## **CONTENTS**

SECTION

INTELLIGENT KEY SYSTEM	BACK DOOR OPEN FUNCTION24	F
	BACK DOOR OPEN FUNCTION : System Dia-	
BASIC INSPECTION7	gram	
DIAGNOSIS AND REPAIR WORK FLOW7	BACK DOOR OPEN FUNCTION : System De-	G
Work Flow	scription24	
WOIK FIOW	BACK DOOR OPEN FUNCTION :	
INSPECTION AND ADJUSTMENT10	Component Parts Location26	Н
	BACK DOOR OPEN FUNCTION :	
ADDITIONAL SERVICE WHEN REPLACING	Component Description27	
CONTROL UNIT10	REMOTE KEYLESS ENTRY FUNCTION27	
ADDITIONAL SERVICE WHEN REPLACING	REMOTE KEYLESS ENTRY FUNCTION	
CONTROL UNIT : Description10		
ADDITIONAL SERVICE WHEN REPLACING	tem Diagram	
CONTROL UNIT : Special Repair Requirement 10	REMOTE KEYLESS ENTRY FUNCTION : Sys-	J
	tem Description	
SYSTEM DESCRIPTION11	REMOTE KEYLESS ENTRY FUNCTION :	
	Component Parts Location	DLI
POWER DOOR LOCK SYSTEM11	REMOTE REFEESS ENTRY FUNCTION .	
System Diagram11	Component Description32	
System Description11	WELCOME LIGHT FUNCTION	
Component Parts Location13	WELCOME LIGHT FUNCTION : System Descrip-	L
Component Description14	tion	
	WELCOME LIGHT FUNCTION :	
INTELLIGENT KEY SYSTEM15		М
INTELLIGENT KEY SYSTEM15	Component Parts Location34	
INTELLIGENT KEY SYSTEM : System Diagram15	KEY REMINDER FUNCTION	
INTELLIGENT KEY SYSTEM : System Descrip-	KEY REMINDER FUNCTION : System Descrip-	
tion	tion	Ν
INTELLIGENT KEY SYSTEM :	KEY REMINDER FUNCTION :	
Component Parts Location	Component Parts Location	
INTELLIGENT KEY SYSTEM :	•	Ο
	WARNING FUNCTION	
Component Description18	WARNING FUNCTION : System Description	
DOOR LOCK FUNCTION19	WARNING FUNCTION :	Ρ
DOOR LOCK FUNCTION : System Diagram 19	Component Parts Location43	
DOOR LOCK FUNCTION : System Description		
DOOR LOCK FUNCTION :	BACK DOOR OPENER SYSTEM45	
Component Parts Location	System Diagram45	
DOOR LOCK FUNCTION :	System Description45	
Component Description	Component Parts Location46	
	Component Description46	

А

D

Е

₋K

DLK

DOOR & LOCK c

INTEGRATED HOMELINK TRANSMITTER Component Description	
DIAGNOSIS SYSTEM (BCM)	48
COMMON ITEM COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)	
DOOR LOCK DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)	
INTELLIGENT KEY INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)	
TRUNK TRUNK : CONSULT Function (BCM - TRUNK)	
DTC/CIRCUIT DIAGNOSIS	56
U1000 CAN COMM CIRCUIT Description DTC Logic Diagnosis Procedure	56 56
U1010 CONTROL UNIT (CAN) DTC Logic Diagnosis Procedure Special Repair Requirement	57 57
B2621 INSIDE KEY ANTENNA 1 Description DTC Logic Diagnosis Procedure	58 58
B2623 INSIDE KEY ANTENNA 3 Description DTC Logic Diagnosis Procedure	60 60
POWER SUPPLY AND GROUND CIRCUIT	62
BCM (BODY CONTROL MODULE) BCM (BODY CONTROL MODULE) : Diagnosis Procedure	
DOOR SWITCH Description Component Function Check Diagnosis Procedure Component Inspection	<b>63</b> 63 63 63
DOOR LOCK AND UNLOCK SWITCH	67
DRIVER SIDE DRIVER SIDE : Description DRIVER SIDE : Component Function Check DRIVER SIDE : Diagnosis Procedure	67 67
PASSENGER SIDE PASSENGER SIDE : Description	

	_
PASSENGER SIDE : Component Function Check	
DOOR LOCK ACTUATOR 69	)
DRIVER SIDE	) )
PASSENGER SIDE       69         PASSENGER SIDE : Description       70         PASSENGER SIDE :       70         Component Function Check       70         PASSENGER SIDE :       70         PASSENGER SIDE :       70         PASSENGER SIDE :       70	)
REAR LH70REAR LH : Description70REAR LH : Component Function Check71REAR LH : Diagnosis Procedure71	) 
REAR RH       71         REAR RH : Description       71         REAR RH : Component Function Check       71         REAR RH : Diagnosis Procedure       72	
FUEL LID LOCK ACTUATOR       73         Description       73         Component Function Check       73         Diagnosis Procedure       73	3 3
BACK DOOR OPENER ACTUATOR       74         Description       74         Component Function Check       74         Diagnosis Procedure       74	1 1
KEY CYLINDER SWITCH76Description76Component Function Check76Diagnosis Procedure76Component Inspection77	5
REMOTE KEYLESS ENTRY RECEIVER       78         Description       78         Component Function Check       78         Diagnosis Procedure       78	3
BACK DOOR OPENER SWITCH	
DOOR REQUEST SWITCH83Description83Component Function Check83Diagnosis Procedure83Component Inspection84	3 3 3
04	

Component Function Check Diagnosis Procedure	85
Component Inspection	
UNLOCK SENSOR	
Description	
Component Function Check	
Diagnosis Procedure Component Inspection	
OUTSIDE KEY ANTENNA	89
Description	
Component Function Check	
Diagnosis Procedure	
INTELLIGENT KEY WARNING BUZZER	
Description Component Function Check	
Diagnosis Procedure	
Component Inspection	
INTELLIGENT KEY BATTERY	94
Component Inspection	94
KEY SLOT	
Description	
Component Function Check	
Diagnosis Procedure Component Inspection	
KEY SLOT INDICATOR	97
Description	
Component Function Check	97
Diagnosis Procedure	
Component Inspection	
HORN FUNCTION	
Description	
Component Function Check Diagnosis Procedure	
COMBINATION METER DISPLAY FUNC-	
TION	101
Description	
Component Function Check	
Diagnosis Procedure	
BUZZER (COMBINATION METER)	102
Description	102
Component Function Check	
Diagnosis Procedure	102
KEY WARNING LAMP	103
Description	103
Component Function Check	
Diagnosis Procedure	
HAZARD FUNCTION	
Description	
Component Function Check	
Diagnosis Procedure	104

INTEGRATED HOMELINK TRANSMITTER 105	٥
Description	А
Diagnosis Procedure105	
POWER DOOR LOCK SYSTEM	В
	С
INTELLIGENT KEY SYSTEM 118 Wiring Diagram - INTELLIGENT KEY SYSTEM118	C
	D
SYSTEM133	
Wiring Diagram - INTEGRATED HOMELINK TRANSMITTER SYSTEM133	Е
ECU DIAGNOSIS INFORMATION 135	
BCM (BODY CONTROL MODULE)	F
Reference Value	
Fail-safe173	G
DTC Inspection Priority Chart174 DTC Index175	
SYMPTOM DIAGNOSIS	Н
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH 178	I
ALL DOOR178	
ALL DOOR : Description178 ALL DOOR : Diagnosis Procedure178	J
DRIVER SIDE178	
DRIVER SIDE : Description	DLK
PASSENGER SIDE179	
PASSENGER SIDE : Description	L
REAR LH	р. //
REAR LH : Description179 REAR LH : Diagnosis Procedure	Μ
REAR RH179	Ν
REAR RH : Description	IN
DOOR DOES NOT LOCK/UNLOCK WITH	0
DOOR KEY CYLINDER OPERATION	
Description	Ρ
DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH	
ALL DOOR	
ALL DOOR : Diagnosis Procedure	

DRIVER SIDE
PASSENGER SIDE
BACK DOOR
DOOR DOES NOT LOCK/UNLOCK WITH IN- TELLIGENT KEY
BACK DOOR DOES NOT OPENED
SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE WITH DOOR REQUEST SWITCH
SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE WITH INTELLIGENT KEY 189 Description
VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE
IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE
P RANGE INTERLOCK DOOR LOCK/UN- LOCK FUNCTION DOES NOT OPERATE 192 Diagnosis Procedure
AUTO DOOR LOCK OPERATION DOES NOT OPERATE
POWER WINDOW DOWN FUNCTION DOES NOT OPERATE WITH KEY CYLINDER OP- ERATION
POWER WINDOW DOWN FUNCTION DOES NOT WORK WHEN OPERATING WITH IN- TELLIGENT KEY

WELCOME LIGHT FUNCTION DOES NOT OPERATE
Description
PANIC ALARM FUNCTION DOES NOT OP- ERATE
HAZARD AND HORN REMINDER DOES NOT OPERATE
HAZARD AND BUZZER REMINDER DOES NOT OPERATE
KEY REMINDER FUNCTION DOES NOT OP-         ERATE       200         Description       200         Diagnosis Procedure       200
KEY WARNING DOES NOT OPERATE201Description201Diagnosis Procedure201
OFF POSITION WARNING DOES NOT OP- ERATE
P POSITION WARNING DOES NOT OPER- ATE
ACC WARNING DOES NOT OPERATE
TAKE AWAY WARNING DOES NOT OPER- ATE
DOOR IS OPEN206DOOR IS OPEN : Description206DOOR IS OPEN : Diagnosis Procedure206
ANY DOOR OPEN TO ALL DOORS CLOSED 207 ANY DOOR OPEN TO ALL DOORS CLOSED : Description
PUSH-BUTTON IGNITION SWITCH OPERATION. 207 PUSH-BUTTON IGNITION SWITCH OPERA- TION : Description
PUSH-BUTTON IGNITION SWITCH OPERA- TION : Diagnosis Procedure

INTELLIGENT KEY IS REMOVED FROM KEY	208
INTELLIGENT KEY IS REMOVED FROM KEY SLOT : Description	
INTELLIGENT KEY IS REMOVED FROM KEY	
SLOT : Diagnosis Procedure	209
INTELLIGENT KEY LOW BATTERY WARN- ING DOES NOT OPERATE	210
Description	
Diagnosis Procedure	
DOOR LOCK OPERATION WARNING DOES	
NOT OPERATE WITH DOOR REQUEST SWITCH	211
Description	
Diagnosis Procedure	
KEY ID WARNING DOES NOT OPERATE	
Description	
Diagnosis Procedure	212
INTELLIGENT KEY LOW BATTERY WARN-	~ 4 ~
ING DOES NOT OPERATE Description	
Diagnosis Procedure	
INTEGRATED HOMELINK TRANSMITTER	
DOES NOT OPERATE	214
Description	
Diagnosis Procedure	214
SQUEAK AND RATTLE TROUBLE DIAG- NOSES	215
Work Flow	
Inspection Procedure	
Diagnostic Worksheet	219
PRECAUTION	221
PRECAUTIONS	221
Precaution for Supplemental Restraint System	
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	004
SIONER" Precaution for Procedure without Cowl Top Cover.	221
Precautions For Xenon Headlamp Service	
Work	
PREPARATION	223
PREPARATION	
Special Service Tools	223
Commercial Service Tools	223
REMOVAL AND INSTALLATION	224
HOOD	224
HOOD ASSEMBLY	224
HOOD ASSEMBLY : Exploded View	
HOOD ASSEMBLY : Removal and Installation	224

HOOD HINGE       227         HOOD HINGE : Exploded View       228         HOOD HINGE : Removal and Installation       228         HOOD STAY       229         HOOD STAY : Exploded View       229         HOOD STAY : Exploded View       229         HOOD STAY : Exploded View       229	A B C
HOOD STAY	С
HOOD STAY : Disposal	С
RADIATOR CORE SUPPORT       231         Exploded View       231         Removal and Installation       231	
FRONT FENDER234Exploded View234Removal and Installation234	E
FRONT DOOR236	F
DOOR ASSEMBLY	G
DOOR STRIKER	Η
DOOR HINGE	
DOOR CHECK LINK	J
REAR DOOR241	Lł
DOOR ASSEMBLY	L
DOOR STRIKER243 DOOR STRIKER : Exploded View243 DOOR STRIKER : Removal and Installation243	M
DOOR HINGE	C
DOOR CHECK LINK	Ρ
BACK DOOR246	
BACK DOOR ASSEMBLY	

BACK DOOR STRIKER249
BACK DOOR STRIKER : Exploded View249
BACK DOOR STRIKER : Removal and Installa-
tion249
BACK DOOR HINGE250
BACK DOOR HINGE : Exploded View250
BACK DOOR HINGE : Removal and Installation250
BACK DOOR STAY251
BACK DOOR STAY : Exploded View251
BACK DOOR STAY : Removal and Installation251
BACK DOOR STAY : Disposal252
BACK DOOR WEATHER-STRIP252
BACK DOOR WEATHER-STRIP : Exploded View.253
BACK DOOR WEATHER-STRIP : Removal and
Installation
HOOD LOCK
Exploded View254
Removal and Installation254
Inspection256
FRONT DOOR LOCK 257
DOOR LOCK257
DOOR LOCK : Exploded View257
DOOR LOCK : Removal and Installation257
INSIDE HANDLE
INSIDE HANDLE : Exploded View259
INSIDE HANDLE : Exploded View259
INSIDE HANDLE : Exploded View
INSIDE HANDLE : Exploded View259 INSIDE HANDLE : Removal and Installation260
INSIDE HANDLE : Exploded View

BACK DOOR LOCK268Exploded View268Removal and Installation268
FUEL FILLER LID OPENER269Exploded View269Removal and Installation269
DOOR SWITCH
INSIDE KEY ANTENNA271
INSTRUMENT CENTER
LUGGAGE ROOM       271         LUGGAGE ROOM : Exploded View       271         LUGGAGE ROOM : Removal and Installation       271
OUTSIDE KEY ANTENNA273
DRIVER SIDE
PASSENGER SIDE273PASSENGER SIDE : Exploded View273PASSENGER SIDE : Removal and Installation273
BACK DOOR273BACK DOOR : Exploded View273BACK DOOR : Removal and Installation273
INTELLIGENT KEY WARNING BUZZER274 Exploded View
KEY SLOT275Exploded View275Removal and Installation275
REMOTE KEYLESS ENTRY RECEIVER276Exploded View
INTELLIGENT KEY BATTERY

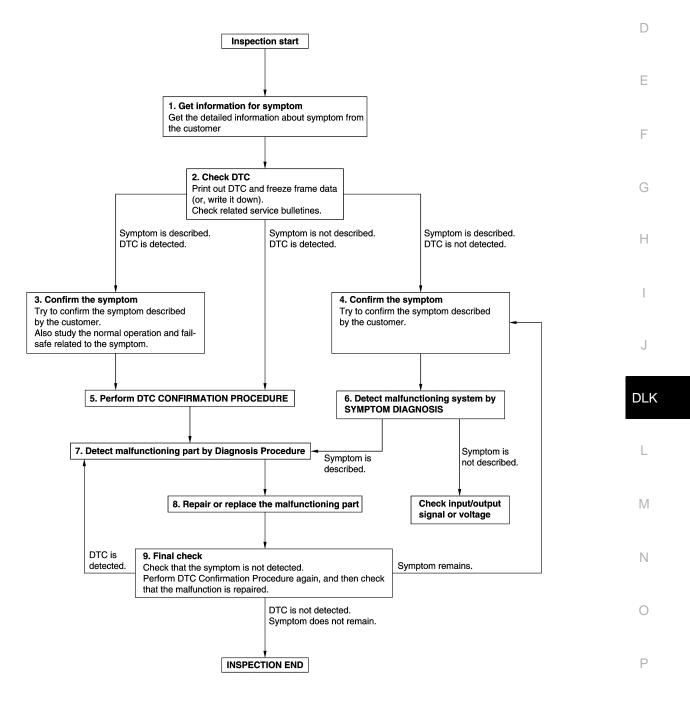
## BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000009064563

А





JMKIA8652GB

< BASIC INSPECTION >

### **1.**GET INFORMATION FOR SYMPTOM

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

#### >> GO TO 2.

### 2.CHECK DTC

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

#### Are any symptoms described and any DTC detected?

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

#### **3.**CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer. Also study the normal operation and fail-safe related to the symptom. Verify relation between the symptom and the condition when the symptom is detected.

#### >> GO TO 5.

#### **4.**CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer. 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 detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time. If two or more DTCs are detected, refer to <u>BCS-89</u>, "<u>DTC Inspection Priority Chart</u>" (BCM), 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 on 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 CONFIR-MATION PROCEDURE.

#### Is DTC detected?

YES >> GO TO 7.

NO >> Check according to <u>GI-42, "Intermittent Incident"</u>.

**6.** DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

#### Is the symptom described?

- YES >> GO TO 7.
- NO >> Monitor input data from related sensors or check voltage of related module terminals using CON-SULT.
- **1.**DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

## DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >	[INTELLIGENT KEY SYSTEM]
Inspect according to Diagnosis Procedure of the system.	
Is malfunctioning part detected?	A
YES >> GO TO 8.	
NO >> Check according to <u>GI-42, "Intermittent Incident"</u> .	D
8.REPAIR OR REPLACE THE MALFUNCTIONING PART	В
<ol> <li>Repair or replace the malfunctioning part.</li> <li>Reconnect parts or connectors disconnected during Diagnosis Proc ment.</li> </ol>	edure again after repair and replace-
3. Check DTC. If DTC is detected, erase it.	
>> GO TO 9.	D
9.FINAL CHECK	
When DTC is detected in step 2, perform DTC CONFIRMATION PROCE malfunction is repaired securely.	DURE again, and then check that the $\Box$
When symptom is described by the customer, refer to confirmed symptom symptom is not detected.	om in step 3 or 4, and check that the
Is DTC detected and does symptom remain?	1
YES-1 >> DTC is detected: GO TO 7. YES-2 >> Symptom remains: GO TO 4. NO >> Before returning the vehicle to the customer, always erase D	TC.
	Н

J

L

Μ

Ν

Ο

Ρ

### **INSPECTION AND ADJUSTMENT**

< BASIC INSPECTION >

### INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000009064564

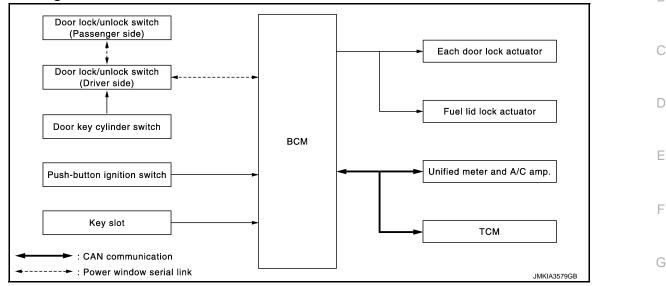
Perform the system initialization when replacing BCM, replacing Intelligent Key or registering an additional Intelligent Key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

Refer to the CONSULT operation manual for the initialization procedure.

## SYSTEM DESCRIPTION POWER DOOR LOCK SYSTEM

System Diagram



### System Description

INFOID:000000009064567

L

Μ

Ρ

А

INFOID:000000009064566

### DOOR LOCK FUNCTION

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

Door Key Cylinder

- With the door key inserted in the door key cylinder on driver side, turning it to "LOCK", will lock door lock actuator of all doors and fuel lid lock actuator.
- With the door key inserted in the door key cylinder on driver side, turning it to "UNLOCK" once unlocks the driver side door lock actuator and fuel lid lock actuator; turning it to "UNLOCK" again within 60 seconds after the first unlock operation unlocks all of the other doors. - (SELECTIVE UNLOCK OPERATION)
   Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-

PORT". Refer to DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

### KEY REMINDER FUNCTION

When door lock and unlock switch are operated while Intelligent Key is inserted into key slot and any door is open, door locks once but immediately unlocks. This operation prevents Intelligent Key from being left in the vehicle.  $\mathbb{N}$ 

### AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

#### Vehicle Speed Sensing Auto Door Lock\*1

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

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

#### P Range Interlock Door Lock

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

### POWER DOOR LOCK SYSTEM

#### < SYSTEM DESCRIPTION >

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

Setting change of Automatic Door Lock/Unlock Function

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

#### (I) With CONSULT

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

#### **Without CONSULT**

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

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

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

#### AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

#### IGN OFF Interlock Door Unlock\*1

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

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

P Range Interlock Door Unlock

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

Setting change of Automatic Door Lock/Unlock Function

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

#### (I) With CONSULT

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

#### **Without CONSULT**

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

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

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

\*1: This function is set to ON before delivery.

### POWER DOOR LOCK SYSTEM

### < SYSTEM DESCRIPTION >

### [INTELLIGENT KEY SYSTEM]

### **Component Parts Location**

INFOID:000000009064568

А

В

С

D

Ε

F

G

Н

J

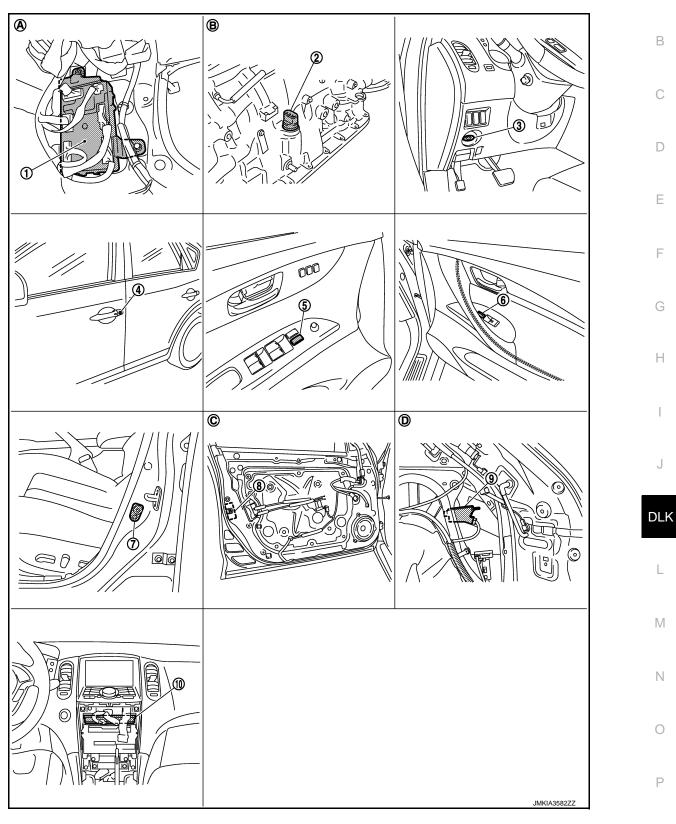
L

Μ

Ν

Ο

Ρ



- BCM M118, M119, M121, M122, 1. M123
- Key cylinder switch 4. [Front door lock assembly (driver side) D15]
- 2. A/T assembly connector F51
- 5. Door lock and unlock switch (Power window main switch D8, D9)
- Key slot M22 3.
- Door lock and unlock switch 6. [Front power window switch (passenger) D38]

### POWER DOOR LOCK SYSTEM

#### < SYSTEM DESCRIPTION >

- 7. Front door switch (driver side) B16
- 8. Door lock actuator [Front door lock assembly (driver side) D15]

Fuel lid lock actuator B242

9.

- 10. Unified meter and A/C amp. M66, M67
- A. Dash side lower (passenger side)
- Β. A/T assembly (TCM is built in A/T as- C. View with front door finisher (LH) is sembly)
  - removed

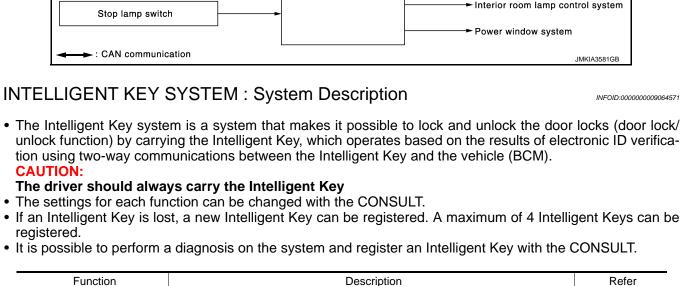
[INTELLIGENT KEY SYSTEM]

D. View with luggage side finisher lower (RH) is removed

### **Component Description**

INFOID:000000009064569

Item Function						
BCM	Controls the door lock function and room lamp function.					
Door lock and unlock switch	Input lock or unlock signal to BCM.					
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.					
Door switch	Input door open/close condition to BCM.					
Key cylinder switch	<ul> <li>Input lock or unlock signal to power window main switch.</li> <li>Power window main switch transmits door lock/unlock signal to BCM.</li> </ul>					
Key slot	Input key insert/remove signal to BCM.					
Unified meter and A/C amp.	<ul> <li>Receive buzzer signal from BCM via CAN communication line, and sounds the buzzer.</li> <li>Transmits vehicle speed signal to BCM via CAN communication line.</li> </ul>					
TCM	Transmit shift position signal to BCM via CAN communication line.					
Push-button ignition switch	Input push-button ignition switch ON/OFF condition to BCM.					



Lock/unlock can be performed by pressing the request switch.

**DLK-15** 

Lock/unlock can be performed by pressing the remote controller button of the In-

The back door can be opened by carrying the Intelligent Key and pressing the

всм

INTELLIGENT KEY SYSTEM

### INTELLIGENT KEY SYSTEM INTELLIGENT KEY SYSTEM : System Diagram

Remote keyless entry receiver

Key ID signal

Request signal

Each outside key antenna

Each inside key antenna

Each request switch

Each door switch

Back door opener switch

Push-button ignition switch

Key slot

Control device (detention switch)

< SYSTEM DESCRIPTION >

Intelligent Key

### Revision: 2013 March

Back door open function

Remote keyless entry func-

telligent Key.

back door opener switch.

Door lock function

tion

[INTELLIGENT KEY SYSTEM]

Intelligent Key warning buzzer

Each door lock actuator

Fuel lid lock actuator

Back door opener actuator

Steering lock unit

Hazard warning lamp

Unified meter and A/C amp.

ECM

TCM

IPDM F/R

Combination meter

Horn

Headlamp

INFOID:000000009064570

А

В

D

Н DLK

INFOID:000000009064571 M

Refer

**DLK-19** 

**DLK-28** 

**DLK-24** 

2014 QX50

Ν

Ρ

### < SYSTEM DESCRIPTION >

### [INTELLIGENT KEY SYSTEM]

Function	Description	Refer
Welcome light function	The puddle lamp and room automatically turn ON, if the Intelligent Key is in the door outside key antenna detection area.	<u>DLK-33</u>
Key reminder function	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle.	<u>DLK-36</u>
Warning function	If an action that does not meet the operating condition of the Intelligent Key sys- tem is taken, the buzzer goes off to inform the driver.	<u>DLK-38</u>
Engine start function	The engine be turned on while carrying the Intelligent Key.	<u>SEC-9</u>

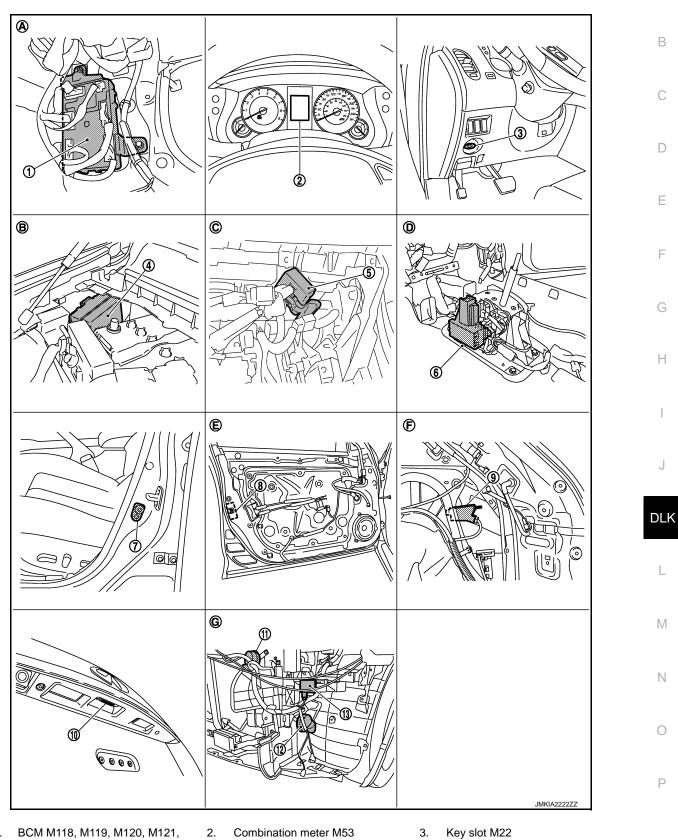
### < SYSTEM DESCRIPTION >

### [INTELLIGENT KEY SYSTEM]

### **INTELLIGENT KEY SYSTEM : Component Parts Location**

INFOID:000000009064572

А



- 1. M122, M123
- IPDM E/R E5, E6 4.
- 5. Remote key less entry receiver M104
- A/T shift selector (detention 6. switch) M137

8.

11.

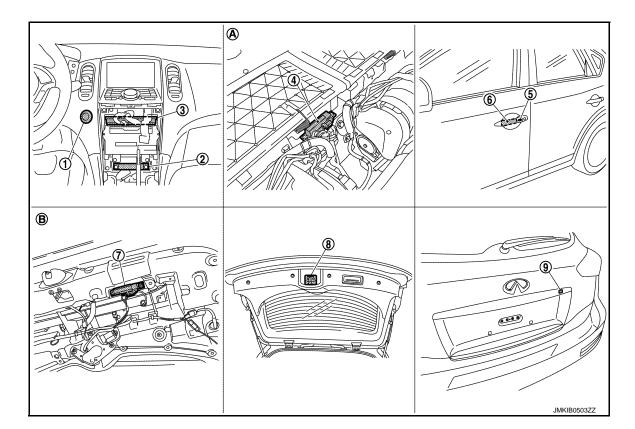
#### < SYSTEM DESCRIPTION >

9.

- Front door switch (driver side) B16 7.
- 10. Back door opener switch D114
- 13. Intelligent Key warning buzzer E57
- Α. Dash side lower (passenger side)
- D. View with center console assembly removed
- View with front bumper is removed G.
- Front door lock assembly (driver side) D15
- Β. Engine room dash panel (RH)

Horn (high) E61, E62

- View with front door finisher (LH) is F. Ε. removed
- Fuel lid lock actuator B242
- 12. Horn (low) E69, E70
- C. Behind the instrument lower panel (driver side)
  - View luggage side finisher lower (RH) is removed



- Push-button ignition switch (push 1. switch) M50
- 4. Inside key antenna (luggage room) B228
- 7. Outside key antenna (back door) D118
- View with luggage floor finisher front B. Α. is removed
- 2. Inside key antenna (instrument cen- 3. ter) M131
  - Front outside handle LH (request switch) D13
- 8. Back door lock assembly D113
  - View with back door finisher inner is removed
- Unified meter and A/C amp. M66, M67
- Front outside handle LH (outside key 6. antenna) D14
- 9. Back door request switch D116

### INTELLIGENT KEY SYSTEM : Component Description

5.

INFOID:000000009064573

Item	Item Function			
BCM	Controls the Intelligent Key system.			
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.			
Door switch	Input 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	Input 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.			

#### [INTELLIGENT KEY SYSTEM]

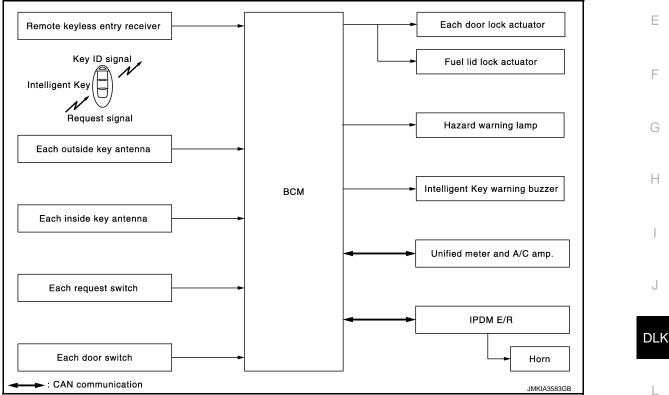
#### < SYSTEM DESCRIPTION >

### [INTELLIGENT KEY SYSTEM]

Item	Function	٨
Inside key antenna	Detects if Intelligent Key is inside the vehicle.	A
Unified meter and A/C amp.	<ul> <li>Receive buzzer signal from BCM via CAN communication line, and sounds the buzzer.</li> <li>Transmits vehicle speed signal to BCM via CAN communication line.</li> </ul>	D
Combination meter	Display, buzzer (combination meter) and KEY warning lamp are installed to combination meter.	D
Back door opener switch	Input back door opener switch operation signal to BCM.	
Back door opener actuator	Opens the back door with the back door open signal from BCM.	С
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.	

### DOOR LOCK FUNCTION

### DOOR LOCK FUNCTION : System Diagram



### DOOR LOCK FUNCTION : System Description

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

### OPERATION DESCRIPTION

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

### OPERATION CONDITION

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

### **DLK-19**

INFOID:000000009064575

Ν

Μ

D

INFOID:000000009064574

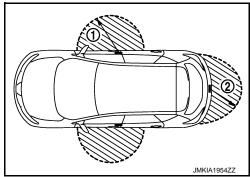
### < SYSTEM DESCRIPTION >

Operation	Operation condition
Lock operation	<ul> <li>All doors are closed</li> <li>P position warning is activated</li> <li>Panic alarm is not activated</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area</li> </ul>
Unlock Operation	<ul> <li>Panic alarm is not activated</li> <li>Intelligent Key is outside the vehicle</li> <li>Intelligent Key is within outside key antenna detection area *</li> </ul>

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

#### OUTSIDE KEY ANTENNA DETECTION AREA

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



#### SELECTIVE UNLOCK FUNCTION

When an LOCK signal is sent from door request switch (driver side or passenger side), all doors and fuel lid will be locked.

When an UNLOCK signal is sent from door request switch (driver side or passenger side) once, driver's door and fuel lid will be unlocked.

Then, if an UNLOCK signal is sent from door request switch (driver side and passenger side) again within 60 seconds, all other door will be unlocked.

#### HAZARD AND BUZZER REMINDER FUNCTION

During lock, unlock, 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, BCM honks Intelligent Key warning buzzer as a reminder and blinks.

Operating Function of Hazard and Buzzer Reminder

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

#### How to Change Hazard and Buzzer Reminder Mode

Refer to DLK-51, "INTELLIGENT KEY : CONSULT 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 and fuel lid 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)

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

#### INTERIOR ROOM LAMP CONTROL

#### < SYSTEM DESCRIPTION >

#### [INTELLIGENT KEY SYSTEM]

Intelligent Key system turns on interior lamp by receiving UNLOCK signal from door request switch. For detailed description, refer to <u>INL-6, "System Description"</u>.

### 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	Door lock actuator and fuel lid lock actuator	Inside key antenna	Outside key antenna	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									×	×	×	×	
Selective unlock function by request switch (Driver side)	×				×	×	×	×			×		
Selective unlock function by request switch (Passenger side)	×				×	×	×	×			×		
Selective unlock function by request switch (back door)	×				×		×	×			×		
Auto door lock function	×	×		×	×	×					×		×

J

А

В

С

D

Е

F

G

Н

DLK

L

Μ

Ν

Ο

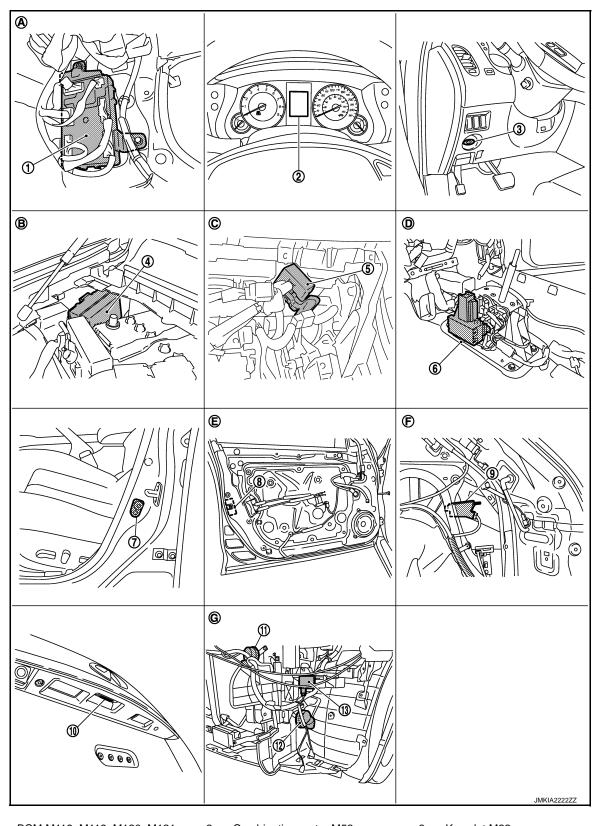
Ρ

### < SYSTEM DESCRIPTION >

## DOOR LOCK FUNCTION : Component Parts Location

### [INTELLIGENT KEY SYSTEM]

INFOID:000000009064576



- 1. BCM M118, M119, M120, M121, M122, M123
- 4. IPDM E/R E5, E6
- 2. Combination meter M53
- 5. Remote key less entry receiver M104
- 3. Key slot M22
- 6. A/T shift selector (detention switch) M137

#### < SYSTEM DESCRIPTION >

- 7. Front door switch (driver side) B16
- 10. Back door opener switch D114
- 13. Intelligent Key warning buzzer E57
- A. Dash side lower (passenger side)
- D. View with center console assembly removed
- G. View with front bumper is removed
- Front door lock assembly (driver side) D15
- 11. Horn (high) E61, E62

8.

Ε.

- B. Engine room dash panel (RH)
  - View with front door finisher (LH) is F. removed

- [INTELLIGENT KEY SYSTEM]
- 9. Fuel lid lock actuator B242
  12. Horn (low) E69, E70
  C. Behind the instrument lower panel (driver side)
  F. View luggage side finisher lower (RH) is removed
- 1. Push-button ignition switch (push switch) M50
- 4. Inside key antenna (luggage room) B228
- Outside key antenna (back door) D118
- A. View with luggage floor finisher front B. is removed
- 2. Inside key antenna (instrument cen- 3. ter) M131
  - Front outside handle LH (request switch) D13
  - Back door lock assembly D113
  - View with back door finisher inner is removed
- Unified meter and A/C amp. M66, M67
- 6. Front outside handle LH (outside key antenna) D14
- 9. Back door request switch D116
- N

D

F

Н

DLK

L

Μ

### DOOR LOCK FUNCTION : Component Description

5.

8.

Item	Function				
BCM	Controls the door lock function.				
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.				
Door switch	Input 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	Input 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.				

INFOID:000000009064577

#### < SYSTEM DESCRIPTION >

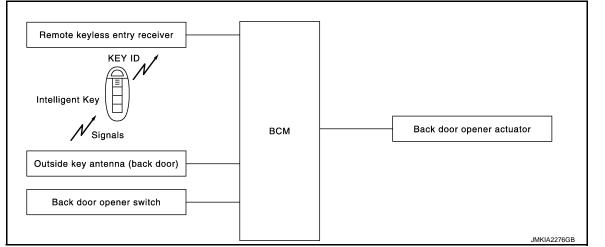
### [INTELLIGENT KEY SYSTEM]

Item	Function
Inside key antenna	Detects if Intelligent Key is inside the vehicle.
Unified meter and A/C amp.	<ul> <li>Receive buzzer signal from BCM via CAN communication line, and sounds the buzzer.</li> <li>Transmits vehicle speed signal to BCM via CAN communication line.</li> </ul>
Combination meter	Display, buzzer (combination meter) and KEY warning lamp are installed to combination meter.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.

### BACK DOOR OPEN FUNCTION

### BACK DOOR OPEN FUNCTION : System Diagram

INFOID:000000009064578



### BACK DOOR OPEN FUNCTION : System Description

INFOID:000000009064579

This section describes the operation of the back door opener switch. The operation of the back door request switch is the same as the door lock function. Refer to <u>DLK-19</u>, <u>"DOOR LOCK FUNCTION : System Description"</u>.

- The back door opener function can open the back door by pressing the back door opener switch while carrying the Intelligent Key. At this time, all doors other than the back door and fuel lid are locked.
- The back door opener function can open the back door by pressing the back door opener switch with all doors and fuel lid are unlocked by the door request switch or remote controller.

#### BACK DOOR OPEN

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

#### **OPERATION CONDITION**

If the following conditions are satisfied, the back door can be opened.

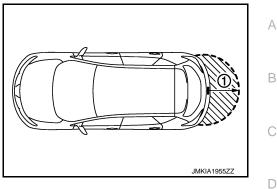
- Back door is closed
- · Intelligent Key is outside of vehicle
- Intelligent Key is within out side key antenna detection area

OUTSIDE KEY ANTENNA DETECTION AREA

### < SYSTEM DESCRIPTION >

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

### [INTELLIGENT KEY SYSTEM]



#### HAZARD AND BUZZER REMINDER FUNCTION

Back door opening operation by back door opener switch, the hazard warning lamps and born will blink or honk as a reminder.

#### 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	Door lock actuator and fuel lid lock actuator	Inside key antenna	Outside key antenna (Rear bumper)	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Back door opener switch	F G H
Back door open function by back door opener switch (Carrying Intelligent Key)	×	×	×	×	×	×	×	×		×	×		×	J
Hazard and buzzer reminder function for door lock/unlock operation									×	×	×	×		

DLK

L

Μ

Ν

0

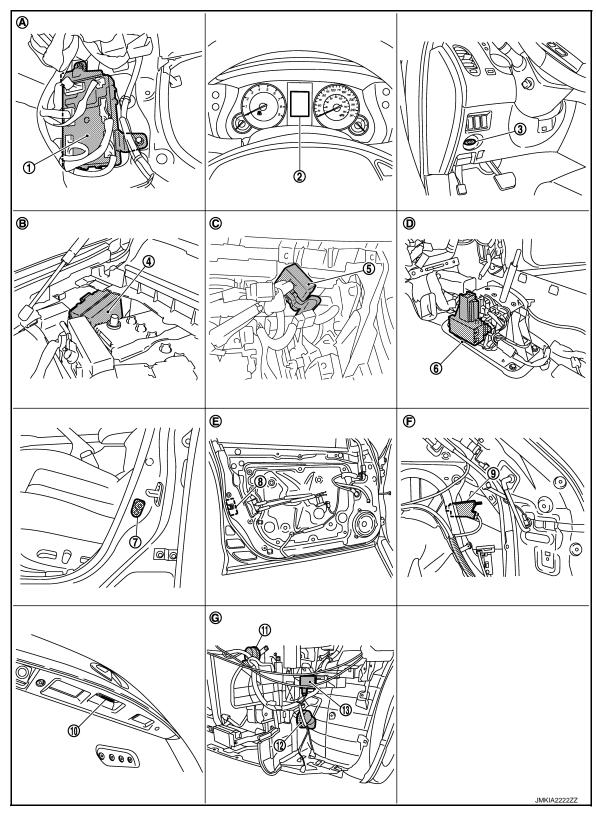
Ρ

Е

### < SYSTEM DESCRIPTION >

## BACK DOOR OPEN FUNCTION : Component Parts Location

INFOID:000000009064580



- 1. BCM M118, M119, M120, M121, M122, M123
- 4. IPDM E/R E5, E6
- 2. Combination meter M53
- 5. Remote key less entry receiver M104
- 3. Key slot M22
- 6. A/T shift selector (detention switch) M137

#### < SYSTEM DESCRIPTION >

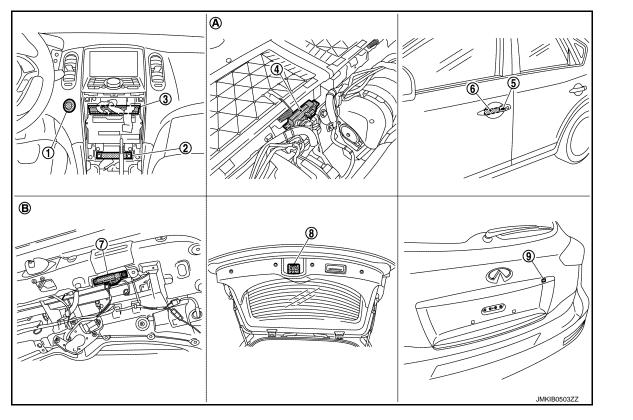
- 7. Front door switch (driver side) B16
- 10. Back door opener switch D114
- 13. Intelligent Key warning buzzer E57
- A. Dash side lower (passenger side)
- D. View with center console assembly removed
- G. View with front bumper is removed
- Front door lock assembly (driver side) D15
- 11. Horn (high) E61, E62

8.

Ε.

- B. Engine room dash panel (RH)
  - View with front door finisher (LH) is F. removed

- [INTELLIGENT KEY SYSTEM]
- 9. Fuel lid lock actuator B242
  12. Horn (low) E69, E70
  C. Behind the instrument lower panel (driver side)
  F. View luggage side finisher lower
- (RH) is removed



- 1. Push-button ignition switch (push switch) M50
- 4. Inside key antenna (luggage room) B228
- Outside key antenna (back door) D118
- A. View with luggage floor finisher front B. is removed
- 2. Inside key antenna (instrument cen- 3. ter) M131
  - Front outside handle LH (request switch) D13

5.

8.

BACK DOOR OPEN FUNCTION : Component Description

- Back door lock assembly D113
- View with back door finisher inner is removed
- Unified meter and A/C amp. M66, M67
- 6. Front outside handle LH (outside key antenna) D14
- 9. Back door request switch D116

#### INFOID:000000009064581

Item	Function
BCM	Controls the back door open function and room lamp function.
Back door opener switch	Input press/degrees signal to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna (back door)	Detects if Intelligent Key is outside the vehicle.

### REMOTE KEYLESS ENTRY FUNCTION

Ν

Ρ

D

F

Н

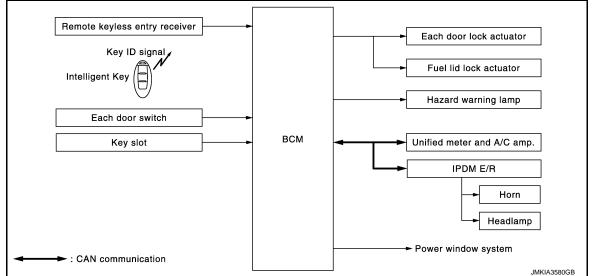
DLK

L

Μ

#### < SYSTEM DESCRIPTION >

# REMOTE KEYLESS ENTRY FUNCTION : System Diagram



## **REMOTE KEYLESS ENTRY FUNCTION : System Description**

INFOID:000000009064583

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

### OPERATION

Remote keyless entry system controls operation of the

- Door lock/unlock
- Selective unlock
- Hazard and horn reminder
- Auto door lock
- Panic alarm
- Power window down
- Interior lamp

### **OPERATION AREA**

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

#### DOOR LOCK/UNLOCK FUNCTION

- When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal 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 and fuel lid 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**

Operation	Operation condition				
Lock	All doors closed				
Unlock	Intelligent Key is out of key slot				

### SELECTIVE UNLOCK FUNCTION

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

When an UNLOCK signal is transmitted from Intelligent Key once, driver's door and fuel lid will be unlocked. Then, if an UNLOCK signal is transmitted from Intelligent Key again within 60 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.

#### < SYSTEM DESCRIPTION >

### [INTELLIGENT KEY SYSTEM]

#### The hazard and horn reminder has a horn chirp mode (C mode) and a non-horn chirp mode (S mode). А Operating Function of Hazard and Horn Reminder C mode S mode Intelligent Key operation Lock Unlock Lock Unlock 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 D (I) With CONSULT Refer to DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)". 🖲 Without CONSULT When LOCK and UNLOCK signals are sent from the Intelligent Key for more than 2 seconds at the same time, the hazard and horn reminder mode is changed and hazard warning lamp flashes and horn sounds as follows: F Hazard warning lamp blinks three times. C mode S mode (Horn chirp mode) (Non-horn chirp mode) Hazard warning lamp blinks three times. Н IMKIA2755GB AUTO DOOR LOCK FUNCTION When all doors and fuel lid 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 and fuel lid are unlocked with Intelligent Key button. When BCM does not receive the following signals within 60 seconds, all doors and fuel lid 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) DLK Auto door lock mode can be changed by "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to DLK-51 "INTELLIGENT KEY : CONSULT 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, M IPDM E/R turns on and off horn intermittently. The headlamp flashes and the horn sounds intermittently. The alarm automatically turns off: Ν After 25 seconds When BCM receives any signal from Intelligent Key Panic alarm function mode can be changed by "PANIC ALARM SET" mode in "WORK SUPPORT". Refer to DLK-51, "INTELLIGENT KEY : CONSULT 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 P 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.

#### < SYSTEM DESCRIPTION >

#### [INTELLIGENT KEY SYSTEM]

Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

#### INTERIOR ROOM LAMP CONTROL

Intelligent Key system turns on interior lamp by receiving UNLOCK signal from Intelligent Key. For detailed description, refer to <u>INL-6</u>, "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	Door switch	Door lock actuator and fuel lid lock actuator	CAN communication system	BCM	Combination meter	Hazard warning lamp	Horn	IPDM E/R	Headlamp
Door lock/unlock function by remote control button		×		×	×		×					
Hazard and horn reminder function						×	×	×	×	×	×	
Selective unlock function				×	×		×					
Auto door lock function		×		×			×					
Panic alarm function			×			×	×			×	×	×

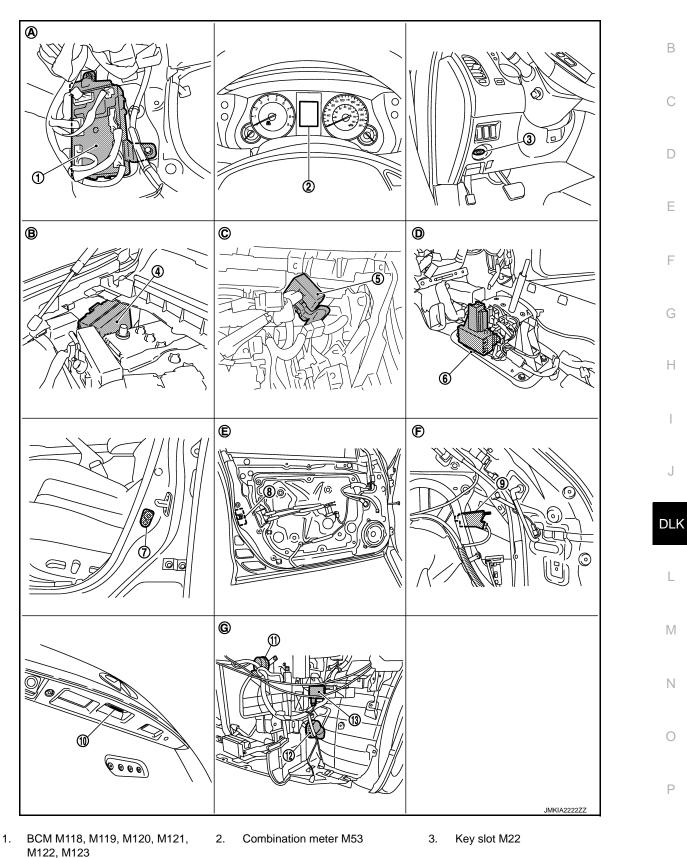
< SYSTEM DESCRIPTION >

[INTELLIGENT KEY SYSTEM]

### REMOTE KEYLESS ENTRY FUNCTION : Component Parts Location

INFOID:000000009064584

А



IPDM E/R E5, E6 4.

- 5. Remote key less entry receiver M104
- 6.

A/T shift selector (detention switch) M137

8.

11.

Β.

#### < SYSTEM DESCRIPTION >

[INTELLIGENT KEY SYSTEM]

- 7. Front door switch (driver side) B16
- 10. Back door opener switch D114
- 13. Intelligent Key warning buzzer E57
- A. Dash side lower (passenger side)
- D. View with center console assembly removed
- G. View with front bumper is removed
- Front door lock assembly (driver side) D15
- . Engine room dash panel (RH)

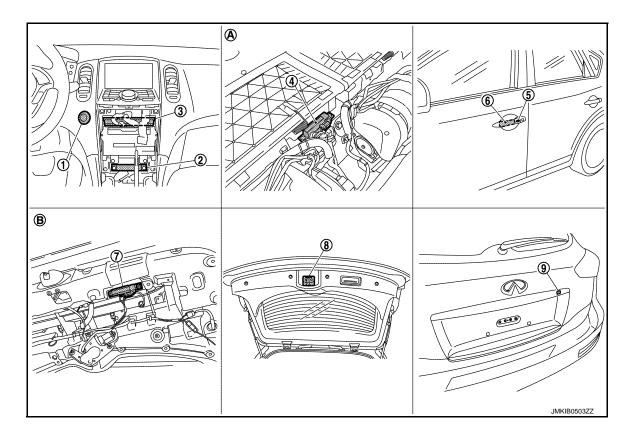
Horn (high) E61, E62

removed

- E. View with front door finisher (LH) is F.
- Fuel lid lock actuator B242
- 12. Horn (low) E69, E70

9.

- C. Behind the instrument lower panel (driver side)
  - View luggage side finisher lower (RH) is removed



- 1. Push-button ignition switch (push switch) M50
- 4. Inside key antenna (luggage room) B228
- Outside key antenna (back door) D118
- A. View with luggage floor finisher front B. is removed
- 2. Inside key antenna (instrument cen- 3. ter) M131
  - Front outside handle LH (request switch) D13
- 8. Back door lock assembly D113
  - View with back door finisher inner is removed
- Unified meter and A/C amp. M66, M67
- 6. Front outside handle LH (outside key antenna) D14
- 9. Back door request switch D116

### REMOTE KEYLESS ENTRY FUNCTION : Component Description

5.

INFOID:000000009064585

Item	Function			
BCM	Controls the door lock function and room lamp function.			
IPDM E/R	Horn sounds and headlamp blinks via CAN communication between BCM.			
Door lock actuator	Outputs 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.			
Unified meter and A/C amp.	<ul> <li>Receive buzzer signal from BCM via CAN communication line, and sounds the buzzer.</li> <li>Transmits vehicle speed signal to BCM via CAN communication line.</li> </ul>			

#### < SYSTEM DESCRIPTION >

### [INTELLIGENT KEY SYSTEM]

 Item
 Function

 Combination meter
 Display, buzzer (combination meter) and KEY warning lamp are installed to combination meter.

Intelligent Key Transmits button operation to remote keyless entry receiver.

### WELCOME LIGHT FUNCTION

### WELCOME LIGHT FUNCTION : System Description

### CONDITION OF SEARCHING

If all following conditions are satisfied, BCM search Intelligent Key by outside key antenna (front outside handle LH/RH and back door). BCM has timer to search for 14 days (every 0.3 sec.). If run the engine, the timer will be reset.

Function	Condition	-
Welcome light function	<ul> <li>System setting is active.</li> <li>All doors are closed.</li> <li>Ignition position is OFF.</li> <li>There is no Intelligent Key inside vehicle.</li> <li>Shift position is P position.</li> <li>All doors are closed and locked (or auto lock timer is running).</li> </ul>	F

#### **OPERATION PROCEDURE**

BCM search outside key antenna (front outside handle LH/RH and back door) detection area. If registered Intelligent Key is detected, BCM turn ON the room lamp and puddle lamp. For detailed description after turning ON the lamps, refer to INL-6, "System Description".

### SYSTEM SETTING PROCEDURE

Setting of welcome light function can be changed by following procedure. (for system setting by CONSULT: refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.)

- 1. Confirm Intelligent Key is removed from key slot.
- 2. Turn ignition switch ON and press and hold request switch (driver side) more than 5 seconds.
- 3. Confirm sounds of buzzer (combination meter).

Pi, Pi, Pi (approx. 1.2 sec.):	Welcome light function is OFF.
Pi, Pi, Pi…(approx. 2.4 sec.):	Welcome light function is ON.

Μ

Ν

Ρ

Н

А

В

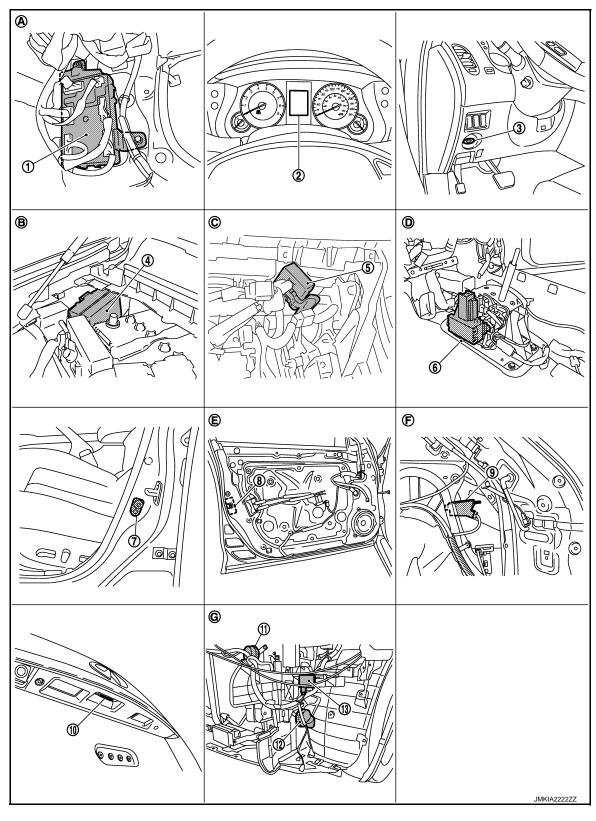
D

INFOID:000000009064586

### < SYSTEM DESCRIPTION >

## WELCOME LIGHT FUNCTION : Component Parts Location

INFOID:000000009064587



- 1. BCM M118, M119, M120, M121, M122, M123
- 4. IPDM E/R E5, E6
- 2. Combination meter M53
- 5. Remote key less entry receiver M104
- 3. Key slot M22
- 6. A/T shift selector (detention switch) M137

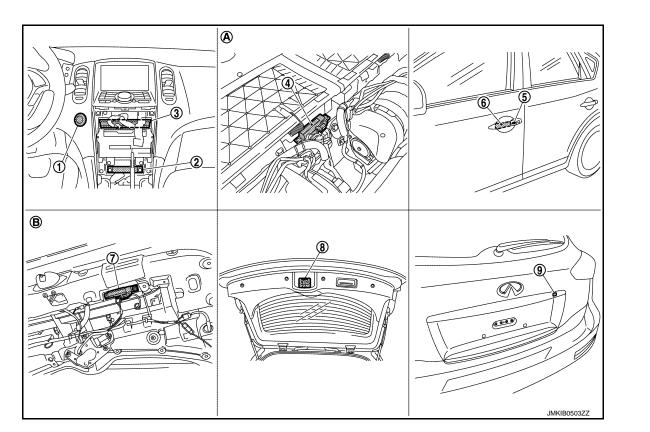
#### < SYSTEM DESCRIPTION >

- 7. Front door switch (driver side) B16 8.
- 10. Back door opener switch D114
- 13. Intelligent Key warning buzzer E57
- A. Dash side lower (passenger side)
- D. View with center console assembly removed
- G. View with front bumper is removed
- Front door lock assembly (driver side) D15
- 11. Horn (high) E61, E62

Ε.

- B. Engine room dash panel (RH)
  - View with front door finisher (LH) is F. removed

- [INTELLIGENT KEY SYSTEM]
- 9. Fuel lid lock actuator B242
  12. Horn (low) E69, E70
  C. Behind the instrument lower panel (driver side)
  F. View luggage side finisher lower (RH) is removed



- Push-button ignition switch (push switch) M50
- 4. Inside key antenna (luggage room) B228
- Outside key antenna (back door) D118
- A. View with luggage floor finisher front B. is removed
- KEY REMINDER FUNCTION

- 2. Inside key antenna (instrument cen- 3. ter) M131
  - Front outside handle LH (request switch) D13
  - Back door lock assembly D113

5.

8.

- View with back door finisher inner is removed
- Unified meter and A/C amp. M66, M67
- 6. Front outside handle LH (outside key antenna) D14
- 9. Back door request switch D116

Н

F

D

Ε

I

DLK

L

Μ

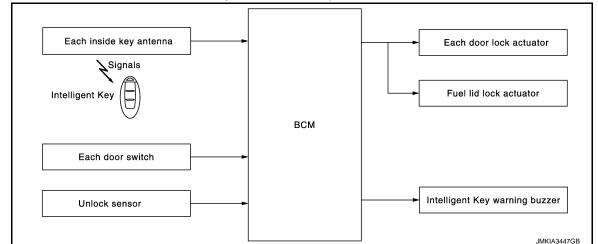
Ν

Ρ

#### < SYSTEM DESCRIPTION >

### **KEY REMINDER FUNCTION : System Description**

INFOID:000000009064588



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*	<ul> <li>Right after driver side door is closed under the following conditions</li> <li>Door lock operation is performed</li> <li>Driver side door is opened</li> <li>Driver side door is in lock state</li> </ul>	All doors and fuel lid unlock
Door is open or closed	<ul> <li>Right after all doors are closed under the following conditions</li> <li>Intelligent Key is inside the vehicle</li> <li>Any door is opened</li> <li>All doors are locked by door lock and unlock switch or door lock knob</li> </ul>	<ul> <li>All doors and fuel lid unlock</li> <li>Honk Intelligent Key warning buzzer</li> </ul>
Back door is closed	<ul> <li>Right after back door is closed under the following conditions</li> <li>Intelligent Key is inside vehicle</li> <li>All doors (except back door) are closed</li> <li>All doors (except back door) are locked</li> </ul>	<ul> <li>All doors and fuel lid unlock</li> <li>Back door can open with back door opener switch</li> <li>Honk Intelligent Key warning buzzer</li> </ul>

\*: 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, or in the glove box. Also, this system sometimes does not operate if the Intelligent Key is in the door pocket for the open door.
- Key reminder function is operated when the back door 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 back door is closed, the Intelligent Key is not inside the vehicle
- When any door is open

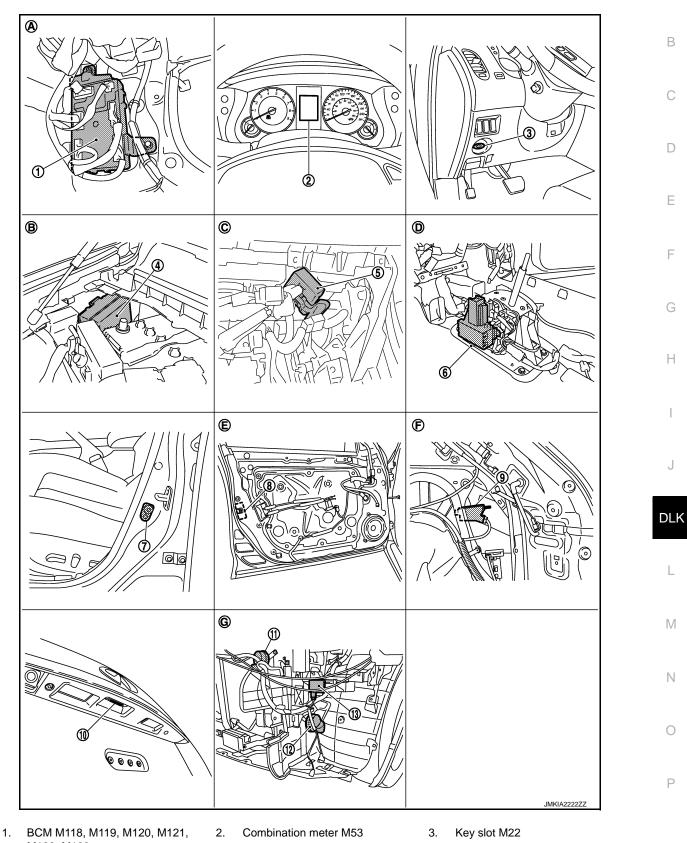
#### < SYSTEM DESCRIPTION >

#### [INTELLIGENT KEY SYSTEM]

## KEY REMINDER FUNCTION : Component Parts Location

INFOID:000000009064589

А



- M122, M123
- IPDM E/R E5, E6 4.
- 5. Remote key less entry receiver M104

A/T shift selector (detention 6. switch) M137

**DLK-37** 

#### < SYSTEM DESCRIPTION >

Front door switch (driver side) B16

10. Back door opener switch D114

13. Intelligent Key warning buzzer E57

Dash side lower (passenger side)

View with center console assembly

View with front bumper is removed

7.

Α.

D.

G.

removed

- 8. Front door lock assembly (driver side) D15
- B. Engine room dash panel (RH)

11. Horn (high) E61, E62

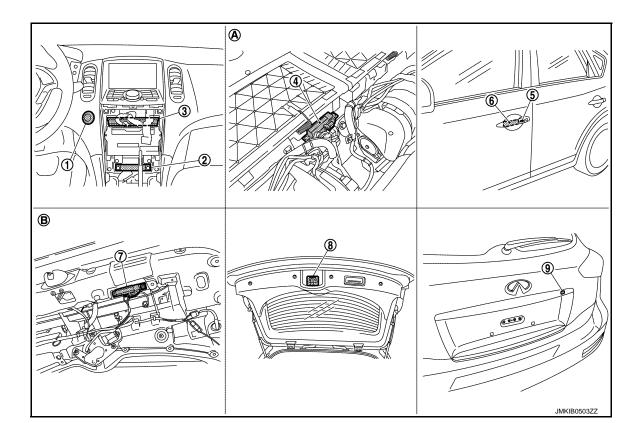
- E. View with front door finisher (LH) is F. removed
- Fuel lid lock actuator B242

[INTELLIGENT KEY SYSTEM]

12. Horn (low) E69, E70

9.

- C. Behind the instrument lower panel (driver side)
  - View luggage side finisher lower (RH) is removed



- 1. Push-button ignition switch (push switch) M50
- 4. Inside key antenna (luggage room) B228
- Outside key antenna (back door) D118
- A. View with luggage floor finisher front B. is removed
- 2. Inside key antenna (instrument cen- 3. ter) M131
  - Front outside handle LH (request switch) D13
  - Back door lock assembly D113
  - View with back door finisher inner is removed
- Unified meter and A/C amp. M66, M67
- 6. Front outside handle LH (outside key antenna) D14
- 9. Back door request switch D116

### WARNING FUNCTION

### WARNING FUNCTION : System Description

5.

8.

#### INFOID:000000009064590

#### **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 information display in combination meter.

- Intelligent Key system malfunction
- OFF position warning
- P position warning
- ACC warning
- Take away warning
- Door lock operation warning

#### < SYSTEM DESCRIPTION >

- Key warning
- Intelligent Key insert information
- Engine start information
- Intelligent key low battery warning
- Key ID warning

А

#### В

### OPERATION CONDITION

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

Warning/Inforn	nation functions	Operation procedure
Intelligent Key system mal	function	When a malfunction is detected on BCM, "KEY" warning lamp will illuminate.
OFF position warning	For internal	<ul> <li>When condition A, B or condition C is satisfied</li> <li>Condition A</li> <li>Ignition switch: ACC position</li> <li>Door switch (driver side): ON (Door is open)</li> <li>Condition B</li> <li>Turn ignition switch from ON to OFF while door is open</li> <li>Condition C</li> <li>Intelligent Key is inserted in key slot</li> <li>Door switch (driver side): ON (Door is open)</li> </ul>
	For external	OFF position warning (For internal) is in active mode, driver side door has been closed. <b>NOTE:</b> 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		<ul><li>Shift position: Except P position.</li><li>Engine is running to stopped (Ignition switch is ON to OFF).</li></ul>
ACC warning		<ul> <li>During P position warning is in active mode, shift position has changed P position.</li> <li>Ignition switch: ACC position.</li> </ul>
	Door is open to close	<ul> <li>Ignition switch: Except LOCK position.</li> <li>Door switch: ON to OFF (Door is open to close).</li> <li>Intelligent Key can not be detected inside the vehicle.</li> </ul>
Take away warning	Door is open	<ul> <li>Door switch: ON (Door is open).</li> <li>Key ID verification every 5 seconds when registered Intelligent Key can not be detected inside the vehicle.</li> </ul>
	Push button-ignition switch operation	<ul> <li>Ignition switch: Except LOCK position.</li> <li>Press push-button ignition switch.</li> <li>Intelligent Key can not be detected inside the vehicle.</li> </ul>
	Intelligent Key is removed from key slot	When Intelligent Key is removed from key slot, Intelligent Key can not be de- tected inside the vehicle.
Door lock operation warn-	Request switch operation	<ul> <li>When request switch is pushed (lock operation) under the following conditions.</li> <li>All door is closed.</li> <li>All door is unlocked.</li> <li>Intelligent Key is inside vehicle.</li> </ul>
ing	Intelligent Key button op- eration	<ul> <li>When Intelligent Key button is pushed (lock operation) under the following conditions.</li> <li>Door switch: ON (Any door is open).</li> <li>For 3 seconds after Intelligent Key is removed from key slot.</li> </ul>
Key warning		<ul> <li>Ignition switch is OFF position.</li> <li>Driver side door switch: ON (Driver side door is open).</li> <li>Intelligent Key is inserted in key slot.</li> </ul>
Intelligent Key insert information		<ul> <li>Door switch: ON to OFF (Door is open to close).</li> <li>Ignition switch: OFF to ON position.</li> <li>Intelligent Key is out of key slot.</li> <li>Intelligent Key can not be detected inside the vehicle.</li> </ul>

#### < SYSTEM DESCRIPTION >

Warning/Inform	mation functions	Operation procedure
	Ignition switch is ON posi- tion	<ul><li>Ignition switch: ON position.</li><li>Shift position: P position.</li><li>Engine is stopped.</li></ul>
Engine start information	Ignition switch is except ON position	<ul> <li>Ignition switch: Except ON position.</li> <li>Shift position: P position.</li> <li>Intelligent Key is inserted in key slot or Intelligent Key can be detected inside the vehicle.</li> </ul>
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 ig- nition switch is turned ON.

#### WARNING METHOD

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

Information display (combination meter), "KEY" indicator or key slot illumination when the warning conditions are met.

					Warning	, chime
Warning/Informa	ation functions	on functions "KEY" warn- ing lamp (combination meter) dica			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			<b>P</b> SHIFT		Activate	_
ACC warning			PUSH JMKIA0047GB		_	_
	Door is open to close	_		Blink	Activate	Activate
	Door is open	_		Blink	_	_
Take away warning	Push-ignition switch operation	—	NO	Blink	Activate	_
	Take away through window	_		Blink	Activate	_
	Intelligent Key is removed from key slot	_	JMKIA0036GB	Blink	_	_
Door lock operation	Request switch operation	_	_	_	—	Activate
warning	Intelligent Key operation	—	_	_	—	Activate

#### < SYSTEM DESCRIPTION >

#### [INTELLIGENT KEY SYSTEM]

				Warning	g chime
Warning/Information functions	"KEY" warn- ing lamp	Information display (combination meter)	Key slot in- dicator	Combination meter buzzer	Intelligent Key warning buzzer
Key ID warning	_	I NO KEY			
Key warning	_	JMKIA0035GB	Blink	Activate	
Intelligent Key insert information	_	JMKIA0034GB	Blink		
Engine start information	_	BRAKE BRAKE			
Intelligent Key low battery warning		JMKIA0048GB			

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

Ο

### < SYSTEM DESCRIPTION >

#### [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	Detention switch	"KEY" warning lamp
Intelligent Key system mal	1										×	×				×
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 oper- ation	×		×			×			×	×	×	×	×		
	Intelligent Key is removed from key slot	×	×				×				×	×	×	×		
Door lock operation warnin	ng	×	×		×	×	×	×	×			×				
Key ID warning		×	×	×			×				×	×	×			
Key warning		×	×		×					×	×	×	×	×		
Intelligent Key insert information		×	×	×	×		×				×	×	×	×		
Engine start information	Ignition switch is ON posi- tion	×	×	×			×				×	×	×		×	
	Ignition switch is except ON position	×	×	×			×				×	×	×			
Intelligent Key low battery	warning	×					×				×	×	×			

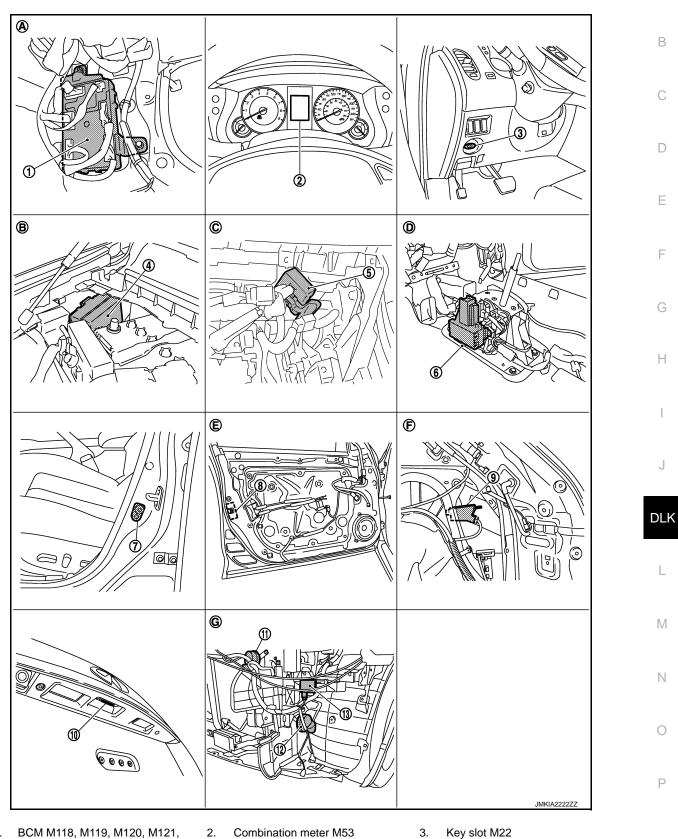
#### < SYSTEM DESCRIPTION >

### WARNING FUNCTION : Component Parts Location

#### [INTELLIGENT KEY SYSTEM]

#### INFOID:000000009064591

А



- 1. M122, M123
- IPDM E/R E5, E6 4.

- Combination meter M53
- 5. Remote key less entry receiver M104

A/T shift selector (detention 6. switch) M137

**DLK-43** 

8.

11.

#### < SYSTEM DESCRIPTION >

[INTELLIGENT KEY SYSTEM]

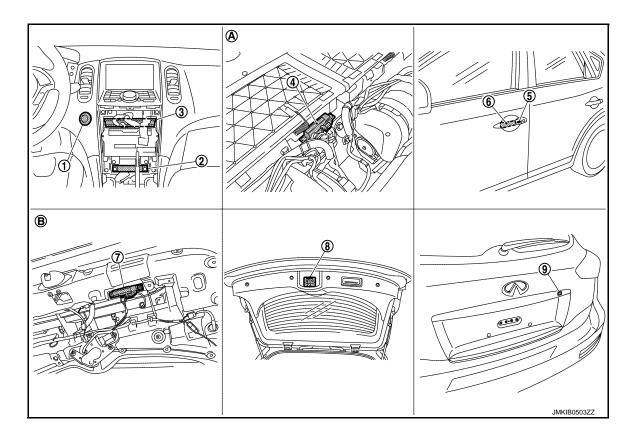
- 7. Front door switch (driver side) B16
- 10. Back door opener switch D114
- 13. Intelligent Key warning buzzer E57
- A. Dash side lower (passenger side)
- D. View with center console assembly removed
- G. View with front bumper is removed
- Front door lock assembly (driver side) D15
- B. Engine room dash panel (RH)

Horn (high) E61, E62

- E. View with front door finisher (LH) is F. removed
- Fuel lid lock actuator B242
- 12. Horn (low) E69, E70

9.

- C. Behind the instrument lower panel (driver side)
  - View luggage side finisher lower (RH) is removed



- 1. Push-button ignition switch (push switch) M50
- 4. Inside key antenna (luggage room) B228
- Outside key antenna (back door) D118
- A. View with luggage floor finisher front B. is removed
- 2. Inside key antenna (instrument cen- 3. ter) M131
  - Front outside handle LH (request switch) D13
- 8. Back door lock assembly D113

5.

- View with back door finisher inner is removed
- Unified meter and A/C amp. M66, M67
- 6. Front outside handle LH (outside key antenna) D14
- 9. Back door request switch D116

### BACK DOOR OPENER SYSTEM

#### < SYSTEM DESCRIPTION >

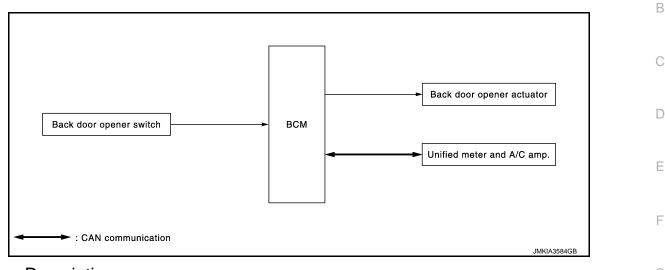
### BACK DOOR OPENER SYSTEM

### System Diagram

INFOID:000000009064592

А

[INTELLIGENT KEY SYSTEM]



### System Description

INFOID:0000000009064593

#### BACK DOOR OPENER OPERATION

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

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

#### OPERATION CONDITION

If the following conditions are satisfied, back door opener operation is performed.

Back door opener switch operation	Operation condition	J
Back door open	All door is unlocked.*	_
	<ul> <li>Vehicle speed is less than 5 km/h (3 MPH).</li> </ul>	

\*: Except UNLOCK by door lock knob operation.

Μ

Ν

Ρ

Н

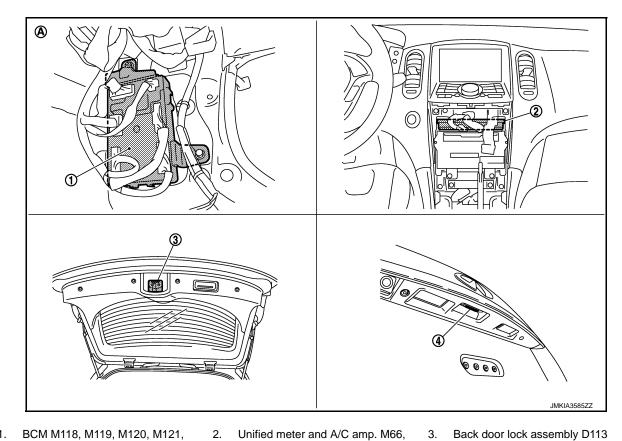
### BACK DOOR OPENER SYSTEM

#### < SYSTEM DESCRIPTION >

### [INTELLIGENT KEY SYSTEM]

### **Component Parts Location**

INFOID:000000009064594



- 1. BCM M118, M119, M120, M121, M122
- 4. Back door opener switch D114
- A. Behind the center console

### **Component Description**

INFOID:000000009064595

Item	Function
BCM	Controls the back door opener function.
Back door opener switch	Input back door opener switch operation signal to BCM.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Unified meter and A/C amp.	Transmits vehicle speed signal to BCM via CAN communication.

M67

### INTEGRATED HOMELINK TRANSMITTER

#### < SYSTEM DESCRIPTION >

## INTEGRATED HOMELINK TRANSMITTER

### **Component Description**

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

J

L

Μ

Ν

Ο

Ρ

[INTELLIGENT KEY SYSTEM]

INFOID:000000009064596

А

В

С

D

Е

F

G

Н

## DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

INFOID:000000009345020

### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description			
Work Support	Changes the setting for each system function.			
Self Diagnostic Result	Displays the diagnosis results judged by BCM.			
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.			
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	<ul><li>Read and save the vehicle specification.</li><li>Write the vehicle specification when replacing BCM.</li></ul>			

#### 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.

Quete m	Out and a start and a time it and	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 CONDITONER*						
<ul><li>Intelligent Key system</li><li>Engine start system</li></ul>	INTELLIGENT KEY	×	×	×			
Combination switch	COMB SW		×				
Body control system	BCM	×					
IVIS - NATS	IMMU		×	×			
Interior room lamp battery saver	BATTERY SAVER	×	×	×			
Back door open system	TRUNK		×	×			
Vehicle security system	THEFT ALM	×	×	×			
RAP system	RETAINED PWR		×				
Signal buffer system	SIGNAL BUFFER		×	×			
TPMS	AIR PRESSURE MONITOR	×	×	×			

#### NOTE:

\*: This item is displayed, but is not used.

#### FREEZE FRAME DATA (FFD)

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

### **DLK-48**

#### < SYSTEM DESCRIPTION >

#### [INTELLIGENT KEY SYSTEM]

CONSULT screen item	Indication/Unit	Description								
Vehicle Speed	km/h	Vehicle speed of the mo	Vehicle speed of the moment a particular DTC is detected							
Odo/Trip Meter	km	Total mileage (Odomete	r value) of the moment a particular DTC is detected							
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)							
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)							
	LOCK>ACC		While turning power supply position from "LOCK"* to "ACC"							
	ACC>ON		While turning power supply position from "ACC" to "IGN"							
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Except emergency stop operation)							
Vehicle Condition	CRANK>RUN	Power supply position status of the moment a particular DTC is de- tected*	While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)							
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emer- gency stop operation)							
	ACC>OFF		While turning power supply position from "ACC" to "OFF"							
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"*							
	OFF>ACC		While turning power supply position from "OFF" to "ACC"							
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"							
	OFF>SLEEP			While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode						
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply posi- tion is "LOCK"*.) to low power consumption mode							
	LOCK		Power supply position is "LOCK"*							
	OFF		Power supply position is "OFF" (Ignition switch OFF)							
	ACC		Power supply position is "ACC" (Ignition switch ACC)							
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)							
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)							
	CRANKING		Power supply position is "CRANKING" (At engine cranking)							
IGN Counter	0 - 39	<ul> <li>The number is 0 wher</li> <li>The number increases whenever ignition swith</li> </ul>	at ignition switch is turned ON after DTC is detected a malfunction is detected now. s like $1 \rightarrow 2 \rightarrow 338 \rightarrow 39$ after returning to the normal condition tch OFF $\rightarrow$ ON. b 39 until the self-diagnosis results are erased if it is over 39.							

#### NOTE:

\*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.

- Closing door
- · Opening door
- · Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

#### DOOR LOCK

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

#### INFOID:000000009064598

Ν

0

Ρ

#### BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

### **DLK-49**

#### < SYSTEM DESCRIPTION >

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.
AUTOMATIC DOOR LOCK SE- LECT	<ul> <li>Automatic door lock function mode can be selected from the following in this mode.</li> <li>VH SPD: All doors are locked when vehicle speed more than 24km/h (15MPH)</li> <li>P RANGE: All doors are locked when shifting the selector lever from P position to other than the P position</li> </ul>
AUTOMATIC DOOR UNLOCK SELECT	<ul> <li>Automatic door unlock function mode can be selected from the following in the mode.</li> <li>MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF</li> <li>MODE 2: All doors are unlocked when shifting the selector lever from any position other than the P to P position</li> <li>MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF</li> <li>MODE 4: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position</li> </ul>
AUTOMATIC LOCK/UNLOCK SET	<ul> <li>Automatic door lock/unlock function mode can be selected from the following in this mode.</li> <li>Off: non-operational</li> <li>Unlock Only: door unlock operation only</li> <li>Lock Only: door lock operation only</li> <li>Lock/Unlock: lock/unlock operation</li> </ul>

### DATA MONITOR

#### NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

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

#### ACTIVE TEST

#### < SYSTEM DESCRIPTION >

#### [INTELLIGENT KEY SYSTEM]

Test item	Description	A
DOOR LOCK	<ul> <li>This test is able to check door lock/unlock operation.</li> <li>The all door lock actuators are locked when "ALL LCK" on CONSULT screen is touched.</li> <li>The all door lock actuators are unlocked when "ALL UNLK" on CONSULT screen is touched.</li> <li>The door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT screen is touched.</li> <li>The door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT screen is touched.</li> <li>The door lock actuator (rear LH and RH) is unlocked when "OTR ULK" on CONSULT screen is touched.</li> </ul>	B

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

## D

Е

INFOID:000000009064599

#### WORK SUPPORT

Monitor item Description F CONFIRM KEY FOB ID It can be checked whether Intelligent Key ID code is registered or not in this mode. Auto door lock time can be changed in this mode. MODE 1: 1 minute AUTO LOCK SET MODE 2: 5 minutes MODE 3: 30 seconds MODE 4: 2 minutes Н Door lock/unlock function by door request switch (driver side, passenger side and back door) LOCK/UNLOCK BY I-KEY mode can be changed to operate (ON) or not operate (OFF) in this mode. Engine start function mode can be changed to operate (ON) or not operate (OFF) with this ENGINE START BY I-KEY mode. Buzzer reminder function mode by back door request switch can be changed to operate (ON) TRUNK/GLASS HATCH OPEN or not operate (OFF) with this mode. Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. PANIC ALARM SET • MODE 1: 0.5 sec. MODE 2: Non-operation DLK • MODE 3: 1.5 sec. Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. PW DOWN SET MODE 1: 3 sec. L MODE 2: Non-operation MODE 3: 5 sec. NOTE: M TAKE OUT FROM WIN WARN This item is displayed, but cannot be supported. NOTE: TRUNK OPEN DELAY This item is displayed, but cannot be supported. Ν Intelligent Key low battery warning mode can be changed to operate (ON) or not operate LO- BATT OF KEY FOB WARN (OFF) with this mode. Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this ANTI KEY LOCK IN FUNCTI mode. Hazard reminder function mode can be selected from the following with this mode. LOCK ONLY: Door lock operation only Ρ HAZARD ANSWER BACK ٠ UNLOCK ONLY: Door unlock operation only LOCK/UNLOCK: Lock/unlock operation ٠ • OFF: Non-operation Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode. ANS BACK I-KEY LOCK Horn chirp: Sound horn Buzzer: Sound Intelligent Key warning buzzer OFF: Non-operation

#### < SYSTEM DESCRIPTION >

Monitor item	Description
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.
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.
WELCOME LIGHT OP SET	Welcome light function mode can be changed to operate (WITH) or not operate (WITHOUT) with this mode.
WELCOME LIGHT SELECT	<ul> <li>Welcome light function mode can be selected from the following with this mode.</li> <li>Without room lamp</li> <li>With room lamp</li> <li>Without paddle lamp</li> <li>With paddle lamp</li> </ul>

#### SELF-DIAG RESULT Refer to <u>BCS-90, "DTC Index"</u>.

## DATA MONITOR **NOTE**:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

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 -RR	NOTE: This item is displayed, but cannot be monitored.
REQ SW -RL	NOTE: This item is displayed, but cannot be monitored.
REQ SW -BD/TR	Indicates [ON/OFF] condition of back door request switch.
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.
IGN RLY2 -F/B	Indicates [ON/OFF] condition of ignition relay 2.
CLUCH SW	NOTE: This item is displayed, but cannot be monitored.
BRAKE SW 1	Indicates [ON/OFF] condition of brake switch power supply.
BRAKE SW 2	Indicates [ON/OFF] condition of brake switch.
DETE/CANCL SW	Indicates [ON/OFF] condition of P position.
SFT PN/N SW	Indicates [ON/OFF] condition of P or N position.
S/L -LOCK	NOTE: This item is displayed, but cannot be monitored.
S/L -UNLOCK	NOTE: This item is displayed, but cannot be monitored.
S/L RELAY -F/B	NOTE: This item is displayed, but cannot be monitored.
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.

### < SYSTEM DESCRIPTION >

#### [INTELLIGENT KEY SYSTEM]

Monitor Item	Condition
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	NOTE: This item is displayed, but cannot be monitored.
S/L UNLK-IPDM	NOTE: This item is displayed, but cannot be monitored.
S/L RELAY-REQ	NOTE: This item is displayed, but cannot be monitored.
VEH SPEED 1	Display the vehicle speed signal received from unified meter and A/C amp. 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/UNLOCK] condition of driver side door status.
DOOR STAT-AS	Indicates [LOCK/READY/UNLOCK] condition of passenger side door status.
ID OK FLAG	Indicates [SET/RESET] condition of key ID.
PRMT ENG STRT	Indicates [SET/RESET] condition of engine start possibility.
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be monitored.
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
RKE-TR/BD	NOTE: This item is displayed, but cannot be monitored.
RKE-PANIC	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.
RKE-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.
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.

### 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 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 screen is touched.
INSIDE BUZZER	<ul> <li>This test is able to check warning chime in combination meter operation.</li> <li>Take away warning chime sounds when "TAKE OUT" on CONSULT screen is touched.</li> <li>Key warning chime sounds when "KEY WARN" on CONSULT screen is touched.</li> <li>P position warning chime sounds when "P RNG WARN" on CONSULT screen is touched.</li> <li>ACC warning chime sounds when "ACC WARN" on CONSULT screen is touched.</li> </ul>
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. The Intelligent Key warning buzzer will be activated after "ON" on CONSULT screen is touched.
INDICATOR	<ul> <li>This test is able to check warning lamp operation.</li> <li>"KEY" Warning lamp illuminates when "KEY ON" on CONSULT screen is touched.</li> <li>"KEY" Warning lamp flashes when "KEY IND" on CONSULT screen is touched.</li> </ul>

#### < SYSTEM DESCRIPTION >

Test item	Description
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT screen is touched.
LCD	<ul> <li>This test is able to check meter display information</li> <li>Engine start information displays when "BP N" on CONSULT screen is touched.</li> <li>Engine start information displays when "BP I" on CONSULT screen is touched.</li> <li>Key ID warning displays when "ID NG" on CONSULT screen is touched.</li> <li>ROTAT: This item is displayed, but cannot be tested.</li> <li>P position warning displays when "SFT P" on CONSULT screen is touched.</li> <li>Intelligent Key insert information displays when "INSRT" on CONSULT screen is touched.</li> <li>Intelligent Key low battery warning displays when "BATT" on CONSULT screen is touched.</li> <li>Take away through window warning displays when "NO KY" on CONSULT screen is touched.</li> <li>Take away warning display when "OUTKY" on CONSULT screen is touched.</li> <li>OFF position warning display when "LK WN" on CONSULT screen is touched.</li> </ul>
TRUNK/GLASS HATCH	This test is able to check back door opener actuator open operation. This actuator opens when "ON" on CONSULT screen is touched.
FLASHER	This test is able to check hazard warning lamp operation. The hazard warning lamps will be activated after "ON" on CONSULT screen is touched.
HORN	This test is able to check horn operation. The horn will be activated after "ON" on CONSULT screen is touched.
P RANGE	This test is able to check A/T shift selector power supply A/T shift selector power is supplied when "ON" on CONSULT 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 screen is touched.
LOCK INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation. LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched;
ACC INDICATOR	This test is able to check ACC indicator in push-ignition switch operation. Indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.
IGNITION ON IND	This test is able to check ON indicator in push-ignition switch operation. Indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination flash when "ON" on CONSULT screen is touched.
TRUNK/BACK DOOR	NOTE: This item is displayed, but cannot be tested.

### TRUNK

### TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:000000009064600

#### BCM CONSULT FUNCTION

CONSULT 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.

## DATA MONITOR **NOTE**:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Contents
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter.

#### < SYSTEM DESCRIPTION >

#### [INTELLIGENT KEY SYSTEM]

Monitor Item	Contents	_
KEY CYL SW-TR	NOTE: This item is displayed, but cannot be monitored.	- A
TR CANCEL SW	NOTE: This item is displayed, but cannot be monitored.	В
TR/BD OPEN SW	Indicates [ON/OFF] condition of back door opener switch.	-
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be monitored.	С
RKE-TR/BD*	NOTE: This item is displayed, but cannot be monitored.	-

#### ACTIVE TEST

Test item	Description	Е
TRUNK/GLASS HATCH	This test is able to check back door opener actuator open operation. This actuator opens when ""	
		F

Н

G

J

DLK

L

Μ

Ν

Ο

Ρ

## DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

### Description

INFOID:000000009064601

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to LAN-25, "CAN System Specification Chart".

### DTC Logic

INFOID:000000009064602

### DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detection condition	Possible cause
U1000	CAN COMM CIRCUIT	When BCM cannot communicate CAN communica- tion signal continuously for 2 seconds or more.	CAN communication system

### **Diagnosis Procedure**

INFOID:000000009064603

### **1.**PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.

2. Check "Self Diagnostic Result".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to LAN-16, "Trouble Diagnosis Flow Chart"LAN-16, "Trouble Diagnosis Flow Chart"
- NO >> Refer to <u>GI-42</u>, "Intermittent Incident".

## U1010 CONTROL UNIT (CAN)

### < DTC/CIRCUIT DIAGNOSIS >

## U1010 CONTROL UNIT (CAN)

### 

[INTELLIGENT KEY SYSTEM]

А

DTC	CONSULT display de- scription	DTC detection condition	Possible cause
U1010	CONTROL UNIT (CAN)	BCM detected internal CAN communication circuit malfunction.	BCM
Diagno	osis Procedure		INFOID:00000000906460
<b>1.</b> REPL	LACE BCM		
When D	TC [U1010] is detected	d, replace BCM.	
	>> Replace BCM. Re	fer to BCS-96. "Removal and Installation"	
Specia	al Repair Requirer	nent	INFOID:000000009064600
1.REQ	UIRED WORK WHEN	REPLACING BCM	
nitialize	control unit. Refer to (	CONSULT operation manual NATS-IVIS/NVIS.	
	>> Work end.		

#### < DTC/CIRCUIT DIAGNOSIS >

### B2621 INSIDE KEY ANTENNA 1

### Description

• Installed in the instrument center.

### DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA 1 CIRCUIT	An excessive high or low voltage from inside anten- na is sent to BCM.	<ul> <li>Inside key antenna (instrument center)</li> <li>Between BCM and Inside key antenna (instrument center)</li> </ul>

#### DTC CONFIRMATION PROCEDURE

**1.**PERFORM DTC CONFIRMATION PROCEDURE

1. Perform inside key antenna ("INSIDE ANT DIAGNOSIS") on Work Support" of "INTELLIGENT KEY".

2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

Is inside key antenna DTC detected?

YES >> Refer to <u>DLK-58, "Diagnosis Procedure"</u>.

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

### Diagnosis Procedure

INFOID:000000009064609

### 1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

	(+) BCM		()	Condition	Signal
Connector Terminal				(Reference value)	
Instrument	M122	78, 79	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB
center	IVI I ZZ	76, 79	Ground	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM and inside key antenna connector.

INFOID:000000009064607

INEOID:000000009064608

#### **B2621 INSIDE KEY ANTENNA 1** [INTELLIGENT KEY SYSTEM]

#### < DTC/CIRCUIT DIAGNOSIS >

2. Check continuity between BCM harness connector and inside key antenna (instrument center) harness connector.

BCM		Inside key antenna (instrument center)		Quartinuitu	-	
Connector	Terminal	Connector	Terminal	- Continuity	В	
M122	78	M404	M131	2	Existed	-
IVI 1 2 2	M122 79		1	Existed		

3. Check continuity between BCM harness connector and ground.

B	СМ		Continuity	D
Connector	Connector Terminal		Continuity	D
M122	78	Ground	Not existed	
IVI 122	79	-	NOL EXISTED	E

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### **3.**CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna (instrument center). (New antenna or other antenna)

2. Connect BCM and inside key antenna (instrument center) connector.

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

(+) BCM Connector Terminal		4		Signal
		(–) Condition		(Reference value)
Instrument M122	78, 79	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i> <i>1</i>
center	10,10		Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5

Is the inspection result normal?

YES	>> Replace inside key antenna (instrument center). Refer to DLK-271, "INSTRUMENT CENTER :
	Removal and Installation".

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

**4.**CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Ρ

А

F

#### < DTC/CIRCUIT DIAGNOSIS >

### B2623 INSIDE KEY ANTENNA 3

#### Description

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

### DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA 3 CIRCUIT	An excessive high or low voltage from inside anten- na is sent to BCM.	<ul> <li>Inside key antenna (luggage room)</li> <li>Between BCM ~ Inside key antenna (luggage room)</li> </ul>

#### DTC CONFIRMATION PROCEDURE

### 1.PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is inside key antenna DTC detected?

- YES >> Refer to <u>DLK-60, "Diagnosis Procedure"</u>.
- NO >> Inside key antenna (luggage room) is OK.

#### **Diagnosis** Procedure

.

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

(+) BCM		()	Condition	Signal (Reference value)		
Conn	ector	Terminal				
Luggage	M121	34, 35	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB	
room	IVI Z I	34, 33	Ground	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s JMKIA0063GB	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

$$2.$$
CHECK INSIDE KEY ANTENNA CIRCUIT

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

### **DLK-60**

INFOID:000000009064610

INFOID:000000009064611

INFOID:000000009064612

### **B2623 INSIDE KEY ANTENNA 3**

[INTELLIGENT KEY SYSTEM]

А

F

#### < DTC/CIRCUIT DIAGNOSIS >

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

B	СМ	Inside ke	y antenna	Continuity	•
Connector	Terminal	Connector	Terminal	Continuity	В
M121	34	B228	2	Existed	-
IVI I Z I	35	DZZ0	1	Existed	

3. Check continuity between BCM harness connector and ground.

В	CM			D
Connector	Terminal	Ground	Continuity	D
M121	34	Ground	Not existed	
IVI 12 I	35		NOL EXISTED	E

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## **3.**CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna (luggage room). (New antenna or other antenna)

2. Connect BCM and inside key antenna (luggage room) connector.

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

	(+)				Signal
	BCM		(-)	Condition	(Reference value)
Conr	nector	Terminal			
Luggage	M121	34, 35	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 1 5 0 1 1 5 0 1 1 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1
room		34, 33	Ground	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 •••••••••••••••••••••••••••••
					JMKIA0063GB
inspectio	on result no	rmal?			

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room). Refer to <u>DLK-271, "LUGGAGE ROOM : Removal</u> and Installation".

NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

**4.**CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Ρ

### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

# POWER SUPPLY AND GROUND CIRCUIT

## BCM (BODY CONTROL MODULE)

### BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:000000009064613

### **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 (40 A)
11	Dattery power supply	10 (10 A)

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.

(•	+)		Voltago	
BCM		(–)	Voltage (Approx.)	
Connector	Terminal		( TT - /	
M118	1	Ground	Battery voltage	
M119	11	Ground	ballery vollage	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BC	CM		Continuity	
Connector	Connector Terminal		Continuity	
M119	13		Existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

DOOR SWITCH		٨
Description	INFOID:00000009064614	A
Detects door open/close condition. Component Function Check	INFOID:00000009064615	В
1.CHECK FUNCTION		С
B With CONSULT Check door switches ("DOOR SW-DR", "DOOR SW- BK") in Data Monitor" mode with CONSULT.	AS", "DOOR SW-RL", "DOOR SW-RR" and "DOOR SW-	D
Monitor item	Condition	_
DOOR SW-DR		E
DOOR SW-AS		
DOOR SW-RL	$CLOSE \to OPEN \text{: } OFF \to ON$	F
DOOR SW-RR		
DOOR SW-BK		
Is the inspection result normal?		G
YES >> Door switch is OK. NO >> Refer to <u>DLK-63, "Diagnosis Procedure"</u> .		Н
Diagnosis Procedure	INFOID:00000009064616	11
1.CHECK DOOR SWITCH INPUT SIGNAL		Ι
<ol> <li>Turn ignition switch OFF.</li> <li>Disconnect malfunctioning door switch connecto</li> <li>Check signal between malfunctioning door switch</li> </ol>	r. h harness connector and ground with oscilloscope.	J

DLK

L

Μ

Ν

Ο

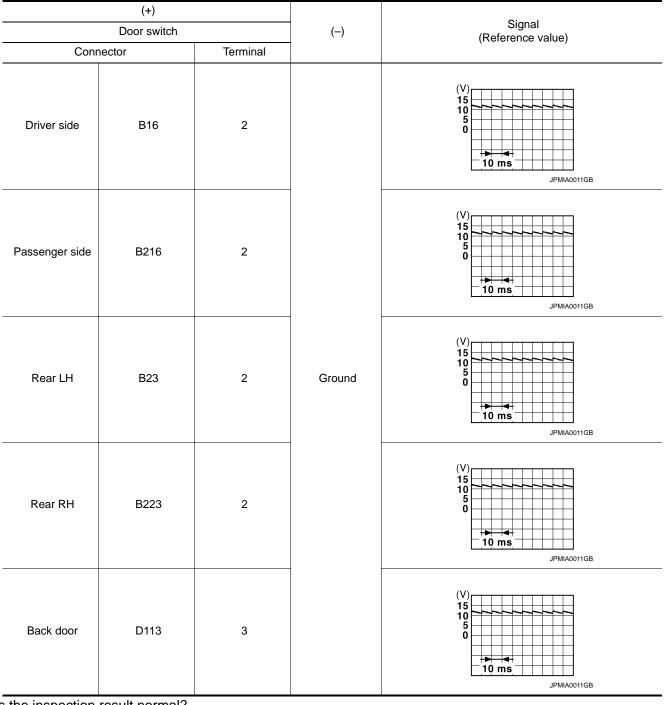
Ρ

< DTC/CIRCUIT DIAGNOSIS >

### **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

#### [INTELLIGENT KEY SYSTEM]



Is the inspection result normal?

YES-1 >> Back door: GO TO 3. YES-2 >> Other doors: GO TO 4.

NO >> GO TO 2.

2. CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

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

### **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

#### [INTELLIGENT KEY SYSTEM]

BCM			Do	oor switch			
Connector	Termi	nal	Connector Terminal		Continuity		
M123	150	) E	16 (Driver side	e)			
	124	4 B21	6 (Passenger s	side)	2		
	69	1	B23 (Rear LH)		2	Existed	
M121	68		3223 (Rear RH				
	66		113 (Back doo		3		
<ol> <li>Check continuity betw</li> </ol>	een BCM ha	arness connecto	or and groun	nd.			
	BCM					Questionity	
Connector		Termin	al			Continuity	
M123		150 (Drive	r side)				
W123		124 (Passen	ger side)	G	Ground		
		69 (Rear	LH)			Not existed	
M121		68 (Rear	RH)				
		66 (Back	door)				
heck continuity between			ack door sw	/itch) har	ness connect	or and ground.	
Back door lock ass	embly (back d	•	_	<b>.</b> .		Continuity	
Connector D113		Terminal	_ (	Ground		Eviete d	
s the inspection result nor		4				Existed	
YES >> GO TO 4. NO >> Repair or repla 4.CHECK DOOR SWITC Refer to <u>DLK-65, "Compor</u> <u>s the inspection result nor</u> YES >> GO TO 5. NO >> Replace ma • Door switch:	H <u>nent Inspect</u> <u>mal?</u> Ifunctioning	ion".	al and Insta	llation".			
						l and Installation".	
<b>D</b> .CHECK INTERMITTEN	IT INCIDEN	т					
Refer to <u>GI-42, "Intermitter</u>	nt Incident".						
>> INSPECTION							
Component Inspection						INFOID:00000000090640	
1. Turn ignition switch Ol							
<ol> <li>Disconnect door switc</li> <li>Check door switch term</li> </ol>	h connector						

### **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

	Door switch Terminal			- Condition		
Each door	2	Ground part of door		Pressed	Not existed	
Lacii dool	2	switch	switch	Door switch	Released	Existed
Pools door	2	Back door 3 4	4	DOOL SWITCH	Pressed	Not existed
Dack UUUI	3	4		Released	Existed	

Is the inspection result normal?

YES >> INSPECTION END

NO-1 >> Replace malfunction door switch. Refer to <u>DLK-270, "Removal and Installation"</u>.

NO-2 >> Replace back door lock assembly. Refer to <u>DLK-268, "Removal and Installation"</u>.

DOOR LOC	K AND UNLOCK SWI	-	T KEY SYSTEM]			
DOOR LOCK AND UNLOCK SV	WITCH					
DRIVER SIDE			,			
DRIVER SIDE : Description	DRIVER SIDE : Description					
Transmits door lock/unlock operation to BCM.			E			
DRIVER SIDE : Component Function	INFOID:000000009064619					
1.CHECK FUNCTION						
With CONSULT Check ("CDL LOCK SW ", "CDL UNLOCK SW	") in Data Monitor mode wit	h CONSULT.	[			
Monitor item	C	ondition				
	LOCK	: ON				
CDL LOCK SW	UNLOCK	: OFF				
CDL UNLOCK SW	LOCK	: OFF	F			
Is the inspection result normal?	UNLOCK	: ON				
DRIVER SIDE : Diagnosis Procedur 1. CHECK POWER WINDOW SWITCH 1. Turn ignition switch ON. 2. Check power window operation. Does power window (driver side) operate? YES >> Replace power window main swit NO >> Refer to <u>PWC-103</u> , "Diagnosis Pr PASSENGER SIDE PASSENGER SIDE : Description	ch.		INFOID:0000000000064620			
			INI CID.000000000000000000000000000000000000			
Transmits door lock/unlock operation to BCM.			l			
PASSENGER SIDE : Component F 1.CHECK FUNCTION	UNCTION CHECK		INFOID:000000000064622			
With CONSULT Check ("CDL LOCK SW ", "CDL UNLOCK SW	/") in Data Monitor mode wit	h CONSULT.	''			
Monitor item	C	ondition				
CDL LOCK SW	LOCK	: ON				
	UNLOCK	: OFF	(			
CDL UNLOCK SW	LOCK	: OFF				
	UNLOCK	: ON	F			
Is the inspection result normal?           YES         >> Door lock and unlock switch is OF           NO         >> Refer to DLK-67, "PASSENGER S		1				
PASSENGER SIDE : Diagnosis Pro	cedure		INFOID:000000009064623			
1.CHECK POWER WINDOW SWITCH						

< DTC/CIRCUIT DIAGNOSIS >

- 1. Turn ignition switch ON.
- 2. Check passenger side power window operation.

Does power window (passenger side) operate?

- YES >> Replace power window switch (passenger side)
- NO >> Refer to <u>PWC-105</u>, "WHEN POWER WINDOW MAIN SWITCH IS OPERATED : Diagnosis Procedure".

### **DOOR LOCK ACTUATOR**

DTC/CIRCUIT D	IAGNOSIS >			INTELL	IGENT P	KEY SYSTEM]
OOR LOCK	ACTUATO	R				
RIVER SIDE						
RIVER SIDE	: Description					INFOID:000000009064624
ocks/unlocks the	door with the sig	nal from BCM				
RIVER SIDE	: Component	Function	Check			INFOID:000000009064625
.CHECK FUNCT	ION					
	to perform Activ					
Touch "ALL LC		TO CHECK TH	at it works normally.			
	ock actuator is O	K.				
NO >> Refer t	o <u>DLK-69, "DRI\</u>	ER SIDE : D	agnosis Procedure".			
RIVER SIDE	: Diagnosis F	Procedure				INFOID:000000009064626
.CHECK OUTPL	JT SIGNAL					
Turn ignition sv	witch OFF.					
Disconnect from	nt door lock asse					and a
Check voltage	between front do	or lock asser	nbly (driver side) harnes	s connector	and grou	na.
(-	+)					
	ombly (driver eide)	()	(–) Condition	Condition		ltage (V)
Front door lock ass	sembly (unver side)	(-)	Condition		()	Approx.)
Front door lock ass Connector	Terminal	(-)				
	Terminal 1	Ground	Door lock and unlock	Lock	$0 \rightarrow Batte$	ery voltage $\rightarrow 0$
Connector D15	Terminal 1 2				$0 \rightarrow Batte$	
Connector D15 the inspection re YES >> Replac and Ins NO >> GO TC	Terminal 1 2 sult normal? ce front door lock stallation". ) 2.	Ground assembly (dr	Door lock and unlock	Lock Unlock	$0 \rightarrow Batter 0 \rightarrow Batter 0$	ery voltage $\rightarrow 0$ ery voltage $\rightarrow 0$
Connector D15 the inspection re YES >> Replac and Ins NO >> GO TO .CHECK DOOR	Terminal 1 2 sult normal? ce front door lock stallation". ) 2. LOCK ACTUAT(	Ground assembly (dr	Door lock and unlock switch	Lock Unlock	$0 \rightarrow Batter 0 \rightarrow Batter 0$	ery voltage $\rightarrow 0$ ery voltage $\rightarrow 0$
Connector D15 the inspection re YES >> Replac and Ins NO >> GO TC CHECK DOOR Disconnect BC	Terminal 1 2 sult normal? ce front door lock stallation". ) 2. LOCK ACTUATO M connector.	Ground assembly (dr DR CIRCUIT	Door lock and unlock switch	Lock Unlock	0 → Batt 0 → Batt R ASSEM	ery voltage $\rightarrow 0$ ery voltage $\rightarrow 0$ IBLY : Removal
Connector D15 the inspection re YES >> Replac and Ins NO >> GO TO CHECK DOOR Disconnect BC Check continu	Terminal 1 2 sult normal? ce front door lock stallation". ) 2. LOCK ACTUATO M connector.	Ground assembly (dr DR CIRCUIT	Door lock and unlock switch	Lock Unlock -236, "DOOF lock asseml	0 → Batti 0 → Batti R ASSEN	ery voltage → 0 ery voltage → 0 IBLY : Removal r side) harness
Connector D15 the inspection re YES >> Replac and Ins NO >> GO TO CHECK DOOR Disconnect BC Check continu	Terminal 1 2 <u>sult normal?</u> ce front door lock <u>stallation"</u> . 2. LOCK ACTUATO M connector. ity between BCN	Ground assembly (dr DR CIRCUIT /I harness co	Door lock and unlock switch	Lock Unlock -236, "DOOF lock asseml	$0 \rightarrow Battalow Battal$	ery voltage $\rightarrow 0$ ery voltage $\rightarrow 0$ IBLY : Removal
Connector D15 the inspection re YES >> Replace and Ins NO >> GO TC CHECK DOOR Disconnect BC Check continu connector.	Terminal 1 2 sult normal? ce front door lock stallation". 2 LOCK ACTUATO M connector. ity between BCN BCM Term 8	Ground assembly (dr DR CIRCUIT /I harness co	Door lock and unlock switch river side). Refer to DLK nnector and front door Front door lock assen	Lock Unlock -236, "DOOF lock assemt nbly (driver side Termir 1	$0 \rightarrow Battalow Battal$	ery voltage → 0 ery voltage → 0 IBLY : Removal r side) harness
Connector D15 the inspection re YES >> Replac and Ins NO >> GO TO CHECK DOOR Disconnect BC Check continu connector. Connector M119	Terminal 1 2 sult normal? ce front door lock stallation". 2 LOCK ACTUATO M connector. ity between BCN BCM Cerminal ECM	Ground assembly (dr DR CIRCUIT /I harness co	Door lock and unlock switch river side). Refer to DLK nnector and front door Front door lock assen Connector D15	Lock Unlock -236, "DOOI lock assemi nbly (driver side Termir	$0 \rightarrow Battalow Battal$	ery voltage $\rightarrow 0$ ery voltage $\rightarrow 0$ IBLY : Removal r side) harness Continuity
Connector D15 the inspection re YES >> Replac and Ins NO >> GO TO CHECK DOOR Disconnect BC Check continu connector. Connector M119	Terminal 1 2 sult normal? ce front door lock stallation". 2 LOCK ACTUATO M connector. ity between BCM BCM Connector	Ground assembly (dr DR CIRCUIT /I harness co	Door lock and unlock switch river side). Refer to DLK nnector and front door Front door lock assen Connector	Lock Unlock -236, "DOOF lock assemt nbly (driver side Termir 1	$0 \rightarrow Battalow Battal$	ery voltage $\rightarrow 0$ ery voltage $\rightarrow 0$ IBLY : Removal r side) harness Continuity
Connector D15 the inspection re YES >> Replac and Ins NO >> GO TC CHECK DOOR Disconnect BC Check continu connector. Connector M119	Terminal 1 2 sult normal? ce front door lock stallation". 2 LOCK ACTUATO M connector. ity between BCM BCM Cerminal ECM BCM BCM BCM BCM	Ground assembly (dr DR CIRCUIT A harness co	Door lock and unlock switch river side). Refer to DLK nnector and front door Front door lock assen Connector D15	Lock Unlock -236, "DOOF lock assemt nbly (driver side Termir 1	0 → Batt 0 → Batt R ASSEM	ery voltage $\rightarrow 0$ ery voltage $\rightarrow 0$ IBLY : Removal r side) harness Continuity
Connector D15 the inspection re YES >> Replac and Ins NO >> GO TO CHECK DOOR Disconnect BC Check continu connector. Connector M119	Terminal 1 2 sult normal? ce front door lock stallation". 2 LOCK ACTUATO M connector. ity between BCM BCM Cerminal ECM BCM BCM BCM BCM	Ground assembly (dr DR CIRCUIT /I harness co	Door lock and unlock switch river side). Refer to DLK nnector and front door Front door lock assen Connector D15	Lock Unlock -236, "DOOF lock assemt nbly (driver side Termir 1	$0 \rightarrow Battal 0 \rightarrow Battal R ASSEM bly (drive b) nal Cont$	ery voltage $\rightarrow$ 0 ery voltage $\rightarrow$ 0 IBLY : Removal r side) harness Continuity Existed

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

>> Repair or replace harness. NO

PASSENGER SIDE

< DTC/CIRCUIT DIAGNOSIS >

#### PASSENGER SIDE : Description

Locks/unlocks the door with the signal from BCM.

### PASSENGER SIDE : Component Function Check

**1.**CHECK FUNCTION

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

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

#### Is the inspection result normal?

- YES >> Door lock actuator is OK.
- NO >> Refer to <u>DLK-70</u>, "PASSENGER SIDE : Diagnosis Procedure".

### PASSENGER SIDE : Diagnosis Procedure

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

(-	+)				
Front door lock assembly (passenger side)		(—)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
D45	1	Cround	Door lock and unlock Unlock		$0 \rightarrow \text{Battery voltage} \rightarrow 0$
D40	2	Ground	switch	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$

#### Is the inspection result normal?

YES >> Replace front door lock assembly (passenger side). Refer to <u>DLK-236, "DOOR ASSEMBLY :</u> <u>Removal and Installation"</u>.

NO >> GO TO 2.

## **2.**CHECK DOOR LOCK ACTUATOR CIRCUIT

#### 1. Disconnect BCM connector.

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

В	СМ	Front door lock asse	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M119	5	D45	1	- Existed
W119	8	D45	2	LXISIEU

3. Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Terminal	Ground	Continuity	
M119	5	Ground	Not existed	
	8	-	Not existed	

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

NO >> Repair or replace harness.

### REAR LH

### REAR LH : Description

Locks/unlocks the door with the signal from BCM.

### **DLK-70**

INFOID:000000009064627

INFOID:000000009064628

INFOID:000000009064629

INFOID:000000009064630

### DOOR LOCK ACTUATOR

REAR LH : Component Function Check		
		INFOID:000000009064631
1.CHECK FUNCTION		
1. Use CONSULT to perform Active Test ("DOOR LOCK").		
2. Touch "ALL LCK" or "ALL UNLK" to check that it works normally.		
Is the inspection result normal? YES >> Door lock actuator is OK.		
NO >> Refer to <u>DLK-71, "REAR LH : Diagnosis Procedure"</u> .		
REAR LH : Diagnosis Procedure		INFOID:00000000000064632
<b>1.</b> CHECK DOOR LOCK ACTUATOR SIGNAL		
<ol> <li>Turn ignition switch OFF.</li> <li>Disconnect rear door lock assembly LH.</li> <li>Check voltage between rear door lock assembly LH harness connection.</li> </ol>	ector and grou	ınd.
(+)		
Rear door lock assembly LH         (-)         Condition	on	Voltage (V) (Approx.)
Connector Terminal		(···FF·····)
D55 1 Door lock and unlock	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
2 switch	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
<ul> <li>CHECK DOOR LOCK ACTUATOR CIRCUIT</li> <li>Disconnect BCM connector.</li> <li>Check continuity between BCM harness connector and rear door location.</li> </ul>	ock assembly	LH harness connector.
BCM Rear door lock asser	Rear door lock assembly LH	
Connector Terminal Connector	Terminal	
M119 8 D55	1 2	Existed
. Check continuity between BCM harness connector and ground.		
B. Check continuity between BCM harness connector and ground.		
BCM Connector Terminal	4	Continuity
BCM	d	Continuity Not existed
BCM     Ground       Connector     Terminal       M119     8       10     10	d	
BCM       Connector     Terminal       M119     8       10       s the inspection result normal?       YES     >> Replace BCM. Refer to BCS-96, "Removal and Installation NO       NO     >> Repair or replace harness.		
BCM       Connector     Terminal       M119     8       10     10       s the inspection result normal?       YES     >> Replace BCM. Refer to BCS-96, "Removal and Installation NO       NO     >> Repair or replace harness.       REAR RH		
BCM       Ground         Connector       Terminal         M119       8         10       8         sthe inspection result normal?       10         YES       >> Replace BCM. Refer to BCS-96, "Removal and Installation NO         NO       >> Repair or replace harness.         REAR RH       Description		Not existed
BCM       Connector     Terminal       M119     8       10     10   Is the inspection result normal? YES >> Replace BCM. Refer to BCS-96, "Removal and Installation"		Not existed
BCM       Ground         Connector       Terminal         M119       8         10       10         Sthe inspection result normal?       Ground         YES       >> Replace BCM. Refer to BCS-96, "Removal and Installation NO         NO       >> Repair or replace harness.         REAR RH         REAR RH : Description         Locks/unlocks the door with the signal from BCM.		Not existed

### DOOR LOCK ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

- YES >> Door lock actuator is OK.
- NO >> Refer to <u>DLK-72, "REAR RH : Diagnosis Procedure"</u>.

#### **REAR RH : Diagnosis Procedure**

INFOID:000000009064635

### **1.**CHECK DOOR LOCK ACTUATOR SIGNAL

#### 1. Turn ignition switch OFF.

- 2. Disconnect rear door lock assembly RH.
- 3. Check voltage between rear door lock assembly RH harness connector and ground.

(+) Rear door lock assembly RH		(—)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
D75	D75 1 Cround	Ground	Door lock and unlock	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$
015	2	switch	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$	

#### Is the inspection result normal?

```
NO >> GO TO 2.
```

### 2. CHECK DOOR LOCK ACTUATOR CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM harness connector and rear door lock assembly RH harness connector.

BCM		Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M119	8	D75	2	- Existed
	10		1	

#### 3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M119	8	Ground	Not Existed
	10	1	NOT EXISTED

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

NO >> Repair or replace harness.

YES >> Replace rear door lock assembly RH. Refer to <u>DLK-241, "DOOR ASSEMBLY : Removal and</u> <u>Installation"</u>.

					INFOID:000000009064636
uel filler lid wit	h the signal fr	om BCM.			
nction Che	eck				INFOID:000000009064637
ON					
-	tive Test ("DC	OR LOCK").			
CK" or "ALL U			s normal	ly.	
		dure".			
edure					INFOID:000000009064638
		I SIGNAL			
lid lock actua					
between fuel li	d lock actuate	or harness conn	ector and	l ground.	
actuator	()		Condition		Voltage (V) (Approx.)
Terminal					
1	Ground		inlock	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
_		Switch		LOCK	$0 \rightarrow \text{Battery voltage} \rightarrow 0$
e fuel lid lock a	actuator. Refe	r to <u>DLK-269, "F</u>	Removal	and Installa	ation".
		N UT			
		,011			<u> </u>
	M harness co	onnector and fue	l lid lock	actuator ha	arness connector.
BCM		Fuellid	lock actua	tor	
	ninal			Terminal	Continuity
				2	
	9	B242		1	Existed
y between BC	M harness co	onnector and gro	und.		
BCM					
	Terminal		Ground		Continuity
	8		Ground		Not existed
	ON to perform Ac CK" or "ALL U sult normal? lock actuator DLCK ACT vitch OFF. lid lock actua oetween fuel li actuator Terminal 1 2 sult normal? e fuel lid lock a 2. DLOCK ACT V connector. y between BC BCM Terr y between BC	to perform Active Test ("DC CK" or "ALL UNLOCK" to ch sult normal? lock actuator is OK. DLK-73, "Diagnosis Proce edure D LOCK ACTUATOR INPU itch OFF. lid lock actuator connector. between fuel lid lock actuator actuator (-) Terminal 1 Ground 2 sult normal? e fuel lid lock actuator. Refe 2. D LOCK ACTUATOR CIRC % connector. y between BCM harness co BCM 1 8 9 y between BCM harness co	ON to perform Active Test ("DOOR LOCK"). CK" or "ALL UNLOCK" to check that it works sult normal? lock actuator is OK. DLK-73, "Diagnosis Procedure". edure DLOCK ACTUATOR INPUT SIGNAL itch OFF. lid lock actuator connector. between fuel lid lock actuator harness connector effect on the sector of t	ON to perform Active Test ("DOOR LOCK"). CK" or "ALL UNLOCK" to check that it works normal sult normal? lock actuator is OK. D LOCK ACTUATOR INPUT SIGNAL itch OFF. lid lock actuator connector. between fuel lid lock actuator harness connector and actuator (-) Condition Terminal  1 Ground Door lock and unlock witch  1 Ground Door lock and unlock witch  1 D LOCK ACTUATOR CIRCUIT  M connector. y between BCM harness connector and fuel lid lock actuato  8 CM Fuel lid lock actuato  8 CM Fuel lid lock actuato  9 Connector  9 Co	ON         to perform Active Test ("DOOR LOCK"). CK" or "ALL UNLOCK" to check that it works normally. sult normal?         lock actuator is OK.         o DLK-73. "Diagnosis Procedure".         edure         D LOCK ACTUATOR INPUT SIGNAL         vitch OFF.         lid lock actuator connector.         between fuel lid lock actuator harness connector and ground.         actuator       (-)         Condition         actuator       (-)         Terminal       Door lock and unlock         1       Ground       Door lock and unlock         2       Ground       Door lock and unlock         sult normal?       a foround       Lock         a fuel lid lock actuator. Refer to DLK-269. "Removal and Installa"       2.         D LOCK ACTUATOR CIRCUIT       M connector.       y between BCM harness connector and fuel lid lock actuator has a sult normal?         8       B242       2         9       B242       1         y between BCM harness connector and ground.       1         BCM       Terminal       2         9       B242       1

< DTC/CIRCUIT DIAGNOSIS >

#### < DTC/CIRCUIT DIAGNOSIS >

# BACK DOOR OPENER ACTUATOR

### Description

Back door opener actuator open back door from BCM.

#### **Component Function Check**

# **1.**CHECK FUNCTION

1. Perform Active Test ("TRUNK/GLASS HATCH") with CONSULT.

2. Touch "OPEN" and check that back door opens.

#### Is the inspection result normal?

YES >> Back door opener actuator is OK.

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

### Diagnosis Procedure

# 1. CHECK OUTPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect back door lock assembly.

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

	+) ock assembly	()	Condition		Voltage (V) (Approx.)
Connector	Terminal				(Approx.)
D113	1	Ground	Back door opener switch	ON	$0 \rightarrow Battery voltage \rightarrow 0$

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.check back door opener actuator circuit

#### 1. Disconnect BCM connector.

 Check continuity between BCM harness connector and back door lock assembly (back door opener actuator) harness connector.

В	BCM		Back door lock assembly	
Connector	Terminal	Connector	Terminal	Continuity
M120	23	D113	1	Existed

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity	
Connector	Connector Terminal		Continuity	
M120	23		Not existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

NO >> Repair or replace harness.

#### $\mathbf{3}$ . CHECK BACK DOOR OPENER ACTUATOR GROUND CIRCUIT

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

INFOID:000000009064639

INFOID:000000009064640

## **BACK DOOR OPENER ACTUATOR**

#### < DTC/CIRCUIT DIAGNOSIS >

### [INTELLIGENT KEY SYSTEM]

Back door lo	ock assembly		Continuity
Connector	Terminal	Ground	Continuity
D113	2	_	Existed
ne inspection normal? ES >> Replace back do D >> Repair or replace	oor lock assembly. Refer to e harness.	o <u>DLK-268, "Removal and</u>	Installation"

|

DLK

Ν

0

Ρ

#### < DTC/CIRCUIT DIAGNOSIS >

# **KEY CYLINDER SWITCH**

### Description

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**

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 SYS-TEM" with CONSULT. Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Monitor item	Co	ndition	
KEY CYL LK-SW	Lock	: ON	
REFORER-SW	Neutral / Unlock	: OFF	
KEY CYL UN-SW	Unlock	: ON	
KET CTL UN-SW	Neutral / Lock	: OFF	

Is the inspection result normal?

- YES >> Key cylinder switch is OK.
- NO >> Refer to <u>DLK-76, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

INFOID:000000009064644

# 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

	(+) Front door lock assembly (driver side)		Voltage (V) (Approx.)
Connector	Terminal		()
D15	5	Ground	5
015	6	Ground	5

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

**2.**CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

- 1. Disconnect power window main switch connector.
- 2. Check continuity between power window main switch harness connector and front door lock assembly (driver side) harness connector.

Power wind	ow main switch	Front door lock assembly (driver side) Connector Terminal		Continuity
Connector	Terminal			Continuity
D8	4	D15	6	Existed
00	6	פוש	5	EXISTED

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

INFOID:000000009064642

# **KEY CYLINDER SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

### [INTELLIGENT KEY SYSTEM]

Power win	dow main switch		
Connector	Terminal	Ground	Continuity
D8	4	Ground	Not existed
	6		
NO >> Repair or repla	r window main switch. Refe		nd Installation".
Check continuity between	front door lock assembly (dr	iver side) harness connect	or and ground.
Front door lock	assembly (driver side)		
Connector	Terminal	Ground	Continuity
D15	4		Existed
s the inspection result nor YES >> GO TO 4. NO >> Repair or repla <b>1.</b> CHECK DOOR KEY CY	ace harness.		
Check door key cylinder sv	witch.		
Refer to <u>DLK-77, "Compor</u>	ent Inspection".		
Refer to <u>DLK-77, "Compor</u> s the inspection result nor YES >> GO TO 5. NO >> Replace front and Installation	<u>ient Inspection"</u> . <u>mal?</u> door lock assembly (driver s <u>n"</u> .	ide). Refer to <u>DLK-236, "D</u>	OOR ASSEMBLY : Remo
Refer to <u>DLK-77, "Compor</u> s the inspection result nor YES >> GO TO 5. NO >> Replace front and Installation D.CHECK INTERMITTEN	<u>ient Inspection"</u> . <u>mal?</u> door lock assembly (driver s <u>n"</u> . IT INCIDENT	ide). Refer to <u>DLK-236, "D</u>	OOR ASSEMBLY : Remo
Refer to <u>DLK-77, "Compor</u> s the inspection result nor YES >> GO TO 5. NO >> Replace front and Installation	<u>ient Inspection"</u> . <u>mal?</u> door lock assembly (driver s <u>n"</u> . IT INCIDENT	ide). Refer to <u>DLK-236, "D</u>	OOR ASSEMBLY : Remo
Refer to <u>DLK-77, "Compor</u> s the inspection result nor YES >> GO TO 5. NO >> Replace front and Installation D.CHECK INTERMITTEN	<u>nent Inspection"</u> . mal? door lock assembly (driver s <u>n"</u> . IT INCIDENT <u>nt Incident"</u> .	ide). Refer to <u>DLK-236, "D</u>	OOR ASSEMBLY : Remo
Refer to <u>DLK-77, "Compor</u> <u>s the inspection result nor</u> YES >> GO TO 5. NO >> Replace front <u>and Installation</u> D.CHECK INTERMITTEN Refer to <u>GI-42, "Intermitter</u> >> INSPECTION	<u>eent Inspection"</u> . mal? door lock assembly (driver s <u>n"</u> . IT INCIDENT <u>nt Incident"</u> . END	ide). Refer to <u>DLK-236, "D</u>	
Refer to <u>DLK-77, "Compor</u> <u>s the inspection result nor</u> YES >> GO TO 5. NO >> Replace front <u>and Installation</u> D.CHECK INTERMITTEN Refer to <u>GI-42, "Intermitter</u>	<u>eent Inspection"</u> . mal? door lock assembly (driver s n". IT INCIDENT <u>It Incident"</u> . END DN	ide). Refer to <u>DLK-236, "D</u>	
Refer to <u>DLK-77, "Compor</u> <u>s the inspection result nor</u> YES >> GO TO 5. NO >> Replace front a <u>and Installation</u> D.CHECK INTERMITTEN Refer to <u>GI-42, "Intermitter</u> >> INSPECTION Component Inspection 1.CHECK DOOR KEY CN 1. Turn ignition switch OF 2. Disconnect front door	<u>eent Inspection"</u> . mal? door lock assembly (driver s n". IT INCIDENT <u>IT Incident"</u> . END ON	erminals.	
Refer to <u>DLK-77, "Compor</u> <u>s the inspection result nor</u> YES >> GO TO 5. NO >> Replace front a <u>and Installation</u> D.CHECK INTERMITTEN Refer to <u>GI-42, "Intermitter</u> >> INSPECTION Component Inspection 1.CHECK DOOR KEY CN 1. Turn ignition switch OF 2. Disconnect front door	nent Inspection". mal? door lock assembly (driver s n". IT INCIDENT <u>It Incident"</u> . END CN YLINDER SWITCH FF. lock assembly (driver side) t assembly (driver side) termin	erminals. nals.	INFOID:000000009
Refer to <u>DLK-77, "Compor</u> <u>s the inspection result nor</u> YES >> GO TO 5. NO >> Replace front a <u>and Installation</u> <b>D</b> .CHECK INTERMITTEN Refer to <u>GI-42, "Intermitter</u> >> INSPECTION <b>Component Inspection</b> <b>1</b> .CHECK DOOR KEY CM <b>1</b> . CHECK DOOR KEY CM <b>1</b> . Turn ignition switch OF <b>2</b> . Disconnect front door <b>3</b> . Check front door lock a	<u>ment Inspection"</u> . <u>mal?</u> door lock assembly (driver s <u>n"</u> . IT INCIDENT <u>th Incident"</u> . END ON YLINDER SWITCH =F. lock assembly (driver side) termin mbly (driver side)	erminals.	
Refer to <u>DLK-77, "Compor</u> <u>s the inspection result nor</u> YES >> GO TO 5. NO >> Replace front a <u>and Installation</u> D.CHECK INTERMITTEN Refer to <u>GI-42, "Intermitter</u> >> INSPECTION Component Inspection .CHECK DOOR KEY CN . Turn ignition switch Of . Disconnect front door 3. Check front door lock asse <u>Front door lock asse</u> <u>Termin</u>	<u>ment Inspection"</u> . <u>mal?</u> door lock assembly (driver s <u>n"</u> . IT INCIDENT <u>th Incident"</u> . END ON YLINDER SWITCH =F. lock assembly (driver side) termin mbly (driver side)	erminals. nals.	INFOID:000000009
Refer to <u>DLK-77, "Compor</u> <u>s the inspection result nor</u> YES >> GO TO 5. NO >> Replace front a <u>and Installation</u> D.CHECK INTERMITTEN Refer to <u>GI-42, "Intermitter</u> >> INSPECTION Component Inspection I.CHECK DOOR KEY CN I. Turn ignition switch Of Disconnect front door Check front door lock assessed	ment Inspection".         mal?         door lock assembly (driver s         n".         IT INCIDENT         nt Incident".         END         ON         /LINDER SWITCH         =F.         lock assembly (driver side) termine         mbly (driver side)         mal	erminals. nals. Key position	INFOID:00000000
Refer to <u>DLK-77, "Compor</u> <u>s the inspection result nor</u> YES >> GO TO 5. NO >> Replace front a <u>and Installation</u> D.CHECK INTERMITTEN Refer to <u>GI-42, "Intermitter</u> >> INSPECTION Component Inspection I.CHECK DOOR KEY CN I. Turn ignition switch Of Disconnect front door Check front door lock asse <u>Front door lock asse</u> Termin	<u>ment Inspection"</u> . <u>mal?</u> door lock assembly (driver s <u>n"</u> . IT INCIDENT <u>th Incident"</u> . END ON YLINDER SWITCH =F. lock assembly (driver side) termin mbly (driver side)	erminals. nals. Key position Unlock	INFOID:000000009

### < DTC/CIRCUIT DIAGNOSIS >

# REMOTE KEYLESS ENTRY RECEIVER

### Description

#### Receives Intelligent Key operation and transmits to BCM.

### **Component Function Check**

### **1.**CHECK FUNCTION

#### With CONSULT

Check remote keyless entry receiver ("RKE OPE COUN1") in Data Monitor mode with CONSULT.

Monitor item	Condition
RKE OPE COUN1	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-78, "Diagnosis Procedure"</u>.

### **Diagnosis Procedure**

# 1. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect remote keyless entry receiver connector.
- 3. Check voltage between remote keyless entry receiver harness connector and ground.

(+) Remote keyless entry receiver		()	Voltage (V) (Approx.)
Connector	Terminal		
M104	4	Ground	12

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLYCIRCUIT

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

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

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Connector Terminal		Continuity
M122	103		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-96. "Removal and Installation"</u>.

NO >> Repair or replace harness.

### 3.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

1. Disconnect BCM connector.

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

### **DLK-78**

INFOID:000000009064647

INFOID:000000009064648

# **REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Connector       Terminal       Connector       Terminal         M123       137       M104       1       Exist         ack continuity between BCM harness connector and ground.       Italian       Continuit         M123       137       Ground       Continuit         M123       137       Ground       Continuit         M123       137       Order       Continuit         M123       137       Order       Continuit         Spection result normal?       >> GO TO 4.       >> Repair or replace harness.       CK BCM SIGNAL         sonnect BCM connector.       Ket voltage between remote keyless entry receiver harness connector and ground.       Voltage (normal?)         Connector       Terminal       (-)       Voltage (normal?)         Spection result normal?       Continuit       Voltage (normal?)         >> GO TO 6.       >> GO TO 6.       >> GO TO 5.         CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT       Connector.       Sconnect BCM connector.         Sconnect BCM connector.       Sconnect BCM harness connector and remote keyless entry receiver harness         SP GO TO 6.       >> GO TO 5.       CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT         Sconnect BCM connector.       Sconnector.       Sconnect BCM harness connector and remote keyless entry receiver	M123	Terminal		ss entry receiver	Continuity	
BCM harness connector and ground.         Continuit         BCM       Ground       Continuit         M123       137       Not existe         spection result normal?       >> GO TO 4.       >> Repair or replace harness.       CK BCM SIGNAL         >>> Repair or replace harness.       CK BCM SIGNAL       Sonnect BCM connector.       Continuit         ck voltage between remote keyless entry receiver harness connector and ground.       (-)       Voltage (V (Approx.         Connector       Terminal       (-)       Voltage (V (Approx.         Connector       Terminal       12         spection result normal?       >> GO TO 6.       >> GO TO 5.         CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT       connector.       connector.         spection inuity between BCM harness connector and remote keyless entry receiver harness       continuit	-		Connector	Terminal		
BCM         Continuit           Connector         Terminal         Ground         Continuit           M123         137         Not existe         Spection result normal?         Not existe           >> GO TO 4.         >> Repair or replace harness.         CK BCM SIGNAL         Spection result normal?         Voltage         Continuit           connect BCM connector.         Spection result normal?         (-)         Voltage (N (Approx.           connect keyless entry receiver         (-)         Voltage (N (Approx.         Connector           connector         Terminal         (-)         Voltage (N (Approx.         Content (Approx.           M104         2         Ground         12         Spection result normal?         So GO TO 6.         So GO TO 5.         CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT         Connector.         Source (N Remote keyless entry receiver harness         Source (N Remote keyless entry receiver harness           bcm connector.         Source (N Remote keyless entry receiver harness         Continuit         Continuit	heck continuity betw	137	M104	1	Existed	
Connector       Terminal       Ground       Continuit         M123       137       Not existe         spection result normal?       >> GO TO 4.       >> Repair or replace harness.         CK BCM SIGNAL       Sonnect BCM connector.       Sonnect PCM connector and ground.         (+)       (-)       Voltage (V (Approx.         Connector       Terminal       (-)         (Approx.       (-)       Voltage (V (Approx.         Spection result normal?       2       Ground       12         spection result normal?       >> GO TO 6.       >> GO TO 5.       Sector 5.         CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT       connector.       Sonnect BCM connector.         Spection result normal?       >> GO TO 6.       >> GO TO 5.         CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT       connector.       Sonnect BCM connector.         Spection result performance box       Sector and remote keyless entry receiver harness       continuity between BCM harness connector and remote keyless entry receiver harness		een BCM harness	connector and grour	nd.		
Connector       Terminal       Ground         M123       137       Not existe         spection result normal?       >> GO TO 4.       >> Repair or replace harness.         CK BCM SIGNAL       connect BCM connector.		BCM			Continuity	
spection result normal?         >> GO TO 4.         >> Repair or replace harness.         CK BCM SIGNAL         connect BCM connector.         cck voltage between remote keyless entry receiver harness connector and ground.         (+)         Remote keyless entry receiver         (-)         Voltage (\ (Approx.         Connector         Terminal         M104       2         Spection result normal?         >> GO TO 6.         >> GO TO 5.         CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT         connect BCM connector.         cck continuity between BCM harness connector and remote keyless entry receiver harness         BCM       Remote keyless entry receiver	Connector	Termin	al	Ground	Continuity	
>> GO TO 4.         >> Repair or replace harness.         CK BCM SIGNAL         connect BCM connector.         ack voltage between remote keyless entry receiver harness connector and ground.         (+)         (-)         Voltage (V (Approx.         Connector         Terminal         M104       2         Spection result normal?         >> GO TO 6.         >> GO TO 5.         CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT         connect BCM connector.         ack continuity between BCM harness connector and remote keyless entry receiver harness         BCM       Remote keyless entry receiver	M123	137			Not existed	
Image: between remote keyless entry receiver harness connector and ground.         (+)       Voltage (V         Remote keyless entry receiver       (-)         Connector       Terminal         M104       2       Ground       12         spection result normal?       >> GO TO 6.       >> GO TO 5.       CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT         Connect BCM connector.       Continuity between BCM harness connector and remote keyless entry receiver harness       Continuity between BCM harness connector and remote keyless entry receiver harness	>> GO TO 4. >> Repair or repla ECK BCM SIGNAL	ace harness.				
Remote keyless entry receiver       (-)       Voltage (V (Approx.         Connector       Terminal       12         M104       2       Ground       12         spection result normal?       >> GO TO 6.       >> GO TO 5.       CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT         Connect BCM connector.       connect or.       connect continuity between BCM harness connector and remote keyless entry receiver harness       Continuity continuity between Continuity between BCM harness connector and remote keyless entry receiver harness		n remote keyless	entry receiver harnes	ss connector and gr	ound.	
Kernote keyless entry receiver       (-)       (Approx.         Connector       Terminal       12         M104       2       Ground       12         spection result normal?       >> GO TO 6.       >> GO TO 5.       CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT         connect BCM connector.       connect or.       continuity between BCM harness connector and remote keyless entry receiver harness         BCM       Remote keyless entry receiver       Contin				( )	Voltage (V)	
M104       2       Ground       12         spection result normal?       >> GO TO 6.       >> GO TO 5.           CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT       Connect BCM connector.            connect BCM connector.       eck continuity between BCM harness connector and remote keyless entry receiver harness        BCM       Remote keyless entry receiver       Continuity		-		(-)	(Approx.)	
spection result normal?         >> GO TO 6.         >> GO TO 5.         CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT         connect BCM connector.         ock continuity between BCM harness connector and remote keyless entry receiver harness         BCM       Remote keyless entry receiver         Continuity				Cround	10	
>> GO TO 6.         >> GO TO 5.         CK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT         connect BCM connector.         eck continuity between BCM harness connector and remote keyless entry receiver harness         BCM       Remote keyless entry receiver         Continuity	-			Ground	12	
Contir	ECK REMOTE KEY		CEIVER CIRCUIT			
Connector Terminal Connector Terminal	isconnect BCM conn		s connector and remo	te keyless entry rec	eiver harness con	
	isconnect BCM conn heck continuity betw		1			
M122 83 M104 2 Exis	isconnect BCM conn heck continuity betw		1		eiver harness con	
ck continuity between BCM harness connector and ground.	isconnect BCM conn heck continuity betwo BCM Connector	een BCM harness	Remote keyles Connector	ss entry receiver		
BCM	isconnect BCM conn heck continuity betwo BCM Connector M122	een BCM harness Terminal 83	Remote keyles Connector M104	ss entry receiver Terminal 2	- Continuity	
Connector Terminal Ground Continuit	isconnect BCM conn heck continuity betwo BCM Connector M122 heck continuity betwo	een BCM harness Terminal 83 een BCM harness	Remote keyles Connector M104	ss entry receiver Terminal 2	Continuity     Existed	
M122 83 Not existence	isconnect BCM conn heck continuity betwo BCM Connector M122 heck continuity betwo	een BCM harness Terminal 83 een BCM harness BCM	Remote keyles Connector M104 s connector and grour	ss entry receiver Terminal 2 nd.	- Continuity	
spection result normal?	isconnect BCM conn heck continuity betwo BCM Connector M122 heck continuity betwo Connector	een BCM harness Terminal 83 een BCM harness BCM Terminal	Remote keyles Connector M104 s connector and grour	ss entry receiver Terminal 2 nd.	Continuity     Existed	
>> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u> .	isconnect BCM conn heck continuity betwo BCM Connector M122 heck continuity betwo Connector M122	een BCM harness Terminal 83 een BCM harness BCM Terminal 83	Remote keyles Connector M104 s connector and grour	ss entry receiver Terminal 2 nd.	Continuity Existed Continuity	
>> Repair or replace harness.	isconnect BCM conn heck continuity betwo BCM Connector M122 heck continuity betwo Connector M122 inspection result nor >> Replace BCM.	een BCM harness Terminal 83 een BCM harness BCM Termina 83 mal? . Refer to BCS-96	Remote keyles Connector M104 connector and grour al	ss entry receiver Terminal 2 nd. Ground	Continuity Existed Continuity	
	isconnect BCM conn heck continuity betwo BCM Connector M122 heck continuity betwo Connector M122 inspection result nor >> Replace BCM >> Repair or repla	een BCM harness Terminal 83 een BCM harness BCM Termina 83 mal? . Refer to BCS-96 ace harness.	Remote keyles Connector M104 s connector and grour al , "Removal and Insta	ss entry receiver Terminal 2 nd. Ground	Continuity Existed Continuity	
CK REMOTE KEYLESS ENTRY RECEIVER SIGNAL	isconnect BCM conn heck continuity betwo BCM Connector M122 heck continuity betwo Connector M122 inspection result nor >> Replace BCM >> Repair or repla	een BCM harness Terminal 83 een BCM harness BCM Termina 83 mal? . Refer to BCS-96 ace harness.	Remote keyles Connector M104 s connector and grour al , "Removal and Insta	ss entry receiver Terminal 2 nd. Ground	Continuity Existed Continuity	

Ρ

# **REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

(+				Signal
	s entry receiver	(—)	Condition	(Reference value)
Connector	Terminal			
M104	2	Ground	During waiting	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1
WIGH	2	Sibulu	When operating either button on the Intelligent Key	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace remote keyless entry receiver. Refer to <u>DLK-276, "Removal and Installation"</u>.

7. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

### BACK DOOR OPENER SWITCH

#### [INTELLIGENT KEY SYSTEM] < DTC/CIRCUIT DIAGNOSIS > BACK DOOR OPENER SWITCH А Description INFOID:000000009064649 Output back door open signal to BCM. В **Component Function Check** INFOID:000000009064650 1.CHECK FUNCTION Check back door opener switch ("TR/BD OPEN SW") in "Data Monitor mode with CONSULT. D Monitor item Condition Back door opener switch is pressed: ON TR/BD OPEN SW Back door opener switch is released: OFF Ε Is the inspection result normal? YES >> Back door opener switch is OK. >> Refer to DLK-81, "Diagnosis Procedure". NO F Diagnosis Procedure INFOID:000000009064651 1.CHECK BACK DOOR OPEN INPUT SIGNAL Turn ignition switch OFF. 1. 2. Disconnect back door opener switch connector. Н 3. Check signal between back door opener switch harness connector and ground with oscilloscope. (+) Signal Back door opener switch (-) (Reference value) Connector Terminal (V 15 10 D114 1 Ground DLK 10 ms IPMIA0011GB Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 2. Μ 2.CHECK BACK DOOR OPENER SWITCH CIRCUIT 1. Disconnect BCM connector. Ν 2. Check continuity between BCM harness connector and back door opener switch assembly harness connector. BCM Back door opener switch Continuity Connector Terminal Connector Terminal 67 M121 D114 1 Existed Ρ Check continuity between BCM harness connector and ground. 3.

BCMGroundContinuityConnectorTerminalGroundNot existedM12167Not existed

Is the inspection result normal?

# BACK DOOR OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

#### YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# **3.**CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

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

Back door o	pener switch		Continuity
Connector	Terminal	Ground	Continuity
D114	2	_	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

#### **4.**CHECK BACK DOOR OPENER SWITCH

Refer to DLK-82, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener switch. Refer to EXT-48, "Removal and Installation".

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

#### >> INSPECTION END

#### Component Inspection

INFOID:000000009064652

# 1. CHECK BACK DOOR OPENER SWITCH

1. Turn ignition switch OFF.

- 2. Disconnect back door opener switch connector.
- 3. Check continuity between back door opener switch terminals.

Back door of	opener switch	Condition		Continuity
Ter	minal			Continuity
1	2	Back door opener switch	Pressed	Existed
I	2	Back door opener switch	Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace back door opener switch. Refer to EXT-48. "Removal and Installation".

# DOOR REQUEST SWITCH

COTC/CIRCUIT DI	AGNOSIS >			[INTELLIGE	NT KEY SYSTE
DOOR REQU	EST SWITC	CH			
Description					INFOID:00000000906
ransmits lock/unlo	ck operation to B	CM.			
component Fu	nction Checl	<			INFOID:000000000906
.CHECK FUNCTI	ON				
heck door request	switch ("REQ S	W -DR" or "RE	Q SW -AS") in Data M	Ionitor mode.	
	Monitor item			Condition	
REQ SW -DR			Door requ	est switch is pressed:	ON
REQ SW -AS			Door reque	est switch is released:	OFF
	ult normal? quest switch is 0 DLK-83, "Diagr		<u>e"</u> .		
Diagnosis Proc	edure				INFOID:000000000000
.снеск всм о	JTPUT SIGNAL				
. Check signal be with oscilloscop		oning front out	side handle (request s		
Front o	utside handle (reque	est switch)	(-)	Signal (Reference value)	
Conne		Terminal			,
RH	D13 D43	1	Ground	(V) 15 10 5 0 	JPMIA0016GB
s the inspection res YES >> GO TO NO >> GO TO CHECK DOOR F Disconnect BCI Check continui switch) harness	3. 2. REQUEST SWIT M connector. ty between BCM		nector and malfunct	ioning front outsi	de handle (reque
В	СМ	Fre	ont outside handle (reques	t switch)	Continuity
Connector	Terminal		Connector	Terminal	Continuity
M122	101	LH	D13	1	Existed
	1111		1/4-3		1

3. Check continuity between BCM harness connector and ground.

100

D43

RH

# DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### [INTELLIGENT KEY SYSTEM]

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	101	Ground	Not existed
IVI I ZZ	100		NOI EXISIEU

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# $\mathbf{3}$ .check door request switch ground circuit

Check continuity between malfunctioning front outside handle (request switch) harness connector and ground.

Fron	Front outside handle (request switch)			Continuity
Con	Connector		Ground	Continuity
LH	D13	2	Ground	Existed
RH	D43	Ζ.		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK DOOR REQUEST SWITCH

#### Refer to DLK-84, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front outside handle (request switch). Refer to <u>DLK-260. "OUTSIDE HAN-</u> <u>DLE : Removal and Installation"</u>.

### **5.**CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

#### >> INSPECTION END

#### **Component Inspection**

INFOID:000000009064656

### 1.CHECK DOOR REQUEST SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect malfunctioning front outside handle (request switch) connector.
- 3. Check continuity between malfunctioning front outside handle (request switch) terminals.

Front outside handle (request switch)		Condition		Continuity
Tern	Terminal		Condition	
1	2	Door request switch	Pressed	Existed
I	2	Door request switch	Released	Not existed

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunctioning front outside handle (request switch). Refer to <u>DLK-260. "OUTSIDE HAN-</u> <u>DLE : Removal and Installation"</u>.

< DTC/CIRCUIT DIAGN		OR REQUEST S		GENT KEY SYSTEM]
BACK DOOR RE	QUEST SWITC	СН		
Description				INFOID:00000000906465
Transmits lock/unlock op	eration to BCM.			
Component Function	on Check			INFOID:00000000906465
1.CHECK FUNCTION				
Check back door opener	request switch ("REC	Q SW -BD/TR ") in Da	ta Monitor mode.	
Mor	nitor item		Condition	
		Back door opener r	equest switch is pressed	d: ON
REQ SW -BD/TR		Back door opener r	equest switch is release	d: OFF
Is the inspection result n	ormal?			
YES >> Back door o NO >> Refer to DLk	pener request switch <u>&lt;-85, "Diagnosis Proc</u>	is OK. <u>cedure"</u> .		
Diagnosis Procedu	re			INFOID:00000000906465
1.CHECK BCM OUTPL	JT SIGNAL			
1 Turn ignition owitch				
	or opener request swi		s connector and gr	ound with oscilloscope
2. Disconnect back doo	or opener request swi		s connector and gr	
<ol> <li>Disconnect back doo</li> <li>Check signal betwee</li> </ol>	or opener request swi en back door opener r			Signal
<ol> <li>Disconnect back doo</li> <li>Check signal betwee</li> </ol>	or opener request swi en back door opener r (+)	request switch harnes		
<ol> <li>Disconnect back door</li> <li>Check signal betwee</li> <li>Back door ope</li> </ol>	or opener request swi en back door opener r (+) ner request switch	request switch harnes	(Re (V) 15 10 5 0	Signal ference value)
2. Disconnect back doo 3. Check signal betwee Back door ope Connector	r opener request swi en back door opener r (+) ner request switch Terminal	(-)	(Re	Signal ference value)
2. Disconnect back doo 3. Check signal betwee Back door ope Connector D116 Is the inspection result n YES >> GO TO 3.	r opener request swi en back door opener r (+) ner request switch Terminal	(-)	(Re	Signal ference value)
2. Disconnect back doo 3. Check signal betwee Back door ope Connector D116 Is the inspection result n YES >> GO TO 3. NO >> GO TO 2.	or opener request switch (+) (+) (+) Terminal 1 ormal?	(-) Ground	(Re	Signal ference value)
2. Disconnect back doo 3. Check signal betwee Back door ope Connector D116 Is the inspection result n YES >> GO TO 3. NO >> GO TO 2. 2.CHECK BACK DOOF 1. Disconnect BCM con	er opener request swi en back door opener r (+) ner request switch Terminal 1 ormal? R OPENER REQUES	T SWITCH CIRCUIT	(Re	Signal ference value)
2. Disconnect back door 3. Check signal between Back door ope Connector D116 Is the inspection result n YES >> GO TO 3. NO >> GO TO 2. 2.CHECK BACK DOOF 1. Disconnect BCM con 2. Check continuity bet	er opener request switch (+) (+) (+) (+) (+) (+) (+) (+) (+) (+)	T SWITCH CIRCUIT	(Re (V) 15 10 5 0 10 10	Signal ference value)
<ul> <li>2. Disconnect back door</li> <li>3. Check signal between</li> <li>Back door ope</li> <li>Connector</li> <li>D116</li> <li>Is the inspection result not res</li></ul>	er opener request switch (+) (+) (+) (+) (+) (+) (+) (+) (+) (+)	(-) Ground	(Re (V) 15 10 5 0 10 10	Signal ference value)

 BCM
 Ground
 Continuity

 Connector
 Terminal
 Ground
 Not existed

 M121
 61
 Not existed

Is the inspection result normal?

# **BACK DOOR REQUEST SWITCH**

< DTC/CIRCUIT DIAGNOSIS >

#### YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# $\mathbf{3}$ .check back door opener request switch ground circuit

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

Back door open	er request switch		Continuity
Connector	Connector Terminal		Continuity
D116	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK BACK DOOR OPENER REQUEST SWITCH

Refer to DLK-86, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door opener request switch. Refer to EXT-48. "Removal and Installation".

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

#### >> INSPECTION END

#### Component Inspection

INFOID:000000009064660

### 1.CHECK BACK DOOR OPENER REQUEST SWITCH

1. Turn ignition switch OFF.

2. Disconnect back door opener request switch connector.

3. Check continuity between back door opener request switch assembly terminals.

Back door opener request switch		Condition		Continuity
Terr	Terminal		Condition	
1	2	Back door opener request	Pressed	Existed
I	2	switch	Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace back door opener request switch. Refer to EXT-48. "Removal and Installation".

## **UNLOCK SENSOR**

## [INTELLIGENT KEY SYSTEM]

UNLOCK SENSO	२					
Description			INFOID:000000009064661			
Detects door lock condition	n of driver door.					
Component Function	n Check		INF0ID:00000009064662			
1.CHECK FUNCTION						
Check unlock sensor ("UN	LK SEN -DR") in "	Data Monitor" mode.				
Monitor it	tem		Condition			
UNLK SEN -DR						
Front door lock (driver side) UNLOCK: ON Is the inspection result normal?						
Diagnosis Procedure 1. CHECK BCM OUTPUT 1. Turn ignition switch Ol 2. Disconnect front door 3. Check signal between scope.	SIGNAL FF. lock assembly (dri		INFOID:000000000000000000000000000000000000			
(+	,		Signal			
Front door lock ass	embly (driver side) Terminal	(-)	(Reference value)			
D15	3	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB			
Is the inspection result nor YES >> GO TO 3. NO >> GO TO 2.	mal?	,				

## 2. CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.

< DTC/CIRCUIT DIAGNOSIS >

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

					0
B	CM	Front door lock as	sembly (driver side)	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M123	119	D15	3	Existed	Р

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M123	119		Not existed

Ν

# UNLOCK SENSOR

# < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

#### YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# **3.**CHECK UNLOCK SENSOR GROUND CIRCUIT

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

Front door lock as	sembly (driver side)		Continuity
Connector	Terminal	Ground	Continuity
D15	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### **4.**CHECK UNLOCK SENSOR

Refer to DLK-88, "Component Inspection".

#### Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-257, "DOOR LOCK : Removal and</u> <u>Installation"</u>.

### **5.**CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

#### >> INSPECTION END

#### **Component Inspection**

INFOID:000000009064664

# 1.CHECK UNLOCK SENSOR

#### 1. Turn ignition switch OFF.

- 2. Disconnect front door lock assembly (driver side) connector.
- 3. Check front door lock assembly (driver side) terminals.

	Front door lock as	sembly (driver side)	Condition		Continuity	
	Terminal		Condition		Continuity	
	3	4	Front door lock assembly (driver side)	Unlock	Existed	
		4		Lock	Not existed	

#### Is the inspection result normal?

YES >> INSPECTION END

```
NO >> Replace front lock assembly (driver side). Refer to <u>DLK-257, "DOOR LOCK : Removal and Instal-</u>
lation".
```

# **OUTSIDE KEY ANTENNA**

## [INTELLIGENT KEY SYSTEM]

	RCUIT DIA	GINOSIS.	>		1			
DUTSI	DE KEY	ANTE	NNA					
Descrip	tion					INF01D:000000009064665		
Detects	whether Inte	elliaent Ke	v is outsid	e the vehicle.				
					er side) and installed	d in rear bumper.		
Compor	nent Fund	ction Ch	neck			INFOID:000000009064666		
	K DOOR RE	QUEST S	WITCH					
Compone s the insp	ent Function	<u>h_Check"</u> ( It normal?			nponent Function C	<u>Check</u> " (front door) or <u>DLK-85.</u>		
NO-1 > NO-2 >		ont door op ick door re				ponent Function Check". nt Function Check".		
Be sure that Intelligent Key is in each outside key antenna detection area.								
<u>Does doo</u> YES >	-	<u>k when ead</u> ey antenn	<u>ch request</u> a is OK.	switch is press				
Diagnos	sis Proced	dure				INFOID:000000000064667		
	K OUTSIDE	KEY ANT	ENNA INF	PUT SIGNAL 1				
	ignition swite k signal betv		harness o	connector and (	ground with oscillos	cope.		
	(+)							
	BCM		(—)	C	Condition	Signal (Reference value)		
C	onnector	Terminal				· · ·		
M122	LH	74, 75			When Intelligent Key is in the antenna de- tection area.	(V) 15 10 5 0 		
					st switch ushed When Intelligent Key is not in the antenna detection area			

Disconnect BCM connector and malfunctioning outside key antenna connector. Check continuity between BCM harness connector and malfunctioning outside key antenna harness con-2. nector.

>> Replace BCM. Refer to BCS-96, "Removal and Installation"

YES

NO

1.

Is the inspection result normal?

>> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

### **DLK-89**

detection area.

JMKIA0063GB

Ο

Ρ

1 s

# **OUTSIDE KEY ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

B	СМ	Outside k	ey antenna	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	74	D44 (RH)	2	
M122	75	D44 (IXII)	1	*
IVI 122	76	– D14 (LH)	2	Existed
	77		1	Existed
M121	38	– D118 (back door)	2	*
	39		1	*

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal		Continuity
	74		
M122	75	- Ground	Not existed
IVI I ZZ	76		
	77		NOT EXISTED
M121	38		
IVI I Z I	39		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace malfunctioning outside key antenna. (New antenna or other antenna)

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

(+) BCM		()	-) Condition		Signal (Reference value)	
С	onnector	Terminal				()
	RH	74, 75				
M122	LH	76, 77	Ground	Door request switch is	When Intelligent Key is in the antenna de- tection area.	(V) 15 10 0 1 s JMKIA0062GB
M121	Back door	38, 39	Ground	pushed	When Intelligent Key is not in the antenna detection area.	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

- YES-1 >> Replace malfunctioning front outside handle (LH or RH). Refer to <u>DLK-260, "OUTSIDE HANDLE :</u> <u>Removal and Installation"</u>.
- YES-2 >> Replace outside key antenna (Back door). Refer to <u>DLK-273, "BACK DOOR : Removal and Instal-</u> lation".

# **OUTSIDE KEY ANTENNA**

# INTELLICENT KEV SVSTEMI

C/CIRCUIT DIAGNOSIS >	[INTELLIGENT KEY SYSTEM]	
>> Replace BCM. Refer to <u>BCS-96, "Removal and Installation</u>	"	

### INTELLIGENT KEY WARNING BUZZER

### < DTC/CIRCUIT DIAGNOSIS >

# INTELLIGENT KEY WARNING BUZZER

### Description

#### Answers back and warns for an inappropriate operation.

### **Component Function Check**

### **1.**CHECK FUNCTION

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-92, "Diagnosis Procedure"</u>.

### **Diagnosis Procedure**

## 1.CHECK FUSE

- 1. Turn ignition switch OFF.
- 2. Check 10 A fuse, [No.6, located in fuse block (J/B)].

#### Is fuse fusing?

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

NO >> GO TO 2.

### 2. CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

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

(+ Intelligent Key v	,	(-)	Voltage (V) (Approx.)	
Connector	Connector Terminal		(	
E57	1	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### ${ m 3.}$ CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

#### 1. Disconnect BCM connector.

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

BCM		Intelligent Key warning buzzer		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M121	64	E57	3	Existed	

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M121	64		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK INTELLIGENT KEY WARNING BUZZER

Check DLK-93, "Component Inspection".

Is the inspection result normal?

[INTELLIGENT KEY SYSTEM]

INFOID:000000009064668

INFOID:000000009064669

INTELLI	GENT KEY WARNING B	-
< DTC/CIRCUIT DIAGNOSIS >		[INTELLIGENT KEY SYSTEM]
YES >> Replace BCM. Refer to BC NO >> Replace Intelligent Key wa	CS-96, "Removal and Installation" arning buzzer. Refer to DLK-274,	". "Removal and Installation".
Component Inspection		INFOID:000000009064671
1.CHECK INTELLIGENT KEY WARN	ING BUZZER	
<ol> <li>Turn ignition switch OFF.</li> <li>Disconnect Intelligent Key warning</li> <li>Connect battery power supply direction.</li> </ol>	buzzer connector. ectly to Intelligent Key warning b	ouzzer terminals and check the opera-
Intelligent Key w	arning buzzer	
Termi	nal	Operation
(+)	(-)	
1	3	Buzzer sounds
		D

# INTELLIGENT KEY BATTERY

Component Inspection

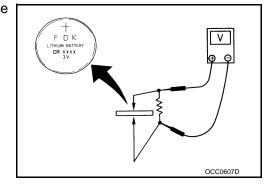
# 1.CHECK INTELLIGENT KEY BATTERY

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

#### Standard : Approx. 2.5 - 3.0 V

Is the measurement value within the specification?

- YES >> INSPECTION END
- NO >> Replace Intelligent Key battery.



# **KEY SLOT**

## [INTELLIGENT KEY SYSTEM]

KEY SLOT				
Description				INF01D:000000009064677
<ul> <li>Detect whether Intelligent</li> <li>Immobilizer antenna amp</li> </ul>		Key transponder.		
Component Function	Check			INFOID:000000009064678
1.CHECK FUNCTION				
Check key slot ("KEY SW -	SLOT") in Data M	onitor mode using (	CONSULT.	
Monito	or item		Condition	
		Key is inserted	l in key slot: ON	
KEY SW-SLOT		-	d from key slot: OFF	
YES >> Key slot is OK. NO >> Refer to <u>DLK-9</u> Diagnosis Procedure		cedure".		INFOID:0000000009064679
1.CHECK FUSE				
2. Check 10 A fuse, [No.9 <u>Is the inspection result norn</u> YES >> GO TO 2.	<u>mal?</u>		sirouit if a fusa ia bla	200
Is the inspection result norm YES >> GO TO 2. NO >> Replace the blo 2.CHECK KEY SLOT POV 1. Disconnect key slot cor	<u>mal?</u> own fuse after repa WER SUPPLY CIF nnector.	airing the affected o	circuit if a fuse is blo	own
Is the inspection result norm YES >> GO TO 2. NO >> Replace the blo 2.CHECK KEY SLOT POV 1. Disconnect key slot cor	<u>mal?</u> own fuse after repa WER SUPPLY CIF nnector.	airing the affected o	circuit if a fuse is blo	
Is the inspection result norm YES >> GO TO 2. NO >> Replace the blo 2.CHECK KEY SLOT POV 1. Disconnect key slot cor 2. Check voltage betweer	mal? own fuse after repa WER SUPPLY CIR nnector. n slot harness cont (+) ey slot	airing the affected of RCUIT	circuit if a fuse is blo	vwn. Voltage (V) (Approx.)
Is the inspection result norm YES >> GO TO 2. NO >> Replace the blo 2.CHECK KEY SLOT POV 1. Disconnect key slot cor 2. Check voltage betweer	<u>mal?</u> own fuse after repa WER SUPPLY CIR nnector. n slot harness cont (+)	airing the affected of RCUIT		Voltage (V)
Is the inspection result norm YES >> GO TO 2. NO >> Replace the bloc 2.CHECK KEY SLOT POV 1. Disconnect key slot cor 2. Check voltage betweer Ke Connector	mal? own fuse after reparation WER SUPPLY CIR nnector. n slot harness cont (+) ey slot (+) ey slot (+) ey slot 1 mal? nce harness. CUIT ector.	airing the affected of RCUIT	(-) Ground	Voltage (V) (Approx.) Battery voltage
Is the inspection result norm YES >> GO TO 2. NO >> Replace the blo 2.CHECK KEY SLOT POV 1. Disconnect key slot cord 2. Check voltage between Key Connector M22 Is the inspection result norm YES >> GO TO 3. NO >> Repair or repla 3.CHECK KEY SLOT CIR 1. Disconnect BCM connect 2. Check continuity between 3. Check continui	mal? own fuse after reparation WER SUPPLY CIR nnector. n slot harness cont (+) ey slot (+) ey slot (+) ey slot 1 mal? nce harness. CUIT ector.	airing the affected of RCUIT nector and ground.	(–) Ground	Voltage (V) (Approx.) Battery voltage
Is the inspection result norm YES >> GO TO 2. NO >> Replace the blo 2.CHECK KEY SLOT POV 1. Disconnect key slot cord 2. Check voltage between Connector M22 Is the inspection result norm YES >> GO TO 3. NO >> Repair or repla 3.CHECK KEY SLOT CIR 1. Disconnect BCM connect	mal? own fuse after reparation WER SUPPLY CIR nnector. n slot harness cont (+) ey slot (+) ey slot (+) ey slot 1 mal? nce harness. CUIT ector.	airing the affected of RCUIT nector and ground.	(-) Ground	Voltage (V) (Approx.) Battery voltage
Is the inspection result norm YES >> GO TO 2. NO >> Replace the blo 2.CHECK KEY SLOT POV 1. Disconnect key slot cord 2. Check voltage between Connector M22 Is the inspection result norm YES >> GO TO 3. NO >> Repair or repla 3.CHECK KEY SLOT CIR 1. Disconnect BCM connect 2. Check continuity between BCM	mal? own fuse after reparation WER SUPPLY CIR nnector. n slot harness cont (+) ey slot (+) ey slot (+) ey slot (+) ey slot 1 mal? nce harness. CUIT ector. een BCM harness	airing the affected of RCUIT nector and ground.	(-) Ground	Voltage (V) (Approx.) Battery voltage
Is the inspection result norm YES >> GO TO 2. NO >> Replace the blo 2. CHECK KEY SLOT POV 1. Disconnect key slot cord 2. Check voltage between Connector M22 Is the inspection result norm YES >> GO TO 3. NO >> Repair or repla 3. CHECK KEY SLOT CIR 1. Disconnect BCM connect 2. Check continuity between BCM Connector	mal? own fuse after reparation WER SUPPLY CIR nnector. n slot harness cont (+) ey slot (+) ey slot (+) ey slot (+) ey slot 1 mal? nce harness. CUIT ector. een BCM harness Terminal 121	airing the affected of RCUIT nector and ground.	(-) Ground slot harness conne ey slot Terminal 11	Voltage (V) (Approx.) Battery voltage

M123 Is the inspection result normal?

< DTC/CIRCUIT DIAGNOSIS >

121

Not existed

#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

4.CHECK KEY SLOT

Refer to DLK-96, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace key slot. Refer to <u>DLK-275</u>, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

### >> INSPECTION END

## Component Inspection

INFOID:000000009064680

# 1.CHECK KEY SLOT

1. Turn ignition switch OFF.

2. Disconnect key slot connector.

3. Check continuity between key slot terminals.

Key	Key slot		Condition		
Terr	minal	Condition		Continuity	
1	11	Intelligent Key	Inserted in key slot	Existed	
I		Intelligent Key	Removed in key slot	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace key slot. Refer to <u>DLK-275, "Removal and Installation"</u>.

# **KEY SLOT INDICATOR**

escription				INFOID:0000000906468
-		ine d		14 SID.000000000000000000000000000000000000
links when Intelligent Ke	_	iired.		
component Functio	n Check			INFOID:00000000906468
.CHECK FUNCTION				
heck key slot indicator ("	KEY SLOT ILLUN	/II") Active Test mod	de.	
the inspection result no	rmal?			
YES >> Key slot funct	ion is OK.			
	<u>97, "Diagnosis Pr</u>	<u>ocedure"</u> .		
iagnosis Procedure	9			INFOID:00000000906468
.CHECK FUSE				
. Turn ignition switch O				
. Check 10 A fuse, [No.	. 6, located in fuse	e block (J/B)].		
<u>s fuse fusing?</u> YES >> GO TO 2.				
	lown fuse after re	pairing the affected	I circuit if a fuse is I	blown.
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee	onnector.		ound.	
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee	onnector. en key slot harnes (+)			Voltage (V)
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee	onnector. en key slot harnes	s connector and gr	ound. (–)	Voltage (V) (Approx.)
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee	onnector. en key slot harnes (+) Key slot	s connector and gr		
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector	onnector. en key slot harnes (+) Key slot Termir 5	s connector and gr	()	(Approx.)
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 the inspection result nor YES >> GO TO 3.	onnector. en key slot harnes (+) Key slot Termir 5 rmal?	s connector and gr	()	(Approx.)
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 the inspection result not YES >> GO TO 3. NO >> Repair or repl	onnector. en key slot harnes (+) Key slot Termir 5 rmal? ace harness.	s connector and gr	()	(Approx.)
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 the inspection result no YES >> GO TO 3. NO >> Repair or repl CHECK KEY SLOT CI	onnector. en key slot harnes (+) Key slot Termir 5 rmal? ace harness. RCUIT	s connector and gr	()	(Approx.)
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 the inspection result not YES >> GO TO 3. NO >> Repair or repl	onnector. en key slot harnes (+) Key slot Termir 5 rmal? ace harness. RCUIT	nal	(–) Ground	(Approx.) Battery voltage
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 the inspection result no YES >> GO TO 3. NO >> Repair or repl CHECK KEY SLOT CII Disconnect BCM con	onnector. en key slot harnes (+) Key slot Termir 5 rmal? ace harness. RCUIT	s connector and gr	(–) Ground y slot harness cont	(Approx.) Battery voltage
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 the inspection result no YES >> GO TO 3. NO >> Repair or repl CHECK KEY SLOT CII Disconnect BCM conr Check continuity betw	onnector. en key slot harnes (+) Key slot Termir 5 rmal? ace harness. RCUIT	s connector and gr	(–) Ground	(Approx.) Battery voltage
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 the inspection result not YES >> GO TO 3. NO >> Repair or repl CHECK KEY SLOT CII Disconnect BCM conr Check continuity betw	onnector. en key slot harnes (+) Key slot Termir 5 rmal? ace harness. RCUIT nector. veen BCM harness	s connector and gr	(–) Ground y slot harness cont	(Approx.) Battery voltage
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 Connector YES >> GO TO 3. NO >> Repair or repl CHECK KEY SLOT CII Disconnect BCM conr Check continuity betw BCM Connector	onnector. en key slot harnes (+) Key slot Termir 5 rmal? ace harness. RCUIT nector. veen BCM harness Terminal 92	s connector and gr	(–) Ground y slot harness cont Key slot Terminal 6	(Approx.) Battery voltage
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 the inspection result noi YES >> GO TO 3. NO >> Repair or repl CHECK KEY SLOT CII Disconnect BCM conr Check continuity betw BCM Connector M122	onnector. en key slot harnes (+) Key slot Termir 5 rmal? ace harness. RCUIT nector. veen BCM harness Terminal 92	s connector and gr	(–) Ground y slot harness cont Key slot Terminal 6	(Approx.) Battery voltage
CHECK KEY SLOT PC Disconnect key slot co Check voltage betwee Connector M22 the inspection result noi YES >> GO TO 3. NO >> Repair or repl CHECK KEY SLOT CII Disconnect BCM conr Check continuity betw BCM Connector M122	onnector. en key slot harnes (+) Key slot Termir 5 rmal? ace harness. RCUIT nector. veen BCM harness Terminal 92 veen BCM harness	s connector and gr	(–) Ground y slot harness cont Key slot Terminal 6	(Approx.) Battery voltage

4.CHECK KEY SLOT

< DTC/CIRCUIT DIAGNOSIS >

Refer to DLK-98, "Component Inspection".

# **KEY SLOT INDICATOR**

### [INTELLIGENT KEY SYSTEM]

# < DTC/CIRCUIT DIAGNOSIS >

- Is the inspection result normal?
- YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.
- NO >> Replace key slot. Refer to <u>DLK-275</u>, "Removal and Installation".

### **Component Inspection**

INFOID:000000009064684

# 1. CHECK KEY SLOT ILLUMINATION

- 1. Turn ignition switch OFF.
- 2. Disconnect key slot connector.
- 3. Connect battery power supply directly to key slot terminals.

Кеу				
Terr	Terminal			
(+)	(+) (-)			
5	5 6			

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace key slot. Refer to <u>DLK-275, "Removal and Installation"</u>.

# **HORN FUNCTION**

# [INTELLIGENT KEY SYSTEM]

HORN F	UNCTIO	NC					
Descriptio	'n						INFOID:000000009064685
Perform ans	wer-back f	or each op	eration wit	h horn.			
Compone	nt Func	tion Che	eck				INFOID:000000009064686
1. СНЕСК Р	UNCTION	l					
	-	ACTIVE T		e with CO	NSULT.		
2. Check the	ne horn (hi	gh/low) op	eration.				
	Test	item			De	escription	
HORN		ON	ŀ	Horn relay		ON (for 20 ms)	
	Horn funct		agnosis Pr	<u>ocedure"</u> .			
Diagnosis	Proced	lure					INFOID:000000009064687
<b>1.</b> CHECK H	IORN SW	ІТСН					
Check horn		-	itch				
Do the horns							
-	GO TO 2.						
NO >> 2.CHECK F		<u>RN-2, "Wir</u>			<u>  -"</u> .		
			R SUPPL	Y			
2. Perform		TEST" ("HO				r and ground	
3. Check v	ollage bell	ween main	inclioning	nom relay	harness connecto	r and ground.	
	(+)					Voltage (V	()
	Horn relay		()		Test item	(Approx.)	
E11	nector	Terminal 1			ON	Battery voltage $\rightarrow 0 \rightarrow$	Battony voltago
E11	Low High	3	Ground	HORN	Other than above	Battery voltage $\rightarrow$ 0 $\rightarrow$ Battery volta	· · ·
Is the inspec	-	-			outor utan above	Dattory volt	
YES >>	GO TO 4.	<u>Hormar.</u>					
-	GO TO 3.						
<b>3.</b> CHECK F			ЛТ				
•	ition switch		tor and he		opportor		
		E/R connec		m relay c	Unnector.		

3. Check continuity between IPDM E/R harness connector and malfunctioning horn relay harness connector.

IPD	IPDM E/R		Horn relay		
Connector	Terminal	Connector	Terminal	Continuity	
E6	44	E11	1	Existed	P
E0	45	E18	3	LAISted	

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

< DTC/CIRCUIT DIAGNOSIS >

# HORN FUNCTION

### < DTC/CIRCUIT DIAGNOSIS >

### [INTELLIGENT KEY SYSTEM]

IPD	M E/R		Continuity
Connector	Terminal	Ground	Continuity
E6	44	Giouna	Not existed
EO	45		

### Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-32, "Removal and Installation".

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

### Refer to GI-42, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END

COMBINATION METER DISPLAY FUNCTION < DTC/CIRCUIT DIAGNOSIS > [INTELLIGENT KEY SYSTEM]	
COMBINATION METER DISPLAY FUNCTION	A
Description	
Displays each operation method guide and warning for system malfunction.	В
Component Function Check	1
1.CHECK FUNCTION	С
Check the operation with ("LCD") in the Active Test.	
Is each warning displayed on meter display?	D
<u>Is the inspection result normal?</u> YES >> Meter display is OK. NO >> Refer to <u>DLK-101, "Diagnosis Procedure"</u> .	E
Diagnosis Procedure	
1. CHECK COMBINATION METER	F
Refer to <u>MWI-89, "DTC Index"</u> .	G
<u>Is the inspection result normal?</u> YES >> GO TO 2.	9
NO >> Check combination meter. Refer to <u>MWI-4, "Work flow"</u> .	
2.CHECK INTERMITTENT INCIDENT	Н
Refer to GI-42, "Intermittent Incident".	
>> INSPECTION END	

J

L

M

Ν

0

Ρ

< DTC/CIRCUIT DIAGNOSIS >

# **BUZZER (COMBINATION METER)**

### Description

Performs operation method guide and warning with buzzer.

**Component Function Check** 

1.CHECK FUNCTION

1. Check the operation with "INSIDE BUZZER" in the Active Test.

2. Touch "TAKE OUT", "KNOB" or "KEY" on screen.

Is the inspection result normal?

Yes >> Warning buzzer into combination meter is OK.

No >> Refer to <u>DLK-102</u>, "Diagnosis Procedure".

Diagnosis Procedure

**1.**CHECK METER BUZZER CIRCUIT

Refer to WCS-23, "Component Function Check".

Is the inspection result normal?

Yes >> GO TO 2.

No >> Repair or replace harness.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident"

>> INSPECTION END

[ÍNTELLIGENT KEY SYSTEM]

INFOID:000000009064691

INFOID:000000009064692

### **KEY WARNING LAMP**

# [INTELLIGENT KEY SYSTEM]

KEY WARNING LAM	P			٨
Description			INFOID:000000009064694	A
Performs operation method gu Component Function C		rning together with buzzer.	INF01D:00000000000064695	В
1.CHECK FUNCTION				С
Check the operation with "IND	ICATOR" in	"Active Test" mode with CONSULT.		
Test item		Condition		D
INDICATOR	RED ON	Key warning lamp (red) illuminates		
	RED IND	Key warning lamp (red) flashes		Е
Is the inspection result normal				
YES >> Key warning lamp NO >> Refer to <u>DLK-103</u>	in combina , "Diagnosis	tion meter is OK. <u>Procedure"</u> .		F
Diagnosis Procedure			INFOID:000000009064696	
1. CHECK KEY WARNING LA	AMP			G
Refer to MWI-25, "WARNING	LAMPS/IND	ICATOR LAMPS : System Description".		
Is the inspection result normal	<u>?</u>			Н
YES >> GO TO 2. NO >> Repair or replace	harness			
2.CHECK INTERMITTENT IN				1
Refer to <u>GI-42, "Intermittent In</u>				I
>> INSPECTION EN	D			J
				DLK
				<u>.</u>
				L
				M
				Ν

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

### HAZARD FUNCTION

## [INTELLIGENT KEY SYSTEM]

HAZARD FUNCTION Description Perform answer-back for each operation with number of blinks.

Component Function Check

< DTC/CIRCUIT DIAGNOSIS >

1.CHECK FUNCTION

Check hazard warning lamp ("FLASHER") in Active Test.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.

NO >> Refer to <u>DLK-104, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

1. CHECK HAZARD SWITCH CIRCUIT

Refer to <u>EXL-83</u>, "Component Function Check" (For xenon type) or <u>EXL-271</u>, "Component Function Check" (For halogen type)

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

INFOID:000000009064697

INFOID:000000009064698

### INTEGRATED HOMELINK TRANSMITTER

### < DTC/CIRCUIT DIAGNOSIS > INTEGRATED HOMELINK TRANSMITTER

Description				INFOID:000000009064700
Integrated Homelink Transmitte Allows operation of garage doo Integrated Homelink Transmitte gram in case battery is dischar	ors, gates, home er power supply	e and office I y uses vehic	ighting, entry door lock	s and security system, etc.
Component Function C	heck			INFOID:00000009064701
1.CHECK FUNCTION				
Check that system receiver (ga Is the inspection result normal? YES >> GO TO 2. NO >> Receiver or hand-h 2.CHECK ILLUMINATE	<u> </u>		Ū.	I-held transmitter.
1. Turn ignition switch OFF.         2. Does red light of transmitter         Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Refer to DLK-105.         3.CHECK TRANSMITTER	2	-	mitter button is pressed	1?
Check transmitter with Tool*.				
	2 neld transmitter i-dazzling insid	malfunction, e mirror (hc	melink universal trans	sceiver). Refer to <u>MIR-119.</u> <u>allation"</u> (Without ADP).
Diagnosis Procedure		,		INFOID:000000009064702
1.CHECK POWER SUPPLY				
<ol> <li>Turn ignition switch OFF.</li> <li>Disconnect auto anti-dazzl</li> </ol>				onnector. ransceiver) harness connec-
Auto anti-dazzling inside mirror (Homelink universal transceiver) connector	Termin	nal	Condition	Voltage (V) (Approx.)
	10		Ignition switch position: OFF	

Is the inspection result normal?

R3

YES >> GO TO 2.

NO >> Check the following.

• 10A fuse [No. 3 located in the fuse block (J/B)]

6

- 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).

ON

Ignition switch position:

2. CHECK GROUND CIRCUIT

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

Ground

## **DLK-105**

Battery voltage

# [INTELLIGENT KEY SYSTEM]

0

Ρ

### INTEGRATED HOMELINK TRANSMITTER

#### < DTC/CIRCUIT DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Auto anti-dazzling inside mirror (Homelink universal transceiver) connector	Terminal	Ground	Continuity
R3	8	Ť	Existed
Is the inspection result normal?			

is the inspection result normal?

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

no >> Repair namess.

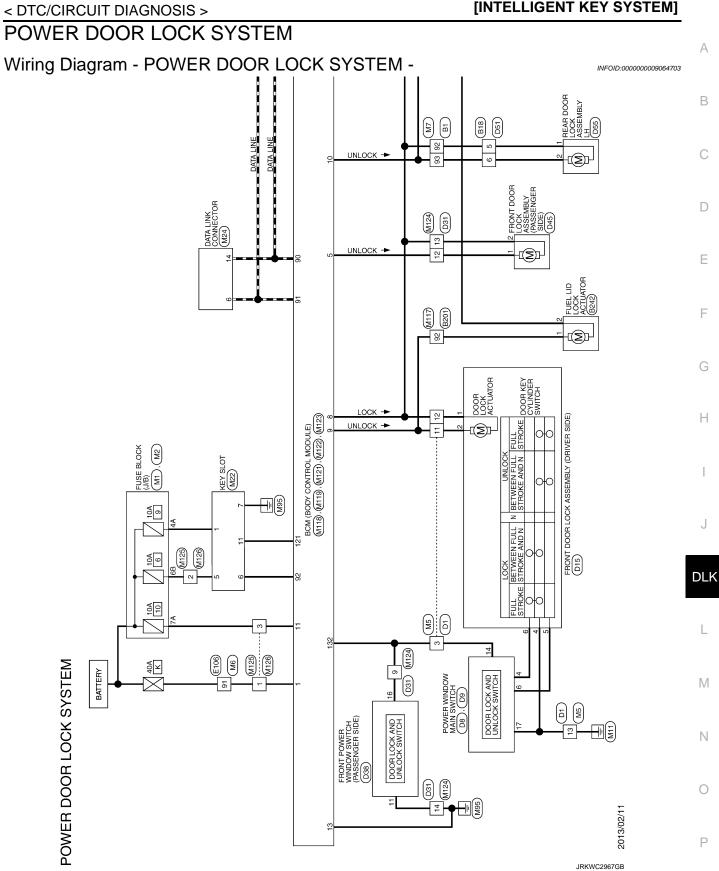
3. Check intermittent incident

Refer to GI-42, "Intermittent Incident".

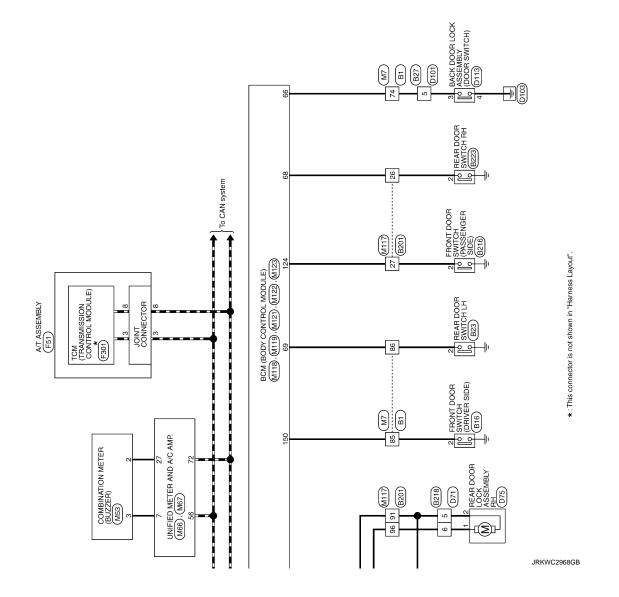
>> INSPECTION END

## **POWER DOOR LOCK SYSTEM**

### [INTELLIGENT KEY SYSTEM]



Revision: 2013 March



## POWER DOOR LOCK SYSTEM

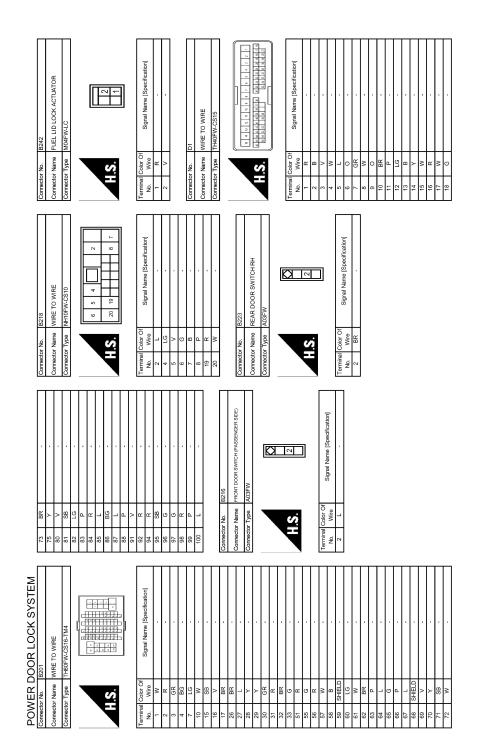
## [INTELLIGENT KEY SYSTEM]

	А
	В
B23 REAR DOOR SWITCH LH A03FW Signal Name [Specification] Signal Name [Specification] Signal Name [Specification]	С
Connector No.     I       Connector Name     Connector Name       Connector Name     Vire       2     U       1     Nor	D
DRIVER SIDE) DRIVER SIDE) autolo autolo autolo	E
B16     A03FW       A03FW     A03FW       A03FW     Signal Name [Specification]       Signal Name [Specification]     -       -     -	F
Connector Name FR/NT     B16       connector Name FR/NT     FR/NT       Energia     Connector Name Primal     Connector Name Primal       2     V       2     V       2     V       2     V       2     V       2     V       2     V       2     V       2     V       2     V       19     CR       20     W	G
	Н
	I
	J
60         P           63         SHELL           63         SHELL           63         SHELL           65         SHELL           66         SHELL           67         W           66         SHELL           67         W           68         SHELL           73         W           73         W           73         W           73         W           73         W           73         W           93         G           94         G           93         G           94         G           93         G           94         G           93         G           94         G           95         G           96         G           97         G           98         V           99         G           99         G           99         G           99         G           99         G           99         G      177         177 </td <td>DLK</td>	DLK
	L
POMER DOOR LOCK SYSTEM       Domedor No.     Dimension No.       Connector Name     Nin       Span     Span	Μ
POWER         DO           Connector No.         B           Connector Name         W           Connector Name         W           Sa         Sa	Ν
Commercial	

JRKWC3192GB

Ρ

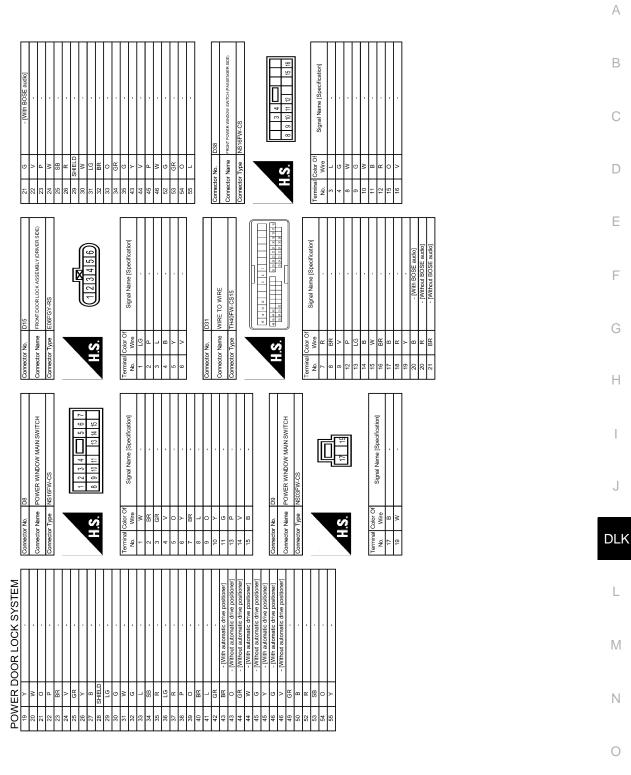
Ο



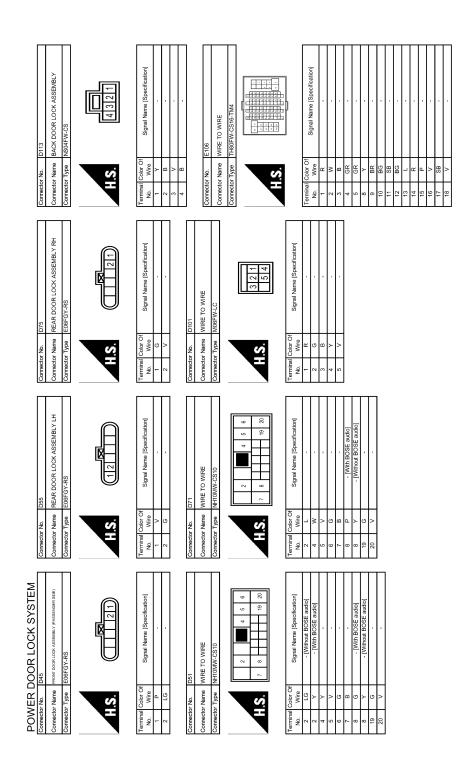
JRKWC3193GB

## POWER DOOR LOCK SYSTEM

### [INTELLIGENT KEY SYSTEM]



JRKWC3194GB



JRKWC3195GB

# POWER DOOR LOCK SYSTEM

### < DTC/CIRCUIT DIAGNOSIS >

## [INTELLIGENT KEY SYSTEM]

	А
	В
E E LOCK     44       Signal Name     14	С
Corrector Name Fue Corrector Name Fue Corrector Name Fue SB B B B B B B B B B B B B B B B B B B	D
	E
Omedia     Eaol       Corrector Name     Toxi (maxis) sisten corritor, indoute)       Corrector Name     Toxi (maxis) sisten corritor, indoute)       Corrector Name     Toxi (maxis) sisten corritor, indoute)       Corrector Name     Toxi (maxis) sisten correct, indoute)       Corrector Name     Toxi (maxis) sisten correct, indoute)       Corrector Name     Eaol       Corrector Name     Eaol       Corrector Name     Eaol       Corrector Name     Eaol       Corrector Name     Corrector Name       Name     Corrector Nam       Name	F
Connector No.     F301       Connector Name     ToM, Transussussusson o       Connector Name     ToM, Transussusson o       Connector Name     SP10FG       SP10FG     SP10FG       3     -       3     -       3     -       1     -       1     -       1     -       1     -       2     -       1     -       1     -       2     -       3     -       1     -       1     -       2     -       3     -       3     -       3     -       3     -       3     -       3     -       3     -       3     -       3     -       3     -       3     -       3     -       3     -       3     -	G
Correction         Correction           Correction         0           Terminic         1           A         1           A         1           A         1           A         1           A         1           A         1           A         1           A         1           A         1	Н
- (Without ICC)     -	I
	J
78         BR           79         L           79         L           81         B7           82         S8           83         B6           99         S44ELD           99         S44ELD           100         P           100         P           110         B           9         S44ELD           90         S44ELD           100         P           100         P           10         B	DLK
	L
POMER DOR LOCK SYST           2         L           3         R           3         R           4         L           5         K           6         L           7         K           8         L           8         L           6         L           7         K           8         L           6         L           7         K	M
FR DOR         x P < x	A. I
POWEF	Ν
—	0

JRKWC3196GB

### < DTC/CIRCUIT DIAGNOSIS >

44

BG

POV	/ER C	POWER DOOR LOCK SYSTEM	Connec	Connector No	M	L	43 BG	-		ð	8 SHFLD	,	
			5		2	1	╉			ľ	T		
5 4	< 0		Connec	Connector Name	e WIRE TO WIRE		40 - M			» =	- 20 - 20 - 20 - 20 - 20 - 20 - 20 - 20		
2	د د		ļ	1	THE LOOP STATE OF LO THE LT		+			-	-		
	n (		Connec	Connector Type			20 21						
• •	,		-				╀			Ċ	Connector Ma	147	
e c		. ,					- u			3	IECIOI NO.		
2	- -						╀			Con	Connector Name	WIRE TO WIRE	
1	3 -		1	Į			-			ļ	ter E	TI DOM BAL OC 40 TA 14	
7				2			+			5	CONTRECTOR 1 ype	1 FIGUINIVE-CO 10-1 M4	
23	σ				1.1		61 G						
24	Y	-					_	-					
25	GR						63 G						
26	æ	,	Termin	Ferminal Color Of			64 B						
27	×	,	Ś	Wire	signal Name [specification]		65 W			_	ŝ		
28	SHIELD		-	≥			66 R				Ż		
29	≻		2	£			Ϋ́	- -					
30	~		en	ß			68 Y						
31	٣		4	SHIELD			69 GR			Terr	Terminal Color Of		
32	BR		ۍ	U			┝			z	No. Wire	Signal Name [Specification]	
33	ß		ω	>			21 LG	•		ľ	3B SB	- [With automatic drive positioner]	
8	≻		თ	H			72 Y			ľ	3 V	<ul> <li>[Without automatic drive positioner]</li> </ul>	
35	٩		9	œ			73 SB			- <i>"</i>	ى 2		
36	ŋ		11	BR				- [With ICC]	loci	ľ	6 BG		
37	BR		12	ß		L	+		ut ICC]				
38	۵.		<del>1</del> 3	-						Ĩ	8 8		
39	BG		14	er er			76 GR	- IWithout ICC	ut ICCI	Ē		,	
40	BB		15	4		L	╀		ICCI	ſ	┝	,	
41	-		16	>			╞		ut ICC]	<b>_</b>	┢		
42	æ		17	8			77 R		lccl	-	15 G		
43	BR		18	>						ſ			
44	>		20	g		L	F	,	ut ICC]	ſ	18 SB	,	
45	0		21	-					ut ICC]	-		,	
46	SB	<ul> <li>[With automatic drive positioner]</li> </ul>	22	>			79 Y		lccl	~	0 BR	,	
46	>	<ul> <li>[Without automatic drive positioner]</li> </ul>	23	۵.	,		80 SB			~	21 SHIELD	-	
49	۵.		24	BR			81 SB			N	22 Y		
50	ш		25	>			82 SB			~	24 V	1	
52	œ		26	>			83 V			R	27 B		
53	>		27	U			84 0			N	28 W	•	
54	с		28	U			85 L			~	29 R		
55	SB	•	31	-			86 P			٣	30 SHIELD		
			32	U	,		87 W			~	31 L	,	
			ŝ	œ			89 GR			m	32 P		
			34	M			30 SHIELD	- la		e	33 SB	1	
			35	۳			91 W			٣	34 L	-	
			36	SHIELD	- D					e	35 P		
			37	>		┛	_			Ű			
			38	BG			94 P			ິ	37 P		
			39	Ч			95 GR			ິ	8 8		
			41	>							<del>ک</del>	-	

JRKWC3197GB

# POWER DOOR LOCK SYSTEM

### < DTC/CIRCUIT DIAGNOSIS >

### [INTELLIGENT KEY SYSTEM]

	А
ND A/C AMP. IS Sectional International Inte	В
M66     UNIFIED METER AND A/C AMP.       UNIFIED METER AND A/C AMP.     IHH0FWAH       TH40FWAH     IHH0FWAH       Signal Name (Specification)     Signal Name (Specification)       MANUAL MODE SIGNAL THAP METER AND A/C AMP.     UNIVEL MODE SIGNAL THAP METER AND A/C AMVAL MODE SIGNAL THAP METER AND A/C AMMUAL MODE SIGNAL THAP METER AND A/C AMMUAL MODE SIGNAL THAP METER AND A/C AMMUAL MODE SIGNAL TO NON SIGNAL	С
Corrector Numerical Connector Numerical Numeri	D
NMETER NMETER Mare Specification Mare Speci	E
Ommeter No.     Mi3       Corrector Name     COMBINATION METER       Corrector Name     COMBINATION METER       Corrector Type     THAIPFW-MH       Termini     Corrector Type       Termini     Corrector Tree       Termini     Corrector Type       Termini     Corrector Tree       Termini     Corrector Science Towner Science       Termini     Corrector Correcto	F
Connector No.         Terminal         Connector No.         Terminal           Connector Name         0         0         0         0           Terminal         Connector Name         0         0         0           1         -         -         -         0         0           1         -         -         -         -         0         0           1         -         -         -         -         -         0	G
	I
M22     KeY sLOT       THTEPWANH     THTEPWANH       Signal Name (Specification)     Signal Name (Specification)       M24     LLBAT       LLL     LLL       N124     LLBAT       N124     LLBAT       N124     LLBAT       Signal Name (Specification)     Signal Name (Specification)       Signal Name (Specification)     Signal Name (Specification)	J
Corrector No. 1 Connector Name 1 Connector Nam	DLK
SYSTEM	L
ADMER DOR LOCK SYSTEM           46         6R           46         6R           46         6R           50         P           50         P           50         R           61         C           50         R           61         C           62         SHELD           63         RELD           64         C           65         SHELD           73         G           73         G           84         C           73         G           85         RELD           73         G           86         R           87         C           88         R           89         R           80         R           81         R           93         R           94         7           95         7           96         7           97         7           98         8           90         7           91         7           91         7 <td>Μ</td>	Μ
Ability         Ability <t< td=""><td>Ν</td></t<>	Ν
	0

JRKWC3198GB

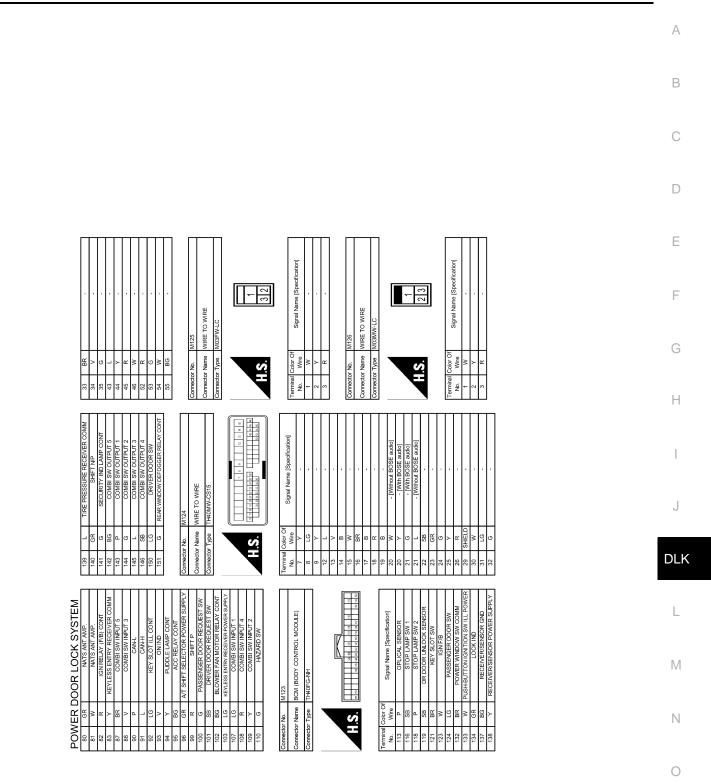
### < DTC/CIRCUIT DIAGNOSIS >

JRKWC3199GB

## **POWER DOOR LOCK SYSTEM**

#### < DTC/CIRCUIT DIAGNOSIS >

### [INTELLIGENT KEY SYSTEM]

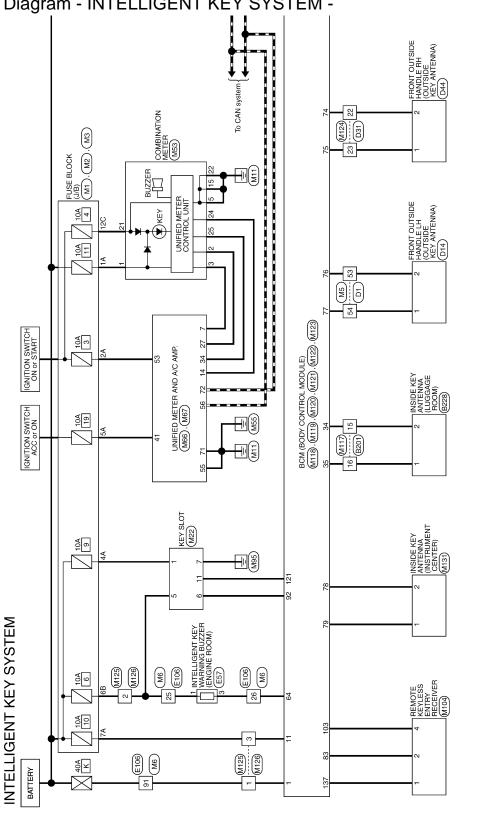


JRKWC3200GB

# **INTELLIGENT KEY SYSTEM**

Wiring Diagram - INTELLIGENT KEY SYSTEM -

INFOID:000000009064704



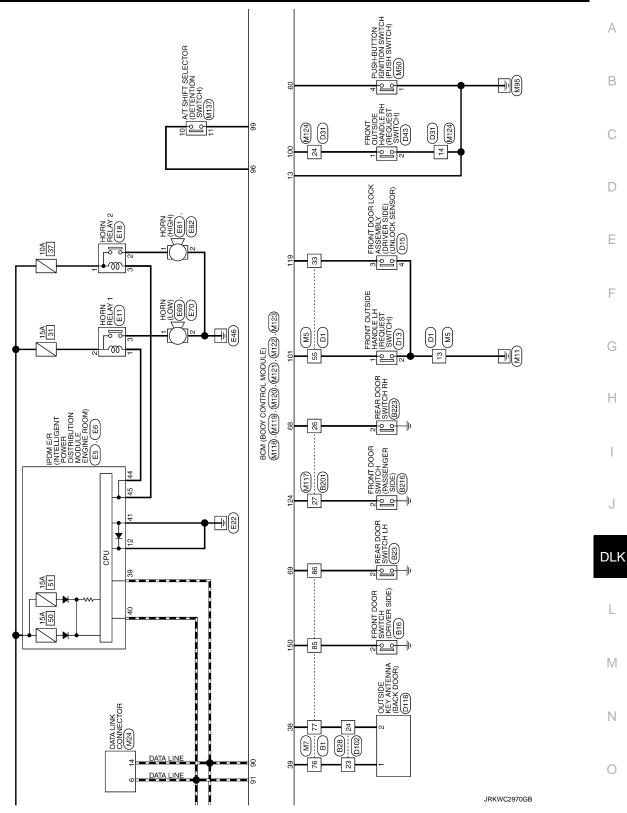
2013/02/11

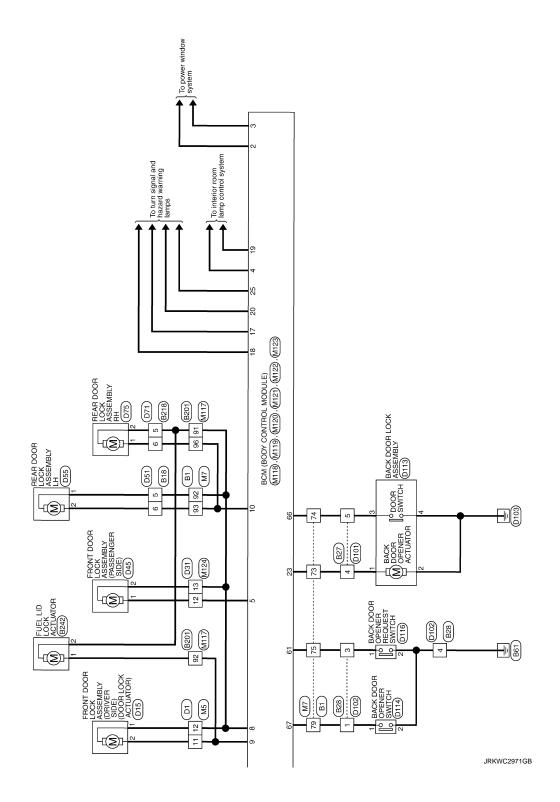
JRKWC2969GB

# INTELLIGENT KEY SYSTEM

#### < DTC/CIRCUIT DIAGNOSIS >

### [INTELLIGENT KEY SYSTEM]





Connector No.     E23       Connector Name     REAR DOOR SWITCH LH       Connector Name     REAR DOOR SWITCH LH       Connector Name     REAR DOOR SWITCH LH       Connector Name     Display to the state of	
Connector No.     B16       Connector Name     FRONT DOOR SWITCH (DRIVER SIDE)       Name     Doit OI       Name     B18       Connector Name     B05E audio)       B     -       Connector Name     Connector Name       B     -       Connector Name     Connector Name       Signal Name     Connector Name       Connector Name     Connector Name       B     -       Connector Name     Connector Name       Connector Name     Connector Name       Connector Name     Connector Name       Connector Name     Connector Name       Connetor Name     Connetor Name	
6         6         6         6         6         6         6         6         7         8         8         8         8         9	
INTELLICENT KEY SYSTEM         Connector Name       Nine       Dimension         None       Connector Name       Dimension	

JRKWC3201GB

Ο

### < DTC/CIRCUIT DIAGNOSIS >

## [INTELLIGENT KEY SYSTEM]

А

В

С

D

Е

F

G

Н

J

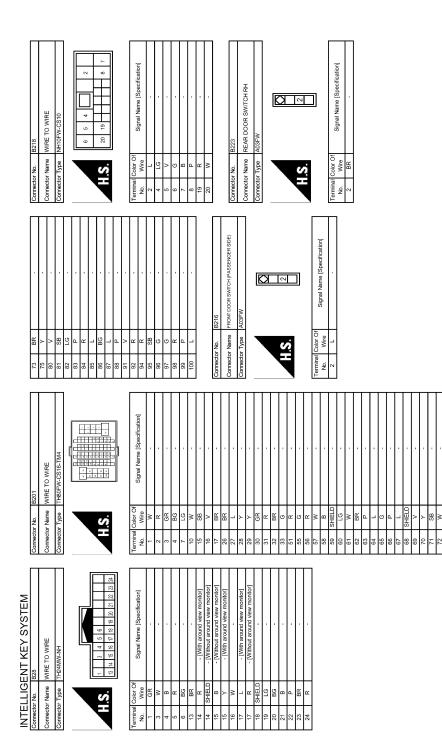
DLK

L

Μ

Ν

# **INTELLIGENT KEY SYSTEM**

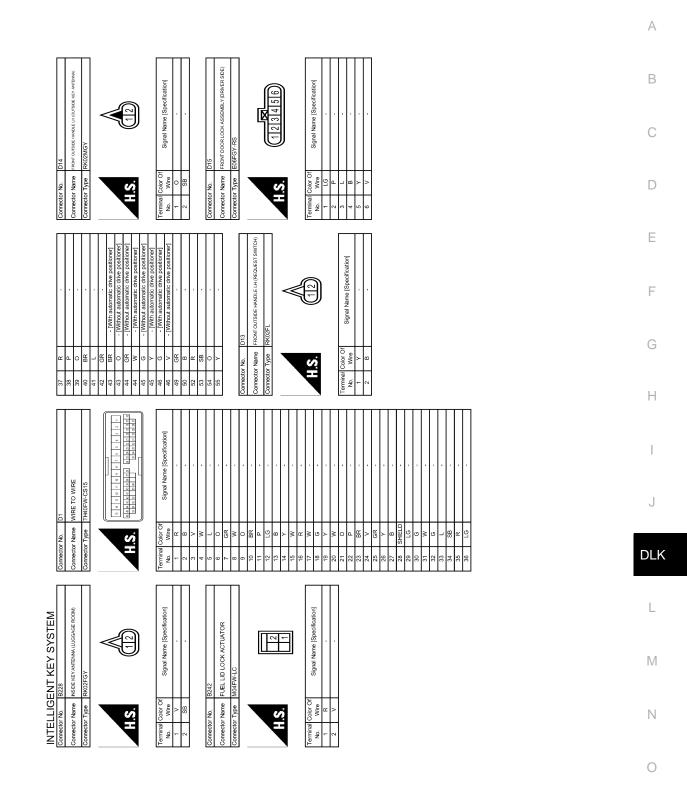


JRKWC3202GB

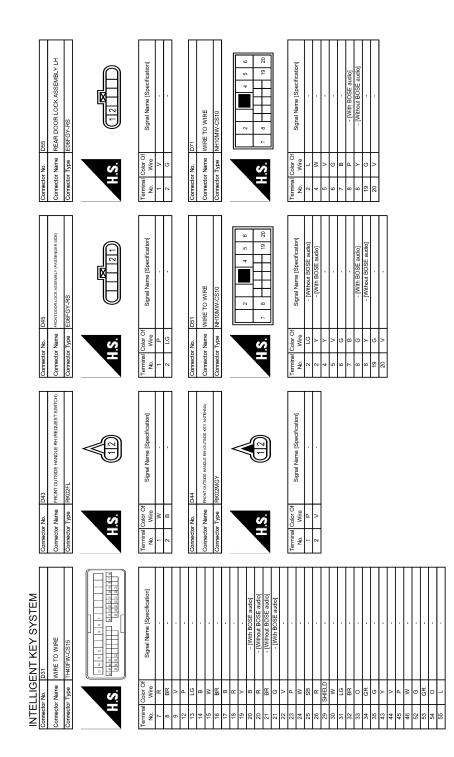
72 70

# INTELLIGENT KEY SYSTEM

### [INTELLIGENT KEY SYSTEM]



JRKWC3203GB



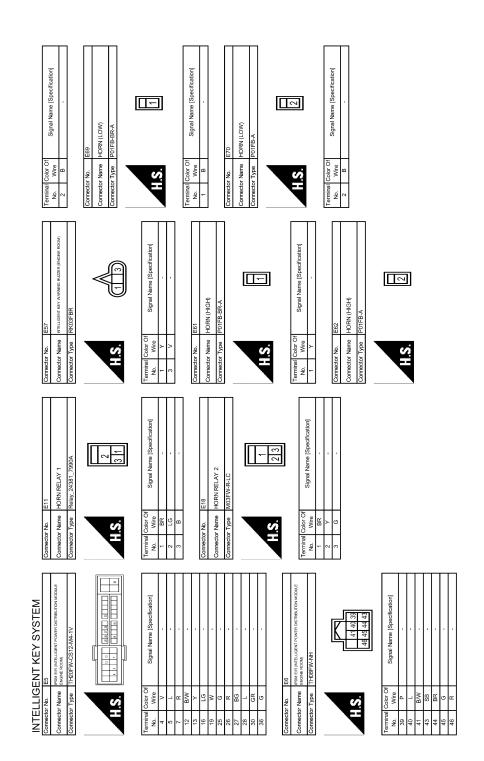
JRKWC3204GB

	А
Peofication)	В
Dite     Dite       BACK DOOR OFENER REQUEST     BACK DOOR OFENER REQUEST       MITCH     Signal Name [Specification]       Signal Name [Specification]     Signal Name [Specification]       Signal Name [Specification]     Signal Name [Specification]	С
Corrector No.     D       Corrector Name     S       Connector Name     S       S     S       No.     Wre	D
Lation La	E
Otheretor     No.     Dit3       Corrector     No.     Dit3       Corrector     Nonector     Nonector       Corrector     Nonector     Nonector       No.     Nonector     Signal Name (Specification)       No.     Dit4       Nonector     Nonector	F
Connector Num     D113       Connector Name     BACK DOOF       Connector Name     BACK DOOF       Connector Name     BACK DOOF       1     V       2     B       1     KORMBR-P       2     B	G
	Η
: TO WRE EW-NHI EW-N	I
	J
Connector Numerican Num	DLK
KEY SYSTEM DOOR LOCK ASSEMBLY RH VRS Signal hame [Specification] 	L
ENT KEY S BIS REAR DOOR LOCK REAR DOOR LOCK REAR DOOR LOCK Signal Name Signal Name Signal Name Signal Name Signal Name Not	Μ
INTELLIGENT KEY SYSTEM       Commedicity. Intelligent Key DOR LOCK ASSEMBLY RH       Commedicity.     Display       Commedicity.     ERFEY-RS	Ν
	0

JRKWC3205GB

Ρ

## < DTC/CIRCUIT DIAGNOSIS >



JRKWC3206GB

# INTELLIGENT KEY SYSTEM

### < DTC/CIRCUIT DIAGNOSIS >

## [INTELLIGENT KEY SYSTEM]

	А
	В
M3     -       FUSE BLOCK (Jub)       FUSE ELOCK (Jub)       Signal Hame [Specification]       Signal Hame [Specification]       Signal Hame [Specification]	С
98     58       Connector No.     M3       Connector Nome     FUE       Connector Nome     FUE       Connector Nome     FUE       Connector Nome     FUE       Connector Nome     M3       Connector Nome     M3       Connector Nome     M3       Connector Nome     M1       FUE     FUE	D
	E
M1	F
State     Mon     Min       State     N     N       N     N     N	G
Pint         Pint <th< td=""><td>Н</td></th<>	Н
• • • • • • • • • • • • • • • • • • •	I
	J
43         83           45         1           45         1           45         1           55         1           56         1           57         1           58         3           59         1           57         1           57         1           58         1           59         1           50         1           51         1           52         2           53         2           54         1           75         1         1           73         1         1         1           73         1         1         1         1           73         1         1         1         1           73         1         1         1         1           73         1         1         1         1           73         1         1         1         1           73         1         1         1         1           73         1         1         1         1	DLK
	L
INTELLICENT KEY SYSTEM       Dimeter Ning       Dimeter Ning     Elife       Dimeter Ning       Dimeter Ning       Dimeter Ning <tr< td=""><td>Μ</td></tr<>	Μ
INTELLIGEX           Connector Name         E1           Connector Name         E1           Connector Name         Wire           In         No.           No.         No.	Ν
	0

JRKWC3207GB

Ρ

Ο

### < DTC/CIRCUIT DIAGNOSIS >

# **INTELLIGENT KEY SYSTEM**

## [INTELLIGENT KEY SYSTEM]

WIET OWRE         A5         W         A           AFE TO WRE         39         P         -	- 75 F	INTELLIGENT KEY SYSTEM	Connector No.	tor No.	g		43 BG		ſ	86	SHIELD	
Connector Name         Milet TO WIRE         Image: Connector Name         Image: Con							+			3 8	T	
Consector Type         TeleNMACS16-TMA           5         F         Y           7         Y         Y           7         Y         Y           7         Y         Y           1         Y         Y			Connec	tor Name			+			9 ē	-	
51       51       61       1			Connec	tor Type	TH80MW-CS16-TM4	w,	+					
Matrix         Matrix<						<i>u</i> ,	┢					
Image: constraint of the constrated of the constraint of the constraint of the constraint of the		,			막막	u)	╞	,		Corn	ictor No.	M7
					2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	u)				000	otor Namo	
Image: control of the contro						ω,				5		
Image: constrained on the point of		1		ğ		Ű				Conn	ector Type	TH80MW-CS16-TM4
Terminal (1)         Manuel (1)         Signal Name (Spacification)           1         Winsi (1)         Signal Name (Spacification)           2         2         2           3         8         -           4         System           1         1						e	_					
Territial Color Ol Nu, Ware Nu         Signal Name (specification)           0         8         0         -           1         8         0         -         -           1         9         8         -         -         -           1         9         8         -         -         -         -           1         9         8         -         -         -         -         -           1         9         8         -						°						바라바라
Terminal Cont Of Nw         Signal Name (specification)         Eds         N         N           1         W         -         -         -         -         -           1         W         -         -         -         -         -         -           2         R         -						2	+					
Nu         Wite         Section         Million         Millio			Termin	al Color		e						
1         W         ···         Me         ···         Me         ···           1         B         Y         ···         ···         ···         ···         ···           3         B         Y         ···         ···         ···         ···         ···         ···         ···           3         B         Y         ····         ···         ···		ſ	ĝ	Vire		°	+				<u></u>	
2         8         7         9         67         54ELD         -           4         5         7         0         0         7         0         7           9         7         0         0         7         0         7         0         0           1         1         1         0         7         2         9         -         0         0           13         1         1         0         -         -         0         0         0         -           14         7         2         2         4         -         -         0         0         -           15         6         0         -         -         -         0         -         0         -           14         7         9         -         -         -         -         0         -         0		-	-	>	-	e					į	
3         B         Y         Normalization         Normalion         Normalization <td></td> <td></td> <td>2</td> <td>œ</td> <td>•</td> <td>e</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			2	œ	•	e						
4         Switclo         7         Let         7         Switclo         7         7         7         7         7         7         7	SHIELD		m	۵		e	_					
5         C         No.			4	SHE		Ű	-			Term		
8         Y			ŝ	U		~	-			ž		
9         6			œ	≻	,	~	┝			e	89	<ul> <li>[With automatic drive positioner]</li> </ul>
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			6	BR		Γ	┝			e	>	<ul> <li>[Without automatic drive positioner]</li> </ul>
11         BR        Min.LC;         1         B         N			9	ď			╀	,		2	U	
12         BG         ·         / Without ICC          7         W           14         R         N         ·         ·         ·         ·         Without ICC          R         ·         W           15         F         N         ·         ·         ·         Without ICC          13         LG         ·         ·         W           16         V         · <td></td> <td></td> <td>7</td> <td>BR</td> <td></td> <td>ſ</td> <td>┝</td> <td></td> <td></td> <td>9</td> <td>BG</td> <td></td>			7	BR		ſ	┝			9	BG	
13       L			12	g			╀			~	>	
14         R			13	-		~				80	œ	
15         P         ········         77         P         ··········         13         L(G           17         SB         ········         17         P         ·········         14         Y           16         SB         ·······         ·······         17         P         ········         14         Y           16         SB         ·······         ······         14         Y         Withuku(CC)         15         G           21         L         ·······         ·····         ·····         ·····         ·····         16         SB           22         W         ······         ·····         ·····         ·····         22         Y         ······           23         V         ·······         ·····         ······         22         Y         ·······         22         Y         V           23         G         ········         ·······         ·······         23         B         V         V           33         L         ············         ·························         23         P         V         V           33         V         ····································			14	۳						12		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			15	۵.		~	$\vdash$			6	┝	,
17         28         · · · · · · · · · · · · · · · · · · ·		1	16	>		۲				4		
18         V         ·············         73         L         ···············         17         W           21         L         ············         ················         ·············         ············         ···········         ···········         ···········         ···········         ············         ············         ············         ··············         ···············         ···············         ··················         ····················         ·································         ····································			17	ß	,	^	┝			12	$\vdash$	,
20         BG         ········         18         ········         18         28           21         L         ········         ·······         ·······         ······         ······         ······         ······         ······         ······         ·····         ······         ······         ······         ······         ······         ······         ······         ······         ······         ·······         ·······         ·······         ·······         ·······         ······         ·······         ·······         ·······         ········         ·········         ···········         ············         ············         ·················         ·····················         ·······························         ····································			18	>		~				17	8	
21         L         -         -         10000411CC]         10         <			20	BG		~	┝			18	┝	
23         W         -         With ICCI         20         RR           24         B         Y         -         With ICCI         22         Y         Y           24         B         Y         -         23         Y         -         24         Y           25         Y         Y         -         -         23         Y         -         23         Y         -           26         Y         Y         -         -         23         Y         Y         -         -         23         Y         Y         -         -         -         -         -         23         Y         Y         -         <		,	21	-	,	_				10	-	
23       P         24       P         25       Y         26       Y         27       Y         28       V         29       Y         29 <td< td=""><td></td><td></td><td>22</td><td>&gt;</td><td></td><td>_</td><td>_</td><td></td><td></td><td>20</td><td></td><td></td></td<>			22	>		_	_			20		
24         BR           25         F           26         V           27         V           28         V           29         G           21         F           23         G           24         F           27         G           28         L           29         G           21         L           23         G           24         V           27         G           28         L           29         G           21         L           23         L           24         V           25         L           26         N           27         L           28         L           29         G           29         N           29         N           29         N           29         N           20         N           21         V           22         N           23         V           24         N <tr td=""></tr>			23	۵.		ω	$\vdash$			21	SHIELD	
26         ×           27         ×           28         ×           29         ×           21         ×           22         ×           23         ×           24         ×           27         ×           28         ×           29         ×           20         ×      20 <td>- [With a</td> <td>utomatic drive positioner]</td> <td>24</td> <td>BR</td> <td></td> <td>æ</td> <td>_</td> <td></td> <td></td> <td>22</td> <td></td> <td></td>	- [With a	utomatic drive positioner]	24	BR		æ	_			22		
28       C       27       C<	- [Without	automatic drive positioner]	25	≻	-	ω	_			24		
27         6          28         6            21         1         1         1         1         23         8         1           31         1         1         1         1         1         1         23         8         1           33         1 <t< td=""><td></td><td>-</td><td>26</td><td>&gt;</td><td>-</td><td>8</td><td>_</td><td></td><td></td><td>27</td><td>_</td><td>-</td></t<>		-	26	>	-	8	_			27	_	-
28         C         29         R           31         C         29         R           32         C         31         29         R           33         C         9         R         31         1           33         R         9         9         R         31         1         1           34         N         9         1         N         33         1         1         1         1           35         R         N         1         N         1			27	U	•	æ				28		-
31         L         30         34ELD           33         B         -         -         32         34ELD           33         B         -         -         -         32         P           34         W         -         -         -         32         P         -           34         W         -         -         90         S4ELD         -         -         32         P         -           35         R         W         -         -         90         S4ELD         -         -         33         P         - <t< td=""><td></td><td>ŗ</td><td>28</td><td>U</td><td>T</td><td>æ</td><td>_</td><td></td><td></td><td>29</td><td></td><td></td></t<>		ŗ	28	U	T	æ	_			29		
32       6        89       W        31       L       33       L        33       L        33       L        33       L        33       S        33       L        33       S         33       S         33       S            33       S <td></td> <td>Į.</td> <td>31</td> <td>_</td> <td>•</td> <td>۵ ۵</td> <td>_</td> <td></td> <td></td> <td>90 S</td> <td></td> <td></td>		Į.	31	_	•	۵ ۵	_			90 S		
33       B			32	U		æ				31	_	
W         ·         90         SHELD         ·         33         58           SHELD         ·         ·         ·         ·         ·         ·         34         L           SHELD         ·         ·         ·         ·         ·         ·         34         L           SHELD         ·         ·         ·         ·         ·         ·         34         L           V         ·         ·         ·         ·         ·         ·         ·         34         L           V         ·         ·         ·         ·         ·         ·         ·         36         L         L           V         · <td></td> <td></td> <td>33</td> <td>m</td> <td></td> <td>Ű</td> <td></td> <td></td> <td></td> <td>32</td> <td></td> <td></td>			33	m		Ű				32		
K     K     K     Set     Se			34	≥	-	ő	Г			ŝ		-
SHELD         .         22         Y         .         35         P         35         P           V         .         .         .         .         .         .         .         35         P         .           V         .			35	۳		ő				æ		
<ul> <li>&lt; 1</li> <li>&lt; 1<td></td><td></td><td>36</td><td>SHE</td><td></td><td>°</td><td><math>\vdash</math></td><td></td><td></td><td>35</td><td>╞</td><td></td></li></ul>			36	SHE		°	$\vdash$			35	╞	
BG         ·			37	>		0				36		
BR         .         95         GR         .         38         BR           W         . <td></td> <td></td> <td>38</td> <td>. (2) (2)</td> <td></td> <td>0</td> <td>+</td> <td></td> <td></td> <td>37</td> <td>+</td> <td></td>			38	. (2) (2)		0	+			37	+	
96 W - 39 Y - 33 - 4			39	BR		0				Ř	+	
			41	3		Ő	┝			8	┝	
			40	a			╀				.  -	

JRKWC3208GB

	M50 22 B GROUND BISH RITTON IGNITION SWITCH 24 BR COMMUNICATION SIGNAL (LCD-AMP.)	25 Y 26 R	27 V PARKING BRAKE SWITCH SIGNAL 28 W BRAKE FLUID LEVEL SWITCH SIGNAL	: 8 (	5 6 7 8	0 / 0 33 B	98	38 L TRIP AB RESET SWITCH SIGNAL	P L	- 40 BG ILLUMINATION CONTROL SWITCH SIGNAL (+)		Connector No M66			- Connector Type TH40FW-NH						Terminal Color Of	Wire		7 a 2 a 2 a 2 a 2 a 2 a 2 a 2 a 2 a 2 a	» 89	×	Signal Name [Specification] 11 G NON-MANUAL MODE SIGNAL	4 S	20	COMMUNICATION SIGNAL (METER-AWR), 23 7 AL SNOW SWITCH SIGNAL COMMUNICATION SIGNAL (AMP - METER) 25 V MANIAL MODE SHIFT DOWN SIGNAL	27 LG C	L 28 R	>	ECURITY SIGNAL 34 Y COMMUNICATION SIGNAL (AMPLCD)	2 2			GUITION SIGNAL										
	Connector No. M50 Connector Name El ISHLRI (TTON				•			Terminal Color Of	pecification] No. Wire	-	CLOCK 2 W	n 4	+	9	4	8 B		Connector No. M53			F	11 14 16		3 4 5 6 7 8 V A.			Terminal Color Of	No.	¥ (		5 m	9	BR	- 10 G SE	•	n a	0 01	- Se	2									
	- Connector No. M22 Connector Name KEV SLOT				Ŀ		-	- Terminal Color Of	Wire		- 2 GR		- [] 9	œ	- 11 BR KEY:		- Connector No. M24	1	- Connector Type BD16FW							- Terminal Color Of Simual D		ם מיייייייייייייייייייייייייייייייייייי	+		7 <	0	.,	14 P														
ᇳ		47 SB 49 V		+		64 G								I 1		-	+		+	+	+	91 G	+	+	95 G	$\square$	+	_																				

JRKWC3209GB

Р

Ο

# INTELLIGENT KEY SYSTEM

### < DTC/CIRCUIT DIAGNOSIS >

## [INTELLIGENT KEY SYSTEM]

А

В

С

D

Е

F

G

Н

J

DLK

L

Μ

Ν

# INTELLIGENT KEY SYSTEM

### < DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY SYSTEM							
Connector No. M67	Connector No.	lo. M104	51	٣		Connector No.	o. M118
Connector Name UNIFIED METER AND A/C AMP.	Connector Name	ame REMOTE KEYLESS ENTRY RECEIVER	55 56	≥ @		Connector Name	ame BCM (BODY CONTROL MODULE)
Connector Type TH32FW-NH	Connector T	Connector Type JAB04FB	57	ι <sub>α</sub>		Connector Ty	Connector Type M03FB-LC
			H	υ			
				SHIELD	1		
K			60 64	> 9			C 7
			62	2 88		Ę	
	N.H.	1 2 4	3 5	<u>.</u>	,		
20 00 00 00 10 00 00 10			64	, g			]
			65	m			
Terminal Color Of	Terminal Co	Color Of	99	œ	,	Terminal Col	Color Of
Wire Signal Nar	No.	N IBUSIC		W		No. V	Wire Signal Name (Specification)
V ACC PO	+	BG GROUND		SHIELD		-	
ũ.	+	Y SIGNAL OUTPUT	69	>>		~ ~	W POWER WINDOW POWER SUPPLY(BAT)
2	4		2 7	- 40		n	
44 LG IN-VEHICLE SENSOR SIGNAL 45 P AMRIENT SENSOR SIGNAL			1/	8≥			
. g	Connector No.	6. M117	73	: 0		Connector No.	o. M119
G EXHAUST GAS / OUTSIDE			75	M			
U	Connector Name	ame WIRE TO WIRE	80	>		Connector Name	ame BCM (BODY CONTROL MODULE)
Y BATTERY	Connector Type	ype TH80MW-CS16-TM4	81	SB		Connector Type	/pe NS16FW-CS
B 0			82	~			
			83	Ь	•		
W BRAKE FLUID LE			84	В			
58 BR FUEL LEVEL SENSOR GROUND			85	L			
$\downarrow$	Ť		86	g.	,	S H	11 13 14 15 17 18 19
_			87	_ (			
61 BK AMBIENI SENSOK GROUND 62 CP CLINI OAD CENSOD CPOLIND			88	r >			
	Torminal Color Of	Acr Of	6	, <sub>(</sub>		Torminol Col	Color Of
F	No.	Wire Signal Name [Specification]	94	0 0		No.	Wire Signal Name [Specification]
× ۲	-	-	95	N		4	LG INTERIOR ROOM LAMP POWER SUPPLY
70 R EACH DOOR MOTOR POWER SUPPLY	2		96	σ		ß	L PASSENGER DOOR UNLOCK OUTPUT
8	e	GR -	26	7	,	2	Y STEP LAMP CONT
72 P CAN-L	4	SB -	98	BR		80	V ALL DOOR, FUEL LID LOCK OUTPUT
	7	- 	66	۵	- [Without BOSE audio]	<b>б</b>	G DRIVER DOOR, FUEL LID UNLOCK OUTPUT
	10	M	66	^	- [With BOSE audio]	10	BR REAR DOOR UNLOCK OUTPUT
	15	SB -	100	L	- [Without BOSE audio]	11	R BAT (FUSE)
	16	V -	100	SB	<ul> <li>[With BOSE audio]</li> </ul>	13	-
		BR -				14	W PUSH-BUTTON IGNITION SW ILL GND
		BR -				15	
	+	LG -				┥	
	28	-					BG TURN SIGNAL LH (FRONT)
	29	· ·				19	V INT ROOM LAMP CONT
		-					

JRKWC3210GB

### < DTC/CIRCUIT DIAGNOSIS >

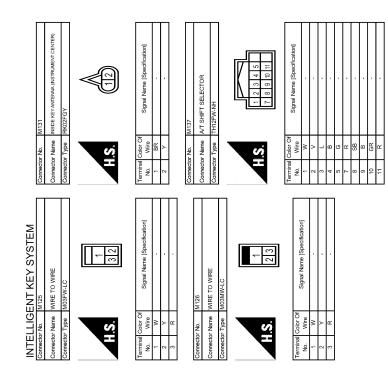
# INTELLIGENT KEY SYSTEM

## [INTELLIGENT KEY SYSTEM]

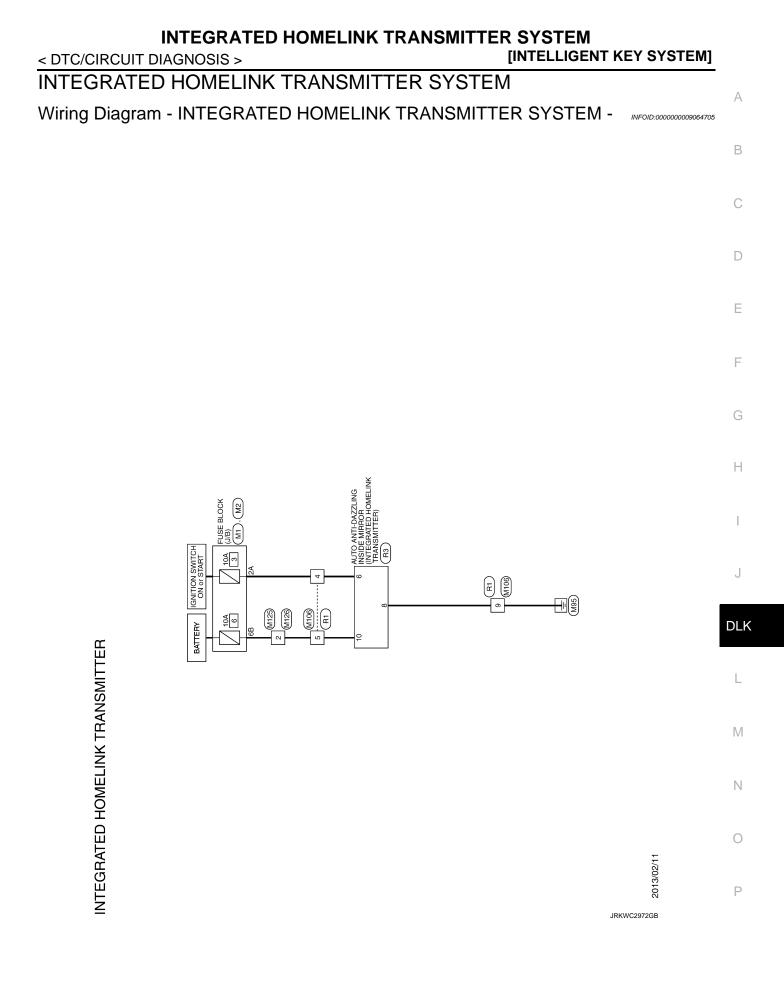
	А
SE audio) SE audio) SE audio) SE audio)	В
M124         WIRE TO WIRE         FH00MW-CS MRE         Preprint         Stgrat Name (Specification)         - (With BOSE audio)	С
Connector No.         Nonector Name           Connector Name         Connector Name           Connector Name         Connector Name           Connector Name         Connector Name           No.         Write           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           1         P           2         S           3         P           3         P           4         P           4         P           5         P           5         P           5         P	D
MODULE) MODULE	E
	F
Connector No.         M123           Connector Name         ECM (BC)           Connector Name         ECM (BC)           Connector Name         ECM (BC)           Connector Name         ECM (BC)           Timinal         Name	G
	Н
If Rol, Modolut, E       If Rol, North, F       If Rol, Rol, Rol, Rol, Rol, Rol, Rol, Rol,	I
	J
Connector Nu         Connector Num           Connector Num         Connector Num           Connector Type         Num           73         Cunector Type           91         L           92         L           93         Y           99         C           100         G           101         LG           102         LG           103         Y           103         LG           103         LG           103         LG           103         LG           103         LG           104         T	DLK
TEM MODULE) MO	L
ENT KEY SYSTEM MI20 RM 201 RM 201	M
INTELLICENT KEY SYSTEM       Connector Na.     M.120       Connector Name     KM.120       Connector Name     SIZPW.CS       Connector Name     Connector Name       Signal Name (Specification)       Signal Name (Specification)       Signal Name       Connector Name       Connector Name       Signal Name (Specification)       Connector Name       Connector Name       Connector Name       Connector Name       Signal Name (Specification)       Signal Name (Specification) <td>Ν</td>	Ν

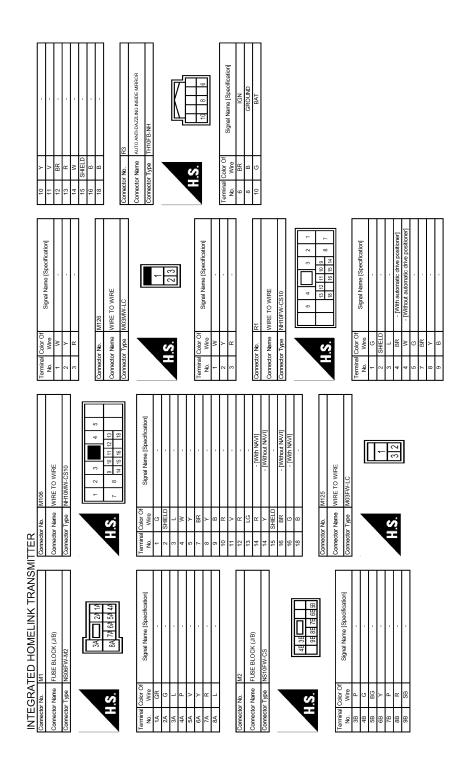
JRKWC3211GB

Ο



JRKWC3212GB





JRKWC3213GB

**ECU DIAGNOSIS INFORMATION** 

BCM (BODY CONTROL MODULE)

# **Reference Value**

## VALUES ON THE DIAGNOSIS TOOL

### NOTE:

С The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

#### CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
	Other than front wiper switch HI	Off
FR WIPER HI	Front wiper switch HI	On
	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
	Other than front wiper switch HI           Front wiper switch LO           Front wiper switch LO           Front wiper switch CO           Front washer switch OFF           Front washer switch ON           Other than front wiper switch INT           Front wiper switch INT           Front wiper switch INT           Front wiper is not in STOP position           Front wiper is not in STOP position           Front wiper is in STOP position           Viper intermittent dial is in a dial position 1 - 7           Other than rear wiper switch ON           Rear wiper switch OFF           Rear washer switch ON           Rear and the store switch ON           Rear and the store switch ON           Rear and the store store of the st	Off
FR WASHER SW	Front washer switch ON	On
	Other than front wiper switch HI         Front wiper switch HI         Other than front wiper switch LO         Front wiper switch OFF         Front washer switch ON         Other than front wiper switch INT         Front washer switch ON         Other than front wiper switch INT         Front wiper switch INT         Front wiper is not in STOP position         Front wiper is in STOP position         Viper intermittent dial is in a dial position 1 - 7         Other than rear wiper switch ON         Rear wiper switch ON         Other than rear wiper switch INT         Rear wiper switch ON         Rear wiper is in STOP position         Rear wiper is not in STOP position         Other than turn signal switch RH         Turn signal switch RH         Other than turn signal switch LH         Other than lighting switch 1ST and 2ND         Lighting switch 1ST or 2ND         Other than lighting switch 2ND         Lighting switch 2ND         Other than lighting switch 2ND <td>Off</td>	Off
	Front wiper switch INT	On
	Front wiper is not in STOP position	Off
-R WIPER STOP	Front wiper is in STOP position	On
NT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
	Other than rear wiper switch ON	Off
FR WIPER INT FR WIPER STOP INT VOLUME RR WIPER ON RR WIPER INT RR WASHER SW RR WIPER STOP TURN SIGNAL R TURN SIGNAL L	Rear wiper switch ON	On
	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
	Rear wiper is in STOP position	Off
KR WIPER STOP	Rear wiper is not in STOP position	On
	Other than turn signal switch RH	Off
I URIN SIGINAL R	Turn signal switch RH	On
	Other than turn signal switch LH	Off
I URIN SIGNAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAIVIP SVV	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On

INFOID:000000009345021 В

А

### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status		
FR FOG SW	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		
DOOR SW-DR	Driver door closed	Off		
DOOK SW-DK	Driver door opened	On		
DOOR SW-AS	Passenger door closed	Off		
DOOR SW-AS	Passenger door opened	On		
DOOR SW-RR	Rear RH door closed	Off		
DOOK SW-KK	Rear RH door opened	On		
DOOR SW-RL	Rear LH door closed	Off		
JOOR SW-RL	Rear LH door opened	On		
	Driver door closed Driver door opened Passenger door closed Passenger door opened Rear RH door closed Rear RH door opened Rear LH door closed	Off		
DOOR SW-BK	Back door opened	On		
CDL LOCK SW	NOTE:         The item is indicated, but not monitored.         Driver door closed         Driver door opened         Passenger door closed         Passenger door opened         Rear RH door opened         Rear RH door opened         Rear RH door opened         Rear LH door opened         Back door opened         Back door opened         Back door opened         Back door opened         Other than power door lock switch LOCK         Power door lock switch LOCK         Power door lock switch UNLOCK         Power door lock switch UNLOCK         Other than power door lock switch UNLOCK         Power door lock switch UNLOCK         Other than driver door key cylinder LOCK position         Driver door key cylinder UNLOCK position         NOTE:       The	Off		
JDL LOCK SW	Power door lock switch LOCK			
	Other than power door lock switch UNLOCK	Off		
CDL UNLOCK SW	Power door lock switch UNLOCK	On		
	Other than driver door key cylinder LOCK position	Off		
KEY CYL LK-SW	Driver door key cylinder LOCK position	On		
	Other than driver door key cylinder UNLOCK position	Off		
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On		
KEY CYL SW-TR	-	Off		
	Hazard switch is OFF	Off		
HAZARD SW	Hazard switch is ON	On		
REAR DEF SW	-	Off		
TR CANCEL SW		Off		
	The item is indicated, but not monitored.         Driver door closed         Passenger door closed         Passenger door opened         Rear RH door closed         Rear RH door closed         Rear RH door opened         Rear RH door opened         Rear LH door closed         Rear LH door closed         Rear LH door opened         Back door opened         Back door opened         Other than power door lock switch LOCK         Power door lock switch UNLOCK         Other than power door lock switch UNLOCK         Power door lock switch UNLOCK         Other than driver door key cylinder LOCK position         Driver door key cylinder UNLOCK position         Driver the time is indicated, but not monitored.         Hazard switch is OFF         Hazard switch is OFF         The item is indicated, but not monitored.	Off		
TR/BD OPEN SW	While the back door opener switch is turned ON	On		
TRNK/HAT MNTR		Off		
REVERSE SW		Off		
	LOCK button of the key is not pressed	Off		
RKE-LOCK	LOCK button of the key is pressed	On		
	UNLOCK button of the key is not pressed	Off		
RKE-UNLOCK	UNLOCK button of the key is pressed	On		
RKE-TR/BD	-	Off		
	PANIC button of the key is not pressed	Off		
RKE-PANIC		On		
		Off		
RKE-P/W OPEN	UNLOCK button of the key is pressed and held	On		

# < ECU DIAGNOSIS INFORMATION >

## [ÍNTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status		
KE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneous- ly	Off		
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On		
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V		
JPHCAL SENSOR	Dark outside of the vehicle	Close to 0 V		
	Driver door request switch is not pressed	Off		
	Driver door request switch is pressed	On		
	Passenger door request switch is not pressed	Off		
	Passenger door request switch is pressed	On		
REQ SW -RR	<b>NOTE:</b> The item is indicated, but not monitored.	Off		
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off		
REQ SW -BD/TR Back door request switch is not pressed Back door request switch is pressed		Off		
CU SW -BU/IK	NOTE:         The item is indicated, but not monitored.         NOTE:         The item is indicated, but not monitored.         Back door request switch is not pressed			
Q SW -DR       Driver door request switch is pressed         Q SW -AS       Passenger door request switch is not pressed         Q SW -RR       NOTE: The item is indicated, but not monitored.         Q SW -RL       NOTE: The item is indicated, but not monitored.         Q SW -RL       NOTE: The item is indicated, but not monitored.         Q SW -BD/TR       Back door request switch is not pressed         Back door request switch is pressed       Back door request switch is pressed         SH SW       Push-button ignition switch (push switch) is not pressed         SH SW       Push-button ignition switch (push switch) is pressed         V RLY2 -F/B       NOTE: The item is indicated, but not monitored.         VC RLY -F/B       NOTE: The item is indicated, but not monitored.         JCH SW       NOTE: The item is indicated, but not monitored.         AKE SW 1       The brake pedal is depressed when No. 7 fuse is blown The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal         AKE SW 2       The brake pedal is not depressed         TE/CANCL SW       Selector lever in P position         Selector lever in any position other than P       Selector lever in any position other than P         TPN/N SW       Selector lever in P or N position         -LOCK       NOTE: The item is indicated, but not monitored.		Off		
001300	Push-button ignition switch (push switch) is pressed	On		
GN RLY2 -F/B		Off		
ACC RLY -F/B		Off		
CLUCH SW	-	Off		
	The brake pedal is depressed when No. 7 fuse is blown	Off		
BRAKE SW 1		On		
	The brake pedal is not depressed	Off		
STARE SW 2	The brake pedal is depressed	On		
ETE/CANCL SW/	Selector lever in P position	Off		
	Selector lever in any position other than P	On		
SET PN/N SW	Bright outside of the vehicle           Dark outside of the vehicle           Driver door request switch is not pressed           Passenger door request switch is not pressed           Passenger door request switch is pressed           Passenger door request switch is pressed           Passenger door request switch is pressed           NOTE:           The item is indicated, but not monitored.           NOTE:           The item is indicated, but not monitored.           Back door request switch is not pressed           Back door request switch is pressed           Push-button ignition switch (push switch) is not pressed           Push-button ignition switch (push switch) is pressed           Push-button ignition switch (push switch) is pressed           NOTE:           The item is indicated, but not monitored.           NOTE:           The item is indicated, but not monitored.           NOTE:           The item is indicated, but not monitored.           NOTE:           The brake pedal is not depressed when No. 7 fuse is blown or No. 7 fuse is blown or No. 7 fuse is normal           The brake pedal is not depressed           Selector lever in P position           Selector lever in any position other than P           Selector lever in any position other than P           Selecto	Off		
	Selector lever in P or N position	On		
S/L -LOCK		Off		
S/L -UNLOCK	-	Off		
S/L RELAY-F/B		Off		
JNLK SEN -DR	Driver door is unlocked	Off		
	Driver door is locked	On		
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off		
	Push-button ignition switch (push-switch) is pressed	On		
GN RLY1 -F/B	Ignition switch in OFF or ACC position	Off		
	Ignition switch in ON position	On		
DETE SW -IPDM	Selector lever in any position other than P	Off		
	Selector lever in P position	On		
SFT PN -IPDM	Selector lever in any position other than P and N	Off		
	Selector lever in P or N position	On		

Revision: 2013 March

**DLK-137** 

### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
SFT IN -IVIET	Selector lever in N position	On
	Engine stopped	Stop
	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	<b>NOTE:</b> The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	<b>NOTE:</b> The item is indicated, but not monitored.	Off
S/L RELAY-REQ	<b>NOTE:</b> The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	<b>NOTE:</b> The item is indicated, but not monitored.	Reset
	The key is not inserted into key slot	Off
KEY SW -SLOT	The key is inserted into key slot	On
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	<b>NOTE:</b> The item is indicated, but not monitored.	_
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the fourth key ID reg- istered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done

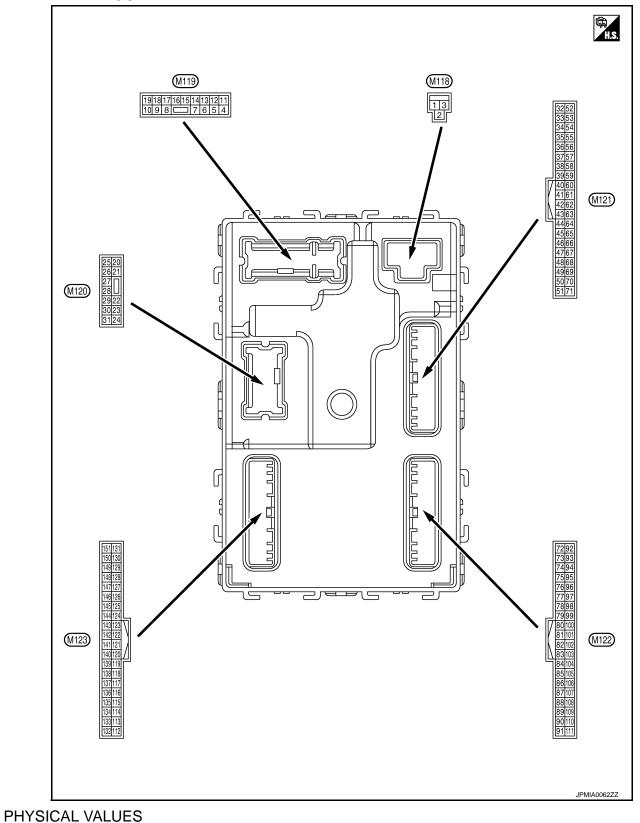
# < ECU DIAGNOSIS INFORMATION >

## [ÍNTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status		
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet		
CONFIRMIDZ	The key ID that the key slot receives accords with the second key ID reg- istered to BCM.	Done		
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet		
CONFIRMIDI	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done		
TP 4	The ID of fourth key is not registered to BCM	Yet		
IP 4	The ID of fourth key is registered to BCM	Done		
	The ID of third key is not registered to BCM	Yet		
TP 3	The ID of third key is registered to BCM The ID of second key is not registered to BCM			
TP 2	The ID of second key is not registered to BCM The ID of second key is registered to BCM	Yet		
1P 2	The ID of second key is registered to BCM	Done		
TD 1	The ID of first key is not registered to BCM	Yet		
	The ID of first key is registered to BCM	Done		
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire		
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire		
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire		
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire		
	ID of front LH tire transmitter is registered	Done		
ID REGOI FLI	The ID of first key is not registered to BCM The ID of first key is registered to BCM Ignition switch ON (Only when the signal from the transmitter is received Ignition switch ON (Only when the signal from the transmitter is received Ignition switch ON (Only when the signal from the transmitter is received Ignition switch ON (Only when the signal from the transmitter is received Ignition switch ON (Only when the signal from the transmitter is received Ignition switch ON (Only when the signal from the transmitter is received ID of front LH tire transmitter is registered ID of front LH tire transmitter is not registered ID of front RH tire transmitter is not registered ID of front RH tire transmitter is not registered	Yet		
AIR PRESS FL       Ignition switch ON         AIR PRESS FR       Ignition switch ON         AIR PRESS RR       Ignition switch ON         AIR PRESS RL       Ignition switch ON         AIR PRESS RL       Ignition switch ON         ID REGST FL1       ID of front LH tire         ID REGST FR1       ID of front RH tire         ID of front RH tire       ID of front RH tire	ID of front RH tire transmitter is registered	Done		
ID REGST FR1		Yet		
	ID of rear RH tire transmitter is registered	Done		
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet		
	ID of rear LH tire transmitter is registered	Done		
D REGST RL1	ID of rear LH tire transmitter is not registered	Yet		
	Tire pressure indicator OFF	Off		
WARNING LAMP	Tire pressure indicator ON	On		
	Tire pressure warning alarm is not sounding	Off		
BUZZER	Tire pressure warning alarm is sounding	On		

0

## **TERMINAL LAYOUT**



### < ECU DIAGNOSIS INFORMATION >

Terminal No. Description				Value			
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage	
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage	
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage	
4		Interior room lamp			battery saver is activated. oom lamp power supply)	0 V [	
4 (LG)	Ground	power supply	Output	Interior room lamp battery saver is not activat- ed. (Outputs the interior room lamp power supply)		Battery voltage	
5	Ground	Passenger door UN-	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage	
(L)	Giouna	LOCK	Output	Fassenger door	Other than UNLOCK (Actuator is not activated)	0 V	
7	Ground	Step lamp	Output	Step lamp ON		0 V	
(Y)	Cround		Output		OFF	Battery voltage	
8	Ground	All doors, fuel lid		All doors	LOCK (Actuator is activated)	Battery voltage	
(V)	(V) Glound LOCK	Output		Other than LOCK (Actuator is not activated)	0 V		
9	Ground	Driver door, fuel lid	uel lid Output	Quitout	put Driver door	UNLOCK (Actuator is activated)	Battery voltage
(G)	Cround	UNLOCK			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 DL	
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage	
13 (B)	Ground	Ground	—	Ignition switch ON		0 V	
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V NOTE: When the illumination brighten- ing/dimming level is in the neutral position (V) 10 0 0 2 ms JSNIA0010GB	
15	Ground	ACC indicator lamp	Output	Ignition switch	OFF or ON	Battery voltage	
(Y)				<u> </u>	ACC	0 V	

### < ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value	
(Wire c	color) –	Signal name	Input/ Output		Condition	(Approx.)	
					Turn signal switch OFF	0 V	
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 0 15 15 15 15 15 15 15 15 15 15	
					Turn signal switch OFF	0 V	
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 0 1 s 0 FKID0926E 6.5 V	
19	Ground	Room lamp timer	Output	Interior room	OFF	Battery voltage	
(V)	Ground	control	Output	lamp	ON	0 V	
					Turn signal switch OFF	0 V	
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 0 1 1 1 1 1 1 1 1 1 1	
23	Crownd	Daale daar anan	Output	Dool door	OPEN (Back door opener actuator is activated)	Battery voltage	
(G) (	Ground	Back door open	Output	Back door	Other than OPEN (Back door opener actuator is not activated)	0 V	
					Turn signal switch OFF	0 V	
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s FKID0926E 6.5 V	
26	Ground	Boor wipor	Outout	Poor winer	OFF (Stopped)	0 V	
	Ground	Rear wiper	Output	Rear wiper	ON (Operated)	Battery voltage	

### < ECU DIAGNOSIS INFORMATION >

	inal No.						
(Wire +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	A
34	Ground	Luggage room anten-	Outout	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(SB)			OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 s JMKIA0063GB	E	
35	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	G H I
(V)	(V) Ground na (+)	Gupu	OFF	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1	J DLK L
38	Ground	Back door antenna (-	Output	When the back door opener re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M
(B)	(B) Ground ) Output	) quest switch is operated with ig- nition switch OFF W ir	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB	O P		

### < ECU DIAGNOSIS INFORMATION >

(Intersector)       Signal name       Input       Condition       (Approx.)         *       -       Signal name       Output       When Intelligent Key is in the antenna detection area       (V)       (V) <th colspan="2">Terminal No.</th> <th colspan="2">Description</th> <th colspan="2"></th> <th colspan="2">Value</th>	Terminal No.		Description				Value		
39 (W)       Ground       Back door antenna (+)       Output       When the back door opener re- quest switch OFF       When Intelligent Key is in the antenna detection area       Image: Comparison of the system operated with ig- intion switch OFF         47 (Y)       Ground       Ignition relay (IPDM E/R) control       Output       Ignition switch OFF       OFF or ACC       Battery voltage         52 (SB)       Ground       Ignition relay control       Output       Ignition switch ON       OFF or ACC       Battery voltage         60 (BR)       Ground       Starter relay control       Output       Ignition switch ON       OFF or ACC       Battery voltage         60 (BR)       Ground       Push-button ignition switch (Push switch)       Input       Push-button igni- switch)       Pressed       0 V         61 (W)       Ground       Back door opener re- quest switch       Input       Back door opener re- quest switch       ON (Pressed)       0 V         61 (W)       Ground       Back door opener re- quest switch       Input       Back door opener re- quest switch       OV (Pressed)       0 V		e color) -	Signal name			Condition	Value (Approx.)		
(W)       (*)       (	39 Grant Back door antenna		Back door antenna	Output	door opener re-				
47       Ground       Ignition ready (if Difficulty (if Diffic	(W)	Clound	(+)	Guiput	quest switch is operated with ig- nition switch OFF	in the antenna detection			
(Y)       Ground       E/R) control       Output       Ignition switch ON       ON       0 V         52 (SB)       Ground       Starter relay control       Output       Ignition switch ON       When selector lever is in P or N position       Battery voltage         60 (BR)       Ground       Push-button ignition switch (Push switch)       Input       Push-button ignition tion switch (push switch)       Pressed       0 V         61 (W)       Ground       Push-button opener request switch       Input       Push-button opener request switch       ON (Pressed)       0 V         61 (W)       Ground       Back door opener request switch       Input       Back door opener request switch       OFF (Not pressed)       0       V         61 (W)       Intelligent Key warn-       Intelligent Key       Sounding       0 V       V       V	47	<u> </u>	Ignition relay (IPDM	<b>.</b>		OFF or ACC	Battery voltage		
52 (SB)     Ground     Starter relay control     Output     Ignition switch ON     or N position     or N position     Battery voltage       60 (BR)     Ground     Push-button ignition switch (Push switch)     Input     Push-button ignition switch (push switch)     Pressed     0 V       61 (W)     Ground     Back door opener re- quest switch     Input     Push-button igni- tion switch (push switch)     ON (Pressed)     0 V       61 (W)     Ground     Back door opener re- quest switch     Input     Back door opener request switch     OFF (Not pressed)     0 V       61 (W)     Intelligent Key warn-     Intelligent Key     Intelligent Key     Sounding     0 V	(Y)	Ground		Output	Ignition switch	ON	0 V		
(SB)       Ground       Push-button ignition switch (Push switch)       Input       Push-button ignition switch (push switch)       Pressed       0 V         60 (BR)       Ground       Push-button ignition switch (Push switch)       Input       Push-button ignition switch (push switch)       Pressed       0 V         61 (W)       Ground       Back door opener request switch       Input       Back door opener request switch       ON (Pressed)       0 V         61 (W)       Ground       Back door opener request switch       Input       Back door opener request switch       OFF (Not pressed)       0         62       Intelligent Key warn-       Intelligent Key       Sounding       0 V	52	52	0	Onerred			Ignition switch		Battery voltage
60 (BR)       Ground       Push-button ignition switch (Push switch)       Input       tion switch (push switch)       Not pressed       Battery voltage         61 (W)       Ground       Back door opener re- quest switch       Input       Back door opener request switch       ON (Pressed)       0 V         61 (W)       Ground       Back door opener re- quest switch       Input       Back door opener request switch       OFF (Not pressed)       0 <sup>15</sup> 0       0 <sup>15</sup> 0         64       Intelligent Key warn-       Intelligent Key       Sounding       0 V	(SB)	Ground	Starter relay control Output		ON		0 V		
(BR)       Ground       switch (Push switch)       Input       tion switch (push switch)       Not pressed       Battery voltage         61       Ground       Back door opener request switch       Input       Back door opener request switch       ON (Pressed)       0 V         61       (W)       Ground       Back door opener request switch       Input       Back door opener request switch       OFF (Not pressed)       0 V         64       Intelligent Key warn-       Intelligent Key       Sounding       0 V	60		Push-button ignition			Pressed	0 V		
61 (W)       Ground       Back door opener request switch       Input       Back door opener request switch       OFF (Not pressed)       Imput 10 ms		Ground		Input		Not pressed	Battery voltage		
61 (W)       Ground       Back door opener request switch       Input       Back door opener request switch       OFF (Not pressed)          15         15         10         0         0						ON (Pressed)	0 V		
		Ground		Input		OFF (Not pressed)	15 10 5 10 ms JPMIa0016GB		
	64	Cround		Outout		Sounding	0 V		
O4 (V)Ground ing buzzer (Engine room)Output Vwarning buzzer (Engine room)Not soundingBattery voltage		Ground		Output		Not sounding	Battery voltage		
65 (BG)     Ground     Rear wiper stop posi- tion     Input     Rear wiper     In stop position     In stop position		Ground		Input	Rear wiper	In stop position	15 10 5 10 ms JPMIa0016GB		
Not in stop position 0 V						Not in stop position	0 V		

#### < ECU DIAGNOSIS INFORMATION >

[ÍNTELLIGENT KEY SYSTEM]

round	Signal name Back door switch	Input/ Output	Back door switch	Condition OFF (Door close) ON (Door open)	Value (Approx.)
	Back door switch	Input	Back door switch		15 0 0 10 ms JPMIA0011GB 11.8 V
round				ON (Door open)	
round					0 V
round				Pressed	0 V
	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0
					10 ms JPMIA0011GB 11.8 V
round	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	(V) 15 10 10 ms JPMIA0011GB 11.8 V
				ON (Door open)	0 V
round	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	(V) 15 10 5 10 10 ms JPMIA0011GB 11.8 V
				ON (Door open)	0 V
ro	und	und Rear LH door switch	und Rear LH door switch Input		und Boar I H door switch Input Rear LH door OFF (Door close)

0

#### < ECU DIAGNOSIS INFORMATION >

	ninal No.	Description				Value
(VVir +	e color)	Signal name	Input/ Output		Condition	(Approx.)
74	Ground	Passenger door an-	Output	When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0062GB
(SB)		tenna (-)		quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1
75		When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 0 0 1 s JMKIA0062GB		
(GR)		tenna (+)		quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB
76	Ground	nd 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 JMKIA0062CB
(V)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 15 15 15 15 15 15 15 15 15 15

#### < ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	٨
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)	A
77	Ground	Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 50 1 s JMKIA0062GB	B C D
(LG)	Ground	(+)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E F G
78	B Room antenna 1	Room antenna 1 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1	H
(Y)	Ground	(Instrument panel)			When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 0 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	J DLK
79	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	M
(BR)		(Instrument panel)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 15 0 15 0 15 0 15 15 15 15 15 15 15 15 10 15 15 15 10 15 15 15 15 15 15 15 15 15 15 15 15 15	P

#### < ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
+	e color) -	Signal name	Input/ Output		Condition	(Approx.)
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82	Ground	Ignition relay [Fuse	Output	Ignition switch	OFF or ACC	0 V
(R)	Cround	block (J/B)] control	Output	ON		Battery voltage
83	Ground	Remote keyless entry receiver communica-				(V) 15 10 10 10 10 10 10 10 10 10 10
(Y)	(Y) Ground receiver communica- tion Output		When operating e	ither button on the key	(V) 15 10 50 10 10 10 10 10 10 10 10 10 1	

#### < ECU DIAGNOSIS INFORMATION >

[ÍNTELLIGENT KEY SYSTEM]

	inal No.	Description				Value	^
(VVir +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMA0041GB 1.4 V	B C D
87		Combination switch		Combination	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 0 2 ms 1.3 V	E
(BR)		INPUT 5	NPUT 5	switch	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0039GB 1.3 V	G
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 0 2 ms JPMIA0040GB 1.3 V	J DLK

 $\mathbb{N}$ 

Ν

0

#### < ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
				Combination switch	Lighting switch HI (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V
88 (V)	Ground	Combination switch INPUT 3	Input		Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 2 ms JPMIA0040GB 1.3 V
90 (P)	Ground	CAN-L	Input/ Output	_		_
91 (L)	Ground	CAN-H	Input/ Output			_

#### < ECU DIAGNOSIS INFORMATION >

Term	inal No.	Description					
(Wire +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	A
					OFF	Battery voltage	_
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 0 1 s JPMIA0015GB 6.5 V	B C D
					ON	0 V	Е
93	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage	
(V)	Ciouna		Output	ignition switch	ON	0 V	
94	Ground	Puddle lamp control	Output	Puddle lamp	OFF	Battery voltage	F
(Y)	Giounu		Output		ON	0 V	
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V	0
(BG)	Giouna	ACC relay control	Output	Ignition switch	ACC or ON	Battery voltage	G
96 (GR)	Ground	A/T shift selector (De- tention switch) power supply	Output	_		Battery voltage	Н
99	Ground	Selector lever P posi-	Innut	Selector lever	P position	0 V	
(R)	Ground	tion switch	Input	Selector level	Any position other than P	Battery voltage	1
					ON (Pressed)	0 V	
100 (G)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V	J DLK
					ON (Pressed)	0 V	
101 (SB)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 50 10 ms JPMIA0016GB 1.0 V	M N O
102		Plower for motor re			OFF or ACC	0 V	0
102 (BG)	Ground	Blower fan motor re- lay control	Output	Ignition switch	ON	Battery voltage	
103 (LG)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OF		Battery voltage	Ρ

#### < ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description		Condition		Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 0 5 0 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 0 2 ms JPMIA0037GB 1.3 V
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 0 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 1
					Front wiper switch LO	(V) 15 0 2 ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 0 2 ms JPMIA0039GB 1.3 V

#### < ECU DIAGNOSIS INFORMATION >

[ÍNTELLIGENT KEY SYSTEM]

	inal No.	Description				Value	٨
(VVir +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C D
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	F
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V	G H I
					Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	J
					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 <i>y</i> <i>y</i> <i>y</i> <i>y</i> <i>y</i> <i>y</i> <i>y</i> <i>y</i> <i>y</i> <i>y</i>	M
						1.3 V	0

Ρ

#### < ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch PASS	(V) 15 0 2 ms JPMIA0037GB 1.3 V
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch INT	(V) 15 0 2 ms JPMIA0038GB 1.3 V
					Front wiper switch HI	(V) 15 0 2 ms JPMIA0040GB 1.3 V
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V

#### < ECU DIAGNOSIS INFORMATION >

	inal No.	Description					-
(Wire +	e color) -	Signal name	Input/ Output		Condition	Value (Approx.)	A
113	Crownd	Ontionlognoor	lasut	Ignition switch	When bright outside of the vehicle	Close to 5 V	В
(P)	Ground	Optical sensor	Input	<b>ON</b>	When dark outside of the vehicle	Close to 0 V	_
116 (SB)	Ground	Stop lamp switch 1	Input	_		Battery voltage	С
		Stop lamp switch 2		Stop lamp switch	OFF (Brake pedal is not depressed)	0 V	D
118	Ground	(Without ICC)	Input		ON (Brake pedal is de- pressed)	Battery voltage	
(P)	Cround	Stop lamp switch 2	input		OFF (Brake pedal is not de- brake hold relay OFF	0 V	E
		(With ICC)			ON (Brake pedal is de- rake hold relay ON	Battery voltage	F
119 (SB)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 0 10 ms 10 ms JPMIA0012GB 1.1 V	G
					UNLOCK status (Unlock switch sensor ON)	0 V	
121	Ground	Kov clot switch	Innut	When the key is in	nserted into key slot	Battery voltage	-
(BR)	Ground	Key slot switch	Input	When the key is n	ot inserted into key slot	0 V	J
123	Ground	IGN feedback	Innut	Ignition switch	OFF or ACC	0 V	-
(W)	Ground	IGN REEDBACK	Input	Ignition switch	ON	Battery voltage	DLł
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 ••••••	L
					ON (Door open)	JPMIA0011GB 11.8 V 0 V	N
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 0 0 10 ms 10 ms 10.2 V	O
				Ignition switch OFF or ACC			-
				ignition switch OF		Battery voltage	-

#### < ECU DIAGNOSIS INFORMATION >

	inal No.	Description				
(Wire +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)
					ON (Tail lamps OFF)	9.5 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button igni- tion switch illumi- nation	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.
					OFF	0 V
134	Ground	LOCK indicator lamp	Output	LOCK indicator	OFF	Battery voltage
(GR)	Croana		Calput	lamp	ON	0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(Y)	Ground	power supply	Output	Ignition switch	ACC or ON	5.0 V
139	Ground	Tire pressure receiv- er communication	Input/		Standby state	(V) 6 2 0 • • 0.2s OCC3881D
(L)	Ground		Output		When receiving the signal from the transmitter	(V) 6 2 0 + 0.2s OCC3880D
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	Battery voltage
(GR)	Ground	position	Input		Except P and N positions	0 V
					ON	0 V
141 (G)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 10 5 0 1 s JPMIA0014GB 11.3 V
				OF	OFF	Battery voltage
						Battory voltage

#### < ECU DIAGNOSIS INFORMATION >

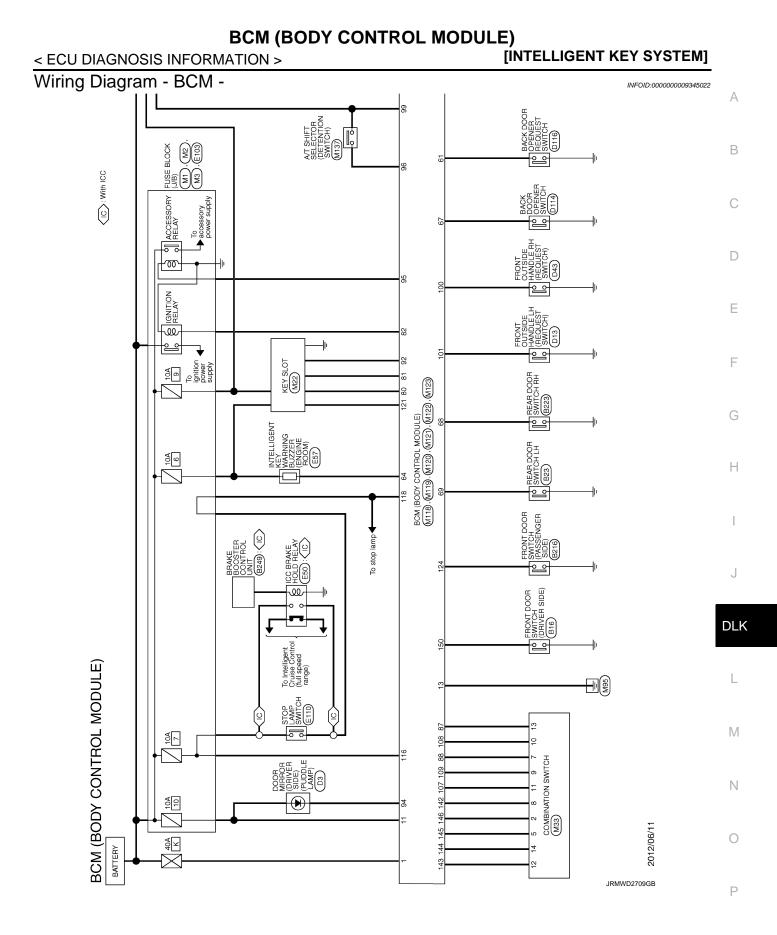
[ÍNTELLIGENT KEY SYSTEM]

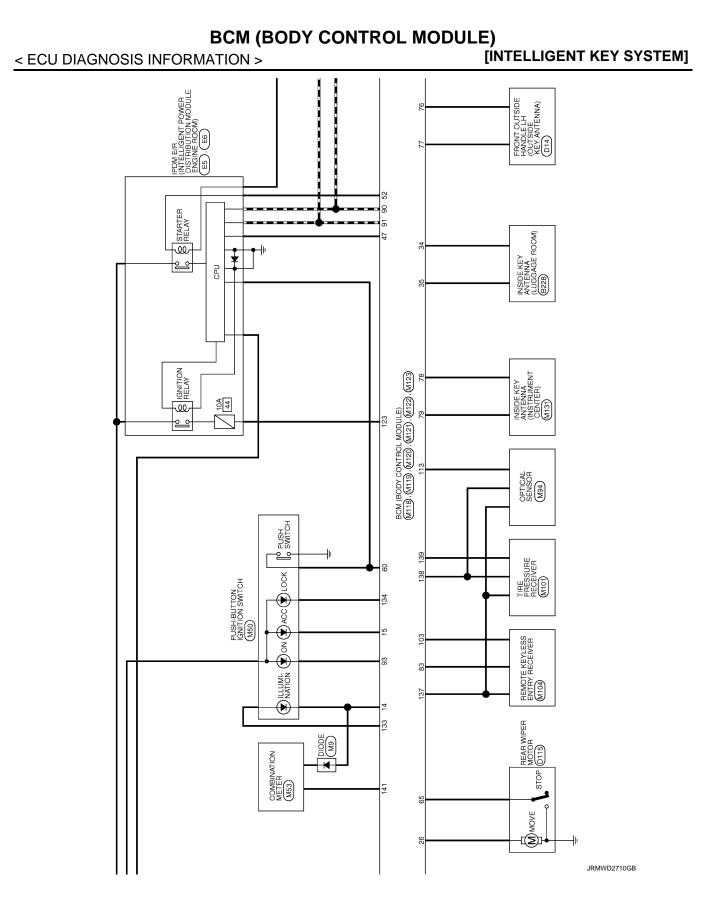
	inal No.	Description				Value	^
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF Lighting switch 1ST	0 V	В
142 (BG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit-	Lighting switch HI Lighting switch 2ND		С
(66)		001-01-3		tent dial 4)	Turn signal switch RH	2 ms JPMIA0031GB	D
					All switches OFF (Wiper intermittent dial 4)	0 V	Е
					Front wiper switch HI (Wiper intermittent dial 4)		_
143	Ground	Combination switch	Output	Combination	Rear wiper switch INT (Wiper intermittent dial 4)		F
(P)	Cround	OUTPUT 1	Output	switch	Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2	5 0 	G
					<ul> <li>Wiper intermittent dial 2</li> <li>Wiper intermittent dial 3</li> <li>Wiper intermittent dial 6</li> <li>Wiper intermittent dial 7</li> </ul>	JPMIA0032GB 10.7 V	Η
					All switches OFF (Wiper intermittent dial 4)	0 V	
					Front washer switch ON (Wiper intermittent dial 4)		
144		Combination switch		Combination	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15	J
(G)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)		DLł
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	2 ms JPMIA0033GB 10.7 V	L
					All switches OFF	0 V	M
					Front wiper switch INT		
145		Combination switch		Combination switch	Front wiper switch LO		Ν
(L)	Ground	OUTPUT 3	Output	(Wiper intermit- tent dial 4)	Lighting switch AUTO	5 0 2 ms JPMIA0034GB	0
						10.7 V	

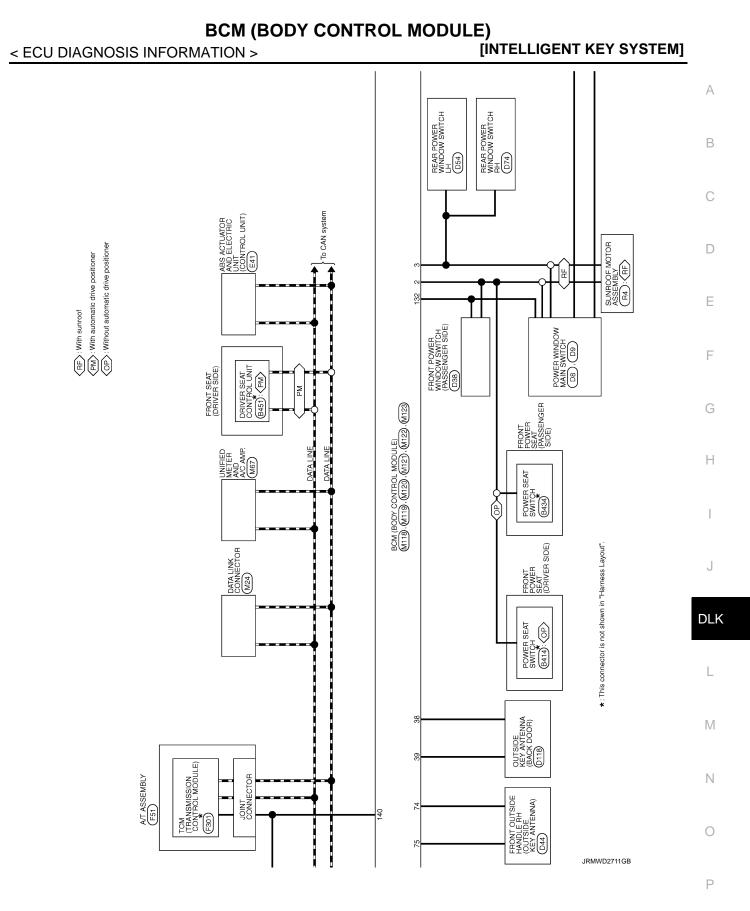
Ρ

#### < ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	0 V
					Front fog lamp switch ON	
				Combination	Lighting switch 2ND	(V) 15
146	Ground	Combination switch	Output	switch	Lighting switch PASS	
(SB)		OUTPUT 4		(Wiper intermit- tent dial 4)	Turn signal switch LH	0 2 ms JPMIA0035GB 10.7 V
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 0 10 10 10 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151	Ground	Rear window defog-	Output	Rear window de-	Active	0 V
(G)	Sicalia	ger relay control	Sarbar	fogger	Not activated	Battery voltage

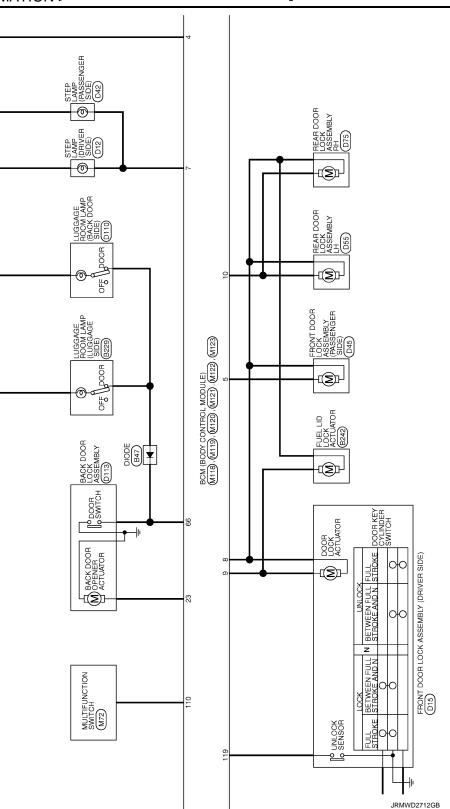


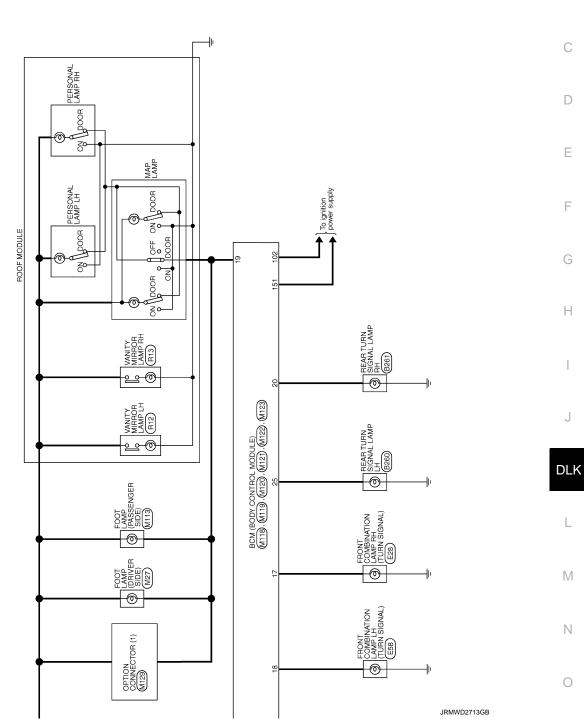




Revision: 2013 March







Ρ

А

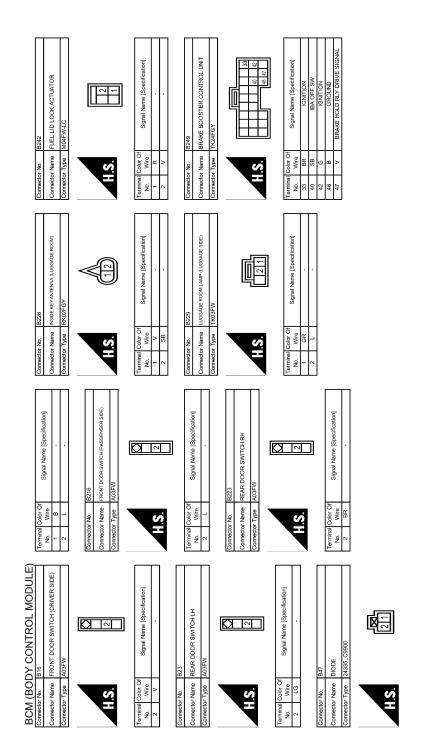
В

Ε

F

J

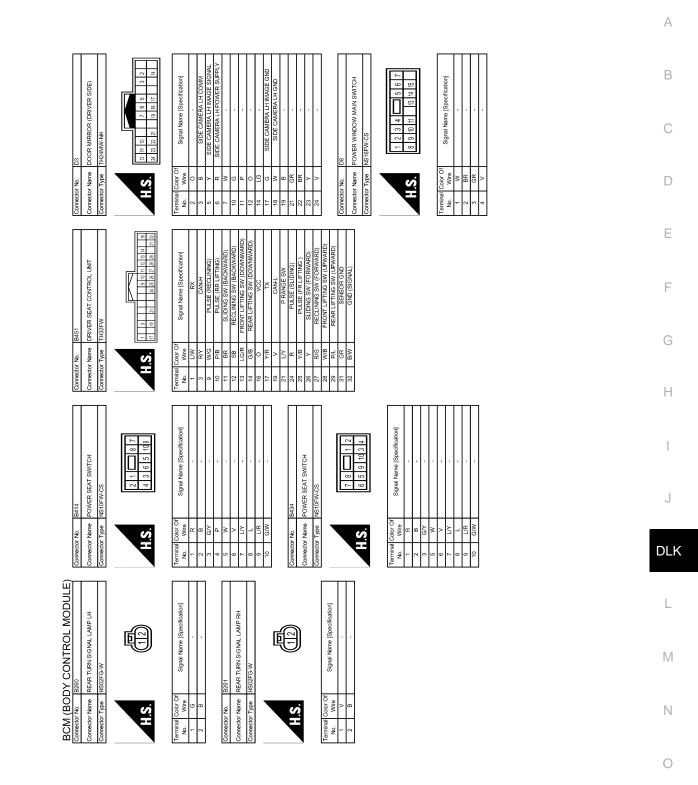
L



JRMWD8153GB

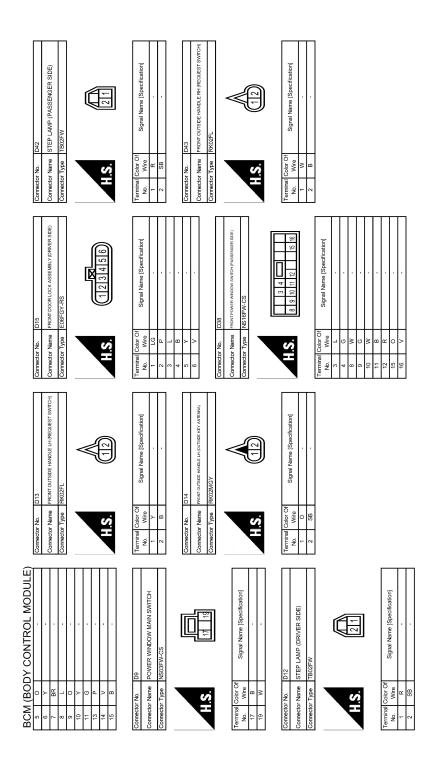
#### < ECU DIAGNOSIS INFORMATION >

### [ÍNTELLIGENT KEY SYSTEM]



JRMWD8154GB

Р



JRMWD8155GB

	A
	В
Omedia     Dito       Corrector Name     LucsAcce       Corrector Name     Signal Name [Specification]       Terminal     Corrector Name       Name     Signal Name [Specification]       Terminal     Corrector Name       Name     Signal Name [Specification]	С
Corrrector Name Corrrector Name Corrrector Name 2 2 2 3 4 4 4 4 8 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	D
	E
P14       REAR POWER WINDOW SWITCH RH       NEODEFW.CS       NEODEFW.CS       Signal Name [Specification]       Signal Name [Specification]       . </td <td>F</td>	F
Connector No. 074 Connector Name Connector Name REA Connector Name REA Name Connector Name Connector Name Connector Name REA Name Connector Name REA Name Connector Name REA Name Connector Name REA Name Connector Name Connector Name REA Name Connector Name Connector Name REA Name Connector Name REA Name Connector Name REA Name Name Name Name Name Name Name Name	G
	Η
P64       REAR POWER WINDOW SWITCHLH       NBGEFW.CS       NGGEFW.CS       Signal Name [Specification]       .   <	I
	J
	DLK
BCM (BODY CONTROL MODULE) Corrector Name Rent Outsie ware in consistent ware in consiste	L
Proceeding of the second of th	Μ
BCM (BOD Connector Name Connector Name Conn	Ν
	0

JRMWD8156GB

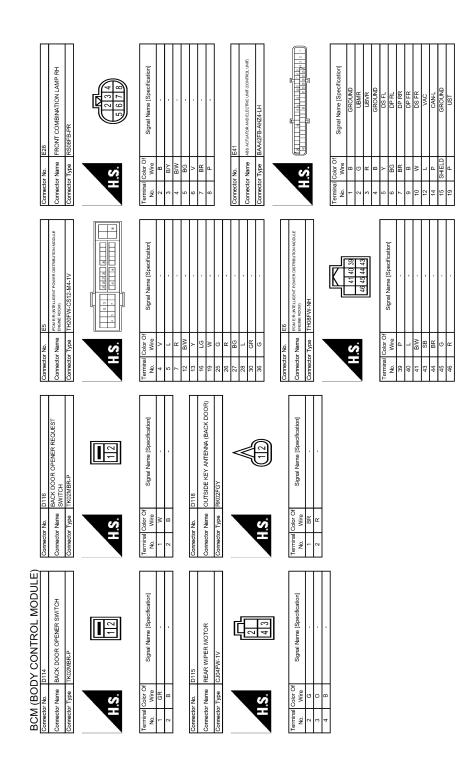
Р

₋K

### < ECU DIAGNOSIS INFORMATION >

#### < ECU DIAGNOSIS INFORMATION >

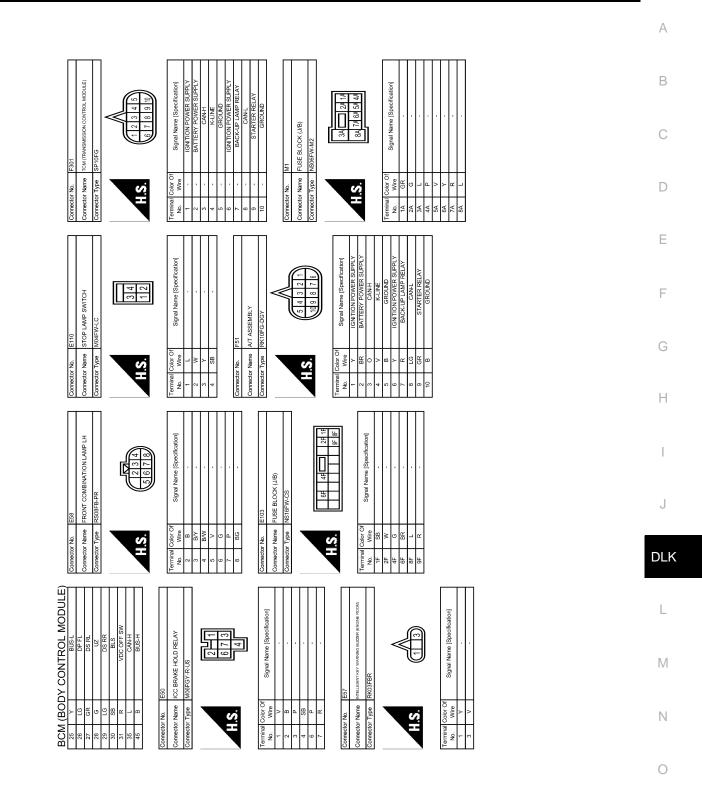
[ÍNTELLIGENT KEY SYSTEM]



JRMWD8157GB

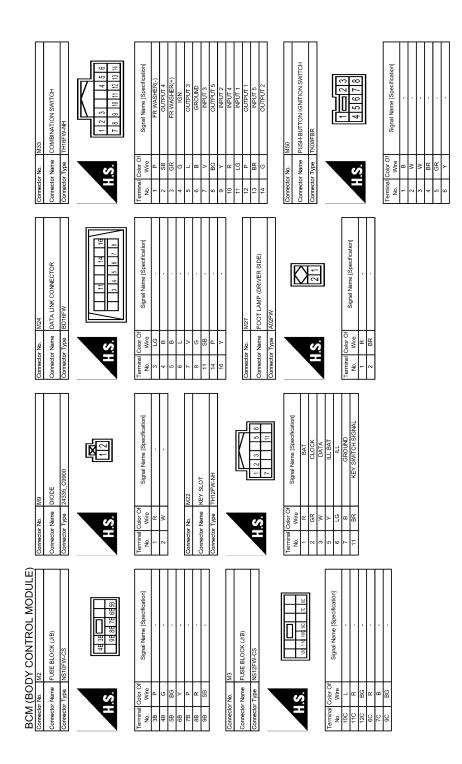
#### < ECU DIAGNOSIS INFORMATION >

### [ÍNTELLIGENT KEY SYSTEM]



JRMWD8158GB

Ρ



JRMWD8159GB

Corrrector No. M101 Connector Name TIRE PRESSURE RECEIVER Connector Type TYONFW	Terminal Onlor Ol     Signal Name [Specification]       no.     vire     GROUND       1     V     BATTERY       2     Corrector Name     RENOTE KEYLESS ENTRY RECEIVER       Corrector Name     RENOTE KEYLESS ENTRY RECEIVER       1     V     Data	
Cometor No. M72 Connector Name MULTIFLAXCITON SWITCH Connector Type THIGFW.NH	Terminal     Color     Signal Name (Specification)       No.     Wr.e     Signal Name (Specification)       1     V     ACC       2     V     NU COMM (L)       1     V     DISK ELECT SIGNAL	
Corrector No. M67 Corrector Name UNIFIED METER AND A/C AMP. Connector Type TH22PVU-NH Connector Type 1424 data data data data data data data dat	Terminal No.         Mine Mine         Sgnal Name [Specification]           41         V         ACC POWER SupPLY           42         Y         FLELLEVIL SERSOR SIGNAL.           43         R         INVERT SERSOR SIGNAL.           44         LG         MABIENT SERSOR SIGNAL.           45         P         MABIENT SERSOR SIGNAL.           46         B         MABIENT SERSOR SIGNAL.           47         G         MABIENT SERSOR SIGNAL.           48         BG         MABIENT SERSOR SIGNAL.           49         G         MABIENT SERSOR SIGNAL.           46         P         AMABIENT SERSOR SIGNAL.           53         G         INVARIS SERSOR SIGNAL.           54         V         BRAKE FLUID LEVEL SERSOR GROUND.           55         B         INTARE SERSOR GROUND.           56         B         SULOND SERSOR GROUND.           51         R         SULOND SERSOR GROUND.           63         R         ECV DORING SERSOR GROUND.           70         R         SULOND SERSOR GROUND.           71         B         AMAIENT SERSOR GROUND.           72         P         GROUND.	
BCM (BODY CONTROL MODULE)	Image: Signal Name Specification)       No.     Signal Name Specification)       No.     Signal Name Specification)       No.     Mine Signal Name Specification)       1     CR     Signal Name Specification)       2     Lide     ComMunications State(LMP)       3     R     Alternation State(LMP)       10     G     ComMunications State(LMP)       11     B     Alternation State(LMP)       12     Lide     ComMunications State(LMP)       13     B     ComMunications State(LMP)       14     B     METER ComMunications State(LMP)       15     B     ComMunications State(LMP)       23     B     ComMunications State(LML)       23     B     ComMunications State(LML)       23     B     ComMunications State(LML)       23     B     Luitum <td></td>	

#### JRMWD8160GB

Р

Ο

## **BCM (BODY CONTROL MODULE)**

< ECU DIAGNOSIS INFORMATION >

[ÍNTELLIGENT KEY SYSTEM]

А

В

С

D

Е

F

G

Н

J

DLK

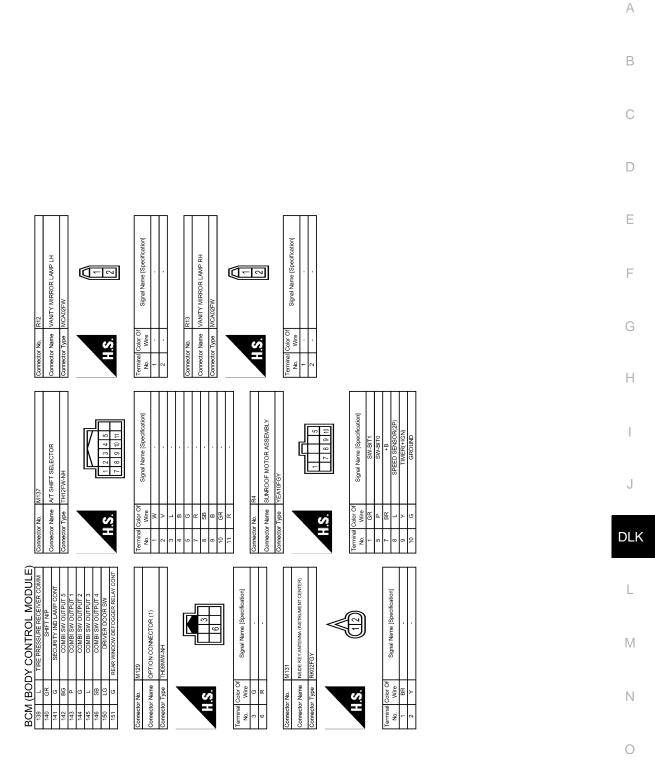
L

Μ

Ν

M119 BCM (BODY CONTROL MODULE) NS16FW-CS
5         7         1         8         9         10           1         13         14         15         17         18         19
Signal Name [Specification] NTERIOR ROOM LAMP POWER SUPPLY PASSENGER DOOM LUN-OCK OUTPUT STEP LAMP CONT
ALL DOOR, FUEL LID LOCK OUTPUT RAMER DOOR, FUEL LID UNLOCK OUTPUT REAR DOOR UNLOCK OUTPUT BAT (FUSE)
PUSH BUTTON IGNUM ACC IND TURN SIGNUL IR (FRONT) TURN SIGNUL LH (FRONT) INT ROOM LANP CONT
M120 Connector No. Connector No. BCM (BODY CONTROL MODULE) Connector Name NS12PW.CS Connector Type
Signal Name [Specification]     Terminal Color Of Turks Signal, Erri (RE-RR)     No.     Wire       Turks Signal, Erri (RE-RR)     No.     Wire     74     S8       RE-RR WIPER OUTPUT     77     75     V       77     14     V     V

< ECU DIAGNOSIS INFORMATION >



JRMWD8162GB

INFOID:000000009345023

Ρ

Fail-safe

#### FAIL-SAFE CONTROL BY DTC

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

#### < ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2560: STARTER CONT RELAY	Inhibit engine cranking	<ul><li>500 ms after the following CAN signal communication status becomes consistent</li><li>Starter control relay signal</li><li>Starter relay status signal</li></ul>
B2608: STARTER RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following signal communication status becomes consistent</li> <li>Starter motor relay control signal</li> <li>Starter relay status signal (CAN)</li> </ul>
B260A: IGNITION RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following conditions are fulfilled</li> <li>IGN relay (IPDM E/R) control signal: OFF (Battery voltage)</li> <li>Ignition ON signal (CAN to IPDM E/R): OFF (Request signal)</li> <li>Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)</li> </ul>
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	<ul><li>When any of the following conditions are fulfilled</li><li>Power position changes to ACC</li><li>Receives engine status signal (CAN)</li></ul>
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 be- comes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

#### REAR WIPER MOTOR PROTECTION

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

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

Condition of cancellation

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

#### DTC Inspection Priority Chart

INFOID:000000009345024

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
2	U1000: CAN COMM CIRCUIT     U1010: CONTROL UNIT (CAN)
3	<ul> <li>B2190: NATS ANTENNA AMP</li> <li>B2191: DIFFERENCE OF KEY</li> <li>B2192: ID DISCORD BCM-ECM</li> <li>B2193: CHAIN OF BCM-ECM</li> <li>B2195: ANTI SCANNING</li> </ul>

< ECU DIAGNOSIS INFORMATION >		[INTELLIGENT KEY SYSTEM]		
Priority		DTC		
4	<ul> <li>B2553: IGNITION RELAY</li> <li>B2555: STOP LAMP</li> <li>B2556: PUSH-BTN IGN SW</li> <li>B2557: VEHICLE SPEED</li> <li>B2560: STARTER CONT RELAY</li> <li>B2601: SHIFT POSITION</li> <li>B2602: SHIFT POSITION</li> <li>B2603: SHIFT POSI STATUS</li> <li>B2604: PNP SW</li> <li>B2605: PNP SW</li> <li>B2608: STARTER RELAY</li> <li>B2607: ENG STATE SIG LOST</li> <li>B2614: ACC RELAY CIRC</li> <li>B2615: BLOWER RELAY CIRC</li> <li>B2616: IGN RELAY CIRC</li> <li>B2617: STARTER RELAY CIRC</li> <li>B2618: BCM</li> <li>B2614: PUSH-BTN IGN SW</li> <li>B2614: PUSH-BTN IGN SW</li> <li>B2614: PUSH-BTN IGN SW</li> <li>B2614: PUSH-BTN IGN SW</li> <li>B2614: VEHICLE TYPE</li> <li>B2626A: KEY REGISTRATION</li> <li>C1729: VHCL SPEED SIG ERR</li> <li>U0415: VEHICLE SPEED SIG</li> </ul>			
5	<ul> <li>C1704: LOW PRESSURE FL</li> <li>C1705: LOW PRESSURE FR</li> <li>C1706: LOW PRESSURE RR</li> <li>C1707: LOW PRESSURE RL</li> <li>C1708: [NO DATA] FL</li> <li>C1709: [NO DATA] FR</li> <li>C1710: [NO DATA] RR</li> <li>C1711: [NO DATA] RL</li> <li>C1716: [PRESSDATA ERR] FL</li> <li>C1718: [PRESSDATA ERR] FR</li> <li>C1718: [PRESSDATA ERR] RR</li> <li>C1719: [PRESSDATA ERR] RL</li> <li>C1734: CONTROL UNIT</li> </ul>			
6	<ul><li>B2621: INSIDE ANTENNA</li><li>B2623: INSIDE ANTENNA</li></ul>			

### DTC Index

#### NOTE:

The details of time display are as follows.

• CRNT: A malfunction is detected now.

• PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to DLK-48, "COM-MON ITEM : CONSULT Function (BCM - COMMON ITEM)".

	1		1	1		
CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	0
No DTC is detected. further testing may be required.	_	_	_	_	_	P
U1000: CAN COMM CIRCUIT	—	—	—	—	BCS-41	-
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-42	-
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-43	=
B2190: NATS ANTENNA AMP	×	—	—	—	<u>SEC-40</u>	-

Revision: 2013 March

Μ

Ν

L

INFOID:000000009345025

#### < ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2191: DIFFERENCE OF KEY	×				<u>SEC-43</u>
B2192: ID DISCORD BCM-ECM	×				SEC-44
B2193: CHAIN OF BCM-ECM	×				SEC-45
B2195: ANTI SCANNING	×				<u>SEC-46</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	×	×	×		SEC-51
B2560: STARTER CONT RELAY	×	×	×		SEC-52
B2562: LOW VOLTAGE		×	_	_	BCS-44
B2601: SHIFT POSITION	×	×	×	—	SEC-53
B2602: SHIFT POSITION	×	×	×	_	<u>SEC-56</u>
B2603: SHIFT POSI STATUS	×	×	×	—	<u>SEC-59</u>
B2604: PNP SW	×	×	×	_	<u>SEC-62</u>
B2605: PNP SW	×	×	×	_	<u>SEC-64</u>
B2608: STARTER RELAY	×	×	×	—	<u>SEC-66</u>
B260A: IGNITION RELAY	×	×	×	—	PCS-50
B260F: ENG STATE SIG LOST	×	×	×	—	<u>SEC-68</u>
B2614: ACC RELAY CIRC		×	×	_	PCS-52
B2615: BLOWER RELAY CIRC		×	×	_	PCS-55
B2616: IGN RELAY CIRC		×	×	_	PCS-58
B2617: STARTER RELAY CIRC	×	×	×	_	<u>SEC-71</u>
B2618: BCM	×	×	×	_	PCS-61
B261A: PUSH-BTN IGN SW	—	×	×	—	<u>SEC-73</u>
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-76</u>
B2621: INSIDE ANTENNA	_	×	_	_	<u>DLK-58</u>
B2623: INSIDE ANTENNA		×	_	_	DLK-60
B26E1: ENG STATE NO RES	×	×	×	_	<u>SEC-69</u>
B26EA: KEY REGISTRATION	_	×	imes (Turn ON for 15 seconds)	_	<u>SEC-70</u>
C1704: LOW PRESSURE FL	—	—		×	
C1705: LOW PRESSURE FR	_	—	_	×	<u>WT-23</u>
C1706: LOW PRESSURE RR		—		×	<u> </u>
C1707: LOW PRESSURE RL				×	
C1708: [NO DATA] FL	—	—	_	×	
C1709: [NO DATA] FR				×	<u>WT-25</u>
C1710: [NO DATA] RR				×	<u></u>
C1711: [NO DATA] RL	—	—	_	×	

#### < ECU DIAGNOSIS INFORMATION >

### [ÍNTELLIGENT KEY SYSTEM]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	A
C1716: [PRESSDATA ERR] FL	—	—	—	×		
C1717: [PRESSDATA ERR] FR	_	—	—	×	WT-28	С
C1718: [PRESSDATA ERR] RR	_	—	—	×	<u>vv1-20</u>	0
C1719: [PRESSDATA ERR] RL	—	—	—	×		
C1729: VHCL SPEED SIG ERR	—	—	—	×	<u>WT-30</u>	D
C1734: CONTROL UNIT		_	—	×	<u>WT-32</u>	

Е

F

G

Н

J

DLK

L

Μ

Ν

Ο

Ρ

Revision: 2013 March

**DLK-177** 

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

# SYMPTOM DIAGNOSIS

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH

ALL DOOR

ALL DOOR : Description

All doors do not lock/unlock using door lock and unlock switch.

### ALL DOOR : Diagnosis Procedure

1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit. Refer to DLK-62, "BCM (BODY CONTROL MODULE) : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.check door lock and unlock switch

Check door lock and unlock switch.

- Driver side: Refer to <u>DLK-67, "DRIVER SIDE : Component Function Check"</u>.
  Passenger side: Refer to <u>DLK-67, "PASSENGER SIDE : Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side). Refer to DLK-69, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1. DRIVER SIDE

**DRIVER SIDE** : Description

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

**DRIVER SIDE : Diagnosis Procedure** 

1.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side). Refer to DLK-69, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

INFOID:000000009064713

INFOID:000000009064714

INFOID:000000009064712

INFOID:000000009064711

## DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH

	GENT KEY SYSTEM]
<u>s the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1. PASSENGER SIDE	
PASSENGER SIDE : Description	INFOID:000000009064715
Passenger side door does not lock/unlock using door lock and unlock switch.	
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000009064710
.CHECK DOOR LOCK ACTUATOR	
Check door lock actuator (passenger side). Refer to <u>DLK-70, "PASSENGER SIDE : Component Function Check"</u> . <u>s the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. <b>2.</b> CONFIRM THE OPERATION	
Confirm the operation again. <u>s the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1. REAR LH	
REAR LH : Description	INFOID:000000009064717
Rear LH side door does not lock/unlock using door lock and unlock switch.	
REAR LH : Diagnosis Procedure	INFOID:00000000906471
.CHECK DOOR LOCK ACTUATOR	
Check door lock actuator (rear LH). Refer to <u>DLK-71, "REAR LH : Component Function Check"</u> . <u>s the inspection result normal?</u> YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts. CONFIRM THE OPERATION	
Confirm the operation again. <u>s the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1. REAR RH	
REAR RH : Description	INFOID:00000000906471
Rear RH side door does not lock/unlock using door lock and unlock switch.	
REAR RH : Diagnosis Procedure	INFOID:000000009064720
.CHECK DOOR LOCK ACTUATOR	
Check door lock actuator (rear RH). Refer to <u>DLK-71, "REAR RH : Component_Function_Check"</u> . <u>s the inspection result normal?</u>	

NO >> Repair or replace the malfunctioning parts.

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH

#### < SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

 $2. {\sf CONFIRM} \text{ THE OPERATION} \\$ 

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

NO >> GO TO 1.

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION < SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]

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

Description	064721 B
All doors do not lock/unlock using driver side door key cylinder.	
Diagnosis Procedure	64722
1. CHECK POWER DOOR LOCK OPERATION	0
Check power door lock operation.	D
Does door lock/unlock with door lock and unlock switch?	
YES >> GO TO 2. NO >> Refer to <u>DLK-178, "ALL DOOR : Diagnosis Procedure"</u> .	E
2. CHECK DOOR KEY CYLINDER SWITCH	_
Check door key cylinder switch. Refer to DLK-76, "Component Function Check".	F
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	G
3. CONFIRM THE OPERATION	
Confirm the operation again.	Н
Is the result normal?	
<ul> <li>YES &gt;&gt; Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.</li> <li>NO &gt;&gt; GO TO 1.</li> </ul>	I
	J

DLK

L

Μ

Ν

Ο

Ρ

А

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

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH ALL DOOR

ALL DOOR : Description	INFOID:000000009064723
All doors do not lock/unlock using all door request switches.	
<b>NOTE:</b> Check door request switch operation in the door lock condition. Refer to <u>DLK-19</u> , " <u>DOOR LOCK</u> <u>System Description</u> ".	<u> (FUNCTION :</u>
ALL DOOR : Diagnosis Procedure	INFOID:000000009064724
1. CHECK REMOTE KEYLESS ENTRY FUNCTION	
Check remote keyless entry function.	
Does door lock/unlock with Intelligent Key button?	
YES >> GO TO 2.	
NO >> Refer to <u>DLK-185, "Description"</u> .	
2.CHECK "LOCK/UNLOCK BY I-KEY" SETTING IN "WORK SUPPORT"	
Check "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT". Refer to DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".	
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Set "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT".	
<b>3.</b> CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42. "Intermittent Incident"</u> .	
NO >> GO TO 1.	
DRIVER SIDE	
DRIVER SIDE : Description	INFOID:000000009064725
All doors do not lock/unlock using driver side door request switch.	
NOTE: Check door request switch operation in the door lock condition. Refer to <u>DLK-19, "DOOR LOCK</u>	
System Description".	FUNCTION .
DRIVER SIDE : Diagnosis Procedure	INFOID:000000009064726
1. CHECK DRIVER SIDE DOOR REQUEST SWITCH	
Check driver side door request switch.	
Refer to DLK-83, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	

2. CHECK OUTSIDE KEY ANTENNA (LH)

Check outside key antenna (LH). Refer to <u>DLK-89, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CONFIRM THE OPERATION

Confirm the operation again.

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

Is the result normal?         YES       >> Check Intermittent Incident. Refer to GI-42, "Intermittent Incident".         NO       >> GO TO 1.         PASSENGER SIDE       PASSENGER SIDE         PASSENGER SIDE : Description       ************************************
PASSENGER SIDE PASSENGER SIDE : Description All doors do not lock/unlock using passenger side door request switch. NOTE: Check door request switch operation in the door lock condition. Refer to <u>DLK-19. "DOOR LOCK FUNCTION :</u> System Description". PASSENGER SIDE : Diagnosis Procedure Al.CHECK PASSENGER SIDE DOOR REQUEST SWITCH Check passenger side door request switch. Refer to <u>DLK-83</u> , "Component Function Check". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK OUTSIDE KEY ANTENNA (RH) Check outside key antenna (RH). Refer to <u>DLK-89</u> , "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION Confirm the operation again. Is the result normal? YES >> Check Intermittent Incident. Refer to <u>GL42. "Intermittent Incident". NO &gt;&gt; GO TO 1. BACK DOOR BACK DOOR </u>
All doors do not lock/unlock using passenger side door request switch. MOTE: Check door request switch operation in the door lock condition. Refer to <u>DLK-19. "DOOR LOCK FUNCTION</u> : MARCHARD STATES TO DOOR REQUEST SWITCH Check PASSENGER SIDE DOOR REQUEST SWITCH Check passenger side door request switch. Refer to <u>DLK-83. "Component Function Check".</u> Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK OUTSIDE KEY ANTENNA (RH) Check outside key antenna (RH). Refer to <u>DLK-89. "Component Function Check".</u> Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION Confirm the operation again. Is the result normal? YES >> Check Intermittent Incident. Refer to <u>GI-42. "Intermittent Incident".</u> NO >> GO TO 1. BACK DOOR BACK DOOR : Description
NOTE:         Check door request switch operation in the door lock condition. Refer to DLK-19, "DOOR LOCK FUNCTION; system Description".         PASSENGER SIDE : Diagnosis Procedure         PASSENGER SIDE : Diagnosis Procedure         1.cHECK PASSENGER SIDE DOOR REQUEST SWITCH         Check passenger side door request switch.         Refer to DLK-83, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 2.         NO       >> Repair or replace the malfunctioning parts.         2.CHECK OUTSIDE KEY ANTENNA (RH)         Check outside key antenna (RH).         Refer to DLK-89, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Repair or replace the malfunctioning parts.         3.CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?         YES       >> Check Intermittent Incident. Refer to GI-42. "Intermittent Incident".         NO       >> GO TO 1.         BACK DOOR       BACK DOOR
System Description".         PASSENGER SIDE : Diagnosis Procedure         1.cHECK PASSENGER SIDE DOOR REQUEST SWITCH         Check passenger side door request switch.         Refer to DLK-83, "Component Function Check".         Is the inspection result normal?         YES       > GO TO 2.         NO       >> Repair or replace the malfunctioning parts.         2.CHECK OUTSIDE KEY ANTENNA (RH)         Check outside key antenna (RH).         Refer to DLK-89. "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Repair or replace the malfunctioning parts.         3.CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?         YES       >> Check Intermittent Incident. Refer to GI-42. "Intermittent Incident".         NO       >> GO TO 1.         BACK DOOR       BACK DOOR: Description
1. CHECK PASSENGER SIDE DOOR REQUEST SWITCH         Check passenger side door request switch.         Refer to DLK-83, "Component Function Check".         Is the inspection result normal?         YES       > GO TO 2.         NO       > Repair or replace the malfunctioning parts.         2.CHECK OUTSIDE KEY ANTENNA (RH)         Check outside key antenna (RH).         Refer to DLK-89, "Component Function Check".         Is the inspection result normal?         YES       > GO TO 3.         NO       > Repair or replace the malfunctioning parts.         3. CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?         YES       > Check Intermittent Incident. Refer to GI-42. "Intermittent Incident".         NO       > GO TO 1.         BACK DOOR       BACK DOOR : Description
$\label{eq:constraint} \begin{array}{l} \hline \label{eq:constraint} \hline \end{tabular} \\ \hline tabula$
Refer to DLK-83, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 2.         NO       >> Repair or replace the malfunctioning parts.         2.CHECK OUTSIDE KEY ANTENNA (RH)         Check outside key antenna (RH).         Refer to DLK-89, "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Repair or replace the malfunctioning parts.         3.CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?         YES       >> Check Intermittent Incident. Refer to GI-42, "Intermittent Incident".         NO       >> GO TO 1.         BACK DOOR       BACK DOOR
YES       >> GO TO 2.         NO       >> Repair or replace the malfunctioning parts.         2.CHECK OUTSIDE KEY ANTENNA (RH)         Check outside key antenna (RH).         Refer to DLK-89. "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Repair or replace the malfunctioning parts.         3.CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?         YES       >> Check Intermittent Incident. Refer to GI-42. "Intermittent Incident".         NO       >> GO TO 1.         BACK DOOR       BACK DOOR
2.CHECK OUTSIDE KEY ANTENNA (RH) Check outside key antenna (RH). Refer to DLK-89. "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION Confirm the operation again. Is the result normal? YES >> Check Intermittent Incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1. BACK DOOR BACK DOOR : Description
Check outside key antenna (RH).         Refer to DLK-89. "Component Function Check".         Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Repair or replace the malfunctioning parts. <b>3.</b> CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?         YES       >> Check Intermittent Incident. Refer to GI-42. "Intermittent Incident".         NO       >> GO TO 1.         BACK DOOR         BACK DOOR : Description
Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Repair or replace the malfunctioning parts. <b>3.</b> CONFIRM THE OPERATION         Confirm the operation again.         Is the result normal?         YES       >> Check Intermittent Incident. Refer to GI-42. "Intermittent Incident".         NO       >> GO TO 1.         BACK DOOR         BACK DOOR : Description
NO >> Repair or replace the malfunctioning parts. 3. CONFIRM THE OPERATION Confirm the operation again. <u>Is the result normal?</u> YES >> Check Intermittent Incident. Refer to <u>GI-42. "Intermittent Incident"</u> . NO >> GO TO 1. BACK DOOR BACK DOOR : Description
Confirm the operation again. <u>Is the result normal?</u> YES >> Check Intermittent Incident. Refer to <u>GI-42. "Intermittent Incident"</u> . NO >> GO TO 1. BACK DOOR BACK DOOR : Description
Is the result normal?         YES       >> Check Intermittent Incident. Refer to GI-42. "Intermittent Incident".         NO       >> GO TO 1.         BACK DOOR         BACK DOOR : Description
NO       >> GO TO 1.         BACK DOOR       BACK DOOR : Description
•
All doors do not lock/unlock using back door request switch. <b>NOTE:</b>
Check door request switch operation in the door lock condition. Refer to <u>DLK-19. "DOOR LOCK FUNCTION :</u> <u>System Description"</u> .
BACK DOOR : Diagnosis Procedure
1.CHECK BACK DOOR REQUEST SWITCH
Check back door request switch. Refer to <u>DLK-85, "Component Function Check"</u> .
<u>Is the inspection result normal?</u> YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts. 2.CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)
Check outside key antenna (rear bumper).
Refer to <u>DLK-89, "Component Function Check"</u> . Is the inspection result normal?
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.

# DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

#### < SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

 $\mathbf{3.}$  CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check Intermittent Incident. Refer to GI-42. "Intermittent Incident".

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

#### DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY А Description INFOID:000000009064731 All doors do not lock/unlock using Intelligent Key. В NOTE: Check Intelligent Key remote operation in the door lock condition. Refer to DLK-28, "REMOTE KEYLESS ENTRY FUNCTION : System Description". Diagnosis Procedure INFOID:000000009064732 1.CHECK INTELLIGENT KEY D For Intelligent Key that cannot be used for door lock and unlock, check that the Intelligent Key belongs to the vehicle to be checked. Е Does the Intelligent Key belong to the vehicle to checked? YES >> GO TO 2. NO >> Check Intelligent Key button operation with registered Intelligent Key belonging to the vehicle. 2.CHECK INTELLIGENT KEY LOW BATTERY WARNING F Check that the Intelligent Key low battery warning is operated. Is the Intelligent Key low battery warning operated? YES >> GO TO 6. NO-1 >> With another registered Intelligent Key: GO TO 3. NO-2 >> Without another registered Intelligent Key: GO TO 4. Н ${ m 3.}$ CHECK INTELLIGENT KEY BUTTON OPERATION Check that door lock and unlock can be performed by operating the buttons of another registered Intelligent Key. Can door lock and unlock be performed with another registered Intelligent Key? YES >> GO TO 4. NO >> GO TO 7. 4. CHECK ENGINE START Insert Intelligent Key into the key slot. Operate the push-button ignition switch, and check that the vehicle is in DLK START status. Is the vehicle in START status? YES >> GO TO 6. L NO >> GO TO 5. ${f 5}.$ CHECK INTELLIGENT KEY Check the inside of the Intelligent Key for rust or corrosion by water. Simultaneously check the internal circuits Μ for damage. Is the vehicle in START status? Ν YES >> GO TO 6. NO >> Replace Intelligent Key. **O.**CHECK INTELLIGENT KEY BATTERY Check the Intelligent Key battery. Refer to DLK-94, "Component Inspection". Is the inspection result normal? Ρ YES >> GO TO 7. NO >> Replace Intelligent Key battery. **7.**CHECK POWER DOOR LOCK OPERATION Check door lock/unlock using door lock and unlock switch.

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

YES >> GO TO 8.

# DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

NO >> Refer to <u>DLK-178</u>, "<u>ALL DOOR : Diagnosis Procedure</u>".

 $8. {\sf CHECK REMOTE KEYLESS ENTRY RECEIVER}$ 

Check remote keyless entry receiver. Refer to <u>DLK-78</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 9.

NO >> Repair or replace the malfunctioning parts.

**9.**CHECK DOOR SWITCH

Check door switch.

Refer to DLK-63, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace the malfunctioning parts.

**10.**REPLACE INTELLIGENT KEY

1. Replace Intelligent Key.

2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END

NO >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

#### BACK DOOR DOES NOT OPENED А Description INFOID:000000009064733 NOTE: В Before performing the diagnosis in the following procedure, check the operation condition. Refer to DLK-24. "BACK DOOR OPEN FUNCTION : System Description". **Diagnosis** Procedure INFOID:000000009064734 С 1. CHECK BACK DOOR OPENER SWITCH Check back door opener switch. D Refer to DLK-81, "Component Function Check". Is the inspection result normal? Е YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK BACK DOOR OPENER ACTUATOR Check back door opener actuator. Refer to DLK-74, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CHECK VEHICLE SPEED SIGNAL Н Check combination meter. Refer to MWI-52, "Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. **4.**CONFIRM THE OPERATION Confirm the operation again. Is the result normal? DLK YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". NO >> GO TO 1.

Μ

Ν

Ρ

#### SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

# SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE WITH DOOR RE-QUEST SWITCH

# Description

INFOID:000000009064735

## NOTE:

- Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7, "Work</u> <u>Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

- Intelligent Key is removed from key slot.
- Ignition switch is in OFF position.
- No Intelligent Keys are inside the vehicle.

# **Diagnosis Procedure**

INFOID:000000009064736

# 1. CHECK DOOR LOCK FUNCTION

Check door lock function by door request switch.

Does door lock/unlock with door request switch?

YES >> GO TO 2.

NO-1 >> Go to <u>DLK-182</u>, "<u>DRIVER SIDE</u> : <u>Description</u>" (driver side).

- NO-2 >> Go to <u>DLK-183</u>, "PASSENGER SIDE : <u>Description</u>" (passenger side).
- NO-3 >> Go to <u>DLK-183</u>, "BACK DOOR : Description" (back door).

2.CHECK "DOOR LOCK–UNLOCK SET" SETTING IN "WORK SUPPORT"

Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Set "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT".

 $\mathbf{3.}$ CONFIRM THE OPERATION

Confirm the operation again.

#### Is the result normal?

- YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
- NO >> GO TO 1.

# SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE WITH INTELLIGENT

KEY	
< SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]	
SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE WITH INTELLI- GENT KEY	А
Description	В
<ul> <li>NOTE:</li> <li>Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7, "Work Flow"</u>.</li> <li>Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.</li> </ul>	С
<ul><li>CONDITIONS OF VEHICLE (OPERATING CONDITIONS)</li><li>Intelligent key is removed from key slot.</li><li>All doors are closed.</li></ul>	D
Diagnosis Procedure	E
1.CHECK POWER DOOR LOCK OPERATION	_
Check power door lock operation.	F
Does door lock/unlock with door lock and unlock switch?	
YES >> GO TO 2. NO >> Go to <u>DLK-178, "ALL DOOR : Description"</u> .	G
2. CHECK "DOOR LOCK-UNLOCK SET" SETTING IN "WORK SUPPORT"	
Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .	Н
Is the inspection result normal?	
YES >> GO TO 3. NO >> Set "DOOR LOCK-UNLOCK SET" of "WORK SUPPORT".	
3. CONFIRM THE OPERATION	
Confirm the operation again.	J
Is the result normal?	
<ul> <li>YES &gt;&gt; Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.</li> <li>NO &gt;&gt; GO TO 1.</li> </ul>	DLł
	L

M

Ν

Ο

Ρ

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPER-ATE

Diagnosis Procedure

INFOID:000000009064739

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Go to <u>DLK-178</u>, "ALL DOOR : Description".

2. CHECK VEHICLE SPEED SIGNAL

Check combination meter. Refer to <u>SEC-51, "DTC Logic"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

#### IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE (MPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]

# < SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM] IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

		А
Diagnosis Procedure	INFOID:000000009064740	~
1. CHECK POWER DOOR LOCK OPERATION		В
Check power door lock operation.		
Does door lock/unlock with door lock and unlock switch?		
YES >> GO TO 2. NO >> Go to <u>DLK-178, "ALL DOOR : Description"</u> .		С
2.снеск всм		
Check DTC for BCM.		D
Refer to <u>BCS-90, "DTC_Index"</u> .		
Is the inspection result normal?		E
YES >> GO TO 3.		
NO >> Repair or replace the malfunctioning parts.		
3.CONFIRM THE OPERATION		F
Confirm the operation again.		
Is the result normal?		
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.		G

J

Н

DLK

L

Μ

Ν

Ο

Ρ

#### P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPER-ATE

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

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

**Diagnosis** Procedure

INFOID:000000009064741

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Go to <u>DLK-178</u>, "ALL DOOR : Description".

2. СНЕСК ТСМ

Check DTC for TCM. Refer to <u>TM-158, "DTC Index"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

AUTO DOOR LOCK OPERATION DOES NO < SYMPTOM DIAGNOSIS >	T OPERATE [INTELLIGENT KEY SYSTEM]	
AUTO DOOR LOCK OPERATION DOES NOT OPER	RATE	^
Description	INFOID:000000009064742	-
<b>NOTE:</b> Before performing the diagnosis in the following procedure, check "Work Flo	ow". Refer to <u>DLK-7, "Work Flow"</u> .	3
Diagnosis Procedure	INFOID:000000009064743	_
1.CHECK "AUTO LOCK SET" SETTING IN "WORK SUPPORT"	(	Ĵ
Check "AUTO LOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELL</u>	<u>.IGENT KEY)"</u> .	C
Is the inspection result normal?		
YES >> GO TO 2. NO >> Set "AUTO LOCK SET" setting in "WORK SUPPORT".	E	E
2.CONFIRM THE OPERATION		
Confirm the operation again.	F	F
Is the result normal?		
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Inciden</u> NO >> GO TO 1.	<u>t"</u> .	G

J

Н

DLK

L

M

Ν

0

Ρ

# POWER WINDOW DOWN FUNCTION DOES NOT OPERATE WITH KEY CYLIN-DER OPERATION

< SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

# POWER WINDOW DOWN FUNCTION DOES NOT OPERATE WITH KEY CYLINDER OPERATION

**Diagnosis Procedure** 

INFOID:000000009064744

**1.**CHECK DOOR KEY CYLINDER OPERATION

Check door key cylinder operation.

Does door lock/unlock with door key cylinder switch operation?

YES >> GO TO 2.

NO >> Go to <u>DLK-181, "Diagnosis Procedure"</u>.

**2.**CHECK POWER WINDOW OPERATION

Check power window operation.

Does power window up/down with power window main switch?

YES >> GO TO 3.

NO >> Go to <u>PWC-103</u>, "Diagnosis Procedure".

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

# POWER WINDOW DOWN FUNCTION DOES NOT WORK WHEN OPERATING WITH INTELLIGENT KEY

WITH INTELLIGENT KEY		
< SYMPTOM DIAGNOSIS > [INTE	ELLIGENT KEY SYSTEM]	
POWER WINDOW DOWN FUNCTION DOES NOT WOR ING WITH INTELLIGENT KEY	K WHEN OPERAT-	
Description	INFOID:000000009064745	
NOTE: • Before performing the diagnosis in the following procedure, check " Work Flore Flow".	ow". Refer to <u>DLK-7, "Work</u>	
Diagnosis Procedure	INFOID:000000009064746	
1. CHECK REMOTE KEYLESS ENTRY FUNCTION	D	
Check remote keyless entry function. <u>Does door lock/unlock with Intelligent key button?</u> YES >> GO TO 2. NO >> Go to <u>DLK-185. "Description"</u> .	E	
2.CHECK POWER WINDOW OPERATION	F	
Check power window operation. <u>Does power window up/down with power window main switch?</u> YES >> GO TO 3. NO >> Go to <u>PWC-103</u> , "Diagnosis Procedure".	G	
<b>3.</b> CHECK "PW DOWN SET" SETTING IN "WORK SUPPORT"	Н	
Check "PW DOWN SET" setting in "WORK SUPPORT". Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGEN</u>	IT KEY)".	
<u>Is the inspection result normal?</u> YES >> GO TO 4. NO >> Set "PW DOWN SET" setting in "WORK SUPPORT".	I	
4.CONFIRM THE OPERATION	J	
Confirm the operation again.		
Is the result normal?	DLk	<
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.		ľ

L

M

Ν

Ο

Ρ

# WELCOME LIGHT FUNCTION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

# WELCOME LIGHT FUNCTION DOES NOT OPERATE

# Description

INFOID:000000009064747

[INTELLIGENT KEY SYSTEM]

#### NOTE:

- Before performing the diagnosis following procedure, check "Work Flow". Refer to DLK-7, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

#### CONDITIONS OF VEHICLE (OPERATION CONDITIONS)

- Intelligent Key system (door lock function) is normal.
- All operation conditions are satisfied. Refer to <u>DLK-33, "WELCOME LIGHT FUNCTION : System Description"</u>.

## **Diagnosis Procedure**

INFOID:000000009064748

## **1.**CHECK WELCOME LIGHT FUNCTION SETTING

Check "WELCOME LIGHT OP SET" and "WELCOME LIGHT SELECT" setting in "WORK SUPPORT". Refer to <u>DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

#### Is the function active?

- YES >> GO TO 2.
- NO >> Set "WELCOME LIGHT OP SET" and "WELCOME LIGHT SELECT" setting in "WORK SUP-PORT".

2. CHECK DOOR LOCK FUNCTION

Check Intelligent Key system (door lock function).

Does the door lock/unlock with door request switch (driver side)?

YES >> GO TO 3.

NO >> Go to <u>DLK-182</u>, "DRIVER SIDE : Description".

**3.**CHECK INTERIOR ROOM LAMP CONTROL SYSTEM

Check interior room lamp control system. Refer to INL-6. "System Description".

Does the room lamp and puddle lamp turn ON?

YES >> GO TO 4.

NO >> Go to <u>INL-100, "Symptom Table"</u>.

**4.**REPLACE BCM

Replace BCM. Refer to BCS-96, "Removal and Installation".

>> GO TO 5.

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> INSPECTION END NO >> GO TO 1.

#### PANIC ALARM FUNCTION DOES NOT OPERATE INCELLIGENT KEY SYSTEM

# PANIC ALARM FUNCTION DOES NOT OPERATE

# Description

#### NOTE:

Before performing the diagnosis following procedure, check "Work Flow". Refer to <u>DLK-7, "Work Flow"</u>.

 Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
 CONDITIONS OF VEHICLE (OPERATION CONDITIONS)

# Ignition switch is in OFF or LOCK position.

Intelligent Key is removed from key slot.

# Diagnosis Procedure

< SYMPTOM DIAGNOSIS >

# **1.**CHECK REMOTE KEYLESS ENTRY FUNCTION Check remote keyless entry function.

Does door lock/unlock with Intelligent key button?

YES	>> GO TO Z.
NO	>> Go to <u>DLK-185, "Description"</u> .

2.CHECK VEHICLE SECURITY ALARM OPERATION

Check vehicle security alarm operation.
---

Does alarm (headlamp and horn) active?

YES	>> GO TO 3.
NO	>> Go to <u>SEC-186, "Description"</u> .

 ${f 3.}$ CHECK "PANIC ALARM SET" SETTING IN "WORK SUPPORT"

Check "PANIC ALARM SET" setting in "WORK SUPPORT". Refer to DLK-51, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES	>> GO TO 4.
NO	>> Set "PANIC ALARM SET" setting in "WORK SUPPORT".

## **4.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

NO >> GO TO 1.

А

В

С

D

Ε

F

Н

DLK

L

Μ

Ν

Ρ

INFOID:000000009064749

INFOID:000000009064750

#### HAZARD AND HORN REMINDER DOES NOT OPERATE [INTELLIGENT KEY SYSTEM]

#### < SYMPTOM DIAGNOSIS >

# HAZARD AND HORN REMINDER DOES NOT OPERATE

# Description

NOTE:

- Before performing the diagnosis following procedure, check "Work Flow". Refer to DLK-7, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

#### CONDITIONS OF VEHICLE (OPERATION CONDITIONS)

- Ignition switch is in OFF or LOCK position.
- Intelligent Key is removed from key slot.

## Diagnosis Procedure

INFOID:000000009064752

INFOID:000000009064751

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

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

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

Is the inspection result normal?

YES >> GO TO 2.

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

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

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

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

Is the inspection result normal?

YES >> GO TO 3.

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

3.CHECK HAZARD WARNING LAMP

Check hazard warning lamp.

Refer to DLK-104, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK HORN

Check horn. Refer to DLK-99, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

HAZARD AND BUZZER REMINDER DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]
HAZARD AND BUZZER REMINDER DOES NOT OPERATE
Description
NOTE: • Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7. "Work</u> Flow".
<ul> <li>Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.</li> </ul>
CONDITIONS OF VEHICLE (OPERATING CONDITIONS)
<ul> <li>Intelligent Key is removed from key slot.</li> <li>Ignition switch is in OFF position.</li> </ul>
<ul> <li>No Intelligent Keys are inside the vehicle.</li> </ul>
Diagnosis Procedure
1.CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"
Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .
Is the inspection result normal?
YES >> GO TO 2. NO >> Set "HAZARD ANSWER BACK" in "WORK SUPPORT".
2. CHECK "ANS BACK I-KEY LOCK" SETTING IN "WORK SUPPORT"
Check "ANS BACK I-KEY LOCK" setting in "WORK SUPPORT". Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .
Is the inspection result normal?
YES >> GO TO 3. NO >> Set "ANS BACK I-KEY LOCK" in "WORK SUPPORT".
3. CHECK "ANS BACK I-KEY UNLOCK" SETTING IN "WORK SUPPORT"
Check "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT".
Refer to <u>DLK-49, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> . Is the inspection result normal?
YES >> GO TO 4.
NO >> Set "ANS BACK I-KEY UNLOCK" in "WORK SUPPORT".
4.CHECK HAZARD WARNING LAMP
Check hazard warning lamp. Refer to <u>DLK-104, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.
5.CHECK INTELLIGENT KEY WARNING BUZZER
Check Intelligent Key warning buzzer. Refer to <u>DLK-92, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.
Confirm the operation again.
Is the result normal?
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.
NO >> GO TO 1.

Revision: 2013 March

## **KEY REMINDER FUNCTION DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

# **KEY REMINDER FUNCTION DOES NOT OPERATE**

# Description

NOTE:

- Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7, "Work</u> Flow".
- Understand the operation when does it work, refer to <u>DLK-36</u>, "KEY REMINDER FUNCTION : System Description".

## **Diagnosis** Procedure

INEOID:000000009064756

INFOID:000000009064755

[INTELLIGENT KEY SYSTEM]

**1.**CHECK "ANTI KEY LOCK IN FUNCTI" SETTING IN "WORK SUPPORT"

Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".

2.check door switch

Check door switch.

Refer to DLK-63, "Component Function Check".

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace the malfunctioning parts.

3.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

Refer to <u>DLK-58, "DTC Logic"</u> (instrument center). Refer to <u>DLK-60, "DTC Logic"</u> (luggage room).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK UNLOCK SENSOR

Check unlock sensor.

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

# **KEY WARNING DOES NOT OPERATE**

## < SYMPTOM DIAGNOSIS >

# **KEY WARNING DOES NOT OPERATE**

Description INFOID:000000000000000000000000000000000000	1
<ul> <li>NOTE:</li> <li>Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7, "Work Flow"</u>.</li> </ul>	В
<ul> <li>Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38</u>, "WARNING FUNCTION : System <u>Description</u>".</li> </ul>	С
Door lock function is normal.	_
Diagnosis Procedure	D
1.CHECK BUZZER (COMBINATION METER)	
Check buzzer (combination meter). Refer to <u>DLK-102, "Component Function Check"</u> .	
Is the inspection result normal?	F
YES >> GO TO 2.	Γ
NO >> Repair or replace the malfunctioning parts. 2.CHECK DOOR SWITCH	
	G
Check door switch (driver side). Refer to <u>DLK-63, "Component Function Check"</u> .	
Is the inspection result normal?	Н
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts. 3.CHECK KEY SLOT	1
Check key slot. Refer to <u>DLK-95, "Component Function Check"</u> .	
Is the inspection result normal?	J
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	DLK
4.CHECK COMBINATION METER DISPLAY	
Check combination meter display. Refer to <u>DLK-101, "Component Function Check"</u> .	L
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	M
5. CHECK KEY SLOT ILLUMINATION	
Check key slot illumination. Refer to DLK-97, "Component Function Check".	Ν
Is the inspection result normal?	
YES >> GO TO 6.	0
NO >> Repair or replace the malfunctioning parts.	0
6.CONFIRM THE OPERATION	
Confirm the operation again.	Ρ
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	

NO >> GO TO 1.

А

# OFF POSITION WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

# OFF POSITION WARNING DOES NOT OPERATE

# Description

INFOID:000000009064759

[INTELLIGENT KEY SYSTEM]

#### NOTE:

- Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7, "Work</u> <u>Flow"</u>.
- Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38</u>, "WARNING FUNCTION : <u>System</u> <u>Description</u>".
- Door lock function is normal.

#### Diagnosis Procedure

INFOID:000000009064760

# **1.**CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2.

NO >> Check DTC for BCM. Refer to <u>BCS-90, "DTC Index"</u>.

2. CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter). Refer to <u>DLK-102, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to DLK-92, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CHECK DOOR SWITCH

Check door switch (driver side). Refer to DLK-63, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

#### P POSITION WARNING DOES NOT OPERATE [INTELLIGENT KEY SYSTEM] < SYMPTOM DIAGNOSIS > P POSITION WARNING DOES NOT OPERATE А Description INFOID:000000009064761 NOTE: Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7, "Work</u> Flow". · Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-38, "WARNING FUNCTION : System С Description". Door lock function is normal. D Diagnosis Procedure INFOID:000000009064762 1.CHECK TRANSMISSION RANGE SWITCH Check DTC for BCM. Refer to BCS-90, "DTC Index". Is the inspection result normal? F YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK INTELLIGENT KEY WARNING BUZZER Check Intelligent Key warning buzzer. Refer to DLK-92, "Component Function Check". Н Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. **3.**CHECK BUZZER (COMBINATION METER) Check buzzer (combination meter). Refer to DLK-102, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. DLK 4.CHECK DOOR SWITCH Check door switch (driver side). Refer to DLK-63, "Component Function Check". Is the inspection result normal? YES >> GO TO 5. Μ NO >> Repair or replace the malfunctioning parts. 5. CHECK INSIDE KEY ANTENNA Check inside key antenna. Ν Refer to DLK-58, "DTC Logic" (instrument center). Refer to DLK-60, "DTC Logic" (luggage room). Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. **O.**CHECK COMBINATION METER DISPLAY Check combination meter display. Refer to DLK-101, "Component Function Check". Is the inspection result normal? YES >> GO TO 7. NO >> Repair or replace the malfunctioning parts. **I**.CONFIRM THE OPERATION

## **P POSITION WARNING DOES NOT OPERATE**

## < SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

Confirm the operation again.

#### Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.
- NO >> GO TO 1.

# ACC WARNING DOES NOT OPERATE

[INTELLIGENT KEY SYSTEM]

# < SYMPTOM DIAGNOSIS > ACC WARNING DOES NOT OPERATE

	А
Description	A
<ul> <li>NOTE:</li> <li>Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7, "Work Flow"</u>.</li> </ul>	В
<ul> <li>Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38</u>, "WARNING FUNCTION : System <u>Description"</u>.</li> <li>Door lock function is normal.</li> </ul>	С
Diagnosis Procedure	D
1. CHECK POWER POSITION	_
Check if ignition switch position is changing or not.	E
Does ignition switch position change?         YES       >> GO TO 2.         NO       >> Check DTC for BCM. Refer to <u>BCS-90, "DTC Index"</u> .	F
2.CHECK BUZZER (COMBINATION METER)	
Check buzzer (combination meter). Refer to <u>DLK-102, "Component Function Check"</u> .	G
<u>Is the inspection result normal?</u> YES >> GO TO 3.	Н
NO >> Repair or replace the malfunctioning parts. 3.CHECK COMBINATION METER DISPLAY FUNCTION	
Check combination meter display function.	I
Refer to <u>DLK-101, "Component Function Check"</u> . Is the inspection result normal?	1
YES >> GO TO 4.	J
NO >> Repair or replace the malfunctioning parts. 4.CONFIRM THE OPERATION	
Confirm the operation again.	DLK
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	L
	M
	Ν
	0

Ρ

# TAKE AWAY WARNING DOES NOT OPERATE DOOR IS OPEN

# DOOR IS OPEN : Description

INFOID:000000009064765

[INTELLIGENT KEY SYSTEM]

# NOTE:

- Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7, "Work</u> <u>Flow"</u>.
- Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38</u>, "WARNING FUNCTION : System <u>Description</u>".
- Door lock function is normal.

# DOOR IS OPEN : Diagnosis Procedure

INFOID:000000009064766

# **1.**CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2.

NO >> Check DTC for BCM. Refer to <u>BCS-90, "DTC Index"</u>.

**2.**CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter). Refer to <u>DLK-102, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 $\mathbf{3.}$ CHECK COMBINATION METER DISPLAY

Check combination meter display.

Refer to DLK-101, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CHECK DOOR SWITCH

Check door switch (driver side).

Refer to DLK-63, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to DLK-92, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

**6.**CHECK INSIDE KEY ANTENNA

Check inside key antenna.

Refer to <u>DLK-58</u>, "<u>DTC Logic</u>" (instrument center).

Refer to <u>DLK-60, "DTC Logic"</u> (luggage room).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

# TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]	
7. CHECK KEY SLOT ILLUMINATION	А
Check key slot illumination. Refer to <u>DLK-97, "Component Function Check"</u> .	A
<u>Is the inspection result normal?</u> YES >> GO TO 8. NO >> Repair or replace the malfunctioning parts.	В
8. CONFIRM THE OPERATION	С
Confirm the operation again.	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	D
ANY DOOR OPEN TO ALL DOORS CLOSED	E
ANY DOOR OPEN TO ALL DOORS CLOSED : Description	
NOTE: • Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7. "Work Flow"</u> .	F
<ul> <li>Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38</u>, "WARNING FUNCTION : System <u>Description</u>".</li> </ul>	G
Door lock function is normal.	Н
ANY DOOR OPEN TO ALL DOORS CLOSED : Diagnosis Procedure	11
1.CHECK DOOR SWITCH	I
Check door switch (driver side). Refer to <u>DLK-63, "Component Function Check"</u> .	
Is the inspection result normal?	J
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2. CHECK COMBINATION METER DISPLAY	DLK
Check combination meter display. Refer to <u>DLK-101, "Component_Function_Check"</u> .	
Is the inspection result normal?	L
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
NO >> Repair or replace the malfunctioning parts. 3.CHECK INSIDE KEY ANTENNA	M
Check inside key antenna.	
Refer to <u>DLK-58, "DTC Logic"</u> (instrument center). Refer to <u>DLK-60, "DTC Logic"</u> (luggage room).	Ν
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	0
4. CONFIRM THE OPERATION	
Confirm the operation again.	Ρ
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	
PUSH-BUTTON IGNITION SWITCH OPERATION	

# TAKE AWAY WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

[INTELLIGENT KEY SYSTEM]

INFOID:000000009064769

#### **PUSH-BUTTON IGNITION SWITCH OPERATION : Description**

#### NOTE:

- Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7. "Work</u> <u>Flow"</u>.
- Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38</u>, "WARNING FUNCTION : System <u>Description</u>".
- Door lock function is normal.

# PUSH-BUTTON IGNITION SWITCH OPERATION : Diagnosis Procedure INFOLD.00000000064770

## **1.**CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2.

NO >> Check DTC for BCM. Refer to <u>BCS-90, "DTC Index"</u>.

**2.**CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.

Refer to PCS-65. "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).

Refer to <u>DLK-102</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CHECK COMBINATION METER DISPLAY

Check combination meter display. Refer to DLK-101, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CHECK INSIDE KEY ANTENNA

Check inside key antenna.

Refer to <u>DLK-58, "DTC Logic"</u> (instrument center).

Refer to <u>DLK-60, "DTC Logic"</u> (luggage room).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

**6.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

NO >> GO TO 1.

INTELLIGENT KEY IS REMOVED FROM KEY SLOT

INTELLIGENT KEY IS REMOVED FROM KEY SLOT : Description

NOTE:

INFOID:000000009064771

# TAKE AWAY WARNING DOES NOT OPERATE

#### [INTELLIGENT KEY SYSTEM] < SYMPTOM DIAGNOSIS > Before performing the diagnosis in the following procedure, check "Work Flow". Refer to DLK-7, "Work Flow". А Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-38, "WARNING FUNCTION : System Description". В Door lock function is normal. INTELLIGENT KEY IS REMOVED FROM KEY SLOT : Diagnosis Procedure INFOID:000000009064772 1.CHECK KEY SLOT Check key slot. D Refer to DLK-95, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. Е NO >> Repair or replace the malfunctioning parts. 2.CHECK COMBINATION METER DISPLAY Check combination meter display. Refer to DLK-101, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. **3.**CHECK INSIDE KEY ANTENNA Н Check inside key antenna. Refer to <u>DLK-58, "DTC Logic"</u> (instrument center). Refer to <u>DLK-60, "DTC Logic"</u> (luggage room). Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4.CHECK KEY SLOT ILLUMINATION Check key slot illumination. DLK Refer to DLK-97, "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5.CONFIRM THE OPERATION Confirm the operation again. Μ

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

NO >> GO TO 1.

Ρ

Ν

# INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]

# INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

# Description

INFOID:000000009064773

#### NOTE:

- Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7. "Work</u> <u>Flow"</u>.
- Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38</u>, "WARNING FUNCTION : <u>System</u> <u>Description</u>".

## Diagnosis Procedure

INFOID:000000009064774

**1.**CHECK "LO- BATT OF KEY FOB WARN" SETTING IN "WORK SUPPORT"

Check "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT".

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT".

2.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery. Refer to <u>DLK-94, "Component Inspection"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 ${\it 3.}$  CHECK COMBINATION METER DISPLAY

Check combination meter display.

Refer to DLK-101, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CHECK INSIDE KEY ANTENNA

Check inside key antenna.

Refer to <u>DLK-58, "DTC Logic"</u> (instrument center).

Refer to DLK-60, "DTC Logic" (luggage room).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CHECK KEY SLOT ILLUMINATION

Check key slot illumination. Refer to <u>DLK-97, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

# DOOR LOCK OPERATION WARNING DOES NOT OPERATE WITH DOOR RE-QUEST SWITCH

QUEST SWITCH	
SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]	
OOR LOCK OPERATION WARNING DOES NOT OPERATE WITH DOOR	
REQUEST SWITCH	А
escription	В
<b>OTE:</b> Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7. "Work Flow"</u> . Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38, "WARNING FUNCTION : System Description"</u> .	С
viagnosis Procedure	D
.CHECK DOOR LOCK FUNCTION	Е
heck door lock function by door request switch. <u>oes door lock/unlock with door request switch?</u> YES >> GO TO 2. NO-1 >> Go to <u>DLK-182, "DRIVER SIDE : Description"</u> (driver side). NO-2 >> Go to <u>DLK-183, "PASSENGER SIDE : Description"</u> (passenger side).	F
NO-3 >> Go to <u>DLK-183, "BACK DOOR : Description"</u> (back door).	G
heck door switch (driver side). efer to <u>DLK-63, "Component Function Check"</u> . the inspection result normal?	Η
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. CHECK INTELLIGENT KEY WARNING BUZZER	
heck Intelligent Key warning buzzer. efer to <u>DLK-92, "Component Function Check"</u> .	J
the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	DLł
CHECK INSIDE KEY ANTENNA	L
heck inside key antenna. efer to <u>DLK-58, "DTC Logic"</u> (instrument center). efer to <u>DLK-60, "DTC Logic"</u> (luggage room).	
the inspection result normal? YES >> GO TO 5.	Μ
NO >> Repair or replace the malfunctioning parts.	Ν
onfirm the operation again.	
<u>the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> .	0
NO >> GO TO 1.	Ρ

# **KEY ID WARNING DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

# KEY ID WARNING DOES NOT OPERATE

# Description

INFOID:000000009064777

INFOID:000000009064778

[INTELLIGENT KEY SYSTEM]

#### NOTE:

- Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7, "Work</u> <u>Flow"</u>.
- Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38</u>, "WARNING FUNCTION : <u>System</u> <u>Description</u>".

## **Diagnosis** Procedure

**1.**CHECK INTELLIGENT KEY

Check Intelligent Key.

Refer to <u>DLK-94</u>, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK COMBINATION METER DISPLAY FUNCTION

Check combination meter display function. Refer to <u>DLK-101, "Component Function Check"</u>.

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace the malfunctioning parts.
- 3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]	
INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE	А
Description	1
NOTE: • Before performing the diagnosis in the following procedure, check "Work Flow". Refer to <u>DLK-7. "Work</u> Flow".	В
<ul> <li>Warning functions operating condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to <u>DLK-38</u>, "WARNING FUNCTION : System <u>Description</u>".</li> </ul>	С
Diagnosis Procedure	D
1.CHECK INTELLIGENT KEY	
Check Intelligent Key. Refer to <u>DLK-94, "Component Inspection"</u> .	Е
<u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. <b>2.</b> CHECK COMBINATION METER DISPLAY FUNCTION	F
Check combination meter display function. Refer to <u>DLK-101, "Component Function Check"</u> .	G
Is the inspection result normal?         YES       >> GO TO 3.         NO       >> Repair or replace the malfunctioning parts.	Н
3. CONFIRM THE OPERATION	I
Confirm the operation again.	1
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	J
	DLK

L

Μ

Ν

0

Ρ

#### INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE [INTELLIGENT KEY SYSTEM]

#### < SYMPTOM DIAGNOSIS >

# INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

# Description

INFOID:000000009064781

#### NOTE:

Before performing the diagnosis in the following procedure, check "Work Flow". Refer to DLK-7, "Work Flow".

**Diagnosis Procedure** 

INFOID:000000009064782

1. CHECK INTEGRATED HOMELINK TRANSMITTER

Check integrated homelink transmitter. Refer to DLK-105, "Component Function Check". Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

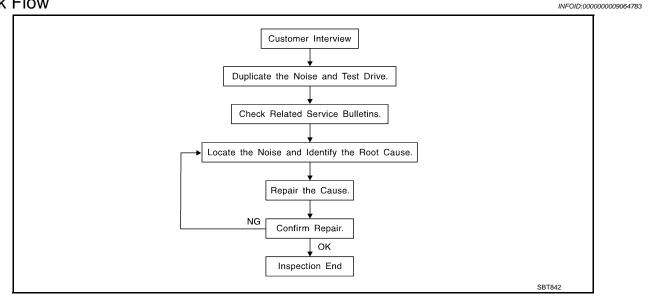
YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

#### < SYMPTOM DIAGNOSIS >

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

### Work Flow



#### CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to <u>DLK-219</u>, "<u>Diagnostic Worksheet</u>". 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 J are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak (Like tennis shoes on a clean floor)
   Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
   higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
- Creak (Like walking on an old wooden floor)
   Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle (Like shaking a baby rattle) Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock (Like a knock on a door)
   Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick (Like a clock second hand)
   Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump (Heavy, muffled knock noise) Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz (Like a bumblebee) Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

#### DUPLICATE THE NOISE AND TEST DRIVE

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

## **DLK-215**

А

В

E

Ν

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

#### < SYMPTOM DIAGNOSIS >

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

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

#### CHECK RELATED SERVICE BULLETINS

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

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

#### LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
- Removing the components in the area that is are suspected to be the cause of the noise. Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise. Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks. Refer to DLK-217, "Inspection Procedure".

#### REPAIR THE CAUSE

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

#### CAUTION:

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

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  $\times$  135 mm (3.94  $\times$  5.31 in)/76884-71L01: 60  $\times$  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,  $50 \times 50$  mm (1.97  $\times$  1.97 in)/73982-

50Y00: 10 mm (0.39 in) thick,  $50 \times 50$  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 mm (0.59  $\times$  0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll

The following materials, not found in the kit, can also be used to repair squeaks and rattles. UHMW (TEFLON) TAPE

SQUEAK AND RATTLE TROUBLE DIAGNOSES	
< SYMPTOM DIAGNOSIS > [INTELLIGENT KEY SYSTEM]	
Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE	А
Used in place of UHMW tape that is be visible or does not fit. Will only last a few months. SILICONE SPRAY	
Used when grease cannot be applied.	В
DUCT TAPE Used to eliminate movement.	
CONFIRM THE REPAIR Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same	С
conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.	
Inspection Procedure	D
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
3. Instrument panel to front pillar garnish	
4. Instrument panel to windshield	G
5. Instrument panel mounting pins	
<ol> <li>Wiring harnesses behind the combination meter</li> <li>A/C defractor dust and dust joint</li> </ol>	
<ol> <li>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</li> </ol>	Н
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	I
wiring harness. CAUTION:	1
Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.	J
CENTER CONSOLE	0
Components to pay attention to include:	
1. Shifter assembly cover to finisher	DLK
2. A/C control unit and cluster lid C	
<ol><li>Wiring harnesses behind audio and A/C control unit</li></ol>	I
The instrument panel repair and isolation procedures also apply to the center console.	
DOORS	
Pay attention to the following:	M
1. Finisher and inner panel making a slapping noise	
2. Inside handle escutcheon to door finisher	
	Ν
4. Door striker out of alignment causing a popping noise on starts and stops	
Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise.	0
TRUNK	_
Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer. In addition look for the following:	Ρ
1. Trunk lid dumpers out of adjustment	
2. Trunk lid striker out of adjustment	
3 The trunk lid torsion has knocking together	

- 3. The trunk lid torsion bars knocking together
- 4. A loose license plate or bracket

#### < 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:

- 1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
- 2. Sunvisor shaft shaking in the holder
- 3. Front or rear windshield touching headlining and squeaking

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

#### SEATS

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

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

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

#### UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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

< SYMPTOM DIAGNOSIS >

**Diagnostic Worksheet** 



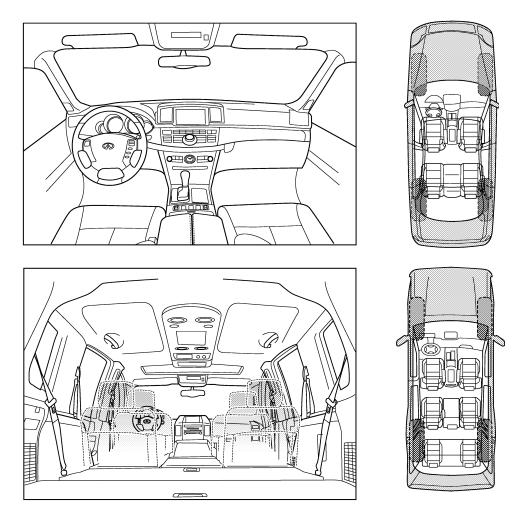
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

#### 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.

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

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



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

INFOID:000000009064785

[INTELLIGENT KEY SYSTEM]

А

В

D

Е

F

Н

DLK

L

Μ

Ν

#### < SYMPTOM DIAGNOSIS >

#### SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

II. WHEN DOES IT OCCUR? (please check the boxes that apply)						
<ul> <li>anytime</li> <li>1st time in the morning</li> <li>only when it is cold outside</li> <li>only when it is hot outside</li> </ul>	<ul> <li>after sitting out in the rain</li> <li>when it is raining or wet</li> <li>dry or dusty conditions</li> <li>other:</li> </ul>					
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE					
<ul> <li>through driveways</li> <li>over rough roads</li> <li>over speed bumps</li> <li>only about mph</li> <li>on acceleration</li> <li>coming to a stop</li> <li>on turns: left, right or either (circle)</li> <li>with passengers or cargo</li> <li>other:</li> <li>after driving miles or minutes</li> </ul>	<ul> <li>squeak (like tennis shoes on a clean floor)</li> <li>creak (like walking on an old wooden floor)</li> <li>rattle (like shaking a baby rattle)</li> <li>knock (like a knock at the door)</li> <li>tick (like a clock second hand)</li> <li>thump (heavy, muffled knock noise)</li> <li>buzz (like a bumble bee)</li> </ul>					

#### TO BE COMPLETED BY DEALERSHIP PERSONNEL

**Test Drive Notes:** 

	YES	NO	Initials of person performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm repair			
		me:	

# < PRECAUTION > PRECAUTION PRECAUTIONS

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

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

#### WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that 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 "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

#### WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

## Precaution for Procedure without Cowl Top Cover

DLK

J

А

В

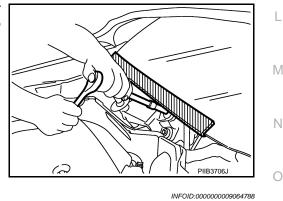
Е

F

Н

INFOID:000000009064787

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



Precautions For Xenon Headlamp Service

# Р

WARNING:

Comply with the following warnings to prevent any serious accident.

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.
- Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector.

# PRECAUTIONS

#### < PRECAUTION >

- (Turning it ON outside the lamp case may cause fire or visual impairments.)
- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

#### **CAUTION:**

Comply with the following cautions to prevent any error and malfunction.

- Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)
- Never perform HID circuit inspection with a tester.
- Never touch the xenon bulb glass with hands. Never put oil and grease on it.
- Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.
- Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).

#### 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.

# PREPARATION PREPARATION

# Special Service Tools

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

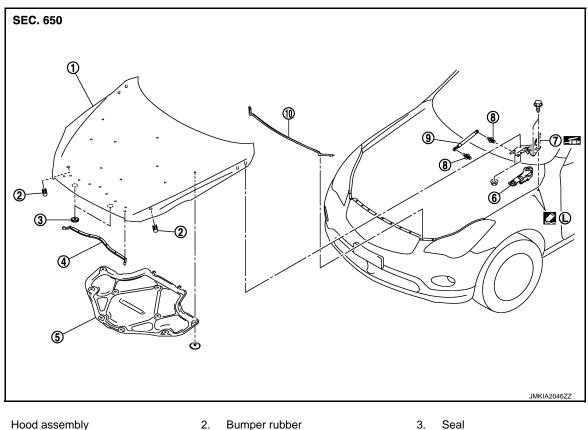
(Ke	Fool number ent-Moore No.) Tool name	Description
(J-39570) Chassis ear	SIIA0993E	Locates the noise
(J-43980) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairs the cause of noise
nmercial Service Too	ls	INFOID:000000009064791
Tool name		Description
Engine ear		Locates the noise
	SilA0995E	
Remover tool	SIIA0995E	Removes the clips, pawls and metal clips

А

В

# < REMOVAL AND INSTALLATION > **REMOVAL AND INSTALLATION** HOOD HOOD ASSEMBLY HOOD ASSEMBLY : Exploded View

INFOID:000000009064792



- 1. Hood assembly
- 4. Radiator core seal
- 7. Hood hinge
- 10. Hood seal (front)
- : Apply Genuine High Strength Locking Sealant or equivalent.

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

HOOD ASSEMBLY : Removal and Installation

#### **CAUTION:**

#### Operate with 2 workers, because of its heavy weight.

#### REMOVAL

Remove hood hinge cover (LH/RH) (1). 1.

#### NOTE:

While pushing the pawls, pull hood hinge cover in the direction of the arrow.

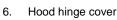
2.

5.

8.

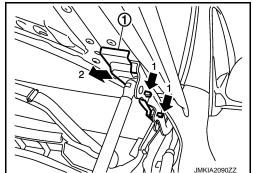
Hood insulator

Stud ball



3.

9. Hood stay



# < REMOVAL AND INSTALLATION >

C

JMKIA225577

3

 $\mathbf{\hat{2}}$ 

А

В

D

Ε

F

Н

- 2. Remove washer nozzle, washer tube. Refer to <u>WW-115, "Removal and Installation"</u>.
- 3. Support hood lock assembly with a proper material to prevent it from falling.

# WARNING:

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

HOOD

- 4. Remove the metal clip (3) located on the connection between the hood stay (1) and the stud ball (2) (hood side), by using a flatted-blade screwdriver (A).
- 5. Disengage the stud ball from the hood stay (hood side).

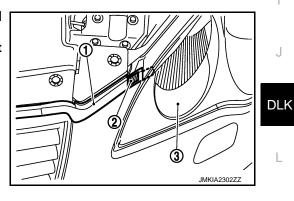
- 6. Remove hinge mounting nuts on the hood to remove the hood assembly.
- 7. Remove following parts after removing the hood assembly.
  - Radiator core seal
  - Hood insulator
  - Hood bumper rubber
  - Hood seal (front)
  - Hood striker

# INSTALLATION

Install in the reverse order of removal.

# CAUTION:

- Before installing hood seal (front)(1), apply double-faced adhesive tape (2).
- Check that both ends of hood seal (front) is below than front combination lamp (3).



- 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-226, "HOOD ASSEMBLY : Adjust-ment"</u>.
- After installing, perform front washer nozzle and tube inspection and adjustment. Refer to <u>WW-115</u>, <u>"Inspection and Adjustment"</u>.

Ν

Μ

HOOD

# HOOD ASSEMBLY : Adjustment

< REMOVAL AND INSTALLATION >

INFOID:000000009064794

#### 1 Ð $\bigcirc$ D ന 0 13.5 3 (1.4, 10) ⓓ 2 3 4 <u>0</u>-0 **A**-**A B**-**B** ⓓ Ð A ⓓ ര 8 7 JMKIA2086GB Hood assembly 2. Hood striker Hood bumper rubber 3. Hood hinge 5. Front grill Front bumper fascia 6. Front combination lamp 8. Front fender

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

1.

4.

7.

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

If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Portion			Standard	Difference (LH/RH, MAX)	
Hood – Front grille A – A E		Е	Clearance	2.6 - 7.4 (0.102 - 0.291)	_
Hood – Front bumper	B – B	F	Clearance	1.5 – 5.5 (0.059 – 0.217)	2.5 (0.098)
fascia	<b>D</b> - <b>D</b>	G	Surface height	-1.0 - 3.0 (-0.039 - 0.118)	2.0 (0.079)

#### < REMOVAL AND INSTALLATION >

	Portion Standard		Difference (LH/RH, MAX)		
Hood – Front combina-	0.0	н	Clearance	1.5 – 5.5 (0.059 – 0.217)	2.0 (0.079)
tion lamp	<b>C</b> – <b>C</b>	I	Surface height	-2.0 - 2.0 (-0.079 - 0.079)	2.1 (0.083)
Head Front for day D. J		J	Clearance	2.5 – 4.5 (0.098 – 0.177)	2.0 (0.079)
Hood – Front fender	D – D	ĸ	Surface height	-1.0 - 1.0 (-0.039 - 0.039)	_
Hood striker – Bumper rubber	_	L	Clearance	32.5 – 33.5 (1.280 – 1.319)	_

- 1. Remove striker and adjust the surface height of hood, front bumper fascia and front fender according to the fitting standard dimension, by rotating hood bumper rubbers.
- 2. Adjust the height difference of striker, hood bumper rubber according to the fitting standard dimension.
- 3. Loosen hood hinge mounting nuts on the hood.
- 4. Adjust the clearance of hood, front bumper fascia, front grill and front fender according to the fitting standard dimension, for the hood.

5.	Check that hood lock primary latch is securely engaged with striker by dropping hood from approximately	
	200 mm (7.874 in) height or pressing lightly on the hood.	
	CAUTION:	Н
	Never drop hood from a height of 300 mm (11.811 in) or more.	

- 6. Install as 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.
  - Never press simultaneously both sides.
- 7. After adjustment tighten hood hinge mounting nuts to the specified torque.

# HOOD HINGE

DLK

L

Μ

Ν

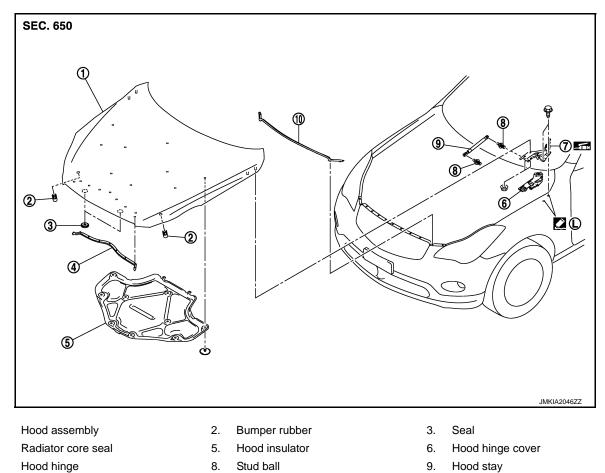
Ρ

J

F

# < REMOVAL AND INSTALLATION > HOOD HINGE : Exploded View

INFOID:000000009064795



10. Hood seal (front)

: Apply Genuine High Strength Locking Sealant or equivalent.

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

# HOOD HINGE : Removal and Installation

#### REMOVAL

1.

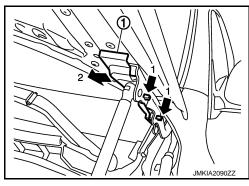
4.

7.

1. Remove hood hinge cover (LH/RH) (1).

NOTE:

While pushing the pawls, pull hood hinge cover in the direction of the arrow.



- 2. Remove hood assembly. Refer to DLK-224, "HOOD ASSEMBLY : Removal and Installation".
- 3. Remove front fender. Refer to <u>DLK-234, "Removal and Installation"</u>.
- 4. Remove hood hinge mounting bolts, and then remove hood hinge.

# INSTALLATION

Install in the reverse order of removal. CAUTION:

## HOOD

#### [INTELLIGENT KEY SYSTEM]

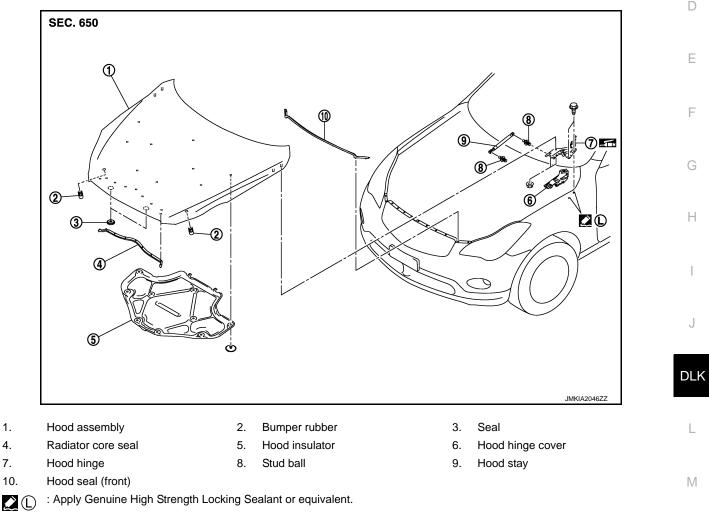
А

INFOID:000000009064797

- < REMOVAL AND INSTALLATION >
- Before installation of hood hinge, apply anticorrosive agent onto the surface of the vehicle body.
- Before installation of hood hinge, drop genuine high strength locking sealant or equivalent into bolt hole of hood hinge (body side).
- After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.
- В After installation, perform hood fitting adjustment. Refer to <u>DLK-226, "HOOD ASSEMBLY : Adjust-</u> ment".

# HOOD STAY

HOOD STAY : Exploded View



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

# HOOD STAY : Removal and Installation

# REMOVAL

1.

4.

7.

10.

- Support hood lock assembly with a proper material to prevent it from falling. 1.
  - WARNING:

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

INFOID:000000009064798

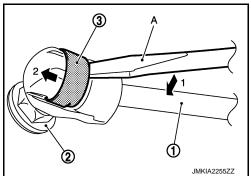
Ν

# HOOD

#### < REMOVAL AND INSTALLATION >

- 2. Remove the metal clip (3) located on the connection between the hood stay (1) and the stud ball (2) (hood side), by using a flat-bladed screwdriver (A).
- 3. Disengage the stud ball from the hood stay (hood side).
- 4. Repeat the same operation to disengage the stud ball from the hood stay (body side), then remove the hood stay.

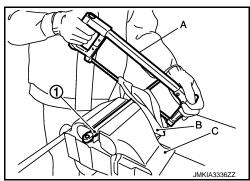
# [INTELLIGENT KEY SYSTEM]

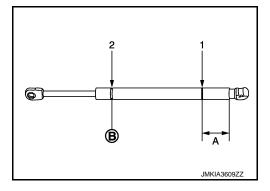


INSTALLATION Install in the reverse order of removal.

# HOOD STAY : Disposal

- 1. Fix hood stay (1) using a vise (C).
- Using hacksaw (A) slowly make 2 holes in the hood stay, in numerical order as shown in the figure.
   CAUTION:
  - When cutting a hole on hood stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.
  - Wear eye protection (safety glasses).
  - Wear gloves.
    - A: 20 mm (0.787 in)
    - B: Cut at the groove.





# **RADIATOR CORE SUPPORT**

# < REMOVAL AND INSTALLATION >

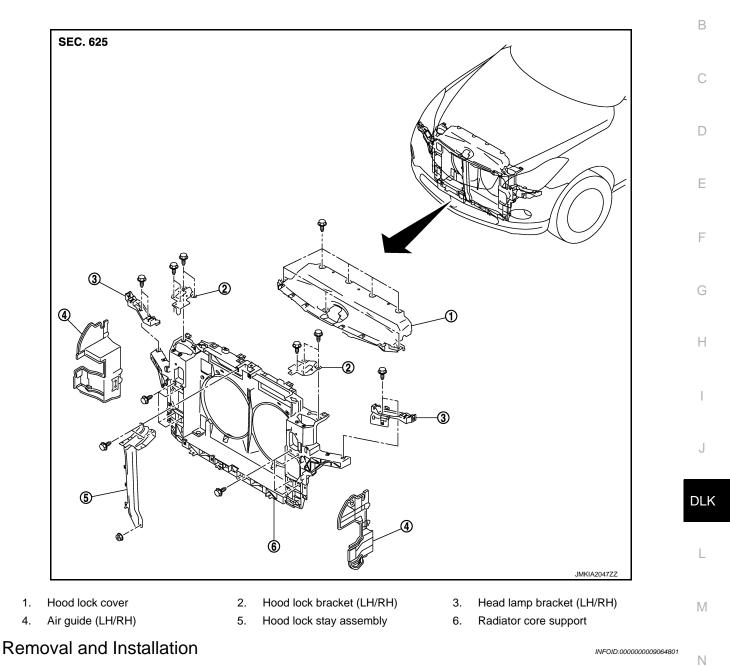
# RADIATOR CORE SUPPORT

# **Exploded View**

INFOID:000000009064800

А

[INTELLIGENT KEY SYSTEM]



#### REMOVAL

- Use a refrigerant collecting equipment to discharge the refrigerant. Refer to <u>HA-24</u>, "<u>Collection and</u> <u>Charge</u>".
- 2. Drain engine coolant from radiator. Refer to <u>CO-7, "Draining"</u>.
- 3. Remove engine under cover. Refer to EXT-31. "Removal and Installation".
- Remove front grille. Refer to <u>EXT-20, "Removal and Installation"</u>.
- 5. Remove front bumper fascia, energy absorber, reinforcement. Refer to <u>EXT-13, "Removal and Installa-</u> tion".
- 6. Remove mounting bolts of hood lock cover.
- 7. Disconnect harness clip and hood lock cable from hood lock cover.
- 8. Remove hood lock cover.

# DLK-231

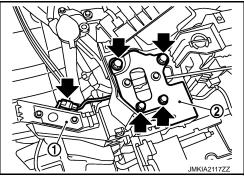
 $\bigcirc$ 

# **RADIATOR CORE SUPPORT**

#### < REMOVAL AND INSTALLATION >

- Remove front combination lamp (LH/RH). Refer to <u>EXL-210, "Removal and Installation"</u> (XENON TYPE) or <u>EXL-385, "Removal and Installation"</u> (HALOGEN TYPE).
- 10. Disconnect hood lock switch connector (A) from head lamp bracket (RH) (1).
- 11. Remove mounting bolts and remove hood lock bracket (2) (LH/ RH).





- 12. Disconnect hood lock cable from hood lock (LH/RH).
- 13. Disassembly hood lock from hood lock bracket (LH/RH).
- 14. Disconnect all clamp of hood cable from radiator core support assembly.
- 15. Disconnect harness connector of refrigerant pressure sensor. Refer to <u>HAC-131, "Removal and Installa-</u> tion".
- 16. Disconnect harness connector of ambient sensor. Refer to HAC-124, "Removal and Installation".
- 17. Remove air guide (LH).
- 18. Remove ICC sensor integrated unit (with intelligent cruse control model). Refer to <u>CCS-174, "Removal</u> <u>and Installation"</u>.
- 19. Remove horn (Hi/Lo). Refer to HRN-7, "Removal and Installation".
- 20. Remove intelligent key warning buzzer. Refer to DLK-274, "Removal and Installation".
- 21. Disconnect harness clamp from hood lock stay.
- 22. Remove mounting bolt and nut, and remove hood lock stay.
- 23. Remove washer tank. Refer to WW-112, "Removal and Installation".
- 24. Remove power steering oil cooler. Refer to <u>ST-51, "2WD : Exploded View"</u> (2WD) or <u>ST-52, "AWD :</u> <u>Exploded View"</u> (AWD).
- 25. Remove air guide (RH).
- Remove mounting bolt of power steering oil cooler pipe bracket. Refer to <u>ST-51, "2WD : Exploded View"</u> (2WD) or <u>ST-52, "AWD : Exploded View"</u> (AWD).
- 27. Remove air cleaner box (LH/RH). Refer to EM-26. "Removal and Installation".
- 28. Remove front under side cover (LH). Refer to EXT-31, "Removal and Installation".
- 29. Remove radiator upper hose and lower hose at radiator side. Refer to CO-13, "Removal and Installation".
- 30. Remove mounting bolts of condenser assembly from radiator core support assembly. Refer to <u>HA-48.</u> <u>"CONDENSER : Removal and Installation"</u>.
- Disconnect AT fluid cooler hose (upper/lower) from fan shroud and remove AT fluid cooler hose (upper/lower) from radiator. Refer to <u>TM-206</u>, "<u>2WD</u> : <u>Removal and Installation</u>" (2WD) or <u>TM-208</u>, "<u>AWD</u> : <u>Removal and Installation</u>" (AWD).
- 32. Remove condenser assembly. Refer to HA-48, "CONDENSER : Removal and Installation".
- 33. Remove radiator. Refer to CO-13, "Removal and Installation".
- 34. Disconnect harness connector of crash zone sensor. Refer to SR-20, "Removal and Installation".
- 35. Disconnect harness connector of cooling fan control module. Refer to CO-17, "Removal and Installation".
- 36. Disconnect all harness clip from radiator core support assembly.
- 37. Remove mounting bolts, and then remove radiator core support assembly. CAUTION:

#### Operate with two workers, because of its heavy weight.

- 38. Remove the following parts after removing radiator core support assembly.
  - Head lamp bracket
  - Cooling fan (LH/RH): Refer to CO-17. "Removal and Installation".
  - Crash zone sensor: Refer to <u>SR-20, "Removal and Installation"</u>.
  - Ambient sensor: Refer to <u>HAC-124</u>, "Removal and Installation".

# **DLK-232**

# **RADIATOR CORE SUPPORT**

[INTEL	LIGENT	KEY	SYSTEM]
--------	--------	-----	---------

## < REMOVAL AND INSTALLATION > INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

- Replenish the following parts.
- Refrigerant: Refer to <u>HA-24, "Collection and Charge"</u>.
- Engine coolant: Refer to CO-8, "Refilling".
- AT fluid: Refer to TM-174, "Changing".
- Power steering oil: Refer to ST-10, "Inspection".
- Adjust the following parts.
- ICC sensor integrated unit (with intelligent cruse control model): Refer to CCS-7, "ADDITIONAL SER-VICE WHEN REPLACING CONTROL UNIT (ICC SENSOR INTEGRATED UNIT) : Description".
- Front combination lamp: Refer to EXL-206, "Aiming Adjustment Procedure" (XENON TYPE) or EXL-D 382, "Aiming Adjustment Procedure" (HALOGEN TYPE).
- Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to AV-234, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Special Repair Requirement"

Н

А

В

Ε

F

L

Μ

Ν

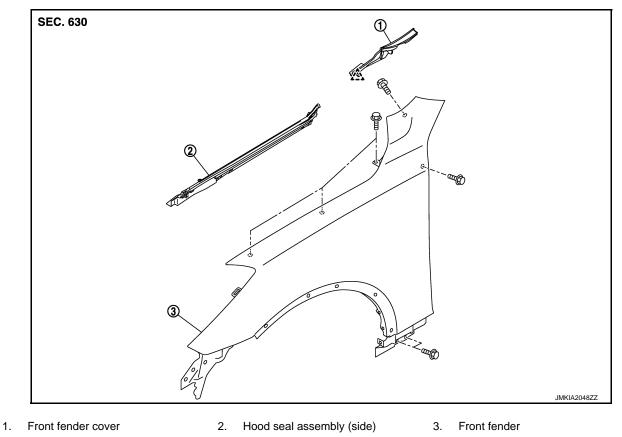
# < REMOVAL AND INSTALLATION >

# FRONT FENDER

**Exploded View** 

INFOID:000000009064802

[INTELLIGENT KEY SYSTEM]



♪ : Pawl

# Removal and Installation

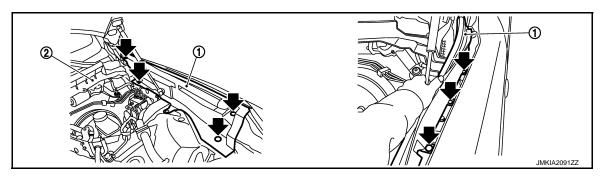
INFOID:000000009064803

## CAUTION:

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

#### REMOVAL

- 1. Remove the following parts.
  - LH side
  - Brake master cylinder cover and hood ledge cover (LH): Refer to <u>EXT-23, "Removal and Installation"</u>. • RH side
    - Battery cover and hood ledge cover (RH): Refer to EXT-23, "Removal and Installation".
- 2. Remove clips as shown in the figure by arrows, and remove hood seal assembly (side).



- 1. Hood seal assembly (side) 2.
  - Cowl top cover

# **FRONT FENDER**

< REMOVAL AND INSTALLATION >

# [INTELLIGENT KEY SYSTEM]

<ul> <li>4. Remove front bumper fascia. Refer to <u>EXT-13</u>, "<u>Removal and Installation</u>". (XENON TYPE) or <u>EXL-385</u>, "<u>Removal and Installation</u>" (HALOGEN TYPE).</li> <li>5. Remove front fender cover. B</li> <li>6. Remove front fender cover. B</li> <li>7. Remove fillet molding. Refer to <u>EXT-32</u>, "<u>Removal and Installation</u>".</li> <li>8. Remove center mod guard. Refer to <u>EXT-29</u>, "<u>Removal and Installation</u>".</li> <li>9. Remove mounting bolts except bolt of windshield side.</li> <li>10. Loosen the mounting bolt (windshield glass side), then pull the front fender upward to remove it. CAUTION: <ul> <li>• The mounting bolt (windshield glass side) can not be removed because there is not enough space, between the front fender and the windshield glass.</li> <li>• A viscous urethane foam is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.</li> </ul> </li> <li>INSTALLATION <ul> <li>Install in the reverse order of removal.</li> <li>CAUTION:</li> <li>• After installation, check front fender adjustment. Refer to <u>DLK-226</u>, "HOOD ASSEMBLY : Adjustment" and <u>DLK-237</u>, "DOOR ASSEMBLY : Adjustment".</li> <li>• Adjust the following part.</li> <li>• Front combination lamp: Refer to <u>EXL-206</u>, "Aiming Adjustment Procedure" (XENON TYPE) or <u>EXL-382</u>, "Aiming Adjustment Procedure" (HALOGEN TYPE).</li> <li>• Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234</u>, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR): Special Repair Requirement"</li> </ul></li></ul>	3.	Remove fender protector. Refer to EXT-25, "FENDER PROTECTOR : Removal and Installation".	
385. "Removal and Installation" (HALOGEN TYPE).       B         6. Remove front fender cover.       F         7. Remove fillet molding. Refer to EXT-32. "Removal and Installation"       C         8. Remove center mod guard. Refer to EXT-29. "Removal and Installation".       C         9. Remove mounting bolts except bolt of windshield side.       C         10. Loosen the mounting bolt (windshield glass side), then pull the front fender upward to remove it.       C         CAUTION:       • The mounting bolt (windshield glass side) can not be removed because there is not enough space, between the front fender and the windshield glass.       • A viscous urethane foam is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.       E         INSTALLATION       Installation, check front fender adjustment. Refer to DLK-226, "HOOD ASSEMBLY : Adjustment" and DLK-237, "DOOR ASSEMBLY : Adjustment".       F         • After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.       G         • Adjust the following part.       • Front combination lamp: Refer to EXL-206, "Aiming Adjustment Procedure" (XENON TYPE) or EXL-382, "Aiming Adjustment Procedure" (XENON TYPE) or EXL-382, "Aiming Adjustment Procedure" (HALOGEN TYPE).       H	4.	Remove front bumper fascia. Refer to EXT-13, "Removal and Installation".	А
<ul> <li>7. Remove fillet molding. Refer to <u>EXT-32</u>, "Removal and Installation"</li> <li>8. Remove center mod guard. Refer to <u>EXT-29</u>, "Removal and Installation".</li> <li>9. Remove mounting bolts except bolt of windshield side.</li> <li>10. Loosen the mounting bolt (windshield glass side), then pull the front fender upward to remove it. CAUTION: <ul> <li>The mounting bolt (windshield glass side) can not be removed because there is not enough space, between the front fender and the windshield glass.</li> <li>A viscous urethane foam is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.</li> </ul> </li> <li>INSTALLATION <ul> <li>Install in the reverse order of removal.</li> <li>CAUTION:</li> <li>After installation, check front fender adjustment. Refer to <u>DLK-226</u>, "HOOD ASSEMBLY : Adjustment".</li> <li>After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.</li> <li>Adjust the following part.</li> <li>Front combination lamp: Refer to <u>EXL-206</u>, "Aiming Adjustment Procedure" (XENON TYPE) or <u>EXL-382</u>, "Aiming Adjustment Procedure" (MALOGEN TYPE).</li> <li>H around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234</u>, "CALIBRATING CAMERA</li> </ul> </li> </ul>	5.		
<ul> <li>8. Remove center mod guard. Refer to <u>EXT-29. "Removal and Installation"</u>.</li> <li>9. Remove mounting bolts except bolt of windshield side.</li> <li>10. Loosen the mounting bolt (windshield glass side), then pull the front fender upward to remove it. <b>CAUTION:</b> <ul> <li>The mounting bolt (windshield glass side) can not be removed because there is not enough space, between the front fender and the windshield glass.</li> <li>A viscous urethane foam is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.</li> </ul> </li> <li><b>INSTALLATION</b> Install in the reverse order of removal. <b>CAUTION:</b> <ul> <li>After installation, check front fender adjustment. Refer to <u>DLK-226, "HOOD ASSEMBLY : Adjustment"</u>.</li> <li>After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts. <ul> <li>Adjust the following part.</li> <li>Front combination lamp: Refer to <u>EXL-206, "Aiming Adjustment Procedure"</u> (XENON TYPE) or <u>EXL-382, "Aiming Adjustment Procedure"</u> (HALOGEN TYPE).</li> <li>Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234, "CALIBRATING CAMERA</u></li> </ul></li></ul></li></ul>	6.	Remove front fender cover.	В
<ul> <li>9. Remove mounting bolts except bolt of windshield side.</li> <li>10. Loosen the mounting bolt (windshield glass side), then pull the front fender upward to remove it. CAUTION: <ul> <li>The mounting bolt (windshield glass side) can not be removed because there is not enough space, between the front fender and the windshield glass.</li> <li>A viscous urethane foam is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.</li> </ul> </li> <li>INSTALLATION <ul> <li>Install in the reverse order of removal.</li> <li>CAUTION:</li> <li>After installation, check front fender adjustment. Refer to DLK-226, "HOOD ASSEMBLY : Adjustment".</li> <li>After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.</li> <li>Adjust the following part.</li> <li>Front combination lamp: Refer to EXL-206, "Aiming Adjustment Procedure" (XENON TYPE) or EXL-382, "Aiming Adjustment Procedure" (HALOGEN TYPE).</li> <li>Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to AV-234, "CALIBRATING CAMERA</li> </ul> </li> </ul>	7.	Remove fillet molding. Refer to EXT-32, "Removal and Installation"	
<ul> <li>10. Loosen the mounting bolt (windshield glass side), then pull the front fender upward to remove it. <i>CAUTION:</i> <ul> <li>The mounting bolt (windshield glass side) can not be removed because there is not enough space, between the front fender and the windshield glass.</li> <li>A viscous urethane foam is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.</li> <li>INSTALLATION</li></ul></li></ul>	8.	Remove center mod guard. Refer to EXT-29, "Removal and Installation".	0
<ul> <li>CAUTION:         <ul> <li>The mounting bolt (windshield glass side) can not be removed because there is not enough space, between the front fender and the windshield glass.</li> <li>A viscous urethane foam is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.</li> </ul> </li> <li>INSTALLATION         <ul> <li>Install in the reverse order of removal.</li> <li>CAUTION:</li> <li>After installation, check front fender adjustment. Refer to <u>DLK-226, "HOOD ASSEMBLY : Adjustment" and DLK-237, "DOOR ASSEMBLY : Adjustment".</u></li> </ul> </li> <li>After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.</li> <li>Adjust the following part.</li> <li>Front combination lamp: Refer to <u>EXL-206, "Aiming Adjustment Procedure"</u> (XENON TYPE) or <u>EXL-382, "Aiming Adjustment Procedure"</u> (HALOGEN TYPE).</li> <li>Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234, "CALIBRATING CAMERA</u></li> </ul>	9.	Remove mounting bolts except bolt of windshield side.	C
<ul> <li>The mounting bolt (windshield glass side) can not be removed because there is not enough space, between the front fender and the windshield glass.</li> <li>A viscous urethane foam is installed on the back surface of front fender. When removing the front fender, peel of the urethane foam bit at a time, and carefully to remove it.</li> <li>INSTALLATION Install in the reverse order of removal. CAUTION: <ul> <li>After installation, check front fender adjustment. Refer to <u>DLK-226, "HOOD ASSEMBLY : Adjustment"</u> and <u>DLK-237, "DOOR ASSEMBLY : Adjustment"</u>.</li> <li>After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.</li> <li>Adjust the following part.</li> <li>Front combination lamp: Refer to <u>EXL-206, "Aiming Adjustment Procedure"</u> (XENON TYPE) or <u>EXL-382, "Aiming Adjustment Procedure"</u> (HALOGEN TYPE).</li> <li>Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234, "CALIBRATING CAMERA</u></li> </ul></li></ul>	10.		
Install in the reverse order of removal.       F         CAUTION:       • After installation, check front fender adjustment. Refer to DLK-226, "HOOD ASSEMBLY : Adjust- ment" and DLK-237, "DOOR ASSEMBLY : Adjustment".       • After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.       • After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.       • Adjust the following part.         • Front combination lamp: Refer to EXL-206, "Aiming Adjustment Procedure" (XENON TYPE) or EXL- 382, "Aiming Adjustment Procedure" (HALOGEN TYPE).       • Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to AV-234, "CALIBRATING CAMERA		<ul><li>space, between the front fender and the windshield glass.</li><li>A viscous urethane foam is installed on the back surface of front fender. When removing the</li></ul>	_
<ul> <li>CAUTION:</li> <li>After installation, check front fender adjustment. Refer to <u>DLK-226, "HOOD ASSEMBLY : Adjustment"</u> and <u>DLK-237, "DOOR ASSEMBLY : Adjustment"</u>.</li> <li>After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.</li> <li>Adjust the following part.</li> <li>Front combination lamp: Refer to <u>EXL-206, "Aiming Adjustment Procedure"</u> (XENON TYPE) or <u>EXL-382, "Aiming Adjustment Procedure"</u> (HALOGEN TYPE).</li> <li>Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234, "CALIBRATING CAMERA</u></li> </ul>	INS	STALLATION	
<ul> <li><u>ment"</u> and <u>DLK-237, "DOOR ASSEMBLY : Adjustment"</u>.</li> <li>After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.</li> <li>Adjust the following part.</li> <li>Front combination lamp: Refer to <u>EXL-206, "Aiming Adjustment Procedure"</u> (XENON TYPE) or <u>EXL-382, "Aiming Adjustment Procedure"</u> (HALOGEN TYPE).</li> <li>Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234, "CALIBRATING CAMERA</u></li> </ul>	-		F
<ul> <li>After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.</li> <li>Adjust the following part.</li> <li>Front combination lamp: Refer to <u>EXL-206, "Aiming Adjustment Procedure"</u> (XENON TYPE) or <u>EXL-382, "Aiming Adjustment Procedure"</u> (HALOGEN TYPE).</li> <li>Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234, "CALIBRATING CAMERA</u></li> </ul>			
<ul> <li>Front combination lamp: Refer to <u>EXL-206, "Aiming Adjustment Procedure"</u> (XENON TYPE) or <u>EXL-382, "Aiming Adjustment Procedure"</u> (HALOGEN TYPE).</li> <li>Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234, "CALIBRATING CAMERA</u></li> </ul>	• A	fter installation, apply the touch-up paint (the body color) onto the head of front fender mounting	G
382, "Aiming Adjustment Procedure" (HALOGEN TYPE). - Around view monitor (BOSE AUDIO WITH NAVIGATION): Refer to <u>AV-234, "CALIBRATING CAMERA</u>			
	<u>3</u>	82, "Aiming Adjustment Procedure" (HALOGEN TYPE).	Н
	<u>m</u>		

J

L

Μ

Ν

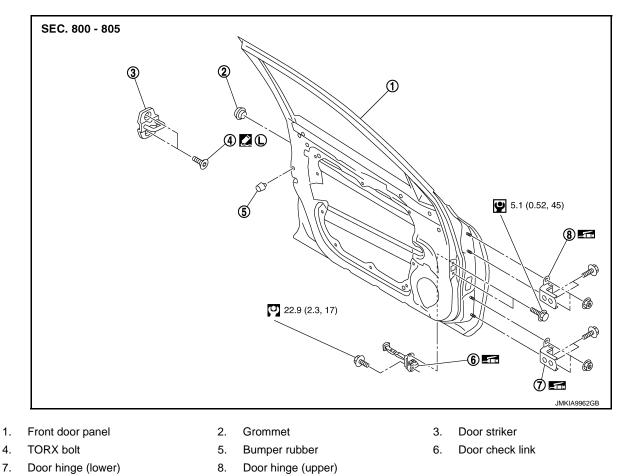
Ο

#### < REMOVAL AND INSTALLATION >

# FRONT DOOR DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:000000009064804



Refer to <u>GI-4, "Components"</u> for symbols in the figure.

# DOOR ASSEMBLY : Removal and Installation

INFOID:000000009064805

# **CAUTION:**

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

## REMOVAL

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

# INSTALLATION

Install in the reverse order of removal.

- CAUTION:
- Check front door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-237, "DOOR ASSEMBLY : Adjust-ment"</u>.
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

# **DLK-236**

## [INTELLIGENT KEY SYSTEM]

## < REMOVAL AND INSTALLATION > **DOOR ASSEMBLY : Adjustment**

INFOID:000000009064806

А

В

D

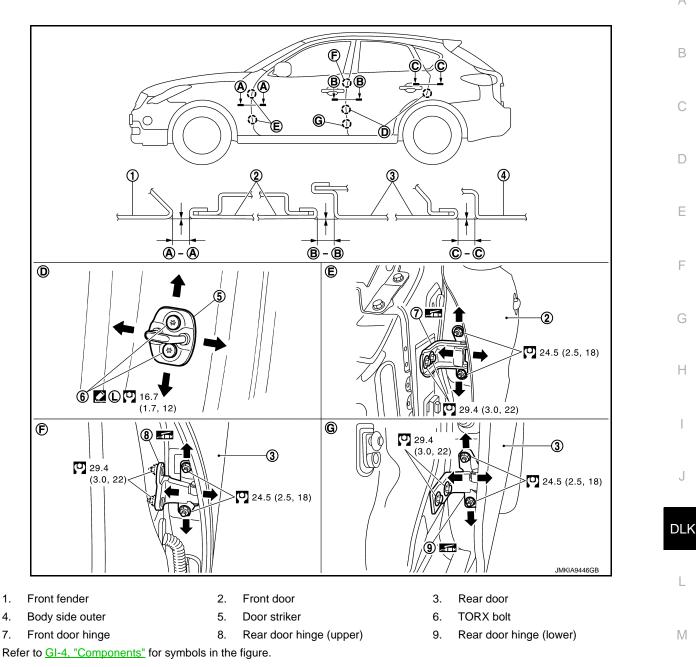
Ε

F

Н

L

Ν



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

			Unit: mm (in)	
Portion		Clearance	Surface height	0
Front fender – Front door	<b>A</b> – A	2.6 – 4.6 (0.102 – 0.181)	- 1.0 - 1.0 (- 0.039 - 0.039)	
Front door – Rear door	<b>B</b> – <b>B</b>	2.6 – 4.6 (0.102 – 0.181)	- 0.5 - 1.0 (- 0.020 - 0.039)	Ρ

- 1. Remove front fender. Refer to <u>DLK-234, "Removal and Installation"</u>.
- 2. Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of front door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- Loosen door hinge mounting bolts on body side. 5.

# **DLK-237**

#### < REMOVAL AND INSTALLATION >

# [INTELLIGENT KEY SYSTEM]

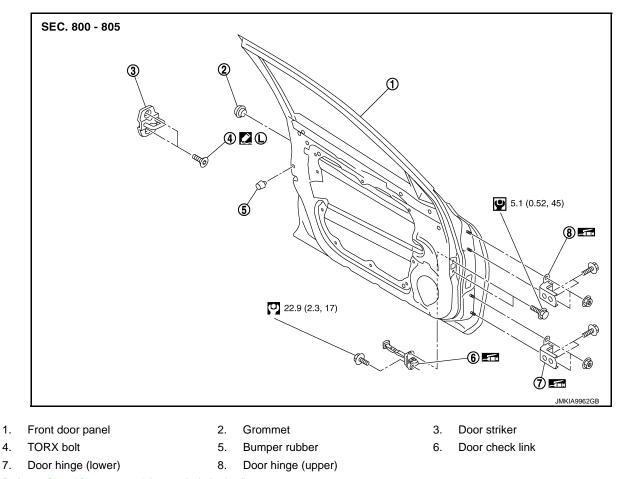
- 6. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- 8. Install front fender. Refer to <u>DLK-234, "Removal and Installation"</u>.

#### DOOR STRIKER ADJUSTMENT

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

# DOOR STRIKER : Exploded View

INFOID:000000009064807



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

# DOOR STRIKER : Removal and Installation

# REMOVAL

Remove TORX bolts, and then remove door striker.

#### INSTALLATION

Install in the reverse order of removal. **CAUTION:** 

- Check front door open/close, lock/unlock operation after installation.
- After installation, check to perform the fitting adjustment. Refer to <u>DLK-237, "DOOR ASSEMBLY :</u> <u>Adjustment"</u>.

DOOR HINGE

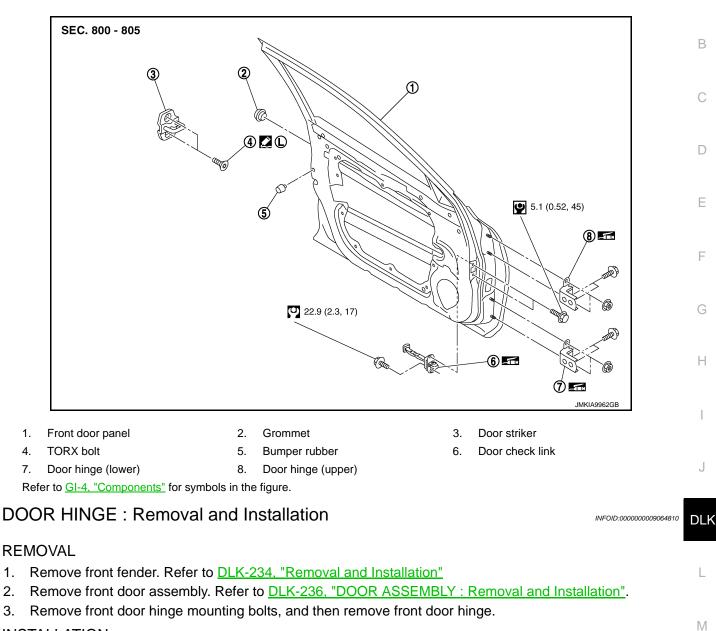
#### [INTELLIGENT KEY SYSTEM]

# < REMOVAL AND INSTALLATION >

DOOR HINGE : Exploded View

INFOID:000000009064809

А



## **INSTALLATION**

Install in the reverse order of removal.

#### CAUTION:

1.

2. 3.

- Check front door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to DLK-237, "DOOR ASSEMBLY : Adjustment".

• After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts. DOOR CHECK LINK

Ρ

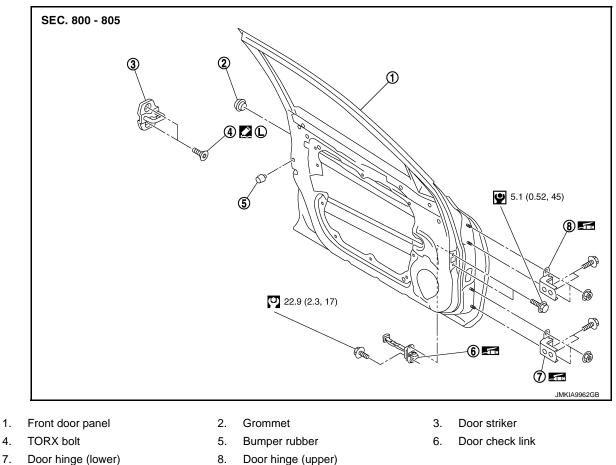
Ν

#### < REMOVAL AND INSTALLATION >

#### [INTELLIGENT KEY SYSTEM]

# DOOR CHECK LINK : Exploded View

INFOID:000000009064811



7. Door hinge (lower)

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

# DOOR CHECK LINK : Removal and Installation

INFOID:000000009064812

#### REMOVAL

1.

- Remove front door finisher. Refer to INT-11. "DRIVER SIDE : Removal and Installation" (driver side) or 1. INT-14, "PASSENGER SIDE : Removal and Installation" (passenger side).
- 2. Fully close the front door window.
- 3. Remove front door speaker. Refer to AV-130, "Removal and Installation" (base audio without navigation), AV-317, "Removal and Installation" (BOSE audio without navigation) or AV-521, "Removal and Installation" (BOSE audio with navigation).
- 4. Remove mounting bolts of door check link on the vehicle.
- 5. Remove mounting bolts of door check link on door panel.
- Take door check link out from the hole of door panel. 6.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

Check front door open/close operation after installation.

# [INTELLIGENT KEY SYSTEM]

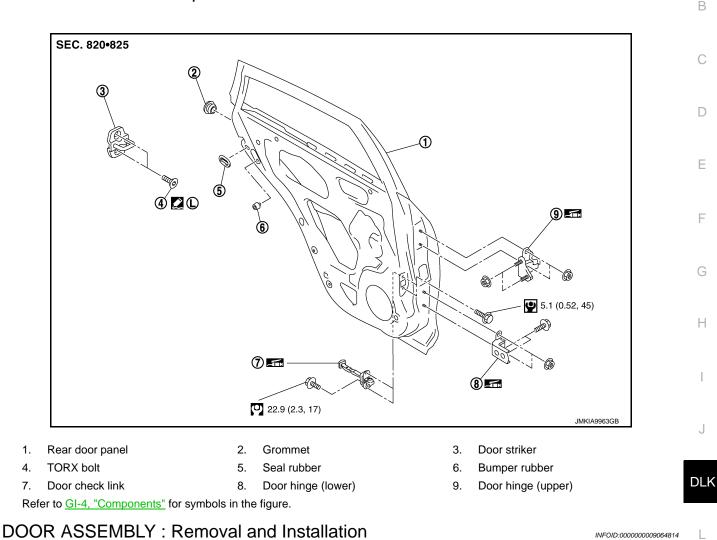
< REMOVAL AND INSTALLATION >

# REAR DOOR DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:000000009064813

А



#### **CAUTION:**

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

#### REMOVAL

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

#### **INSTALLATION**

Install in the reverse order of removal.

- **CAUTION:**
- Check rear door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-242, "DOOR ASSEMBLY : Adjust-ment"</u>.
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

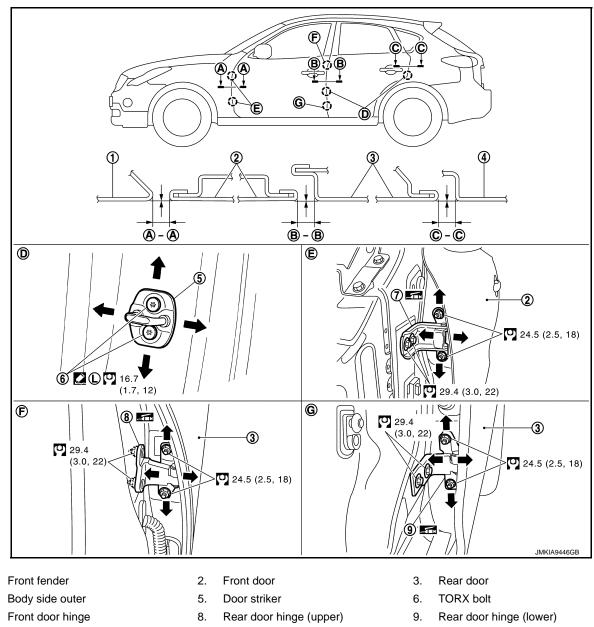
## **DLK-241**

Ν

## [INTELLIGENT KEY SYSTEM]

## < REMOVAL AND INSTALLATION > DOOR ASSEMBLY : Adjustment

INFOID:000000009064815



Refer to <u>GI-4, "Components"</u> for symbols in the figure.

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

Portion		Clearance	Surface height
Front door – Rear door	<b>B</b> – B	2.6 - 4.6 (0.102 - 0.181)	-0.5 - 1.0 (-0.020 - 0.039)
Rear door – Body side outer	<b>C</b> – <b>C</b>	2.6 - 4.6 (0.102 - 0.181)	-0.5 - 1.0 (-0.020 - 0.039)

1. Remove center pillar lower garnish. Refer to INT-20, "Removal and Installation".

- 2. Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of rear door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- 5. Loosen door hinge mounting nuts and bolts on body side.
- 6. Raise rear door at rear end to adjust clearance of rear door according to the fitting standard dimension.

1. 4.

7.

## **DLK-242**

# [INTELLIGENT KEY SYSTEM]

А

В

INFOID:000000009064816

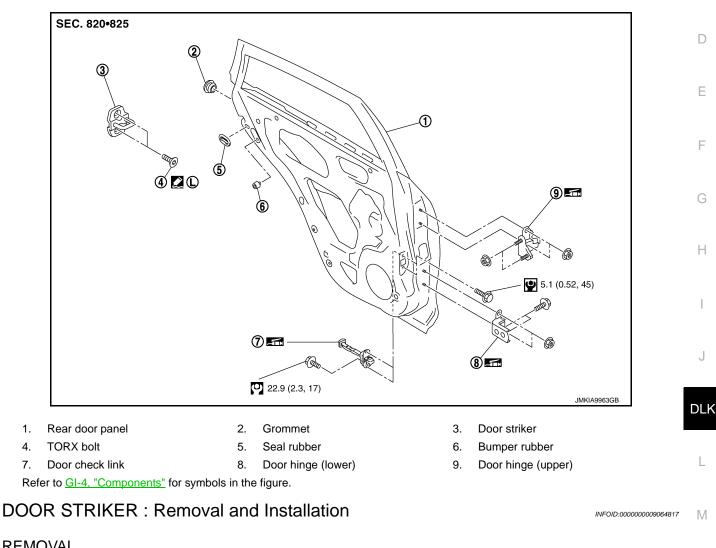
- 7. After adjustment tighten bolts and nuts to the specified torque.
- 8. Install center pillar lower garnish. Refer to .INT-20, "Removal and Installation"

#### DOOR STRIKER ADJUSTMENT

< REMOVAL AND INSTALLATION >

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

# DOOR STRIKER : Exploded View



# REMOVAL

1.

4.

Remove TORX bolts, and then remove door striker.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

- · Check rear door open/close, lock/unlock operation after installation.
- After installation, check to perform the fitting adjustment. Refer to DLK-242, "DOOR ASSEMBLY : Adjustment".

# DOOR HINGE

Revision: 2013 March

# **DLK-243**

2014 QX50

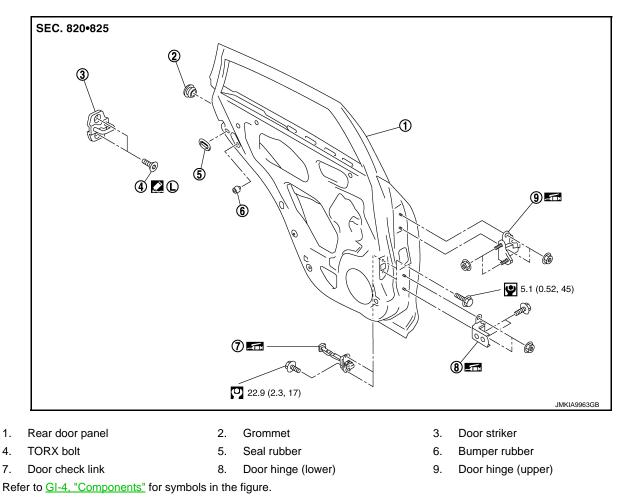
Ν

## < REMOVAL AND INSTALLATION >

## DOOR HINGE : Exploded View

INFOID:000000009064818

[INTELLIGENT KEY SYSTEM]



# DOOR HINGE : Removal and Installation

INFOID:000000009064819

#### REMOVAL

- 1. Remove center pillar lower garnish. Refer to INT-20, "Removal and Installation".
- 2. Remove rear door assembly. Refer to <u>DLK-241, "DOOR ASSEMBLY : Removal and Installation"</u>.
- 3. Remove rear door hinge mounting bolts and nuts (body side), and then remove door hinge.

#### **INSTALLATION**

Install in the reverse order of removal.

#### CAUTION:

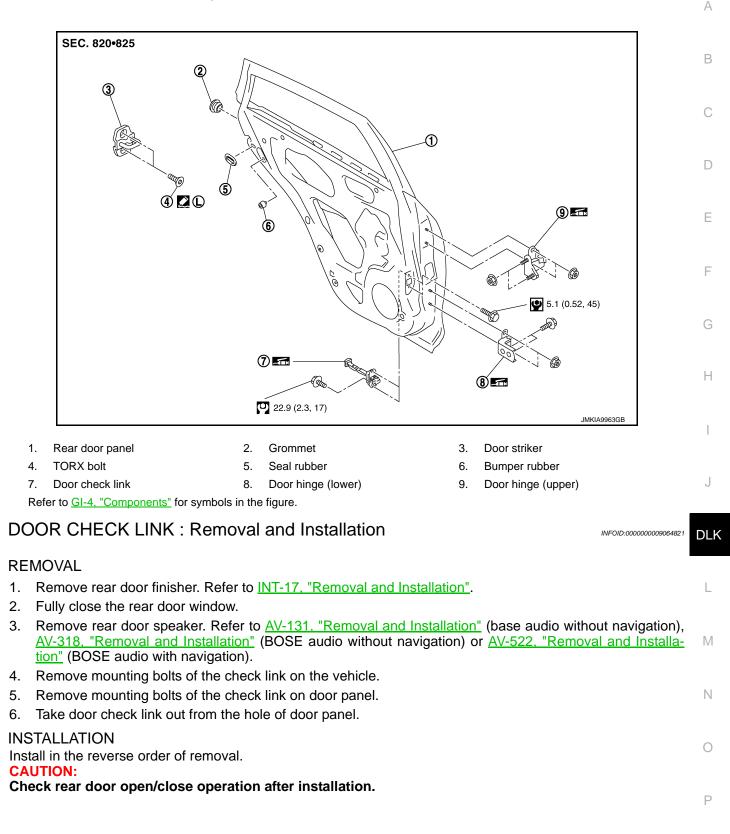
- Check rear door open/close operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- When removing and installing rear door assembly, perform the fitting adjustment. Refer to <u>DLK-242</u>, <u>"DOOR ASSEMBLY : Adjustment"</u>.

• After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts. DOOR CHECK LINK

#### < REMOVAL AND INSTALLATION >

# DOOR CHECK LINK : Exploded View

#### [INTELLIGENT KEY SYSTEM]

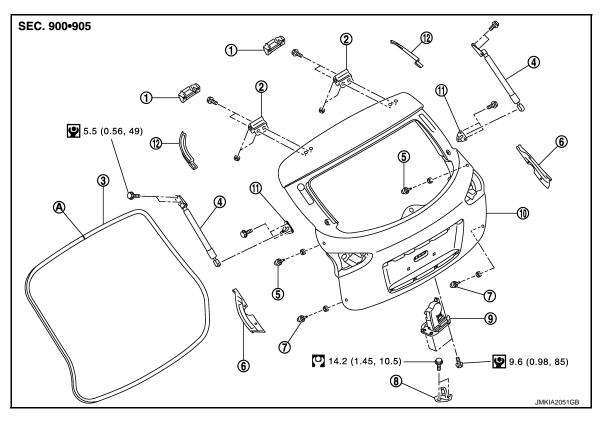


# < REMOVAL AND INSTALLATION > BACK DOOR

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Exploded View

INFOID:000000009064822



Back door hinge (LH/RH)

11. Stud ball assembly (LH/RH)

Back door striker

Bumper rubber (side) (LH/RH)

- 1. Back door hinge cover (LH/RH)
- 4. Back door stay (LH/RH)
- 7. Bumper rubber (lower) (LH/RH)
- 10. Back door assembly
- A : Center mark

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

# BACK DOOR ASSEMBLY : Removal and Installation

2.

5.

8.

#### **CAUTION:**

# Operate with two workers, because of its heavy weight. NOTE:

The back door harness constitute the back door assembly.

#### REMOVAL

- 1. Remove back door finisher inner, back door plate, back door hinge cover. Refer to <u>INT-40, "Removal and</u> <u>Installation"</u>.
- 2. Remove clips of head lining at rear end. Refer to <u>INT-29, "NORMAL ROOF : Removal and Installation"</u> (NORMAL ROOF) or <u>INT-32, "SUNROOF : Removal and Installation"</u> (SUNROOF).

Back door weather-strip Back door seal (side) (LH/RH)

9. Back door lock assembly

3.

6.

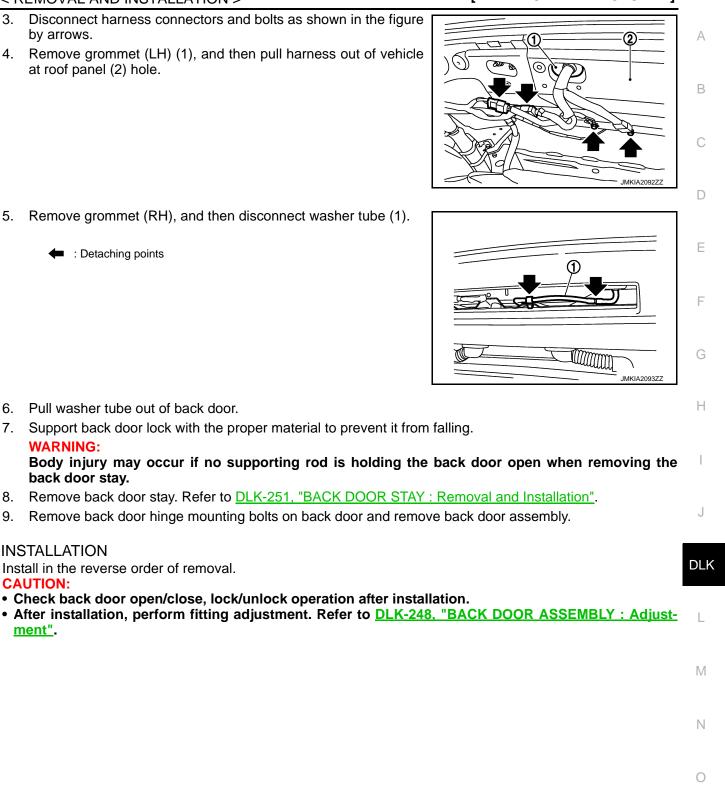
12. Back door seal (upper) (LH/RH)

Revision: 2013 March

#### < REMOVAL AND INSTALLATION >

- 3. Disconnect harness connectors and bolts as shown in the figure by arrows.
- 4. Remove grommet (LH) (1), and then pull harness out of vehicle at roof panel (2) hole.

#### [INTELLIGENT KEY SYSTEM]



- 5. Remove grommet (RH), and then disconnect washer tube (1).
  - : Detaching points

6. Pull washer tube out of back door.

Install in the reverse order of removal.

WARNING:

INSTALLATION

CAUTION:

ment".

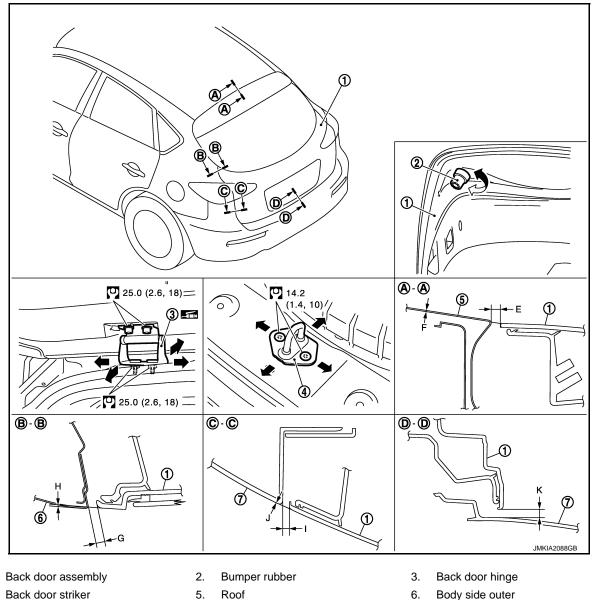
back door stay.

# < REMOVAL AND INSTALLATION >

# BACK DOOR ASSEMBLY : Adjustment

INFOID:000000009064824

[INTELLIGENT KEY SYSTEM]



Roof 5.

7. Rear bumper fascia

1.

4.

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

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

Portion				Standard
Back door – Roof	A – A	Ε	Clearance	5.0 – 9.0 (0.197 – 0.354)
		F	Surface height	-1.0 - 3.0 (-0.039 - 0.118)
Back door – Body side outer		G	Clearance	3.0 - 7.0 (0.118 - 0.276)
	B – B	Н	Surface height	-1.0 - 3.0 (-0.039 - 0.118)
Back door – Rear bumper fascia		Ι	Clearance	3.0 - 7.2 (0.118 - 0.283)
	<b>C</b> – <b>C</b>	J	Surface height	-1.7 - 2.5 (-0.067 - 0.098)
Back door – Rear bumper fascia	<b>D</b> – <b>D</b>	Κ	Clearance	5.1 – 9.1 (0.197 – 0.358)

Unit: mm (in)

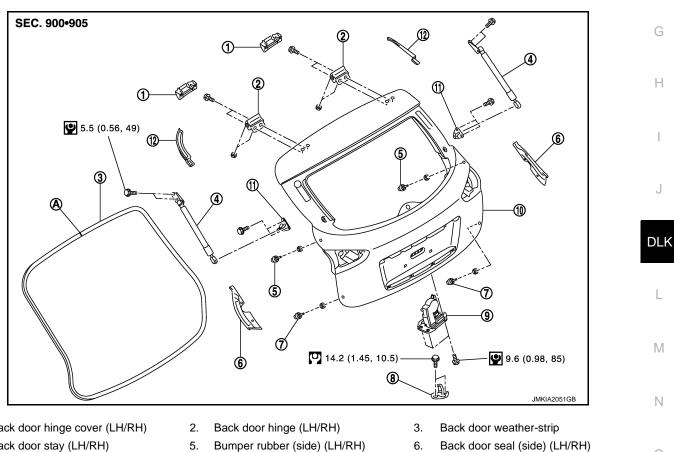
Revision: 2013 March

INFOID:000000009064825

F

<	REMOVAL AND INSTALLATION >		
1	. Remove back door hinge cover. Refer to INT-40. "Removal and Installa	ation".	
2	. Loosen back door hinge mounting bolts (back door side).		А
3	. Loosen bumper rubber (side/lower).		
4	. Remove luggage rear plate mask. Refer to INT-37, "Removal and Insta	<u>allation"</u> .	
5	<ul> <li>Loosen back door striker mounting bolts.</li> </ul>		В
6	<ul> <li>Lift up back door approximately 100 – 150 mm (3.937 – 5.906 in) heigh it is engaged firmly with back door closed.</li> </ul>	t then close it lightly and check that	0
7	. Check the clearance and surface height.		C
8	Finally tighten back door hinge, bumper rubber, and back door striker.		
9	<ul> <li>Install back door hinge cover and luggage rear plate mask. Refer to and <u>INT-37, "Removal and Installation"</u></li> </ul>	NT-40, "Removal and Installation"	D
A	ACK DOOR STRIKER ADJUSTMENT djust back door striker so that i becomes parallel with back door lock inse ACK DOOR STRIKER	rtion direction.	E

# BACK DOOR STRIKER : Exploded View



- Back door hinge cover (LH/RH) 1.
- Back door stay (LH/RH) 4.
- 7. Bumper rubber (lower) (LH/RH)
- 10. Back door assembly
- А : Center mark

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

# **BACK DOOR STRIKER : Removal and Installation**

8.

Back door striker

11. Stud ball assembly (LH/RH)

## REMOVAL

- Remove luggage rear plate mask. Refer to INT-37, "Removal and Installation". 1.
- 2. Remove mounting bolts, and then remove back door striker.

**DLK-249** 

INFOID:000000009064826

Ρ

Back door lock assembly

Back door seal (upper) (LH/RH)

9. 12.

#### < REMOVAL AND INSTALLATION >

# INSTALLATION

Install in the reverse order of removal.

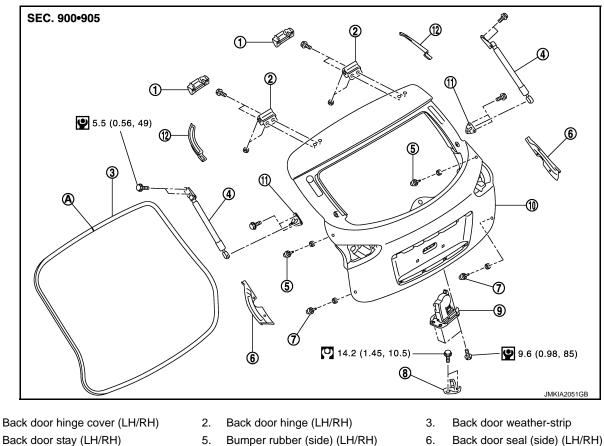
#### **CAUTION:**

- Check back door open/close operation after installation.
- When removing and installing back door striker, check to perform the fitting adjustment. Refer to DLK-248, "BACK DOOR ASSEMBLY : Adjustment".

# BACK DOOR HINGE

# BACK DOOR HINGE : Exploded View

INFOID-000000009064827



- 4. Back door stay (LH/RH)
- Bumper rubber (lower) (LH/RH) 7.
- 10. Back door assembly
- А : Center mark

1.

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

# BACK DOOR HINGE : Removal and Installation

8.

#### REMOVAL

1. Remove luggage side lower finisher and luggage side upper finisher. Refer to INT-37, "Removal and Installation".

9.

Back door lock assembly

12. Back door seal (upper) (LH/RH)

- 2. Using a remover tool, remove headlining clip at the rear side of headlining, and then remove rear side of headlining. Refer to INT-29, "NORMAL ROOF : Removal and Installation" (NORMAL ROOF), INT-32, "SUNROOF : Removal and Installation" (SUNROOF).
- 3. Remove back door assembly. Refer to DLK-246, "BACK DOOR ASSEMBLY : Removal and Installation".
- 4. Remove back door hinge mounting nuts (body side), and then remove back door hinge.

Back door striker

11. Stud ball assembly (LH/RH)

#### INSTALLATION Install in the reverse order of removal. CAUTION:

# **DLK-250**

#### 2014 QX50

#### < REMOVAL AND INSTALLATION >

А

В

INFOID:000000009064829

- Check back door open/close operation after installation. •
- Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.
- When removing and installing back door assembly, perform the fitting adjustment. Refer to DLK-248. "BACK DOOR ASSEMBLY : Adjustment".
- After installation, apply touch-up paint (the body color) onto the head of back door hinge mounting nuts.

## BACK DOOR STAY

# BACK DOOR STAY : Exploded View

SEC. 900-905 D 2 (4) Ε Æ 5.5 (0.56, 49) F 6 3 (A) (10 Н ൭ T 14.2 (1.45, 10.5) 9.6 (0.98, 85) 6 (8) AL DLK JMKIA2051GB Back door hinge cover (LH/RH) Back door hinge (LH/RH) 3. Back door weather-strip 2. Back door stay (LH/RH) 5. Bumper rubber (side) (LH/RH) 6. Back door seal (side) (LH/RH) L Bumper rubber (lower) (LH/RH) 8. Back door striker 9. Back door lock assembly 12. Back door seal (upper) (LH/RH) 10. Back door assembly Stud ball assembly (LH/RH) 11 Μ

Α : Center mark

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

# BACK DOOR STAY : Removal and Installation

#### REMOVAL

1.

4.

7.

Support back door lock with the proper material to prevent it from falling.

WARNING: Body injury may occur if no supporting rod is holding the back door open when removing the back door stay.

Remove mounting bolts of back door stay (body side). 2.

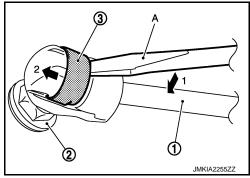
INFOID:000000009064830

Ν

#### < REMOVAL AND INSTALLATION >

- 3. Remove the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) by using a flatted-blade screwdriver (A).
- 4. Remove back door stay (back door side).

# [INTELLIGENT KEY SYSTEM] 3



5. Remove mounting bolts of stud ball assembly, and then remove stud ball assembly.

#### **INSTALLATION**

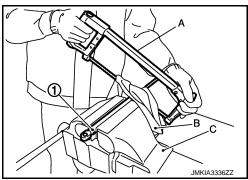
Install in the reverse order of removal.

#### **CAUTION:**

Check back door open/close operation after installation.

# **BACK DOOR STAY : Disposal**

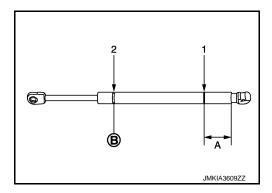
- 1. Fix back door stay (1) using a vise (C).
- 2. Using hacksaw (A) slowly make 2 holes in the back door stay, in numerical order as shown in the figure. **CAUTION:** 
  - When cutting a hole on back door stay, always cover a hacksaw using a shop cloth (B) to avoid scattering metal fragments or oil.
  - Wear eye protection (safety glasses).
  - Wear gloves.



INFOID:000000009064831



B: Cut at the groove.



# BACK DOOR WEATHER-STRIP

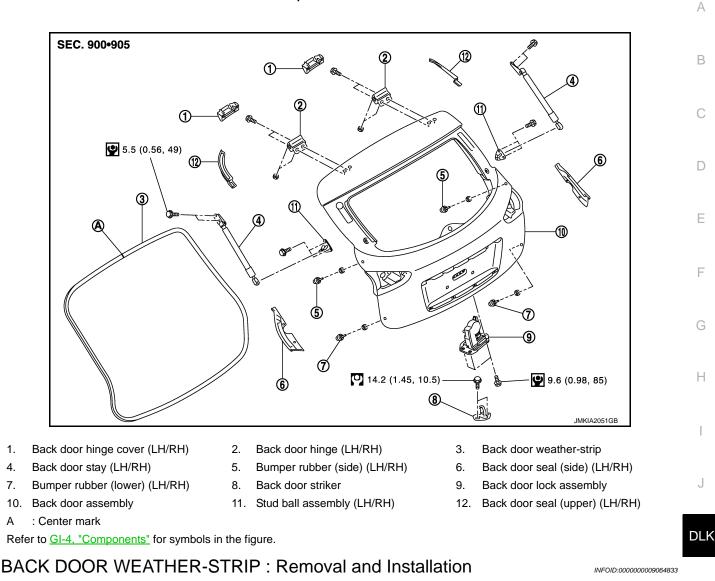
## **BACK DOOR**

### < REMOVAL AND INSTALLATION >

## BACK DOOR WEATHER-STRIP : Exploded View

## [INTELLIGENT KEY SYSTEM]

#### INFOID:000000009064832



#### REMOVAL

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

#### CAUTION:

#### Never pull strongly on weather-strip.

#### INSTALLATION

- 1. Working from the upper section, align weather-strip mark with vehicle center position mark and install N weather-strip onto the vehicle.
- 2. For the lower section, align weather-strip seam with center of back door striker.
- Pull weather-strip gently to ensure that there is no loose section.
   NOTE: Check that weather-strip is fit tightly at each corner and luggage rear plate.
- 4. Install mounting bolts of power back door drive assembly (Back door side).

L

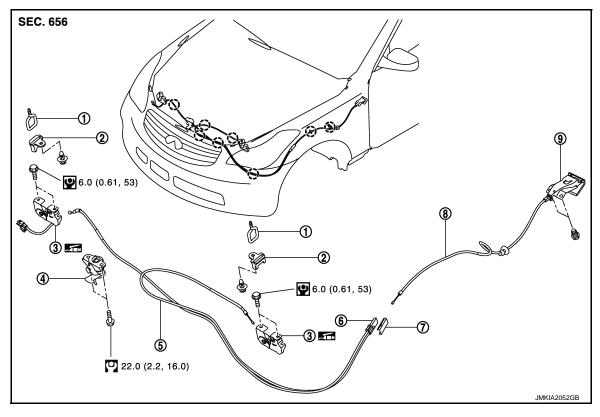
Μ

Ρ

# < REMOVAL AND INSTALLATION > HOOD LOCK

Exploded View

INFOID:000000009064834



- 1. Hood striker (LH/RH)
- 2. Hood lock cover (LH/RH)
- 4. Secondary latch
- Hood lock cover (En/R1)
   Hood lock control cable (front)
- 8. Hood lock control cable (rear)
- 3. Hood lock (LH/RH)
- 6. Hood lock control cable protector
- 9. Hood lock opener

(`) : Clip

cover

7.

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

Hood lock control cable protector

## Removal and Installation

#### REMOVAL

#### CAUTION:

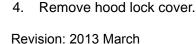
#### Check wiring of hood lock control before removal.

 Remove mounting clips, of front grille upper side and front bumper fascia. Refer to <u>EXT-20, "Removal and Installation"</u> and <u>EXT-13, "Removal and Installation"</u>.

MKA2118ZZ

🖿 : Clip

- 2. Remove mounting bolts of hood lock cover.
- 3. Disconnect harness clip and hood lock cable from hood lock cover.



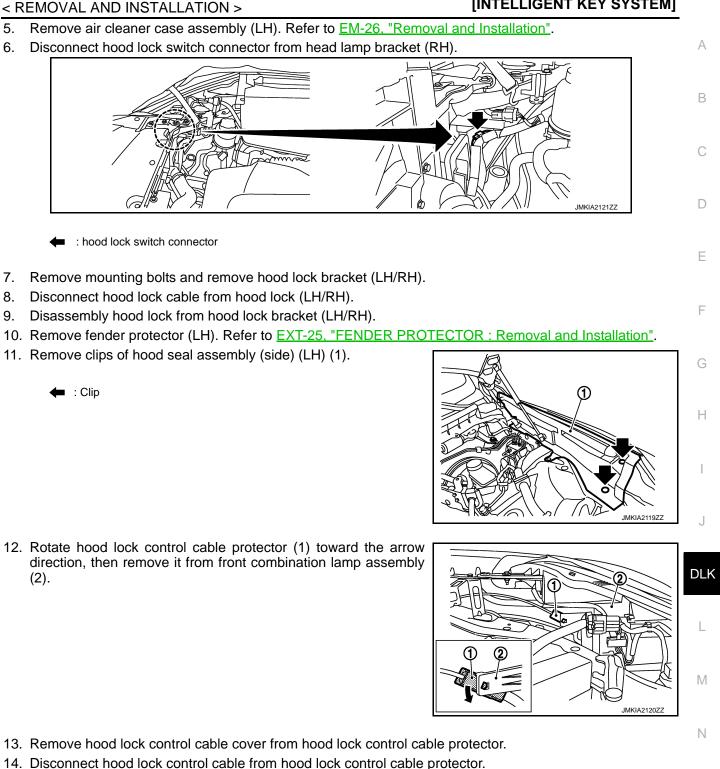


INFOID:000000009064835

[INTELLIGENT KEY SYSTEM]

## HOOD LOCK

## [INTELLIGENT KEY SYSTEM]



- 15. Remove mounting bolts and remove hood lock opener.
- 16. Remove grommet on the lower dash, pull hood lock control cable toward the passenger compartment. CAUTION:

While pulling, never to damage (peeling) the outside of the hood lock control cable.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

Never to bend cable too much, keeping the radius 100 mm (3.937 in) or more.

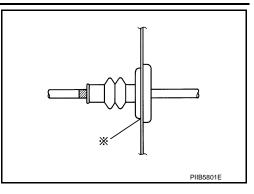
## **DLK-255**

Ρ

## HOOD LOCK

#### < REMOVAL AND INSTALLATION >

 Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at \* mark) properly.



- Check that hood lock control cable is properly engaged with hood lock.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-226, "HOOD ASSEMBLY : Adjust-ment"</u>.
- After installation, perform hood lock control inspection. Refer to <u>DLK-256, "Inspection"</u>.

#### Inspection

INFOID:000000009064836

#### NOTE:

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

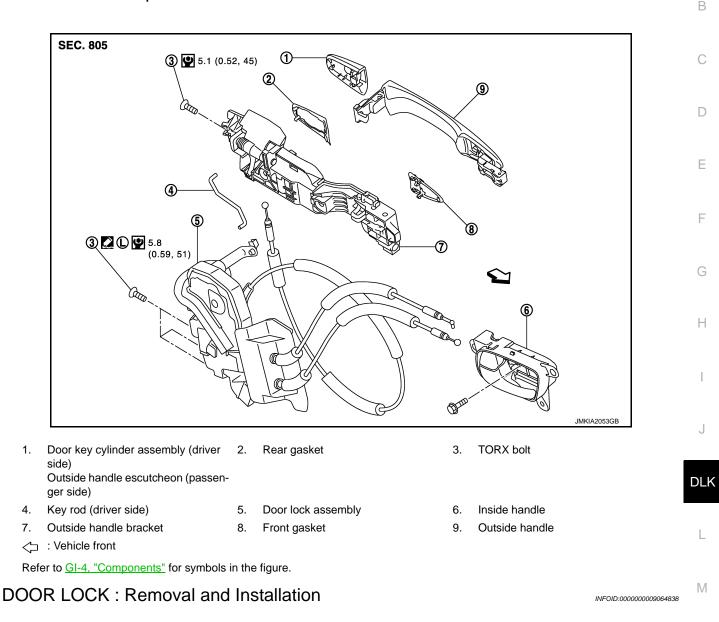
- 1. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] by hood weight.
- 2. While operating hood opener, carefully check that the front end of hood is raised by approximately 20.0 mm (0.787 in). Also check that hood opener returns to the original position.
- 3. Check that hood opener operating is condition 49 N (5.0 kg, 11.0 lb) or below.
- 4. Install so that static closing force of hood is 94 490 N⋅m (9.6 50.0 kg-m, 69 361 ft lb). NOTE:
  - Exert vertical force on right side and left side of hood lock.
  - Never press simultaneously both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

## FRONT DOOR LOCK DOOR LOCK

DOOR LOCK : Exploded View

INFOID:000000009064837

А



### REMOVAL

- 1. Remove front door finisher. Refer to <u>INT-11, "DRIVER SIDE : Removal and Installation"</u> (driver side) or <u>INT-14, "PASSENGER SIDE : Removal and Installation"</u> (passenger side).
- 2. Remove front door glass. Refer to <u>GW-17, "Removal and Installation"</u>.
- 3. Remove front door module assembly. Refer to <u>GW-20, "Removal and Installation"</u>.
- 4. Disconnect door antenna and door request switch connector and remove harness clamp (with Intelligent Key system model) on outside handle bracket.

Ν

0

Ρ

## FRONT DOOR LOCK

#### < REMOVAL AND INSTALLATION >

Remove door side grommet, and loosen TORX bolt from grommet hole.
 CAUTION:

Never remove TORX bolt forcibly.

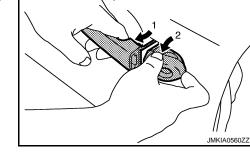
- + : TORX bolt
- 6. Reach in to separate key rod (2) connection [on the door key cylinder assembly (1)] (driver side).

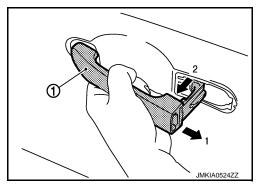
7. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).

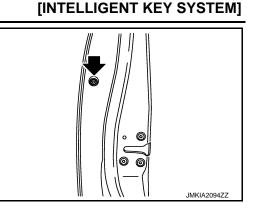
8. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.

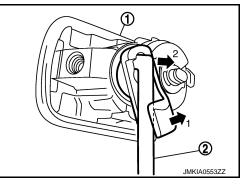
Revision: 2013 March

9. Remove front gasket and rear gasket.







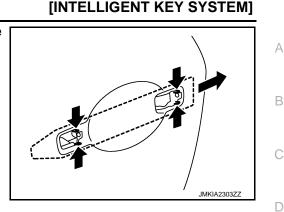


**DLK-258** 

## FRONT DOOR LOCK

#### < REMOVAL AND INSTALLATION >

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



Ε

F

Н

Μ

Ν

Ρ

INFOID:000000009064839

- 11. Reach in to separate outside handle cable connection on outside handle bracket.
- 12. Remove door lock assembly TORX bolts.
- 13. Disconnect door lock actuator connector, and then remove door lock assembly.
- 14. Remove key rod from door lock assembly.

#### **INSTALLATION**

Install in the reverse order of removal.

#### CAUTION:

- When installing each rod, rotate rod holder until a click is felt.
- Check door open/close, lock/unlock operation after installation. **INSIDE HANDLE**

## **INSIDE HANDLE : Exploded View**

# SEC. 805 £ 3 🕑 5.1 (0.52, 45) 9 DLK 4 **(8**) 3 🖉 🛈 🖳 5.8 1 (0.59, 51) P JMKIA2053GB

- 2. TORX bolt 1. Door key cylinder assembly (driver Rear gasket 3. side) Outside handle escutcheon (passenger side) 4. Key rod (driver side) 5. Door lock assembly 6. Inside handle Outside handle bracket 8. 7. Front gasket
  - 9. Outside handle

Revision: 2013 March

**DLK-259** 

: Vehicle front

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

## **INSIDE HANDLE : Removal and Installation**

INFOID:000000009064840

#### REMOVAL

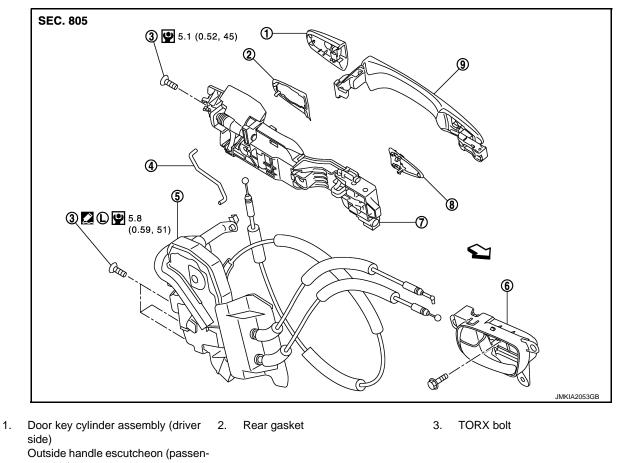
- 1. Remove front door finisher. Refer to INT-11, "DRIVER SIDE : Removal and Installation" (driver side) or INT-14, "PASSENGER SIDE : Removal and Installation" (passenger side).
- 2. Disconnect inside handle cable, and then remove the inside handle.
- 3. Remove inside handle mounting screws.

#### INSTALLATION

Install in the reverse order of removal. **CAUTION:** Check door open/close, lock/unlock operation after installation. OUTSIDE HANDLE

## **OUTSIDE HANDLE : Exploded View**

INFOID:000000009064841



- ger side) 4. Key rod (driver side)
- 5. Door lock assembly Front gasket

8.

- 7. Outside handle bracket
- : Vehicle front

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

## **OUTSIDE HANDLE : Removal and Installation**

#### REMOVAL

### **DLK-260**

2014 QX50

INFOID:000000009064842

Inside handle

Outside handle

6.

9

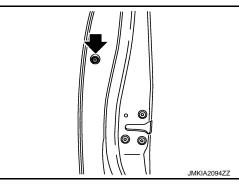
## FRONT DOOR LOCK

#### < REMOVAL AND INSTALLATION >

- 1. Remove front door finisher. Refer to <u>INT-11, "DRIVER SIDE : Removal and Installation"</u> (driver side) or <u>INT-14, "PASSENGER SIDE : Removal and Installation"</u> (passenger side).
- Remove front door glass. Refer to <u>GW-17, "Removal and Installation"</u>.
- 3. Remove front door module assembly. Refer to <u>GW-20, "Removal and Installation"</u>.
- Disconnect door antenna and door request switch connector and remove harness clamp (models with Intelligent Key system) on outside handle bracket.
- Remove door side grommet, and loosen TORX bolt from grommet hole.
   CAUTION:

Never remove TORX bolt forcibly.

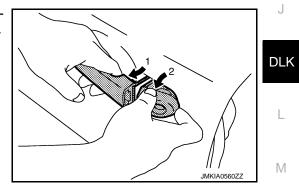
🖛 : TORX bolt

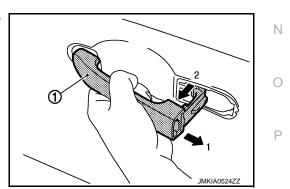


ി

 Reach in to separate key rod (2) connection [on the door key cylinder assembly (1)] (driver side).

7. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).





8. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.

9. Remove front gasket and rear gasket.



А

D

Ε

F

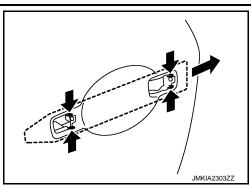
Н

JMKIA0553ZZ

## FRONT DOOR LOCK

### < REMOVAL AND INSTALLATION >

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



[INTELLIGENT KEY SYSTEM]

11. Reach in to separate outside handle cable connection on outside handle bracket.

#### INSTALLATION

Install in the reverse order of removal.

**CAUTION:** 

- When installing each rod, rotate rod holder until a click is felt.
- Check door open/close, lock/unlock operation after installation.

## < REMOVAL AND INSTALLATION > REAR DOOR LOCK DOOR LOCK

DOOR LOCK : Exploded View

INFOID:000000009064843

А

В

D

Ε

F

Н

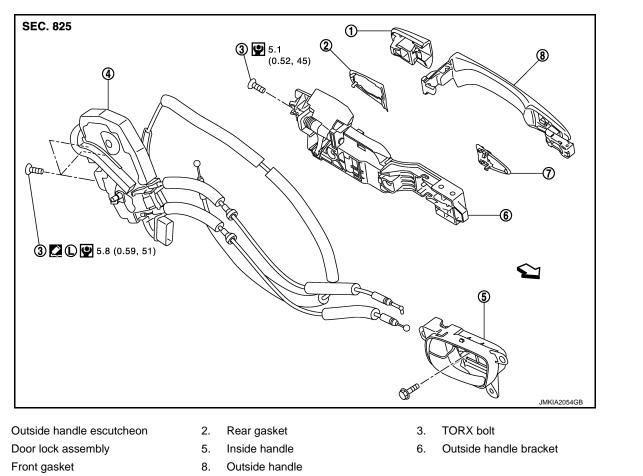
J

DLK

L

Μ

INFOID:000000009064844



: Vehicle front

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

## DOOR LOCK : Removal and Installation

#### REMOVAL

1.

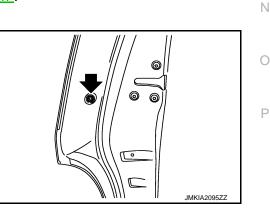
4.

7.

- 1. Remove rear door finisher. Refer to INT-17, "Removal and Installation".
- 2. Remove sealing screen. Refer to <u>GW-23, "Removal and Installation"</u>.
- 3. Fully close the rear door glass.
- Remove door side grommet, and loosen TORX bolt from grommet hole.
   CAUTION:

### Never remove TORX bolt forcibly.

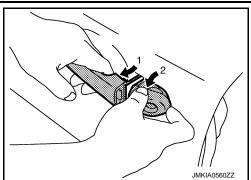
🖛 : TORX bolt



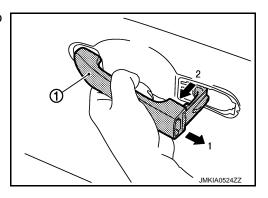
#### < REMOVAL AND INSTALLATION >

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

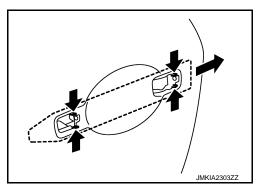
## [INTELLIGENT KEY SYSTEM]



6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



- 9. Reach in to separate outside handle cable connection on outside handle bracket.
- 10. Remove door lock mounting bolts.
- 11. Remove door lock assembly.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

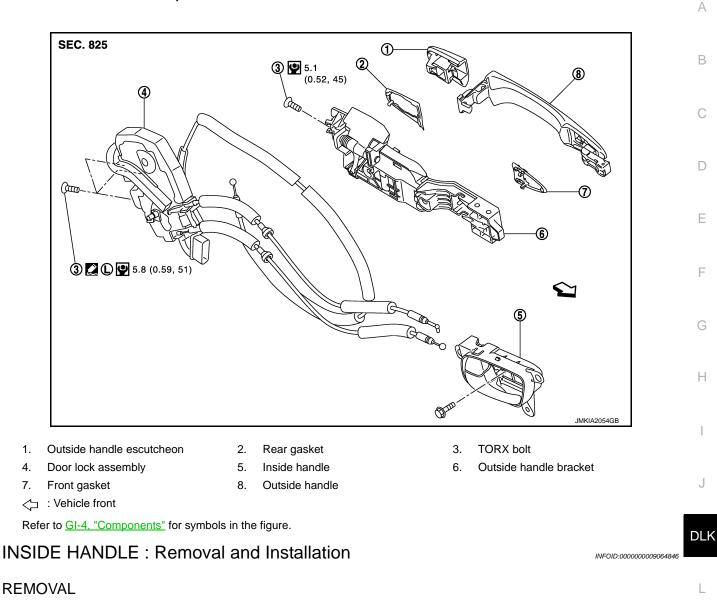
Check door open/close, lock/unlock operation after installation. INSIDE HANDLE

#### < REMOVAL AND INSTALLATION >

### [INTELLIGENT KEY SYSTEM]

## **INSIDE HANDLE : Exploded View**

#### INFOID:000000009064845



- 1. Remove rear door finisher. Refer to INT-17, "Removal and Installation".
- 2. Disconnect inside handle cable, and then remove inside handle.
- 3. Remove inside handle mounting screws.

#### INSTALLATION

Install in the reverse order of removal. CAUTION: Check door open/close, lock/unlock operation after installation. OUTSIDE HANDLE

Ν

Ρ

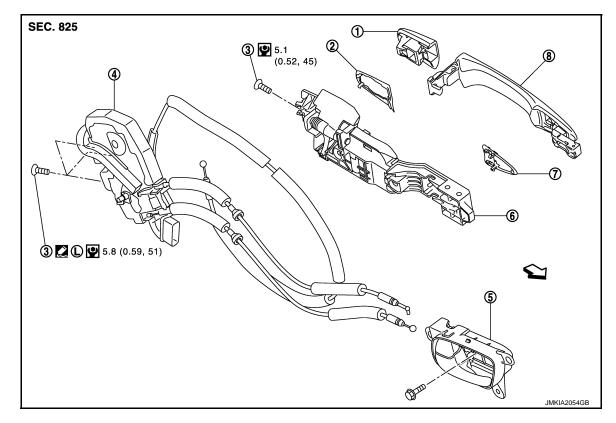
Μ

### < REMOVAL AND INSTALLATION >

[INTELLIGENT KEY SYSTEM]

## **OUTSIDE HANDLE : Exploded View**

INFOID:000000009064847



- 1. Outside handle escutcheon Door lock assembly
- 2. Rear gasket Inside handle 5.

Outside handle

8.

- 3. TORX bolt
- Outside handle bracket 6.

Front gasket 7.

: Vehicle front

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

## **OUTSIDE HANDLE : Removal and Installation**

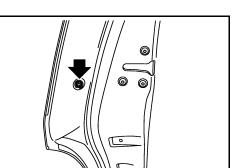
#### REMOVAL

4.

1. Remove door side grommet, and loosen TORX bolt from grommet hole. **CAUTION:** 

Never remove TORX bolt forcibly.

: TORX bolt

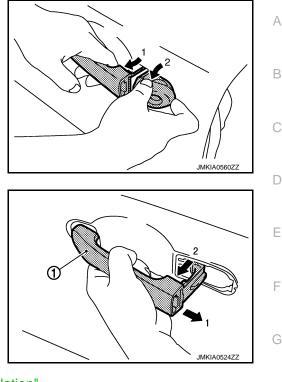


JMKIA2095ZZ

### < REMOVAL AND INSTALLATION >

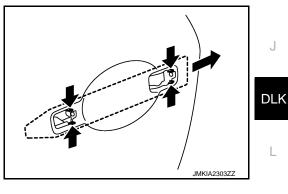
2. While pulling outside handle, remove outside handle escutcheon.

### [INTELLIGENT KEY SYSTEM]



3. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.

- 4. Remove rear door finisher. Refer to INT-17, "Removal and Installation".
- 5. Remove sealing screen. Refer to <u>GW-23, "Removal and Installation"</u>.
- 6. Fully close rear door glass.
- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



9. Reach in to separate outside handle cable connection on outside handle bracket. INSTALLATION

Install in the reverse order of removal. **CAUTION:** 

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

Ρ

L

Μ

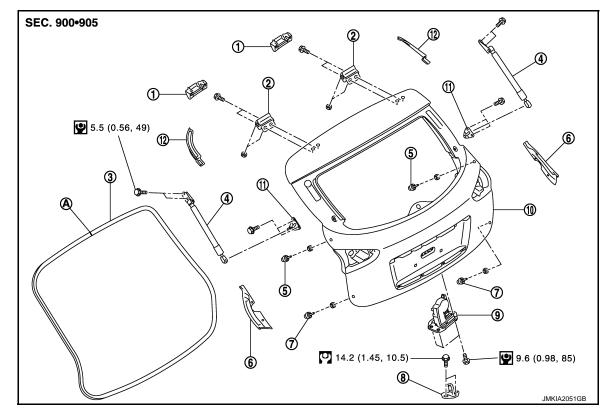
Н

## BACK DOOR LOCK

Exploded View

INFOID:000000009064849

[INTELLIGENT KEY SYSTEM]



- 1. Back door hinge cover (LH/RH)
- 4. Back door stay (LH/RH)
- 7. Bumper rubber (lower) (LH/RH)
- 10. Back door assembly
- A : Center mark

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

## Removal and Installation

- 2. Back door hinge (LH/RH)
- 5. Bumper rubber (side) (LH/RH)
- 8. Back door striker
- 11. Stud ball assembly (LH/RH)
- 3. Back door weather-strip
- 6. Back door seal (side) (LH/RH)
- 9. Back door lock assembly
- 12. Back door seal (upper) (LH/RH)

INFOID:000000009064850

#### REMOVAL

- 1. Remove back door finisher inner. Refer to INT-40, "Removal and Installation".
- 2. Disconnect back door lock assembly and back door opener switch connectors.
- 3. Remove back door lock mounting bolts, and then remove back door lock assembly.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

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

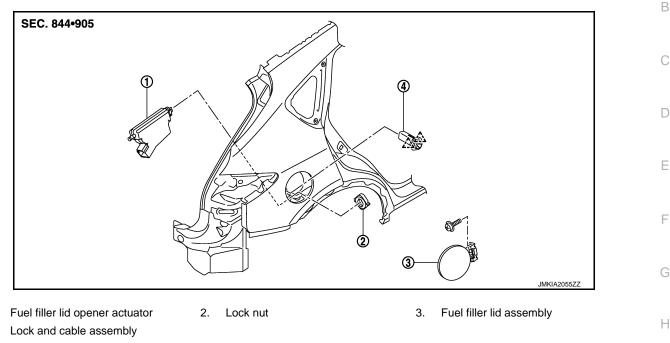
## FUEL FILLER LID OPENER

**Exploded View** 

INFOID:000000009064851

INEOID:000000009064852

[INTELLIGENT KEY SYSTEM]



,^ : Pawl

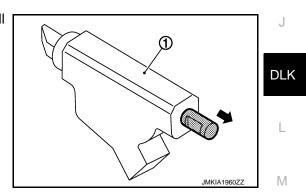
## **Removal and Installation**

#### NOTE:

1.

4.

When fuel filler lid opener actuator (1) is a defective operation, pull the rod to open fuel filler lid.



### REMOVAL

- 1. Remove mounting screws, and then remove fuel filler lid.
- 2. Pull and remove lock & cable assembly forward, while pushing the pawls.
- 3. Rotate lock nut counterclockwise, and then remove lock nut.
- 4. Push fuel filler lid opener actuator behind the vehicle, while pushing the pawl.
- 5. Remove luggage side finisher lower (RH). Refer to INT-37, "Removal and Installation".
- 6. Disconnect harness connector and remove fuel filler lid opener actuator.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.

Α

## **DLK-269**

Ν

Ρ

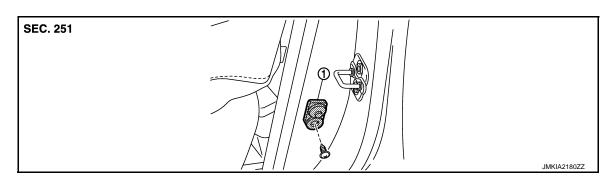
# < REMOVAL AND INSTALLATION > DOOR SWITCH

## Exploded View

INFOID:000000009064853

INFOID:0000000009064854

[INTELLIGENT KEY SYSTEM]

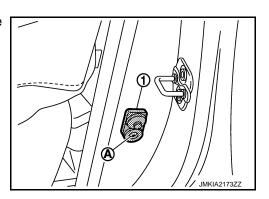


1. Door switch

## Removal and Installation

REMOVAL

1. Remove the door switch mounting screw (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:000000009064855

А

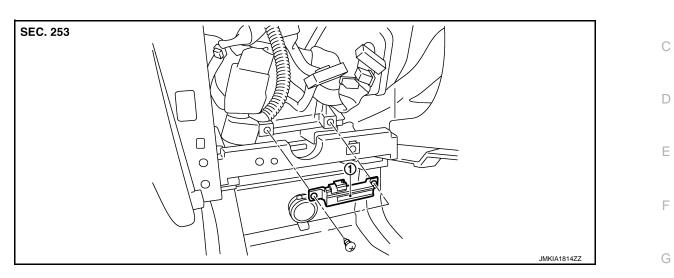
В

Н

Ν

Ρ

INFOID:000000009064856

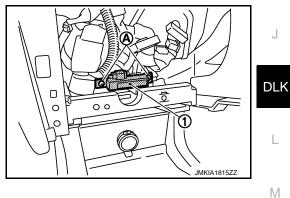


1. Inside key antenna (instrument center)

## **INSTRUMENT CENTER : Removal and Installation**

### REMOVAL

- 1. Remove the console finisher assembly. Refer to IP-23. "Removal and Installation".
- Remove the key antenna mounting screw (instrument center) (A), and then remove inside key antenna (instrument center) (1).



INSTALLATION Install in the reverse order of removal. LUGGAGE ROOM

LUGGAGE ROOM : Exploded View

Refer to INT-36, "Exploded View".

LUGGAGE ROOM : Removal and Installation

### REMOVAL

1. Remove the luggage floor finisher front. Refer to INT-37, "Removal and Installation".

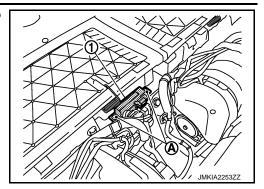
INFOID:000000009064857

## **INSIDE KEY ANTENNA**

#### < REMOVAL AND INSTALLATION >

 Remove the inside key antenna (luggage room) mounting clip (A), and then remove inside key antenna (luggage room) (1).

## [INTELLIGENT KEY SYSTEM]



INSTALLATION Install in the reverse order of removal.

## **OUTSIDE KEY ANTENNA**

< REMOVAL AND INSTALLATION >	[INTELLIGENT KEY SYSTEM]
OUTSIDE KEY ANTENNA	
DRIVER SIDE	
DRIVER SIDE : Exploded View	INF01D:00000009064859
Refer to DLK-260, "OUTSIDE HANDLE : Exploded View".	
DRIVER SIDE : Removal and Installation	INF01D:00000009064860
REMOVAL Remove the front outside handle LH. Refer to <u>DLK-260, "OUTSIDE HAND</u> INSTALLATION Install in the reverse order of removal. PASSENGER SIDE	LE : Removal and Installation".
PASSENGER SIDE : Exploded View	INFOID:000000009064861
Refer to <u>DLK-260, "OUTSIDE HANDLE : Exploded View"</u> .	
PASSENGER SIDE : Removal and Installation	INFOID:000000009064862
REMOVAL	
Remove the front outside handle RH. Refer to <u>DLK-260, "OUTSIDE HAND</u> INSTALLATION Install in the reverse order of removal. BACK DOOR	DLE : Removal and Installation".
BACK DOOR : Exploded View	INFOID:000000009064863
Refer to INT-40, "Exploded View".	
BACK DOOR : Removal and Installation	INF01D:000000009064864
REMOVAL	
1. Remove the back door finisher inner. Refer to EXT-48, "Removal and	Installation".
2. Remove the outside key antenna (back door) mounting bolts (A), and then remove outside key antenna (back door) (1).	0
INSTALLATION	JMKIA2283ZZ
Install in the reverse order of removal.	

## INTELLIGENT KEY WARNING BUZZER

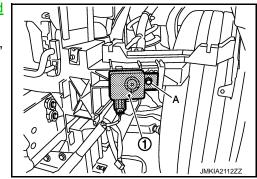
## **Exploded View**

Refer to EXT-12, "Exploded View".

#### Removal and Installation

#### REMOVAL

- 1. Remove the fender protector. Refer to <u>EXT-13, "Removal and</u> <u>Installation"</u>.
- 2. Remove the Intelligent Key warning buzzer mounting bolt (A), and then remove the Intelligent Key warning buzzer (1).



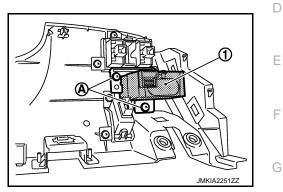
[INTELLIGENT KEY SYSTEM]

INSTALLATION Install in the reverse order of removal.

## [INTELLIGENT KEY SYSTEM]

K	EY SLOT		^
Ex	ploded View	INFOID:000000009064867	A
Re	fer to <u>IP-12, "Exploded View"</u> .		В
Re	emoval and Installation	INFOID:000000009064868	
RE	MOVAL		С
1.	Remove the instrument lower panel LH (2). Refer to IP-13, "Removal and Installation".		
2.	Disconnect key slot connector.		
3	Remove the key slot mounting screw (A) and then remove key		D

 Remove the key slot mounting screw (A), and then remove key slot (1).



INSTALLATION Install in the reverse order of removal.

< REMOVAL AND INSTALLATION >

DLK

L

Μ

Ν

Ο

Ρ

J

Н

## REMOTE KEYLESS ENTRY RECEIVER

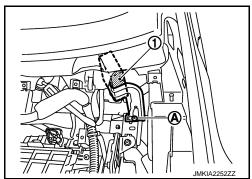
## **Exploded View**

Refer to IP-12, "Exploded View".

#### Removal and Installation

#### REMOVAL

- 1. Remove the instrument lower panel RH. Refer to IP-13, "Removal and Installation".
- 2. Remove the remote keyless entry receiver mounting screw (A), and then remove remote keyless entry receiver (1).



[INTELLIGENT KEY SYSTEM]

INSTALLATION Install in the reverse order of removal. INFOID:000000009064869

## INTELLIGENT KEY BATTERY

## < REMOVAL AND INSTALLATION >

## INTELLIGENT KEY BATTERY

## **Removal and Installation**

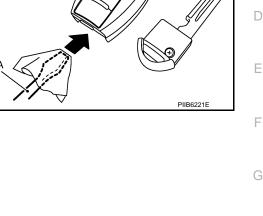
- 1. Release the lock knob at the back of the Intelligent Key and remove the mechanical key.
- Insert a remover tool (A) wrapped with a cloth into the slit of the 2. corner and twist it to separate the upper part from the lower part. **CAUTION:** 
  - Do not touch the circuit board or battery terminal.
  - The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.
- Replace the battery with new one. 3.

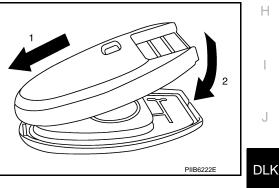
#### **Battery replacement**

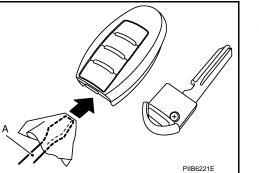
#### :Coin-type lithium battery (CR2025)

- Align the tips of the upper and lower parts, and then push them 4. 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.









[INTELLIGENT KEY SYSTEM]

А

В

L

Μ

Ν

Ρ