom	Diagnosis/service procedure	Reference page
	Check BCM power supply and ground circuit.	DLK-64
Door lock/unlock do not operate by door re-	2. Check door switch.	DLK-65
quest switch.	3. Check key slot.	DLK-72
	Check Intermittent Incident.	<u>GI-39</u>
	Check door request switch (driver side).	DLK-87
Door lock/unlock does not operate by request switch (driver side).	Check outside key antenna (driver side).	DLK-101
ewiter (arver elae).	Check Intermittent Incident.	<u>GI-39</u>
Door lock/unlock does not operate by request switch (passenger side).	Check door request switch (passenger side).	DLK-87
	Check outside key antenna (passenger side).	DLK-101
	Check Intermittent Incident.	GI-39
Selective unlock function does not operate by	Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT".	<u>DLK-50</u>
door request switch (driver side) (other door lock function operate).	2. Check selective unlock function with a remote controller or door key cylinder.	DLK-13
	Check Intermittent Incident.	<u>GI-39</u>
Selective unlock function does not operate by door request switch (passenger side) (other	Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT".	<u>DLK-50</u>
door lock function operate).	Check Intermittent Incident.	<u>GI-39</u>
	Check "AUTO LOCK SET" setting in "WORK SUP-PORT".	<u>DLK-50</u>
Auto lock function does not operate.	2. Check door switch.	DLK-65
	3. Check key slot.	DLK-72
	Check Intermittent Incident.	<u>GI-39</u>
Fuel lid opener actuator does not operate. (All door lock actuators operates properly.)	Check fuel lid lock actuator.	DLK-98

INTELLIGENT KEY

INTELLIGENT KEY: Symptom Table

INFOID:0000000000961243

REMOTE KEYLESS ENTRY FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-6, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- · Intelligent Key is out of key slot.
- Ignition switch is in OFF or ACC position.
- All doors are closed.
- Retaind power operation does not operate. Refer to PWC-9, "System Description".

Symptom	Diagnosis/service procedure		Reference page
All of the remote keyless entry functions do	1.	Check Intelligent Key battery inspection.	DLK-107
not operate.	2.	Check Intermittent Incident.	<u>GI-39</u>

DLK

L

Ν

Р

Α

В

D

Е

F

Н

DLK-169

DOOR LOCK FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Symptom	Diagnosis/service procedure	Reference page
Selective unlock function does not operate	1. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUP-PORT".	DLK-50
by Intelligent Key.	Check Intelligent Key battery inspection.	DLK-107
	3. Check Intermittent Incident.	<u>GI-39</u>
	Check "AUTO LOCK SET" setting in "WORK SUPPORT".	DLK-51
Auto lock function does not operate nor-	2. Check door switch.	DLK-65
mally.	3. Check key slot.	DLK-72
	4. Check Intermittent Incident.	<u>GI-39</u>
Power window down function does not operate.	Check "PW DOWN SET" setting in "WORK SUPPORT".	DLK-107
	2. Check Intelligent Key battery inspection.	DLK-107

TRUNK OPEN FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

TRUNK OPEN FUNCTION SYMPTOMS TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH: Symptom Table

INFOID:0000000000961244

Α

В

D

Е

F

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-6, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is out of key slot.
- All doors are closed.

Symptom	Diagnosis/service procedure	Reference page
Trunk open function does not operate by trunk opener switch.	Check trunk opener switch.	<u>DLK-80</u>
	Check trunk lid opener cancel switch.	DLK-82
	Check Intermittent Incident.	<u>GI-39</u>

TRUNK REQUEST SWITCH

TRUNK REQUEST SWITCH: Symptom Table

INFOID:0000000000961245

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-6, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following "symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column
 in this order.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is out of key slot.
- · All doors are closed.

Symptom	Diagnosis/service procedure	Reference page
Trunk open function does not operate by trunk opener request switch.	Check trunk opener request switch.	DLK-90
	2. Check trunk lid opener cancel switch.	DLK-82
	3. Check outside key antenna (trunk room).	DLK-101
	4. Check Intermittent Incident.	<u>GI-39</u>

INTELLIGENT KEY

INTELLIGENT KEY: Symptom Table

INFOID:0000000000961246

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-6, "Work Flow".</u>
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is out of key slot.
- All doors are closed.

DLK

J

L

M

N

0

TRUNK OPEN FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Symptom	Diagnosis/service procedure		Reference page
Trunk open function does not operate by Intelligent Key.	1.	Check "TRUNK OPEN DELAY" setting in "WORK SUPPORT".	DLK-51
	2.	Check trunk open function.	DLK-32
	3.	Check trunk room lamp switch.	DLK-84
	4.	Check Intelligent Key battery inspection.	DLK-107
	5.	Check Intermittent Incident.	<u>GI-39</u>

WARNING FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

WARNING FUNCTION SYMPTOMS

Symptom Table

WARNING FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-6, "Work Flow".</u>
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following "symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

Warning chime functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation.

Sym	ptom	Diagnosis/service procedure	Reference page
		Check push button ignition switch position indicator.	PCS-68
	For internal	2. Check door switch.	<u>DLK-65</u>
	Formlemai	Check warning chime function.	DLK-114
OFF position warn-		Check Intermittent Incident.	<u>GI-39</u>
ing does not oper- ate.		Check push button ignition switch position indicator.	PCS-68
	For external	2. Check door switch.	<u>DLK-65</u>
	For external	Check Intelligent Key warning buzzer.	<u>DLK-99</u>
		Check Intermittent Incident.	<u>GI-39</u>
		Check Park position switch.	<u>SEC-58</u>
		2. Check door switch.	<u>DLK-65</u>
D position warning d	loop not approto	Check Intelligent Key warning buzzer.	<u>DLK-99</u>
P position warning d	loes not operate.	Check warning chime function.	DLK-114
		5. Check combination meter display function.	DLK-113
		6. Check Intermittent Incident.	<u>GI-39</u>
ACC warning does not operate		Check push button ignition switch position indicator.	PCS-68
		Check warning chime function.	DLK-114
		3. Check combination meter display function.	DLK-113
		Check Intermittent Incident.	<u>GI-39</u>

D

Α

В

Ε

F

G

Н

J

DLK

M

Ν

[INTELLIGENT KEY SYSTEM]

Symptom			Diagnosis/service proced	Reference page	
		1.	Check door switch.		DLK-65
			Instrument		DLK-58
		2.	Check inside key antenna.	Console	DLK-60
	Door open to close			Trunk room	DLK-62
		3.	Check Intelligent Key warning buzzer.		DLK-99
		4.	Check warning chime function.		DLK-114
		5.	Check key slot illumination.		DLK-109
		6.	Check combination meter display function		DLK-113
		7.	Check Intermittent Incident.		<u>GI-39</u>
		1.	Check push button ignition switch position	indicator.	PCS-68
				Instrument center	DLK-58
		2.	Check inside key antenna.	Console	DLK-60
	Push-button igni-			Trunk room	DLK-62
	tion switch opera- tion	3.	Check warning chime function.		DLK-114
		4.	Check key slot illumination.		DLK-109
Take away warning does not operate.		5.	Check combination meter display function	DLK-113	
		6. Check Intermittent Incident.			<u>GI-39</u>
		1.	Check push button ignition switch position	indicator.	PCS-68
	Door is open	2.	Check inside key antenna.	Instrument center	DLK-58
				Console	DLK-60
				Trunk room	DLK-62
		3.	Check combination meter display function	DLK-113	
		4.	Check Intermittent Incident.	<u>GI-39</u>	
		1.	Check "TAKE OUT FROM WIN WARN" setting in "WORK SUPPORT".		DLK-51
				Instrument center	DLK-58
		2.	Check inside key antenna.	Console	DLK-60
	Take away through window			Trunk room	DLK-62
	Willdow	3.	Check warning chime function.	DLK-114	
		4.	Check key slot illumination.		DLK-109
		5.	Check combination meter display function		DLK-113
		6.	6. Check Intermittent Incident.		<u>GI-39</u>
-	Key warning chime does not operate.		Check key slot.		DLK-72
			2. Check door switch.		DLK-65
Key warning chime			Check warning chime function.		<u>DLK-114</u>
Key warning chime (Check key slot illumination.		DLK-109
		5.	5. Check combination meter display function.		DLK-113
			Check Intermittent Incident.		<u>GI-39</u>

WARNING FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Symptom		Diagnosis/service proced	Reference page	
Door lock operation warning chime does not operate.	1.	Check door switch.		DLK-65
	2.	Check key slot illumination.		DLK-109
	3.	Check Intelligent Key warning buzzer.		DLK-99
	4.	Check inside key antenna.	Instrument center	DLK-58
			Console	DLK-60
			Trunk room	DLK-62
	5.	Check Intermittent Incident.		<u>GI-39</u>

Α

В

С

D

Е

F

G

Н

J

DLK

L

 \mathbb{N}

Ν

0

KEY REMINDER FUNCTION SYMPTOMS

[INTELLIGENT KEY SYSTEM]

KEY REMINDER FUNCTION SYMPTOMS

Symptom Table

KEY REMINDER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "Work flow". Refer to <u>DLK-6</u>, "Work Flow".
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- "LOCK/UNLOCK BY I-KEY" is ON when setting on CONSULT-III.
- "ANSWER BACK FUNCTION" is ON when setting on CONSULT-III.
- Ignition switch is in OFF position.
- · All doors are closed.
- Intelligent Key is out of key slot.

Symptom	Diagnosis/service procedure	Reference page
Key reminder function does not operate. 3 4 5	Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".	DLK-51
	2. Check door switch.	DLK-65
	Check inside key antenna.	DLK-58
	4. Check unlock sensor.	DLK-77
	Check Intelligent Key battery inspection.	DLK-107
	6. Check Intermittent Incident.	<u>GI-39</u>

HAZARD AND BUZZER REMINDER FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

HAZARD AND BUZZER REMINDER FUNCTION SYMPTOMS

Symptom Table

HAZARD AND BUZZER REMINDER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "Work flow". Refer to <u>DLK-6</u>, "Work Flow".
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- "LOCK/UNLOCK BY I-KEY" is ON when setting on CONSULT-III.
- "ANSWER BACK FUNCTION" is ON when setting on CONSULT-III.
- Ignition switch is in OFF position.
- · All doors are closed.
- Intelligent Key is out of key slot.

Symptom		Diagnosis/service procedure	Reference page
Hazard reminder does not operate by request switch. (Buzzer reminder operate.)	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	<u>DLK-51</u>
	2.	Check hazard function.	DLK-115
	3.	Check Intermittent incident.	<u>GI-39</u>
Hazard reminder does not operate by Intelligent Key. (Buzzer reminder operate.)	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	DLK-51
	2.	Check hazard function.	DLK-115
	3.	Check Intelligent Key battery inspection.	DLK-107
Buzzer reminder does not operate by request switch. (Hazard reminder operate.)	1.	Check "ANS BACK I-KEY LOCK" or "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT".	DLK-51
	2.	Check Intelligent Key warning buzzer.	DLK-99
	3.	Check Intermittent incident.	GI-39
Buzzer reminder does not operate by trunk opener request switch.	1.	Check "TRUNK OPEN DELAY" setting in "WORK SUP-PORT".	DLK-51
	2.	Check Intelligent Key warning buzzer.	DLK-99
	3.	Check trunk open function.	DLK-27
	4.	Check Intermittent incident.	<u>GI-39</u>

Н

Α

В

D

Е

F

DLK

J

M

Ν

HAZARD AND HORN REMINDER FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

HAZARD AND HORN REMINDER FUNCTION SYMPTOMS

Symptom Table

HAZARD AND HORN REMINDER FUNCTION MALFUNCTION

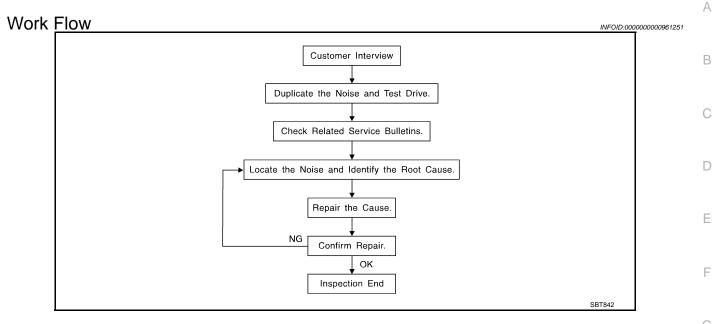
- Before performing the diagnosis in the following table, check "Work flow". Refer to DLK-6, "Work Flow".
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- "ANSWER BACK FUNCTION" is ON when setting on CONSULT-III.
- Ignition switch is in OFF position.
- All doors are closed.

Symptom		Diagnosis/service procedure	Reference page
Hazard reminder does not operate by request switch. (Horn reminder operate.)	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	DLK-51
	2.	Check hazard function.	DLK-115
	3.	Check Intermittent Incident.	<u>GI-39</u>
Hazard reminder does not operate by Intelligent Key. (Horn reminder operate.)	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	DLK-51
	2.	Check hazard function.	DLK-115
	3.	Check Intelligent Key battery inspection.	
Horn reminder does not operate by request switch. (Hazard reminder operate.)	1.	Check "ANSWER BACK WITH I-KEY LOCK" or "ANSWER BACK WITH I-KEY UNLOCK" setting in "WORK SUPPORT".	DLK-51
	2.	Check Intelligent Key warning buzzer.	DLK-99
	3.	Check Intermittent Incident.	<u>GI-39</u>
Horn reminder does not operate by Intelligent Key. (Hazard reminder operate.)	1.	Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".	DLK-51
	2.	Check horn function.	DLK-111
	3.	Check Intermittent Incident.	GI-39

SQUEAK AND RATTLE TROUBLE DIAGNOSES



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-183, "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 you may judge
 as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

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

DLK

M

Ν

 \circ

Ρ

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[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 you suspect the noise is coming from.
 Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that you suspect is causing the noise.
 Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
- placing a piece of paper between components that you suspect are causing the noise.
- looking for loose components and contact marks. Refer to <u>DLK-181</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 your authorized Nissan Parts Department.

CAUTION:

Do not use excessive force as many components are constructed of plastic and may be damaged.

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

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

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100×135 mm $(3.94 \times 5.31$ 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 \times 50 mm (1.18 \times 1.97in)

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE Α Used in place of UHMW tape that will be visible or not fit. Will only last a few months. SILICONE SPRAY Use when grease cannot be applied. В **DUCT TAPE** Use to eliminate movement. CONFIRM THE REPAIR Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet. Inspection Procedure D INFOID:0000000000961252 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: Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair. CENTER CONSOLE Components to pay attention to include: 1. Shifter assembly cover to finisher 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: 1. 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. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise. TRUNK Р Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner. In addition look for:

4. A loose license plate or bracket

1. Trunk lid dumpers out of adjustment Trunk lid striker out of adjustment

3. The trunk lid torsion bars knocking together

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

[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
- 3. Front or rear windshield touching headlining and squeaking

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

SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

- 1. Headrest rods and holder
- 2. A squeak between the seat pad cushion and frame
- 3. The rear seat back 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 orapplying 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 under hood 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
- 6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

Diagnostic Worksheet



SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

INFOID:0000000000961253

В

Α

Dear Infiniti Customer:

We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti 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 consultant or technician to ensure we confirm the noise you are hearing.

D

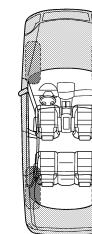
Е

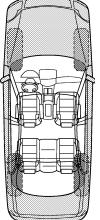
F

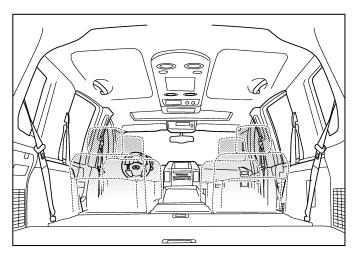
Н

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

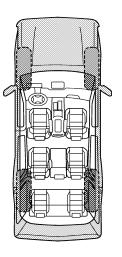
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.







\<u>o</u>==0



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. PIIB8741E

DLK

Ν

SQUEAK AND RATTLE TROUBLE DIAGNOSES

SQUEAK & RATTLE DIAGNOSTIC WO	RKSHE	ET - page 2		
Briefly describe the location where the no	ise occu	ırs:		
II. WHEN DOES IT OCCUR? (please che	eck the b	oxes that ap	ply)	
□ anytime□ 1st time in the morning□ only when it is cold outside□ only when it is hot outside	□ w □ d	fter sitting ou hen it is raini ry or dusty co ther:	ing or we	
III. WHEN DRIVING:	IV. W	HAT TYPE	OF NOIS	E
 □ through driveways □ over rough roads □ over speed bumps □ only about mph □ on acceleration □ coming to a stop □ on turns: left, right or either (circle) □ with passengers or cargo □ other: □ after driving miles or mir TO BE COMPLETED BY DEALERSHIP Test Drive Notes:				
		YES	NO	Initials of person
		123	110	performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm	m repair			
VIN:	D	ate:		

PIIB8742E

PRECAUTION

PRECAUTIONS

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

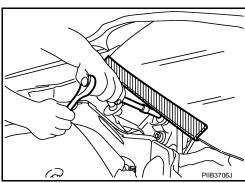
The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air 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 and SB section of this Service Manual.

WARNING:

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

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.



Precaution Necessary for Steering Wheel Rotation after Battery Disconnect INFOID:0000000000961256

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. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)

DLK

INFOID:0000000000961255

Α

В

D

Е

Ν

PRECAUTIONS

< PRECAUTION >

[INTELLIGENT KEY SYSTEM]

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

Work

- 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.

[INTELLIGENT KEY SYSTEM]

PREPARATION

PREPARATION

Special Service Tools

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

Tool name		Description
Engine ear	SIIA0995E	Locating the noise
Power tool	PIIB1407E	

В

С

D

Е

F

Н

INFOID:0000000000961258

INFOID:0000000000961259

Α

DLK

J

M

Ν

0

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

BASIC INSPECTION

1. CHECK FUNCTION OF INTELLIGENT KEY SYSTEM

Check all Intelligent Key system operation.

If any of Intelligent Key system does not operate>>Refer to <u>DLK-167, "Symptom Table"</u>.

If specific function of Intelligent Key system does not operate>>GO TO 2.

2. CHECK POWER DOOR LOCK OPERATION

Check door lock/unlock operation by operating door lock and unlock switch.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to DLK-168, "DOOR LOCK AND UNLOCK SWITCH: Symptom Table".

3.check door request switch operation

Check door lock/unlock operation by operating door request switch.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Refer to DLK-168, "DOOR REQUEST SWITCH: Symptom Table".

f 4.CHECK TRUNK OPEN OPERATION

Check trunk open operation by the operating trunk opener switch.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Refer to DLK-171, "TRUNK LID OPENER SWITCH: Symptom Table".

${f 5.}$ CHECK TRUNK OPENER REQUEST SWITCH OPERATION

Check trunk open operation by the operating trunk opener request switch.

Is the inspection result normal?

YES >> GO TO 6.

NO >> Refer to <u>DLK-171</u>, "TRUNK REQUEST SWITCH: Symptom Table".

O.CHECK REMOTE KEYLESS FUNCTION

Check following operation by operating the Intelligent Key remote control button.

- Door lock/unlock function
- · Trunk open function

Is the inspection result normal?

YES >> GO TO 7.

NO >> Refer to <u>DLK-169</u>, "INTELLIGENT KEY : <u>Symptom Table</u>" (Door lock/unlock function), <u>DLK-171</u>, "INTELLIGENT KEY : <u>Symptom Table</u>" (Trunk open function).

7.CHECK POWER WINDOW OPERATION

Check power window operation by operating power window main switch.

Is the inspection result normal?

YES >> GO TO 8.

NO >> Refer to PWC-107, "Diagnosis Procedure".

8.CHECK POWER WINDOW DOWN FUNCTION

Check power window down function by operating Intelligent Key remote control button.

Is the inspection result normal?

ON-VEHICLE MAINTENANCE >	[INTELLIGENT KEY SYST
YES >> GO TO 9.	
NO >> Refer to >> Refer to DLK-51, "INTELLIGENT KEY: CONS .CHECK HAZARD AND BUZZER REMINDER FUNCTION	
heck hazard and buzzer reminder function by operating for Door request switches Trunk opener request switch	bliowing switches.
the inspection result normal?	
YES >> GO TO 10. NO >> Refer to <u>DLK-177, "Symptom Table"</u> .	
O.CHECK HAZARD AND HORN REMINDER FUNCTIO	N BY INTELLIGENT KEY BUTTON
heck hazard and horn reminder function by operating Inte	
the inspection result normal?	
YES >> GO TO 11. NO >> Refer to DLK-178, "Symptom Table".	
1. CHECK WARNING FUNCTION	
heck warning function operate properly. Refer to DLK-173	3. "Symptom Table".
the inspection result normal?	
YES >> GO TO 12.	
NO >> Refer to <u>DLK-173, "Symptom Table"</u> . 2.CHECK OUT	
HECK OUT.	
>> INSPECTION END	

0

INFOID:0000000000961261

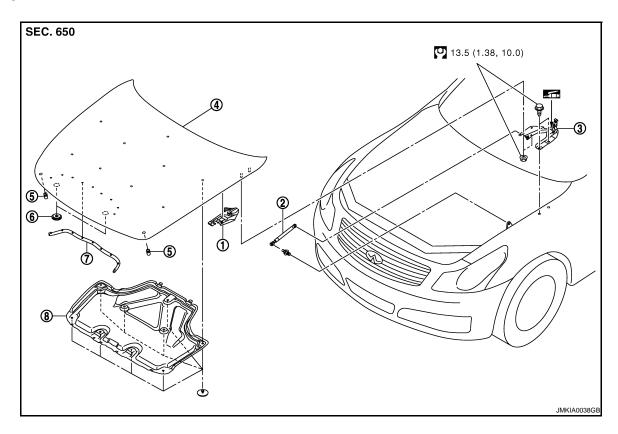
ON-VEHICLE REPAIR

HOOD

HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View

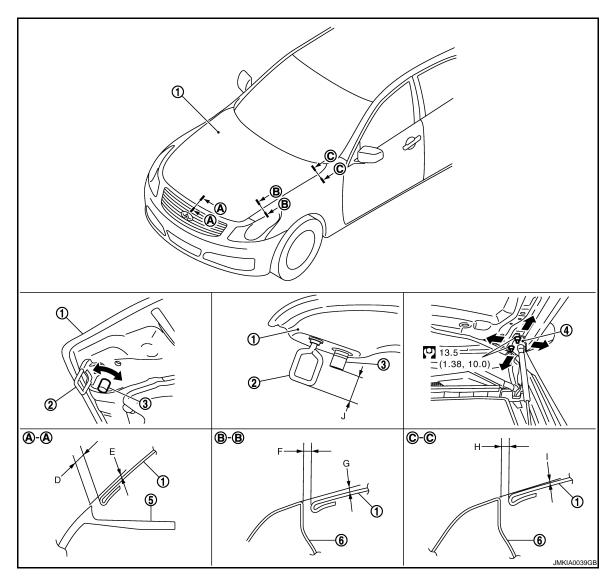
REMOVAL



- 1. Hood hinge cover
- 4. Hood assembly
- 7. Radiator core seal
- 2. Hood stay
- 5. Hood bumper rubber
- 8. Hood insulator
- Refer to GI-4, "Components" for symbols in the figure.

- 3. Hood hinge
- 6. Seal

ADJUSTMENT



Hood assembly 1. Hood hinge

- 2. Striker
- 5. Front bumper

- Hood bumper rubber 3.
- 6. Front fender

HOOD ASSEMBLY: Removal and Installation

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

CAUTION:

4.

Operate with two workers, because of its heavy weight.

REMOVAL

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

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

- 2. Remove the hood hinge cover (RH,LH).
- Remove the washer nozzle and hose nozzle. Refer to <u>WW-82, "Removal and Installation"</u>.
- 4. Remove the stud balls on the hood stays at the hood side.
- 5. Remove the hinge mounting nuts on the hood to remove the hood assembly.
- 6. Remove following parts after removing the hood assembly.
 - · Radiator core seal
 - · Hood insulator

DLK

Α

В

D

Е

F

Н

INFOID:0000000000961262

Ν

DLK-191

Hood bumper rubber

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Before installing hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.
- After installing, perform hood fitting adjustment. Refer to <u>DLK-192</u>, "HOOD ASSEMBLY: Adjustment".

HOOD ASSEMBLY: Adjustment

INFOID:0000000000961263

1. Check the clearance and the surface height between the hood and each part visually and by touching. (Fitting standard dimension in the table below should be satisfied.)

	Parts			Standard	Right/left clear- ance (MAX)
Hood – Front bumper	A – A	D	Clearance	2.6 - 5.6 (0.102 - 0.220)	_
		E	Surface height	-2.0 - 1.0 (-0.079 - 0.039)	_
Hood – Front fender B – B	B – B	F	Clearance	2.5 - 4.5 (0.098 - 0.177)	2.0 (0.079)
		G	Surface height	-2.0 - 1.0 (-0.079 - 0.039)	_
	C – C	Н	Clearance	2.5 - 4.5 (0.098 - 0.177)	2.0 (0.079)
		I	Surface height	-1.0 - 1.0 (-0.039 - 0.039)	_
Striker – hood bumper rubber	_	J	Clearance	32.5 - 33.5 (1.280 - 1.319)	_

^{*} Unit: mm (in)

- 2. In case out of specification, adjust them according to the procedures shown below.
- Remove the striker and adjust the surface height of hood, front bumper and front fender according to the fitting standard dimension, by rotating hood bumper rubbers.
- 4. Adjust the clearance of striker, hood bumper rubber according to the fitting standard dimension.
- 5. Loosen the hood hinge mounting nuts on the hood.
- Adjust the clearance of hood, front bumper and front fender according to the fitting standard dimension, for the hood.
- Check that the hood lock primary latch is securely engaged with the striker by dropping hood from approximately 200 mm (7.87 in) height or pressing lightly on the hood.

Do not drop hood from a height of 300 mm (11.81 in) or more.

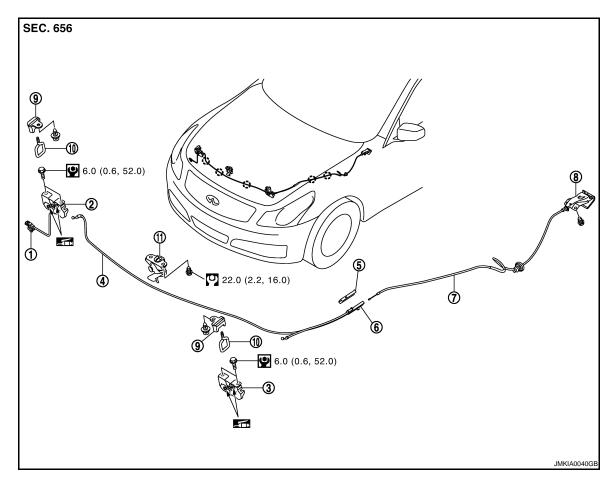
8. Install as static closing face of hood is $94 - 490 \text{ N} \cdot \text{m} (9.6 - 50.0 \text{ kg-m})$.

NOTE:

- Exercise vertical force on right side and left side of hood lock.
- Do not press simultaneously both sides.
- 9. After adjustment tighten hood hinge mounting nuts to the specified torque.

HOOD LOCK CONTROL

HOOD LOCK CONTROL: Exploded View



- 1. Hood lock switch harness connector 2.
- 4. Hood lock control cable (Front)
- 7. Hood lock control cable (Rear)
- 10. Striker
- (]) Clip

- Hood lock (RH)
- Hood lock control cable protector cover
- 8. Hood lock opener
- 11. Secondary latch

- 3. Hood lock (LH)
- 6. Hood lock control cable protector
- Hood lock cover

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

HOOD LOCK CONTROL: Removal and Installation

REMOVAL

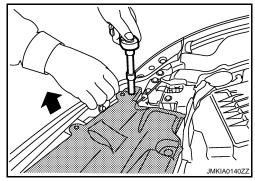
- 1. Remove the washer tank. Refer to refer to <a href="https://www.nemoval.nemo
- 2. Remove the radiator core support ornament.
 - Remove the radiator core support ornament mounting bolts and clips.

NOTE:

To remove the mounting bolts on both sides of radiator core support ornament, first remove the mounting bolts of front bumper (shown by arrows in the figure) and pull up the bumper edge slightly to get working clearance.

CAUTION:

Do not apply excessive force while pulling front bumper to prevent front bumper and front fender from being damaged.



Hold both sides of radiator core support ornament, pull it upwards and slide it rearwards of the vehicle.

В

Α

D

Е

F

G

Н

DLK

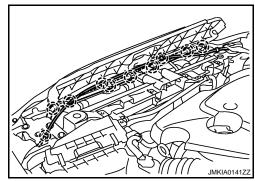
M

INFOID:0000000000961265

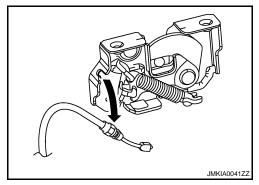
Ν

• Disconnect the harness clip and hood lock control cable clip on radiator core support.



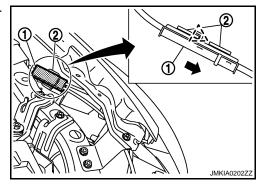


- Remove the fender protector (LH). Refer to EXT-22, "Removal and Installation".
- 4. Disconnect hood lock switch harness connector (RH side).
- 5. Remove the hood lock bracket mounting bolts, and remove the hood lock bracket assembly. Refer to DLK-196, "Removal and Installation".
- 6. Remove the hood lock mounting bolts, and disassemble the hood lock from the hood lock bracket.
- 7. Disconnect the hood lock control cable from the hood lock and clip it to the hood-ledge.

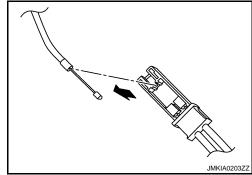


8. Remove the hood lock control cable protector (1) from the head-lamp assembly (2).





- 9. Remove the hood lock control cable cover from hood lock control cable protector.
- 10. Disconnect the hood lock control cable from hood lock control cable protector.



- 11. Remove the mounting screws and then remove the hood lock opener.
- 12. Remove the grommet on the dashboard, and pull the hood lock control cable toward the passenger compartment.

CAUTION:

While pulling, do not to damage (peeling) the outside of the hood lock control cable.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Do not to bend the cable too much, keeping the radius 100 mm (3.94 in) or more.
- Check that the hood lock control cable is properly engaged with the hood lock.
- After installing, perform hood fitting adjustment. Refer to <u>DLK-192</u>, "HOOD ASSEMBLY: Adjustment".
- After installing, perform the hood lock control inspection. Refer to <u>DLK-195, "HOOD LOCK CONTROL</u>: Inspection".

HOOD LOCK CONTROL: Inspection

NOTE:

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

- 1. Check that the secondary latch is properly engaged with the secondary striker (6.8 mm (0.268 in) shown in the figure) by hood weight.
- 2. While operating the hood opener, carefully check that the front end of the hood is raised by approximately 20 mm (0.79 in). Also check that the hood opener returns to the original position.
- 3. Check that the hood opener operating is 49 N (5.0 kg) or below.
- 4. Install so that static closing face of hood is 94 − 490 N·m (9.6 − 50.0 kg-m).

NOTE:

- Exercise vertical force on right side and left side of hood lock.
- Do not press simultaneously both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply body grease to the hood lock.

DLK

Α

В

D

Е

Н

INFOID:0000000000961266

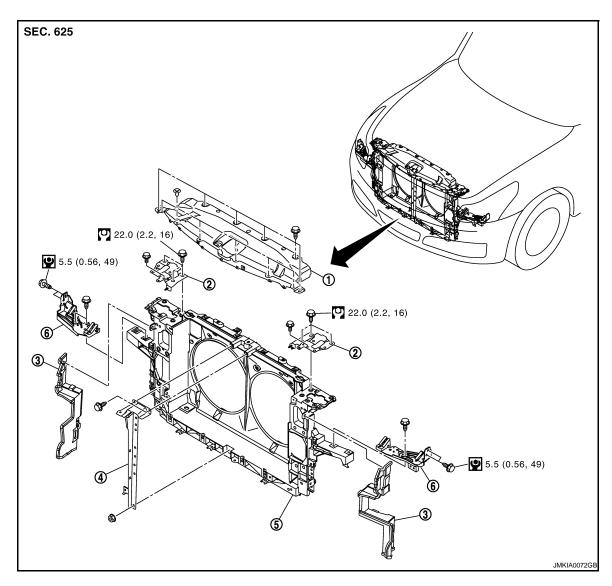
. .

Ν

C

RADIATOR CORE SUPPORT

Exploded View



- 1. Radiator core support ornament
- 4. Hood lock stay

- 2. Hood lock bracket
- 5. Radiator core support assembly
- Air guide
- 6. Head-lamp bracket

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

Removal and Installation

INFOID:0000000000961268

REMOVAL

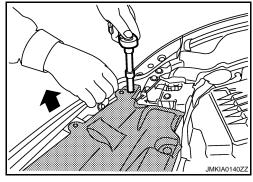
- 1. Remove the front bumper and front bumper reinforcement. Refer to EXT-11, "Removal and Installation".
- 2. Remove the radiator reserve tank. Refer to CO-14, "Removal and Installation".
- 3. Remove horn (High/Low). Refer to HRN-6, "Removal and Installation".
- 4. Remove the radiator core support ornament.
 - Remove the radiator core support ornament mounting bolts and clips.
 NOTE:

[INTELLIGENT KEY SYSTEM]

In the case that only radiator core support ornament is removed (front bumper is not removed), remove them according to the procedures shown below.

To remove the mounting bolts on both sides of radiator core support ornament, first remove the mounting bolts of front bumper (shown by arrows in the figure) and pull up the bumper edge slightly to get working clearance. **CAUTION:**

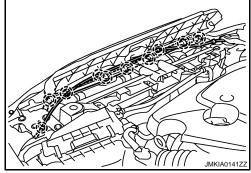
Do not apply excessive force while pulling front bumper to prevent front bumper and front fender from being damaged.



Hold both sides of radiator core support ornament, pull it upwards and slide it to the rear of the vehicle.

 Disconnect the harness clip and hood lock control cable clip on radiator core support.

: Clip



Remove the head lamp assembly. Refer to EXL-185, "Removal and Installation".

Remove the hood lock bracket assembly.

7. Remove the washer inlet and washer tank. Refer to WW-79, "Removal and Installation".

Remove the ambient sensor. Refer to VTL-25, "Removal and Installation". 8.

Remove the power steering fluid cooler. Refer to ST-20, "WITHOUT 4WAS: Removal and Installation" (without 4WAS), ST-22, "WITH 4WAS: Removal and Installation" (with 4WAS).

10. Remove the air guide mounting clips and then remove air guaide.

11. Disconnect the harness connector from liquid tank, and disconnect harness clamp from radiator core sup-

12. Remove the ICC sensor integrated unit. Refer to CCS-110, "Removal and Installation".

13. Remove the hood lock stay.

14. Remove the engine undercover. Refer to EXT-26, "Removal and Installation".

15. Drain engine coolant from radiator. Refer to <a>CO-8, "Draining".

16. Remove the radiator upper hose and lower hose on radiator side.

17. Remove the A/T fluid cooler tube on radiator side. Refer to TM-271, "2WD: Removal and Installation"

18. Disconnect condenser pipe assembly at one touch joint. Refer to HA-54, "Removal and Installation".

19. Remove the radiator core support assembly mounting bolts, and draw out radiator core support assembly forward of the vehicle.

20. Disconnect the cooling fan and crush zone sensor harness connector and clamp.

Remove the radiator core support assembly.

22. Remove the following parts after removing the radiator core support assembly.

· Head lamp bracket.

Cooling fan. Refer to <u>CO-17</u>, "<u>Removal and Installation</u>".

Radiator and condenser assembly. Refer to CO-14, "Removal and Installation".

• Crush zone sensor Refer to SR-14, "Removal and Installation".

Crush zone sensor bracket Refer to <u>SR-14</u>, "Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

CAUTION:

DLK

Α

D

Е

Ν

RADIATOR CORE SUPPORT

< ON-VEHICLE REPAIR >

[INTELLIGENT KEY SYSTEM]

- After installation, refill the following parts.

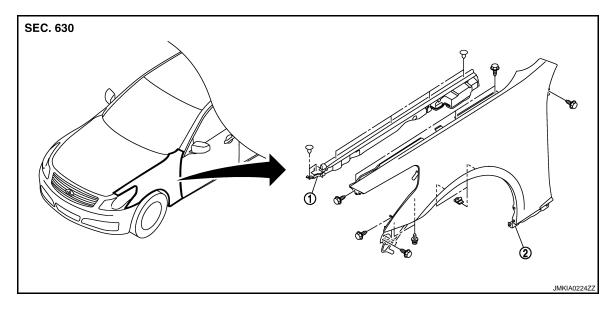
 Power stealing fluid. Refer to ST-10, "Inspection".

 A/T fluid. Refer to TM-218, "Changing".

 Engine coolant. Refer to CO-9, "Refilling".

FRONT FENDER

Exploded View



1. Hood seal assembly (side)

Front fender

Removal and Installation

REMOVAL

- Remove the front bumper. Refer to <u>EXT-11</u>, "Removal and Installation".
- 2. Remove the hood seal assembly (side).
- 3. Remove the head-lamp. Refer to EXL-185, "Removal and Installation".
- 4. Remove the front fender protector. Refer to EXT-22, "Removal and Installation".
- 5. Remove the center mudguard. Refer to EXT-24, "Removal and Installation".
- 6. Remove the mounting bolt and remove the front fender.

CAUTION:

While removing use a shop cloth to protect body from damaging.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- After installing, apply touch-up paint (the body color) onto the head of the front fender mounting bolts.
- After installing, check front fender adjustment. Refer to <u>DLK-192, "HOOD ASSEMBLY : Adjustment"</u> and <u>DLK-202, "FRONT DOOR : Adjustment"</u>.

DLK

Α

В

D

Е

F

Н

INFOID:0000000000961270

_ _

N

 \cap

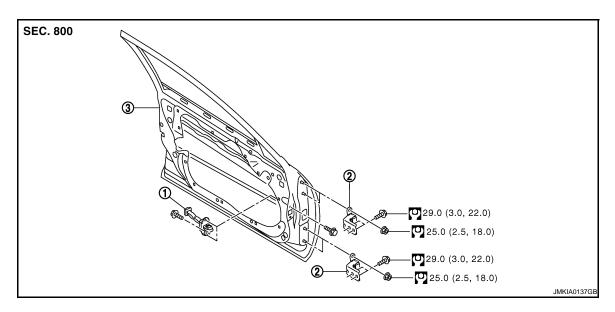
DOOR

FRONT DOOR

FRONT DOOR: Exploded View

INFOID:0000000000961271

REMOVAL

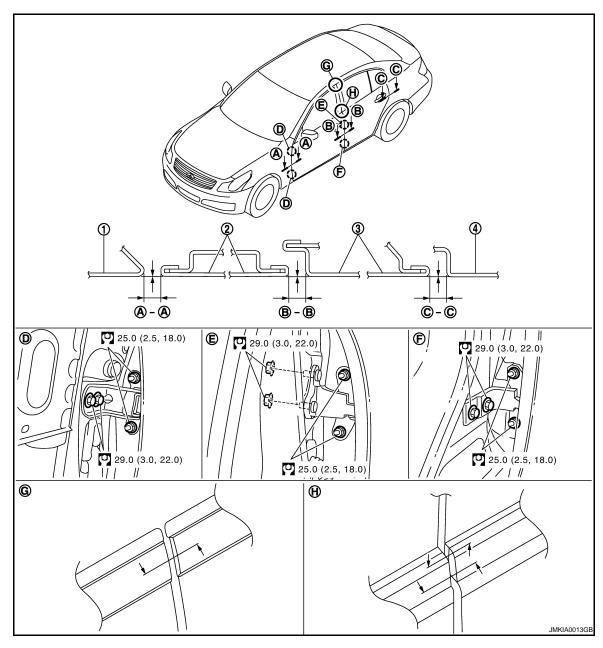


1. Check link

- 2. Door hinge (upper, lower)
- 3. Front door panel

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

ADJUSTMENT



Front fender 1.

2. Front door outer Rear door outer

Rear fender

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

FRONT DOOR: Removal and Installation

REMOVAL

CAUTION:

- When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.
- When removing and installing front door assembly, perform the fitting adjustment. Refer to <u>DLK-202</u>, "FRONT DOOR: Adjustment".
- After installing, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.
- Check the hinge rotating part for poor lubrication. If necessary, apply body grease.
- Operate with two workers, because of its heavy weight.
- Check rear door open/close operation after installation.
- Pull the lever and disconnect the door harness connector while removing tabs of door harness connector.

DLK

Α

В

D

Е

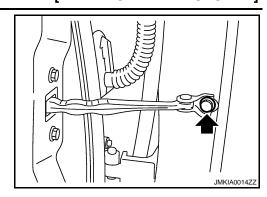
F

Н

Ν

INFOID:0000000000961272

2. Remove the mounting bolts of the check link on the vehicle.



3. Remove the door side hinge mounting nuts, then remove the door assembly.

INSTALLATION

Install in the reverse order of removal.

FRONT DOOR: Adjustment

INFOID:0000000000961273

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

1. Check the clearance and surface height and surface mismatch between the front door and each part visually and by touching.(Fitting standard dimension in the table below should be satisfied.)

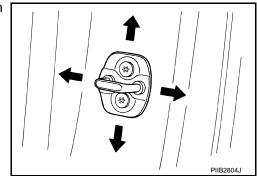
Parts	Portion	Clearance	Surface height	Surface mismatch
Front fender – front door	A – A	2.5 - 4.5 (0.098 - 0.177)	-1.0 - 1.0 (-0.039 - 0.039)	_
Front door – rear door	B – B	2.5 - 4.5 (0.098 - 0.177)	-1.0 - 1.0 (-0.039 - 0.039)	_
Front door sash molding – rear door sash molding	G	_	-1.5 - 1.5 (-0.059 - 0.059)	_
Front door outside molding – rear door outside molding	Н	_	-1.5 - 1.5 (-0.059 - 0.059)	-1.5 - 1.5 (-0.059 - 0.059)

- 2. In case out of specification, adjust them according to the procedures shown below.
- Remove the front fender. Refer to refer to <u>DLK-199</u>, "Removal and Installation".
- 4. Loosen the hinge mounting nuts on door side.
- Adjust the surface height and surface mismatch of the front door according to the fitting standard dimension.
- 6. Temporarily tighten the hinge mounting nuts on door side.
- 7. Loosen the hinge mounting bolts on body side.
- 8. Raise the front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 9. After adjustment tighten bolts and nuts to the specified torque.
- 10. Install the front fender. Refer to refer to DLK-199, "Removal and Installation".

STRIKER ADJUSTMENT

[INTELLIGENT KEY SYSTEM]

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

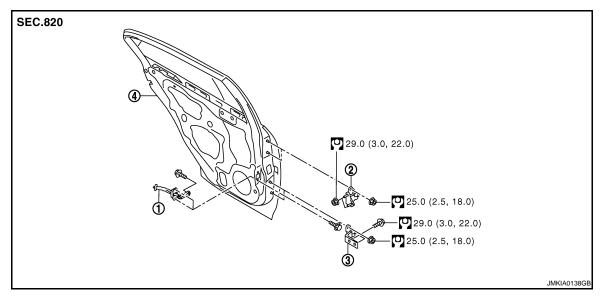


REAR DOOR

REAR DOOR: Exploded View

INFOID:0000000000961274

REMOVAL



1. Check link

- 2. Door hinge (upper)
- 3. Door hinge (lower)

4. Rear door panel

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

ADJUSTMENT

G

Α

В

D

Е

F

Н

-

J

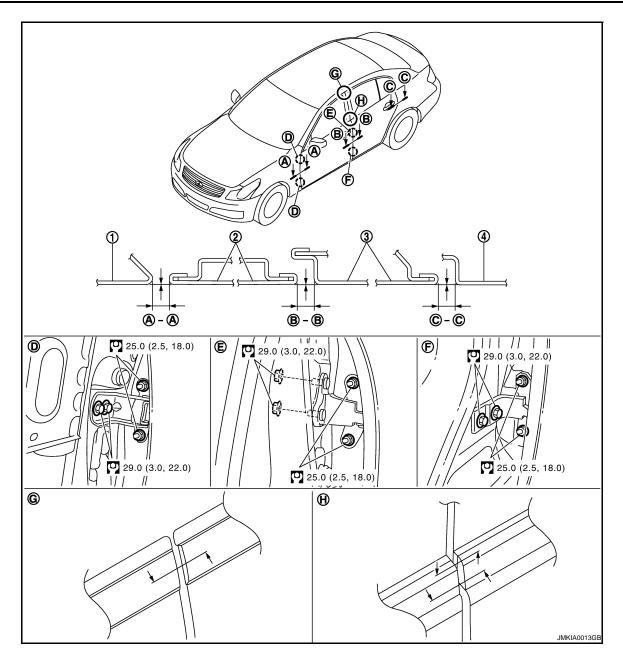
DLK

L

M

Ν

0



1. Front fender

- 2. Front door outer
- 3. Rear door outer

INFOID:0000000000961275

4. Rear fender

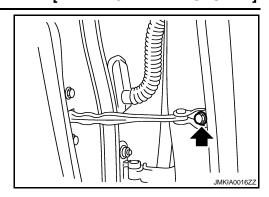
Refer to GI-4, "Components" for the symbols in the figure.

REAR DOOR: Removal and Installation

REMOVAL

1. Pull out grommet and disconnect rear door harness connector.

2. Remove the mounting bolts of the check link on the vehicle.



3. Remove the door side hinge mounting nuts and remove the door assembly.

CAUTION:

- When removing and installing the rear door assembly, support the door with a jack and cloth to protect the door and body.
- When removing and installing rear door assembly, perform the fitting adjustment. Refer to <u>DLK-205</u>, <u>"REAR DOOR: Adjustment"</u>.
- Check the hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installing, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.
- Operate with two workers, because of its heavy weight.
- Check rear door open/close operation after installation.

INSTALLATION

Install in the reverse order of removal.

REAR DOOR: Adjustment

INFOID:0000000000961276

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

1. Check the clearance and surface height and surface mismatch between the rear door and each part visually and by touching. (Fitting standard dimension in the table below should be satisfied.)

Parts	Portion	Clearance	Surface height	Surface mismatch
Front door – rear door	B – B	2.5 - 4.5 (0.098 - 0.177)	-1.0 - 1.0 (-0.039 - 0.039)	_
Rear door – rear fender	C – C	2.5 - 4.5 (0.098 - 0.177)	-1.0 - 1.0 (-0.039 - 0.039)	_
Front door sash molding – rear door weather-strip	G	_	-1.5 - 1.5 (-0.059 - 0.059)	_
Front door outside molding – rear door outside molding	Н	_	-1.5 - 1.5 (-0.059 - 0.059)	-1.5 - 1.5 (-0.059 - 0.059)

- 2. In case out of specification, adjust them according to the procedures shown below.
- Remove the center pillar upper garnish and center pillar lower garnish. Refer to <u>INT-13</u>, "Removal and <u>Installation"</u>.
- 4. Loosen the hinge mounting nuts on door side.
- Adjust the surface height and surface mismatch of the rear door according to the fitting standard dimension.
- 6. Temporarily tighten the hinge mounting nuts on door side.
- 7. Loosen the hinge mounting nuts and bolts on body side.
- Raise the rear door at rear end to adjust clearance of the rear door according to the fitting standard dimension.
- 9. After adjustment tighten bolts and nuts to the specified torque.
- 10. Install the center pillar upper garnish and center pillar lower garnish. Refer to INT-13, "Removal and Installation".

DLK

Α

D

Е

F

Н

L

M

Ν

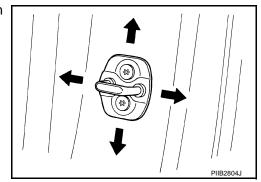
0

Р

Ρ

STRIKER ADJUSTMENT

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



DOOR LOCK FRONT DOOR LOCK

FRONT DOOR LOCK: Exploded View

INFOID:0000000000961277

Α

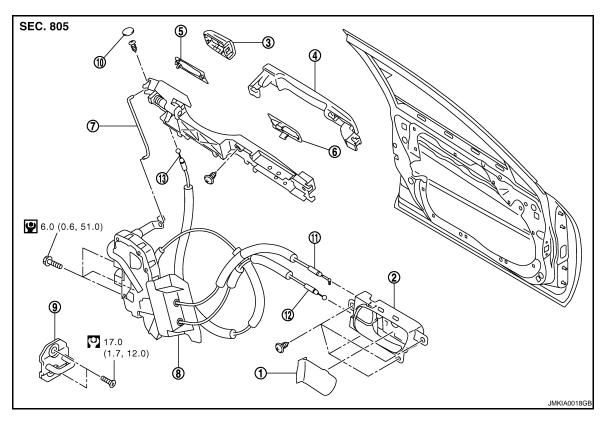
В

D

Е

F

Н



- Inside handle cap
- 2. Inside handle

Rear gasket

11. Lock knob cable

Door lock assembly

- Door key cylinder assembly (Driver side)
 Outside handle escutcheon (Passenger side)
- 6. Front gasket
- 9. Striker
- 12. Inside handle knob cable

- 4. Outside handle
- 7. Key cylinder rod (Driver side only)
- 10. Grommet
- 13. Outside handle cable

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

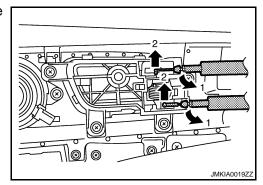
FRONT DOOR LOCK: Removal and Installation

REMOVAL

1. Remove the front door finisher. Refer to INT-10, "Removal and Installation".

5.

2. Disconnect the inside handle knob cable and lock knob cable from the back side of the front door finisher.



DLK

J

ı

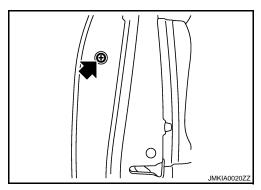
M

INFOID:0000000000961278

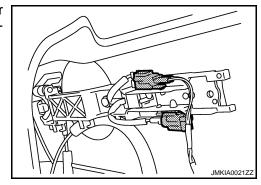
Ν

- 3. Remove the front door glass and front door module assembly. Refer to <u>GW-14</u>, "<u>Removal and Installation</u>".
- Remove door side grommet, and remove door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) bolts (TORX T30) from grommet hole.
 CAUTION:

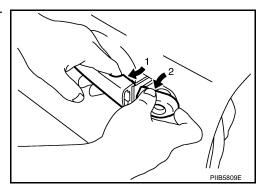
Do not forcibly remove the TORX bolts (T30).



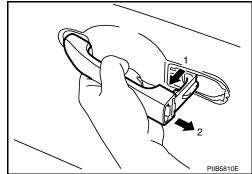
5. Disconnect door antenna and door request switch connector and remove harness clamp. (Models with Intelligent Key system)



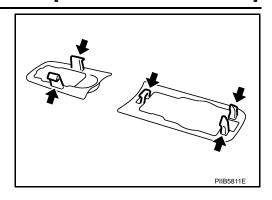
- 6. Reach in to separate the key cylinder rod connection (on the handle).
- 7. Disconnect door key cylinder switch harness connector.
- 8. While pulling the outside handle, remove door key cylinder assembly.



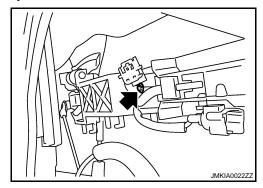
- 9. Disconnect front door request switch harness connector (with Intelligent Key system).
- 10. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



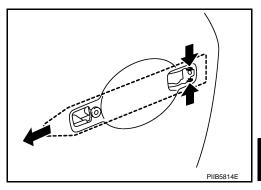
11. Remove the front gasket and rear gasket.



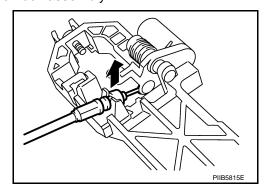
- 12. Remove the TORX bolts (T30), and remove the door lock assembly.
- 13. Remove the TORX bolt (T30) of the outside handle bracket.



 While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



- 15. Disconnect the door lock actuator connector and remove the door lock assembly.
- 16. Reach in to separate the outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

To install each rod, rotate the rod holder until a click is felt.

REAR DOOR LOCK

REAR DOOR LOCK: Exploded View

Α

В

С

D

Е

F

G

Н

1

DLK

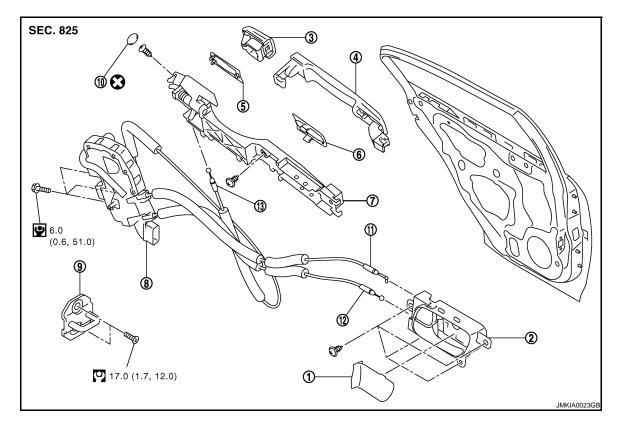
N

Ν

 \cap

Р

INFOID:0000000000961279



- Inside handle cap
- 4. Outside handle
- 7. Outside handle bracket
- 10. Seal
- 13. Outside handle cable
- Refer to GI-4, "Components" for symbols in the figure.
- 2. Inside handle
- 5. Rear gasket
- 8. Door lock assembly
- 11. Lock knob cable

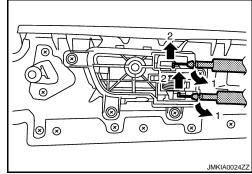
- 3. Outside handle escutcheon
- 6. Front gasket
- 9. Striker
- 12. Inside handle knob cable

REAR DOOR LOCK: Removal and Installation

INFOID:0000000000961280

REMOVAL

- 1. Remove the rear door finisher. Refer to INT-10, "Removal and Installation".
- 2. Disconnect the inside handle knob cable and lock knob cable from the back side of the rear door finisher.



- 3. Remove the rear door glass. Refer to GW-19, "Removal and Installation".
- 4. Remove door side grommet, and remove outside handle escutcheon bolt (TORX T30) from grommet hole.

CAUTION:

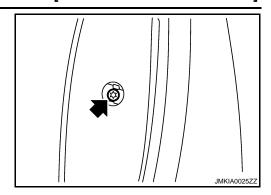
Α

В

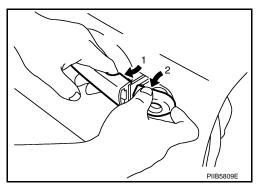
D

Е

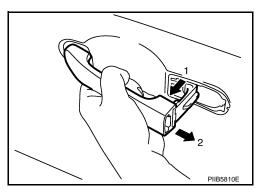
Do not forcibly remove the TORX bolts (T30).



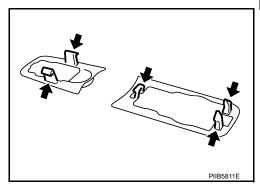
5. While pulling the outside handle, remove outside handle escutcheon.



6. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



7. Remove the front gasket and rear gasket.



8. Remove the TORX bolts (T30), remove the door lock assembly.

Р

0

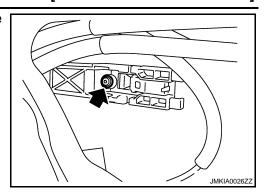
DLK

M

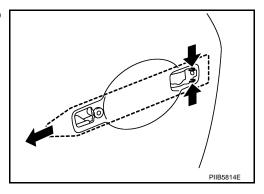
Ν

[INTELLIGENT KEY SYSTEM]

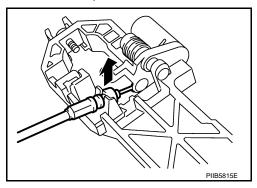
9. Remove the TORX bolt (T30), and remove the outside handle bracket.



10. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



- 11. Disconnect the door lock actuator connector and remove the door lock assembly.
- 12. Reach in to separate outside handle cable connection.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

To install each rod, rotate the rod holder until a click is felt.

TRUNK LID

TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY: Exploded View

INFOID:0000000000961281

Α

В

C

D

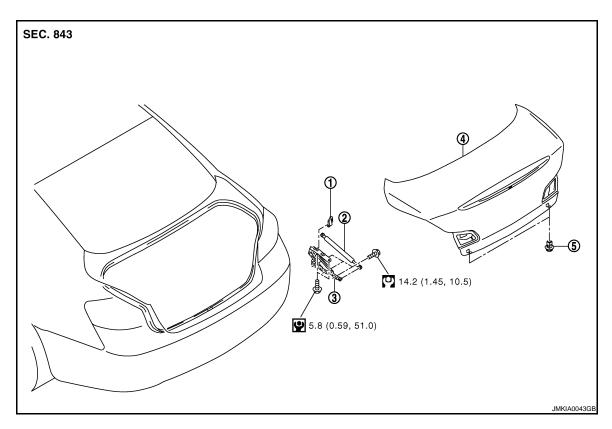
Е

F

G

Н

REMOVAL



- Trunk lid hinge stopper
- 2. Trunk lid stay
- Trunk lid assembly
- Bumper rubber

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

Trunk lid hinge

ADJUSTMENT

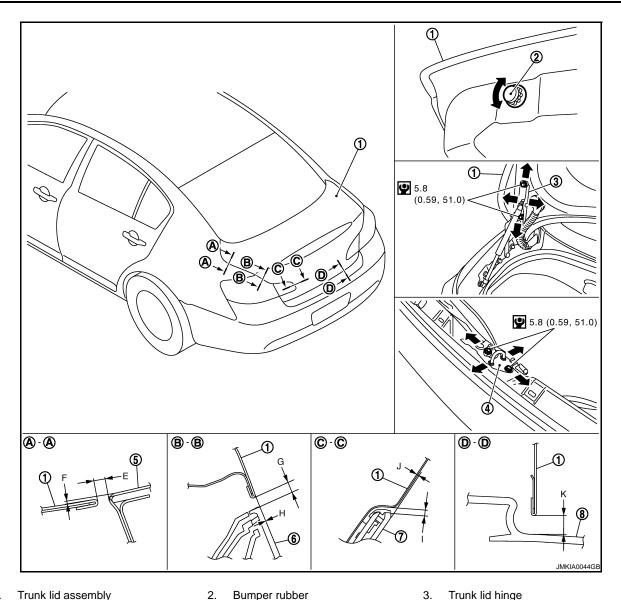
L

DLK

M

Ν

0



- Trunk lid assembly
- Trunk lid striker
- Back up lamp

- 2. Bumper rubber
- 5. Rear fender
- 8. Rear bumper

- - 6. Rear combination lamp

INFOID:00000000000961282

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

TRUNK LID ASSEMBLY: Removal and Installation

REMOVAL

- 1. Remove trunk lid finisher. Refer to INT-27, "Removal and Installation".
- 2. Disconnect the connectors in the trunk lid, and remove the harness clamps to pull the harness out of the trunk lid.
- 3. Insert flat-bladed screwdriver into the gap and remove holder.
- 4. Remove trunk lid stay.

Body injury may occur if no supporting rod is holding the trunk lid open when removing the

5. Remove the trunk lid hinge mounting bolts on trunk lid side and remove the trunk lid assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

< ON-VEHICLE REPAIR >

- · After installing, apply touch-up paint (the body color) onto the head of the hinge mounting bolts.
- After installing, check operation.
- After installing, perform fitting adjustment. Refer to <u>DLK-215, "TRUNK LID ASSEMBLY: Adjustment"</u>.

TRUNK LID ASSEMBLY: Adjustment

1. Check the clearance and the evenness between the trunk lid and each part visually and by touching. (Fitting standard dimension in the table below should be satisfied.)

Parts	Portion			Standard	Right/left clearance (MAX)
Trunk lid –	A – A	E	Clearance	2.5 - 4.5 (0.098 - 0.177)	1.5 (0.059)
Rear fender	A-A	F	Surface height	-1.5 - 0.5 (0.059 - 0.020)	1.5 (0.059)
Trunk lid – Rear combination lamp	B – B	G	Clearance	3.9 - 7.1 (0.154 - 0.280)	2.1 (0.083)
	B - B	Н	Surface height	-2.1 - 0.9 (-0.083 - 0.035)	2.0 (0.079)
Trunk lid –	Trunk lid - C - C	-	Clearance	1.7 – 3.7 (0.067 – 0.146)	1.2 (0.047)
Back-up lamp	0-0	J	Surface height	-1.8 - 0.6 (-0.071 - 0.024)	1.5 (0.059)
Trunk lid – Rear bumper	D – D	K	Clearance	4.0 - 8.0 (0.157 - 0.315)	_

^{*} Unit: mm (in)

- In case out of specification, adjust them according to the procedures shown below.
- 3. Loosen the bumper rubber.
- 4. Loosen the striker mounting bolts.
- 5. Lift up the trunk lid approximately 100 150 mm (3.94 5.91 in) height then close it lightly and check that it is engaged firmly with the trunk lid closed.
- 6. Check the clearance and evenness.
- Finally tighten the trunk lid striker.

TRUNK LID LOCK

TRUNK LID LOCK: Exploded View

DLK

J

Α

В

C

D

Е

F

Н

INFOID:0000000000961283

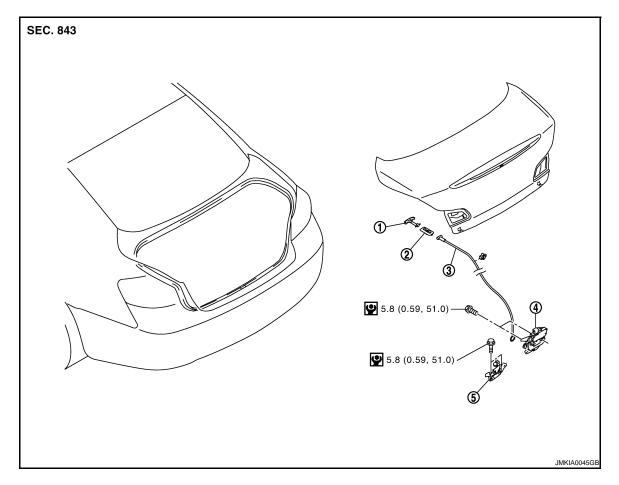
M

INFOID:0000000000961284

L

Ν

C



- 1. Trunk lid emergency opener lever
- Trunk lid emergency opener lever holder
- 3. Trunk lid opener cable

4. Trunk lid lock

5. Trunk lid striker

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

TRUNK LID LOCK: Removal and Installation

REMOVAL

- 1. Remove the trunk lid finisher. Refer to INT-27, "Removal and Installation".
- 2. Remove the trunk lid emergency opener lever.
- 3. Disconnect the trunk lid opener cable.
- 4. Disconnect the connector from trunk lid lock.
- 5. Remove the mounting bolts, and remove the trunk lid lock.

INSTALLATION

Install in the reverse order of removal.

NOTE:

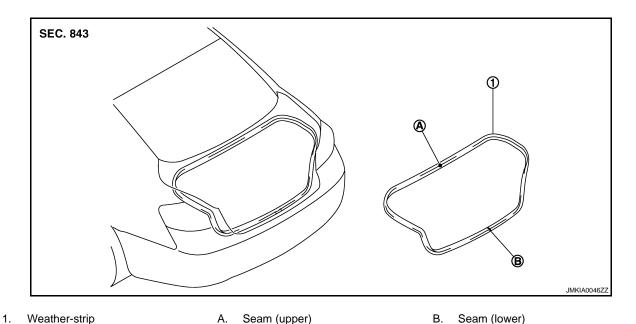
- After installing, perform trunk lid fitting adjustment. Refer to refer to <u>DLK-215</u>, <u>"TRUNK LID ASSEMBLY : Adjustment"</u>.
- After installing, check the operation.

TRUNK LID WEATHERSTRIP

TRUNK LID WEATHERSTRIP: Exploded View

INFOID:0000000000961286

INFOID:0000000000961285



TRUNK LID WEATHERSTRIP: Removal and Installation

INFOID:0000000000961287

REMOVAL

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

CAUTION:

After removal, do not pull strongly on the weather-strip.

INSTALLATION

- 1. Align the weather-strip seam (upper) with mark of the body panel and weather-strip onto the vehicle.
- 2. Align the weather-strip seem (lower) with center of the striker and weather-strip onto the vehicle.
- After installation, pull the weather-strip gently to ensure that there is no loose section.NOTE:

Check that the weather-strip fits tightly at each corner and trunk rear plate.

DLK

J

Α

В

C

D

Е

F

Н

L

M

Ν

C

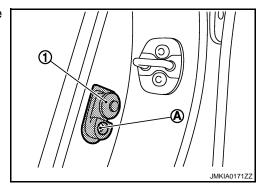
DOOR SWITCH

Removal and Installation

INFOID:0000000000961288

REMOVAL

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



INSTALLATION

Install in the reverse order of removal.

INSIDE KEY ANTENNA

INSTRUMENT CENTER

INSTRUMENT CENTER: Exploded View

INFOID:0000000000961289

Α

В

D

Е

F

Н

DLK

M

Ν

Р

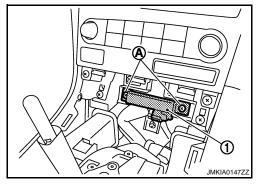
Refer to IP-11, "Exploded View".

INSTRUMENT CENTER: Removal and Installation

INFOID:0000000000961290

REMOVAL

- 1. Remove the console finisher. Refer to IP-12, "Removal and Installation".
- 2. Remove the key slot mounting screw (A), and then remove inside key antenna (instrument center) (1).



INSTALLATION

Install in the reverse order of removal.

CONSOLE

CONSOLE: Exploded View

INFOID:0000000000961291

Refer to IP-22, "Exploded View".

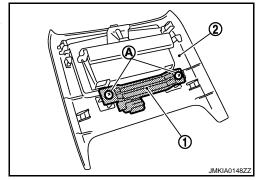
CONSOLE: Removal and Installation

INFOID:0000000000961292

REMOVAL

1. Remove the console ashtray.

- Remove the console rear finisher (2). Refer to <u>IP-26, "Disassembly and Assembly"</u>.
- Remove the inside key antenna mounting screw (A), and then remove inside key antenna (console) (1) from console rear finisher (2).



INSTALLATION

Install in the reverse order of removal.

TRUNK ROOM

TRUNK ROOM: Exploded View

Refer to INT-26, "Exploded View".

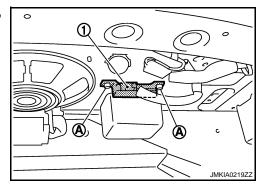
TRUNK ROOM: Removal and Installation

INFOID:0000000000961293

INFOID:0000000000961294

REMOVAL

- 1. Remove the trunk trim. Refer to INT-27, "Removal and Installation".
- 2. Remove the inside key antenna (trunk room) mounting nuts (A), and then remove inside key antenna (trunk room) (1).



INSTALLATION

Install in the reverse order of removal.

OUTSIDE KEY ANTENNA

< ON-VEHICLE REPAIR >

[INTELLIGENT KEY SYSTEM]

Α

D

Е

F

Н

DLK

L

M

Ν

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE: Exploded View

INFOID:0000000000961295 В

Refer to DLK-207, "FRONT DOOR LOCK: Exploded View".

DRIVER SIDE: Removal and Installation INFOID:0000000000961296

REMOVAL

Remove the front outside handle LH. Refer to DLK-207, "FRONT DOOR LOCK: Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE: Exploded View INFOID:0000000000961297

Refer to DLK-207, "FRONT DOOR LOCK: Exploded View".

PASSENGER SIDE: Removal and Installation INFOID:0000000000961298

REMOVAL

Remove the front outside handle RH. Refer to <u>DLK-207, "FRONT DOOR LOCK: Removal and Installation"</u>.

INSTALLATION

Install in the reverse order of removal.

REAR BUMPER

REAR BUMPER: Exploded View

INFOID:0000000000961299

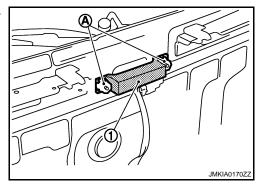
Refer to EXT-13, "Exploded View".

REAR BUMPER: Removal and Installation INFOID:0000000000961300

REMOVAL

1. Remove the rear bumper. Refer to EXT-14, "Removal and Installation".

Remove the outside key antenna (rear bumper) mounting nuts (A), and then remove outside key antenna (rear bumper) (1).



INSTALLATION

Install in the reverse order of removal.

INTELLIGENT KEY WARNING BUZZER

< ON-VEHICLE REPAIR >

[INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY WARNING BUZZER

Exploded View

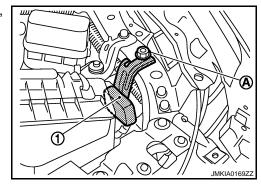
Refer to DLK-199, "Exploded View".

Removal and Installation

INFOID:0000000000961302

REMOVAL

- 1. Remove the hood seal assembly (side). Refer to <u>DLK-199</u>, "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.

[INTELLIGENT KEY SYSTEM]

KEY SLOT

Exploded View

INFOID:0000000000961303

Α

В

C

D

Е

F

Н

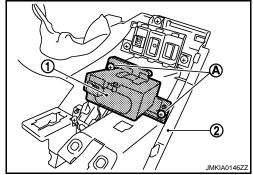
Refer to IP-11, "Exploded View".

Removal and Installation

INFOID:0000000000961304

REMOVAL

- 1. Remove the instrument driver lower panel (2). Refer to IP-12, "Removal and Installation".
- 2. Disconnect key slot connector.
- 3. Remove the key slot mounting screw (A), and then remove key slot (1) from instrument driver lower panel (2).



INSTALLATION

Install in the reverse order of removal.

DLK

J

L

M

Ν

0

TRUNK OPENER REQUEST SWITCH

< ON-VEHICLE REPAIR >

[INTELLIGENT KEY SYSTEM]

TRUNK OPENER REQUEST SWITCH

Exploded View

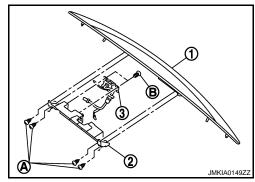
Refer to EXT-35, "Exploded View".

Removal and Installation

INFOID:0000000000961306

REMOVAL

- 1. Remove the trunk lid finisher outer (1). Refer to EXT-35, "Removal and Installation".
- 2. Remove the inner bracket mounting screw (A), and then remove inner bracket (2) from trunk lid finisher outer (1).



3. Remove the trunk lid request switch mounting screw (B), and then remove trunk lid request switch (3) from inner bracket (2).

INSTALLATION

Install in the reverse order of removal.

TRUNK LID OPENER SWITCH

< ON-VEHICLE REPAIR >

[INTELLIGENT KEY SYSTEM]

TRUNK LID OPENER SWITCH

Exploded View

INFOID:0000000000961307

Α

В

C

D

Е

F

Н

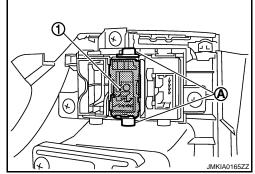
Refer to IP-11, "Exploded View".

Removal and Installation

INFOID:0000000000961308

REMOVAL

- 1. Remove the instrument driver lower panel. Refer to IP-12, "Removal and Installation".
- Remove the trunk lid opener switch (1) from instrument driver lower panel, and then remove pawl (A). Press trunk lid opener switch (1) front side to disengage from instrument driver lower panel.



INSTALLATION

Install in the reverse order of removal.

DLK

J

L

M

Ν

0

TRUNK LID OPENER CANCEL SWITCH

< ON-VEHICLE REPAIR >

[INTELLIGENT KEY SYSTEM]

TRUNK LID OPENER CANCEL SWITCH

Exploded View

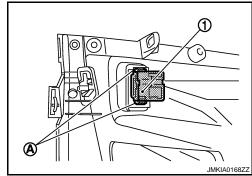
Refer to IP-11, "Exploded View".

Removal and Installation

INFOID:0000000000961310

REMOVAL

- 1. Remove the instrument assist lower panel. Refer to IP-12, "Removal and Installation".
- Remove the trunk lid opener cancel switch (1) instrument assist lower panel, and then remove pawl (A). Press trunk lid opener cancel switch (1) backside to disengage from instrument assist lower panel.



INSTALLATION

Install in the reverse order of removal.

REMOTE KEYLESS ENTRY RECEIVER

< ON-VEHICLE REPAIR >

[INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY RECEIVER

Exploded View

INFOID:0000000000961311

Α

В

C

D

Е

F

Н

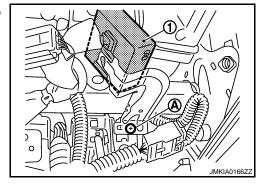
Refer to IP-11, "Exploded View".

Removal and Installation

INFOID:0000000000961312

REMOVAL

- 1. Remove the instrument assist lower panel. Refer to IP-12, "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.

DLK

J

L

M

Ν

0