CONTENTS

SECTION

WITH INTELLIGENT KEY SYSTEM	REMOTE KEYLESS ENTRY FUNCTION25
BASIC INSPECTION9	REMOTE KEYLESS ENTRY FUNCTION : Sys- tem Diagram25
	REMOTE KEYLESS ENTRY FUNCTION : Sys-
DIAGNOSIS AND REPAIR WORK FLOW 9	tem Description
Work Flow9	REMOTE KEYLESS ENTRY FUNCTION :
	Component Parts Location
INSPECTION AND ADJUSTMENT12	REMOTE KEYLESS ENTRY FUNCTION :
ADDITIONAL SERVICE WHEN REPLACING	Component Description
CONTROL UNIT	
ADDITIONAL SERVICE WHEN REPLACING	KEY REMINDER FUNCTION
CONTROL UNIT : Description	KEY REMINDER FUNCTION : System Diagram30
ADDITIONAL SERVICE WHEN REPLACING	KEY REMINDER FUNCTION : System Descrip-
CONTROL UNIT : Special Repair Requirement 12	tion
	KEY REMINDER FUNCTION :
SYSTEM DESCRIPTION13	Component Parts Location31
POWER DOOR LOCK SYSTEM13	WARNING FUNCTION
	WARNING FUNCTION : System Description32
System Diagram	WARNING FUNCTION :
System Description13 Component Parts Location	Component Parts Location35
Component Description	
	DIAGNOSIS SYSTEM (BCM)37
INTELLIGENT KEY SYSTEM16	COMMON ITEM
INTELLIGENT KEY SYSTEM16	COMMON ITEM : CONSULT Function (BCM -
INTELLIGENT KEY SYSTEM : System Diagram 16	COMMON ITEM)
INTELLIGENT KEY SYSTEM : System Diagram	
tion	DOOR LOCK
INTELLIGENT KEY SYSTEM :	DOOR LOCK : CONSULT Function (BCM -
Component Parts Location	DOOR LOCK)
INTELLIGENT KEY SYSTEM :	INTELLIGENT KEY40
Component Description	INTELLIGENT KEY : CONSULT Function (BCM -
	INTELLIGENT KEY)40
DOOR LOCK FUNCTION	
DOOR LOCK FUNCTION : System Diagram20	TRUNK
DOOR LOCK FUNCTION : System Description20	TRUNK : CONSULT Function (BCM - TRUNK)43
DOOR LOCK FUNCTION :	DTC/CIRCUIT DIAGNOSIS44
Component Parts Location	
DOOR LOCK FUNCTION :	B2621 INSIDE ANTENNA44
Component Description24	Description44

А

В

D

Е

F

G

Н

J

DLK

L

Μ

Ν

Ο

Ρ

K

DOOR & LOCK c

DTC Logic Diagnosis Procedure	44 44
B2622 INSIDE ANTENNA Description DTC Logic Diagnosis Procedure	46 46
B2626 OUTSIDE ANTENNA Description DTC Logic Diagnosis Procedure	48 48
B2627 OUTSIDE ANTENNA Description DTC Logic Diagnosis Procedure	50 50
B2628 OUTSIDE ANTENNA Description DTC Logic Diagnosis Procedure	52 52 52
POWER SUPPLY AND GROUND CIRCUIT	54
BCM (BODY CONTROL MODULE) BCM (BODY CONTROL MODULE) : Diagnosis Procedure	
DOOR SWITCH Description Component Function Check Diagnosis Procedure Component Inspection	55 55 55
DOOR LOCK AND UNLOCK SWITCH	59
DRIVER SIDE DRIVER SIDE : Description DRIVER SIDE : Component Function Check DRIVER SIDE : Diagnosis Procedure DRIVER SIDE : Component Inspection	59 59 59
PASSENGER SIDE PASSENGER SIDE : Description PASSENGER SIDE : Component Function Check PASSENGER SIDE : Diagnosis Procedure PASSENGER SIDE : Component Inspection	61 61 61
DOOR LOCK ACTUATOR	64
DRIVER SIDE DRIVER SIDE : Description DRIVER SIDE : Component Function Check DRIVER SIDE : Diagnosis Procedure	64 64
PASSENGER SIDE PASSENGER SIDE : Description PASSENGER SIDE : Component Function Check PASSENGER SIDE : Diagnosis Procedure	65 65

REAR LH65
REAR LH : Description
REAR RH66REAR RH : Description66REAR RH : Component Function Check66REAR RH : Diagnosis Procedure67
BACK DOOR 67 BACK DOOR : Description 67 BACK DOOR : Component Function Check 67 BACK DOOR : Diagnosis Procedure 68
BACK DOOR LOCK ACTUATOR RELAY70Description70Component Function Check70Diagnosis Procedure70Component Inspection71
DOOR KEY CYLINDER SWITCH73Description73Component Function Check73Diagnosis Procedure73Component Inspection74
REMOTE KEYLESS ENTRY RECEIVER 75Description75Component Function Check75Diagnosis Procedure75
BACK DOOR REQUEST SWITCH
Component Inspection
Component Inspection
Component Inspection 78 DOOR REQUEST SWITCH 79 Description 79 Component Function Check 79 Diagnosis Procedure 79 Component Inspection 80 UNLOCK SENSOR 81 Description 81 Component Function Check 81 Description 81 Component Function Check 81
Component Inspection 78 DOOR REQUEST SWITCH 79 Description 79 Component Function Check 79 Diagnosis Procedure 79 Component Inspection 80 UNLOCK SENSOR 81 Description 81 Component Function Check 81 Description 81 Component Function Check 81 Diagnosis Procedure 81 Component Function Check 81 Diagnosis Procedure 81 Component Inspection 82 INTELLIGENT KEY WARNING BUZZER 83 Description 83 Description 83 Diagnosis Procedure 83

Revision: 2012 August

Description
KEY WARNING LAMP87
Description
Component Function Check
Diagnosis Procedure
HAZARD FUNCTION88
Description
Component Function Check88
Diagnosis Procedure88
POWER DOOR LOCK SYSTEM89
Wiring Diagram - POWER DOOR LOCK SYSTEM
INTELLIGENT KEY SYSTEM91
Wiring Diagram - INTELLIGENT KEY SYSTEM91
ECU DIAGNOSIS INFORMATION94
BCM (BODY CONTROL MODULE)94
Reference Value94
Wiring Diagram - BCM 115
Fail-safe
DTC Inspection Priority Chart119
DTC Index120
SYMPTOM DIAGNOSIS123
SYMPTOM DIAGNOSIS123 DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH ALL DOOR ALL DOOR : Description ALL DOOR : Diagnosis Procedure 123 DRIVER SIDE
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH ALL DOOR ALL DOOR : Description ALL DOOR : Diagnosis Procedure 123 ALL DOOR : Diagnosis Procedure 123 DRIVER SIDE 123 DRIVER SIDE : Description
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH ALL DOOR ALL DOOR : Description ALL DOOR : Diagnosis Procedure 123 DRIVER SIDE
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH 123 ALL DOOR ALL DOOR : Description 123 DRIVER SIDE DRIVER SIDE : Description 123 DRIVER SIDE : Description 123 DRIVER SIDE : Description 123
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH 123 ALL DOOR ALL DOOR : Description 123 ALL DOOR : Description 123 ALL DOOR : Description 123 DOUR : Description 123 DRIVER SIDE DRIVER SIDE : Description 123 DRIVER SIDE : Diagnosis Procedure 123 PASSENGER SIDE
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH 123 ALL DOOR ALL DOOR : Description 123 DRIVER SIDE DRIVER SIDE : Description 123 DRIVER SIDE : Description 123 DRIVER SIDE : Description 123
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOORALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDE123DRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE124PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Diagnosis Procedure124
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH 123 ALL DOOR ALL DOOR : Description 123 ALL DOOR : Diagnosis Procedure 123 DRIVER SIDE 123 DRIVER SIDE : Description 123 DRIVER SIDE : Diagnosis Procedure 123 DRIVER SIDE : Diagnosis Procedure 123 PASSENGER SIDE : Diagnosis Procedure 124 PASSENGER SIDE : Diagnosis Procedure
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOORALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDE123DRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE124PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Diagnosis Procedure124
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOOR123ALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDE123DRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Description124PASSENGER SIDE : Diagnosis Procedure124REAR LH124REAR LH : Description124REAR LH : Diagnosis Procedure124REAR LH : Diagnosis Procedure124REAR LH : Diagnosis Procedure124REAR LH : Diagnosis Procedure124REAR LH : Diagnosis Procedure124
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOORALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDE123DRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Description124REAR LH124REAR LH : Description124REAR LH : Diagnosis Procedure124REAR RH124
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOORALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDE123DRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Description124PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Diagnosis Procedure124REAR LH124REAR LH : Description124REAR LH : Diagnosis Procedure124REAR RH124REAR RH124REAR RH124REAR RH124REAR RH124REAR RH124REAR RH124
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOORALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDE123DRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Description124REAR LH124REAR LH : Description124REAR LH : Diagnosis Procedure124REAR RH124
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOOR123ALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDE123DRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Description124PASSENGER SIDE : Diagnosis Procedure124REAR LH124REAR LH : Description124REAR LH : Description124REAR RH : Diagnosis Procedure124REAR RH : Diagnosis Procedure124REAR RH : Description124REAR RH : Diagnosis Procedure124REAR RH : Diagnosis Procedure124
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOORALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDEDRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Description124PASSENGER SIDE : Description124PASSENGER SIDE : Diagnosis Procedure124REAR LH124REAR LH : Description124REAR LH : Description124REAR RH : Description124REAR RH : Description124REAR RH : Description125BACK DOOR125BACK DOOR : Description
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOOR123ALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDE123DRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Description124PASSENGER SIDE : Diagnosis Procedure124REAR LH124REAR LH : Description124REAR LH : Description124REAR RH : Diagnosis Procedure124REAR RH : Diagnosis Procedure124REAR RH : Description124REAR RH : Diagnosis Procedure124REAR RH : Diagnosis Procedure124
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOORALL DOOR : Description123ALL DOOR : Diagnosis Procedure123ALL DOOR : Diagnosis Procedure123DRIVER SIDEDRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Description124PASSENGER SIDE : Diagnosis Procedure124REAR LH124REAR LH : Description124REAR LH : Description124REAR RH : Description124REAR RH : Description124REAR RH : Description125BACK DOORBACK DOOR : Description125BACK DOOR : Diagnosis Procedure125BACK DOOR : Diagnosis Procedure
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOOR123ALL DOOR : Description123ALL DOOR : Diagnosis Procedure123DRIVER SIDE123DRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Description124PASSENGER SIDE : Diagnosis Procedure124REAR LH124REAR LH : Description124REAR RH : Description125BACK DOOR125BACK DOOR : Description125BACK DOOR : Diagnosis Procedure125DOOR DOES NOT LOCK/UNLOCK WITH
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH123ALL DOORALL DOOR : Description123ALL DOOR : Diagnosis Procedure123ALL DOOR : Diagnosis Procedure123DRIVER SIDEDRIVER SIDE : Description123DRIVER SIDE : Diagnosis Procedure123PASSENGER SIDE : Diagnosis Procedure124PASSENGER SIDE : Description124PASSENGER SIDE : Diagnosis Procedure124REAR LH124REAR LH : Description124REAR LH : Description124REAR RH : Description124REAR RH : Description124REAR RH : Description125BACK DOORBACK DOOR : Description125BACK DOOR : Diagnosis Procedure125BACK DOOR : Diagnosis Procedure

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH127	А
ALL DOOR	В
DRIVER SIDE	С
PASSENGER SIDE128PASSENGER SIDE : Description128PASSENGER SIDE : Diagnosis Procedure128	D
BACK DOOR	Е
DOOR DOES NOT LOCK/UNLOCK WITH IN-	F
TELLIGENT KEY 130 Diagnosis Procedure 130	
SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE	G
Diagnosis Procedure131 VEHICLE SPEED SENSING AUTO LOCK	Н
OPERATION DOES NOT OPERATE	I
IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE	J
P RANGE INTERLOCK DOOR LOCK/UN- LOCK FUNCTION DOES NOT OPERATE 134 Diagnosis Procedure	DLŀ
AUTO DOOR LOCK OPERATION DOES NOT OPERATE	L
HAZARD AND HORN REMINDER DOES NOT OPERATE	M
HAZARD AND BUZZER REMINDER DOES NOT OPERATE	N
KEY REMINDER FUNCTION DOES NOT OP-ERATE139Diagnosis Procedure139	O
OFF POSITION WARNING DOES NOT OP- ERATE	-
P POSITION WARNING DOES NOT OPER- ATE	

ACC WARNING DOES NOT OPERATE 143 Diagnosis Procedure
TAKE AWAY WARNING DOES NOT OPER- ATE
Diagnosis Procedure
INTELLIGENT KEY LOW BATTERY WARN- ING DOES NOT OPERATE
DOOR LOCK OPERATION WARNING DOES NOT OPERATE
KEY ID WARNING DOES NOT OPERATE 147 Diagnosis Procedure
KEY WARNING LAMP DOES NOT ILLUMI- NATE
Diagnosis Procedure148
SQUEAK AND RATTLE TROUBLE DIAG- NOSES
PRECAUTION155
PRECAUTIONS
PREPARATION156
PREPARATION
REMOVAL AND INSTALLATION157
HOOD 157
HOOD ASSEMBLY
HOOD HINGE
HOOD SUPPORT ROD
RADIATOR CORE SUPPORT 162

Exploded View
FRONT FENDER164Exploded View164Removal and Installation164
FRONT DOOR166
DOOR ASSEMBLY166DOOR ASSEMBLY : Exploded View166DOOR ASSEMBLY : Removal and Installation166DOOR ASSEMBLY : Adjustment167
DOOR STRIKER
DOOR HINGE169DOOR HINGE : Exploded View169DOOR HINGE : Removal and Installation169
DOOR CHECK LINK
REAR DOOR171
DOOR ASSEMBLY171DOOR ASSEMBLY : Exploded View171DOOR ASSEMBLY : Removal and Installation171DOOR ASSEMBLY : Adjustment172
DOOR STRIKER173DOOR STRIKER : Exploded View173DOOR STRIKER : Removal and Installation173
DOOR HINGE
DOOR CHECK LINK
BACK DOOR176
BACK DOOR ASSEMBLY 176 BACK DOOR ASSEMBLY : Exploded View 176 BACK DOOR ASSEMBLY : Removal and Installation 176 BACK DOOR ASSEMBLY : Adjustment 178
BACK DOOR STRIKER
BACK DOOR HINGE
DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation	182
DOVETAIL DOVETAIL : Exploded View DOVETAIL : Removal and Installation	183
BACK DOOR WEATHER-STRIP BACK DOOR WEATHER-STRIP : Exploded View. BACK DOOR WEATHER-STRIP : Removal and Installation	184
HOOD LOCK Exploded View Removal and Installation Inspection	185 185
FRONT DOOR LOCK	187
DOOR LOCK DOOR LOCK : Exploded View DOOR LOCK : Removal and Installation	187 187
INSIDE HANDLE INSIDE HANDLE : Exploded View INSIDE HANDLE : Removal and Installation	188
OUTSIDE HANDLE OUTSIDE HANDLE : Exploded View OUTSIDE HANDLE : Removal and Installation	189
REAR DOOR LOCK	191
DOOR LOCK DOOR LOCK : Exploded View DOOR LOCK : Removal and Installation	191
INSIDE HANDLE INSIDE HANDLE : Exploded View INSIDE HANDLE : Removal and Installation	192
OUTSIDE HANDLE OUTSIDE HANDLE : Exploded View OUTSIDE HANDLE : Removal and Installation	
BACK DOOR LOCK	195
DOOR LOCK DOOR LOCK : Exploded View DOOR LOCK : Removal and Installation	195
OUTSIDE HANDLE OUTSIDE HANDLE : Exploded View OUTSIDE HANDLE : Removal and Installation	196
EMERGENCY LEVER EMERGENCY LEVER : Unlock procedures	
FUEL FILLER LID OPENER Exploded View Removal and Installation	198
DOOR SWITCH Exploded View Removal and Installation	200

INSIDE KEY ANTENNA 201	
INSTRUMENT CENTER	A
LUGGAGE ROOM 201 LUGGAGE ROOM : Exploded View 201 LUGGAGE ROOM : Removal and Installation 202	С
INTELLIGENT KEY WARNING BUZZER 203 Exploded View	D
REMOTE KEYLESS ENTRY RECEIVER204Exploded View204Removal and Installation204	Е
INTELLIGENT KEY BATTERY 205 Removal and Installation	F
BASIC INSPECTION	G
DIAGNOSIS AND REPAIR WORK FLOW 206 Work Flow	Н
INSPECTION AND ADJUSTMENT 209	
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	J
SYSTEM DESCRIPTION 210	DLK
POWER DOOR LOCK SYSTEM210System Diagram210System Description210Component Parts Location212Component Description212	L
REMOTE KEYLESS ENTRY SYSTEM 213System Diagram213System Description213Component Parts Location215Component Description216	Ν
DIAGNOSIS SYSTEM (BCM)	0
COMMON ITEM	Ρ
DOOR LOCK	
MULTI REMOTE ENT219	

MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)219
TRUNK
TRUNK : CONSULT Function (BCM - TRUNK)220
DTC/CIRCUIT DIAGNOSIS222
POWER SUPPLY AND GROUND CIRCUIT 222
BCM (BODY CONTROL MODULE)
DOOR SWITCH 223
Description
Component Function Check
Diagnosis Procedure
Component Inspection
DOOR LOCK AND UNLOCK SWITCH 226
DRIVER SIDE
DRIVER SIDE : Description
DRIVER SIDE : Component Function Check226 DRIVER SIDE : Diagnosis Procedure
DRIVER SIDE : Diagnosis Procedure
PASSENGER SIDE228
PASSENGER SIDE : Description
PASSENGER SIDE :
Component Function Check228
PASSENGER SIDE : Diagnosis Procedure
PASSENGER SIDE : Component Inspection230
DOOR LOCK ACTUATOR 231
DRIVER SIDE231
DRIVER SIDE : Description
DRIVER SIDE : Component Function Check231 DRIVER SIDE : Diagnosis Procedure231
PASSENGER SIDE231
PASSENGER SIDE : Description
PASSENGER SIDE :
Component Function Check232
PASSENGER SIDE : Diagnosis Procedure232
REAR LH232
REAR LH : Description232
REAR LH : Component Function Check
REAR LH : Diagnosis Procedure233
REAR RH
REAR RH : Description
REAR RH : Component Function Check233 REAR RH : Diagnosis Procedure234
-
BACK DOOR234 BACK DOOR : Description
BACK DOOR : Component Function Check234
BACK DOOR : Diagnosis Procedure

DOOR KEY CYLINDER SWITCH	236
Description	
Component Function Check	
Diagnosis Procedure	236
Component Inspection	237
REMOTE KEYLESS ENTRY RECEIVER	
Description Component Function Check	238
Diagnosis Procedure	
	250
KEY SWITCH	241
Description	
Component Function Check	
Diagnosis Procedure	
Component Inspection	242
BUZZER (COMBINATION METER)	243
Description	243
Component Function Check	
Diagnosis Procedure	
ů –	
HAZARD FUNCTION	
Description	
Component Function Check	
Diagnosis Procedure	244
KEYFOB BATTERY	245
Description	
Component Function Check	245
Diagnosis Procedure	
POWER DOOR LOCK SYSTEM	040
Wiring Diagram - POWER DOOR LOCK SYSTE	
REMOTE KEYLESS ENTRY SYSTEM	
Wiring Diagram - REMOTE KEYLESS ENTRY	
SYSTEM	248
ECU DIAGNOSIS INFORMATION	250
BCM (BODY CONTROL MODULE)	250
Reference Value	
Wiring Diagram - BCM	
Fail-safe	
DTC Inspection Priority Chart	
DTC Index	266
SYMPTOM DIAGNOSIS	268
	_/•
DOOR DOES NOT LOCK/UNLOCK WITH	
DOOR LOCK AND UNLOCK SWITCH	268
ALL DOOR	260
ALL DOOR : Description	
ALL DOOR : Description	
-	
DRIVER SIDE	
DRIVER SIDE : Description DRIVER SIDE : Diagnosis Procedure	
	~~~

PASSENGER SIDE PASSENGER SIDE : Description	<b>269</b> 269
PASSENGER SIDE : Diagnosis Procedure	269
REAR LH	
REAR LH : Description	269
REAR LH : Diagnosis Procedure	269
REAR RH	
REAR RH : Description	269
REAR RH : Diagnosis Procedure	269
BACK DOOR	
BACK DOOR : Description	
BACK DOOR : Diagnosis Procedure	270
DOOR DOES NOT LOCK/UNLOCK WITH	
DOOR KEY CYLINDER OPERATION Diagnosis Procedure	
Ũ	
DOOR DOES NOT LOCK/UNLOCK WITH	070
KEYFOB Diagnosis Procedure	
-	212
AUTO DOOR LOCK OPERATION DOES NOT	
OPERATE	
Diagnosis Procedure	273
SELECTIVE UNLOCK FUNCTION DOES	
NOT OPERATE	274
Diagnosis Procedure	274
VEHICLE SPEED SENSING AUTO LOCK	
OPERATION DOES NOT OPERATE	275
Diagnosis Procedure	
IGN OFF INTERLOCK DOOR UNLOCK	
FUNCTION DOES NOT OPERATE	276
Diagnosis Procedure	
P RANGE INTERLOCK DOOR LOCK/UN-	
LOCK FUNCTION DOES NOT OPERATE	277
Diagnosis Procedure	
KEY OUT INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE	170
Diagnosis Procedure	
C C	210
HAZARD AND HORN REMINDER DOES	
NOT OPERATE	
Diagnosis Procedure	279
SQUEAK AND RATTLE TROUBLE DIAG-	
NOSES	
Work Flow	
Inspection Procedure Diagnostic Worksheet	
PRECAUTION	286
PRECAUTIONS	286

Precaution for Supplemental Restraint System	
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	А
Precaution for Procedure without Cowl Top Cover. 286 Precautions Necessary for Steering Wheel Rota-	В
tion After Battery Disconnection	
PREPARATION288	С
PREPARATION	D
REMOVAL AND INSTALLATION 289	_
HOOD	E
HOOD ASSEMBLY	F
HOOD ASSEMBLY : Adjustment	G
HOOD HINGE	0
HOOD HINGE : Removal and Installation291	Н
HOOD SUPPORT ROD	I
RADIATOR CORE SUPPORT 294	
Exploded View294 Removal and Installation294	J
FRONT FENDER 296	DL
Exploded View296 Removal and Installation	
FRONT DOOR298	L
DOOR ASSEMBLY298	L
DOOR ASSEMBLY	L
DOOR ASSEMBLY298	L
DOOR ASSEMBLY298DOOR ASSEMBLY : Exploded View298DOOR ASSEMBLY : Removal and Installation298DOOR ASSEMBLY : Adjustment299DOOR STRIKER300	L M N
DOOR ASSEMBLY	
DOOR ASSEMBLY       298         DOOR ASSEMBLY : Exploded View       298         DOOR ASSEMBLY : Removal and Installation       298         DOOR ASSEMBLY : Removal and Installation       298         DOOR ASSEMBLY : Adjustment       299         DOOR STRIKER       300         DOOR STRIKER : Exploded View       300         DOOR STRIKER : Removal and Installation       300         DOOR STRIKER : Removal and Installation       300         DOOR STRIKER : Removal and Installation       300         DOOR HINGE       301	
DOOR ASSEMBLY       298         DOOR ASSEMBLY : Exploded View       298         DOOR ASSEMBLY : Removal and Installation       298         DOOR ASSEMBLY : Adjustment       299         DOOR STRIKER       300         DOOR STRIKER : Exploded View       300         DOOR STRIKER : Removal and Installation       300	
DOOR ASSEMBLY       298         DOOR ASSEMBLY : Exploded View       298         DOOR ASSEMBLY : Removal and Installation       298         DOOR ASSEMBLY : Adjustment       299         DOOR STRIKER       300         DOOR STRIKER       300         DOOR STRIKER : Exploded View       300         DOOR STRIKER : Removal and Installation       300         DOOR STRIKER : Removal and Installation       301         DOOR HINGE :       Exploded View       301         DOOR HINGE :       Removal and Installation       301         DOOR HINGE :       Support And Installation       301         DOOR HINGE :       Support And Installation       301         DOOR HINGE :       Removal and Installation       301         DOOR CHECK LINK       302       302	
DOOR ASSEMBLY298DOOR ASSEMBLY : Exploded View298DOOR ASSEMBLY : Removal and Installation298DOOR ASSEMBLY : Adjustment299DOOR STRIKER300DOOR STRIKER : Exploded View300DOOR STRIKER : Removal and Installation300DOOR STRIKER : Removal and Installation300DOOR HINGE301DOOR HINGE : Exploded View301DOOR HINGE : Removal and Installation301DOOR CHECK LINK302DOOR CHECK LINK : Exploded View302DOOR CHECK LINK : Removal and Installation302	N
DOOR ASSEMBLY       298         DOOR ASSEMBLY : Exploded View       298         DOOR ASSEMBLY : Removal and Installation       298         DOOR ASSEMBLY : Adjustment       299         DOOR STRIKER       300         DOOR STRIKER       300         DOOR STRIKER : Exploded View       300         DOOR STRIKER : Removal and Installation       300         DOOR STRIKER : Removal and Installation       301         DOOR HINGE :       Exploded View       301         DOOR HINGE :       Removal and Installation       301         DOOR HINGE :       Support And Installation       301         DOOR HINGE :       Support And Installation       301         DOOR HINGE :       Removal and Installation       301         DOOR CHECK LINK       302       302	N

DOOR ASSEMBLY : Removal and Installation303 DOOR ASSEMBLY : Adjustment
DOOR STRIKER305DOOR STRIKER : Exploded View305DOOR STRIKER : Removal and Installation305
DOOR HINGE
DOOR CHECK LINK
BACK DOOR 176
BACK DOOR ASSEMBLY
BACK DOOR STRIKER
BACK DOOR HINGE
DOOR CHECK LINK
DOVETAIL
BACK DOOR WEATHER-STRIP
HOOD LOCK317Exploded View317Removal and Installation317Inspection318
FRONT DOOR LOCK 319
DOOR LOCK

DOOR LOCK : Exploded View
INSIDE HANDLE
OUTSIDE HANDLE
REAR DOOR LOCK323
DOOR LOCK323DOOR LOCK : Exploded View323DOOR LOCK : Removal and Installation323
INSIDE HANDLE
OUTSIDE HANDLE
BACK DOOR LOCK327
DOOR LOCK327DOOR LOCK : Exploded View327DOOR LOCK : Removal and Installation327
OUTSIDE HANDLE
EMERGENCY LEVER
FUEL FILLER LID OPENER
DOOR SWITCH332Exploded View332Removal and Installation332
REMOTE KEYLESS ENTRY RECEIVER
KEYFOB BATTERY334Exploded View334Removal and Installation334

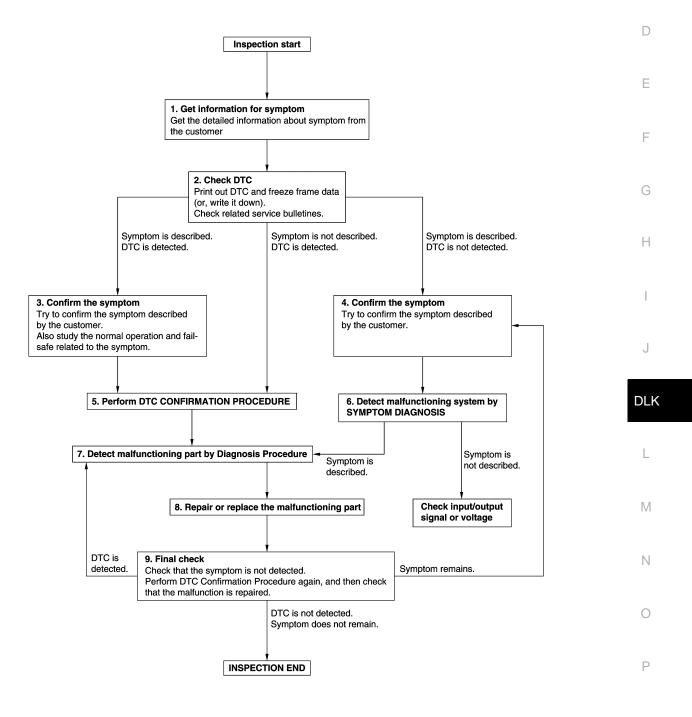
# BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000008452813

[WITH INTELLIGENT KEY SYSTEM]

**OVERALL SEQUENCE** 



JMKIA8652GB

#### DETAILED FLOW

Revision: 2012 August

< 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-75. "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-41, "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.
- 7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

## DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION > [WITH INTELLIGENT KEY SYSTEM]	
Inspect according to Diagnosis Procedure of the system.	
Is malfunctioning part detected?	А
YES >> GO TO 8.	
NO >> Check according to <u>GI-41. "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 Procedure again after repair and replacement.</li> </ol>	С
3. Check DTC. If DTC is detected, erase it.	
>> GO TO 9. 9.FINAL CHECK	D
When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.	Е
When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the	
symptom is not detected. <u>Is DTC detected and does symptom remain?</u>	F
YES-1 >> DTC is detected: GO TO 7.	
YES-2 >> Symptom remains: GO TO 4.	G
NO >> Before returning the vehicle to the customer, always erase DTC.	0
	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:000000008452814

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

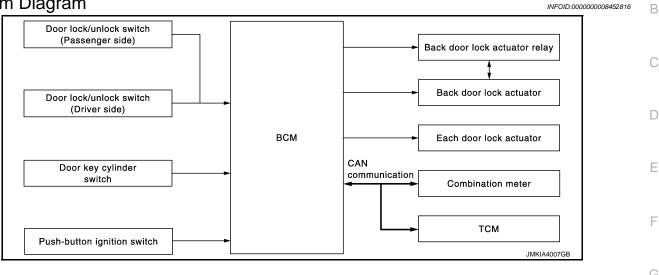
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

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

## [WITH INTELLIGENT KEY SYSTEM]

## SYSTEM DESCRIPTION POWER DOOR LOCK SYSTEM

## System Diagram



## System Description

### DOOR LOCK FUNCTION

Door Lock and Unlock Switch

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

### Door Key Cylinder Switch

fuel lid lock actuator are unlocked.

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

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

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

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

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

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

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

### P Range Interlock Door Lock*2

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

Setting change of Automatic Door Lock/Unlock Function

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

#### Revision: 2012 August

## **DLK-13**

INFOID:000000008452817

Н

J

Μ

Ν

Ρ

А

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

### 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 complete when the hazard lamp blinks.

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

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

#### IGN OFF Interlock Door Unlock*1

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

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

#### P Range Interlock Door Unlock*2

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

Setting change of Automatic Door Lock/Unlock Function

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

#### NOTE:

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

#### 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 complete when the hazard lamp blinks.

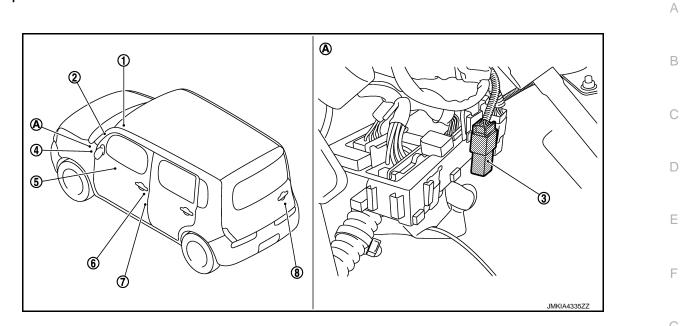
- ^{*1}: This function is set to ON before delivery.
- *²: This function does not operate on M/T models.

## POWER DOOR LOCK SYSTEM

### [WITH INTELLIGENT KEY SYSTEM]

## Component Parts Location

INFOID:00000008452818



- 1. Push-button ignition switch (push switch)
- 4. BCM Refer to <u>BCS-10, "Component Parts</u> <u>Location"</u>
- 7. Front door switch (driver side)
- A. Behind the instrument lower panel LH (Left side)

## **Component Description**

Combination meter

2.

- 5. Power window main switch (door lock and unlock switch)
- 8. Back door lock assembly
- 3. Back door lock actuator relay
- 6. Front door lock assembly (driver side)

INFOID:000000008452819

J

Н

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

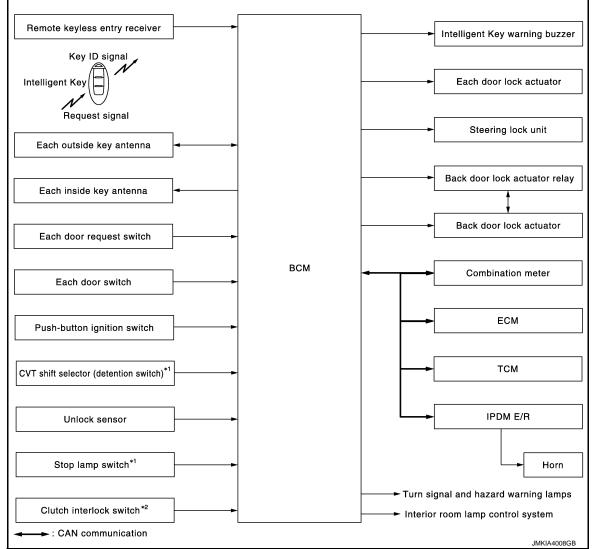
*: With CVT models

0

## INTELLIGENT KEY SYSTEM INTELLIGENT KEY SYSTEM

## INTELLIGENT KEY SYSTEM : System Diagram





### *¹: With CVT models

*²: With M/T models

## INTELLIGENT KEY SYSTEM : System Description

INFOID:000000008452821

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

### The driver should always carry the Intelligent Key

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

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

### < SYSTEM DESCRIPTION >

## [WITH INTELLIGENT KEY SYSTEM]

Function	Description	Refer
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle	DLK-30
Warning	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver	DLK-32
Engine start	The engine can be turned on while carrying the Intelligent Key	<u>SEC-11</u>
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state	<u>INL-6</u>
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds	SEC-21

D

Е

F

G

Н

J

DLK

L

Μ

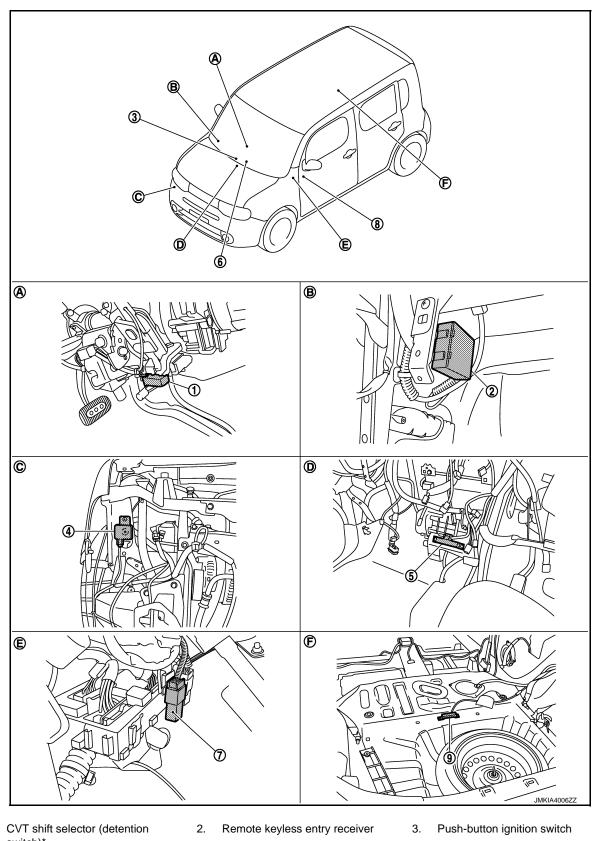
Ν

Ο

Ρ

## < SYSTEM DESCRIPTION >

## INTELLIGENT KEY SYSTEM : Component Parts Location



- switch)*
- 4. Intelligent Key warning buzzer
- 5. Inside key antenna (instrument cen- 6. Combination meter ter)

1.

### **INTELLIGENT KEY SYSTEM** [WITH INTELLIGENT KEY SYSTEM]

### < SYSTEM DESCRIPTION >

- Back door lock actuator relay 7.
- Α. Integrated in CVT shift selector
- Behind the audio unit D.
- *: With CVT models



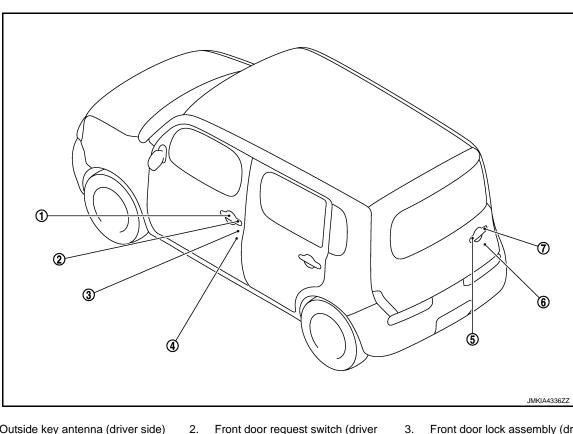
Behind the instrument lower panel

moved

LH (Left side)

Ε.

- 9. Inside key antenna (luggage room)
  - C. View with front bumper removed
  - View with rear seat removed F.



Outside key antenna (driver side) 1.

Front door switch (driver side)

- Front door request switch (driver side)
- Outside antenna (back door)
- Front door lock assembly (driver side)
- 6. Back door lock assembly

7. Back door request switch

4.

## **INTELLIGENT KEY SYSTEM : Component Description**

5.

INFOID:000000008452823
------------------------

Item	Function	
BCM	Controls the Intelligent Key system	N
IPDM E/R	Sounds horn via CAN communication between BCM	
Door lock actuator	Inputs lock/unlock signal from BCM and locks/unlocks each door	0
Door switch	Inputs door open/close condition to BCM	0
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM	
Door request switch	Inputs lock/unlock operation to BCM	P
Intelligent Key	Transmits button operation to remote keyless entry receiver	
Outside key antenna	Detects if Intelligent Key is outside the vehicle	
Inside key antenna	Detects if Intelligent Key is inside the vehicle	
Unlock sensor	Detects door lock condition of driver door	
CVT shift selector (detention switch)*	Detects the P range position of CVT selector lever	

Revision: 2012 August

2013 CUBE

- DLK

L

Μ

J

А

В

D

Ε

F

Н

#### < SYSTEM DESCRIPTION >

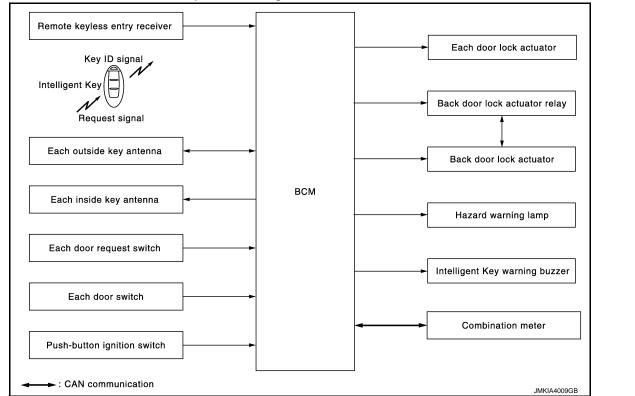
### [WITH INTELLIGENT KEY SYSTEM]

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

*: With CVT models

## DOOR LOCK FUNCTION

## DOOR LOCK FUNCTION : System Diagram



## DOOR LOCK FUNCTION : System Description

INFOID:000000008452825

INFOID:000000008452824

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

### **OPERATION DESCRIPTION**

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

#### **OPERATION CONDITION**

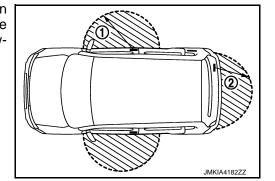
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated.

### < SYSTEM DESCRIPTION >

Each request switch operation	Operation condition	A
Lock	<ul> <li>All doors are closed</li> <li>P position warning is not 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>	В
Unlock	<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>	C

*: 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



D

E

F

Н

Μ

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

### SELECTIVE UNLOCK FUNCTION

Lock Operation

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

Unlock Operation

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

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

### HAZARD AND BUZZER REMINDER FUNCTION

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

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

#### Operating Function of Hazard and Buzzer Reminder

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

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

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

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

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

#### < SYSTEM DESCRIPTION >

## AUTO DOOR LOCK FUNCTION

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

	Door switch is ON (door is open)
Operating condition	Door is locked
	Push switch is pressed

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

#### LIST OF OPERATION RELATED PARTS

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

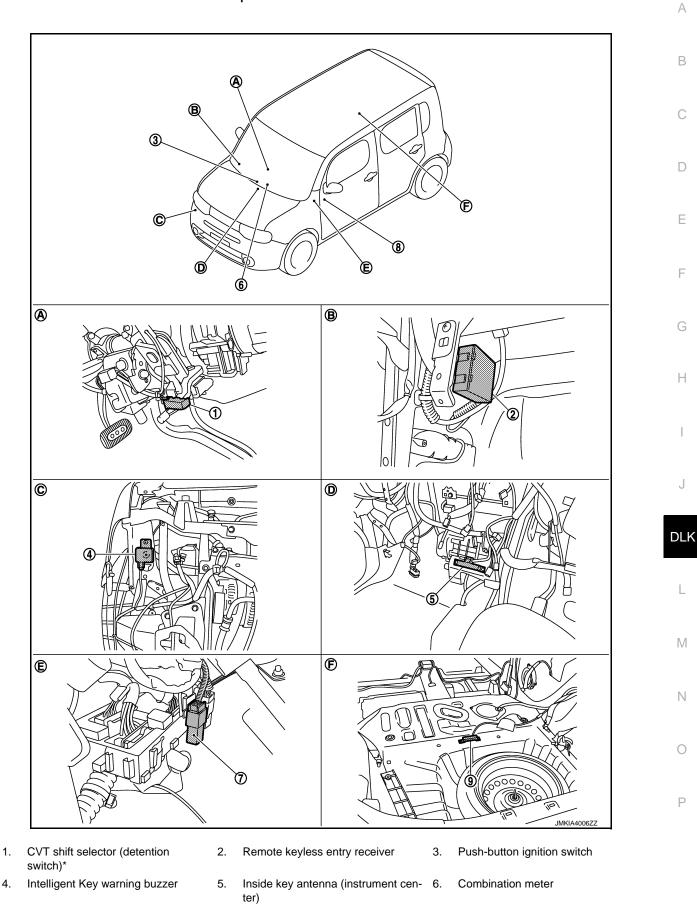
Door lock function	Intelligent Key	Remote keyless entry receiver	Door switch	Door request switch	Door lock actuator	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Push-button ignition switch	Combination meter
Door lock/unlock function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

## INTELLIGENT KEY SYSTEM

### [WITH INTELLIGENT KEY SYSTEM]

## DOOR LOCK FUNCTION : Component Parts Location

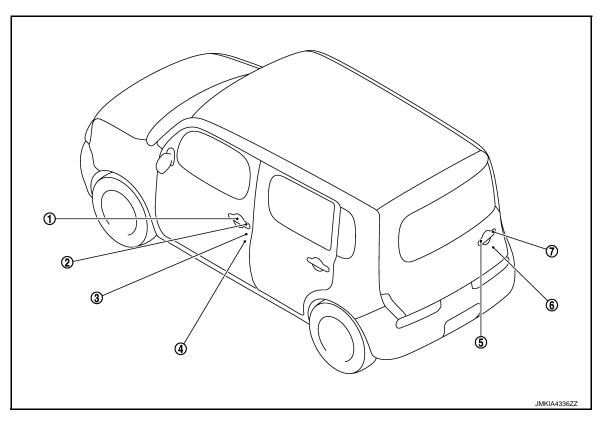
#### INFOID:000000008452826



- 7. Back door lock actuator relay
- Α. Integrated in CVT shift selector
- Behind the audio unit D.
- *: With CVT models

### **INTELLIGENT KEY SYSTEM** [WITH INTELLIGENT KEY SYSTEM]

- 8. BCM Refer to BCS-82, "Removal and Installation"
- Β. View with glove box assembly removed
- Behind the instrument lower panel Ε. F. LH (Left side)
- 9. Inside key antenna (luggage room)
- C. View with front bumper removed
  - View with rear seat removed



- Outside key antenna (driver side) 1.
- 2. Front door request switch (driver side) Outside antenna (back door)
- Front door lock assembly (driver side)
- 6. Back door lock assembly

3.

4. Front door switch (driver side) 7. Back door request switch

## **DOOR LOCK FUNCTION : Component Description**

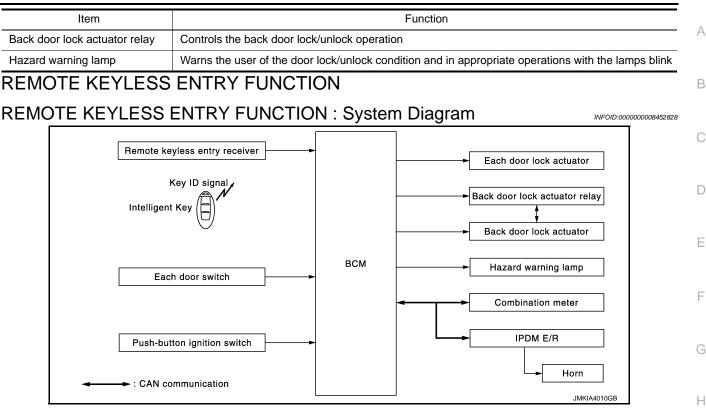
5.

INFOID:000000008452827

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

#### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]



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

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

#### OPERATION

Remote keyless entry system controls operation of the following items.

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

#### **OPERATION AREA**

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

#### DOOR LOCK/UNLOCK FUNCTION

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

### **OPERATION CONDITION**

Remote controller operation	Operation condition	
Lock	<ul><li>Panic alarm is not activated</li><li>P position warning is not activated</li></ul>	
Unlock	Panic alarm is not activated	

#### SELECTIVE UNLOCK FUNCTION

• When an LOCK signal is transmitted from Intelligent Key, all doors are locked.

• When an UNLOCK signal is transmitted from Intelligent Key once, driver side door is unlocked.

## **DLK-25**

INFOID:000000008452829

DLK

M

Ν

### < SYSTEM DESCRIPTION >

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

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

#### HAZARD AND HORN REMINDER FUNCTION

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

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

#### Operating Function of Hazard and Horn Reminder

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

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

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

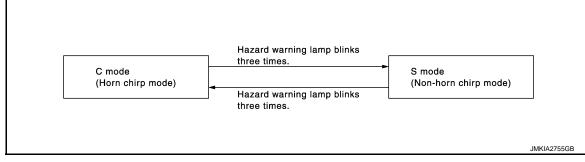
#### How to change hazard and horn reminder mode

#### (I) With CONSULT

Refer to DLK-40, "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 blinks and horn sounds as per the following items:



#### AUTO DOOR LOCK FUNCTION

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

Operating condition	<ul> <li>Door switch is ON (door is open)</li> <li>Door is locked</li> <li>Push switch is pressed</li> </ul>
---------------------	--------------------------------------------------------------------------------------------------------------

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

### LIST OF OPERATION RELATED PARTS

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

### < SYSTEM DESCRIPTION >

## [WITH INTELLIGENT KEY SYSTEM]

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

J

F

G

Н

L

Μ

Ν

Ο

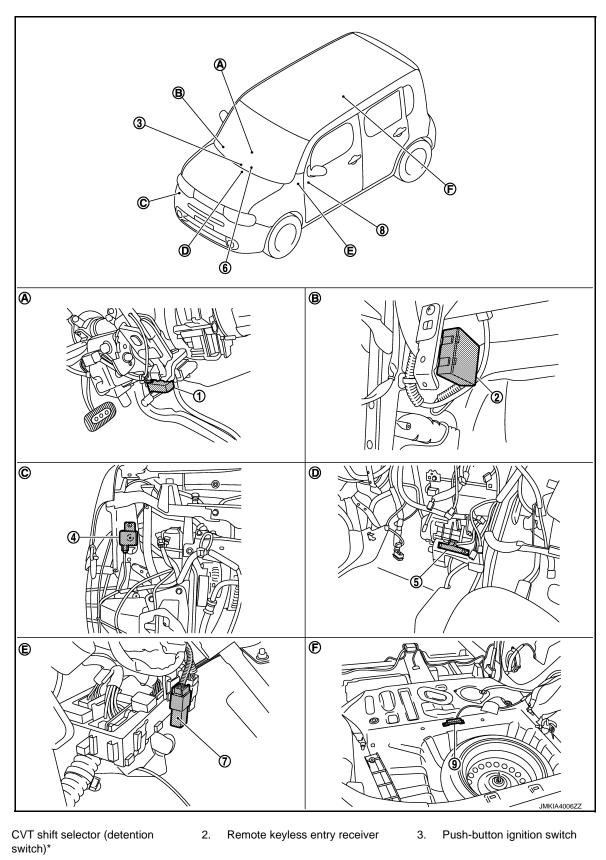
Ρ

## INTELLIGENT KEY SYSTEM

### [WITH INTELLIGENT KEY SYSTEM]

REMOTE KEYLESS ENTRY FUNCTION : Component Parts Location

INFOID:000000008452830



- 4. Intelligent Key warning buzzer
- 5. Inside key antenna (instrument cen- 6. Combination meter ter)

1.

### **INTELLIGENT KEY SYSTEM** [WITH INTELLIGENT KEY SYSTEM]

### < SYSTEM DESCRIPTION >

- 7. Back door lock actuator relay
- Α. Integrated in CVT shift selector
- Behind the audio unit D.
- *: With CVT models



Behind the instrument lower panel

moved

LH (Left side)

Ε.

- 9. Inside key antenna (luggage room)
  - C. View with front bumper removed

А

В

D

Ε

F

Н

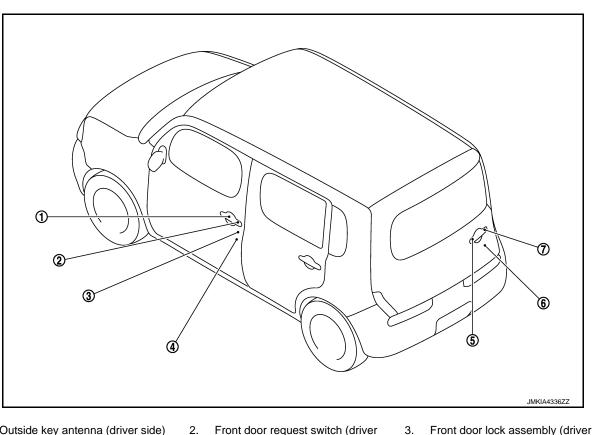
J

DLK

L

Μ

F. View with rear seat removed



- Outside key antenna (driver side) 1.
- Front door request switch (driver side)
  - side) Outside antenna (back door) 6. Back door lock assembly
- 4. Front door switch (driver side)
- 7. Back door request switch

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

5.

INFOID:000000008452831

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

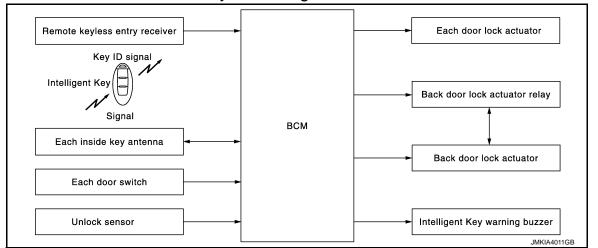
## **KEY REMINDER FUNCTION**

## **DLK-29**

#### 2013 CUBE

### < SYSTEM DESCRIPTION >

## **KEY REMINDER FUNCTION : System Diagram**



## KEY REMINDER FUNCTION : System Description

INFOID:000000008452833

INFOID:000000008452832

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

Key remainder function	Operation	
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 unlock state</li> </ul>	All doors 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 unlock</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 is perform in these cases.

#### **CAUTION:**

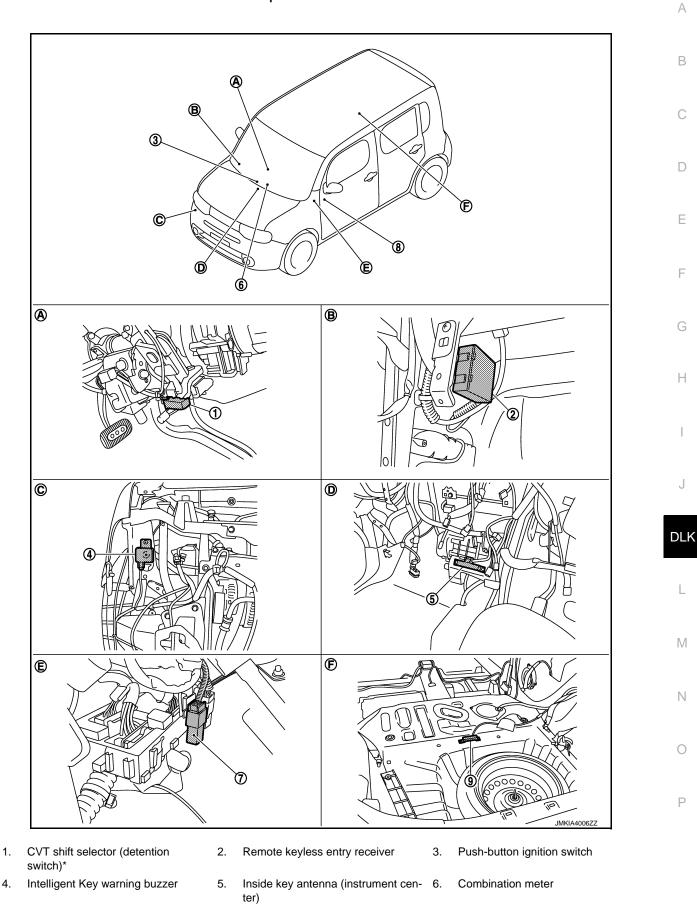
• The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key cannot be detected, and this function does not operate when the Intelligent Key is on the instrument panel, rear parcel shelf, or in the glove box. Also, this system sometimes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

### < SYSTEM DESCRIPTION >

## [WITH INTELLIGENT KEY SYSTEM]

## KEY REMINDER FUNCTION : Component Parts Location

INFOID:00000008452834



#### Integrated in CVT shift selector Β. moved

Behind the audio unit

Back door lock actuator relay

< SYSTEM DESCRIPTION >

*: With CVT models

7.

Α.

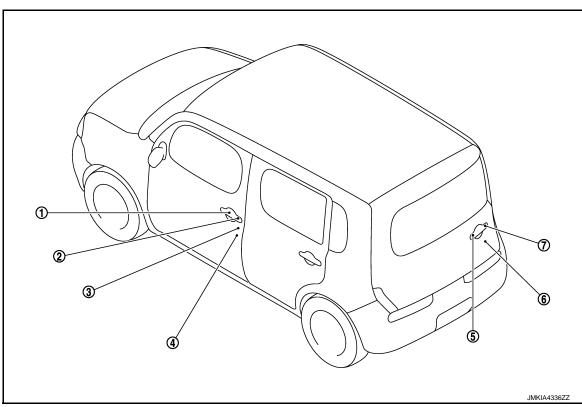
D.

INTELLIGENT KEY SYSTEM

- View with glove box assembly re-
- E. Behind the instrument lower panel F. LH (Left side)



- C. View with front bumper removed
  - View with rear seat removed



- Outside key antenna (driver side) 1.
- Front door request switch (driver side)
- 3. Front door lock assembly (driver side)
- 6. Back door lock assembly

4. Front door switch (driver side)

#### Back door request switch 7.

## WARNING FUNCTION

## WARNING FUNCTION : System Description

### **OPERATION DESCRIPTION**

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

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

### **OPERATION CONDITION**

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

Revision: 2012 August

## **DLK-32**

#### 2013 CUBE

INFOID:000000008452835

- 2. 5. Outside antenna (back door)

### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

Warning/Inform	mation functions	Operation procedure							
Intelligent Key system ma	lfunction	When a malfunction is detected on BCM, "KEY" warning lamp illuminates							
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 backside is contacted to ignition switch while brake pedal is depressed and ignition switch is LOCK or OFF (When the Intelligent Key battery is discharged)</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 is closed <b>NOTE:</b> OFF position (For external) active only when each of the sequence occurs as below: P position warning $\rightarrow$ ACC warning $\rightarrow$ OFF position warning (For internal) $\rightarrow$ OFF position warning (For internal)							
P position warning*	below: P position warning → ACC warning → OFF position warning (For internal)         below: P position warning (For internal)         below: P position warning (For internal)         on warning*         For internal         For external         Warning is activated when driver door is closed from the open position whil the P position warning (for inside vehicle) is ON         arning*         Oper is open to close         Poor switch: ON to OFF (Door is open to close)         Intelligent Key cannot be detected inside the vehicle         Ignition switch: Except LOCK position         Poor is open to close         Intelligent Key cannot be detected inside the vehicle         Ignition switch: Except LOCK position         Poor is open         Poor is open								
r position warning	For external	Warning is activated when driver door is closed from the open position while the P position warning (for inside vehicle) is ON							
ACC warning*		<ul> <li>When P position warning is in active mode, shift position changes P position.</li> <li>Ignition switch: ACC position</li> </ul>							
	Door is open to close	<ul> <li>Door switch: ON to OFF (Door is open to close)</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 cannot</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 cannot be detected inside the vehicle</li> </ul>							
Door lock operation warni	ng	When door lock operation is requested while door lock operating condition of door request switch not satisfied							
	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 in the passenger room after driver door is opened and closed.</li> </ul>							
	Ignition switch is ON posi- tion to OFF position	<ul> <li>Ignition switch: ON position to OFF position</li> <li>Shift position: P position</li> <li>NOTE:</li> <li>Engine start information turns ON for several seconds and then turns OFF, when ignition switch is turned to the ON position from the OFF position. Engine start information does not turn ON until opening and closing of driver door is detected again.</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 cannot be detected inside the vehicle after ig- nition switch is turned ON							

*: M/T models do not apply.

#### WARNING METHOD

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

## < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

			Shift P	Warning	g chime	Engine start
Warning/Info	"KEY" warn- ing lamp	warning lamp	Combination meter buzzer	Intelligent Key warning buzzer	operation in- dicator lamp	
Intelligent Key system m	alfunction	Indicate	_	_	—	—
OFF position warning	For internal	—	_	Activate	—	_
	For external*	—	_	—	Activate	_
P position warning*	For internal	Blink (yellow)	Indicate	Activate —		_
	For external	DIIIIK (yellow)	_	—	Active	_
ACC warning*	ACC warning*			Activate	—	_
	Door is open to close		_	Activate	Activate	_
Take away warning	Door is open	Blink (yellow)	—		—	—
g	Push-ignition switch opera- tion		_	Activate	_	_
Door lock operation warr	ning	—	—		Activate	
Key ID warning		Blink (yellow)	—	—	—	_
Engine start information	Engine start information		_	—	—	Indicate
Intelligent Key low batter	y warning	Blink (green)	_	_	—	_

*: M/T models do not apply.

### LIST OF OPERATION RELATED PARTS

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

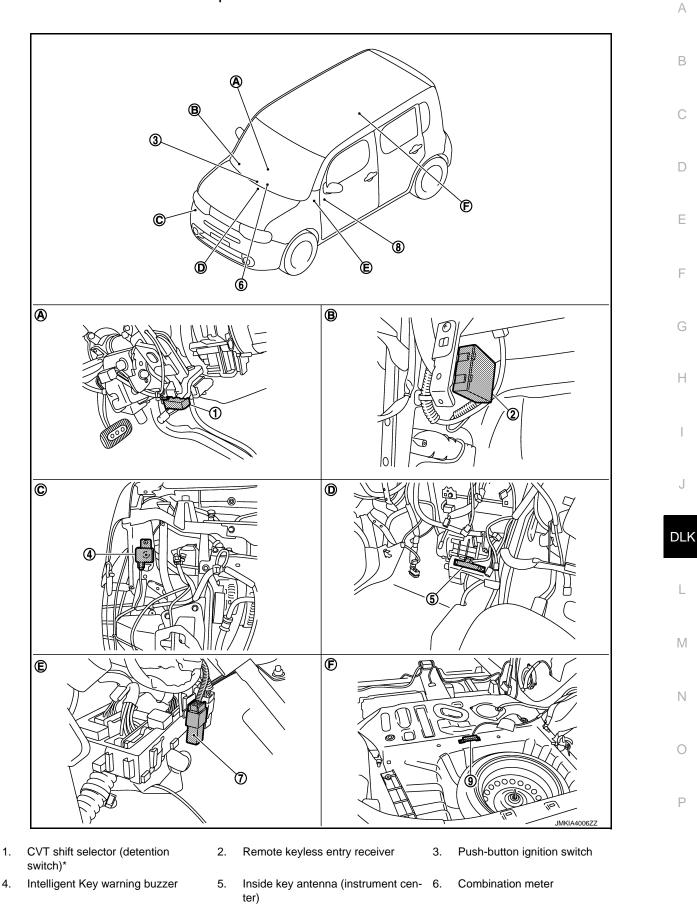
Warning function		Intelligent Key	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Detention switch	"KEY" warning lamp
Intelligent Key system malfunction										×	×		×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

## INTELLIGENT KEY SYSTEM

### [WITH INTELLIGENT KEY SYSTEM]

## WARNING FUNCTION : Component Parts Location

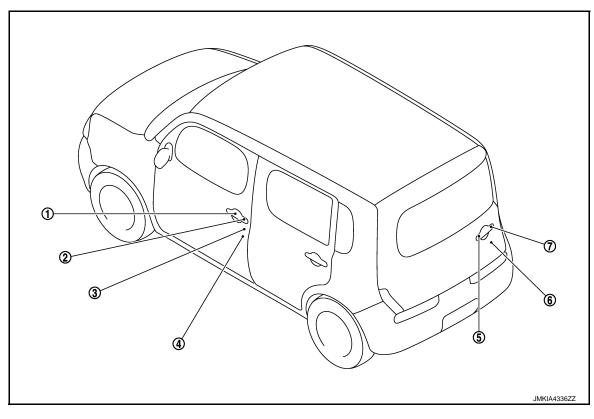
#### INFOID:00000008452836



- 7. Back door lock actuator relay
- A. Integrated in CVT shift selector
- D. Behind the audio unit
- *: With CVT models

### INTELLIGENT KEY SYSTEM [WITH INTELLIGENT KEY SYSTEM]

- 8. BCM Refer to <u>BCS-82, "Removal and In-</u> stallation"
- B. View with glove box assembly removed
- E. Behind the instrument lower panel F. LH (Left side)
- 9. Inside key antenna (luggage room)
- C. View with front bumper removed
  - View with rear seat removed



- 1. Outside key antenna (driver side)
- 2. Front door request switch (driver side)
- Front door lock assembly (driver side)

- 4. Front door switch (driver side)
- 7. Back door request switch
- 5. Outside antenna (back door)
- 6. Back door lock assembly

# < SYSTEM DESCRIPTION > DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

А

В

С

1.1

[WITH INTELLIGENT KEY SYSTEM]

### 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.	- D
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.	-
Data Monitor	The BCM input/output signals are displayed.	E
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>	F

#### 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.

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

*: For models with automatic air conditioner, this model 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-37**

### < SYSTEM DESCRIPTION >

### DIAGNOSIS SYSTEM (BCM)

### [WITH INTELLIGENT KEY SYSTEM]

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

#### NOTE:

*: Power position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position (CVT models), 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 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:000000008452838

#### BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

### **DLK-38**

#### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

Diagnosis mode	Function Description	А
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	В

#### WORK SUPPORT

Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operation with this mode <ul> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
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> <li>MODE 4*: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position</li> <li>MODE 5: This item is displayed, but cannot be monitored</li> <li>MODE 6: This item is displayed, but cannot be monitored</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>

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

### DATA MONITOR

### NOTE:

DLK 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

J

#### < SYSTEM DESCRIPTION >

**DIAGNOSIS SYSTEM (BCM)** 

### [WITH INTELLIGENT KEY SYSTEM]

Test item	Description
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 LOCK" 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 (other) is unlocked when "OTR ULK" on CONSULT screen is touched</li> </ul>

### **INTELLIGENT KEY**

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:000000008452839

### WORK SUPPORT

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

**DLK-40** 

#### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

Е

F

Monitor item	Description
ANS BACK I-KEY UNLOCK	<ul> <li>Buzzer reminder function (unlock operation) mode by door request switch can be changed to operation with this mode</li> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
SHORT CRANKING OUTPUT	Starter motor can operate during the times below
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis
HORN WITH KEYLESS LOCK	<ul> <li>Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode</li> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>

#### SELF-DIAG RESULT Refer to <u>BCS-76, "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 -BD/TR	Indicates [On/Off] condition of back door request switch
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
CLUTCH SW* ¹	Indicates [On/Off] condition of clutch switch
BRAKE SW 1	Indicates [On/Off]* ² condition of brake switch power supply
BRAKE SW 2	Indicates [On/Off] condition of brake switch
DETE/CANCL SW	Indicates [On/Off] condition of P position
SFT PN/N SW	Indicates [On/Off] condition of P or N position
S/L -LOCK	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
SFT P -MET	Indicates [On/Off] condition of P position
SFT N -MET	Indicates [On/Off] condition of N position
ENGINE STATE	Indicates [Stop/Stall/Crank/Run] condition of engine states
S/L LOCK-IPDM	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 combination meter by numerical value [Km/h]
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [Km/h]



### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver side door status
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger side door status
ID OK FLAG	Indicates [Set/Reset] condition of key ID
PRMT ENG STRT	Indicates [Set/Reset] condition of engine start possibility
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be monitored
RKE-LOCK	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key
RKE-TR/BD	NOTE: This item is displayed, but cannot be monitored
RKE-PANIC	Indicates [On/Off] condition of PANIC button of Intelligent Key
RKE-MODE CHG	Indicates [On/Off] condition of MODE CHANGE signal from Intelligent Key
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelli- gent Key, the numerical value start changing
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored

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

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

### ACTIVE TEST

Test item	Description
BATTERY SAVER	<ul><li>This test is able to check interior room lamp operation</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
OUTSIDE BUZZER	<ul><li>This test is able to check Intelligent Key warning buzzer operation</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
INSIDE BUZZER	<ul> <li>This test is able to check warning chime in combination meter operation</li> <li>Take out: Take away warning chime sounds when CONSULT screen is touched</li> <li>Key: Key warning chime sounds when CONSULT screen is touched</li> <li>Knob: OFF position warning chime sounds when CONSULT screen is touched</li> </ul>
INDICATOR	<ul> <li>This test is able to check warning lamp operation</li> <li>KEY ON: "KEY" Warning lamp illuminates when CONSULT screen is touched</li> <li>"KEY" Warning lamp blinks when CONSULT screen is touched</li> </ul>
INT LAMP	<ul><li>This test is able to check interior room lamp operation</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
LCD	<ul> <li>This test is able to check meter display information</li> <li>BP N: Engine start operation indicator lamp indicate when CONSULT screen is touched</li> <li>BP I: Engine start operation indicator lamp indicate when CONSULT screen is touched</li> <li>ID NG: This item is displayed, but cannot be monitored</li> <li>ROTAT: This item is displayed, but cannot be monitored</li> <li>SFT P: Shift P warning lamp indicate when CONSULT screen is touched</li> <li>INSRT: This item is displayed, but cannot be monitored</li> <li>BATT: Key warning lamp indicator when CONSULT screen is touched</li> <li>NO KY: This item is displayed, but cannot be monitored</li> <li>QUTKEY: Engine start operation indicator lamp indicate when CONSULT screen is touched</li> </ul>
FLASHER	This test is able to check security hazard lamp operation The hazard lamps are activated after "LH/RH/Off" on CONSULT screen is touched

#### < SYSTEM DESCRIPTION >

### [WITH INTELLIGENT KEY SYSTEM]

Test item	Description
HORN	This test is able to check horn operation The horn is activated after "ON" on CONSULT screen is touched
P RANGE	<ul><li>This test is able to check CVT shift selector power supply</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
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
PUSH SWITCH INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched
TRUNK/BACK DOOR	NOTE: This item is displayed, but cannot be monitored

### TRUNK

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

### BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

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

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

### ACTIVE TEST

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

0

Μ

Ε

F

Н

INFOID:000000008452840

### **DTC/CIRCUIT DIAGNOSIS B2621 INSIDE ANTENNA**

### Description

• Detects whether Intelligent Key is inside the vehicle.

• Installed in the instrument center.

### DTC Logic

INFOID:000000008452842

INFOID:000000008452841

### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside anten- na (instrument center) is sent to BCM	<ul> <li>Inside key antenna (instrument center)</li> <li>Harness or connector [Inside key antenna (instrument center) circuit is open or shorted]</li> </ul>

### DTC CONFIRMATION PROCEDURE

**1.**PERFORM DTC CONFIRMATION PROCEDURE

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

2.

Is inside key antenna DTC detected?

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

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

### **Diagnosis** Procedure

INFOID:000000008452843

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

Turn ignition switch OFF. 1.

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

Connect	(+) BCM or	Terminal	()	Condition	Signal (Reference value)
Instrument center	M71	84, 85	Ground	When Intelligent Key is in the antenna detection area	(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
				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1111111111111111111111111111

Is the inspection result normal?

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

### **B2621 INSIDE ANTENNA**

### 

### [WITH INTELLIGENT KEY SYSTEM]

А

В

D

Н

Ρ

2.			key antenna (instrume ss connector and insid		
-	BC	М	Inside key antenna	(instrument center)	Continuity
	Connector	Terminal	Connector	Terminal	Continuity
	N474	84	1405	1	Estimate al
	M71	85	– M105 –	2	Existed

В	СМ		Continuity	
Connector	Terminal	- Ground		E
M71	84	Ground	Not existed	
	85		NOT EXISTED	F

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

	(+)				Ciana d
BCM		BCM		Condition Signal (Reference value)	
Connect	tor	Terminal			( ,
Instrument center	M71	84, 85	Ground	When Intelligent Key is in the antenna detection area.	(V) 15 10 5 0 1 s 1 s JMKIA3839GB
instrument center	WI7 T	04, 00	Ground	When Intelligent Key is not in the antenna detection ar-	(V) 15 10 5 0 11 11 11 11 11 11 11 11 11 11 11 11 1
				ea.	500 ms

Is the inspection result normal?

YES >> Replace inside key antenna (instrument center). Refer to DLK-201, "INSTRUMENT CENTER : Removal and Installation"

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

**4.**CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

### **B2622 INSIDE ANTENNA**

### Description

• Installed in the luggage room.

### DTC Logic

### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside anten- na (luggage room) is sent to BCM	<ul> <li>Inside key antenna (luggage room)</li> <li>Harness or connector [Inside key antenna (luggage room) circuit is open or shorted]</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-46, "Diagnosis Procedure"</u>.

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

### Diagnosis Procedure

INFOID:000000008452846

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

1. Turn ignition switch OFF.

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

	(+) BCM		()	Condition	Signal
Conr	nector	Terminal			(Reference value)
Luggage	M71	86, 87	Ground	When Intelligent Key is in the an- tenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB
room		00, 07	Giouna	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 111111111111111111111111

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

### **DLK-46**

INFOID:000000008452844

INEOID:000000008452845

#### **B2622 INSIDE ANTENNA** [WITH INTELLIGENT KEY SYSTEM]

#### < DTC/CIRCUIT DIAGNOSIS >

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

_	Continuity	na (luggage room)	Inside key anten	СМ	BC
	- Continuity	Terminal	Connector	Terminal	Connector
_	Existed	1	B82	86	M71
	EXISTED	2	DOZ	87	

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity	D
Connector	Terminal	Ground	Continuity	D
M71	86	Ground	Not existed	
	87		NOI EXISIED	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 connector and inside key antenna (luggage room) connector.

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

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room). Refer to <u>DLK-202, "LUGGAGE ROOM : Removal</u> and Installation". NO >> Replace BCM. Refer to BCS-82, "Removal and Installation".

**4.**CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Н

F

А

Ρ

### **B2626 OUTSIDE ANTENNA**

### Description

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

### DTC Logic

### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2626	OUTSIDE ANTENNA	An excessive high or low voltage from front door right outside key antenna is sent to BCM	<ul> <li>Front door right outside key antenna</li> <li>Harness or connector (Front door right outside key antenna circuit is open or shorted)</li> </ul>

### DTC CONFIRMATION PROCEDURE

### 1.PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is outside key antenna DTC detected?

- YES >> Refer to <u>DLK-48, "Diagnosis Procedure"</u>.
- NO >> Outside key antenna (passenger side) is OK.

### Diagnosis Procedure

INFOID:000000008452849

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

#### 1. Turn ignition switch OFF.

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

(+	-)					0: I
BC	M	()	Con	dition	Signal (Reference value)	
Connector	Terminal					
M71	20. 94	Ground	When the passenger door request switch is	When Intelligent Key is in the antenna detec- tion area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 	
W17 1	80, 81	Ground	operated with power switch ON	When Intelligent Key is not in the antenna de- tection area (The dis- tance between Intelligent Key and an- tenna: Approx. 2 m)	(V) 10 50 500 ms JMKIA5954GB	

Is the inspection result normal?

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

INFOID:000000008452847

INEOID:000000008452848

### **B2626 OUTSIDE ANTENNA**

#### < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

- 1. Disconnect BCM connector and outside key antenna (passenger side) connector.
- 2. Check continuity between BCM harness connector and outside key antenna (passenger side) harness A connector.

	Continuity	na (passenger side)	Outside key antenr	CM	BC
	Continuity	Terminal	Connector	Terminal	Connector
-	Eviated	1	D22	80	1474
	Existed	2	D32	81	M71

3. Check continuity between BCM harness connector and ground.

В	СМ		Continuity	D
Connector	Terminal	Ground	Continuity	
M71	80	Ground	Not existed	E
M71	81		NOL EXISIED	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

1. Replace outside key antenna (passenger side). (New antenna or other antenna)

2. Connect BCM connector and outside key antenna (passenger side) connector.

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

(•	+)				Signal	
BC	СМ	()	Con	dition	Signal (Reference value)	
Connector	Terminal				, , , , , , , , , , , , , , , , , , ,	I
M74	22.24	Quand	When the passenger door request switch is	When Intelligent Key is in the antenna detec- tion area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 500 ms JMKIA5955GB	J DL
M71	80, 81	Ground	operated with power switch ON			L
			switch ON	When Intelligent Key is not in the antenna de- tection area (The dis- tance between Intelligent Key and an- tenna: Approx. 2 m)	(V) 15 10 11 5 0 → ← 500 ms	Μ
					JMKIA5954GB	Ν

Is the inspection result normal?

 YES >> Replace outside key antenna (passenger side). Refer to <u>DLK-189, "OUTSIDE HANDLE :</u> <u>Removal and Installation"</u>.
 NO >> Replace BCM. Refer to <u>BCS-82, "Removal and Installation"</u>.

**4.**CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

F

Н

P

### **B2627 OUTSIDE ANTENNA**

### Description

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

### DTC Logic

### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2627	OUTSIDE ANTENNA	An excessive high or low voltage from front door left outside key antenna is sent to BCM	<ul> <li>Front door left outside key antenna</li> <li>Harness or connector (Front door left outside key anten- na circuit is open or shorted)</li> </ul>

### DTC CONFIRMATION PROCEDURE

### **1.**PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is outside key antenna DTC detected?

- YES >> Refer to <u>DLK-50, "Diagnosis Procedure"</u>.
- NO >> Outside key antenna (driver side) is OK.

### **Diagnosis Procedure**

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

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

	+) CM	()	Condition		Signal (Reference value)
Connector	Terminal				(
M71	78, 79	Ground	When the passenger door request switch is	When Intelligent Key is in the antenna detec- tion area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 500 ms JMKIA5955GB
	10, 19	Cround	operated with power switch ON	When Intelligent Key is not in the antenna de- tection area (The dis- tance between Intelligent Key and an- tenna: Approx. 2 m)	(V) 15 10 5 0 500 ms JMKIA5954GB

Is the inspection result normal?

YES	>> GO TO 4.

**2.**CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

**DLK-50** 

INFOID:00000008452850

INEOID-000000008452851

INFOID:000000008452852

2013 CUBE

### **B2627 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Connector         Terminal         Connector         Terminal           M71         78         D12         1         Existed           Check continuity between BCM harness connector and ground.         2         Continuity           M71         79         0         Continuity           Connector         Terminal         Ground         Continuity           M71         78         Ground         Not existed           M71         78         Not existed         Not existed           M71         78         79         Not existed           M71         78         79         Not existed           the inspection result normal?         KS         >> CO TO 3.         Not existed           VO         >> Repair or replace harness.         .         .         .         .           Check Signal between BCM harness connector and ground using oscilloscope.         .         .         .         .           (+)         Extended for example of the passenger door request switch is operated with power switch ON         .         .         .         .           M71         78, 79         Ground         When the passenger witch on orace (The distance between Intelligent Key is not in the antenna detection area (The distance between Intelligent Key an an- Intelligent		BCI	Л	Outs	ide key antenna	a (driver side)	ide key antenna (driver side)	
M71       79       D12       2       Existed         Check continuity between BCM harness connector and ground.         BCM       Ground       Continuity         M71       78       Ground       Not existed         M71       78       Ground       Not existed         M71       78       Ground       Not existed         M71       78       Not existed       Not existed         M71       78       Ground       Not existed         VO       >> Replace outside key anterna (driver side), (New anterna or other anterna)       Connector.       Check signal between BCM harness connector and ground using oscilloscope.         EXEMPTION       (-)       Condition       Great (Reference value)         M71       78, 79       Ground       When the passenger door request switch is operated with power switch ON       When Intelligent Key is in the anterna detection area (The distance between Intelligent Key is not in the anterna detection area (The distance between Intelligent Key is not in the anterna detection area (The distance between Intelligent Key and anterna: 80       When Intelligent Key is not in the anterna detection area (The distance between Intelligent Key and anterna: 80         M71       78, 79       Ground       When the passenger intelligent Key is not in the anterna detection area (The distance between Intelligent Key is not in the anterna detection area (The distance between Intelli	Conn	ector	Termir	nal Conne	ector	Terminal	Continuity	
2         Check continuity between BCM harness connector and ground.         Connector         Connector         Terminal         Connector         M71         79         Continuity         Connector         Terminal         Ground         M71         79         Continuity         Continuity         Continuity         M71         M71         Replace outside key antenna (driver side). (New antenna or other antenna)         Connector and outside key antenna (driver side) connector.         Check signal between BCM harness connector and ground using oscilloscope.         (+)         BCM         Condition         Signal         (Reference value)         Condition         Signal         (*)         M71         78, 79         Ground       When the passenger		74	78	D4	<u></u>	1	Eviated	
BCM       Continuity         Connector       Terminal       Continuity         M71       78       Ground       Not existed         Not existed         the inspection result normal?         VES       >> GO TO 3.       Not existed         NO       >> Replace outside key antennas.       CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna)         Connector Connector and outside key antenna (driver side) connector.         Check signal between BCM harness connector and ground using oscilloscope.         (+)       Condition       Signal (Reference value)         (m1       78, 79       Ground       When the passenger door reguest switch is operated with power switch ON       When Intelligent Key is not in the antenna detection area (The distance trans antenna: 80 cm or less)       When Intelligent Key is not in the antenna detection area (The distance trans antenna: 80 cm or less)       When Intelligent Key and antenna: Approx. 2 m)       Januarestee         MrtHeigent Key and antenna: Approx. 2 m)         Januarestee outside key antenna (driver side). Refer to DLK-189, "OUTSIDE HANDLE : Remove Installation".         MrtHeigent Key and antenna: Approx. 2 m)       Januarestee outside key antenna (driver side). Refer to D	M	/1	79	D12	2	2	EXISTED	
Connector       Terminal       Ground       Continuity         M71       78       Ground       Not existed         M71       79       Not existed       Not existed         (FS)       >> Repair or replace harness.       .       .       .         .CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2       Replace outside key antenna (driver side). (New antenna or other antenna) Connect BCM connector and outside key antenna (driver side) connector. Check signal between BCM harness connector and ground using oscilloscope.       .         (+)       (-)       Condition       Signal (Reference value)         (main and the passenger door request switch is operated with power switch ON       When Intelligent Key is in the antenna detec- tion area (The disa- tance between Intelligent Key is not in the antenna de- tection area (The disa- tance between Intelligent Key and an- tenna: Approx. 2 m)	Check co	ontinuity bet	ween BCM	harness connector a	and ground.			
Connector       Terminal       Ground         M71       78       Orong         M71       79       Not existed         the inspection result normal?       FES >> GO TO 3.       Not existed         VO >> Repair or replace harness.       .CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna)       Connector.         Check signal between BCM harness connector and ground using oscilloscope.       Signal (Reference value)         Connector       Terminal       (-)         BCM       (-)       Condition         Connector       Terminal       Signal (Reference value)         M71       78, 79       Ground       When the passenger door request switch is operated with power switch ON         M71       78, 79       Ground       When the passenger door request switch is operated with power switch ON       When Intelligent Key is not in the antenna detection area (The distance between lintelligent Key is not in the antenna detection area (The distance between lintelligent Key and annuma: 80 or or less)			BCM					
M71       78 79       Not existed         the inspection result normal?       (ES >> G0 T0 3.       (NO >> Repair or replace harness.         .CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2       Replace outside key antenna (driver side). (New antenna or other antenna). Connect BCM connector and outside key antenna (driver side) connector. Check signal between BCM harness connector and ground using oscilloscope.       Signal (Reference value)         (+)       (-)       Condition       Signal (Reference value)         (connector       Terminal       (-)       Condition       Signal (Reference value)         (m11       78, 79       Ground       When the passenger door request switch is operated with power switch ON       When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	Сс	onnector		Terminal	0		Continuity	
79         the inspection result normal?         (FES ⇒> GO TO 3. NO ⇒> Repair or replace harness.         .CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna). Connect BCM connector and outside key antenna (driver side) connector. Check signal between BCM harness connector and ground using oscilloscope.         (+)       (-)       Condition       Signal (Reference value)         Connector       Terminal       (-)       Condition       Signal (Reference value)         M71       78, 79       Ground       When the passenger door request switch is operated with power switch ON       When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)		1474		78	Gro	una	Not evicted	
YES       >> GO TO 3. NO         NO       >> Repair or replace harness.         .CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2         Replace outside key antenna (driver side). (New antenna or other antenna). Connect BCM connector and outside key antenna (driver side) connector. Check signal between BCM harness connector and ground using oscilloscope.         (+)       (-)         BCM       (-)         Condition       Signal (Reference value)         Onnector       Terminal         M71       78, 79         Ground       When the passenger door request switch is operated with power switch ON         When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)       (V)         Mnn.metherena: 80 cm or less)       (V)         Metherena: 80 cm or less				79			NOT EXISTED	
BCM       (-)       Condition       Signal (Reference value)         Connector       Terminal       (-)       Condition       Signal (Reference value)         M71       T8, 79       Ground       When the passenger door request switch is operated with power switch ON       When Intelligent Key is in the antenna detec- tion area (The distance between Intelligent Key and antenna: 80 cm or less)       (V) (V) (V) (V) (V) (V) (V) (V) (V) (V)	Replace Connect	outside key BCM conne	antenna (c ector and or	lriver side). (New ant utside key antenna (o	tenna or othe driver side) c	connector.	e.	
BCM       (-)       Condition       (Reference value)         Connector       Terminal       (Reference value)       (Reference value)         M71       78, 79       Ground       When the passenger door request switch is operated with power switch ON       When Intelligent Key is operated with power switch ON       (V)         M71       78, 79       Ground       When the passenger door request switch is operated with power switch ON       When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)       (V)         15       UMMARSHEE       UMMARSHEE       UMMARSHEE         Key and antenna: Approx. 2 m)       UMMARSHEE       UMMARSHEE         M71       78, 79       Ground       Ground       Ground       Ummark         Vision area (The distance between Intelligent Key and antenna: Approx. 2 m)       Ummark       Ummark         VES       >> Replace outside key antenna (driver side). Refer to DLK-189, "OUTSIDE HANDLE : Remove Installation".       UMMARSHEE         NO       >> Replace BCM. Refer to BCS-82. "Removal and Installation".       Ummark	(·	+)						
Connector       Terminal         M71       78, 79       Ground       When the passenger door request switch is operated with power switch ON       When Intelligent Key is in the antenna detection area (The distance between Intelligent Key is on reless)       JMKUA585566         M71       78, 79       Ground       When the passenger door request switch is operated with power switch ON       When Intelligent Key is in the antenna detection area (The distance between Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)       JMKUA585666         the inspection result normal?       (CS)       >> Replace outside key antenna (driver side). Refer to DLK-189, "OUTSIDE HANDLE : Remove Installation".         NO       >> Replace BCM. Refer to BCS-82, "Removal and Installation".       JMKUA595666	B	СМ	(—)	Con				
M71       78, 79       Ground       When the passenger door request switch is operated with power switch ON       in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)       JMKIA59556E         When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key is not in the antenna detection area (The distance between Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)       JMKIA59556E         the inspection result normal?       JMKIA59546E       JMKIA59546E         (FS)       >> Replace outside key antenna (driver side). Refer to DLK-189, "OUTSIDE HANDLE : Removing Installation".         NO       >> Replace BCM. Refer to BCS-82, "Removal and Installation".         .CHECK INTERMITTENT INCIDENT	Connector	Terminal						
<ul> <li>YES &gt;&gt; Replace outside key antenna (driver side). Refer to <u>DLK-189, "OUTSIDE HANDLE : Remove Installation"</u>.</li> <li>NO &gt;&gt; Replace BCM. Refer to <u>BCS-82, "Removal and Installation"</u>.</li> <li>CHECK INTERMITTENT INCIDENT</li> </ul>	M71	78, 79	Ground	door request switch is operated with power	in the antenn tion area (The between Intel Key and ante cm or less) When Intellige not in the ant tection area ( tance betwee Intelligent Ke	a detec- distance ligent nna: 80 ent Key is enna de- The dis- n y and an-	15 10 50 500 ms JMKIA5955 (V) 15 10 500 ms JMKIA5955 (V) 15 10 500 ms 10 500 ms 10 10 10 10 10 10 10 10 10 10	
<ul> <li>YES &gt;&gt; Replace outside key antenna (driver side). Refer to <u>DLK-189, "OUTSIDE HANDLE : Remove Installation"</u>.</li> <li>NO &gt;&gt; Replace BCM. Refer to <u>BCS-82, "Removal and Installation"</u>.</li> <li>CHECK INTERMITTENT INCIDENT</li> </ul>								
NO >> Replace BCM. Refer to <u>BCS-82. "Removal and Installation"</u> . .CHECK INTERMITTENT INCIDENT	the inspect	ion result n	ormal?					
CHECK INTERMITTENT INCIDENT	YES >> F	Replace out		tenna (driver side). F	Refer to <u>DLK</u>	-189, "OUTSI		
	YES >> F	Replace outs	side key an	· · · · ·				
	YES >> F <u>  </u> NO >> F	Replace out: <u>nstallation"</u> . Replace BC	side key an M. Refer to	BCS-82, "Removal a				
	YES >> F <u> </u> NO >> F .CHECK IN	Replace outs <u>Installation"</u> . Replace BC	side key an M. Refer to ENT INCIDE	BCS-82, "Removal a				

### **B2628 OUTSIDE ANTENNA**

### Description

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

### DTC Logic

### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2628	OUTSIDE ANTENNA	An excessive high or low voltage from outside key antenna (back door) is sent to BCM	<ul> <li>Outside key antenna (back door)</li> <li>Harness or connector [Outside key antenna (back door) circuit is open or shorted]</li> </ul>

### DTC CONFIRMATION PROCEDURE

### **1.**PERFORM DTC CONFIRMATION PROCEDURE

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

Is outside key antenna DTC detected?

- YES >> Refer to DLK-52, "Diagnosis Procedure".
- NO >> Outside key antenna (back door) is OK.

### **Diagnosis Procedure**

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

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

(+) BCM		()	Con	dition	Signal	
Connector	Terminal	-			(Reference value)	
M71	82, 83	Ground	When the passenger door request switch is	When Intelligent Key is in the antenna detec- tion area (The distance between Intelligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 500 ms JMKIA5955GB	
	02, 03	Cround	operated with power switch ON	When Intelligent Key is not in the antenna de- tection area (The dis- tance between Intelligent Key and an- tenna: Approx. 2 m)	(V) 15 10 5 0 500 ms JMKIA5954GB	

Is the inspection result normal?

YES	>> GO TO 4.

NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

### **DLK-52**

INEOID-000000008452854

INFOID-00000008452855

### **B2628 OUTSIDE ANTENNA**

### < DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

	BCI	N	Outside key antenna (back door)		door)	
Con	nector	Termir	nal Conne	ector Ter	minal Continuity	
Μ	71	82	D10	)8	Existed	
IV.		83			2	
Check c	ontinuity bet	ween BCM	harness connector	and ground.		
		BCM				
C	onnector		Terminal	Continuity		
	N/74		82	Ground	Not eviated	
	M71		83		Not existed	
Replace Connect	outside key BCM and o	antenna (t utside key	NA INPUT SIGNAL 2 pack door). (New ant antenna (back door) mess connector and	enna or other anter connector.		
	(+)					
В	СМ	(—)	Condition		Signal (Reference value)	
Connector	Terminal				()	
M71	82, 83	Ground	When the passenger door request switch is operated with power switch ON	When Intelligent Key is in the antenna detec- tion area (The distance between Intelligent Key and antenna: 80 cm or less) When Intelligent Key is not in the antenna de- tection area (The dis- tance between Intelligent Key and an tenna: Approx. 2 m)	0 15 10 50 ms 500 ms JMKIA5955GB	
		ormal?			JMKIA5954GB	

### POWER SUPPLY AND GROUND CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

## POWER SUPPLY AND GROUND CIRCUIT

### BCM (BODY CONTROL MODULE)

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

INFOID:000000008831208

### 1.CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

(-	+)	(-)	Voltage	
BC	CM		(Approx.)	
Connector	Terminal			
M70	70	Ground	Pottony voltage	
INI7 O	57		Battery voltage	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M70	67	*	Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

### **DOOR SWITCH**

### Description

Detects door open/close condition.

**Component Function Check** 

### **1.**CHECK FUNCTION

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

Monitor item		Condition	Status	
DOOR SW-DR	Driver side door	Open	ON	
DOOR SW-DR	Driver side door	Closed	OFF	
DOOR SW-AS	Passenger side door	Open	ON	
DOOR 3W-AS	Passenger side door	Closed	OFF	
DOOR SW-RL	Rear door LH	Open	ON	
JOOK SW-KL		Closed	OFF	
OOR SW-RR	Rear door RH	Open	ON	
		Closed	OFF	
DOOR SW-BK	Back door	Open	ON	
JOON SW-DA	Dauk UUUI	Closed	OFF	

Is the inspection result normal?

YES >> Door switch is OK.

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

### **Diagnosis Procedure**

1. CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect malfunctioning door switch connector.

3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

L

А

В

С

INFOID:000000008452857

INFOID:000000008452858

Μ

Ν

Ρ

J

DLK

### **DOOR SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

	(+)					
	Door switch		(—)	Condition		Signal (Reference value)
Conne	ector	Terminal				· · · ·
Driver side	B34	3		Driver door switch	OFF (When driver door closed) ON (When driv- er door opened)	(V) 15 10 5 0 10 10 10 10 10 10 10 10 10
Passenger side	B27	3		Passenger door switch	OFF (When passenger door closed)	(V) 15 0 • • 10ms • • 10ms • • 10ms • • 10ms • • • • • • • • • • • • • • • • • • •
			Ground		ON (When pas- senger door opened)	0 V
Rear LH	B71	3		Rear LH door switch	OFF (When rear LH door closed)	(V) 15 0 5 0 • • • 10ms • • • • 10ms • • • • • • • • • • • • • • • • • • •
					ON (When rear door LH opened)	0 V
Rear RH	B53	3		Rear RH door switch	OFF (When rear RH door closed)	(V) 15 0 • • 10ms • • • 10ms • • • 0 • • • • • • • • • • • • • • • •
					ON (When rear RH door opened)	0 V

### **DOOR SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

(+) Door switch		()	Condition		Signal (Reference value)	/	
Conne	ector	Terminal					
Back door	B75	3	Ground	Back door switch	OFF (When back door closed)	(V) 15 10 5 0 • • 10ms PKIB4960J 9.5 - 10.0 V	E (
					ON (When back door opened)	0 V	E

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2. CHECK DOOR SWITCH CIRCUIT

#### 1. Disconnect BCM connector.

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

	Door switch		BC	Continuity	
Connector		Terminal	Connector Terminal		Continuity
Driver side	B34			47	
Passenger side	B27	-		45	
Rear LH	B71	3	M69	48	Existed
Rear RH	B53			46	
Back door	B75			43	

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

	Door switch		Continuity	
Conn	ector	Terminal		Continuity
Driver side	B34			
Passenger side	B27		Ground	
Rear LH	B71	3		Not existed
Rear RH	B53			
Back door	B75			

#### Is the inspection result normal?

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

NO >> Repair or replace harness.

### ${f 3.}$ check door switch

Refer to DLK-58, "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace malfunctioning door switch. Refer to DLK-200, "Removal and Installation".

**4.**CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

#### >> INSPECTION END

DLK

Ρ

F

Н

### Component Inspection

INFOID:000000008452860

[WITH INTELLIGENT KEY SYSTEM]

### 1.CHECK DOOR SWITCH

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

	Door switch	Con	Continuity	
	Terminal		Condition	
3	Ground part of door switch	Door switch	Pressed	Not existed
5	Ground part of door switch	Door Switch	Released	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunction door switch. Refer to <u>DLK-200, "Removal and Installation"</u>.

RIVER SIDE : De	scription		INFOID:0000000845
ansmits door lock/unic	ck operation to BCM.		
RIVER SIDE : Co	mponent Function Check		INFOID:0000000845
CHECK FUNCTION			
heck "CDL LOCK SW '	and "CDL UNLOCK SW" in BCM '	"Data Monitor" mode using	g CONSULT.
Monitor item	Co	ondition	Status
CDL LOCK SW		LOCK	ON
	Door lock and unlock switch	UNLOCK	OFF
CDL UNLOCK SW		LOCK	OFF
		UNLOCK	ON
<u>the inspection result n</u> YES >> Door lock ar	ormal? nd unlock switch is OK.		
	K-59, "DRIVER SIDE : Diagnosis F	Procedure".	
RIVER SIDE : Dia	agnosis Procedure		INFOID:0000000845
	<pre>&lt; AND UNLOCK SWITCH INPUT \$</pre>	SIGNAI	
Turn ignition switch			
	indow main switch connector.		
		and anonactor and around	
	en power window main switch harr	ness connector and ground	d using oscilloscope.
Check signal betwee	en power window main switch harr +)		- · ·
Check signal betwee ( Power windo	+) w main switch (-)		d using oscilloscope. Signal rence value)
Check signal betwee	en power window main switch harr +) w main switch (-) Terminal		Signal
Check signal betwee ( Power windo	+) w main switch (-)	(Refer (V) 15 10 5 0 10 10 10 10	Signal rence value)
Check signal betwee ( Power windo Connector	en power window main switch harr +) w main switch (-) Terminal 6 18 Groun	(Refer (V) 15 10 5 0 10 10 10 10	Signal rence value)
Check signal between ( Power windo Connector D5 the inspection result n YES >> GO TO 4.	en power window main switch harr +) w main switch (-) Terminal 6 18 Groun	(Refer (V) 15 10 5 0 10 10 10 10	Signal rence value)
Check signal betwee ( Power windo Connector D5 the inspection result n YES >> GO TO 4. NO >> GO TO 2.	en power window main switch harr +) w main switch (-) Terminal 6 18 Groun ormal?	(Refer d	Signal rence value)
Check signal betwee ( Power windo Connector D5 the inspection result n (ES >> GO TO 4. NO >> GO TO 2. CHECK DOOR LOCK	en power window main switch harr +) w main switch (-) Terminal 6 18 Groun	(Refer d d T	Signal rence value)
Check signal betwee ( Power windo Connector D5 the inspection result n (ES >> GO TO 4. NO >> GO TO 2. CHECK DOOR LOCK Disconnect BCM co	en power window main switch harr +) w main switch (-) Terminal 6 18 Groun ormal? X AND UNLOCK SWITCH CIRCUI	d (Refer d d 10 10 10 10 10 10 10 10 10 10 10 10 10	Signal rence value) JPMIA0012GB 0 - 1.5 V
Check signal betwee ( Power windo Connector D5 the inspection result n (ES >> GO TO 4. NO >> GO TO 2. .CHECK DOOR LOCK Disconnect BCM co	en power window main switch harr +) w main switch (-) Terminal 6 18 Groun 18 Groun 0rmal? C AND UNLOCK SWITCH CIRCUI nnector and front power window sy tween BCM harness connector and	d (Refer d d 10 10 10 10 10 10 10 10 10 10 10 10 10	Signal rence value)
Check signal betwee ( Power windo Connector D5 the inspection result n YES >> GO TO 4. NO >> GO TO 2. .CHECK DOOR LOCH Disconnect BCM co Check continuity be	en power window main switch harr +) w main switch (-) Terminal 6 18 Groun 18 Groun 0rmal? C AND UNLOCK SWITCH CIRCUI nnector and front power window sy tween BCM harness connector and	(Refer (Refer (V) 15 10 10 10 10 10 10 10 10 10 10	Signal rence value) JPMIA0012GB 0 - 1.5 V
Check signal betwee ( Power windo Connector D5 the inspection result n YES >> GO TO 4. NO >> GO TO 2. .CHECK DOOR LOCH Disconnect BCM co Check continuity be BC	en power window main switch harr +) w main switch (-) Terminal 6 6 6 6 6 6 6 6 6 6 6 6 6	(Refer (Refer (V) 15 10 10 10 10 10 10 10 10 10 10	Signal rence value)

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

#### DLV-28

#### < DTC/CIRCUIT DIAGNOSIS >

BCM			Continuity
Connector	Terminal	Ground	Continuity
M66	12	Ground	Not existed
MOO	13		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

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

(+) BCM		()	Signal (Reference value)	
Connector	Terminal			
	12			
M66	13	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V	

#### Is the inspection result normal?

YES >> GO TO 6.

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

4.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

**5.**CHECK DOOR LOCK AND UNLOCK SWITCH

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

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace power window main switch. Refer to <u>PWC-93, "Removal and Installation"</u>.

**6.**CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

#### >> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:000000008452864

1. CHECK DOOR LOCK AND UNLOCK SWITCH

1. Turn ignition switch OFF.

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

### **DLK-60**

#### < DTC/CIRCUIT DIAGNOSIS >

### [WITH INTELLIGENT KEY SYSTEM]

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

Power windo	w main switch	Condition			-
Terr	ninal			Continuity	
6			LOCK	Existed	В
0	47	Door lock and unlock	UNLOCK	Not existed	
40	17 Switch	switch	LOCK	Existed	C
18			UNLOCK	Not existed	0

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power window main switch. Refer to PWC-93, "Removal and Installation". PASSENGER SIDE

### PASSENGER SIDE : Description

Transmits door lock/unlock operation to BCM.

### **PASSENGER SIDE : Component Function Check**

### 1.CHECK FUNCTION

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

Monitor item	Condition		Status	
		LOCK	ON	
CKSW	<ul> <li>Door lock and unlock switch</li> </ul>	UNLOCK	OFF	
		LOCK	OFF	
LOCK SW		UNLOCK	ON	
ection result normal?		UNLOCK		ON

#### Is the inspection result normal?

YES	>> Door lock and unlock switch is OK.
NO	>> Refer to DLK-61, "PASSENGER SIDE : Diagnosis Procedure"

### PASSENGER SIDE : Diagnosis Procedure

### 1. CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

(+ Front power window sv		(-)	Signal (Reference value)	Ν
Connector	Terminal	_		
D25	2	Ground	(V) 15 10 5 0 10 10 10 10 10 10 10 10 10	O P

Is the inspection result normal?

YES >> GO TO 4. INFOID:00000000845286

DLK

D

Ε

F

INFOID:000000008452865

INFOID:000000008452866

Μ

< DTC/CIRCUIT DIAGNOSIS >

### NO >> GO TO 2.

### 2. CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

E	BCM		Front power window switch (passenger side)	
Connector	Terminal	Connector	Terminal	Continuity
M66	12	D25	1	Existed
MOO	13	025	2	LAISIEU

3. Check continuity between BCM connector and ground.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M66	12	Ground	Not existed
	13		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

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

(+) BCI		()	Signal (Reference value)
Connector	Terminal		
	12		
M66	13	Ground	(V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V

Is the inspection result normal?

YES >> GO TO 6.

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

### **4.**CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK DOOR LOCK AND UNLOCK SWITCH

Check front power window switch (passenger side). Refer to <u>DLK-63</u>, "PASSENGER SIDE : Component Inspection".

#### [WITH INTELLIGENT KEY SYSTEM] < DTC/CIRCUIT DIAGNOSIS > Is the inspection result normal? А YES >> GO TO 6. NO >> Replace front power window switch (passenger side). Refer to PWC-93, "Removal and Installation". 6. CHECK INTERMITTENT INCIDENT В Refer to GI-41, "Intermittent Incident". С >> INSPECTION END **PASSENGER SIDE : Component Inspection** INFOID:000000008452868 D 1. CHECK DOOR LOCK AND UNLOCK SWITCH 1. Turn ignition switch OFF. Ε 2. Disconnect front power window switch (passenger side) connector.

3. Check continuity between front power window switch (passenger side) terminals.

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

Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Replace front power window switch (passenger side). Refer to <u>PWC-93, "Removal and Installa-</u> tion".

J

DLK

L

Μ

Ν

Ρ

### DOOR LOCK ACTUATOR DRIVER SIDE

**DRIVER SIDE : Description** 

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

### **1.**CHECK FUNCTION

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

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

### Is the inspection result normal?

YES >> Door lock actuator is OK.

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

### DRIVER SIDE : Diagnosis Procedure

### 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

### 1. Turn ignition switch OFF.

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

(*	+)					
Front door lock assembly (driver side)		(—)	Condition		Voltage (V) (Approx.)	
Connector	Terminal					
D9	1	Ground	Door lock and unlock switch	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$	
09	2		Door lock and unlock switch	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$	

### Is the inspection result normal?

YES >> Replace front door lock assembly (driver side). Refer to <u>DLK-187, "DOOR LOCK : Removal and</u> <u>Installation"</u>.

NO >> GO TO 2.

2.check door lock actuator circuit

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

E	BCM	Front door lock as	Front door lock assembly (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M70	65	D9	1	Existed
1017 0	66	- 09	2	Existed

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

В	СМ		Continuity	
Connector	Terminal	Ground	Continuity	
M70	65	Ground	Not existed	
W70	66		NUL EXISTED	

Is the inspection result normal?

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

NO >> Repair or replace harness. PASSENGER SIDE INFOID:000000008452870

INFOID:000000008452871

INFOID-00000008452869

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 LOCK" or "ALL UNLK" to check that it works normally.         s the inspection result normal?         YES >> Door lock actuator is OK.         NO >> Refer to DLK-65. "PASSENGER SIDE : Diagnosis Procedure".         PASSENGER SIDE : Diagnosis Procedure        CHECK DOOR LOCK ACTUATOR INPUT SIGNAL         1. Turn ignition switch OFF.         2. Dick or lock assembly (passenger side) connector.         3. Check voltage between front door lock assembly (passenger side) harness connector and ground.         (+)       Front door lock assembly (passenger side) connector.         3. Check voltage between front door lock assembly (passenger side) harness connector and ground.         (+)       Condition       Voltage (V) (Approx.)         Connector       Terminal       Unlock       0 → Battery voltage → 0         3. the inspection result normal?       YES       >> Replace front door lock assembly (passenger side). Refer to <u>DLK-187. "DOOR LOCK - Remainal Installation".</u> NO       >> Battery voltage → 0         3. the inspection result normal?       Check continuity between BCM harness connector and front door lock assembly (passenger side).       Continuity         OO 2.       Ch							
ASSENGER SIDE : Component Function Check	SSENGER SIDE : Description					INFOID:000000084528;	
CHECK FUNCTION         Use CONSULT to perform Active Test ("DOOR LOCK").         Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.         ithe inspection result normal?         YES       >> Door lock actuator is OK.         NO       >> Refer to <u>DLK-65</u> , "PASSENGER SIDE : Diagnosis Procedure".         PASSENGER SIDE : Diagnosis Procedure       sereoscosses         CHECK DOOR LOCK ACTUATOR INPUT SIGNAL       .         Turn ignition switch OFF.       Disconnect front door lock assembly (passenger side) connector.         Check voltage between front door lock assembly (passenger side) harness connector and ground.         (+)       Front door lock assembly (c)         Connector       Terminal         0       0         0       5         0       Ground         0       0         0       0         0       5         0       5         0       0         0       8         0       9         0       8         0       9         0       8         0       9         0       10         0       10         0       8         0	ocks/unlocks the	door with the si	gnal from B	CM.			
Use CONSULT to perform Active Test ("DOOR LOCK").         Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.         is the inspection result normal?         YES       >> Door lock actuator is OK.         NO       >> Refer to DLK-65, "PASSENGER SIDE : Diagnosis Procedure".         PASSENGER SIDE : Diagnosis Procedure	ASSENGER SIDE : Component Function Check						INFOID:000000084528
2.       Touch "ALL LOCK" or "ALL UNLK" to check that it works normally.         3 the inspection result normal?         YES       >> Refer to DLK-65, "PASSENGER SIDE : Diagnosis Procedure".         PASSENGER SIDE : Diagnosis Procedure       >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	.CHECK FUNC	TION					
sthe inspection result normal?         YES       >> Door lock actuator is OK.         NO       >> Refer to DLK-65. "PASSENGER SIDE : Diagnosis Procedure".         PASSENGER SIDE : Diagnosis Procedure       ************************************					normally		
YES       >> Door lock actuator is OK.       >> Refer to DLK-65, "PASSENGER SIDE : Diagnosis Procedure".         ASSENGER SIDE : Diagnosis Procedure					normany.		
ASSENGER SIDE : Diagnosis Procedure       Information         • CHECK DOOR LOCK ACTUATOR INPUT SIGNAL       • Turn ignition switch OFF.       • Disconnect front door lock assembly (passenger side) connector.         • Check voltage between front door lock assembly (passenger side) harness connector and ground.       • (*)       Voltage (V) (Approx.)         • (*)       Condition       Voltage (V) (Approx.)         • (*)       Continuity       • (*)         • (*)       Condition       Unlock       0 -> Battery voltage -0 0         • (*)       S       Ground       Door lock and unlock switch       Lock       0 -> Battery voltage -0 0         • (*)       S       Replace front door lock assembly (passenger side). Refer to DLK-187. "DOOR LOCK : Remo       and Installation".         • (*)       S<	YES >> Door	lock actuator is (					
.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL         . Turn ignition switch OFF.         Disconnect front door lock assembly (passenger side) connector.         . Check voltage between front door lock assembly (passenger side) harness connector and ground.					sis Proced	<u>ure"</u> .	
Turn ignition switch OFF.         Disconnect front door lock assembly (passenger side) connector.         Check voltage between front door lock assembly (passenger side) harness connector and ground.         (+)         Front door lock assembly (passenger side) (condition         Voltage (V) (passenger side)         (-)       Condition         Voltage (V) (passenger side)         Connector       Terminal         D28       5         Ground       Door lock and unlock switch         Lock       0 → Battery voltage → 0         Unlock       0 → Battery voltage → 0         D28       6         Ground       Door lock and unlock switch         Lock       0 → Battery voltage → 0         unlock       0 → Battery voltage → 0         Sthe inspection result normal?       P         YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187, "DOOR LOCK : Remo         and Installation".       NO         NO       >> GO TO 2.         CHECK DOOR LOCK ACTUATOR CIRCUIT         Disconnect BCM connector and all door lock actuator.         Check continuity between BCM harness connector and front door lock assembly (passenger side)         M70       59         D28       6	ASSENGER	SIDE : Diagi	nosis Pro	cedure			INFOID:000000084528;
2.       Disconnect front door lock assembly (passenger side) connector.         3.       Check voltage between front door lock assembly (passenger side) harness connector and ground.         (+)       Front door lock assembly (passenger side) (approx.)         Connector       Terminal         D28       5         6       Ground         D28       6         6       Ground         D28       6         6       Ground         Door lock and unlock switch       Lock         0 → Battery voltage → 0         0 ± the inspection result normal?         YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187. "DOOR LOCK : Removand Installation".         NO       >> GO TO 2.         CHECK DOOR LOCK ACTUATOR CIRCUIT         .       Disconnect BCM connector and all door lock actuator.         .       Check continuity between BCM harness connector and front door lock assembly (passenger side) for the system of the	.CHECK DOOF	LOCK ACTUAT	OR INPUT	SIGNAL			
B.       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       (-)       Condition       Unlock       0 → Battery voltage → 0         D28       5       Ground       Door lock and unlock switch       Lock       0 → Battery voltage → 0         S       the inspection result normal?       YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187. "DOOR LOCK : Remo and Installation".         NO       >> GO TO 2.       CHECK DOOR LOCK ACTUATOR CIRCUIT         .       Disconnect BCM connector and all door lock actuator.       Check continuity between BCM harness connector and front door lock assembly (passenger side) for ness connector.          BCM       Front door lock assembly (passenger side)       Continuity         M70       59       D28       6       Existed         BCM       Gonnector and ground.       Existed       5       5       Continuity			ombly (===		opposter		
Front door lock assembly (passenger side)       (-)       Condition       Voltage (V) (Approx.)         Connector       Terminal       0       Door lock and unlock switch       Lock       0 -> Battery voltage -> 0         D28       5       Ground       Door lock and unlock switch       Lock       0 -> Battery voltage -> 0         0       6       Ground       Door lock and unlock switch       Lock       0 -> Battery voltage -> 0         0       6       Oron result normal?       Vester of the inspection result normal?       Unlock       0 -> Battery voltage -> 0         YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187. "DOOR LOCK : Remonand Installation".       NO       >> GO TO 2.          CHECK DOOR LOCK ACTUATOR CIRCUIT        Disconnect BCM connector and all door lock actuator.           Check continuity between BCM harness connector and front door lock assembly (passenger side) in ness connector.       Continuity       Continuity         M70       59       D28       6       Existed          Check continuity between BCM harness connector and ground.       Continuity         M70       59       D28       6       Existed          Check continuity between BCM harness connector and ground.       Continuity						harness cor	nnector and ground.
Front door lock assembly (passenger side)       (-)       Condition       Voltage (V) (Approx.)         Connector       Terminal       0       Door lock and unlock switch       Lock       0 -> Battery voltage -> 0         D28       5       Ground       Door lock and unlock switch       Lock       0 -> Battery voltage -> 0         0       6       Ground       Door lock and unlock switch       Lock       0 -> Battery voltage -> 0         0       6       Oron result normal?       Vester of the inspection result normal?       Unlock       0 -> Battery voltage -> 0         YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187. "DOOR LOCK : Remonand Installation".       NO       >> GO TO 2.          CHECK DOOR LOCK ACTUATOR CIRCUIT        Disconnect BCM connector and all door lock actuator.           Check continuity between BCM harness connector and front door lock assembly (passenger side) in ness connector.       Continuity       Continuity         M70       59       D28       6       Existed          Check continuity between BCM harness connector and ground.       Continuity         M70       59       D28       6       Existed          Check continuity between BCM harness connector and ground.       Continuity	(	т)			-		
Conduition       (Approx.)         Connector       Terminal       (Approx.)         D28       5       Ground       Door lock and unlock switch       Lock $0 \rightarrow$ Battery voltage $\rightarrow 0$ Sthe inspection result normal?       YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187. "DOOR LOCK : Remomentation".         NO       >> GO TO 2.       CHECK DOOR LOCK ACTUATOR CIRCUIT         Disconnect BCM connector and all door lock actuator.       Check continuity between BCM harness connector and front door lock assembly (passenger side) in ness connector.       Continuity       Continuity         M70       59       D28       6       Existed         M70       59       D28       5       Existed         BCM       Terminal       Connector and ground.       Continuity         M70       59       D28       5       Existed         BCM       Terminal       Ground       Continuity					Condition		Voltage (V)
D28       5       Ground       Door lock and unlock switch       Lock       0 $\rightarrow$ Battery voltage $\rightarrow$ 0         unlock       0       Battery voltage       0         s the inspection result normal?       YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187. "DOOR LOCK : Remonand Installation".         NO       >> GO TO 2.         2.CHECK DOOR LOCK ACTUATOR CIRCUIT         . Disconnect BCM connector and all door lock actuator.         . Check continuity between BCM harness connector and front door lock assembly (passenger side) ness connector.         Example Connector       Terminal         M70       59         028       6         5       Existed         5       Check continuity between BCM harness connector and ground.         M70       59       D28       6         6       Existed       5         8. Check continuity between BCM harness connector and ground.       Continuity			()		Condition		(Approx.)
D28       Ground       Door lock and unlock switch       Unlock       0 $\rightarrow$ Battery voltage $\rightarrow$ 0         s the inspection result normal?         YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187. "DOOR LOCK : Remo and Installation".         NO       >> GO TO 2.         2.CHECK DOOR LOCK ACTUATOR CIRCUIT         . Disconnect BCM connector and all door lock actuator.         . Check continuity between BCM harness connector and front door lock assembly (passenger side) ness connector.         BCM       Front door lock assembly (passenger side) ness connector.         M70       59         D28       6         5       5         8. Check continuity between BCM harness connector and ground.         M70       59         D28       6         5       5	Connector						
s the inspection result normal?         YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187, "DOOR LOCK : Remained installation".         NO       >> GO TO 2.         CHECK DOOR LOCK ACTUATOR CIRCUIT         .       Disconnect BCM connector and all door lock actuator.         .       Check continuity between BCM harness connector and front door lock assembly (passenger side) in ness connector.         BCM       Front door lock assembly (passenger side)         Connector       Terminal         M70       59         05       028         6       5         Existed	D28		Ground	Door lock and u	nlock switch		
YES       >> Replace front door lock assembly (passenger side). Refer to DLK-187, "DOOR LOCK : Remained Installation".         NO       >> GO TO 2.        CHECK DOOR LOCK ACTUATOR CIRCUIT        Disconnect BCM connector and all door lock actuator.        Check continuity between BCM harness connector and front door lock assembly (passenger side) for ness connector.         Image: Source to the second se							
NO       >> GO TO 2.         CHECK DOOR LOCK ACTUATOR CIRCUIT         .       Disconnect BCM connector and all door lock actuator.         .       Check continuity between BCM harness connector and front door lock assembly (passenger side) for ness connector.         Image: Second connector in the imag	the inspection r	esult normal?					, ,
CHECK DOOR LOCK ACTUATOR CIRCUIT     Disconnect BCM connector and all door lock actuator.     Check continuity between BCM harness connector and front door lock assembly (passenger side) for the ness connector.      BCM Front door lock assembly (passenger side)     Continuity     Connector Terminal Connector Terminal     M70     59     D28     6     Existed     S      Check continuity between BCM harness connector and ground.      BCM     Connector Terminal     Continuity	YES >> Repla	ice front door loo	k assembly	/ (passenger si	ide). Refer	to <u>DLK-187</u>	
Disconnect BCM connector and all door lock actuator.         Check continuity between BCM harness connector and front door lock assembly (passenger side) harness connector.         BCM       Front door lock assembly (passenger side)         Connector       Terminal         M70       59         65       5         065       5         Check continuity between BCM harness connector and ground.         M70       59         65       5         Check continuity between BCM harness connector and ground.         BCM       Continuity         Connector       Terminal         Continuity between BCM harness connector and ground.         BCM       Continuity	YES >> Repla and Ir	ce front door loo	k assembly	/ (passenger si	de). Refer	to <u>DLK-187</u>	
BCM       Front door lock assembly (passenger side)       Continuity         Connector       Terminal       Connector       Terminal         M70       59       D28       6       Existed         0       65       5       Continuity       Continuity         Ocheck continuity between BCM harness connector and ground.       Existed       Continuity         M70       59       D28       6       Existed         0       65       5       Continuity       Continuity         Continuity between BCM harness connector and ground.       Continuity       Continuity	YES >> Repla and Ir NO >> GO T	ice front door loo <u>istallation"</u> . O 2.			de). Refer	to <u>DLK-187</u>	
BCM     Front door lock assembly (passenger side)     Continuity       Connector     Terminal     Connector     Terminal       M70     59     D28     6     Existed       M70     65     5     Existed     6       Output     65     5     Continuity       Conteck continuity between BCM harness connector and ground.     Continuity     Continuity       BCM     Continuity     Continuity	YES >> Repla and Ir NO >> GO T .CHECK DOOR	ce front door loo <u>stallation"</u> . O 2. LOCK ACTUAT	OR CIRCL	ЛТ	de). Refer	to <u>DLK-187</u>	
Connector     Terminal     Connector     Terminal       M70     59     D28     6     Existed       M70     65     5     Existed       .     Check continuity between BCM harness connector and ground.     Continuity       BCM     Connector     Continuity       Connector     Terminal     Continuity	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check contin	ice front door loo <u>nstallation"</u> . O 2. R LOCK ACTUAT CM connector ar uity between BC	OR CIRCU	IIT ock actuator.			. "DOOR LOCK : Remova
M70     59 65     D28     6 5     Existed       . Check continuity between BCM harness connector and ground.       BCM       Connector       Terminal	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check contin	ice front door loo <u>nstallation"</u> . O 2. R LOCK ACTUAT CM connector ar uity between BC	OR CIRCU	IIT ock actuator. connector and	front doc	or lock asser	, "DOOR LOCK : Remova
M70     D28     Existed       65     5     Existed       Check continuity between BCM harness connector and ground.     Existed       BCM     Continuity       Connector     Terminal       Ground     Ground	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check contine ness connect	Ce front door loo <u>nstallation"</u> . O 2. C LOCK ACTUAT CM connector ar uity between BC or. BCM	OR CIRCL nd all door I M harness	IIT ock actuator. connector and Front door lock	front doc	or lock asser bassenger side)	<u>, "DOOR LOCK : Remova</u> nbly (passenger side) har
BCM Continuity Continuity	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check contine ness connect	CCC Front door loo Installation". O 2. C LOCK ACTUAT CM connector ar uity between BC or. BCM Term	OR CIRCL nd all door I M harness	IIT ock actuator. connector and Front door lock	front doc	or lock asser passenger side) Terminal	<u>, "DOOR LOCK : Remova</u> nbly (passenger side) har
Connector Terminal Continuity	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check contine ness connect	CCE front door loo Stallation". O 2. C LOCK ACTUAT CM connector ar uity between BC or. BCM Term 5	OR CIRCL nd all door I M harness	IIT ock actuator. connector and Front door lock Connector	front doc	or lock asser bassenger side) Terminal 6	nbly (passenger side) har
Connector Terminal Continuity	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check contine ness connector Connector	CCE front door loo Installation". O 2. C LOCK ACTUAT CM connector ar uity between BC or. BCM Term 5 6	TOR CIRCL nd all door I IM harness	JIT ock actuator. connector and Front door lock Connector D28	d front doc	or lock asser bassenger side) Terminal 6	nbly (passenger side) har
Ground	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check contine ness connector Connector	Ce front door loo Stallation". O 2. CM CONNECTOR CM CONNECTOR AR UITY between BC DO BCM Term 5 6 UITY between BC	TOR CIRCL nd all door I IM harness	JIT ock actuator. connector and Front door lock Connector D28	d front doc	or lock asser bassenger side) Terminal 6	nbly (passenger side) har
	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check contine ness connector Connector M70	Ce front door loo Installation". O 2. C LOCK ACTUAT CM connector ar uity between BC or. BCM Term 5 6 uity between BC BCM	TOR CIRCL nd all door I CM harness ninal 9 5 M harness	JIT ock actuator. connector and Front door lock Connector D28 connector and	d front doc	or lock asser passenger side) Terminal 6 5	nbly (passenger side) har Continuity Existed
M70 65 Not existed	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check continu ness connector M70 Check continu Connector	Ce front door loo Installation". O 2. C LOCK ACTUAT CM connector ar uity between BC or. BCM Term 5 6 uity between BC BCM	TOR CIRCL nd all door I CM harness ninal 9 5 M harness	JIT ock actuator. connector and Front door lock Connector D28 connector and	d front doc	or lock asser passenger side) Terminal 6 5	nbly (passenger side) har Continuity Continuity Continuity
s the inspection result normal?	YES >> Repla and Ir NO >> GO T CHECK DOOR Disconnect B Check contine ness connector Connector M70	Ce front door loo Installation". O 2. C LOCK ACTUAT CM connector ar uity between BC or. BCM Term 5 6 uity between BC BCM	TOR CIRCL and all door I CM harness ninal 9 5 M harness Terminal 59	JIT ock actuator. connector and Front door lock Connector D28 connector and	d front doc	or lock asser passenger side) Terminal 6 5	nbly (passenger side) har Continuity Existed
O >> Repair or replace harness.	ES >> Repla and Ir O >> GO T CHECK DOOR Disconnect B Check continu- ness connector M70 Check continu- M70 Check continu- M70 check continu- M70	Acce front door loo Installation". O 2. C LOCK ACTUAT CM connector ar uity between BC or. BCM Term 5 6 uity between BC BCM tor esult normal? Ince BCM. Refer to	TOR CIRCL ad all door I M harness aninal 9 5 M harness Terminal 59 65 10 BCS-82.	IIT ock actuator. connector and Front door lock Connector D28 connector and	d front doc	or lock asser passenger side) Terminal 6 5 d	nbly (passenger side) har Continuity Continuity Continuity

### **REAR LH : Description**

Locks/unlocks the door with the signal from BCM.

INFOID:000000008452875

### **REAR LH : Component Function Check**

### **1.**CHECK FUNCTION

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

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

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

### REAR LH : Diagnosis Procedure

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

	+) k assembly LH	()	Condition		Voltage (V) (Approx.)
Connector	Terminal				(********)
D65	1	Ground	Door lock and unlock switch	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$
	2	Ground	Door lock and unlock switch	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

YES >> Replace rear door lock assembly LH. Refer to <u>DLK-191, "DOOR LOCK : Removal and Installa-</u> tion".

NO >> GO TO 2.

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM connector and all door lock actuator connector.

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

В	BCM		Rear door lock assembly LH		
Connector	Terminal	Connector	Terminal	Continuity	
M69	55	D65	2	Existed	
M70	65	005	1	LXISIEU	

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M69	55	Giouna	Not existed
M70	65		NOT EXISTED

Is the inspection result normal?

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

NO >> Repair or replace harness.

### REAR RH

### **REAR RH : Description**

Locks/unlocks the door with the signal from BCM.

### **REAR RH : Component Function Check**

### **1.**CHECK FUNCTION

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

INFOID:000000008452876

.

INFOID:000000008452877

INFOID:000000008452878

INFOID:000000008452879

### DOOR LOCK ACTUATOR

			R LOCK	ACTUAT			
< DTC/CIRCUI					-	LIGENT KEY SYSTEM]	_
		L UNLK" to cl	neck that it	works norma	lly.		
Is the inspection							А
	r lock actuato er to <u>DLK-67.</u>	or is OK. <u>"REAR RH : [</u>	<u>Diagnosis P</u>	rocedure".			В
REAR RH : [	Diagnosis I	Procedure				INFOID:00000008452880	
1.CHECK DOC	R LOCK AC	TUATOR INPL	JT SIGNAL				С
2. Disconnect	n switch OFF. rear door loch ge between re	k assembly RH ear door lock a	I connector assembly R	H harness co	onnector and gr	ound.	D
(•	+)						
Rear door locl	c assembly RH	()		Condition		Voltage (V) (Approx.)	E
Connector	Terminal						
D45	5	Ground	Door lock ar	d unlock switch	Lock Unlock	$0 \rightarrow Battery \text{ voltage } \rightarrow 0$ $0 \rightarrow Battery \text{ voltage } \rightarrow 0$	F
Is the inspection	-	12					-
	DR LOCK AC	or and all doo	r lock actua			y RH harness connector.	. н
	BCM		F	Rear door lock as	ssembly RH		
Connecto		Terminal		nector	Terminal	Continuity	
M69		55			6	<b>–</b>	J
M70		65	- U	45	5	Existed	
3. Check conti	nuity betweer	n BCM harnes	s connecto	and ground.			DL
	BC	М				Continuity	
Conne	ector	Termir	nal	Gro	ound	Continuity	I
Me		55				Not existed	
M7		65					
	lace BCM. Ro air or replace	efer to <u>BCS-82</u>	<u>2, "Remova</u>	l and Installat	<u>tion"</u> .		M
BACK DOOF	R : Descrip	tion				INFOID:00000008452881	1
Locks/unlocks th	ne door with tl	he signal from	BCM.				С
BACK DOOF		•	-	ck		INFOID:00000008452882	2
<b>1.</b> CHECK FUN	CTION						Ρ
2. Touch "ALL Is the inspection YES >> Bac	LOCK [;] or "Al result norma k door lock ad	n Active Test ( LL UNLK" to cl <u>I?</u> ctuator is OK. <u>"BACK DOOF</u>	neck that it	works norma			

Revision: 2012 August

### **DLK-67**

#### DOOR LOCK ACTUATOR [WITH INTELLIGENT KEY SYSTEM]

#### < DTC/CIRCUIT DIAGNOSIS >

### BACK DOOR : Diagnosis Procedure

INFOID:000000008452883

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

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

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

(·	(+) Back door lock assembly				
Back door lo			Condition		Voltage (V) (Approx.)
Connector	Terminal				
D106	2	Ground	Door lock and unlock switch	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$
DI00	3	Ground	Door lock and unlock Switch	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

YES >> Replace back door lock assembly. Refer to <u>DLK-195, "DOOR LOCK : Removal and Installation"</u>.

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

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

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

1. Disconnect BCM connector and all door lock actuator connector.

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

B	BCM		Back door lock assembly		
Connector	Terminal	Connector	Terminal	Continuity	
M70	65	D106	3	Existed	

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M70	65		Not existed

Is the inspection result normal?

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

NO >> Repair or replace harness.

### $\mathbf{3}$ .check back door lock actuator unlock circuit

1. Remove back door lock actuator relay connector.

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

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

3. Check continuity between BCM harness connector and ground.

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-41. "Intermittent Incident"</u>

	_
>> INSPECTION END	A
	В
	С
	D
	E
	F
	G
	Н
	I
	J
	DLK
	L
	Μ
	Ν

Р

Ο

### BACK DOOR LOCK ACTUATOR RELAY

### < DTC/CIRCUIT DIAGNOSIS >

### BACK DOOR LOCK ACTUATOR RELAY

### Description

Controls back door lock actuator lock/unlock operation.

### **Component Function Check**

### **1.**CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Back door lock actuator relay is OK.

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

### Diagnosis Procedure

INFOID:000000008452886

INFOID:00000008452884

INFOID:00000008452885

### **1.**CHECK FUSE

1. Turn ignition switch OFF.

2. Check 10 A fuse, [No. 10, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

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

### 2.CHECK BACK DOOR LOCK ACTUATOR RELAY POWER CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3.CHECK BACK DOOR LOCK ACTUATOR RELAY CIRCUIT 1

### 1. Install the back door lock relay.

2. Check voltage between BCM harness connector and ground.

(+) BCM		()	Condition		Voltage (V) (Approx.)
Connector	Terminal	*			(, + F ,)
Meo	M69 50 G	Ground	Door lock and un-	LOCK	Battery voltage
1009		Ground	lock switch	UNLOCK	0

#### Is the inspection result normal?

YES >> GO TO 6.

NO-1 (when voltage is fixed at 12V)>>Replace BCM. Refer to <u>BCS-82. "Removal and Installation"</u>. NO-2 (when voltage is fixed at 0V)>>GO TO 4.

### **4.**CHECK BACK DOOR LOCK ACTUATOR RELAY CIRCUIT 1

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

### **DLK-70**

### BACK DOOR LOCK ACTUATOR RELAY

### < DTC/CIRCUIT DIAGNOSIS >

(+) BCM		(-)		Voltage (V) (Approx.)	
Connector	Termir		Ground		
M69	50				
e inspection result norm	al?			Battery voltage	
S >> Replace BCM. F >> GO TO 5. HECK BACK DOOR LC Remove back door lock	OCK ACTUATO	2. "Removal and Installatio R RELAY CIRCUIT 2	<u>n"</u> .		
Check continuity betwee	en BCM harnes	s connector and back door	r lock actuator re	elay harness cor	
Back door lock actuator	relav	BCM			
	Terminal	Connector	Terminal	Continuity	
M90	1	M69	50	Existed	
Check continuity betwee	en BCM harnes	s connector and ground.			
Back door lock actu	ator relay				
Connector	Terminal	Ground		Continuity Not existed	
M90	1				
Back door lock actu		_		Continuity	
Connector	Terminal	Ground			
M90	4			Existed	
e inspection result norm S >> GO TO 7. >> Repair or replac HECK BACK DOOR LC	e harness. OCK ACTUATO				
ck back door lock actuat e inspection result norm		o DLK-71, "Component Ins	spection"		
S >> GO TO 8. >> Replace back do HECK INTERMITTENT	oor lock actuate	or relay.			
ck intermittent incident. r to <u>GI-41, "Intermittent</u>					
>> INSPECTION E	ND				
>> INSPECTION E				INFOID:00	
	١	R RELAY		INFOID:00	

2. Remove back door lock actuator relay.

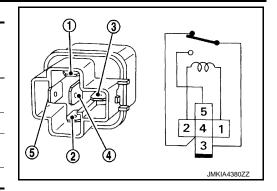
3. Check continuity between back door lock actuator relay terminals.

### **DLK-71**

### BACK DOOR LOCK ACTUATOR RELAY

#### < DTC/CIRCUIT DIAGNOSIS >

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



Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace back door lock actuator relay.

#### DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# DOOR KEY CYLINDER SWITCH

#### Description

Transmits lock/unlock operation to BCM.

#### **Component Function Check**

## **1.**CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

Monitor item	Co	ndition	Status	-
KEY CYL LK-SW		Lock	ON	E
KET GTL LK-SW	Driver eide deer key eylinder	Neutral / Unlock	OFF	
	<ul> <li>Driver side door key cylinder</li> </ul>	Unlock	ON	_
KEY CYL UN-SW		Neutral / Lock	OFF	F

#### Is the inspection result normal?

YES >> Door key cylinder switch is OK.

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

### **Diagnosis Procedure**

# 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

2.check door key cylinder switch signal circuit

1. Disconnect BCM connector.

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

В	СМ	Front door lock as	sembly (driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
 M68	7	D9	5	Existed
IVIOO	8	- 59	6	LAISIEU

А

В

D

Н

Ρ

INFOID:000000008452888

INFOID:000000008452889

## DOOR KEY CYLINDER SWITCH

Ground

#### < DTC/CIRCUIT DIAGNOSIS >

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

E	ЗСМ
Connector	Terminal
M68	7
WOO	8

Not existed

Continuity

#### Is the inspection result normal?

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

NO >> Repair or replace harness.

#### 3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

#### **4.**CHECK DOOR KEY CYLINDER SWITCH

#### Refer to DLK-74, "Component Inspection".

#### Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-187, "DOOR LOCK : Removal and</u> <u>Installation"</u>.

# 5. CHECK INTERMITTENT INCIDENT

Refer to GI-41. "Intermittent Incident".

#### >> INSPECTION END

#### **Component Inspection**

INFOID:000000008452891

### 1. CHECK DOOR KEY CYLINDER SWITCH

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

Front door lock ass	embly (driver side)	Conditio	n	Continuity
Term	inal	Conduito	11	Continuity
5			Unlock	Existed
5	4	Driver side door key cylinder	Neutral / Lock	Not existed
6	4	Driver side door key cylinder	Lock	Existed
0			Neutral / Unlock	Not existed

Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-187, "DOOR LOCK : Removal and</u> <u>Installation"</u>.

## **REMOTE KEYLESS ENTRY RECEIVER**

#### < DTC/CIRCUIT DIAGNOSIS >

# REMOTE KEYLESS ENTRY RECEIVER

Description				INFOID:00000008452892
•	operation and trans	mite to DCM		
Receives Intelligent Key				
Component Function	on Check			INFOID:00000008452893
<b>1.</b> CHECK FUNCTION				
1. Select "INTELLIGEN				
<ol> <li>Select "RKE OPE CO</li> <li>Check that the function</li> </ol>			llowing conditions	S.
	-	,		-
Monitor it		hecks whether value char	Condition	ntolligont Koy
s the inspection result no			iges when operating i	
	ess entry receiver is	s OK.		
	-75, "Diagnosis Pro			
Diagnosis Procedur	е			INFOID:00000008452894
1. СНЕСК REMOTE КЕ	VI ESS ENITOV DE			
			// / L!	
<ol> <li>Turn ignition switch ( 2. Disconnect remote k</li> </ol>		er connector.		
<ol> <li>Check voltage between</li> </ol>			s connector and	ground.
	(+)			
Remote kevle	ess entry receiver	()		Voltage
Connector	Terminal			Ŭ
M87	1	Ground		Battery voltage
s the inspection result no	ormal?			
YES >> GO TO 3.				
NO >> GO TO 2. 2 DETECT MALEUNICT				
2.DETECT MALFUNCT				
Check the following.  10 A fuse (No. 10)				
Harness for open or sh	ort between remote	keyless entry receiv	er and battery	
s the inspection result no	ormal?			
YES >> GO TO 6. NO >> Repair or rep	lace the malfunctio	ning parts		
3. СНЕСК REMOTE КЕ		• ·		
1 Disconnect BCM cor		connector and rome	te keyless entry r	eceiver harness connector.
<ol> <li>Disconnect BCM cor</li> <li>Check continuity bety</li> </ol>	ween BCM harness			
			s entry receiver	Continuity
2. Check continuity bet			s entry receiver Terminal	Continuity Existed

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M68	18		Not existed

# **REMOTE KEYLESS ENTRY RECEIVER**

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

1. Reconnect BCM connector and remote keyless entry receiver connector.

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

(+ Remote keyless		()	Condition	Signal (Reference value)
Connector	Terminal			
			Waiting	12 V
M87	2	Ground	Press the Intelligent Key lock or unlock button	(V) 15 0 5 0 200 ms JJMMA0572GB

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace remote keyless entry receiver.

#### **5.**CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT

1. Disconnect BCM connector and remote keyless entry receiver connector.

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

B	CM	Remote keyles	s entry receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M68	38	M87	2	Existed

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M68	38		Not existed

#### Is the inspection result normal?

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

NO >> Repair or replace harness.

**6.**CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

DTC/CIRCUIT DIAG				
BACK DOOR RE		СН	[	ELLIGENT KEY SYSTEM]
		OIT		
Description				INFOID:0000000845289
ransmits lock/unlock o	peration to BCM.			
Component Funct	ion Check			INFOID:0000000845289
.CHECK FUNCTION				
heck ("REQSW-BD/Th	R") in "Data Monitor" r	node using CONS	SULT.	
Monitor item		Condition		Status
		Press	sed	ON
REQSW-BD/TR	Back door request	switch Relea	ased	OFF
YES >> Back door I	equest switch is OK. K-77, "Diagnosis Pro	<u>cedure"</u> .		
NO >> Refer to <u>DL</u> Diagnosis Procedu	ire			INFOID:0000000845289
CHECK BACK DOO . Turn ignition switch . Disconnect back do	R REQUEST SWITC	nnector.		
Diagnosis Procedu CHECK BACK DOO Turn ignition switch Disconnect back do Check voltage betw	R REQUEST SWITC	nnector.		und. Voltage (V)
Diagnosis Procedu CHECK BACK DOO Turn ignition switch Disconnect back do Check voltage betw	R REQUEST SWITC OFF. oor request switch cor yeen back door reques	nnector. st switch harness	connector and grou	und.
Diagnosis Procedu CHECK BACK DOO Turn ignition switch Disconnect back do Check voltage betw Back of Connector D107	R REQUEST SWITC OFF. oor request switch cor veen back door reques (+) door request switch Termina	nnector. st switch harness	connector and grou	und. Voltage (V)
CHECK BACK DOO . Turn ignition switch Disconnect back do . Check voltage betw Back of Connector D107 the inspection result of YES >> GO TO 3. NO >> GO TO 2. CHECK BACK DOO . Disconnect BCM co	R REQUEST SWITC OFF. oor request switch cor veen back door request (+) door request switch (+) door request switch 1 normal? R REQUEST SWITCH onnector.	H CIRCUIT	connector and grou (–) Ground	und. Voltage (V) (Approx.)
Diagnosis Procedu .CHECK BACK DOO . Turn ignition switch . Disconnect back do . Check voltage betw Back o Connector D107 s the inspection result of YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 2. .CHECK BACK DOO . Disconnect BCM co . Check continuity be	R REQUEST SWITC OFF. oor request switch cor veen back door request (+) door request switch (+) door request switch 1 normal? R REQUEST SWITCH onnector.	H CIRCUIT	connector and grou (–) Ground	Und. Voltage (V) (Approx.) Battery voltage
Diagnosis Procedu .CHECK BACK DOO . Turn ignition switch . Disconnect back do . Check voltage betw Back o Connector D107 s the inspection result of YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 2. .CHECK BACK DOO . Disconnect BCM co . Check continuity be	R REQUEST SWITCH OFF. por request switch conveen back door request (+) door request switch (+) door request switch Termina 1 normal? R REQUEST SWITCH onnector. etween BCM harness	H CIRCUIT	connector and grou (-) Ground	und. Voltage (V) (Approx.) Battery voltage
Connect Disconnect BACK DOO CHECK BACK DOO Turn ignition switch Disconnect back do Check voltage betw Back of Connector D107 Sthe inspection result of YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 2. CHECK BACK DOO Disconnect BCM co Check continuity be BC Connector M69	R REQUEST SWITCH OFF. oor request switch corrected back door request (+) door request switch (+) door request switch Terminal CM Terminal 51	H CIRCUIT connector and ba Back doo D107	connector and grou (-) Ground Ack door request sw or request switch Terminal 1	Und. Voltage (V) (Approx.) Battery voltage
Connect Disconnect BACK DOO CHECK BACK DOO Turn ignition switch Disconnect back do Check voltage betw Back of Connector D107 Sthe inspection result of YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 2. CHECK BACK DOO Disconnect BCM co Check continuity be BC Connector M69	R REQUEST SWITCH OFF. por request switch conveen back door request (+) door request switch (+) door request switch Termina 1 normal? R REQUEST SWITCH onnector. etween BCM harness	H CIRCUIT connector and ba Back doo D107	connector and grou (-) Ground Ack door request sw or request switch Terminal 1	Und. Voltage (V) (Approx.) Battery voltage itch harness connector. Continuity
Connect Disconnect BACK DOO CHECK BACK DOO Turn ignition switch Disconnect back do Check voltage betw Back of Connector D107 Sthe inspection result of YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 2. CHECK BACK DOO Disconnect BCM co Check continuity be BC Connector M69	R REQUEST SWITCH OFF. oor request switch corrected back door request (+) door request switch (+) door request switch Terminal CM Terminal 51	H CIRCUIT connector and ba Back doo D107	connector and grou (-) Ground Ack door request sw or request switch Terminal 1	Und. Voltage (V) (Approx.) Battery voltage itch harness connector. Continuity Existed
Connect Disconnect BACK DOO CHECK BACK DOO Turn ignition switch Disconnect back do Check voltage betw Back of Connector D107 Sthe inspection result of YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 2. CHECK BACK DOO Disconnect BCM co Check continuity be BC Connector M69	R REQUEST SWITCH OFF. por request switch conveen back door request (+) door request switch (+) door request switch Terminal 1 normal? R REQUEST SWITCH onnector. etween BCM harness CM Terminal 51 etween BCM harness	H CIRCUIT connector and ba Back doo Connector D107 connector and gr	connector and grou (-) Ground Ack door request sw or request switch Terminal 1	Und. Voltage (V) (Approx.) Battery voltage itch harness connector. Continuity

**BACK DOOR REQUEST SWITCH** 

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

NO

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

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

## BACK DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

В	Back door request switch			Continuity
Connecto	r	Terminal	Ground	Continuity
D107	D107 2			Existed
Is the inspection res	sult norma	<u>al?</u>		

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK BACK DOOR REQUEST SWITCH

Refer to DLK-78, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace back door request switch. Refer to <u>DLK-196</u>, "<u>OUTSIDE HANDLE</u> : <u>Removal and Instal-</u> <u>lation</u>".

# $5. {\sf check intermittent incident}$

Refer to GI-41, "Intermittent Incident".

#### >> INSPECTION END

#### Component Inspection

1.CHECK BACK DOOR REQUEST SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace back door request switch. Refer to <u>DLK-196, "OUTSIDE HANDLE : Removal and Instal-</u> lation".

## DOOR REQUEST SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# DOOR REQUEST SWITCH

# Description

Transmits lock/unlock operation to BCM.

## **Component Function Check**

# **1.**CHECK FUNCTION

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

Monitor item	Condition		Monitor item Condition		Status	D
REQ SW -DR	Driver side door request switch	Pressed	ON			
REQ SW -DR	Driver side door request switch	Released	OFF	F		
REQ SW -AS	Passenger side door request switch	Pressed	ON			
NEW SWY -AS		Released	OFF			

#### Is the inspection result normal?

YES >> Front door request switch is OK.

NO >> Refer to <u>DLK-79. "Diagnosis Procedure"</u>.

# **Diagnosis Procedure**

1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+) Front door request switch					_
			(-)	Voltage (V) (Approx.)	
Connector		Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0
Driver side	D11	2 Cround		Dottory weltage	
Passenger side D31		2	Ground	Battery voltage	DLk

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.

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

Front door request switch			B	СМ	Continuity	-
Con	nector	Terminal	Connector	Terminal	Continuity	
Driver side	D11	2	M71	75	Existed	(
Passenger side	D31			100	Existed	

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

Front door request switch				Continuity
Connector		Terminal	Ground	Continuity
Driver side	D11	2	Giouna	Not existed
Passenger side	D31	2		NOT EXISTED

Is the inspection result normal?

А

INFOID:000000008452899

INFOID:000000008452900

INFOID:000000008452901

В

Н

Μ

Ν

Ρ

# DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

- YES >> Replace BCM. Refer to <u>BCS-82, "Removal and Installation"</u>.
- NO >> Repair or replace harness.

# ${f 3.}$ CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

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

Front door request switch				Continuity
Connector Terminal		Terminal	Ground	Continuity
Driver side	D11	4	Giouna	Eviated
Passenger side	D31	- 1		Existed

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK DOOR REQUEST SWITCH

Refer to DLK-80, "Component Inspection".

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace malfunctioning front door request switch. Refer to <u>DLK-189</u>, "OUTSIDE HANDLE : <u>Removal and Installation</u>".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

#### >> INSPECTION END

#### **Component Inspection**

INFOID:000000008452902

# 1. CHECK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.

- 2. Disconnect malfunctioning front door request switch connector.
- 3. Check continuity between malfunctioning front door request switch terminals.

Front door re	Front door request switch		Condition	
Terr	Terminal			
1		Door request switch	Pressed	Existed
I	Z	Door request switch	Released	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunctioning front door request switch. Refer to <u>DLK-189</u>, "OUTSIDE HANDLE : <u>Removal and Installation</u>".

# **UNLOCK SENSOR**

TC/CIRCUIT DIAGNOSIS >			[WITH INTELLIGENT KEY SYSTEM]		
JNLOCK SENSOF	2				
Description					INFOID:0000000845290
Detects door lock condition	of driver side doo	or.			
Component Functior	n Check				INFOID:0000000845290
CHECK FUNCTION					
Check ("UNLK SEN -DR")	in BCM "Data Moi	nitor" mode	e using CC	NSULT.	
Monitor item		Con	dition		Status
-			Lock		OFF
UNLK SEN -DR	Driver side door		Unlock		ON
s the inspection result nor					
YES >> Unlock sensor NO >> Refer to DLK-8		cedure".			
Diagnosis Procedure	-				INFOID:0000000845290
1.CHECK UNLOCK SENS		١٨١			
<ol><li>Disconnect front door I</li></ol>	lock assembly (dri	ver side) c	connector.		
				harness connector	and ground with oscillo
<ol> <li>Check signal between</li> </ol>					
<ul> <li>Check signal between scope.</li> <li>(+)</li> <li>Front door lock assen</li> </ul>	front door lock as				and ground with oscillo Gignal ence value)
<ol> <li>Check signal between scope.</li> <li>(+)</li> </ol>	front door lock as		lriver side)		Signal
3. Check signal between scope. (+) Front door lock assen	front door lock as		lriver side)		Signal ence value)
<ul> <li>Check signal between scope.</li> <li>(+)</li> <li>Front door lock assen</li> <li>Connector</li> <li>D9</li> <li><u>s the inspection result norm</u></li> </ul>	front door lock as nbly (driver side) Terminal 3		Iriver side) (-)	(Refer	Signal ence value)
Check signal between scope.     (+)     Front door lock assen     Connector      D9	front door lock as nbly (driver side) Terminal 3		Iriver side) (-)	(Refer	Signal ence value)
<ul> <li>Check signal between scope.</li> <li>(+)</li> <li>Front door lock assen</li> <li>Connector</li> <li>D9</li> <li><u>s the inspection result norn</u></li> <li>YES &gt;&gt; GO TO 3.</li> </ul>	front door lock as nbly (driver side) Terminal 3 mal?		Iriver side) (-)	(Refer	Signal ence value)
<ul> <li>Check signal between scope.</li> <li>(+)</li> <li>Front door lock assen</li> <li>Connector</li> <li>D9</li> <li><u>s the inspection result norn</u></li> <li>YES &gt;&gt; GO TO 3.</li> <li>NO &gt;&gt; GO TO 2.</li> <li>CHECK UNLOCK SENS</li> <li>Disconnect BCM conn</li> </ul>	front door lock as hbly (driver side) Terminal 3 mal? SOR CIRCUIT ector.		Iriver side) (–) Ground	(Refer (V) 15 10 5 0 • • 10m	Signal ence value)
<ul> <li>Check signal between scope.</li> <li>(+)</li> <li>Front door lock assen</li> <li>Connector</li> <li>D9</li> <li><u>s the inspection result norn</u></li> <li>YES &gt;&gt; GO TO 3.</li> <li>NO &gt;&gt; GO TO 2.</li> <li>CHECK UNLOCK SENS</li> <li>Disconnect BCM conn</li> <li>Check continuity betw</li> </ul>	front door lock as hbly (driver side) Terminal 3 mal? SOR CIRCUIT ector.	s connecte	Iriver side) (-) Ground or and fror	(Refer (V) 15 10 5 0 • • 10m	Signal ence value)
<ul> <li>Check signal between scope.</li> <li>(+)</li> <li>Front door lock assen</li> <li>Connector</li> <li>D9</li> <li><u>s the inspection result norn</u></li> <li>YES &gt;&gt; GO TO 3.</li> <li>NO &gt;&gt; GO TO 2.</li> <li>CHECK UNLOCK SENS</li> <li>Disconnect BCM conn</li> <li>Check continuity betw connector.</li> </ul>	front door lock as hbly (driver side) Terminal 3 mal? SOR CIRCUIT ector.	ssembly (d	Iriver side) (-) Ground or and fror	(Reference)	Signal ence value)

B	CM		Continuity
Connector	Connector Terminal		Continuity
M68	31		Not existed

# UNLOCK SENSOR

#### [WITH INTELLIGENT KEY SYSTEM]

# < DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

#### YES >> Replace BCM. Refer to <u>BCS-82, "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
D9	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK UNLOCK SENSOR

Refer to <u>DLK-82, "Component Inspection"</u>.

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-187, "DOOR LOCK : Removal and</u> <u>Installation"</u>.

**5.**CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

#### >> INSPECTION END

#### **Component Inspection**

INFOID:000000008452906

# 1.CHECK UNLOCK SENSOR

#### 1. Turn ignition switch OFF.

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

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

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-187, "DOOR LOCK : Removal and</u> <u>Installation"</u>.

## INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOS					Elligent ke	Y SYSTEM]
INTELLIGENT KEY	WARNING	BUZZ	ER			А
Description						INFOID:000000008452907
Answers back and warns for	an inappropriat	e operatio	n.			В
Component Function	Check					INFOID:000000008452908
1. CHECK FUNCTION						C
1. Use CONSULT to perfor	m BCM Active 7	Test ("OUT	SIDE BUZ	ZER").		
2. Touch "ON" to check that		lly.				D
Is the inspection result norma YES >> Intelligent Key w						
YES >> Intelligent Key w NO >> Refer to <u>DLK-83</u>						_
Diagnosis Procedure						INFOID:000000008452909
<b>1.</b> CHECK FUSE						F
1. Turn ignition switch OFF						F
2. Check 10 A fuse, [No. 10		e block (J/	B)].			
Is the inspection result norm	<u>al?</u>					G
YES >> GO TO 2. NO >> Replace the blov	wn fuse after rer	pairing the	affected ci	rcuit if a fuse is	blown.	
2.CHECK INTELLIGENT K		-				Н
1. Disconnect Intelligent Ke						
<ol> <li>Check voltage between</li> </ol>				ss connector ar	d ground.	1
(+	-)					
Intelligent Key	warning buzzer			(-)	Voltage (Appro:	
Connector	Termina	al			(Appio.	~.) J
E25	1		G	Bround	Battery vo	_
Is the inspection result norm	<u>al?</u>					DL
YES >> GO TO 3. NO >> Repair or replace	o harnoss					
3.CHECK INTELLIGENT K						L
			INCON			
<ol> <li>Disconnect BCM connect</li> <li>Check continuity between</li> </ol>		connector	and Intelli	gent Key warnir	ng buzzer harne	ess connector.
					5	N
BCM				warning buzzer	Cor	ntinuity
Connector	Terminal		nector	Terminal		winted N
M71 3. Check continuity betwee	93 on BCM barness		25 r and grour	3	E>	kisted
3. Check continuity betwee				iu.		
	CM				Contin	
Connector	Termina	al		Ground		
M71	93				Not exis	sted P
Is the inspection result norma YES >> GO TO 4.	<u>ai ?</u>					
NO >> Repair or replace	e harness.					
4. CHECK INTELLIGENT K		BUZZER				

Refer to DLK-84, "Component Inspection".

## INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace BCM. Refer to <u>BCS-82, "Removal and Installation"</u>.
- NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-203, "Removal and Installation"</u>.

#### Component Inspection

INFOID:000000008452910

# 1. CHECK INTELLIGENT KEY WARNING BUZZER

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

Intelligent Key		
Teri	Operation	
(+)	(-)	-
1	3	Buzzer sounds

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-203, "Removal and Installation"</u>.

## INTELLIGENT KEY

## < DTC/CIRCUIT DIAGNOSIS >

# INTELLIGENT KEY

## Description

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

- Door lock/unlock
- Engine start

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

## Component Function Check

## 1.CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Refer to <u>DLK-85, "Diagnosis Procedure"</u>.

## **Diagnosis Procedure**

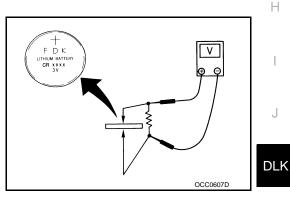
1.CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately  $300\Omega$ ) so that the current value becomes about 10 mA. Refer to <u>DLK-205. "Removal and Installation"</u>.

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

Is the measurement value within the specification?

- YES >> Replace Intelligent Key.
- NO >> Replace Intelligent Key battery. Refer to <u>DLK-205.</u> <u>"Removal and Installation"</u>.



	Ε
on the Intelligent Key.	
	F
INFOID:00000008452913	G

INFOID:000000008452911

INFOID:000000008452912

L

А

В

D

0

Ρ

Revision: 2012 August

< DTC/CIRCUIT DIAGNOSIS >

# **BUZZER (COMBINATION METER)**

## Description

Performs operation method guide and warning with buzzer.

**Component Function Check** 

1.CHECK FUNCTION

1. Use CONSULT to perform Active Test ("INSIDE BUZZER").

2. Touch "take out", "knob" or "key" to check that it works normally.

Is the inspection result normal?

Yes >> Buzzer (combination meter) is OK.

No >> Refer to <u>DLK-86, "Diagnosis Procedure"</u>.

Diagnosis Procedure

**1.**CHECK METER BUZZER CIRCUIT

Refer to WCS-25, "Component Function Check".

Is the inspection result normal?

Yes >> GO TO 2.

No >> Repair or replace harness.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

INFOID:000000008452914

INFOID:000000008452915

INFOID:000000008452916

Revision: 2012 August

KEY WARNING LAMP	А
Description INFOID:00000008452917	
Performs operation method guide and warning together with buzzer.	В
Component Function Check	
1.CHECK FUNCTION	С
<ol> <li>Use CONSULT to perform Active Test ("INDICATOR").</li> <li>Touch "KEY IND" or "KEY ON" to check that it works normally.</li> <li>Is the inspection result normal?</li> </ol>	D
YES >> Key warning lamp is OK.	
NO >> Refer to <u>DLK-87, "Diagnosis Procedure"</u> .	Е
Diagnosis Procedure	
Diagnosis Procedure INFOID:00000008452919	F
1.CHECK KEY WARNING LAMP Refer to <u>MWI-4, "Work flow"</u> .	_
1.CHECK KEY WARNING LAMP	_
1.CHECK KEY WARNING LAMP         Refer to <u>MWI-4, "Work flow"</u> .         Is the inspection result normal?         YES >> GO TO 2.	F
1.CHECK KEY WARNING LAMP         Refer to <u>MWI-4, "Work flow"</u> .         Is the inspection result normal?         YES       >> GO TO 2.         NO       >> Repair or replace harness.	F

J

DLK

L

Μ

Ν

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

# < DTC/CIRCUIT DIAGNOSIS >

# HAZARD FUNCTION

## Description

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

**Component Function Check** 

1.CHECK FUNCTION

1. Use CONSULT to perform Active Test ("FLASHER").

2. Touch "LH" or "RH" to check that it works normally.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.

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

Diagnosis Procedure

**1.**CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-66, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

[WITH INTELLIGENT KEY SYSTEM]

INFOID:000000008452920

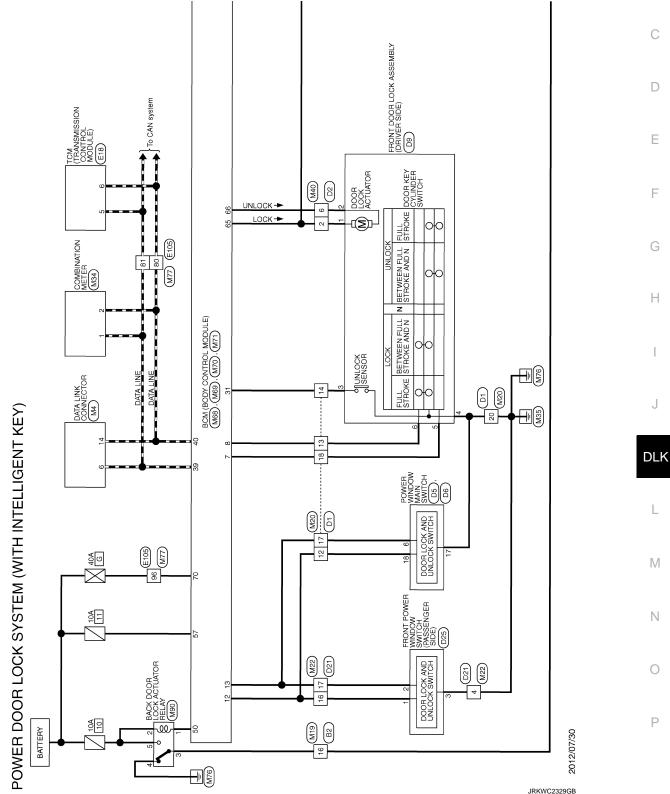
INFOID:000000008452921

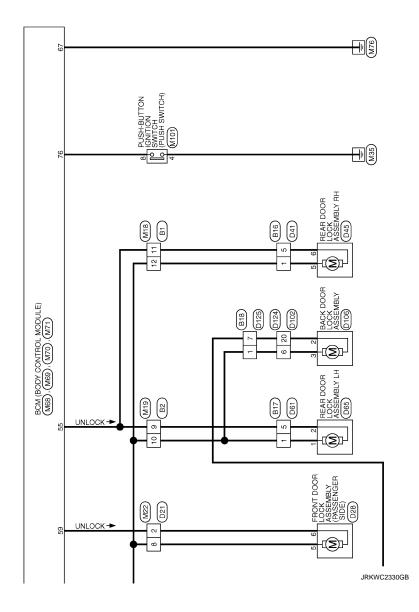
# [WITH INTELLIGENT KEY SYSTEM]

# POWER DOOR LOCK SYSTEM

Wiring Diagram - POWER DOOR LOCK SYSTEM -

For connector terminal arrangements, harness layouts, and alphabets in a  $\bigcirc$  (option abbreviation; if not B described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.





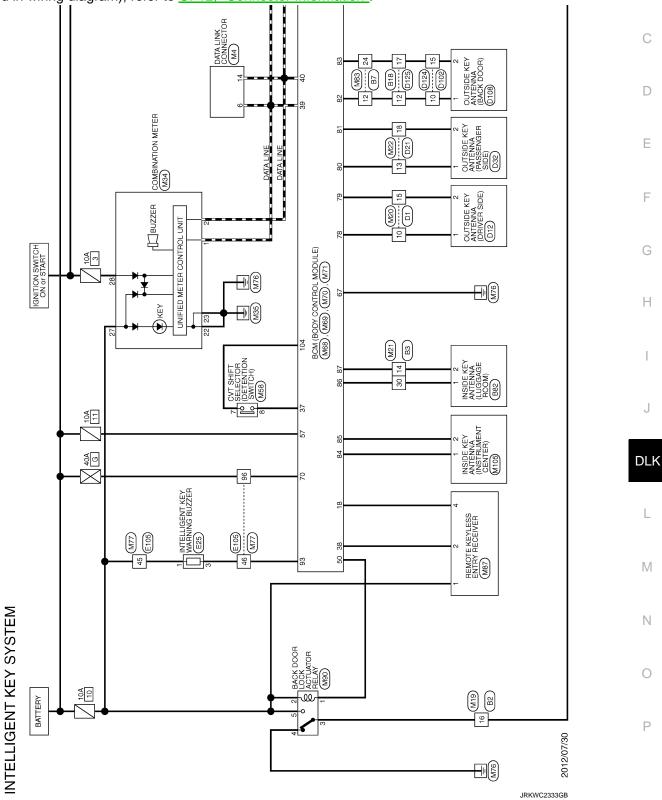
< DTC/CIRCUIT DIAGNOSIS >

## [WITH INTELLIGENT KEY SYSTEM]

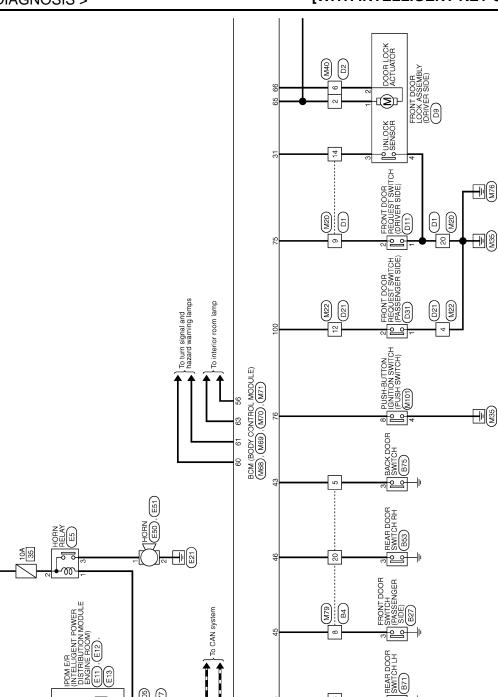
# INTELLIGENT KEY SYSTEM

Wiring Diagram - INTELLIGENT KEY SYSTEM -

For connector terminal arrangements, harness layouts, and alphabets in a  $\bigcirc$  (option abbreviation; if not described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.



#### **INTELLIGENT KEY SYSTEM** [WITH INTELLIGENT KEY SYSTEM]



Î

16

8

FRONT DOOR SWITCH (DRIVER SIDE) (B34)

<u>, e e</u>

(TTM) E105

8 90 7 CPU

34

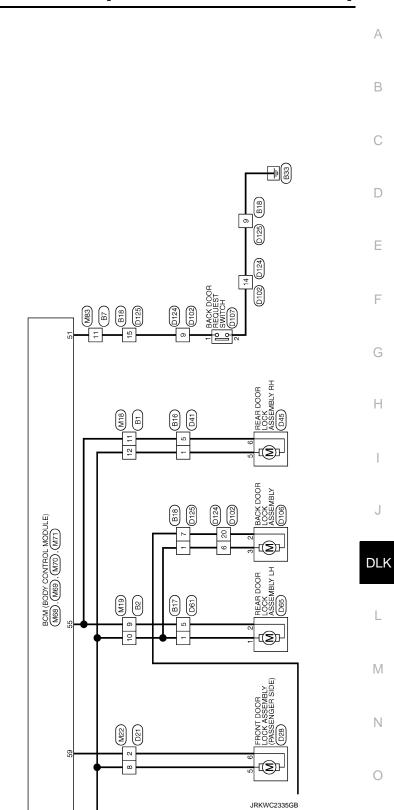
¥ σ

1

ol IGNITION

5

JRKWC2334GB



< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY SYSTEM [WITH INTELLIGENT KEY SYSTEM]

Revision: 2012 August

Ρ

[WITH INTELLIGENT KEY SYSTEM]

INFOID:000000008831203

# ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

**Reference Value** 

VALUES ON THE DIAGNOSIS TOOL

#### NOTE:

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 washer 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 not 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         Other than rear wiper switch INT         Rear wiper switch ON         Other than rear wiper switch INT         Rear washer switch OFF         Rear washer switch OFF         Rear washer switch OFF         Rear washer switch ON         Rear wiper is in STOP position         Rear wiper is not in STOP position         Quther than turn signal switch RH         Turn signal switch RH         Other than turn signal switch LH         Turn signal switch LH         Other than lighting switch 1ST and 2ND         Lighting switch 1NT         Lighting switch 2ND         Other than lighting swit	Off
FR WASHER SW	Front washer switch ON	On
	Other than front wiper switch INT	Off
FR WIPER INT	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
	Other than rear wiper switch ON	Off
RR WIPER ON	Other than front wiper switch HI           Front wiper switch LO           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 switch INT           Front wiper switch INT           Front wiper is not in STOP position           Front wiper is in STOP position           V           Rear wiper switch ON           Other than rear wiper switch INT           Rear wiper switch ON           Other than rear wiper switch INT           Rear wiper switch INT           Rear wiper switch ON           P           Rear wiper switch ON           Rear wiper switch ON           Rear wiper switch ON           Rear wiper switch ON           Rear wiper is in STOP position           Rear wiper is not in STOP position           Lighting switch RH <t< td=""><td>On</td></t<>	On
	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
	Rear washer switch OFF	Off
RR WASHER SW	Front wiper switch LOFront washer switch OFFFront washer switch ONOther than front wiper switch INTFront wiper switch INTFront wiper is not in STOP positionFront wiper is in STOP positionWiper intermittent dial is in a dial position 1 - 7Other than rear wiper switch ONRear wiper switch ONOther than rear wiper switch INTRear wiper switch ONOther than rear wiper switch INTRear washer switch OFFRear washer switch ONRear wiper is in STOP positionRear wiper is not in STOP positionRear wiper is not in STOP positionRear wiper is not in STOP positionOther than turn signal switch RHTurn signal switch LHOther than lighting switch 1ST and 2NDLighting switch 1ST or 2NDOther than lighting switch 2NDLighting switch 2NDLighting switch 2NDLighting switch 2NDOther than lighting switch 2NDLighting switch 2NDOther than lighting switch PASS	On
	Rear wiper is in STOP position	Off
RR WIPER STOP	Front wiper switch LO         Front washer switch OFF         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         Wiper 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         Other than rear wiper switch INT         Rear wiper switch OFF         Rear washer switch OFF         Rear washer switch ON         Rear wiper is not in STOP position         Other than turn signal switch RH         Turn signal switch RH         Other than lighting switch 1ST and 2ND         Lighting switch 1ST or 2ND         Other than lighting switch 2ND         Lighting switch 2ND         Lighting switch 2ND         Lighting switch	On
	Other than turn signal switch RH	Off
I URIN SIGINAL R	Turn signal switch RH	On
	Other than turn signal switch LH	Off
TORN SIGNAL L	Turn signal switch LH	On
RR WIPER ON       Rear wiper         RR WIPER INT       Other than         Rear wiper       Rear wiper         RR WASHER SW       Rear washe         Rear wiper       Rear wiper         RR WIPER STOP       Rear wiper         FURN SIGNAL R       Other than         TURN SIGNAL L       Other than	Other than lighting switch 1ST and 2ND	Off
TAIL LAWP SVV	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
TI DEAN SW	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
HEAD LAWF SW I	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
FA3011NG 3W	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On

## < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	_
	Front fog lamp switch OFF	Off	
R FOG SW	Front fog lamp switch ON	On	
	Driver door closed	Off	
DOOR SW-DR	Driver door opened	On	
	Passenger door closed	Off	
DOOR SW-AS	Passenger door opened	On	_
	Rear RH door closed	Off	_
DOOR SW-RR	Rear RH door opened	On	_
	Rear LH door closed	Off	
DOOR SW-RL	Rear LH door opened	On	
	Back door closed	Off	
DOOR SW-BK	Back door opened	On	
	Other than power door lock switch LOCK	Off	
CDL LOCK SW	Power door lock switch LOCK	On	
	Other than power door lock switch UNLOCK	Off	
CDL UNLOCK SW	Power door lock switch UNLOCK	On	
	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	
	Hazard switch is OFF	Off	
HAZARD SW	Hazard switch is ON	On	
	Rear window defogger switch OFF	Off	
REAR DEF SW	Rear window defogger switch ON	On	
TR/BD OPEN SW	NOTE: The item is indicated, but not monitored.	Off	_
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off	-
	Blower fan OFF	Off	
FAN ON SIG	Blower fan ON	On	
	Air conditioner OFF (A/C switch indicator OFF)	Off	
AIR COND SW	Air conditioner ON (A/C switch indicator ON)	On	
	LOCK button of the key is not pressed	Off	
RKE-LOCK	LOCK button of the key is pressed	On	
	UNLOCK button of the key is not pressed	Off	
RKE-UNLOCK	UNLOCK button of the key is pressed	On	_
	BACK DOOR OPEN button of the key is not pressed	Off	_
RKE-TR/BD	BACK DOOR OPEN button of the key is pressed	On	_
	PANIC button of the key is not pressed	Off	
RKE-PANIC	PANIC button of the key is pressed	On	
	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off	
RKE-MODE CHG	LOCK/UNLOCK button of the key is pressed and held simultaneously	On	
	Bright outside of the vehicle	Close to 5 V	
OPTI SEN (DTCT)	Dark outside of the vehicle	Close to 0 V	—

# < ECU DIAGNOSIS INFORMATION >

## [WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
OPTI SEN (FILT)	Bright outside of the vehicle (Lighting switch AUTO)	Close to 5 V
	Dark outside of the vehicle (Lighting switch AUTO)	Close to 1.50 V
OPTICAL SENSOR	NOTE: The item is indicated, but not monitored.	Off
RAIN SENSOR	<b>NOTE:</b> The item is indicated, but not monitored.	Off
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	<b>NOTE:</b> The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
TEQ 3W -DD/TR	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
-038 377	Push-button ignition switch (push switch) is pressed	On
CLUCH SW	The clutch pedal is not depressed.	Off
	The clutch pedal is depressed	On
BRAKE SW 1	The brake pedal is not depressed	Off
DRAKE SW I	The brake pedal is depressed	On
	The brake pedal is depressed when No. 9 fuse is blown	Off
3RAKE SW 2	The brake pedal is not depressed when No. 9 fuse is blown, or No. 9 fuse is normal	On
DETE/CANCL SW	Selector lever in P position	Off
DETE/CANCE SW	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off
JNLK SEN -DR	Driver door is locked	Off
SINER SEN -DIR	Driver door is unlocked	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
	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On

Revision: 2012 August

**DLK-96** 

#### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
SFT N -MET	Selector lever in any position other than N	Off	
SFT N-MET	Selector lever in N position	On	
	Engine stopped	Stop	
ENGINE STATE	While the engine stalls	Stall	
	At engine cranking	Crank	
	Engine running	Run	
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off	
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off	
S/L RELAY-REQ	NOTE: 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	
D OK FLAG	Driver side door is open after ignition switch is turned OFF (Selector lever is in the P position except for M/T models)	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	
RKE OPE COUN1	During the operation of the key	Operation frequency of the key	
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_	
	The key ID that the key slot receives is not recognized by any key ID reg- istered to BCM.	Yet	
CONFRM ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done	
	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet	
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID reg- istered to BCM.	Done	
	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet	
CONFIRM ID3	The key ID that the key slot receives is recognized by the third key ID reg- istered to BCM.	Done	
	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet	
CONFIRM ID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done	

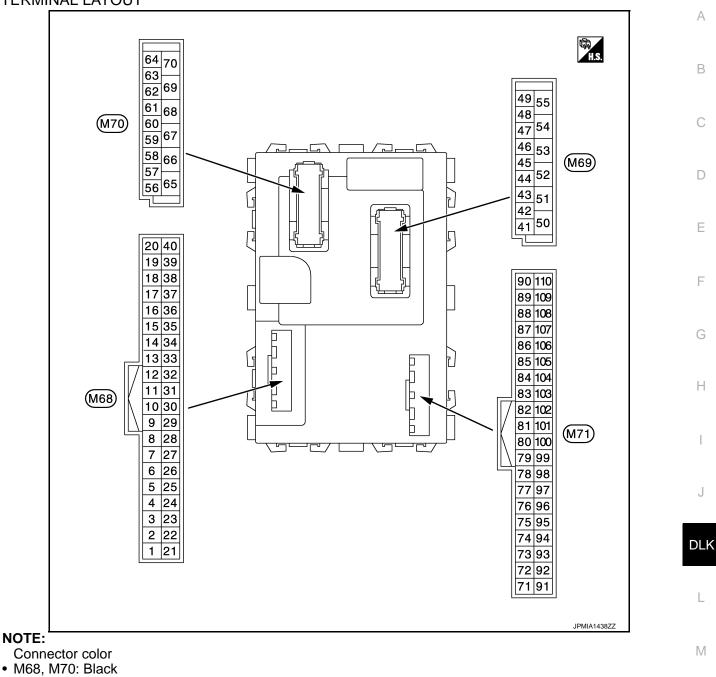
#### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the first key ID reg- istered to BCM.	Done
NOT REGISTERED	BCM detects registered key ID, or BCM does not detect key ID.	ID OK
NOT REGISTERED	BCM detects non-registration key ID.	ID NG
	The ID of fourth key is not registered to BCM	Yet
TP 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	Done
	The ID of second key is not registered to BCM	Yet
TP 2	The ID of second key is registered to BCM	Done
	The ID of first key is not registered to BCM	Yet
TP 1	The ID of first key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGST FLT	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
ID REGOT KRT	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
ID REGOLALI	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

#### < ECU DIAGNOSIS INFORMATION >

# [WITH INTELLIGENT KEY SYSTEM]

#### **TERMINAL LAYOUT**



• M69, M71: White

PHYSICAL VALUES

Ν

0

Р

					Turri signar switch Kri	
					Lighting switch HI	(V) 15
2 (BR/W)	Ground	Combination switch	Input	Combination switch (Wiper intermit-	Lighting switch 1ST	10 5 0 • • • 10ms • • • 10ms
				tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 ••••10 ms JPMIA0342JP 2.0 V
					All switch OFF	0 V
					Turn signal switch LH	
					Lighting switch PASS	(V) 15
3 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch (Wiper intermit-	Lighting switch 2ND	10 0 + +10ms 1.0 V PKIB4958J 1.0 V
				tent dial 4)	Front fog lamp switch ON	(V) 15 10 5 0 + 10ms - + 10ms + 10ms + 10ms 
					All switch OFF	0 V
					Front wiper switch LO	
				Combination	Front wiper switch MIST	(V) 15
4	Ground	Combination switch	Input	switch	Front wiper switch INT	
(L/Y)	Cround	INPUT 3	mput	(Wiper intermit- tent dial 4)	Lighting switch AUTO	0 ++10ms
						1.0 V

Condition

All switch OFF

Turn signal switch RH

#### < ECU DIAGNOSIS INFORMATION >

Description

Signal name

Input/

Output

Terminal No.

(Wire color)

_

+

BCM (BODY CONTROL MODULE) ATION > [WITH INTELLIGENT KEY SYSTEM]

Value

(Approx.)

0 V

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description	I			Value	٨
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	А
					All switch OFF (Wiper intermittent dial 4) Front washer switch	0 V	В
					(Wiper intermittent dial 4) Rear washer ON (Wiper intermittent dial 4)	(V) 15 10 5	С
5 (G)	Ground	Combination switch INPUT 2	Input	Combination switch	Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	0 ↓ ↓ 10ms ↓ ↓ 10ms ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	D
					Rear wiper switch ON (Wiper intermittent dial 4)	(V) = 10ms $(V) = 10ms$ $(V)$	F
					All switch OFF (Wiper intermittent dial 4)	PKIB4956J 0.8 V 0 V 0 V 0 V 0 V 0 V 0 V 0 V 0	Н
					Front wiper switch HI (Wiper intermittent dial 4)		
					Rear wiper switch INT (Wiper intermittent dial 4)		I
					Wiper intermittent dial 3 (All switch OFF)		J
						1.0 V	DL
6 (L/R)	Ground	Combination switch INPUT 1	Input	Combination switch	Any of the condition below with all switch OFF • Wiper intermittent dial 1	(V) 15 0 ••••••••••••••••••••••••••••••••••	L
					Wiper intermittent dial 2		M
					Any of the condition below with all switch OFF • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15	Ν
							0
						PKIB4956J 0.8 V	Ρ

#### < ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
7 (W/R)	Ground	Door key cylinder switch UNLOCK	Input	Door key cylin- der switch	NEUTRAL position	(V) 15 10 5 0 + 10 10 + 10 10 10 10 10 10 10 10 10 10 10 10 10 1
						8.0 - 8.5 V
					UNLOCK position	0 V 12 V
8 (W/B)	Ground	Door key cylinder switch LOCK	Input	Door key cylin- der switch	LOCK position	0 V
					OFF (Brake pedal is not	
9	Ground	Stop lamp switch 1	Input	Stop lamp	depressed)	0 V
(R)	Ground	Stop lamp switch i	Input	switch	ON (Brake pedal is de- pressed)	Battery voltage
12 (GR)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch	NEUTRAL position	(V) 15 10 50 10 10 ms JPMIA0012GB 1.0 - 1.5 V 0 V
13 (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch	NEUTRAL position	(V) 10 5 0 10 10 10 10 10 10 10 10 10
					UNLOCK position	0 V
14	Ground		Incut	Ignition switch	When bright outside of the vehicle	Close to 5 V
(L/G)	Ground	Ground Optical sensor	Input	ON	When dark outside of the vehicle	Close to 0 V
15 (W/L)	Ground	Rear window defog- ger switch	Input	Rear window defogger switch	Not pressed	(V) 15 10 5 10 10 ms JPMIA0012GB 1.0 - 1.5 V
					Pressed OFF, ACC	0 V 0 V
17 (R/G)	Ground	Optical sensor pow- er supply	Output	Ignition switch	OFF, ACC	5 V
. ,		ei suppiy				5 V

# < ECU DIAGNOSIS INFORMATION >

. . .

## [WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description				Value	
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)	А
18 (V)	Ground	Sensor ground	Input	Ignition switch ON		0 V	В
21 (P/L)	Ground	NATS antenna amp.	Input/ Output	Intelligent Key: Intelligent Key battery is re- moved	Brake pedal: Depressed <b>NOTE:</b> Waveform varies each time when brake pedal is depressed	(V) 15 10 5 0 → ← 40ms JMKIA6232JP	C
					Brake pedal: Not de- pressed	12 V	Е
					ON	0 V	
23 (R/Y)	Ground	Security indicator	Output	Security indica-	Blinking (Ignition switch	(V) ₁₅ 10 5 0	F
						→ + 1s JPMIA0590GB 12.0 V	Н
					OFF	Battery voltage	
24* ¹ (SB)	Ground	Dongle link	Input/ Output	Ignition switch O	FF	5 V	I
25 (LG)	Ground	NATS antenna amp.	Input/ Output	During waiting	Brake pedal: Depressed <b>NOTE:</b> Waveform varies each time when brake pedal is depressed	(V) 15 10 50 → ←40ms JMKIA6233JP	J DLK
					Brake pedal: Not de- pressed	12 V	L
26* ²	Ground	Thermo control amp.	Input	Ignition switch ON		0 V	p. 4
(GR)	0.00110			Evaporator is ext	remely low temperature	12 V	M

Ν

Ο

Ρ

#### < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description				Value
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)
		A/C ON (Automatic A/C)		A/C	OFF (A/C switch indicator: OFF)	(V) 15 10 10 10 10 ms JPMIA0012GB 1.0 - 1.5 V
27 (O)	Ground		Input		ON (A/C switch indicator: ON)	0 V
		A/C switch (Manual A/C)	switch (Manual	A/C switch	OFF	(V) 15 0 0 10 ms JPMIA0012GB 1.0 - 1.5 V
					ON	0 V
	Ground	Blower fan switch (Automatic A/C)	- Input	Fan switch Fan switch	Blower fan switch OFF	0 V
					Blower fan switch ON	(V) 15 0 ↓ ↓ 10ms → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
28 (G/W)		Blower fan switch (Manual A/C)			Blower fan switch OFF Blower fan switch ON	(V) 15 10 5 0 +10ms 1.5 - 2.0 V 0 V
29 (L/W)	Ground	Hazard switch	Input	Hazard switch	OFF	12 V
31 (G/B)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	ON LOCK status (Unlock sen- sor switch OFF)	0 V 10 10 5 0 
					UNLOCK status (Unlock sensor switch ON)	0 V

#### < ECU DIAGNOSIS INFORMATION >

# [WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		-	0	Value
+	-	Signal name	Input/ Output	Condition		(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 0 0 + 10ms PKIB4960J 7.0 - 8.0 V
32 (LG)	Ground	Combination switch OUTPUT 5	Output	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2	0
					<ul><li>Wiper intermittent dial 6</li><li>Wiper intermittent dial 7</li></ul>	1.0 V
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 + 10ms PKIB4960J
33	Ground	Combination switch	Output	Combination	Lighting switch 1ST (Wiper intermittent dial 4)	7.0 - 8.0 V
(Y/L)		OUTPUT 4		switch	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF	
			•	<ul> <li>Wiper intermittent dial 1</li> <li>Wiper intermittent dial 5</li> <li>Wiper intermittent dial 6</li> </ul>	PKIB4958J 1.2 V	

Ν

Ο

Ρ

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
34 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	
()					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	++10ms PKIB4958J 1.2 V
35	Ground	Combination switch OUTPUT 2	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	(V) 15 0 • • 10ms PKIE4960J 7.0 - 8.0 V
(R/L)					Lighting switch 2ND	
					Lighting switch PASS	(V) 15
					Front wiper switch INT	
					Front wiper switch HI	+ +10ms → +10ms РКIВ4958J 1.2 V
				Combination	All switch OFF	(V) 15 0 0 0 0 0 0 0 0 0 0 0 0 0
36 (L/O)	Ground	Ground Combination switch OUTPUT 1 Output	Output	switch (Wiper intermit-	Turn signal switch RH	(V) 15 10 5 0
				tent dial 4)	Turn signal switch LH	
					Front wiper switch LO (Front wiper switch MIST)	
				Front washer switch ON	++10ms →+10ms РКIВ4958J 1.2 V	
	1					

Terminal No. Descriptic		Description					
	color)	Signal name	Input/ Output	-	Condition	Value (Approx.)	A
37	Ground	Selector lever P po-		Selector lever	P position	0 V	В
(G/O)	Giouna	sition switch	Input	Selector level	Any position other than P	12 V	D
					Waiting	12 V	
				Ignition switch OFF (Remote keyless entry communication)	When operating either button on Intelligent Key	(V) 15 10 5 0 200 ms JMMIA0572GB	C
38 (G/Y)	Ground	Ground Receiver communi- cation	Input/ Output		Waiting	(V) 15 10 5 0 100 ms JMMA0573GB	F
					When receiving signal from tire pressure sensor	(V) 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	H
39 (L)	Ground	CAN-H	Input/ Output		_	_	J
40 (P)	Ground	CAN-L	Input/ Output		_	_	DL
43 (W)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	(V) 15 0 5 0 + 10ms	L
					ON (When back door opened)	9.5 - 10.0 V 0 V	Ν
44	Ground	Rear wiper stop po-		Ignition switch ON	Rear wiper stop position	12 V	0
(LG)	Ground	sition			Any position other than rear wiper stop position	0 V	-

# < ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Ρ

#### < ECU DIAGNOSIS INFORMATION >

(Wire co +	olor)		Description			Value
	-	Signal name	Input/ Output		Condition	(Approx.)
45 (SB) G	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	(V) 10 50 •••10ms •••10ms •••10ms •••10ms •••10ms •••10ms •••10ms •••10ms •••10ms •••10ms •••10ms •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 •••00 ••
					ON (When passenger door opened)	0 V
46 (GR/L)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closed)	(V) 10 0 0 0 0 0 0 0 0 0 0 0 0 0
					ON (When rear RH door opened)	0 V
47 (BR/Y)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	(V) 15 10 5 0 • • • • • • • • • • • • •
					ON (When driver door opened)	0 V
48 (W/G) G	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closed)	(V) 10 50 • • • 10ms PKIB4960J 7.0 - 8.0 V
					ON (When rear door LH opened)	0 V
50 (DAA) G	Ground	Back door lock actu-	Output	Back door	LOCK (Actuator is activat- ed)	0 V
(R/W)		ator relay control			Other than LOCK (Actua- tor is not activated)	Battery voltage
51 (W) G	Ground	Back door request switch	Input	Back door re- quest switch	ON (Pressed)	0 V
54		Switch		90031 31911011	OFF (Not pressed) OFF (Stopped)	12 V 0 V
(LG)	Ground	Rear wiper	Output	Rear wiper	ON (Activated)	12 V

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
55	Cround	Rear door UNLOCK	Output	Rear door	UNLOCK (Actuator is activated)	12 V
(G)	Ground	Real door UNLOCK	Output	Real dool	Other then UNLOCK (Ac- tuator is not activated)	0 V
					p battery saver is activated. room lamp power supply)	0 V
56 (L)	Ground	Interior room lamp power supply	Output	vated.	p battery saver is not acti- rior room lamp power sup-	12 V
57 (Y)	Ground	Battery power sup- ply	Input	Ignition switch OI	FF	Battery voltage
59		Passenger door UN-			UNLOCK (Actuator is activated)	12 V
(G)	Ground	LOCK	Output	Passenger door	Other then UNLOCK (Ac- tuator is not activated)	0 V
					Turn signal switch OFF	0 V
60 (W/B)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 15 15 15 15 15 15 15 15 15 15
					Turn signal switch OFF	0 V
61 (W/L)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 11 13 14 15 15 15 15 15 15 15 15 15 15
63		Interior room lamp		Interior room	OFF	12 V
(BR)	Ground	control signal	Output	lamp	ON	0 V
65	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activat- ed)	12 V
(V)	Ground		Output	All doors	Other then LOCK (Actua- tor is not activated)	0 V
66 (L/B)	Ground	Driver door UN- LOCK	Output	Driver door	UNLOCK (Actuator is activated) Other then UNLOCK (Ac-	12 V
67					tuator is not activated)	0 V
(B)	Ground	Ground	Output	Ignition switch OI	N	0 V
68 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch OI	N	12 V
69	Ground	P/W power supply	Output	Ignition switch OI		12 V

#### < ECU DIAGNOSIS INFORMATION >

Terminal No. Description (Wire color)					Value	
(vvire +		Signal name	Input/ Output	Condition		(Approx.)
70 (Y)	Ground	Battery power sup- ply	Input	Ignition switch O	FF	Battery voltage
72* ² (SB)	Ground	A/C indicator	Output	A/C indicator	OFF ON	12 V 0 V
75		Driver door request		Driver door re-	ON (Pressed)	0 V
(SB)	Ground	switch	Input	quest switch	OFF (Not pressed)	12 V
76		Push-button ignition		Push-button ig-	Pressed	0 V
(L/O)	Ground	switch (push switch)	Input	nition switch (push switch)	Not pressed	12 V
78	Ground	Driver door antenna	Output	When the driver door request	When Intelligent Key is not in the antenna detec- tion area (The distance between In- telligent Key and antenna: Approx. 2 m)	(V) 15 10 50 500 ms JMKIA5954GB
(LG)		(+)		switch is operat- ed with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between In- telligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1
79	Ground	nd Driver door antenna Outpu		When the driver door request	When Intelligent Key is not in the antenna detec- tion area (The distance between In- telligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5
(V)			Output	switch is operat- ed with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between In- telligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				N/d -	
(Wire	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	A
80	Ground	Passenger door an- tenna (+)		When the pas- senger door re-	When Intelligent Key is not in the antenna detec- tion area (The distance between In- telligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5	B C D
(BR/Y)			Output	quest switch is operated with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between In- telligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 5 0 5 0 5 0 5 0 5 0 5 0 5 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5	E
81	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detec- tion area (The distance between In- telligent Key and antenna: Approx. 2 m)	(V) 15 0 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5	G H I
(L/Y)					When Intelligent Key is in the antenna detection area (The distance between In- telligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 5 0 5 0 5 5 0 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5	J DLK L
82	Ground	Back door antenna (+)	Output	When the back door request switch is operat- ed with ignition switch ON	When Intelligent Key is not in the antenna detec- tion area (The distance between In- telligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5	M
(W/B)					When Intelligent Key is in the antenna detection area (The distance between In- telligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 500 ms JMKIA5955GB	P

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	
(VVire	color)	Signal name	Input/ Output		Condition	(Approx.)	
83	83 (B/W) Ground )		Output	When the back door request	When Intelligent Key is not in the antenna detec- tion area (The distance between In- telligent Key and antenna: Approx. 2 m)	(V) 15 10 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5	
(B/W)		)		switch is operat- ed with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between In- telligent Key and antenna: 80 cm or less)	(V) 15 10 5 0 500 ms JMKIA5955GB	
84	Ground	Room antenna (+) (Instrument center)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detec- tion area	(V) 15 0 5 0 10 10 10 10 10 10 10 10 10 10 10 10 1	
(Y/G)					When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 1 1 1 5 0 1 1 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1	
85	Ground	Room antenna (-) (Instrument center)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detec- tion area	(V) 15 0 16 17 17 16 17 18 JMKIA5951GB	
65 (Y/L)					When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB	

#### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	٥
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
86		Luggage room an-		Ignition switch	When Intelligent Key is not in the antenna detec- tion area	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1	B C D
(P)	Ground	tenna (+)	Output	" ON	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB	E
87	Ground	round Luggage room an- tenna (-)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 1 s JMKIA5951GB	G H
(L)	Clouid				When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA3839GB	J DLK
90 (W/L)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch illu- mination	ON OFF	12 V 0 V	M
91 (Y)	Ground	ACC/ON indicator lamp	Output	Ignition switch	OFF ACC or ON	Battery voltage 0.5 V	
		•			OFF	0.5 V	Ν
92 (BR/R)	Ground	Push-button ignition switch illumination Output ground	Output	Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position (V) 15 10 5 0 10 ms JPMIA1554GB 6.0 - 7.0 V	O

#### < ECU DIAGNOSIS INFORMATION >

## [WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description				Value	
+	-	Signal name	Input/ Output	Condition		(Approx.)	
93	Ground	Intelligent Key warn-	Output Intelligent (e)		Sounding	0 V	
(GR/W)	Ground	ing buzzer	Output	warning buzzer	Not sounding	12 V	
96	Ground	ACC relay control	Output	Ignition switch	OFF	0 V	
(BR/W)	Croana	Noo relay control	Output	ignition switch	ACC or ON	12 V	
97	Ground	Starter relay control	Output	Ignition switch	When selector lever is in P or N position	Battery voltage	
(L/R)	Cround	Stanter relay control	Output	ON	When selector lever is not in P or N position	0 V	
98	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	12 V	
(BR)	Ground	E/R) control			ON	0 V	
99	Ground	Ignition relay control	Output	Ignition switch	OFF or ACC	0 V	
(W/R)	Ground	ignition relay control	Output	Ignition switch	ON	12 V	
100	Cround	Passenger door re-	Input	Passenger door	ON (Pressed)	0 V	
(G)	Ground	quest switch	Input	request switch	OFF (Not pressed)	12 V	
102	Ground	Selector lever P/N	Input	Selector lever	P or N position	Battery voltage	
(G)	Ground	position	mput	Selector level	Except P and N positions	0 V	
		Ground Front defroster Input			A/C mode defroster ON position	0 V	
103* ² (G/Y)	Ground		t Ignition switch ON	Other than A/C mode de- froster ON position	(V) 15 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
104 (Y/R)	Ground	CVT shift selector (detention switch) power supply	Output	Ignition switch ON		12 V	
105 (B/O)	Ground	Stop lamp switch 2	Input	Ignition switch O	FF	Battery voltage	
106	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V	
(Y/B)	Ground	lay control	Supul	ignition switch	ON	12 V	

*1: For Canada

*2: Manual air conditioner

#### < ECU DIAGNOSIS INFORMATION >

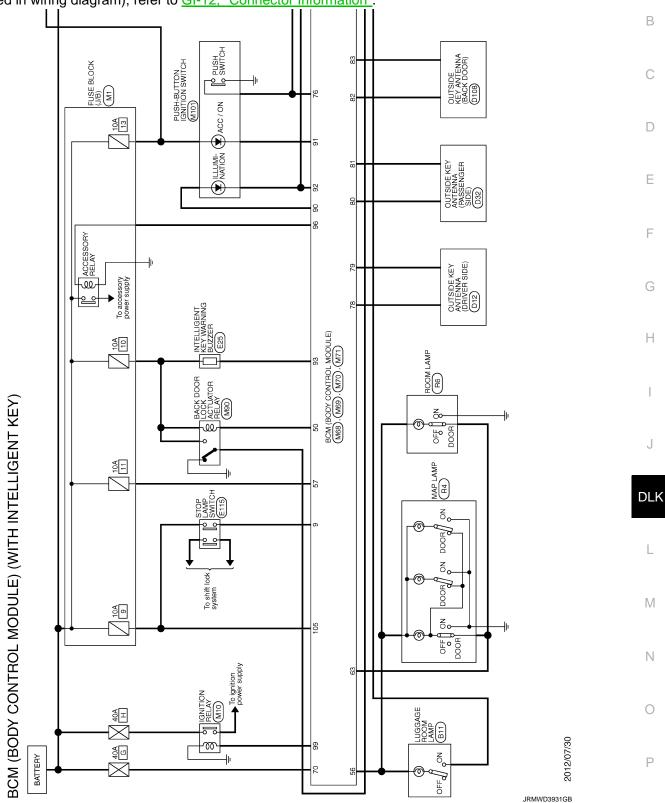
## [WITH INTELLIGENT KEY SYSTEM]

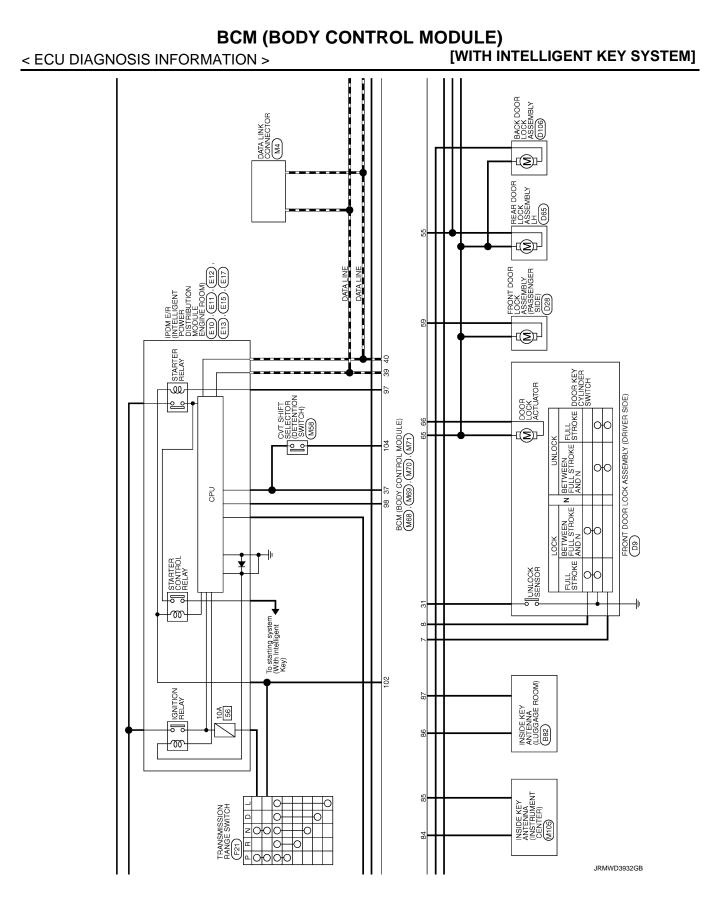
## Wiring Diagram - BCM -

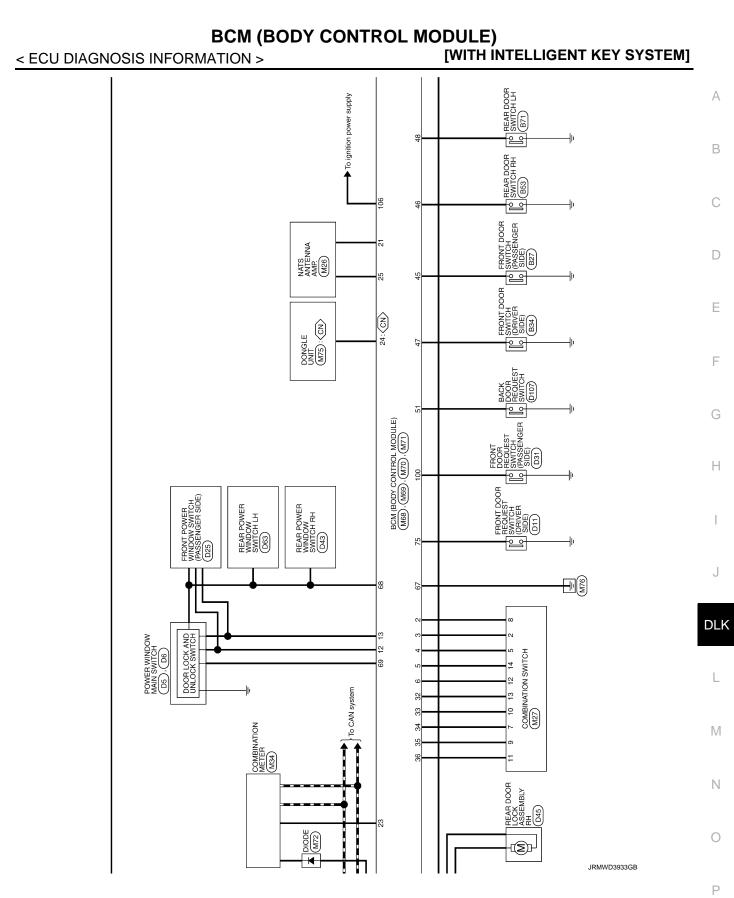
INFOID:000000008831204

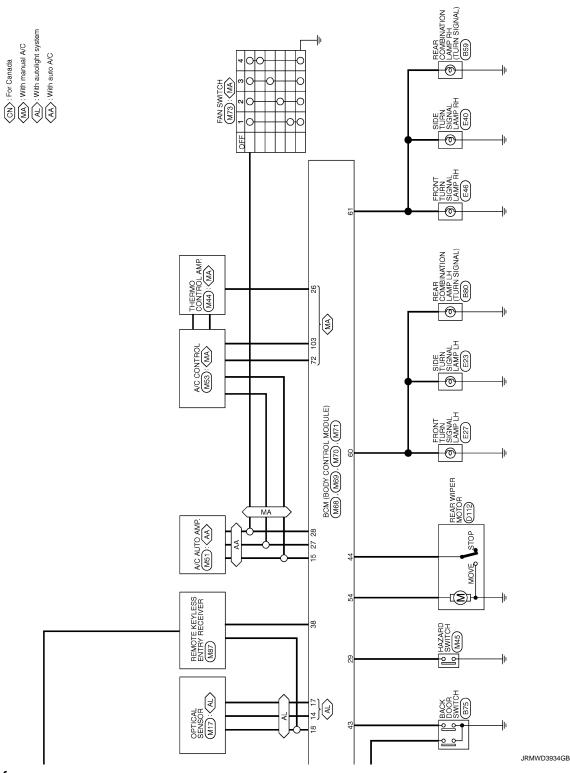
А

For connector terminal arrangements, harness layouts, and alphabets in a  $\bigcirc$  (option abbreviation; if not described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.









INFOID:00000008831205

#### FAIL-SAFE CONTROL BY DTC

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

Fail-safe

#### < ECU DIAGNOSIS INFORMATION >

#### [WITH INTELLIGENT KEY SYSTEM]

Display contents of CONSULT	Fail-safe	Cancellation
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 $ON \rightarrow OFF$
B2196: DONGLE NG	Inhibit engine cranking	Erase DTC
B2198: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2608: STARTER RELAY	Inhibit engine cranking	<ul> <li>500 ms after the following signal communication status becomes consistent</li> <li>Starter relay control signal</li> <li>Starter relay status signal (CAN)</li> </ul>
B260F: ENG STATE SIG LOST	Inhibit engine cranking	<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>
B26F1: IGN RELAY OFF	Inhibit engine cranking	<ul> <li>When the following conditions are fulfilled</li> <li>Ignition switch ON signal (CAN: Transmitted from BCM): ON</li> <li>Ignition switch ON signal (CAN: Transmitted from IPDM E/R): ON</li> </ul>
B26F2: IGN RELAY ON	Inhibit engine cranking	<ul> <li>When the following conditions are fulfilled</li> <li>Ignition switch ON signal (CAN: Transmitted from BCM): OFF</li> <li>Ignition switch ON signal (CAN: Transmitted from IPDM E/R): OFF</li> </ul>
B26F3: START CONT RLY ON	Inhibit engine cranking	<ul> <li>When the following conditions are fulfilled</li> <li>Starter control relay signal (CAN: Transmitted from BCM): OFF</li> <li>Starter control relay signal (CAN: Transmitted from IPDM E/R): OFF</li> </ul>
B26F4: START CONT RLY OFF	Inhibit engine cranking	<ul> <li>When the following conditions are fulfilled</li> <li>Starter control relay signal (CAN: Transmitted from BCM): ON</li> <li>Starter control relay signal (CAN: Transmitted from IPDM E/R): ON</li> </ul>
B26F7: BCM	Inhibit engine cranking by Intelligent Key sys- tem	When room antenna and luggage room antenna functions normally

#### REAR WIPER MOTOR PROTECTION

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

Condition of cancellation

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

FAIL-SAFE CONTROL OF COMBINATION SWITCH READING FUNCTION CAUSED BY LOW POWER SUPPLY VOLTAGE

If voltage of battery power supply lower, BCM maintains combination switch reading to the status when input voltage is less than approximately 9 V.

#### NOTE:

When voltage of battery power supply is approximately 9 V or more, combination switch reading function returns to normal operation.

#### DTC Inspection Priority Chart

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM CIRCUIT     U1010: CONTROL UNIT (CAN)

INFOID:000000008831206

J

DLK

L

Μ

Ν

Ρ

#### < ECU DIAGNOSIS INFORMATION >

## [WITH INTELLIGENT KEY SYSTEM]

Priority	DTC
3	<ul> <li>B2192: ID DISCORD BCM-ECM</li> <li>B2193: CHAIN OF BCM-ECM</li> <li>B2195: ANTI-SCANNING</li> <li>B2196: DONGLE NG</li> <li>B2198: NATS ANTENNA AMP</li> </ul>
4	<ul> <li>B2555: STOP LAMP</li> <li>B2556: PUSH-BTN IGN SW</li> <li>B2557: VEHICLE SPEED</li> <li>B2601: SHIFT POSITION</li> <li>B2602: SHIFT POSITION</li> <li>B2603: SHIFT POSI STATUS</li> <li>B2604: PNP/CLUTCH SW</li> <li>B2605: STARTER RELAY</li> <li>B2606: STARTER RELAY</li> <li>B2607: ENG STATE SIG LOST</li> <li>B2614: BCM</li> <li>B2615: BCM</li> <li>B2618: BCM</li> <li>B2616: BCM</li> <li>B2617: IGN RELAY OFF</li> <li>B26F3: START CONT RLY ON</li> <li>B26F4: START CONT RLY OFF</li> <li>B26F6: BCM</li> <li>B26F4: START CONT RLY OFF</li> <li>B26F6: BCM</li> <li>B26F6: BCM</li> <li>B26F6: BCM</li> <li>B26F7: BCM</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>C1717: [PRESSDATA ERR] FR</li> <li>C1718: [PRESSDATA ERR] RR</li> <li>C1719: [PRESSDATA ERR] RL</li> </ul>
6	B2621: INSIDE ANTENNA     B2622: INSIDE ANTENNA
7	<ul> <li>B2626: OUTSIDE ANTENNA</li> <li>B2627: OUTSIDE ANTENNA</li> <li>B2628: OUTSIDE 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 <u>DLK-37, "COM-MON ITEM : CONSULT Function (BCM - COMMON ITEM)"</u>.

INFOID:000000008831207

#### < 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	A
No DTC is detected. further testing may be required.	_	_	_	_	_	С
U1000: CAN COMM	—	—	—	—	BCS-41	
U1010: CONTROL UNIT (CAN)	—	—	—	_	BCS-42	
U0415: VEHICLE SPEED	—	—	×	_	BCS-43	D
B2192: ID DISCORD BCM-ECM	×	—	—	_	<u>SEC-38</u>	
B2193: CHAIN OF BCM-ECM	×	—	—	—	<u>SEC-40</u>	Е
B2195: ANTI-SCANNING	×	—	—	_	<u>SEC-41</u>	
B2196: DONGLE NG	×	—	—	_	<u>SEC-42</u>	
B2198: NATS ANTENNA AMP	×	—	—	_	<u>SEC-44</u>	F
B2555: STOP LAMP	—	×	×	_	<u>SEC-48</u>	
B2556: PUSH-BTN IGN SW	—	×	×	_	<u>SEC-50</u>	G
B2557: VEHICLE SPEED	—	×	×	—	<u>SEC-52</u>	
B2562: LOW VOLTAGE	—	×	—	—	BCS-44	
B2601: SHIFT POSITION	—	×	×	_	<u>SEC-53</u>	Н
B2602: SHIFT POSITION	—	×	×	_	<u>SEC-56</u>	
B2603: SHIFT POSI STATUS	—	×	×	—	<u>SEC-59</u>	1
B2604: PNP/CLUTCH SW	—	×	×	_	<u>SEC-64</u>	1
B2605: PNP/CLUTCH SW	—	×	×	_	<u>SEC-67</u>	
B2608: STARTER RELAY	×	×	×	_	<u>SEC-69</u>	J
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-71</u>	
B2614: BCM	—	×	×	_	<u>PCS-75</u>	DLK
B2615: BCM	—	×	×	_	PCS-78	DER
B2616: BCM	—	×	×	_	<u>PCS-81</u>	
B2618: BCM	_	×	×	_	PCS-84	L
B261A: PUSH-BTN IGN SW	—	×	×	_	PCS-85	
B2621: INSIDE ANTENNA	—	×	—	_	<u>DLK-44</u>	Ъ. <i>А</i>
B2622: INSIDE ANTENNA	—	×		_	<u>DLK-46</u>	M
B2626: OUTSIDE ANTENNA	—	×	—	_	<u>DLK-50</u>	
B2627: OUTSIDE ANTENNA	—	×		_	<u>DLK-48</u>	Ν
B2628: OUTSIDE ANTENNA	—	×		_	<u>DLK-52</u>	
B26F1: IGN RELAY OFF	×	×	×	_	<u>PCS-87</u>	
B26F2: IGN RELAY ON	×	×	×	_	PCS-89	0
B26F3: START CONT RLY ON	×	×	×	_	<u>SEC-72</u>	
B26F4: START CONT RLY OFF	×	×	×		<u>SEC-73</u>	Р
B26F6: BCM		×	×		PCS-91	-
B26F7: BCM	×	×	×	_	<u>SEC-75</u>	
B26F8: BCM	—	×	×		<u>SEC-76</u>	
B26FC: KEY REGISTRATION	—	×	×	—	<u>SEC-77</u>	

#### < 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
C1704: LOW PRESSURE FL	—	—	—	×	
C1705: LOW PRESSURE FR	—	—	_	×	WT-23
C1706: LOW PRESSURE RR	—	—	_	×	<u>vv1-23</u>
C1707: LOW PRESSURE RL	—	—	_	×	
C1708: [NO DATA] FL	—			×	
C1709: [NO DATA] FR	_	_	_	×	WT-25
C1710: [NO DATA] RR	_	_	_	×	<u></u>
C1711: [NO DATA] RL	_	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	_	×	
C1717: [PRESSDATA ERR] FR	—	—		×	WT-28
C1718: [PRESSDATA ERR] RR	—	—	_	×	<u>vv1-20</u>
C1719: [PRESSDATA ERR] RL	—	_		×	1
C1729: VHCL SPEED SIG ERR	—	—	_	×	<u>WT-30</u>

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

DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH ALL DOOR	A
ALL DOOR : Description	, ,
All doors do not lock/unlock using door lock and unlock switch. ALL DOOR : Diagnosis Procedure	D
1. CHECK POWER SUPPLY AND GROUND CIRCUIT	
Check power supply and ground circuit. Refer to <u>DLK-54, "BCM (BODY CONTROL MODULE) : Diagnosis Procedure"</u> . Is the inspection result normal?	E
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	F
<ul> <li>2.CHECK DOOR LOCK AND UNLOCK SWITCH</li> <li>Check door lock and unlock switch.</li> <li>Driver side: Refer to <u>DLK-59</u>, "<u>DRIVER SIDE</u> : <u>Component Function Check</u>".</li> </ul>	G
<ul> <li>Passenger side: Refer to <u>DLK-61, "PASSENGER SIDE : Component Function Check"</u>. <u>Is the inspection result normal?</u> YES &gt;&gt; GO TO 3.</li> </ul>	Н
NO >> Repair or replace the malfunctioning parts. 3.CHECK DOOR LOCK ACTUATOR	I
Check front door lock assembly (driver side). Refer to <u>DLK-187, "DOOR LOCK : Removal and Installation"</u> . Is the inspection result normal?	J
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. <b>4.</b> CONFIRM THE OPERATION	DLK
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1. DRIVER SIDE	L
DRIVER SIDE : Description	
Driver side door does not lock/unlock using door lock and unlock switch.	Ν
DRIVER SIDE : Diagnosis Procedure	}
1. CHECK DOOR LOCK ACTUATOR	_
Check front door lock assembly (driver side). Refer to <u>DLK-64, "DRIVER SIDE : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	Ρ
2.CONFIRM THE OPERATION	-

Confirm the operation again.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLO	
< SYMPTOM DIAGNOSIS > [WITH INTELLIGENT Is the result normal? YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident". NO >> GO TO 1. PASSENGER SIDE	
PASSENGER SIDE : Description	INFOID:000000008452934
Passenger side door does not lock/unlock using door lock and unlock switch.	
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000008452935
<b>1.</b> CHECK DOOR LOCK ACTUATOR	
Check front door lock assembly (passenger side). Refer to <u>DLK-65, "PASSENGER SIDE : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal? YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1. REAR LH	
REAR LH : Description	INFOID:000000008452936
Rear LH side door does not lock/unlock using door lock and unlock switch.	
REAR LH : Diagnosis Procedure	INFOID:000000008452937
1.CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly LH. Refer to <u>DLK-66, "REAR LH : Component Function Check"</u> . <u>Is 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>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1. REAR RH	
REAR RH : Description	INFOID:00000008452938
Rear RH side door does not lock/unlock using door lock and unlock switch.	
REAR RH : Diagnosis Procedure	INFOID:000000008452939
1.CHECK DOOR LOCK ACTUATOR	
Check rear door lock assembly RH. Refer to <u>DLK-66. "REAR RH : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	

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

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

2.CONFIRM THE OPERATION	Δ
Confirm the operation again. Is the result normal?	1
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1. BACK DOOR	В
BACK DOOR : Description	С
Back door does not lock/unlock using door lock and unlock switch.	
BACK DOOR : Diagnosis Procedure	D
1. CHECK BACK DOOR LOCK ACTUATOR RELAY	Е
Check back door lock actuator relay. Refer to <u>DLK-70, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	F
2. CHECK DOOR LOCK ACTUATOR	G
Check back door lock assembly. Refer to <u>DLK-67, "BACK DOOR : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3.	Η
NO >> Repair or replace the malfunctioning parts.	I
<b>3.</b> CONFIRM THE OPERATION	I
Confirm the operation again. <u>Is the inspection result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	J
	DLK

L

Μ

Ν

Ο

Ρ

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

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

**Diagnosis Procedure** 

INFOID:000000008452942

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-123</u>, "ALL DOOR : Diagnosis Procedure".

2. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to DLK-73, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

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

#### [WITH INTELLIGENT KEY SYSTEM] < SYMPTOM DIAGNOSIS > DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH А ALL DOOR ALL DOOR : Description INFOID:00000008452943 В All doors do not lock/unlock using all door request switches. ALL DOOR : Diagnosis Procedure INFOID:000000008452944 1. CHECK REMOTE KEYLESS ENTRY FUNCTION Check remote keyless entry function. D Does door lock/unlock with Intelligent Key button? YES >> GO TO 2. NO >> Refer to DLK-25, "REMOTE KEYLESS ENTRY FUNCTION : System Description". Е 2.check "lock/unlock by i-key" setting in "work support" Check "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT". F Refer to DLK-40, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT". 3.CHECK DOOR SWITCH Check door switch. Н Refer to DLK-55, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4.CONFIRM THE OPERATION Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident". DLK NO >> GO TO 1. DRIVER SIDE DRIVER SIDE : Description INFOID:00000008452945 All doors do not lock/unlock using driver side door request switch. M **DRIVER SIDE : Diagnosis Procedure** INFOID:00000008452946 1.CHECK DRIVER SIDE DOOR REQUEST SWITCH Ν Check driver side door request switch. Refer to DLK-79, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CHECK OUTSIDE KEY ANTENNA Check outside key antenna (driver side). Refer to DLK-50, "DTC Logic". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. ${ m 3.}$ CONFIRM THE OPERATION

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

< SYMPTOM DIAGN	OSIS >
-----------------	--------

Confirm the operation again.

Is the result normal?

YES >> Check Intermittent Incident. Refer to GI-41, "Intermittent Incident".

NO >> GO TO 1. PASSENGER SIDE

**PASSENGER SIDE : Description** 

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

PASSENGER SIDE : Diagnosis Procedure

1.CHECK PASSENGER SIDE DOOR REQUEST SWITCH

Check passenger side door request switch. Refer to DLK-79, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (passenger side). Refer to <u>DLK-48</u>, "<u>DTC Logic</u>".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.confirm the operation

Confirm the operation again.

Is the result normal?

YES >> Check Intermittent Incident. Refer to GI-41, "Intermittent Incident".

NO >> GO TO 1.

BACK DOOR

**BACK DOOR : Description** 

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

**BACK DOOR : Diagnosis Procedure** 

1. CHECK BACK DOOR REQUEST SWITCH

Check back door request switch. Refer to DLK-77, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (back door). Refer to <u>DLK-52, "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-41, "Intermittent Incident"</u>.

INFOID:000000008452949

INFOID:000000008452950

INFOID:000000008452947

[WITH INTELLIGENT KEY SYSTEM]

INFOID:000000008452948

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

NO >> GO TO 1. B C D E

J

DLK

G

Н

Μ

Ν

Ο

Ρ

### DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:000000008452951

**1.**CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-123</u>, "ALL DOOR : Diagnosis Procedure".

2. CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CHECK INTELLIGENT KEY

Check Intelligent Key.

Refer to DLK-85, "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 <u>GI-41, "Intermittent Incident"</u>.

SELECTIVE UNLOCK FUNCTION DOI	ES NOT OPERATE	
< SYMPTOM DIAGNOSIS >	[WITH INTELLIGENT KEY SYSTEM]	
SELECTIVE UNLOCK FUNCTION DOES NOT	OPERATE	
Diagnosis Procedure	INFOID:00000008452952	
1. CHECK "DOOR LOCK–UNLOCK SET" SETTING IN "WORK SU	IPPORT" B	
Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT" Refer to DLK-38, "DOOR LOCK : CONSULT Function (BCM - DOO		
Is the inspection result normal?	C	
YES >> GO TO 2. NO >> Set "DOOR LOCK-UNLOCK SET" in "WORK SUPPOR $2.$ CONFIRM THE OPERATION	<b>T</b> ".	
Confirm the operation again. Is the result normal?	E	
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent</u> NO >> GO TO 1.		
	F	
	G	

Н

J

L

M

Ν

0

Ρ

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

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

**Diagnosis** Procedure

INFOID:000000008452953

**1.**CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-123</u>, "ALL DOOR : Diagnosis Procedure".

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

Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-38. "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

YES >> GO TO 3.

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

 ${f 3.}$  CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-38, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

YES >> GO TO 4.

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

**4.**CHECK VEHICLE SPEED SIGNAL

Check combination meter for DTC. Refer to MWI-57, "DTC Index".

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-41, "Intermittent Incident"</u>.

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

## IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

	A
Diagnosis Procedure	INFOID:00000008452954
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.	С
NO >> Refer to <u>DLK-123, "ALL DOOR : Diagnosis Procedure"</u> .	
<b>2.</b> CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"	D
Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	
Refer to <u>DLK-38, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .	_
<u>Is the inspection result normal?</u> YES >> GO TO 3.	E
NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	
<b>3.</b> CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"	F
Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".	
Refer to <u>DLK-38, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .	
Is the inspection result normal?	G
YES >> GO TO 4.	
NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".	
4.снеск всм	Н
Check BCM for DTC.	
Refer to <u>BCS-76, "DTC Index"</u> .	I
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	J
<b>5.</b> CONFIRM THE OPERATION	
Confirm the operation again.	DLK
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> .	
NO >> GO TO 1.	L

Μ

Ν

Ο

Ρ

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

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

**Diagnosis** Procedure INFOID:00000008452955 1. CHECK POWER DOOR LOCK OPERATION Check power door lock operation. Does door lock/unlock with door lock and unlock switch? YES >> GO TO 2. NO >> Refer to DLK-123, "ALL DOOR : Diagnosis Procedure". 2.CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT" Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to DLK-38, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 3. NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".  ${f 3.}$ CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT" Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT". Refer to DLK-38, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 4. NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT". 4.CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT" Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". Refer to DLK-38, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)". Is the inspection result normal? YES >> GO TO 5. >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". NO **5.**CHECK TCM Check TCM for DTC. Refer to TM-179, "DTC Index". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. **6**.CONFIRM THE OPERATION Confirm the operation again. Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

#### AUTO DOOR LOCK OPERATION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

# AUTO DOOR LOCK OPERATION DOES NOT OPERATE

		Λ
Diagnosis Procedure	INFOID:000000008452956	A
1. CHECK "AUTO LOCK SET" SETTING IN "WORK SUPPORT"		В
Check "AUTO LOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-40, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u> .		
Is the inspection result normal?		С
YES >> GO TO 2. NO >> Set "AUTO LOCK SET" setting in "WORK SUPPORT".		
2.CONFIRM THE OPERATION		D
Confirm the operation again.		
Is the result normal?		Е
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.		
		F

J

G

Н

L

Μ

Ν

Ο

Ρ

## HAZARD AND HORN REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## [WITH INTELLIGENT KEY SYSTEM]

## HAZARD AND HORN REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000008452957

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

Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to <u>DLK-40</u>, "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 <u>DLK-40, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u>.

Is the inspection result normal?

YES >> GO TO 3.

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

**3.**CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 4.

NO >> Check BCM for DTC. Refer to <u>BCS-76, "DTC Index"</u>.

**4.**CHECK HAZARD FUNCTION

Check hazard function.

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CHECK HORN FUNCTION

Check horn function.

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

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

**6.**CHECK DOOR SWITCH

Check door switch.

Refer to <u>DLK-55</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

**7.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

HAZARD AND BUZZER REMINDER DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]	
HAZARD AND BUZZER REMINDER DOES NOT OPERATE	^
Diagnosis Procedure	A
1.CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"	В
Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to <u>DLK-40, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u> .	
Is the inspection result normal?	С
YES >> GO TO 2. NO >> Set "HAZARD ANSWER BACK" in "WORK SUPPORT".	
<b>2.</b> CHECK "ANS BACK I-KEY LOCK" SETTING IN "WORK SUPPORT"	D
Check "ANS BACK I-KEY LOCK" setting in "WORK SUPPORT". Refer to <u>DLK-40, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u> .	E
Is the inspection result normal?	
YES >> GO TO 3. NO >> Set "ANS BACK I-KEY LOCK" in "WORK SUPPORT".	F
<b>3.</b> CHECK "ANS BACK I-KEY UNLOCK" SETTING IN "WORK SUPPORT"	
Check "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT". Refer to <u>DLK-40, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u> .	G
<u>Is the inspection result normal?</u> YES >> GO TO 4.	
NO >> Set "ANS BACK I-KEY UNLOCK" in "WORK SUPPORT".	Н
4.CHECK POWER POSITION	
Check if ignition switch position is changing or not.	
Does ignition switch position change? YES >> GO TO 5.	
NO >> Check BCM for DTC. Refer to <u>BCS-76, "DTC Index"</u> .	J
5. CHECK HAZARD FUNCTION	
Check hazard function. Refer to <u>DLK-88, "Component Function Check"</u> .	DLK
Is the inspection result normal?	
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	L
6.CHECK DOOR SWITCH	
Check door switch. Refer to <u>DLK-55, "Component Function Check"</u> .	Μ
Is the inspection result normal?	
YES >> GO TO 7. NO >> Repair or replace the malfunctioning parts.	Ν
7. CHECK INTELLIGENT KEY WARNING BUZZER	_
Check Intelligent Key warning buzzer. Refer to <u>DLK-83, "Component Function Check"</u> .	0
Is the inspection result normal?	Ρ
YES >> GO TO 8. NO >> Repair or replace the malfunctioning parts.	
8. CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

#### HAZARD AND BUZZER REMINDER DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]

KEY REMINDER FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [WITH INTELLIGENT KEY SY	YSTEM]
KEY REMINDER FUNCTION DOES NOT OPERATE	
Diagnosis Procedure	00000008452959
1. CHECK "ANTI KEY LOCK IN FUNCTI" SETTING IN "WORK SUPPORT"	
Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT". Refer to <u>DLK-40, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2.	(
NO >> Set "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT". 2.CHECK DOOR SWITCH	
Check door switch. Refer to <u>DLK-55, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK INSIDE KEY ANTENNA	
<ul> <li>Check inside key antenna.</li> <li>Instrument center: Refer to <u>DLK-44, "DTC Logic"</u>.</li> <li>Luggage room: Refer to <u>DLK-46, "DTC Logic"</u>.</li> <li><u>Is the inspection result normal?</u></li> <li>YES &gt;&gt; GO TO 4.</li> <li>NO &gt;&gt; Repair or replace the malfunctioning parts.</li> </ul>	(
4. CHECK UNLOCK SENSOR	
Check unlock sensor. Refer to <u>DLK-81, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	
5.CONFIRM THE OPERATION	D
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	
	I
	I
	(
	F

#### OFF POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

## OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000008452960

**1.**CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2.

NO >> Check BCM for DTC. Refer to <u>BCS-76, "DTC Index"</u>.

2. CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).

Refer to DLK-86, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

**3.**CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer. Refer to <u>DLK-83, "Component Function Check"</u>.

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 <u>DLK-55, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

## P POSITION WARNING DOES NOT OPERATE

P POSITION WARNING DOES NO < SYMPTOM DIAGNOSIS >	OT OPERATE [WITH INTELLIGENT KEY SYSTEM]
P POSITION WARNING DOES NOT OPERATE	
Diagnosis Procedure	INFOID:00000008452961
1.CHECK POWER POSITION	
Check if ignition switch position is changing or not.	
Does ignition switch position change?	
YES >> GO TO 2. NO >> Check BCM for DTC. Refer to <u>BCS-76, "DTC Index"</u> .	
2. CHECK DETENTION SWITCH	
Check BCM for DTC.	
Refer to <u>BCS-76, "DTC Index"</u> .	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer.	
Refer to DLK-83, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4. CHECK BUZZER (COMBINATION METER)	
Check buzzer (combination meter).	
Refer to <u>DLK-86</u> , "Component Function Check".	
<u>Is the inspection result normal?</u> YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	
5. CHECK DOOR SWITCH	
Check door switch (driver side). Refer to <u>DLK-55, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	
<b>O.</b> CHECK INSIDE KEY ANTENNA	
Check inside key antenna. <ul> <li>Instrument center: Refer to <u>DLK-44, "DTC Logic"</u>.</li> </ul>	
<ul> <li>Institutient center: Refer to <u>DLK-44, DTC Logic</u>.</li> <li>Luggage room: Refer to <u>DLK-46, "DTC Logic"</u>.</li> </ul>	
Is the inspection result normal?	
YES >> GO TO 7. NO >> Repair or replace the malfunctioning parts.	
7.CHECK KEY WARNING LAMP	
Check key warning lamp.	
Refer to DLK-87, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 8. NO >> Repair or replace the malfunctioning parts.	
8. CHECK SHIFT P WARNING LAMP	
Check shift P warning lamp.	

Check shift P warning lamp. Refer to <u>MWI-4, "Work flow"</u>.

#### P POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 9.

NO >> Repair or replace the malfunctioning parts.

 $9. {\rm confirm \ the \ operation}$ 

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.
- NO >> GO TO 1.

#### ACC WARNING DOES NOT OPERATE

ACC WARNING DOES NOT OPERATE	А
Diagnosis Procedure	A
1.CHECK POWER POSITION	В
Check if ignition switch position is changing or not.	
Does ignition switch position change?	C
YES >> GO TO 2.	C
NO >> Check BCM for DTC. Refer to <u>BCS-76, "DTC Index"</u> .	
2.CHECK BUZZER (COMBINATION METER)	D
Check buzzer (combination meter). Refer to <u>DLK-86, "Component Function Check"</u> .	
Is the inspection result normal?	E
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	
<b>3.</b> CHECK DETENTION SWITCH	F
Check BCM for DTC.	
Refer to <u>BCS-76, "DTC_Index"</u> .	G
Is the inspection result normal?	9
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4.CONFIRM THE OPERATION	Н
Confirm the operation again.	
Is the result normal?	I
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	
	J

DLK

L

Μ

Ν

Ο

Ρ

< SYMPTOM DIAGNOSIS >

#### TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

## [WITH INTELLIGENT KEY SYSTEM]

## TAKE AWAY WARNING DOES NOT OPERATE

**Diagnosis** Procedure INFOID:00000008452963 1. CHECK POWER POSITION Check if ignition switch position is changing or not. Does ignition switch position change? YES >> GO TO 2. NO >> Check BCM for DTC. Refer to BCS-76, "DTC Index". 2. CHECK DOOR SWITCH Check door switch. Refer to DLK-55, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.  ${f 3.}$ CHECK INSIDE KEY ANTENNA Check inside key antenna. • Instrument center: Refer to DLK-44, "DTC Logic". • Luggage room: Refer to DLK-46. "DTC Logic". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. **4.**CHECK BUZZER (COMBINATION METER) Check buzzer (combination meter). Refer to DLK-86, "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-83, "Component Function Check". Is the inspection result normal? YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts. **6.**CHECK KEY WARNING LAMP Check key warning lamp. Refer to MWI-4, "Work flow". Is the inspection result normal? YES >> GO TO 7. NO >> Repair or replace the malfunctioning parts. **7.**CONFIRM THE OPERATION Confirm the operation again. Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.
- NO >> GO TO 1.

#### INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE [WITH INTELLIGENT KEY SYSTEM] < SYMPTOM DIAGNOSIS > INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE А Diagnosis Procedure INFOID:00000008452964 1.CHECK "LO- BATT OF KEY FOB WARN" SETTING IN "WORK SUPPORT" В Check "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT". Refer to DLK-40, "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". D 2. CHECK INTELLIGENT KEY Check Intelligent key. Refer to DLK-85, "Component Function Check". Е Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. F ${f 3.}$ CHECK KEY WARNING LAMP Check key warning lamp. Refer to DLK-87, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. Н NO >> Repair or replace the malfunctioning parts. **4.**CHECK INSIDE KEY ANTENNA Check inside key antenna. Instrument center: Refer to <u>DLK-44</u>, "DTC Logic". Luggage room: Refer to <u>DLK-46, "DTC Logic"</u>. Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5.CONFIRM THE OPERATION DLK Confirm the operation again. Is the result normal? L YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident". NO >> GO TO 1. Μ Ν

Ρ

## DOOR LOCK OPERATION WARNING DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

# DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

1. CHECK DOOR LOCK FUNCTION

Check door lock function.

Does door lock/unlock using door request switch?

YES >> GO TO 2.

NO >> Refer to <u>DLK-127</u>, "DRIVER SIDE : Diagnosis Procedure".

2. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to <u>DLK-83, "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-41, "Intermittent Incident"</u>.
- NO >> GO TO 1.

INFOID:000000008452965

[WITH INTELLIGENT KEY SYSTEM]

## **KEY ID WARNING DOES NOT OPERATE**

## [WITH INTELLIGENT KEY SYSTEM]

## < SYMPTOM DIAGNOSIS > KEY ID WARNING DOES NOT OPERATE

Ref 10 WARNING DOES NOT OF ERATE	А
Diagnosis Procedure	
1.CHECK INTELLIGENT KEY	В
Check Intelligent Key.	
Refer to <u>DLK-85, "Component Function Check"</u> .	
Is the inspection result normal?	С
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	_
2.CHECK KEY WARNING LAMP	D
Check key warning lamp.	
Refer to DLK-87, "Component Function Check".	E
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	F
3. CONFIRM THE OPERATION	I
Confirm the operation again.	
Is the result normal?	G
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> .	
NO >> GO TO 1.	
	Н

J

DLK

L

Μ

Ν

Ο

Ρ

# KEY WARNING LAMP DOES NOT ILLUMINATE

Diagnosis Procedure

**1.**CHECK KEY WARNING LAMP

Check key warning lamp. Refer to <u>DLK-87, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

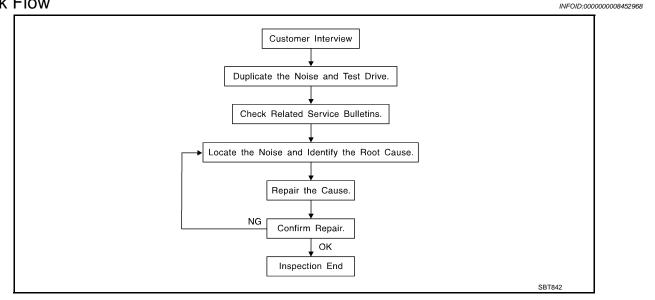
NO >> GO TO 1.

#### < SYMPTOM DIAGNOSIS >

# [WITH INTELLIGENT KEY SYSTEM]

# 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-153</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-149**

А

В

E

Ν

#### < SYMPTOM DIAGNOSIS >

#### [WITH INTELLIGENT KEY SYSTEM]

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

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

#### CHECK RELATED SERVICE BULLETINS

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

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

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

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
- Removing the components in the area that is are suspected to be the cause of the noise. Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise. Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks. Refer to DLK-151, "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  $\times$  1.97 in)

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications. 68370-4B000: 15  $\times$  25 mm (0.59  $\times$  0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll

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

SQUEAK AND RATTLE TROUBL		
< SYMPTOM DIAGNOSIS >	[WITH INTELLIGENT KEY SYSTEM]	
Insulates where slight movement is present. Ideal for instrument pa SILICONE GREASE	anel applications.	
Used in place of UHMW tape that is be visible or does not fit. Will c SILICONE SPRAY		
Used when grease cannot be applied. DUCT TAPE	В	5
Used to eliminate movement.		
CONFIRM THE REPAIR	С	k a
Confirm that the cause of a noise is repaired by test driving the vector conditions as when the noise originally occurred. Refer to the note	whicle. Operate the vehicle under the same	
Inspection Procedure	INFOID:00000008452969	)
Refer to Table of Contents for specific component removal and inst	allation information.	
INSTRUMENT PANEL	E	
Most incidents are caused by contact and movement between:		
1. The cluster lid A and instrument panel	-	
2. Acrylic lens and combination meter housing	F	
3. Instrument panel to front pillar garnish		
4. Instrument panel to windshield	G	ļ
5. Instrument panel mounting pins		
6. Wiring harnesses behind the combination meter		
<ol> <li>A/C defroster duct and duct joint These incidents can usually be located by tapping or moving the</li> </ol>	he components to duplicate the noise or by $H$	
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 area	s). Urethane pads can be used to insulate	
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		
Components to pay attention to include:		
1. Shifter assembly cover to finisher	DL	K
2. A/C control unit and cluster lid C		
<ol><li>Wiring harnesses behind audio and A/C control unit</li></ol>		
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		
3. Wiring harnesses tapping	N	
4. Door striker out of alignment causing a popping noise on starts	•	
Tapping or moving the components or pressing on them while driv many of these incidents. The areas can usually be insulated with f the Nissan Squeak and Rattle Kit (J-43980) to repair the noise.		)
TRUNK	_	
Trunk noises are often caused by a loose jack or loose items put in	to the trunk by the customer.	
In addition look for the following:		
1. Trunk lid dumpers out of adjustment		
2. Trunk lid striker out of adjustment		

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

#### < SYMPTOM DIAGNOSIS >

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

[WITH INTELLIGENT KEY SYSTEM]

#### 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



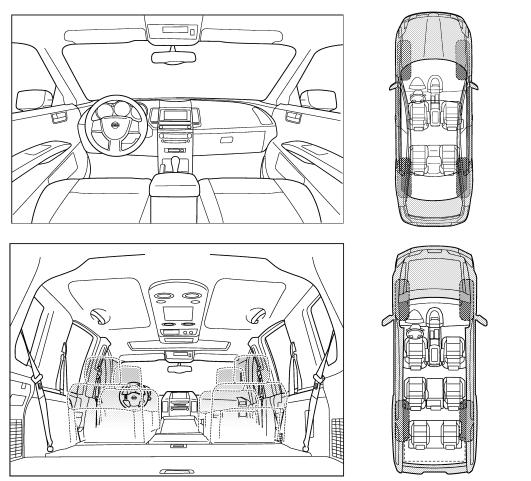
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Nissan Customer:

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

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

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



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

PIIB8740E

INFOID:000000008452970

А

В

D

Е

F

Н

DLK

L

Μ

Ν

Ρ

#### < SYMPTOM DIAGNOSIS >

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

Briefly describe the location where the noise occurs:

II. WHEN DOES IT OCCUR? (please chec	k 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

А

В

Е

F

Н

J

DLK

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" INFOID:00000008452971

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. D 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:

windshield.

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 iniury.
- 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

When performing the procedure after removing cowl top cover, cover

the lower end of windshield with urethane, etc to prevent damage to

L M

 $\langle \mathcal{A} \rangle$ 

INFOID:000000008452972

PIIB3706J

INFOID:000000008452973

Ν

## Work

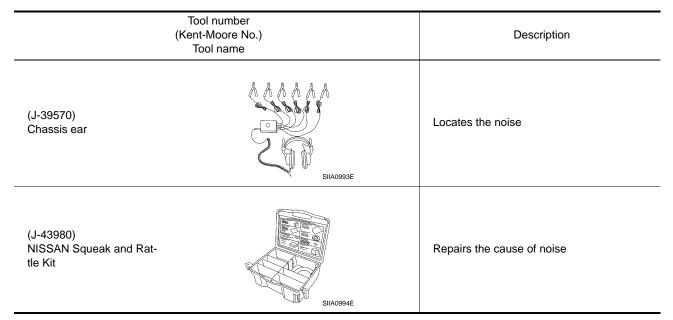
- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their P operational.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.

# PREPARATION PREPARATION

## Special Service Tools

INFOID:000000008452974

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



# **Commercial Service Tools**

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

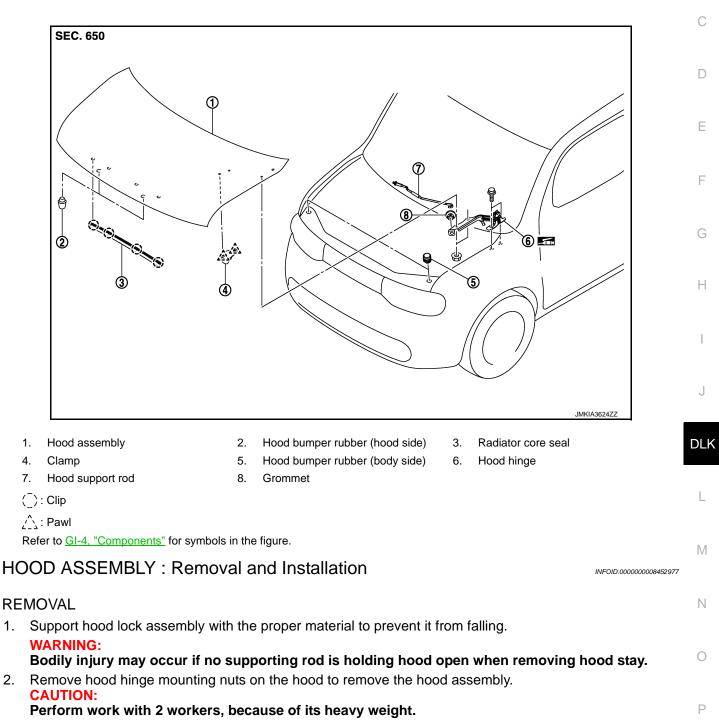
А

В

INFOID:00000008452976

# < REMOVAL AND INSTALLATION > **REMOVAL AND INSTALLATION** HOOD HOOD ASSEMBLY

HOOD ASSEMBLY : Exploded View



#### **INSTALLATION**

Install in the reverse order of removal.

#### CAUTION:

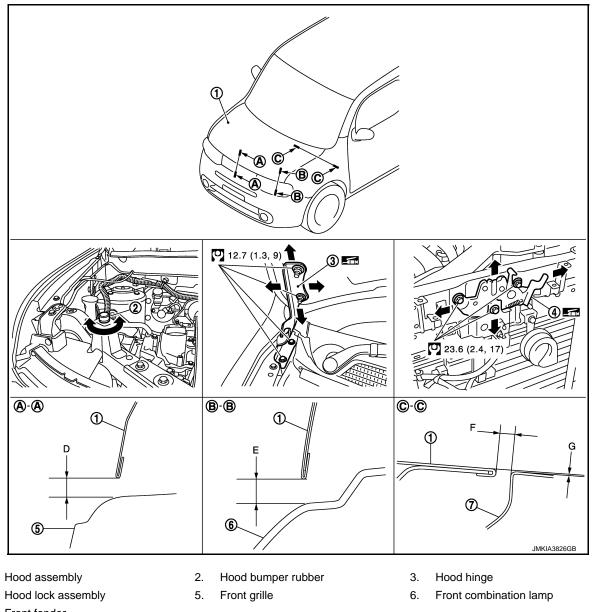
2.

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

• After installing, perform hood fitting adjustment. Refer to <u>DLK-158, "HOOD ASSEMBLY : Adjust-ment"</u>.

HOOD ASSEMBLY : Adjustment

INFOID:000000008452978



7. Front fender

1.

4.

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

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

Unit: mm (in)						
Portion				Standard	Difference (RH/LH)	
Hood – Front grille	<b>A – A</b>	D	Clearance	6.0 - 10.0 (0.236 - 0.394)	< 2.0 (0.079)	
Hood – Front combination lamp	<b>B</b> – B	Е	Clearance	6.0 - 10.0 (0.236 - 0.394)	< 2.0 (0.079)	
Hood – Front fender	C-C	F	Clearance	2.5 – 4.5 (0.098 – 0.177)	< 1.0 (0.039)	
	0-0	G	Surface height	- 1.0 – 1.0 (- 0.039 – 0.039)		

## HOOD

#### < REMOVAL AND INSTALLATION >

Remove hood lock and adjust the surface height of hood, front grill and front fender according to the fitting standard dimension, by rotating hood bumper rubber (body side).

[WITH INTELLIGENT KEY SYSTEM]

А

В

D

Ε

F

INFOID:00000008452979

- 2. Loosen hood hinge mounting nuts on the hood.
- Check that hood lock primary latch is securely engaged with striker by dropping hood from approximately 200 mm (7.874 in) height or by pressing lightly on the hood.
   CAUTION:

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

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

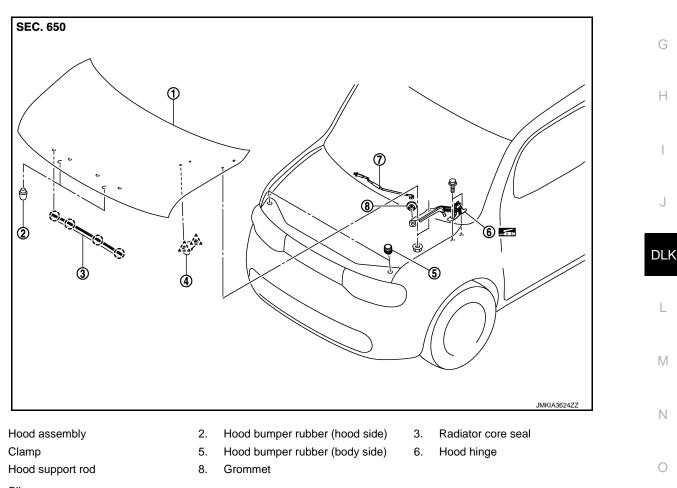
#### CAUTION:

1.

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

## HOOD HINGE

## HOOD HINGE : Exploded View



(_): Clip

1.

4.

7.

Pawl : <u>۲</u>

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

## HOOD HINGE : Removal and Installation

INFOID:000000008452980

## REMOVAL

- 1. Remove hood assembly. Refer to <u>DLK-157, "HOOD ASSEMBLY : Removal and Installation"</u>.
- 2. Remove front fender. Refer to DLK-164, "Removal and Installation".

## HOOD

#### < REMOVAL AND INSTALLATION >

- 3. Remove cowl top. Refer to EXT-19, "Removal and Installation"
- 4. Remove hood hinge mounting bolts, and then remove hood hinge.

#### **INSTALLATION**

Install in the reverse order of removal.

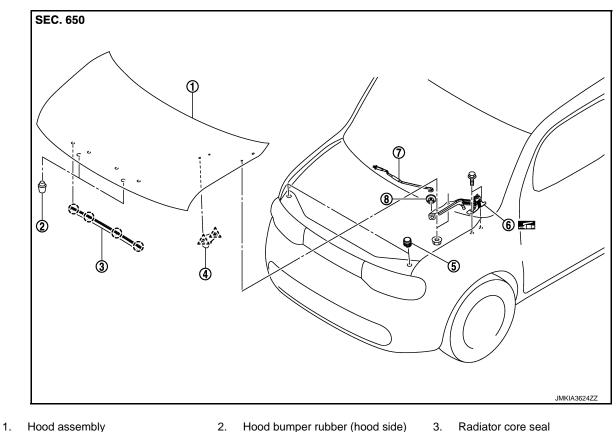
#### **CAUTION:**

- Check hood hinge rotating part for poor lubrication. If necessary, apply grease.
- After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-158, "HOOD ASSEMBLY : Adjust-</u> ment".

## HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View

INFOID:000000008452981



- Clamp 4.
- 7. Hood support rod
- Hood bumper rubber (body side) 8. Grommet

5.

- Radiator core seal
- Hood hinge 6.

(): Clip

```
ည္်: Pawl
```

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

## HOOD SUPPORT ROD : Removal and Installation

INFOID:000000008452982

#### REMOVAL

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

#### WARNING:

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

2. Pull hood support rod from grommet and remove.

## < REMOVAL AND INSTALLATION >

INSTALLATION Install in the reverse order of removal.

DLK

Μ

Ν

Ο

Ρ

А

В

С

D

Е

F

G

Н

J

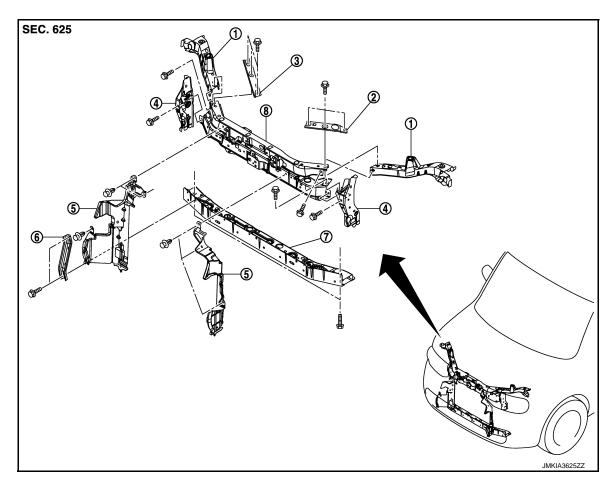
## < REMOVAL AND INSTALLATION >

## **RADIATOR CORE SUPPORT**

Exploded View

INFOID:000000008452983

[WITH INTELLIGENT KEY SYSTEM]



- Radiator core support side 1.
- 2. Radiator core support upper bracket 3. (LH)
- Radiator core support upper bracket (RH)

Radiator core lower stay

6.

- 4. Radiator core reinforcement side Radiator core support lower
- 8. Radiator core support upper

Air guide

INFOID:00000008452984

#### Removal and Installation

#### RADIATOR CORE SUPPORT UPPER REMOVAL

- 1. Remove front bumper fascia and bumper reinforcement. Refer to EXT-12, "Removal and Installation".
- 2. Remove hood lock. Refer to DLK-185, "Removal and Installation".
- Remove front combination lamps (LH/RH). Refer to EXL-168, "Removal and Installation".
- Remove air guide.

7.

- 5. Remove horn. Refer to HRN-4, "Removal and Installation".
- Remove crash zone sensor. Refer to <u>SR-21, "Removal and Installation".</u>

5.

- 7. Remove ambient sensor. Refer to HAC-112, "Removal and Installation".
- 8. Disconnect all harness from radiator core support upper.
- 9. Remove air duct assembly. Refer to EM-24, "Removal and Installation".
- 10. Remove radiator core support upper bracket (LH/RH).
- 11. Remove mounting bolts, and then remove radiator core support upper.

#### INSTALLATION

Revision: 2012 August

## **RADIATOR CORE SUPPORT**

## [WITH INTELLIGENT KEY SYSTEM]

< REMOVAL AND INSTALLATION > Install in the reverse order of removal. CAUTION: А • After installation, adjust the following parts. - Front combination lamp: Refer to EXL-164, "Aiming Adjustment Procedure". В RADIATOR CORE SUPPORT LOWER REMOVAL 1. Remove front bumper fascia and bumper reinforcement. Refer to EXT-12, "Removal and Installation". 2. Remove air guide. Remove radiator core lower stay. D 4. Remove clips of fender protector. Remove floor under cover. Refer to EXT-22, "Removal and Installation". 6. Use a belts (A) to suspend it to prevent it from falling. Е **CAUTION:** Never damage radiator and condenser. F (A) JMKIA3809ZZ Н 7. Remove mounting bolts, and then remove radiator core support lower. **INSTALLATION** Install in the reverse order of removal. CAUTION: • After installation, adjust the following parts. - Front combination lamp: Refer to EXL-164, "Aiming Adjustment Procedure". DLK L Μ Ν Ρ

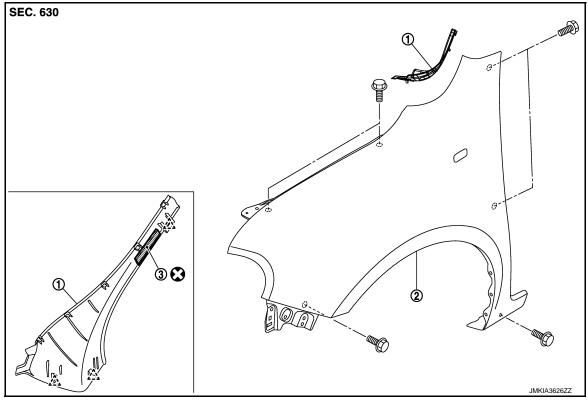
## < REMOVAL AND INSTALLATION >

# FRONT FENDER

Exploded View

INFOID:000000008452985

[WITH INTELLIGENT KEY SYSTEM]



1. Front fender cover

- Front fender assembly
- 3. Doube-faced adhesive tape [t : 2.0 mm (0.079 in)]

Carlos Service Service

## Removal and Installation

INFOID:000000008452986

#### **CAUTION:**

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

#### REMOVAL

1. Remove side turn signal lamp. Refer to EXL-175, "Removal and Installation".

2.

- 2. Remove front grille. Refer to EXT-17, "Removal and Installation".
- 3. Remove front bumper fascia. Refer to EXT-12, "Removal and Installation".
- 4. Remove front combination lamp. Refer to EXL-168, "Removal and Installation".
- 5. Remove clips and screws of fender protector. Refer to <u>EXT-21, "FENDER PROTECTOR : Removal and Installation"</u>.
- 6. Remove front fender cover.
- 7. Remove mounting bolts and remove front fender.
  - CAUTION: An viscous urethane foam is installed on the back surface of front fender. When removing the front fender, be careful to not deform the front fender while performing the procedure and removing the viscous urethane foam a little at a time.

INSTALLATION Install in the reverse order of removal. CAUTION:

## FRONT FENDER

# 

< REMOVAL AND INSTALLATION >	[WITH INTELLIGENT KEY SYSTEM]	
• After installation, apply the touch-up paint (the body color) bolts.	onto the head of front fender mounting	٨
<ul> <li>After installation, adjust the following part.</li> </ul>		А
<ul> <li>Hood assembly : Refer to <u>DLK-158, "HOOD ASSEMBLY : Ad</u></li> <li>Front door : Refer to <u>DLK-167, "DOOR ASSEMBLY : Adjustm</u></li> </ul>	justment".	
<ul> <li>Front combination lamp : Refer to <u>EXL-163, "Description"</u>.</li> </ul>	ient.	В
		С
		D
		Е
		F
		G
		0
		Η
		J
		DLK
		L
		M
		Ν

Ο

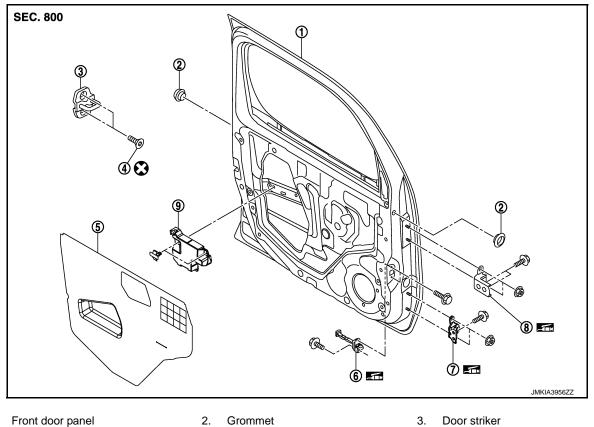
Ρ

#### < REMOVAL AND INSTALLATION >

## FRONT DOOR DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID-00000008452987



- 1.
- 4. TORX bolt 5. Sealing screen
- 7. Door hinge (lower) 8. Door hinge (upper)

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

## DOOR ASSEMBLY : Removal and Installation

INFOID:000000008452988

#### **CAUTION:**

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

6.

Door check link

#### 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

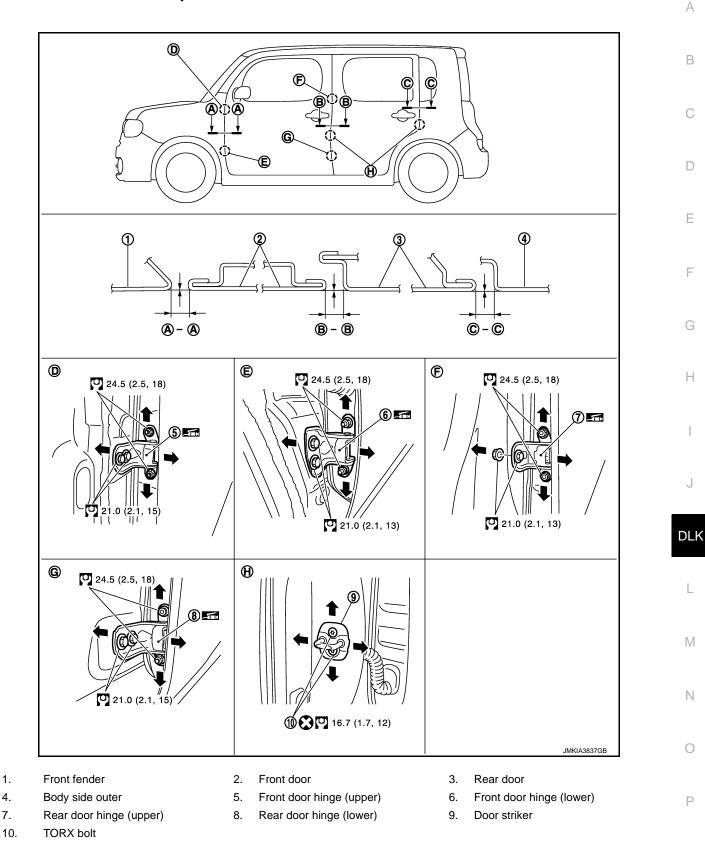
Install in the reverse order of removal.

- 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-167, "DOOR ASSEMBLY : Adjust-</u> ment".
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

#### [WITH INTELLIGENT KEY SYSTEM]

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

INFOID:000000008452989



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

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

1.

4.

7.

#### < REMOVAL AND INSTALLATION >

			Unit : mm (in)
Portion		Clearance	Surface height
Front fender – Front door A – A		3.5 – 5.5 (0.138 – 0.217)	- 1.0 - 1.0 (- 0.039 - 0.039)
Front door – Rear door	<b>B</b> – B	3.4 – 5.4 (0.134 – 0.213)	- 1.0 - 1.0 (- 0.039 - 0.039)

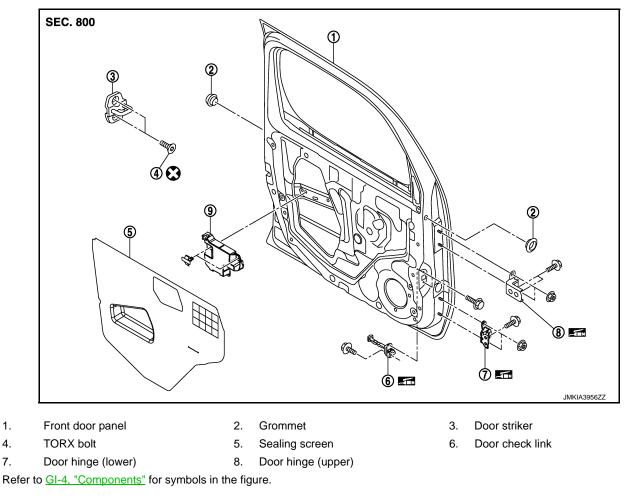
- 1. Remove front fender. Refer to <u>DLK-164, "Removal and Installation"</u>.
- 2. Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of front door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- 5. Loosen door hinge mounting bolts on body side.
- 6. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- 8. Install front fender. Refer to refer to <u>DLK-164</u>, "Removal and Installation".

#### DOOR STRIKER ADJUSTMENT

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

## DOOR STRIKER : Exploded View

INFOID:000000008452990



## DOOR STRIKER : Removal and Installation

REMOVAL

1.

4.

7.

Revision: 2012 August

## **DLK-168**

2013 CUBE

#### < REMOVAL AND INSTALLATION >

Remove TORX bolts, and then remove door striker.

#### **INSTALLATION**

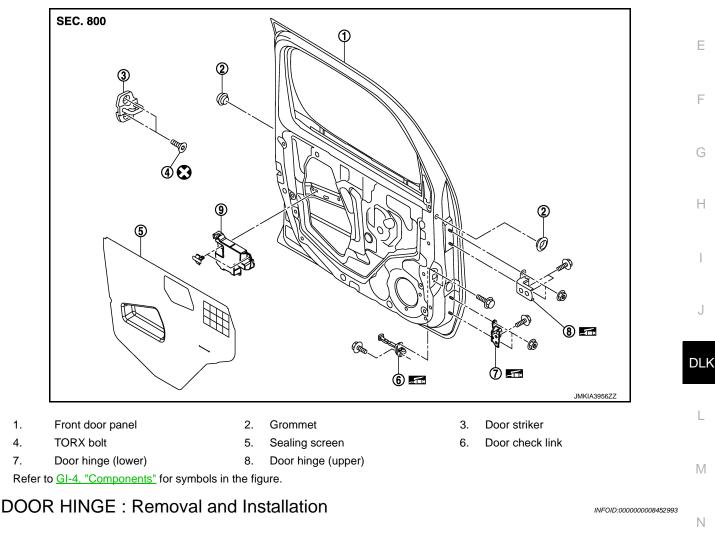
Install in the reverse order of removal.

#### CAUTION:

- Check front door open/close, lock/unlock operation after installation.
- After installation, be sure to perform the fitting adjustment. Refer to <u>DLK-167, "DOOR ASSEMBLY :</u> Adjustment".

## DOOR HINGE

## DOOR HINGE : Exploded View



## REMOVAL

1.

4.

7.

**CAUTION:** 

- Perform work with 2 workers, because of its heavy weight.
- When removing and installing front door assembly, support door with a jack and shop cloth to protect door and body.
- Remove front fender. Refer to DLK-164, "Removal and Installation". 1.
- Remove front door assembly. Refer to <u>DLK-166, "DOOR ASSEMBLY : Removal and Installation"</u>. 2.
- 3. Remove front door hinge mounting bolts (body side), and then remove front door hinge.

#### INSTALLATION

Install in the reverse order of removal.

CAUTION:

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

## **DLK-169**

Ρ

В

D

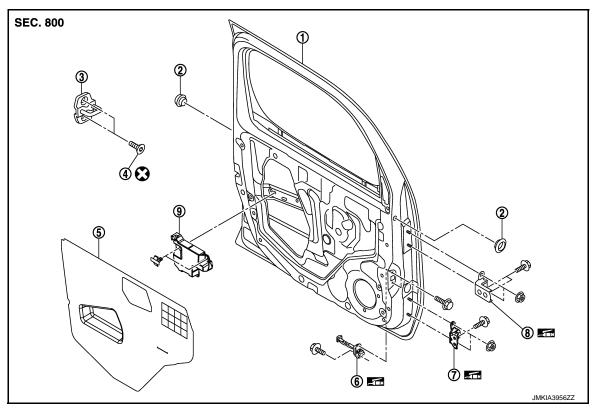
#### < REMOVAL AND INSTALLATION >

- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-167, "DOOR ASSEMBLY : Adjust-ment"</u>.

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

DOOR CHECK LINK : Exploded View

INFOID:000000008452994



- 1. Front door panel
- 4. TORX bolt
- Grommet
   Sealing screen

- 3. Door striker
- 6. Door check link
- 7. Door hinge (lower) 8. Door hinge (upper)

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

## DOOR CHECK LINK : Removal and Installation

#### REMOVAL

- 1. Remove front door finisher. Refer to INT-12, "Removal and Installation".
- 2. Fully close the front door window.
- 3. Remove sealing screen.

NOTE:

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

- 4. Remove front door speaker. Refer to AV-54. "Removal and Installation".
- 5. Remove mounting bolts of door check link on the vehicle.
- 6. Remove mounting bolts of door check link on door panel.
- 7. Take door check link out from the hole of door panel.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

Check front door open/close operation after installation.

## **DLK-170**

#### 2013 CUBE

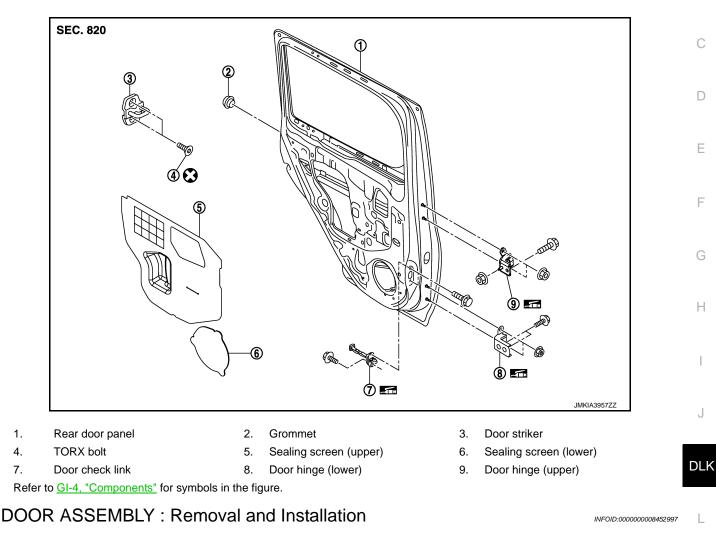
## [WITH INTELLIGENT KEY SYSTEM]

# < REMOVAL AND INSTALLATION >

## REAR DOOR DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:000000008452996



#### **CAUTION:**

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

#### REMOVAL

- 1. Remove rear door harness grommet, and then pull out door harness from the vehicle.
- Disconnect rear door harness connector. 2.
- 3. Remove mounting bolts of door check link on the vehicle.
- 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-172, "DOOR ASSEMBLY : Adjust-</u> ment".
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

## **DLK-171**

Ν

Ρ

А

В

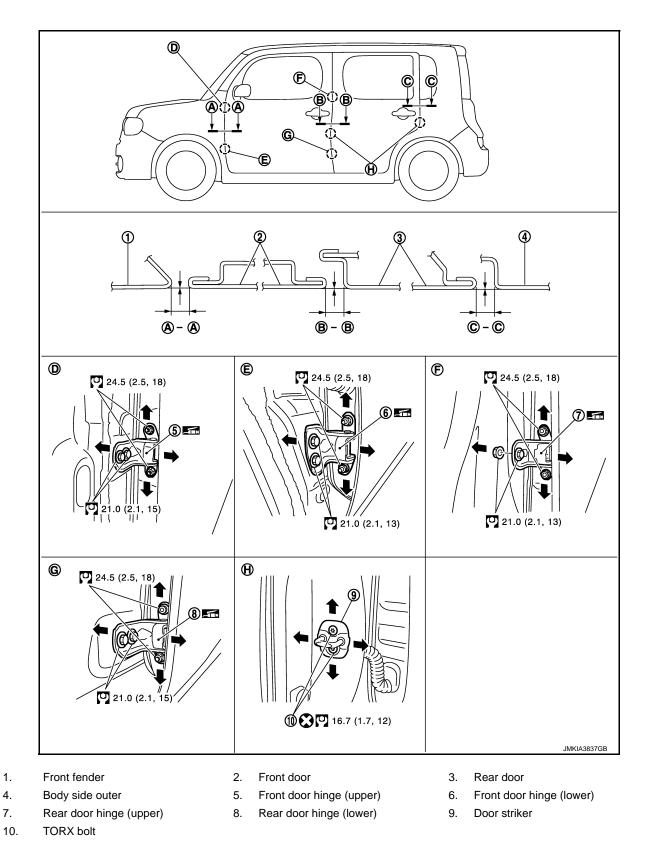
## **REAR DOOR**

## < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

## DOOR ASSEMBLY : Adjustment

INFOID:000000008452998



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.

## **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

D

Е

F

INFOID:000000008452999

			Unit: mm (in)	
Portion		Clearance	Surface height	А
Front door – Rear door	B – B	3.4 – 5.4 (0.134 – 0.213)	-1.0 - 1.0 (-0.039 - 0.039)	
Rear door – Body side outer	<b>C</b> – <b>C</b>	3.5 – 5.5 (0.138 – 0.217)	-1.0 – 1.0 (-0.039 – 0.039)	В

1. Remove center pillar garnish (upper/lower). Refer to INT-16, "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.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- 8. Install center pillar garnish (upper/lower). Refer to INT-16, "Removal and Installation".

#### DOOR STRIKER ADJUSTMENT

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

## DOOR STRIKER : Exploded View

SEC. 820 Н 2 **((((**)) DLK ඛ Μ Ν JMKIA3957ZZ Grommet Door striker Rear door panel 2. 3. TORX bolt 5. Sealing screen (upper) 6. Sealing screen (lower) Door hinge (upper) Door check link 8. Door hinge (lower) 9. Ρ

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

## DOOR STRIKER : Removal and Installation

#### INFOID:000000008453000

#### REMOVAL

1.

4.

7.

Remove TORX bolts, and then remove door striker.

#### < REMOVAL AND INSTALLATION >

#### INSTALLATION

Install in the reverse order of removal.

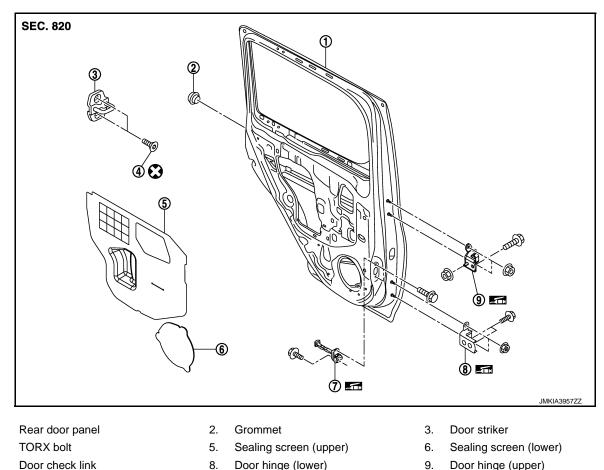
#### CAUTION:

- Check rear door open/close, lock/unlock operation after installation.
- After installation, be sure to perform the fitting adjustment. Refer to <u>DLK-172, "DOOR ASSEMBLY :</u> <u>Adjustment"</u>.

## DOOR HINGE

## DOOR HINGE : Exploded View

INFOID:000000008453001



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

## DOOR HINGE : Removal and Installation

INFOID:000000008453002

#### **CAUTION:**

1.

4.

7.

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

#### REMOVAL

- 1. Remove rear door assembly. Refer to <u>DLK-171, "DOOR ASSEMBLY : Removal and Installation"</u>.
- 2. Remove center pillar garnish (upper/lower). Refer to INT-16, "Removal and Installation".
- 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.

## **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

• When removing and installing rear door assembly, perform the fitting adjustment. Refer to DLK-172. "DOOR ASSEMBLY : Adjustment".

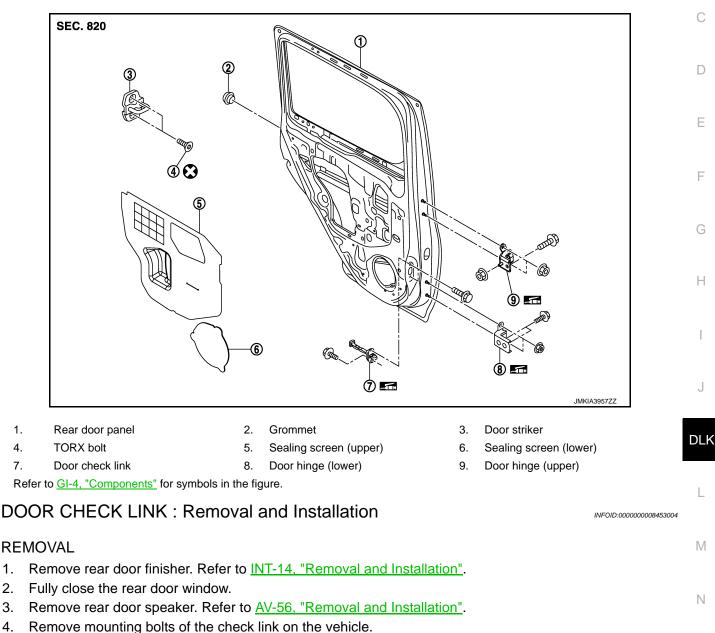
• After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts. DOOR CHECK LINK

## DOOR CHECK LINK : Exploded View

#### INFOID:000000008453003

А

В



- 4.
- Remove mounting bolts of the check link on door panel. 5. Take door check link out from the hole of door panel. 6.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

1.

4.

7.

1.

2.

Check rear door open/close operation after installation.

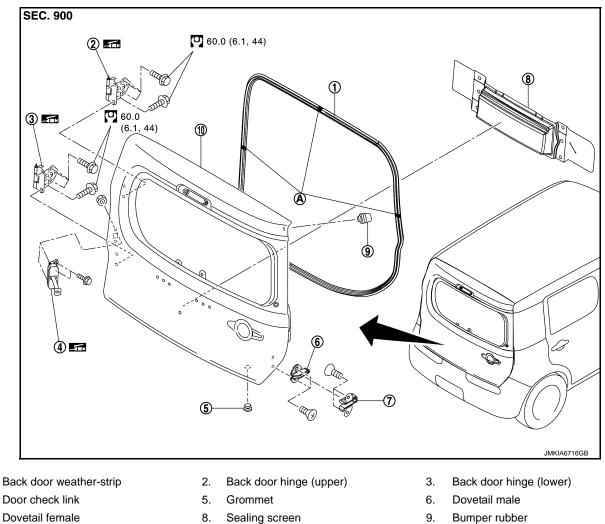
Ρ

## < REMOVAL AND INSTALLATION > **BACK DOOR**

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Exploded View

INFOID:000000008453005



7. Dovetail female 10. Back door panel 8. Sealing screen

: Center mark А

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

INFOID:000000008453006

## BACK DOOR ASSEMBLY : Removal and Installation

#### **CAUTION:**

1.

4.

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

#### REMOVAL

- Remove back door finisher lower. Refer to INT-27, "Removal and Installation". 1.
- 2. Remove luggage side finisher (LH) (upper/lower). Refer to INT-24, "Removal and Installation".

#### < REMOVAL AND INSTALLATION >

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

# [WITH INTELLIGENT KEY SYSTEM]

7

C

	$    \eta   H   M$ JMKIA3963ZZ	
		D
4.	Remove back door harness grommet, and then pull out the harness from the vehcle.	
5.	Support back door with the proper material to prevent it from falling.	_
6.	Remove mounting bolt of door check link on the vehcle.	Е
7.	Remove back door hinge mounting bolts (back door side), and then remove back door assembly.	
8.	<ul> <li>Remove the following parts after removing back door assembly.</li> <li>Back door finisher upper</li> <li>Sealing screen</li> <li>Dovetail (male)</li> </ul>	F
	<ul> <li>Dovetail (female)</li> <li>Door check link</li> <li>Grommet</li> <li>Bumper rubber</li> </ul>	G
Inst CA	TALLATION all in the reverse order of removal. UTION:	
• A	heck back door open/close, lock/unlock operation after installation. fter installation, perform fitting adjustment. Refer to <u>DLK-178, "BACK DOOR ASSEMBLY : Adjust-</u> l <u>ent"</u> .	J

DLK

L

Μ

Ν

Ο

Ρ

А

В

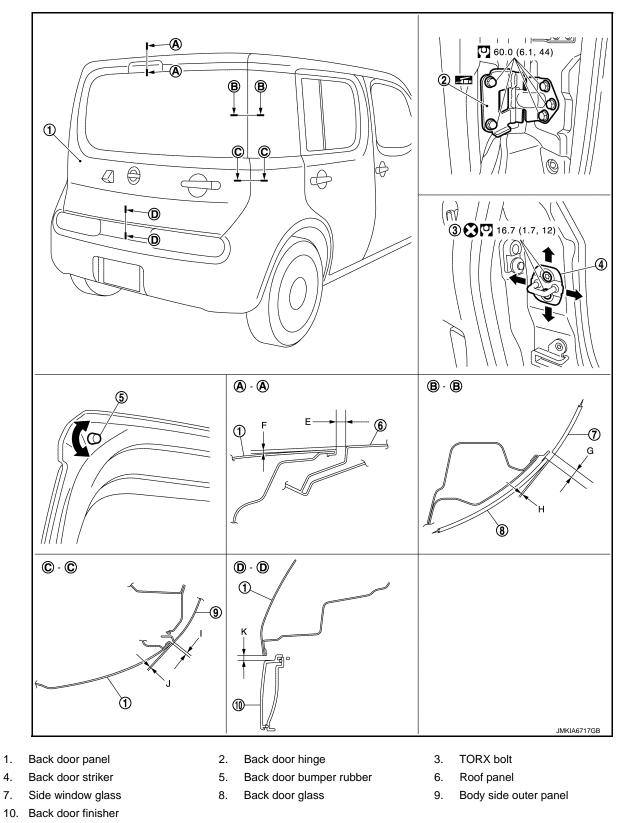
С

#### < REMOVAL AND INSTALLATION >

## BACK DOOR ASSEMBLY : Adjustment

INFOID:000000008453007

[WITH INTELLIGENT KEY SYSTEM]



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.

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

1. Loosen back door striker mounting bolts.

2. Loosen bumper rubber.

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

#### **CAUTION:**

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

#### BACK DOOR STRIKER ADJUSTMENT

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

J

Е

F

Н

# DLK

L

Μ

Ν

Ρ

Revision: 2012 August

#### < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

Dovetail male

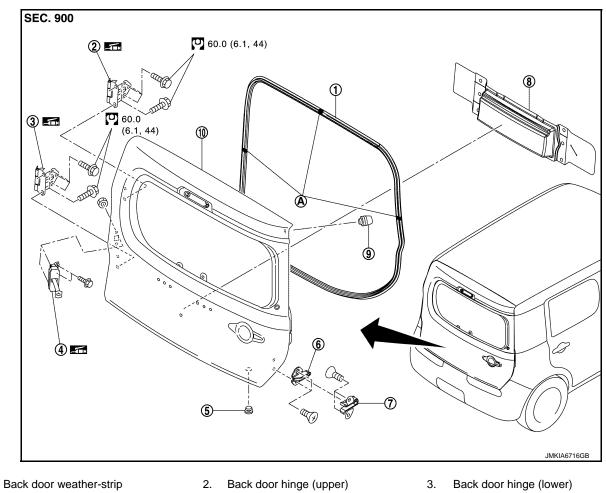
Bumper rubber

6.

9.

## BACK DOOR STRIKER : Exploded View

INFOID:000000008453008



4. Door check link

1.

- 7. Dovetail female
- 10. Back door panel
- Refer to <u>GI-4, "Components"</u> for symbols in the figure.

## BACK DOOR STRIKER : Removal and Installation

5.

8.

А

Grommet

Sealing screen

: Center mark

#### REMOVAL

Remove mounting bolts, and then remove back door striker.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

- Check back door open/close operation after installation.
- When removing and installing back door striker, be sure to perform the fitting adjustment. Refer to <u>DLK-178, "BACK DOOR ASSEMBLY : Adjustment"</u>.

## BACK DOOR HINGE

INFOID:000000008453009

Revision: 2012 August

## **DLK-180**

#### 2013 CUBE

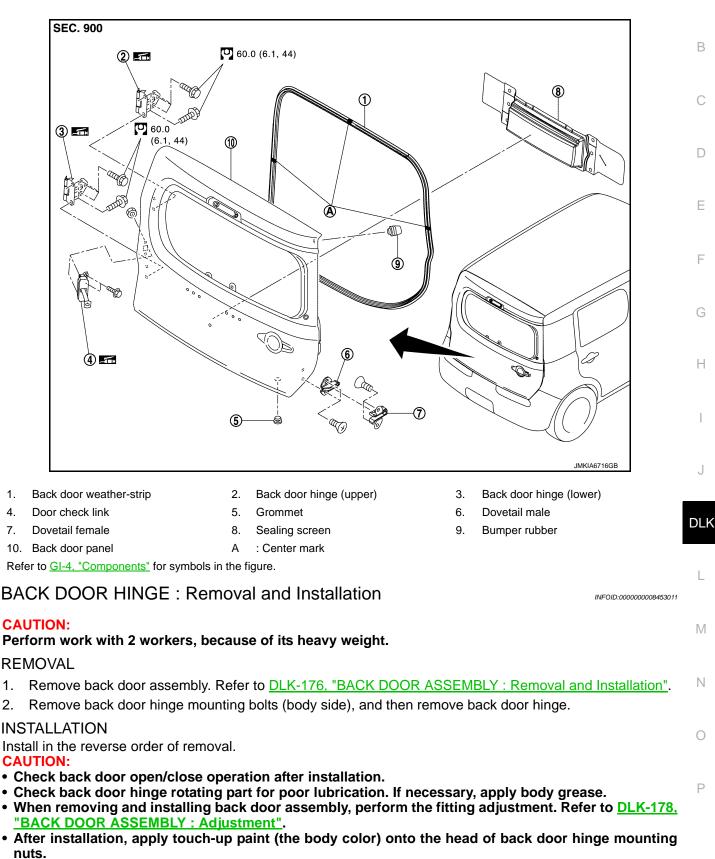
#### < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

### BACK DOOR HINGE : Exploded View

#### INFOID:000000008453010

А



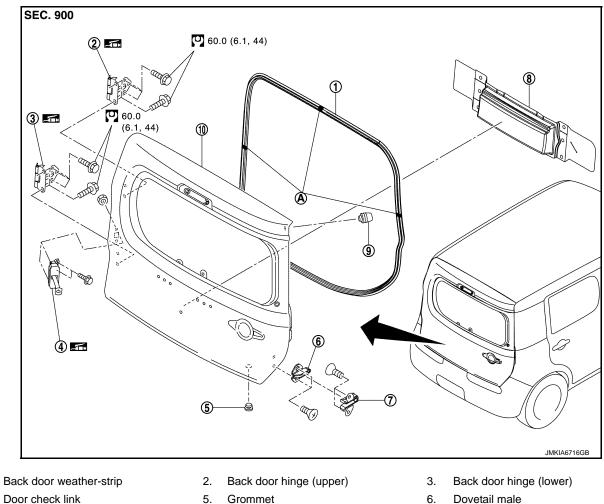
DOOR CHECK LINK

#### < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

# DOOR CHECK LINK : Exploded View

INFOID:000000008453012



Door check link 4.

1.

- 7. Dovetail female
- 10. Back door panel

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

# DOOR CHECK LINK : Removal and Installation

#### REMOVAL

Remove back door finisher lower. Refer to <u>INT-27, "Removal and Installation"</u>.

8.

А

Sealing screen

: Center mark

- 2. Remove sealing screen.
- NOTE:

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

- 3. Remove mounting bolts of door check link on the vehicle.
- 4. Remove mounting nuts of door check link on the back door panel.
- 5. Take door check link out from the hole of back door panel.

#### **INSTALLATION**

Install in the reverse order of removal. **CAUTION:** Check back door open/close operation after installation. DOVETAIL

# **DLK-182**

#### 2013 CUBE

- Dovetail male
- 9. Bumper rubber

INFOID:000000008453013

#### [WITH INTELLIGENT KEY SYSTEM]

### < REMOVAL AND INSTALLATION > **DOVETAIL : Exploded View**

#### INFOID:000000008453014

А

В

D

Ε

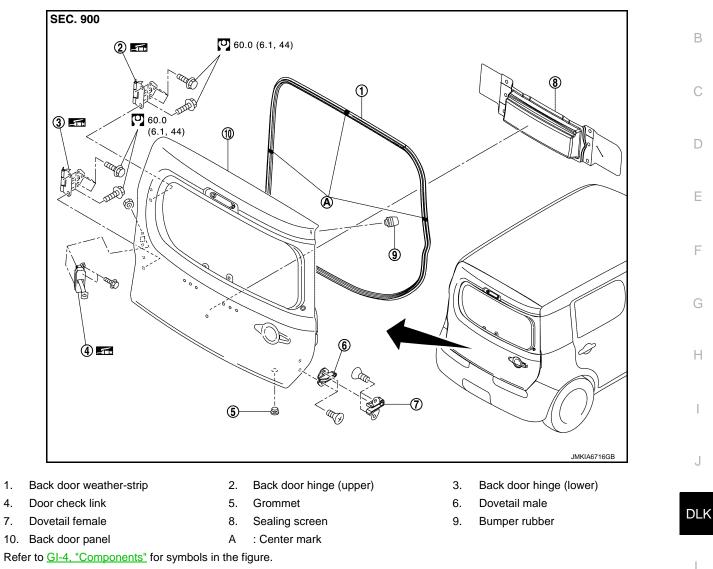
F

Н

J

L

Μ



# **DOVETAIL : Removal and Installation**

#### REMOVAL

1.

4.

7.

- 1. Remove mounting bolts, and then remove dovetai (male).
- Remove mounting bolts, and then remove dovetai (female). 2.

#### **INSTALLATION** Install in the reverse order of removal. **CAUTION:** Check back door open/close operation after installation. BACK DOOR WEATHER-STRIP

INFOID:000000008453015

Ν

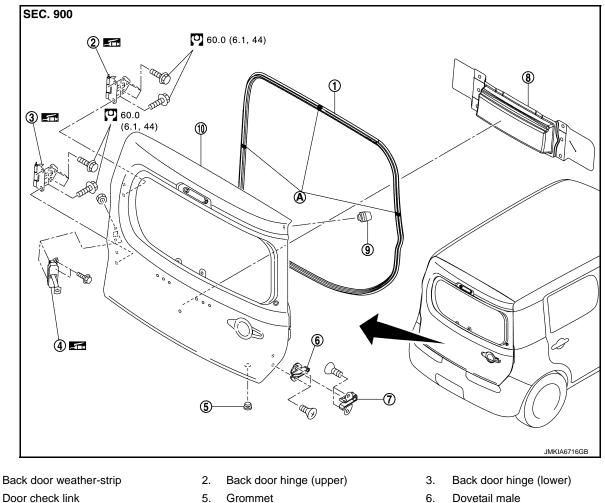
Ρ

#### < REMOVAL AND INSTALLATION >

# BACK DOOR WEATHER-STRIP : Exploded View

INFOID:000000008453016

[WITH INTELLIGENT KEY SYSTEM]



Door check link 4.

1.

- 7. Dovetail female
- 10. Back door panel

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

### BACK DOOR WEATHER-STRIP : Removal and Installation

8.

А

Sealing screen

: Center mark

INFOID:000000008453017

#### REMOVAL

1. Pull and remove engagement with body from weather-strip joint. **CAUTION:** 

### Never pull strongly on weather-strip.

#### INSTALLATION

1. Working from the upper section, align weather-strip center mark (A) with vehicle center mark (cutting position) and install weather-strip onto the vehicle.

6.

9.

Bumper rubber

2. Pull weather-strip gently to ensure that there is no loose section. NOTE:

Make sure that weather-strip is fit tightly at each corner and luggage rear plate.

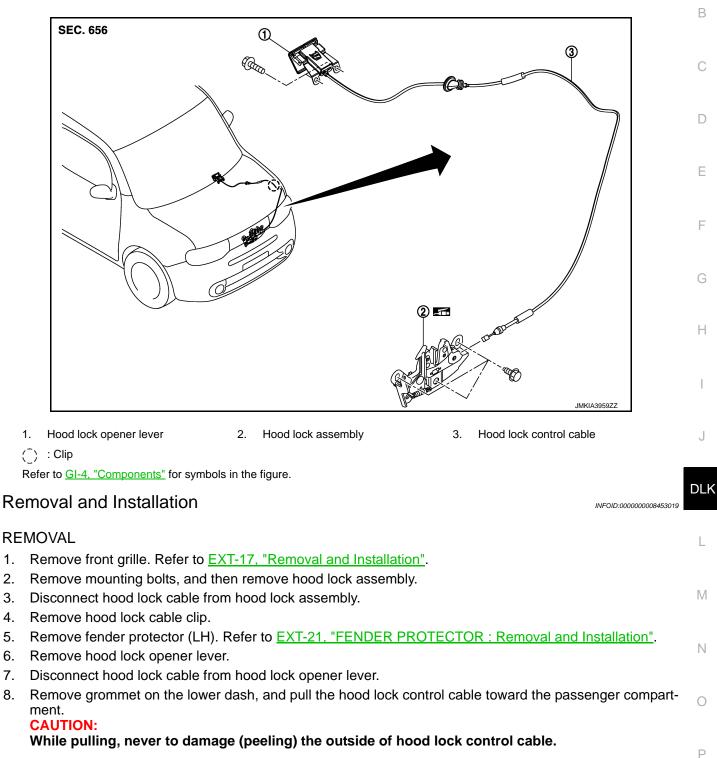
# **DLK-184**

## < REMOVAL AND INSTALLATION > HOOD LOCK

# **Exploded View**

INFOID:000000008453018

А



#### **INSTALLATION**

Install in the reverse order of removal.

#### CAUTION:

2.

3. 4.

5.

7.

8.

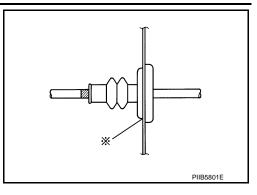
Never to bend cable too much, keeping the radius 100 mm (3.937 in) or more.

# **DLK-185**

# 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-158, "HOOD ASSEMBLY : Adjust-ment"</u>.
- After installation, perform hood lock control inspection. Refer to <u>DLK-186, "Inspection"</u>.

#### Inspection

INFOID:000000008453020

#### NOTE:

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

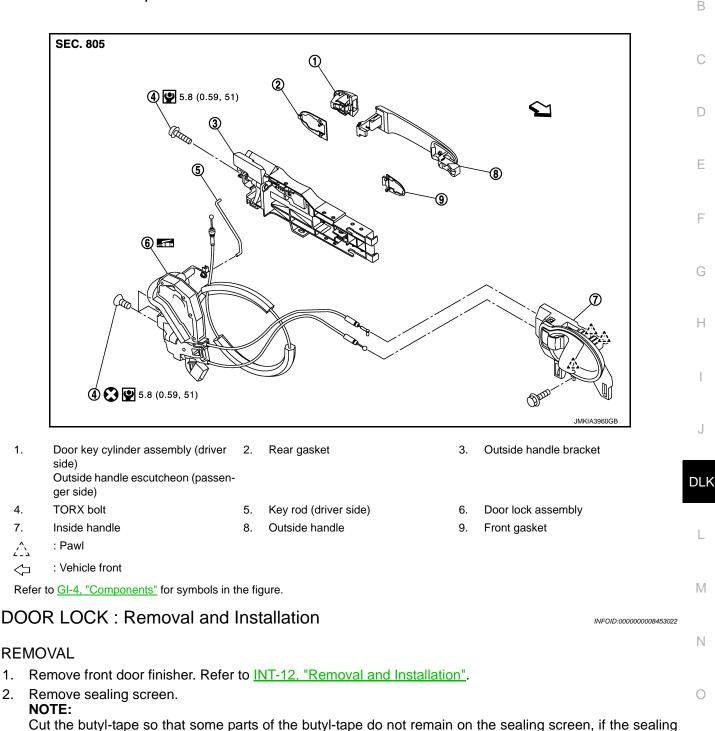
- 1. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] by hood weight.
- 2. While operating hood opener, carefully check that the front end of hood is raised by approximately 20.0 mm (0.787 in). Also check that hood opener returns to the original position.
- 3. Check that hood opener operating is condition 49 N (5.0 kg, 11.0 lb) or below.
- Install so that static closing face of hood is 94 490 N⋅m (9.6 50.0 kg-m, 69 361 ft lb).
   NOTE:
  - Exert vertical force on right side and left side of hood lock.
  - Never press simultaneously both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

< REMOVAL AND INSTALLATION >

# FRONT DOOR LOCK DOOR LOCK

DOOR LOCK : Exploded View

INFOID:000000008453021



- 3. Remove front door glass. Refer to <u>GW-18, "Removal and Installation"</u>.
- 4. Remove front door lower sash (rear). Refer to GW-18, "Removal and Installation".
- 5. Remove outside handle. Refer to DLK-189, "OUTSIDE HANDLE : Removal and Installation".
- 6. Remove inside handle. Refer to <u>DLK-188, "INSIDE HANDLE : Removal and Installation"</u>.
- 7. Remove door lock assembly TORX bolts.
- 8. Disconnect door lock actuator connector, and then remove door lock assembly.

screen is reused.

# **DLK-187**

Ρ

А

< REMOVAL AND INSTALLATION >

#### INSTALLATION

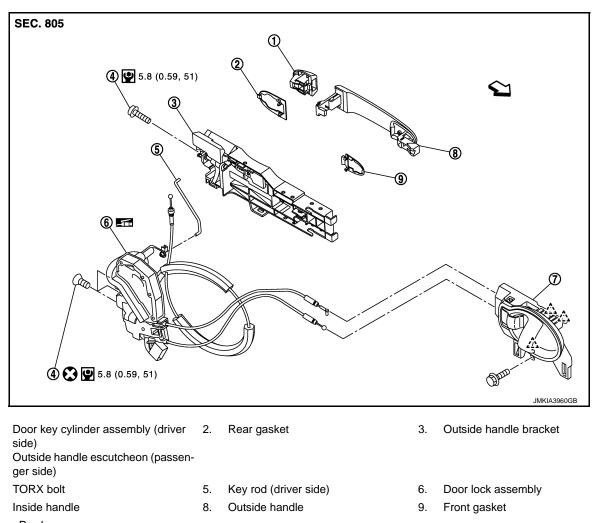
Install in the reverse order of removal.

#### **CAUTION:**

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.
- **INSIDE HANDLE**

# **INSIDE HANDLE : Exploded View**

INFOID:000000008453023



^ : Pawl

1.

4.

7.

: Vehicle front

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

### INSIDE HANDLE : Removal and Installation

INFOID:000000008453024

#### REMOVAL

- 1. Remove front door finisher. Refer to INT-12, "Removal and Installation".
- 2. Remove inside handle mounting bolts, slide handle toward rear of vehicle, disengage handle from door panel, and remove inside handle.

#### INSTALLATION

Install in the reverse order of removal.

Check door open/close, lock/unlock operation after installation. OUTSIDE HANDLE

# **DLK-188**

## FRONT DOOR LOCK

#### < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

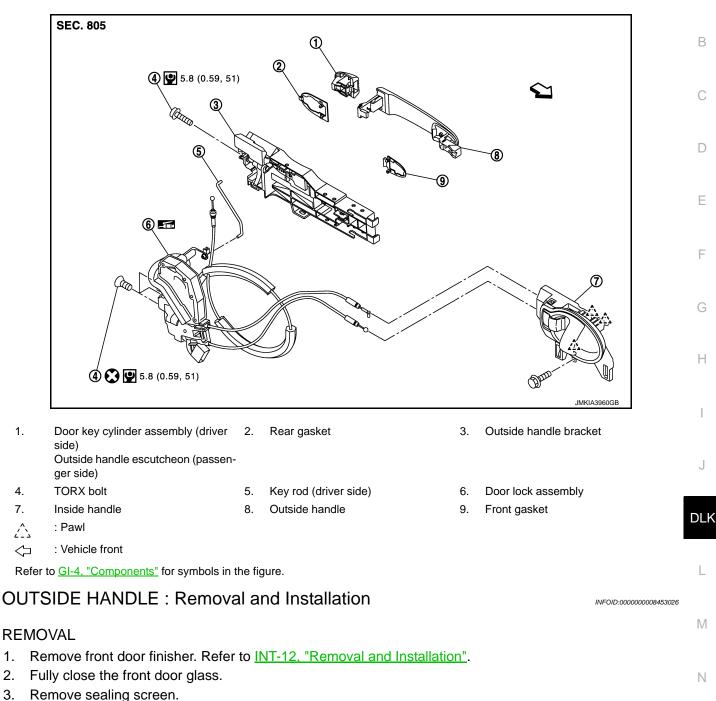
#### **OUTSIDE HANDLE : Exploded View**

#### INFOID:000000008453025

А

J

Ρ



# NOTE:

1.

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

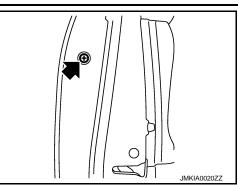
- Remove front door lower sash (rear). Refer to <u>GW-18, "Removal and Installation"</u>.
- 5. Disconnect key rod (driver side).
- 6. Disconnect door antenna and door request switch connector and remove harness clamp (with Intelligent Key system) on outside handle bracket.

# FRONT DOOR LOCK

#### < REMOVAL AND INSTALLATION >

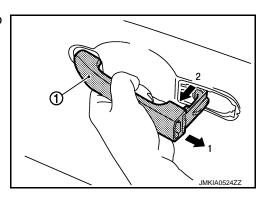
7. Remove door side grommet, and loosen TORX bolt from grommet hole.

#### [WITH INTELLIGENT KEY SYSTEM]



8. While pulling outside handle, remove door key cylinder assembly (diver side) or outside handle escutcheon (passenger side).

9. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



JMKIA0560ZZ

- 10. Remove front gasket and rear gasket.
- 11. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 12. Reach in to separate outside handle cable connection on outside handle bracket.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

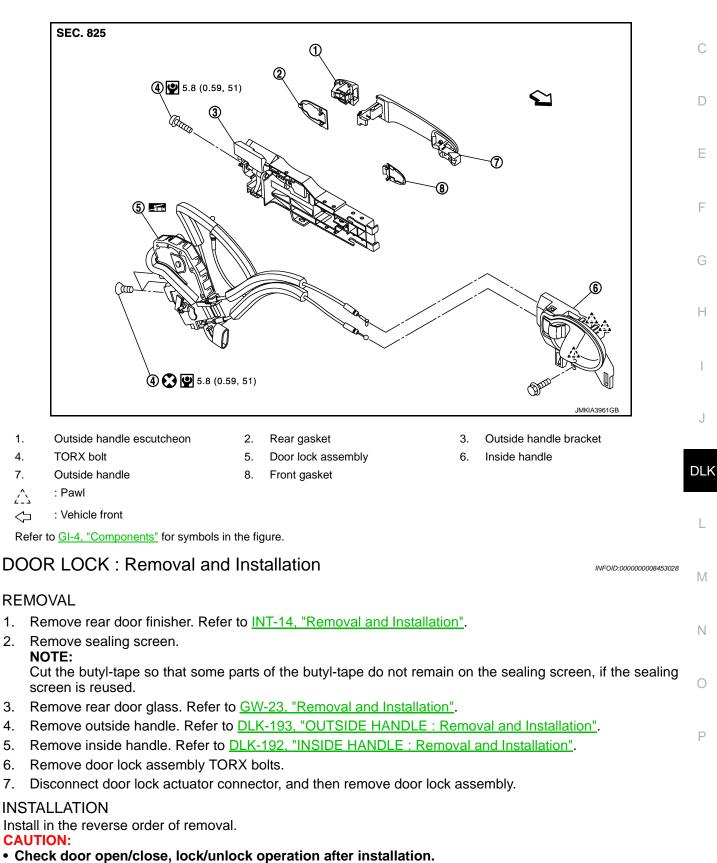
- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

#### < REMOVAL AND INSTALLATION >

# REAR DOOR LOCK DOOR LOCK

DOOR LOCK : Exploded View

INFOID:000000008453027



Revision: 2012 August

#### **DLK-191**

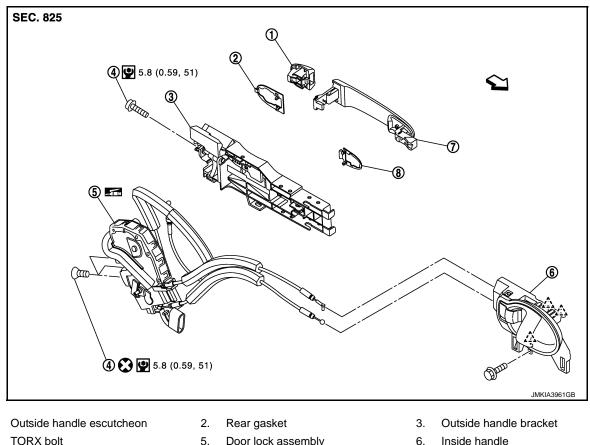
A

В

#### • Check door lock cable is properly engaged with outside handle bracket. INSIDE HANDLE

**INSIDE HANDLE : Exploded View** 

INFOID:000000008453029



- 4. TORX bolt
- 5. Door lock assembly

Front gasket

8.

- Outside handle 7.
- : Pawl  $\hat{\Box}$

1.

: Vehicle front  $\triangleleft$ 

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

# **INSIDE HANDLE : Removal and Installation**

INFOID:000000008453030

#### REMOVAL

- 1. Remove rear door finisher. Refer to INT-14, "Removal and Installation".
- Remove inside handle mounting bolts, slide handle toward rear of vehicle, disengage handle from door 2. panel, and remove inside handle.

6.

#### INSTALLATION

Install in the reverse order of removal. **CAUTION:** Check door open/close, lock/unlock operation after installation. **OUTSIDE HANDLE** 

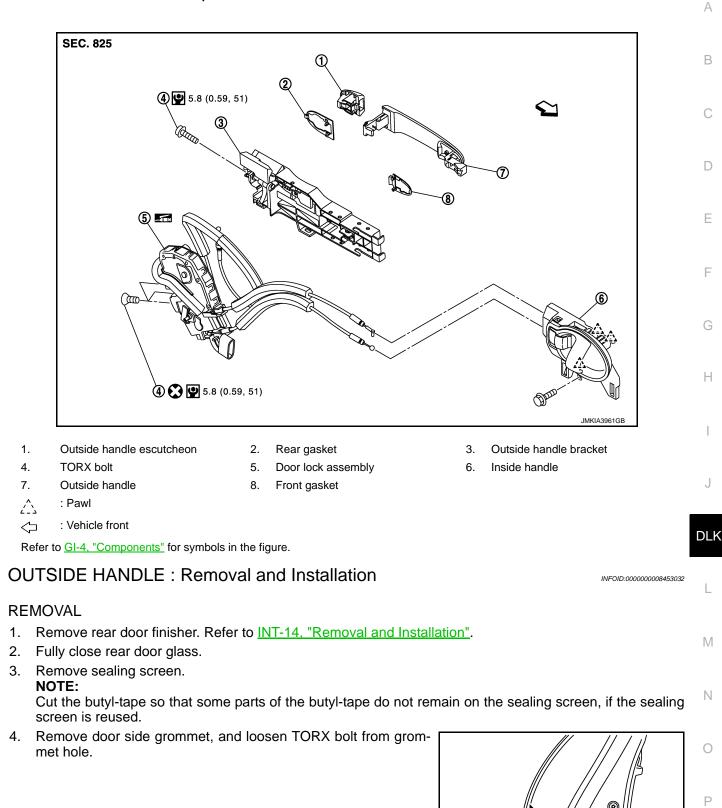
# **REAR DOOR LOCK**

#### < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

# **OUTSIDE HANDLE : Exploded View**

#### INFOID:000000008453031



JMKIA1467ZZ

#### Revision: 2012 August

# REAR DOOR LOCK

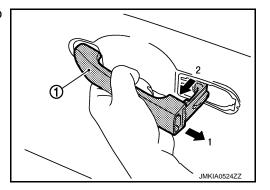
#### < REMOVAL AND INSTALLATION >

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



[WITH INTELLIGENT KEY SYSTEM]

6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



JMKIA0560ZZ

- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 9. Reach in to separate outside handle cable connection on outside handle bracket.

#### **INSTALLATION**

Install in the reverse order of removal.

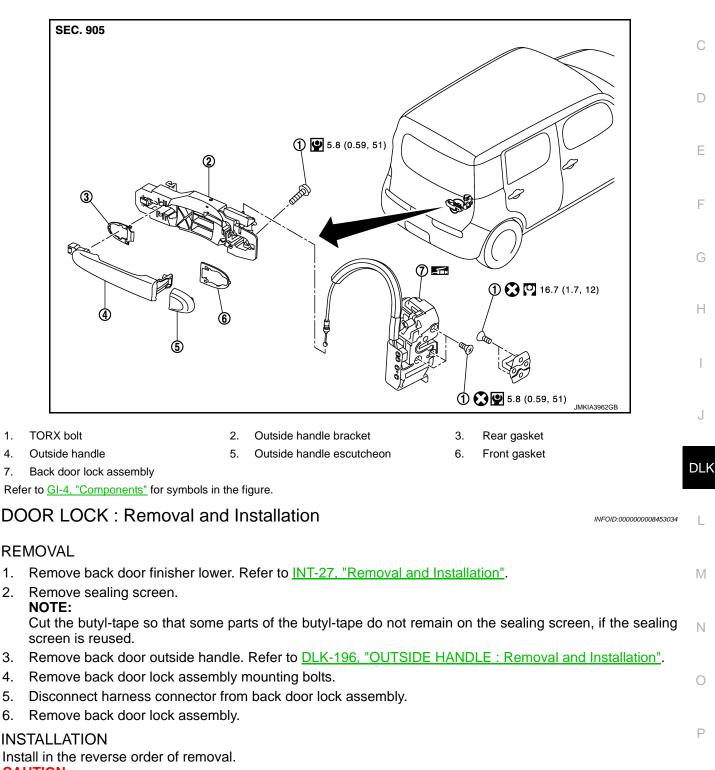
#### **CAUTION:**

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

# BACK DOOR LOCK DOOR LOCK

DOOR LOCK : Exploded View

INFOID:000000008453033



CAUTION:

6.

1.

4.

7.

- · Check back door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

OUTSIDE HANDLE

# **DLK-195**

### А

В

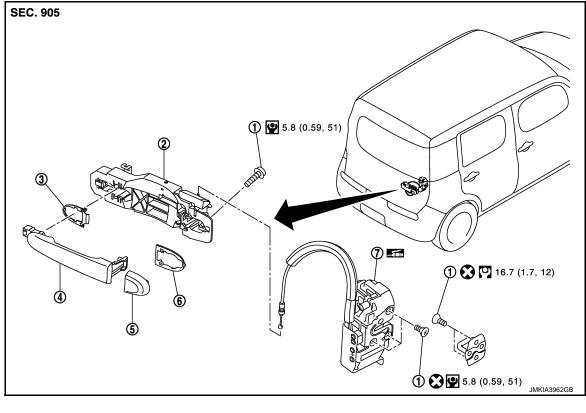
# BACK DOOR LOCK

#### < REMOVAL AND INSTALLATION >

### **OUTSIDE HANDLE : Exploded View**

INFOID:000000008453035

[WITH INTELLIGENT KEY SYSTEM]



1. TORX bolt

4.

2. Outside handle bracket

Outside handle escutcheon

- 3. Rear gasket
- 6. Front gasket

7. Back door lock assembly

Outside handle

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

# OUTSIDE HANDLE : Removal and Installation

#### INFOID:000000008453036

#### REMOVAL

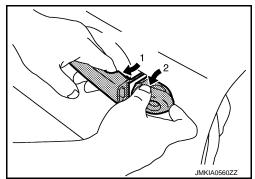
1. Remove back door finisher lower. Refer to INT-27, "Removal and Installation".

5.

2. Remove sealing screeen. NOTE:

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

- 3. Disconnect back door antenna and back door request switch connector and remove harness clamp (with intelligent key system) on outside handle bracket.
- 4. Remove mounting bolt of outside handle bracket.
- 5. While pulling outside handle, remove outside habdle escutcheon.

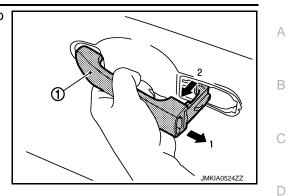


# **BACK DOOR LOCK**

#### < REMOVAL AND INSTALLATION >

#### [WITH INTELLIGENT KEY SYSTEM]

6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 9. Reach in to separate outside handle cable connection on outside handle bracket.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

- Check back door open/close operation after installation.
- Check door lock cable is properly engaged with outside handle bracket. EMERGENCY LEVER

**EMERGENCY LEVER : Unlock procedures** 

### UNLOCK PROCEDURES

#### NOTE:

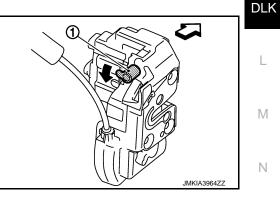
If back door lock cannot be unlocked due to a malfunction or battery discharge, follow the procedures to unlock back door.

- 1. Remove back door finisher lower. Refer to INT-27, "Removal and Installation".
- 2. Remove sealing screen.
  - NOTE:

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

3. From inside the vehicle, rotate emergency lever (1) toward lower direction and unlock.

 $\triangleleft$ : Vehicle front



Е

F

Н

J

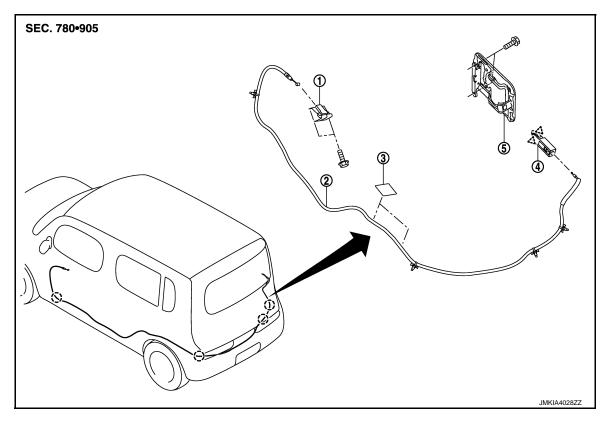
INFOID:000000008453037

# < REMOVAL AND INSTALLATION >

FUEL FILLER LID OPENER

# **Exploded View**

INFOID:00000008453038



- Fuel filler lid opener handle 1.
  - 2. Fuel filler lid lock assembly 5.
- Fuel filler lid opener cable Fuel filler lid assembly
- 3. Cable protector

: Clip

4.

,∧ : Pawl

# **Removal and Installation**

#### REMOVAL

#### FUEL FILLER LID

- 1. Fully open fuel filler lid.
- Remove mounting screws, and then remove fuel filler lid. 2.

#### FUEL FILLER LID OPENER CABLE

- 1. Fully open fuel filler lid.
- Remove dash side finisher (LH). Refer to <u>INT-16, "Removal and Installation"</u>.
- Remove front kicking plate inner (LH). Refer to <u>INT-16. "Removal and Installation"</u>.
- 4. Remove center pillar lower garnish (LH). Refer to INT-16, "Removal and Installation".
- 5. Remove rear kicking plate inner (LH). Refer to INT-16, "Removal and Installation".
- 6. Remove luggage side finisher (LH) (upper/lower). Refer to INT-24, "Removal and Installation".
- 7. Remove center seat belt retractor. Refer to SB-11, "SEAT BELT RETRACTOR : Removal and Installation".
- 8. Remove mounting bolts, and then remove fuel filler lid opener handle.
- 9. Remove fuel filler lid opener cable from fuel filler lid opener handle.
- 10. Push fuel filler lid lock assembly front the vehicle, while pushing the pawls.

### **DLK-198**

# FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >	[WITH INTELLIGENT KEY SYSTEM]	
11. Remove fuel filler lid opener cable from fuel filler lid lock assemi	bly.	
12. Pull up floor trim. Refer to INT-19, "Removal and Installation".		А
13. Remove fuel filler lid opener cable mounting clips.		
14. Remove fuel filler lid opener cable.		В
INSTALLATION		D
Install in the reverse order of removal.		
		С
		D
		Ε
		_
		F
		G
		Н

J

L

M

Ν

Ο

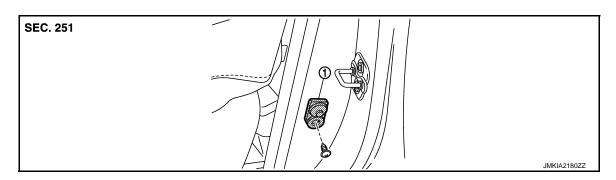
Ρ

# < REMOVAL AND INSTALLATION > DOOR SWITCH

# Exploded View

INFOID:000000008453040

INFOID:000000008453041

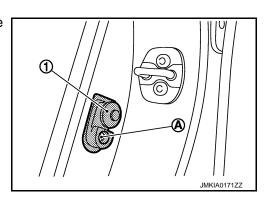


1. Door switch

### Removal and Installation

REMOVAL

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



[WITH INTELLIGENT KEY SYSTEM]

INSTALLATION Install in the reverse order of removal. **INSIDE KEY ANTENNA** 

# [WITH INTELLIGENT KEY SYSTEM]

А

В

D

Ε

F

Н

DLK

L

Μ

Ν

Ρ

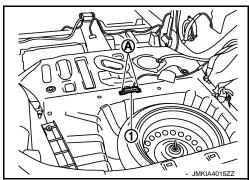
# **INSTRUMENT CENTER INSTRUMENT CENTER : Exploded View** INFOID:000000008453042 SEC. 253 JMKIA4012ZZ Inside key antenna (instrument cen-1. ter) **INSTRUMENT CENTER : Removal and Installation** INFOID:000000008453043 REMOVAL 1. Remove the audio unit. Refer to AV-53, "Removal and Installation". 2. Remove the inside key antenna (instrument center) mounting screw (A), and then remove inside key antenna (instrument center) (1). JMKIA4013ZZ **INSTALLATION** Install in the reverse order of removal. LUGGAGE ROOM LUGGAGE ROOM : Exploded View INFOID:000000008453044 **SEC. 253** JMKIA401477 Inside key antenna (luggage room) 1.

### < REMOVAL AND INSTALLATION >

# LUGGAGE ROOM : Removal and Installation

#### REMOVAL

- 1. Remove the luggage floor finisher front. Refer to INT-24, "Removal and Installation".
- Remove the inside key antenna (luggage room) mounting clip (A), and then remove inside key antenna (luggage room) (1).



INSTALLATION Install in the reverse order of removal.

#### INTELLIGENT KEY WARNING BUZZER _LATION > [WITH INTELLIGENT KEY SYSTEM]

# < REMOVAL AND INSTALLATION >

# INTELLIGENT KEY WARNING BUZZER

# Exploded View

INFOID:000000008453046

INFOID:000000008453047

А

F

Н

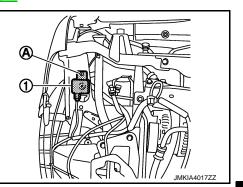
SEC. 253		В
		С
		_
		D
	JMKIA4016ZZ	Е

1. Intelligent Key warning buzzer

# Removal and Installation

#### REMOVAL

- 1. Remove the front bumper. Refer to EXT-12, "Removal and Installation".
- 2. Remove the Intelligent Key warning buzzer mounting bolt (A), and then remove the Intelligent Key warning buzzer (1).



INSTALLATION Install in the reverse order of removal.

L

Μ

Ν

Ο

Ρ

J

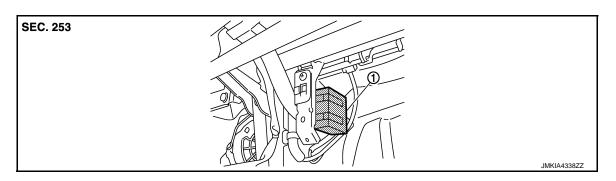
# **REMOTE KEYLESS ENTRY RECEIVER**

# < REMOVAL AND INSTALLATION >

# REMOTE KEYLESS ENTRY RECEIVER

# Exploded View

INFOID:000000008453048



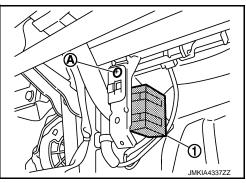
1. Remote keyless entry receiver

### Removal and Installation

INFOID:000000008453049

#### REMOVAL

- 1. Remove the glove box assembly. Refer to IP-13, "Removal and Installation".
- 2. Remove the remote keyless entry receiver mounting bolt (A), and then remove remote keyless entry receiver (1).



[WITH INTELLIGENT KEY SYSTEM]

INSTALLATION Install in the reverse order of removal.

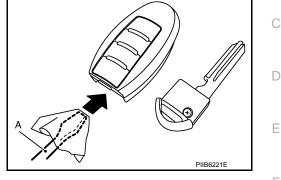
# **INTELLIGENT KEY BATTERY**

# < 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.

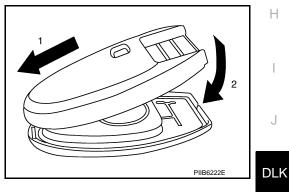


Replace the battery with new one. 3.

**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.



[WITH INTELLIGENT KEY SYSTEM]

А

В

Ε

F

L

Μ

Ν

Ρ

INFOID:000000008453050

< BASIC INSPECTION >

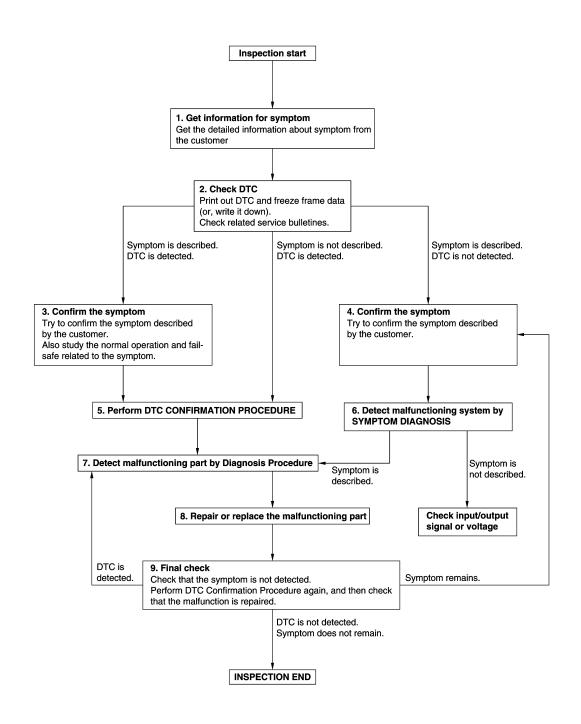
# [WITHOUT INTELLIGENT KEY SYSTEM]

# BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000008453051

**OVERALL SEQUENCE** 



# DIAGNOSIS AND REPAIR WORK FLOW

#### < BASIC INSPECTION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

1.GET INFORMATION FOR SYMPTOM	Λ
1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).	A
2. Check operation condition of the function that is malfunctioning.	В
>> GO TO 2.	
2.CHECK DTC	С
<ol> <li>Check DTC.</li> <li>Perform the following procedure if DTC is detected.</li> <li>Record DTC and freeze frame data (Print them out using CONSULT.)</li> <li>Erase DTC.</li> </ol>	D
<ul> <li>Study the relationship between the cause detected by DTC and the symptom described by the customer.</li> <li>Check related service bulletins for information.</li> </ul>	Е
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.	F
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.	G
>> GO TO 5.	П
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.	
verify relation between the symptom and the condition when the symptom is detected.	
>> GO TO 6.	J
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-75. "DTC Inspection Priority Chart"</u> (BCM), and determine trouble diagnosis order. <b>NOTE:</b>	DLK
<ul> <li>Freeze frame data is useful if the DTC is not detected.</li> <li>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</li> </ul>	Μ
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.	Ν
Is DTC detected?	
YES >> GO TO 7. NO >> Check according to <u>GI-41, "Intermittent Incident"</u> .	0
6. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS	0
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. <u>Is the symptom described?</u>	Ρ
YES >> GO TO 7.	
NO >> Monitor input data from related sensors or check voltage of related module terminals using CON- SULT.	
7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE	

# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to <u>GI-41, "Intermittent Incident"</u>.

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

# 9.FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.

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

Is DTC detected and does symptom remain?

- 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 DTC.

INSPECTION AND ADJUSTMENT		
< BASIC INSPECTION >	[WITHOUT INTELLIGENT KEY SYSTEM]	
INSPECTION AND ADJUSTMENT		
ADDITIONAL SERVICE WHEN REPLACING C	ONTROL UNIT	
ADDITIONAL SERVICE WHEN REPLACING CO	NTROL UNIT : Description	
Perform the system initialization when replacing or registering k	eyfob and ignition key.	
ADDITIONAL SERVICE WHEN REPLACING CO	NTROL UNIT : Special Repair Re-	
quirement	INFOID:00000008453053	
Refer to the CONSULT Operation Manual-NATS.	D	

DLK		
าะก		
	)	r

L

Μ

Ν

0

Ρ

Е

F

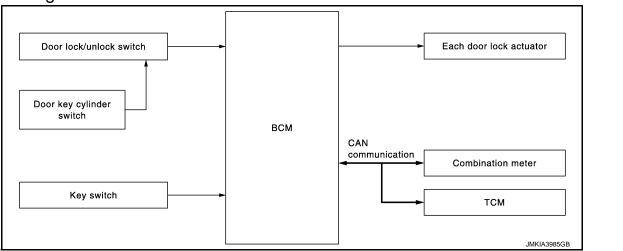
G

Н

J

# SYSTEM DESCRIPTION POWER DOOR LOCK SYSTEM

# System Diagram



# System Description

INFOID:000000008453055

INFOID:000000008453054

#### DOOR LOCK FUNCTION

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

#### Door Key Cylinder

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

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP-PORT". Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

#### KEY REMINDER FUNCTION

When door lock and unlock switch are operated while key is inserted into key switch and any door is open, door locks once but immediately unlocks. This operation prevents keyfob from being left in the vehicle.

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

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

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

All doors are locked when the vehicle speed reaches 15 miles or more.

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

#### P Range Interlock Door Lock*2

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

Setting change of Automatic Door Lock/Unlock Function

# POWER DOOR LOCK SYSTEM

< SYSTEM DESCRIPTION >	[WITHOUT INTELLIGENT KEY SYSTEM]
The lock operation setting of the automatic door lock/unlock fur	A
The ON/OFF switching of the automatic door lock function and unlock function can be performed at the WORK SUPPORT set Without CONSULT	ting of CONSULT.
The automatic door lock function ON/OFF can be switched by 1. Close all doors (door switch OFF)	performing the following operation.
<ol> <li>Turn ignition switch ON</li> <li>Press and hold the door lock and unlock switch for 5 seco</li> </ol>	C nds or more in the lock direction within 20 sec-
<ul><li>onds after turning the ignition switch ON.</li><li>4. The switching is completed when the hazard warning lamp</li></ul>	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	E
AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLO	CK OPERATION)
The automatic door lock/unlock function is the function that un shift position. It has 2 types as follows.	
IGN OFF Interlock Door Unlock*1 All doors are unlocked when the power supply position is change BCM outputs the unlock signal to all door lock actuators whe changed from ignition switch ON to OFF.	
P Range Interlock Door Unlock ^{*2} All doors are unlocked when shifting the selector lever from any 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 comm the P to P position.	unication is shifted from any position other than
Key out Interlock Door Unlock When ignition key is removed from ignition knob switch, all doo When BCM detects that ignition key is removed from ignition k door lock actuators.	
Setting change of Automatic Door Lock/Unlock Function	DL
The unlock operation setting of the automatic door lock/unlock (P) With CONSULT	function can be changed.
The ON/OFF switching of the automatic door lock/unlock function lock/unlock function can be performed at the WORK SUPPOR Without CONSULT	
The automatic door lock/unlock function ON/OFF can be switch	
1. Close all doors below (door switch OFF)	M
<ol> <li>Turn ignition switch ON</li> <li>Press and hold the door lock and unlock switch for 5 sec seconds after turning the power supply position ON.</li> </ol>	onds or more in the unlock direction within 20 $_{ m N}$
4. The switching is completed when the hazard warning lamp	blinks.
$OFF \rightarrow ON$ : 2 blinks	0
$ON \rightarrow OFF$ : 1 blink	
<ul><li>*1: This function is set to ON before delivery.</li><li>*2: This function does not operate on M/T models.</li></ul>	Ρ

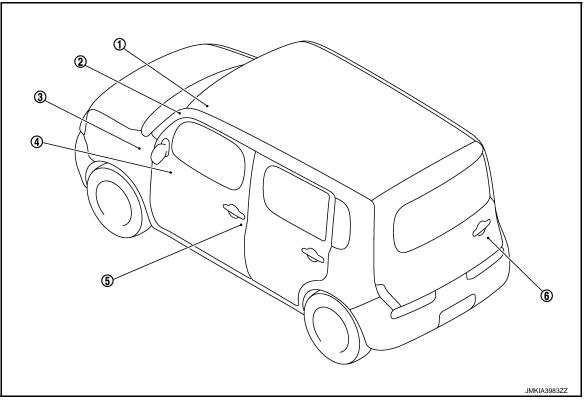
# **POWER DOOR LOCK SYSTEM**

# < SYSTEM DESCRIPTION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

# **Component Parts Location**

INFOID:000000008453056



- 1. Key switch
- 4. Power window main switch (door lock and unlock switch)

# **Component Description**

2. Combination meter 3. Refer to <u>MWI-8</u>, "METER SYSTEM : Component Parts Location"

side)

- 5. Front door lock assembly (driver
- BCM M Refer to BCS-144, "Removal and Installation"
  - 6. Back door lock assembly

INFOID:000000008453057

Item	Function
BCM	Controls the door lock function and room lamp function
Door lock and unlock switch	Input lock or unlock signal to BCM
Door lock actuator	Input lock/unlock signal from BCM and locks/unlocks each door
Door switch	Input door open/close condition to BCM
Door key cylinder switch	<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>
ТСМ	Transmit shift position signal to BCM via CAN communication line
Key switch	Input ignition switch ON/OFF condition to BCM

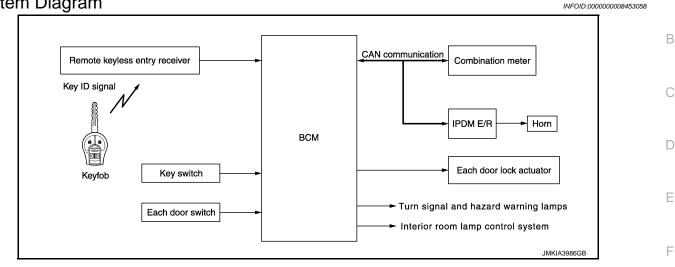
# REMOTE KEYLESS ENTRY SYSTEM

#### < SYSTEM DESCRIPTION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

# REMOTE KEYLESS ENTRY SYSTEM

System Diagram



# System Description

INFOID:000000008453059

Н

L

Μ

Ν

Ρ

А

#### DOOR LOCK AND UNLOCK OPERATION

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

#### **OPERATION CONDITION**

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

Remote controller operation	Operation condition	
Lock/unlock	Key switch is off	
		D

#### **OPERATION AREA**

To ensure that the keyfob works effectively, use within 100 cm (3 ft) range of each door, however the operable range may differ according to surroundings.

#### SELECTIVE UNLOCK OPERATION

When door lock is unlocked, pressing LOCK button on keyfob once will lock all doors. When door lock is locked, pressing UNLOCK button on keyfob will unlock driver side door.

#### HAZARD AND HORN REMINDER

When the doors are locked or unlocked by keyfob, power is supplied to sound horn and flash hazard warning lamps as a reminder

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

How to Change Hazard and Horn Reminder Modes

#### With CONSULT

Hazard reminder has modes 1, 2, 3 and 4, and horn reminder can be turned ON/OFF with any lock mode.

Hazard reminder setting	Мо	de 1	Мо	de 2	Moo	de 3	Mor	de 4
Keyfob operation	Lock	Unlock	Lock	Unlock	Lock	Unlock	Lock	Unlock
Hazard warning lamp blink			_	Once	Twice		Twice	Once

# REMOTE KEYLESS ENTRY SYSTEM

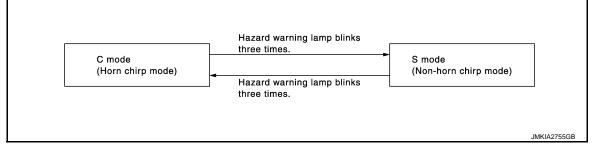
#### < SYSTEM DESCRIPTION >

Horn reminder setting	C	DN	OFF	-
Keyfob operation	Lock	Unlock	Lock	Unlock
Horns sound	Once	—	—	_

Hazard and horn reminders do not operate if any door switch is ON (any door is OPEN). Hazard reminder can be changed using "HAZARD LAMP SET" mode in "WORK SUPPORT". Horn reminder can be changed using "HORN CHIRP SET" mode in "WORK SUPPORT". Refer to <u>DLK-219</u>, "<u>MULTI REMOTE ENT</u> : <u>CONSULT Function (BCM - MULTI REMOTE ENT)</u>".

#### **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 blinks and horn sounds as follows:



#### AUTO DOOR LOCK FUNCTION

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

Operating condition

•	Door switch is ON	I (door is open)
	<b>D</b> · · · · ·	

- Door is locked
- Push switch is pressed
- Ignition switch is ON

Auto door lock mode can be changed by the "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-</u>219, "MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)".

#### INTERIOR ROOM LAMP CONTROL FUNCTION

Interior room lamp is controlled according to door lock/unlock state, refer to INL-6. "System Description".

#### REGISTER, CHECK, AND ERASURE OF REMOTE CONTROLLER ID

- Remote controller ID can be registered by key operation and can be registered, checked, and erased using CONSULT.
- Remote controller ID can be registered by key operation or CONSULT. A maximum of 5 IDs can be registered. Operative number of IDs is always amaximum total of 5. When a 6th ID registration is performed, the oldest ID among the 5 registered IDs is automatically erased. (Initially saved data is automatically erased.)

#### Remote controller ID registration with key

When recording a new remote controller ID after replacing BCM, or when maintaining a previously recorded ID and newly adding a remote controller, keep the remote controller within the effective range and register the new controller by performing the following procedure.

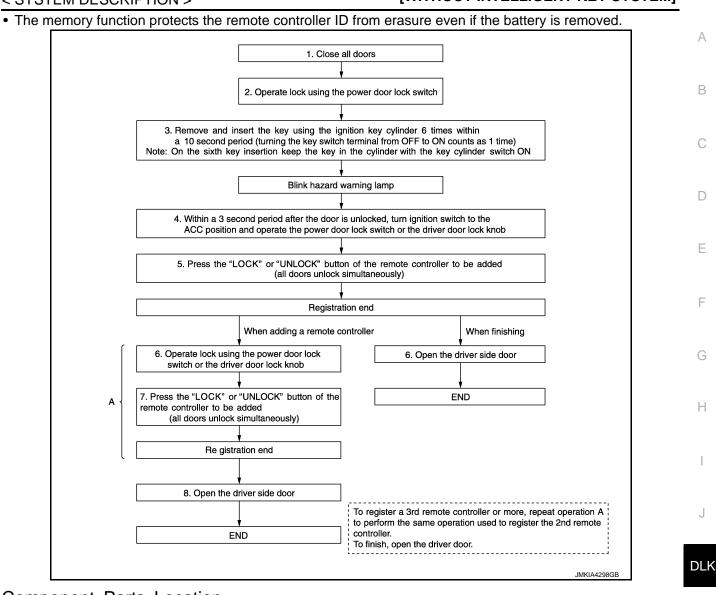
#### NOTE:

- Always remove and insert key slowly and carefully within a 10 second period. If this procedure is performed too quickly, remote controller ID registration mode may not be entered.
- After a new remote controller is registered, be sure to check the operation.

# **REMOTE KEYLESS ENTRY SYSTEM**

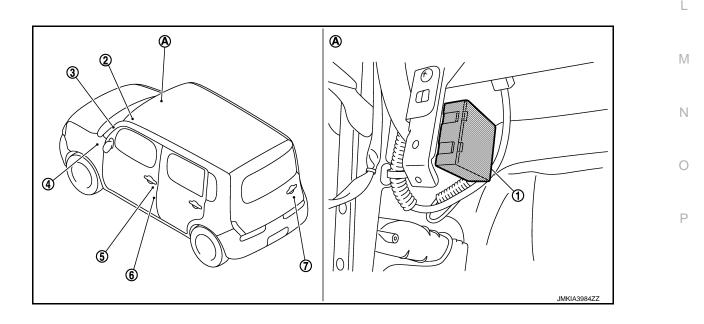
#### < SYSTEM DESCRIPTION >

# [WITHOUT INTELLIGENT KEY SYSTEM]



**Component Parts Location** 

INFOID:000000008453060



### **DLK-215**

### REMOTE KEYLESS ENTRY SYSTEM ESCRIPTION > [WITHOUT IN]

#### < SYSTEM DESCRIPTION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

- 1. Remote keyless entry receiver
- 2. Key switch
- 5. Front door lock assembly (driver side)
- 3. Combination meter Refer to <u>MWI-8. "METER SYSTEM :</u> <u>Component Parts Location"</u>
- 6. Front door switch (driver side)

7. Back door lock assembly

BCM

4.

A. View with globe box assembly removed

# Component Description

INFOID:000000008453061

Item	Function
BCM	Controls the door lock and unlock function.
Door lock actuator	Output lock / unlock signal from BCM and locks and unlocks each door.
Remote keyless entry receiver	Receives lock/unlock signal from the key fob, and then transmits to BCM.
Key fob	Transmits button operation to remote keyless entry receiver.
Door switch	Inputs door open/close condition to BCM
Key switch	Inputs key insert/remove signal to BCM

# DIAGNOSIS SYSTEM (BCM)

# < SYSTEM DESCRIPTION > DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

INFOID:000000008831216

А

В

С

1.1

# 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.	D
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.	
Data Monitor	The BCM input/output signals are displayed.	E
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>	F

#### 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.

				$\times\!\!:$ Applicable item	ŀ
Sustem	Sub system calestian item		Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test	
Door lock	DOOR LOCK	×	×	×	
Rear window defogger	REAR DEFOGGER		×	×	
Warning chime	BUZZER		×	×	
Interior room lamp control	INT LAMP	×	×	×	
Remote keyless entry system	MULTI REMOTE ENT	×	×	×	
Exterior lamp	HEAD LAMP	×	×	×	D
Wiper and washer	WIPER	×	×	×	
Turn signal and hazard warning lamps	FLASHER		×	×	
Manual air conditioner	AIR CONDITONER		×	×	
Combination switch	COMB SW		×		
Body control system	ВСМ	×			ľ
NVIS - NATS	IMMU	×	×	×	
Interior room lamp battery saver	BATTERY SAVER	×	×	×	ľ
Back door	TRUNK		×		
Vehicle security system	THEFT ALM	×	×	×	
RAP system	RETAINED PWR		×	×	(
Signal buffer system	SIGNAL BUFFER		×	×	
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×	[
Panic alarm system	PANIC ALARM			×	1

# DOOR LOCK

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

BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

# **DLK-217**

INFOID:000000008453063

[WITHOUT INTELLIGENT KEY SYSTEM]

### < SYSTEM DESCRIPTION >

# DIAGNOSIS SYSTEM (BCM)

#### [WITHOUT INTELLIGENT KEY SYSTEM]

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

#### WORK SUPPORT

Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operate with this mode <ul> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
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> <li>MODE 4: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position</li> <li>MODE 5: Driver side door is unlocked when key out of key switch</li> <li>MODE 6: All doors are unlocked when key out of key switch</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-operation</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
IGN ON SW	Indicated [On/Off] condition of ignition switch in ON position
KEY ON SW	Indicated [On/Off] condition of key switch
DOOR SW-DR	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR	Indicated [On/Off] condition of rear door switch RH
DOOR SW-RL	Indicated [On/Off] condition of rear door switch LH
BACK DOOR SW	Indicated [On/Off] condition of back door switch
LOCK STATUS	Indicated [On/Off] condition of driver side door
ACC ON SW	Indicated [On/Off] condition of ignition switch in ACC position
KEYLESS LOCK	Indicated [On/Off] condition of lock signal from key fob
KEYLESS UNLOCK	Indicated [On/Off] condition of unlock signal from key fob
SHOCK SENSOR	NOTE: This item is displayed, but cannot be supported
CDL LOCK SW	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW	Indicated [On/Off] condition of unlock signal from door lock unlock switch
KEY CYL LK-SW	Indicated [On/Off] condition of lock signal from door key cylinder

# **DIAGNOSIS SYSTEM (BCM)**

#### < SYSTEM DESCRIPTION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item	Contents	
KEY CYL UN-SW	Indicated [On/Off] condition of unlock signal from door key cylinder	/
VEHICLE SPEED	Display the vehicle speed signal received from combination meter by numerical value [Km/h]	

#### ACTIVE TEST

Test item	Description	-
DOOR LOCK	<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 (other) is unlocked when "OTR ULK" on CONSULT screen is touched</li> </ul>	C
MULTI REMOTE E	NT	E

# MULII REMOTE ENT

# MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)

INFOID:000000008453064

В

F

J

#### BCM CONSULT FUNCTION

#### CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description	
WORK SUPPORT	Changes the setting for each system function	
DATA MONITOR	The BCM input/output signals are displayed	— Н
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	Condition	
IGN ON SW	Indicates [On/Off] condition of ignition switch in ON position	
KEY ON SW	Indicates [On/Off] condition of key switch	
ACC ON SW	Indicates [On/Off] condition of ignition switch in ACC position	
KEYLESS LOCK	Indicates [On/Off] condition of lock signal from keyfob	
KEYLESS UNLOCK	Indicates [On/Off] condition of unlock signal from keyfob	
KYLS TRNK/HAT	NOTE: This item is displayed, but cannot be tested	
DOOR SW-DR	Indicates [On/Off] condition of front door switch (driver side)	
DOOR SW-AS	Indicates [On/Off] condition of front door switch (passenger side)	
DOOR SW-RR	Indicates [On/Off] condition of rear door switch RH	
DOOR SW-RL	Indicates [On/Off] condition of rear door switch LH	
BACK DOOR SW	Indicates [On/Off] condition of back door switch	
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be tested	
CDL LOCK SW	Indicates [On/Off] condition of door lock and unlock switch	
CDL UNLOCK SW	Indicates [On/Off] condition of door lock and unlock switch	
KEYLESS PANIC	Indicates [On/Off] condition of PANIC button of keyfob	

#### ACTIVE TEST

# **DLK-219**

# < SYSTEM DESCRIPTION >

#### **DIAGNOSIS SYSTEM (BCM)** [\

WITHC	OUT INTELLIGENT KEY SYSTEM]

Test item	Description
INT LAMP	<ul><li>This test is able to check interior room lamp operation</li><li>On: Operate</li><li>Off: Non-operation</li></ul>
FLASHER	This test is able to check flasher operation [LH/RH/Off]
HORN	This test is able to check horn operation <ul> <li>On: Operate</li> </ul>

#### WORK SUPPORT

Test item	Description
REMO CONT IN REGIST	Keyfob ID code can be registered
REMO CONT IN ERASUR	Keyfob ID code can be erased
REMO CONT IN CONFIR	It can be checked whether Intelligent Key ID code is registered or not in this mode
MULTI ANSWER BACK SET	NOTE: This item is displayed, but cannot be tested
HORN CHIRP SET	<ul> <li>Hazard and horn reminder function (horn operation) mode can be changed in this mode</li> <li>On: Operate</li> <li>Off: Non-operation</li> </ul>
HAZARD LAMP SET	<ul> <li>Hazard and horn reminder function (hazard operation) mode can be changed in this mode</li> <li>MODE1: Non-operation</li> <li>MODE2: Unlock operation only</li> <li>MODE3: Lock operation only</li> <li>MODE4: Lock and unlock operation</li> </ul>
AUTO LOCK SET	Auto door lock time can be changed in this mode <ul> <li>MODE 1: Non-operation</li> <li>MODE 2: 30 sec</li> <li>MODE 3: 1 minute</li> <li>MODE 4: 2 minute</li> <li>MODE 5: 3 minute</li> <li>MODE 6: 4 minute</li> <li>MODE 6: 4 minute</li> <li>MODE 7: 5 minute</li> </ul>
PANIC ALARM SET	<ul> <li>Panic alarm button pressing time on keyfob remote control button can be selected from the following with this mode</li> <li>MODE1: 0.5 sec</li> <li>MODE2: Non-operation</li> <li>MODE3: 1.5 sec</li> </ul>
TRUNK OPEN SET	NOTE: This item is displayed, but cannot be tested

# TRUNK

# TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:000000008453065

#### **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.

#### 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.

# < SYSTEM DESCRIPTION >

# DIAGNOSIS SYSTEM (BCM)

# [WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item	r Item Contents			
KEY ON SW	Indicates [On/Off] condition of key switch.			
LOCK STATUS	NOTE: This item is displayed, but cannot be monitored.	В		
VEHICLE SPEED	Indicates [Km/h] condition of vehicle speed signal from combination meter.			
IGN ON SW	Indicates [On/Off] condition of ignition switch.			
TRNK OPNR SW	NOTE: This item is displayed, but cannot be monitored.	C		
KYLS TRNK/HAT	NOTE: This item is displayed, but cannot be monitored.	D		

J

Е

F

G

Н

L

Μ

Ν

Ο

Ρ

# POWER SUPPLY AND GROUND CIRCUIT

# < DTC/CIRCUIT DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]

# DTC/CIRCUIT DIAGNOSIS

# POWER SUPPLY AND GROUND CIRCUIT

# BCM (BODY CONTROL MODULE)

# BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:000000008831215

# **1.**CHECK FUSES AND FUSIBLE LINK

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

Signal name	Fuses and fusible link No.
Battery power supply	8
Ballery power suppry	G
ACC power supply	20
Ignition power supply	2

#### Is the fuse fusing?

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

NO >> GO TO 2.

# 2. CHECK POWER SUPPLY CIRCUIT

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

	Terminals		- Ignition switch position		
(-	(+)		ignition switch position		
BCM		(–)	OFF	ACC	ON
Connector	Terminal		OFF	ACC	
M67	70		Battery	Battery	Battery
WO7	57		voltage	voltage	voltage
M65	11	Ground	Approx. 0 V	Battery voltage	Battery voltage
MOS	38		Approx. 0 V	Approx. 0 V	Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Connector Terminal		Continuity
M67	67	Ť	Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

# < DTC/CIRCUIT DIAGNOSIS >

# DOOR SWITCH

### Description

Detects door open/close condition.

**Component Function Check** 

# **1.**CHECK FUNCTION

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

Monitor item		Condition	Status	
DOOR SW-DR	Driver side door	Open	ON	
DOOR SW-DR	Driver side door	Closed	OFF	
	Dessenaer side deer	Open	ON	
DOOR SW-AS	Passenger side door	Closed	OFF	
	Rear door LH	Open	ON	
DOOR SW-RL	Real door LH	Closed	OFF	
DOOR SW-RR	Rear door RH	Open	ON	
DOOR SW-RR		Closed	OFF	
	Deels deer	Open	ON	
BACK DOOR SW	Back door	Closed	OFF	

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-223</u>, "Diagnosis Procedure".

# **Diagnosis Procedure**

1. CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect malfunctioning door switch connector.

3. Check signal between malfunctioning door switch harness connector and ground with oscilloscope.

L

Μ

Ν

Ρ

INFOID:000000008453067

В

С

D

А

INFOID:000000008453068

INFOID:000000008453069

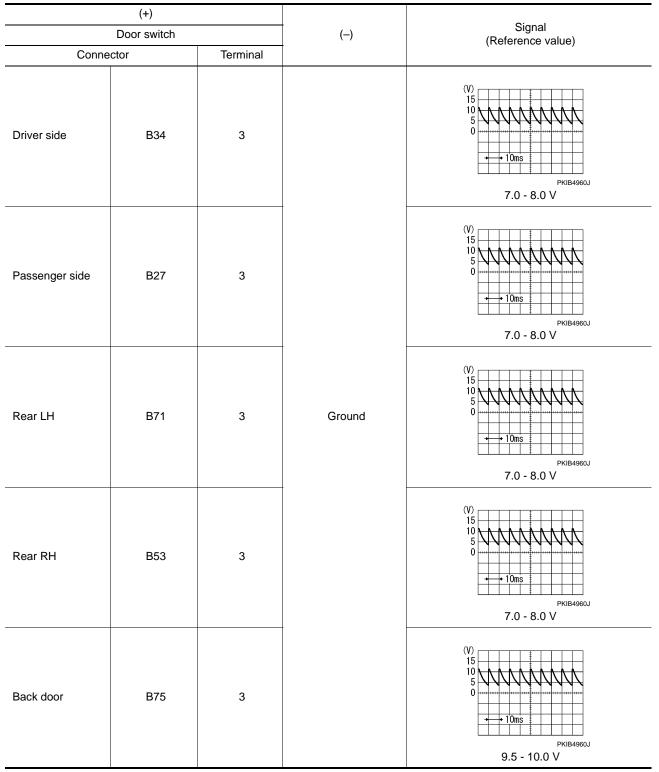
J

DLK

# **DOOR SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]



#### Is the inspection result normal?

YES >> GO TO 3.

2. CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

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

# **DOOR SWITCH**

# < DTC/CIRCUIT DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]

	Door switch		E	BCM	Continuity
Conr	ector	Terminal	Connector	Terminal	Continuity
Driver side	B34		M66	47	
Passenger side	B27		M65	12	
Rear LH	B71	3	M66 48		Existed
Rear RH	B53		M65	13	
Back door	B75		M66	43	
Check continuit	y between door switcl	h harness cor	nnector and grou	nd.	
	Door switch				
	Connector	Tor	minal		Continuity
Driver side	B34	Ien			
Passenger side	B34 B27			Ground	
Rear LH	B71		3	Croand	Not existed
Rear RH	B53		-		
Back door	B75				
he inspection res ES >> Replace O >> Repair CHECK DOOR S fer to <u>DLK-225. "</u> he inspection res ES >> GO TO	BCM. Refer to <u>BCS</u> - or replace harness. WITCH <u>Component Inspection</u> ult normal? 4.	<u>n"</u> .			lle tie e "
he inspection res ES >> Replace O >> Repair CHECK DOOR S fer to <u>DLK-225. "</u> he inspection res ES >> GO TO O >> Replace CHECK INTERM	BCM. Refer to <u>BCS</u> or replace harness. WITCH <u>Component Inspection</u> <u>ult normal?</u> 4. e malfunctioning door	<u>n"</u> .			<u>llation"</u> .
he inspection res ES >> Replace O >> Repair CHECK DOOR S fer to <u>DLK-225, "</u> he inspection res ES >> GO TO O >> Replace CHECK INTERM fer to <u>GI-41, "Inte</u>	BCM. Refer to <u>BCS</u> - or replace harness. WITCH <u>Component Inspection</u> <u>ult normal?</u> 4. e malfunctioning door IITTENT INCIDENT <u>ermittent Incident"</u> .	<u>n"</u> .			<u>llation"</u> .
he inspection res ES >> Replace O >> Repair CHECK DOOR S fer to <u>DLK-225.</u> he inspection res ES >> GO TO O >> Replace CHECK INTERM fer to <u>GI-41, "Inte</u> >> INSPEC	BCM. Refer to BCS- or replace harness. WITCH Component Inspection ult normal? 4. e malfunctioning door IITTENT INCIDENT ermittent Incident".	<u>n"</u> .			llation".
he inspection res ES >> Replace O >> Repair CHECK DOOR S fer to <u>DLK-225, "</u> he inspection res ES >> GO TO O >> Replace CHECK INTERM fer to <u>GI-41, "Inte</u>	BCM. Refer to BCS- or replace harness. WITCH Component Inspection ult normal? 4. e malfunctioning door IITTENT INCIDENT ermittent Incident".	<u>n"</u> .			<u>Ilation"</u> .
he inspection res ES >> Replace O >> Repair CHECK DOOR S fer to <u>DLK-225.</u> he inspection res ES >> GO TO O >> Replace CHECK INTERM fer to <u>GI-41, "Inte</u> >> INSPEC	BCM. Refer to BCS- or replace harness. WITCH Component Inspection with normal? 4. a malfunctioning door IITTENT INCIDENT crmittent Incident".	<u>n"</u> .			
he inspection res ES >> Replace O >> Repair CHECK DOOR S fer to <u>DLK-225</u> , " he inspection res ES >> GO TO O >> Replace CHECK INTERM fer to <u>GI-41</u> , "Inte >> INSPEC omponent Ins CHECK DOOR S Turn ignition sw Disconnect mal	BCM. Refer to <u>BCS</u> - or replace harness. WITCH <u>Component Inspection</u> <u>ult normal?</u> 4. a malfunctioning door IITTENT INCIDENT <u>armittent Incident"</u> . CTION END Dection SWITCH	n". switch. Refer			
he inspection res S >> Replace CHECK DOOR S fer to <u>DLK-225</u> , " he inspection res S >> GO TO O >> Replace CHECK INTERM fer to <u>GI-41</u> , "Inte >> INSPEC omponent Ins CHECK DOOR S Turn ignition sw Disconnect mal Check continuit	e BCM. Refer to <u>BCS</u> - or replace harness. SWITCH <u>Component Inspection</u> <u>sult normal?</u> 4. e malfunctioning door IITTENT INCIDENT <u>rmittent Incident"</u> . CTION END Dection SWITCH itch OFF. functioning door switch	n". switch. Refer	• to <u>DLK-332. "Re</u>	emoval and Insta	INFOID:00000000
he inspection res S >> Replace CHECK DOOR S fer to <u>DLK-225</u> , " he inspection res S >> GO TO O >> Replace CHECK INTERM fer to <u>GI-41</u> , "Inte >> INSPEC omponent Ins CHECK DOOR S Turn ignition sw Disconnect mal Check continuit	e BCM. Refer to <u>BCS</u> - or replace harness. SWITCH <u>Component Inspection</u> <u>Jult normal?</u> 4. e malfunctioning door IITTENT INCIDENT <u>ITTENT INCIDENT</u> <u>ITTENT INCIDENT</u>	n". switch. Refer		emoval and Insta	
he inspection res ES >> Replace O >> Repair CHECK DOOR S fer to <u>DLK-225</u> , " he inspection res ES >> GO TO O >> Replace CHECK INTERM fer to <u>GI-41</u> , "Inte >> INSPEC omponent Ins CHECK DOOR S Turn ignition sw Disconnect mal Check continuit	e BCM. Refer to <u>BCS</u> - or replace harness. SWITCH <u>Component Inspection</u> <u>sult normal?</u> 4. e malfunctioning door IITTENT INCIDENT <u>ermittent Incident"</u> . CTION END Dection SWITCH itch OFF. functioning door switch	n". switch. Refer	to <u>DLK-332. "Re</u> Condition	emoval and Insta	INFOID:00000000

NO >> Replace malfunction door switch. Refer to <u>DLK-332, "Removal and Installation"</u>.

# < DTC/CIRCUIT DIAGNOSIS >

# DOOR LOCK AND UNLOCK SWITCH DRIVER SIDE

# **DRIVER SIDE : Description**

Transmits door lock/unlock operation to BCM.

# DRIVER SIDE : Component Function Check

# **1.**CHECK FUNCTION

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

Monitor item	Cor	Condition		
CDL LOCK SW		LOCK	ON	
ODE LOOK SW	Door lock and unlock switch	UNLOCK	OFF	
CDL UNLOCK SW		LOCK	OFF	
		UNLOCK	ON	

#### Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-226, "DRIVER SIDE : Diagnosis Procedure"</u>.

# **DRIVER SIDE : Diagnosis Procedure**

1. CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

	(+) Power window main switch		Signal (Reference value)	
Connector	Terminal			
	6			
D5	18	Ground	(V) 10 10 10 10 10 10 10 10 10 10	

Is the inspection result normal?

YES >> GO TO 4.

2.check door lock and unlock switch circuit

1. Disconnect BCM connector and front power window switch (passenger side) connector.

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

E	BCM	Power window main switch		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M66	45	D5	18	Existed	
IVIOO	46	J	6	Existed	

3. Check continuity between BCM harness connector and ground.

[WITHOUT INTELLIGENT KEY SYSTEM]

INFOID:000000008453071

INFOID:000000008453072

INFOID:000000008453073

# DOOR LOCK AND UNLOCK SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]

	BCM			Continuity
Connector	Terminal		Ground	Continuity
M66	45		Jound	Not existed
Is the inspection result no	46			
YES >> GO TO 3. NO >> Repair or repl	ace harness.			
3.CHECK BCM OUTPUT 1. Connect BCM connect 2. Check signal between	ctor.	ector and ground us	sing oscilloscor	be.
(+)				
BCM	И	()	(	Signal Reference value)
Connector	Terminal		, , , , , , , , , , , , , , , , , , ,	
M66	45 46	Ground	(V) 15 10 5 0	JPMIA0012GB 1.0 - 1.5 V
Check continuity between		switch harness con	nector and gro	und.
Power wir Connector	ndow main switch Terminal		Ground	Continuity
D6	17		Jouriu	Existed
Is the inspection result no YES >> GO TO 5. NO >> Repair or repl 5.CHECK DOOR LOCK	ace harness.	ĊH		
Refer to <u>DLK-227, "DRIVE</u> <u>Is the inspection result no</u> YES >> GO TO 6. NO >> Replace powe <b>6.</b> CHECK INTERMITTEN	rmal? er window main switc		8, "Removal an	d Installation".
Refer to <u>GI-41, "Intermitte</u>	nt Incident".			
>> INSPECTION DRIVER SIDE : Con		on		INFOID:0000000084530;
1.CHECK DOOR LOCK				
	FF.			

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

# **DLK-227**

#### DOOR LOCK AND UNLOCK SWITCH S > [WITHOUT INTELLIGENT KEY SYSTEM]

#### < DTC/CIRCUIT DIAGNOSIS >

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

Power window main switch		Condition		Continuity
Terminal				
6			LOCK	Existed
0	47	Door lock and unlock	UNLOCK	Not existed
18	19 17	switch	LOCK	Existed
10			UNLOCK	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power window main switch. Refer to <u>PWC-93, "Removal and Installation"</u>. PASSENGER SIDE

PASSENGER	SIDE :	Description
-----------	--------	-------------

Transmits door lock/unlock operation to BCM.

# PASSENGER SIDE : Component Function Check

# **1.**CHECK FUNCTION

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

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

# Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> Refer to <u>DLK-228</u>, "PASSENGER SIDE : Diagnosis Procedure".

# PASSENGER SIDE : Diagnosis Procedure

INFOID:000000008453077

INFOID:000000008453075

INFOID:000000008453076

# 1. CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> GO TO 4.

# DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]

NO >> GO TO 2. **2.**CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT А 1. Disconnect BCM connector and power window main switch connector. Check continuity between BCM harness connector and front power window switch (passenger side) har-2. В ness connector. BCM Front power window switch (passenger side) Continuity Connector Connector Terminal Terminal 45 1 D25 M66 Existed 46 2 D Check continuity between BCM connector and ground. 3. BCM Е Continuity Connector Terminal Ground 45 M66 Not existed F 46 Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace harness. 3. CHECK BCM OUTPUT SIGNAL Н 1. Connect BCM connector. Check signal between BCM harness connector and ground using oscilloscope. 2. (+) Signal BCM (-) (Reference value) Connector Terminal 45 DLK M66 Ground 46 10 ms JPMIA0012GB 1.0 - 1.5 V Is the inspection result normal? Μ YES >> GO TO 6. NO >> Replace BCM. Refer to BCS-144, "Removal and Installation". 4.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND Ν Check continuity between front power window switch (passenger side) harness connector and ground. Front power window switch (passenger side) Continuity Connector Terminal Ground M25 3 Existed Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace harness. **5.**CHECK DOOR LOCK AND UNLOCK SWITCH Check front power window switch (passenger side). Refer to DLK-230, "PASSENGER SIDE : Component Inspection".

# DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> GO TO 6.
- NO >> Replace front power window switch (passenger side). Refer to <u>PWC-93</u>, "<u>Removal and Installa-</u> tion".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

#### >> INSPECTION END

# PASSENGER SIDE : Component Inspection

INFOID:000000008453078

[WITHOUT INTELLIGENT KEY SYSTEM]

# 1. CHECK DOOR LOCK AND UNLOCK SWITCH

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

Front power window switch (passenger side)		Condition		Continuity	
Ter	minal	Condition		Continuity	
1		LOCK	Existed		
I	2	Door lock and unlock	UNLOCK	Not existed	
2	switch	LOCK	Not existed		
			UNLOCK	Existed	

Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Replace front power window switch (passenger side). Refer to <u>PWC-93</u>, "<u>Removal and Installa-</u> tion".

# DOOR LOCK ACTUATOR

DTC/CIRCUIT DIA	GNOSIS :	>	[W	ITHOUT INTE	LLIGENT KEY SYSTEM]		
DOOR LOCK A	CTUAT	ſOR					
RIVER SIDE							
RIVER SIDE : D	)escripti	on			INFOID:00000008453079		
ocks/unlocks the doc	r with the	signal from	BCM.				
RIVER SIDE : C	Compon	ent Func	tion Check		INFOID:00000008453080		
.CHECK FUNCTION	N						
			Test ("DOOR LOCK").	U			
Touch "ALL LOCK		UNLK" to cr	heck that it works norma	illy.			
YES >> Door lock	actuator i						
_			DE : Diagnosis Procedu	<u>re"</u> .			
DRIVER SIDE : Diagnosis Procedure							
.CHECK DOOR LO	СК АСТИ	ATOR INPL	JT SIGNAL				
Turn ignition swite							
			river side) connector. assembly (driver side) h	arness connec	tor and ground.		
			······, (-·····, ·····, ·				
(+)	mbby				Voltage (V)		
Front door lock asse (driver side)	embly	()	Condition	Condition			
Connector Ter	minal						
D9	1	Ground	Door lock and unlock switch		$0 \rightarrow Battery voltage \rightarrow 0$		
	2			Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$		
the inspection result YES >> Replace f Installation NO >> GO TO 2.	ront door	lock assem	bly (driver side). Refer t	o <u>DLK-319, "D</u>	OOR LOCK : Removal and		
CHECK DOOR LO	СК АСТИ	ATOR CIRC	CUIT				
			r lock actuator connector ss connector and front		embly (driver side) harness		
E	BCM		Front door lock asse	mbly (driver side)	Continuity		
Connector	Te	erminal	Connector	Terminal	Continuity		
M67		59	D9	2	Existed		
		65		1			
. Check continuity t		Civi names	s connector and ground				
	BCM				Continuity		
Connector		Termir		ound –			
M67		59			Not existed		
		65					

YES >> Replace BCM. Refer to <u>BCS-144</u>, "<u>Removal and Installation</u>". NO >> Repair or replace harness.

PASSENGER SIDE

# < DTC/CIRCUIT DIAGNOSIS >

Locks/unlocks the door with the signal from BCM.

# PASSENGER SIDE : Component Function Check

# **1.**CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-232, "PASSENGER SIDE : Diagnosis Procedure".

# PASSENGER SIDE : Diagnosis Procedure

# 1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.

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

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

Front door lock (passenge		(-)	(–) Condition		Voltage (V) (Approx.)	
Connector	Terminal					
D28	5	Ground	Door lock and unlock switch	Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$	
D28	6	Ground	Door lock and unlock Switch	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$	

#### Is the inspection result normal?

YES >> Replace front door lock assembly (passenger side). Refer to DLK-319, "DOOR LOCK : Removal and Installation".

NO >> GO TO 2.

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

- 1. Disconnect BCM connector and all door lock actuator connector.
- Check continuity between BCM harness connector and front door lock assembly (passenger side) har-2. ness connector.

В	СМ	Front door lock asser	Continuity		
Connector	Terminal	Connector Terminal		Continuity	
M67	65	D28	5	Existed	
INIO7	66	DZO	6	LAISted	

Check continuity between BCM harness connector and ground. 3.

BCM			Continuity
Connector	Terminal	Ground	Continuity
M67	65	Ground	Not existed
	66		Not existed

#### Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-144, "Removal and Installation".

>> Repair or replace harness. NO

# REAR LH

# **REAR LH** : Description

Locks/unlocks the door with the signal from BCM.

# **PASSENGER SIDE : Description**

INFOID:00000008453085

2013 CUBE

INFOID:00000008453083

INFOID:00000008453082

INFOID:000000008453084

# DOOR LOCK ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS > **REAR LH: Component Function Check** INFOID:000000008453086 А **1.**CHECK FUNCTION Use CONSULT to perform Active Test ("DOOR LOCK"). 1. В 2. Touch "ALL LOCK" or "ALL UNLK" to check that it works normally. Is the inspection result normal? YES >> Door lock actuator is OK. >> Refer to DLK-234, "REAR RH : Diagnosis Procedure". NO REAR LH : Diagnosis Procedure INFOID:00000008453087 D **1.**CHECK DOOR LOCK ACTUATOR INPUT SIGNAL 1. Turn ignition switch OFF. 2. Disconnect rear door lock assembly LH connector. 3. Check voltage between rear door lock assembly LH harness connector and ground. (+)F Voltage (V) Rear door lock assembly LH Condition (-) (Approx.) Terminal Connector 1 I ock $0 \rightarrow Battery \ voltage \rightarrow 0$ D65 Ground Door lock and unlock switch 2 Unlock $0 \rightarrow Battery \ voltage \rightarrow 0$ Is the inspection result normal? Н YES >> Replace rear door lock assembly LH. Refer to <u>DLK-323, "DOOR LOCK : Removal and Installa-</u> tion". NO >> GO TO 2. 2. CHECK DOOR LOCK ACTUATOR CIRCUIT 1. Disconnect BCM connector and all door lock actuator. 2. Check continuity between BCM harness connector and rear door lock assembly LH harness connector. J BCM Rear door lock assembly LH Continuity Connector Terminal Connector Terminal DLK 65 1 M67 D65 Existed 66 2 Check continuity between BCM harness connector and ground. 3 BCM Continuity M Connector Terminal Ground 65 M67 Not existed 66 Ν Is the inspection result normal? >> Replace BCM. Refer to BCS-144, "Removal and Installation". YES NO >> Repair or replace harness. REAR RH **REAR RH** : Description INFOID:000000008453088 P Locks/unlocks the door with the signal from BCM. **REAR RH : Component Function Check** INFOID:00000008453089 1.CHECK FUNCTION Use CONSULT to perform Active Test ("DOOR LOCK"). 1.

# DOOR LOCK ACTUATOR

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

2.

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-234, "REAR RH : Diagnosis Procedure"</u>.

# **REAR RH** : Diagnosis Procedure

INFOID:000000008453090

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

#### 1. Turn ignition switch OFF.

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

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

#### Is the inspection result normal?

YES	>> Replace rear	door lock assembly	RH.	Refer to	ס <u>DLK-323,</u>	"DOOR	LOCK :	Removal	and	Installa-
	<u>tion"</u> .									

```
NO >> \overline{\text{GO TO 2}}.
```

# 2. CHECK DOOR LOCK ACTUATOR CIRCUIT

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

E	BCM	Rear door loc	Continuity		
Connector	Terminal	Connector Terminal		Continuity	
M67	65	D45	5	Existed	
IVIO7	66	D45	6	Existed	

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M67	65	Ground	Not existed
	66		NUL EXISIEU

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-144, "Removal and Installation"</u>.

NO >> Repair or replace harness.

BACK DOOR

# BACK DOOR : Description

Locks/unlocks the door with the signal from BCM.

# BACK DOOR : Component Function Check

# **1.**CHECK FUNCTION

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

#### Is the inspection result normal?

YES >> Back door lock actuator is OK.

NO >> Refer to <u>DLK-235</u>, "BACK DOOR : Diagnosis Procedure".

#### Revision: 2012 August

# **DLK-234**

INFOID:000000008453091

INFOID:000000008453092

# DOOR LOCK ACTUATOR [WITHOUT INTELLIGENT KEY SYSTEM]

# < DTC/CIRCUIT DIAGNOSIS >

# BACK DOOR : Diagnosis Procedure

INFOID:000000008453093

А

В

Ε

F

Н

# 1. CHECK BACK DOOR LOCK ACTUATOR INPUT SIGNAL

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

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

-	(·	+)					С	
_	Back door lo	ock assembly	(—)	Condition		Condition Voltage (V)	Voltage (V) (Approx.)	
_	Connector	Terminal					D	
_	D106	2	Ground	Door lock and unlock switch	Unlock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$	D	
	0100	3	Ground	Door lock and unlock Switch	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$		

#### Is the inspection result normal?

YES	>> Replace back door lock assembly. Refer to DLK-327, "DOOR LOCK : Removal and Installation".
NO	>> GO TO 2

# 2. CHECK BACK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM connector and all door lock actuator.

#### 2. Check continuity between BCM harness connector and back door lock assembly harness connector.

E	CM	Back door l	ock assembly	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M67	65	D106	3	Existed
WO7	66		2	

3. Check continuity between BCM harness connector and ground.

-	В	CM		Continuity	
-	Connector Terminal		Ground	Continuity	J
-	M67	65	Ground	Not existed	
	WO7	66		NOT EXISTED	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-144, "Removal and Installation"</u>.

NO >> Repair or replace harness.

Μ

Ν

Ρ

#### < DTC/CIRCUIT DIAGNOSIS >

# DOOR KEY CYLINDER SWITCH

# Description

Transmits lock/unlock operation to BCM.

# Component Function Check

INFOID:000000008453095

INFOID:00000008453094

# **1.**CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

Monitor item	Con	Status	
KEY CYL LK-SW		Lock	ON
RET GTE LR-SW	Deixen side deserves ediades	Neutral / Unlock	OFF
KEY CYL UN-SW	Driver side door key cylinder	Unlock	ON
KET CTL ON-SW		Neutral / Lock	OFF

#### Is the inspection result normal?

- YES >> Door key cylinder switch is OK.
- NO >> Refer to DLK-236, "Diagnosis Procedure".

# **Diagnosis Procedure**

INFOID:000000008453096

# 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

(+) Front door lock assembly (driver side)		()	Voltage (V)	
Connector	Terminal		(Approx.)	
D9	5 6	Ground	(V) ₁₅ 10 10 10 10 10 10 10 10 10 10	

#### Is the inspection result normal?

YES >> GO TO 3.

# 2. CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

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

В	BCM		Front door lock assembly (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M65	7	D9	5	Existed
WIOS	8	9	6	Existed

# DOOR KEY CYLINDER SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]

	BCM				Continuity	
Connector	r	Terminal		Ground	Continuity	
M65		7 8		Giouna	Not existed	
s the inspection res		0				
YES >> Replace NO >> Repair <b>3.</b> CHECK DOOR H	e BCM. Refer to or replace harn KEY CYLINDEF	R SWITCH GROUND	CIRCUI	Т		
Check continuity be	tween front doc	or lock assembly (driv	er side) l	harness connector ar	nd ground.	
Front de	oor lock assembly (	driver side)				
Connector	r	Terminal		Ground	Continuity	
D9		4			Existed	
	-					
D.CHECK INTERN Refer to <u>GI-41, "Inte</u>	Component Ins sult normal? 5. e front door lock tion". MITTENT INCID ermittent Incider	pection". k assembly (driver sid	de). Refe	er to <u>DLK-319, "DOO</u>		
Refer to <u>DLK-237, "</u> <u>s the inspection res</u> YES >> GO TO NO >> Replace <u>Installa</u> D.CHECK INTERM Refer to <u>GI-41, "Inte</u> >> INSPEC	Component Ins sult normal? 5. e front door lock tion". IITTENT INCID ermittent Incider CTION END pection	pection". k assembly (driver sid ENT <u>nt"</u> .	de). Refe	er to <u>DLK-319, "DOC</u>		
Refer to <u>DLK-237, "</u> <u>s the inspection res</u> YES >> GO TO NO >> Replace <u>Installar</u> D.CHECK INTERM Refer to <u>GI-41, "Inte</u> >> INSPEC Component Ins .CHECK DOOR H . Turn ignition sw 2. Disconnect from	Component Ins sult normal? 5. e front door lock tion". IITTENT INCID ermittent Incider CTION END pection KEY CYLINDEF vitch OFF. at door lock asso	pection". k assembly (driver sid ENT <u>nt"</u> .	rminal.			
Refer to <u>DLK-237, "</u> <u>s the inspection res</u> YES >> GO TO NO >> Replace <u>Installar</u> D.CHECK INTERM Refer to <u>GI-41, "Inte</u> >> INSPEC Component Ins .CHECK DOOR H . Turn ignition sw 2. Disconnect from	Component Ins sult normal? 5. e front door lock tion". AITTENT INCID ermittent Incider CTION END pection KEY CYLINDEF vitch OFF. of door lock asset y between front	pection". k assembly (driver sid ENT nt". R SWITCH embly (driver side) ter	rminal. (driver si	de) terminals.	INFOID:0000	
Refer to <u>DLK-237</u> , " <u>s the inspection res</u> YES >> GO TO NO >> Replace <u>Installa</u> <b>D</b> .CHECK INTERM Refer to <u>GI-41</u> , "Inte >> INSPEC <b>Component Ins</b> .CHECK DOOR H . Turn ignition sw 2. Disconnect from 3. Check continuit	Component Ins sult normal? 5. e front door lock tion". MITTENT INCID ermittent Incider CTION END pection KEY CYLINDEF vitch OFF. at door lock asso y between front embly (driver side)	pection". k assembly (driver sid ENT nt". R SWITCH embly (driver side) ter	rminal.	de) terminals.		
Refer to <u>DLK-237</u> , " <u>s the inspection res</u> YES >> GO TO NO >> Replace <u>Installar</u> <b>D</b> .CHECK INTERM Refer to <u>GI-41</u> , "Inte >> INSPEC <b>Component Ins</b> .CHECK DOOR H . Turn ignition sw 2. Disconnect from 3. Check continuit Front door lock asse Term	Component Ins sult normal? 5. e front door lock tion". MITTENT INCID ermittent Incider CTION END pection KEY CYLINDEF vitch OFF. at door lock asso y between front embly (driver side)	pection". k assembly (driver sid ENT nt". R SWITCH embly (driver side) ter	rminal. (driver si	de) terminals.	INFOID:0000	
Refer to <u>DLK-237</u> , " <u>s the inspection res</u> YES >> GO TO NO >> Replace <u>Installar</u> D.CHECK INTERM Refer to <u>GI-41</u> , "Inter >> INSPEC Component Ins . CHECK DOOR H . Turn ignition sw 2. Disconnect from 3. Check continuit Front door lock asse	Component Ins sult normal? 5. e front door lock tion". MITTENT INCID ermittent Incider CTION END pection KEY CYLINDEF vitch OFF. at door lock asse y between front embly (driver side) inal	pection". k assembly (driver sid ENT <u>nt"</u> . R SWITCH embly (driver side) tel door lock assembly	rminal. (driver si Conditio	de) terminals.	INFOID:00000	
Refer to <u>DLK-237</u> , " <u>s the inspection res</u> YES >> GO TO NO >> Replace <u>Installar</u> <b>D</b> .CHECK INTERM Refer to <u>GI-41</u> , "Inte >> INSPEC <b>Component Ins</b> .CHECK DOOR H . Turn ignition sw 2. Disconnect from 3. Check continuit Front door lock asse Term	Component Ins sult normal? 5. e front door lock tion". MITTENT INCID ermittent Incider CTION END pection KEY CYLINDEF vitch OFF. at door lock asso y between front embly (driver side)	pection". k assembly (driver sid ENT nt". R SWITCH embly (driver side) ter	rminal. (driver si Conditio	ide) terminals. n Unlock	INFOID:0000 Continuity Existed	

# REMOTE KEYLESS ENTRY RECEIVER

# < DTC/CIRCUIT DIAGNOSIS > REMOTE KEYLESS ENTRY RECEIVER

# Description

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

#### **Component Function Check**

# **1.**CHECK FUNCTION

Check ("RKE OPE COUN1") in MULTI REMOTE ENT Data Monitor mode using 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-238</u>, "Diagnosis Procedure".

# **Diagnosis Procedure**

INFOID:000000008453100

# 1.CHECK BCM SIGNAL 1

- 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 keyles	+) s entry receiver	()	Voltage (V) (Approx.)	
Connector	Connector Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
M61	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		Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M65	19	M61	4	Existed

3. Check continuity between BCM harness connector and ground.

ВС	CM		Continuity
Connector	Connector Terminal		Continuity
M65	19		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-144, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# **3.**CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

1. Reconnect remote keyless entry receiver.

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

INFOID:000000008453098

INFOID:000000008453099

# REMOTE KEYLESS ENTRY RECEIVER

#### < DTC/CIRCUIT DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]

(+) Remote keyless entry receiver				Signal	
	Terminal	(-)		(Reference va	alue)
Connector	Terminal		Insert mechanical key key cylinder Remove mechanical k		0 V 5 V
			tion key cylinder (Any	door opened)	5 V
M61	4	Ground	Remove mechanical I tion key cylinder (Any		
					• •0.2 s
he inspection res	ult normal?				
S >> GO TO					
		yless entry re			
CHECK REMOT	E KEYLESS	S ENTRY RE	CEIVER GROUND (	CIRCUIT	
			keyless entry receive		/ receiver harness con
	BCM		Remote keyles	ss entry receiver	Continuity
Connector	Т	erminal	Connector Terminal		Continuity
MOD		18	M61 1		Estisted
M65		10		l	Existed
	y between E	-	connector and grou		Existed
	-	-	-		Existed
	BCM	-	connector and grou		Continuity
Check continuity	BCM	3CM harness	connector and grou	nd.	1
Check continuity Connector	BCM	BCM harness Termina 18	connector and grou	nd.	Continuity
Check continuity Connector M65 he inspection res S >> GO TO	BCM sult normal? 5.	BCM harness Termina 18	connector and grou	nd.	Continuity
Check continuity Connector M65 he inspection res ES >> GO TO D >> Repair of	BCM sult normal? 5. or replace h	BCM harness Termina 18	connector and grou	nd.	Continuity
Check continuity Connector M65 he inspection res ES >> GO TO O >> Repair of CHECK BCM SIG	BCM sult normal? 5. 5. or replace h GNAL 2	3CM harness Termina 18 arness.	connector and grou	nd.	Continuity
Check continuity Connector M65 he inspection res ES >> GO TO D >> Repair of CHECK BCM SIG Reconnect BCM	BCM BUIt normal? 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	3CM harness Termina 18 arness.	connector and grou	Ground	Continuity Not existed
Check continuity Connector M65 he inspection res ES >> GO TO D >> Repair of CHECK BCM SIG Reconnect BCM	BCM BUIt normal? 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	3CM harness Termina 18 arness.	connector and grou	Ground	Continuity Not existed
Check continuity Connector M65 he inspection res ES >> GO TO D >> Repair of CHECK BCM SIG Reconnect BCM	BCM BUIt normal? 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	3CM harness Termina 18 arness.	connector and grou	Ground	Continuity Not existed
Check continuity Connector M65 he inspection res ES >> GO TO D >> Repair of CHECK BCM SIO Reconnect BCM Check voltage b	BCM Sult normal? 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	CM harness Termina 18 arness.	connector and grou	Ground	Continuity Not existed d ground.
Check continuity Connector M65 he inspection res ES >> GO TO D >> Repair of CHECK BCM SIO Reconnect BCM Check voltage b	BCM sult normal? 5. or replace h GNAL 2 A connector oetween ren (+)	CM harness Termina 18 arness.	connector and grou	Ground	Continuity Not existed
Check continuity Connector M65 he inspection res ES >> GO TO D >> Repair of CHECK BCM SIO Reconnect BCM Check voltage b Rem	BCM sult normal? 5. or replace h GNAL 2 A connector oetween ren (+)	BCM harness Termina 18 arness. note keyless o	connector and grou	Ground	Continuity Not existed d ground.
Check continuity Connector M65 he inspection res ES >> GO TO D >> Repair of CHECK BCM SIO Reconnect BCM Check voltage b Rem Connector	BCM Sult normal? 5. or replace h GNAL 2 A connector (+) note keyless en (+)	CM harness Termina 18 arness. note keyless of htry receiver Termina 2	connector and grou	⊥ nd. Ground ss connector an (–)	Continuity Not existed d ground. Voltage (V) (Approx.)
Check continuity Connector M65 he inspection res ES >> GO TO O >> Repair of CHECK BCM SIO Reconnect BCM Check voltage b Rem Connector M61 he inspection res ES >> GO TO	BCM Sult normal? 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	CM harness Termina 18 arness. note keyless of htry receiver Termina 2	connector and grou	⊥ nd. Ground ss connector an (–)	Continuity Not existed d ground. Voltage (V) (Approx.)
Check continuity Connector M65 he inspection res ES >> GO TO D >> Repair of CHECK BCM SIO Reconnect BCM Check voltage b Rem Connector M61 he inspection res ES >> GO TO D >> GO TO	BCM Sult normal? 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	CM harness Termina 18 arness	connector and grou	⊥ nd. Ground ss connector an (–)	Continuity Not existed d ground. Voltage (V) (Approx.)

# REMOTE KEYLESS ENTRY RECEIVER

#### < DTC/CIRCUIT DIAGNOSIS >

# [WITHOUT INTELLIGENT KEY SYSTEM]

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M65	20	M61	2	Existed

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Connector Terminal		Continuity
M65	20		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-144</u>, "Removal and Installation".

NO >> Repair or replace harness.

# 7.CHECK REMOTE KEYLESS ENTRY RECEIVER SIGNAL

1. Reconnect remote keyless entry receiver connector.

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

(+) Remote keyless entry receiver		()	Condition	Signal (Reference value)
Connector	Terminal			(((((((((((((((((((((((((((((((((((((((
M61	2	Ground	Waiting	(V) 6 4 2 0 •••••••••••••••••••••••••••••••••
		Cround	Signal receiving	(V) 6 4 0 ••••1.0ms PIIB7729J

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace remote keyless entry receiver. Refer to <u>DLK-333</u>, "Removal and Installation".

**8.**CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

# < DTC/CIRCUIT DIAGNOSIS >

# KEY SWITCH

Description

Key switch detects that ignition key is inserted into the key cylinder, and then transmits the signa	al to BCM.
Component Function Check	INFOID:000000008453102

# 1. CHECK FUNCTION

Check ("KEY ON SW") in BCM "DATA MONITOR" mode using CONSULT.

Monitor item		Condition	Status
	Kaufah	Inserted in key cylinder	ON
KEY ON SW	Keyfob Removed from key cylind		OFF
Is the inspection result normal?			
YES >> Key switch is OK. NO >> Refer to <u>DLK-241, "Di</u>	agnosis Procedure".		
Diagnosis Procedure			INFOID:00000008453103
<b>1.</b> CHECK FUSE			
<ol> <li>CHECK FUSE</li> <li>Turn ignition switch OFF.</li> <li>Check 10 A fuse, [No.10, local</li> </ol>	ted in fuse block (J/B	)].	
1. Turn ignition switch OFF.	ted in fuse block (J/B	)].	
<ol> <li>Turn ignition switch OFF.</li> <li>Check 10 A fuse, [No.10, locals fuse fusing?</li> </ol>	, ,	)]. affected circuit if a fuse is blow	n.

1. Disconnect key switch connector.

2. Check voltage between key switch harness connector and ground.

	Key switch			Voltage (V)	DL
(	Connector	Terminal	Ground	(Approx.)	
M24 2			Battery voltage		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK KEY SWITCH CIRCUIT

1. Disconnect BCM connector.

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

Keys	switch	BC	CM	Continuity	•
Connector	Terminal	Connector	Terminal	Continuity	С
M24	1	M65	37	Existed	-

3. Check continuity between key switch connector and ground.

Key switch			Continuity
Connector	Terminal	Ground	Continuity
M24	1	_	Not existed

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

В

Μ

Ν

Ρ

INFOID:000000008453101

#### < DTC/CIRCUIT DIAGNOSIS >

# 4.CHECK KEY SWITCH

Refer to DLK-242, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace key switch.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

#### >> INSPECTION END

**Component Inspection** 

#### COMPONENT INSPECTION

# 1. CHECK KEY SWITCH

1. Turn ignition switch OFF.

2. Disconnect key switch connector.

3. Check continuity between key switch terminals.

Key s	witch	Condition Continuity		Continuity	
Term	ninal			Continuity	
1	2	Kevfob	Inserted in key cylinder	Existed	
I	2	Reylob	Removed from key cylinder	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace key switch.

INFOID:000000008453104

BUZZER (COMBINATI	ON METER)
< DTC/CIRCUIT DIAGNOSIS >	[WITHOUT INTELLIGENT KEY SYSTEM]
BUZZER (COMBINATION METER)	
Description	INFOID:00000008453105
Performs operation method guide and warning with buzzer.	
Component Function Check	INFOID:00000008453106
1.CHECK FUNCTION	
<ol> <li>Check the operation with "INSIDE BUZZER" in the Active</li> <li>Touch "take out", "knob" or "key" on screen.</li> </ol>	Test.
Is the inspection result normal?	
Yes >> Buzzer (combination meter) is OK. No >> Refer to <u>DLK-243, "Diagnosis Procedure"</u> .	
Diagnosis Procedure	INFOID:00000008453107
1.CHECK METER BUZZER CIRCUIT	
Refer to WCS-25, "Component Function Check".	
Is the inspection result normal?	
Yes >> GO TO 2.	
No >> Repair or replace meter buzzer circuit.	
2.CHECK INTERMITTENT INCIDENT	
Refer to GI-41, "Intermittent Incident".	
>> INSPECTION END	

J

А

В

С

D

Ε

F

G

Н

I

DLK

L

M

Ν

0

Ρ

# HAZARD FUNCTION

# Description

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

**Component Function Check** 

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-244, "Diagnosis Procedure"</u>.

# Diagnosis Procedure

1. CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-66, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace hazard warning switch circuit. Refer to EXL-177, "Removal and Installation".

2. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

INFOID:000000008453108

INFOID:000000008453109

INFOID:000000008453110

# **KEYFOB BATTERY**

# < DTC/CIRCUIT DIAGNOSIS >

# **KEYFOB BATTERY**

#### Description INFOID:000000008453111 Remote door lock and unlock control entry function available when operating on button. В **Component Function Check** INFOID:000000008453112 **1.**CHECK FUNCTION С Check door lock and unlock operation with keyfob button. Is the inspection result normal? D YES >> Keyfob is OK. >> Refer to DLK-245, "Diagnosis Procedure". NO **Diagnosis Procedure** Ε INFOID:000000008453113

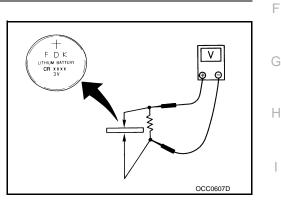
# **1.**CHECK KEYFOB BATTERY

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

> Standard : Approx. 2.5 - 3.0V

Is the measurement value within the specification?

- YES >> Replace keyfob.
- NO >> Replace keyfob battery. Refer to DLK-334, "Removal and Installation".



J

L

Μ

Ν

Ρ

[WITHOUT INTELLIGENT KEY SYSTEM]

А

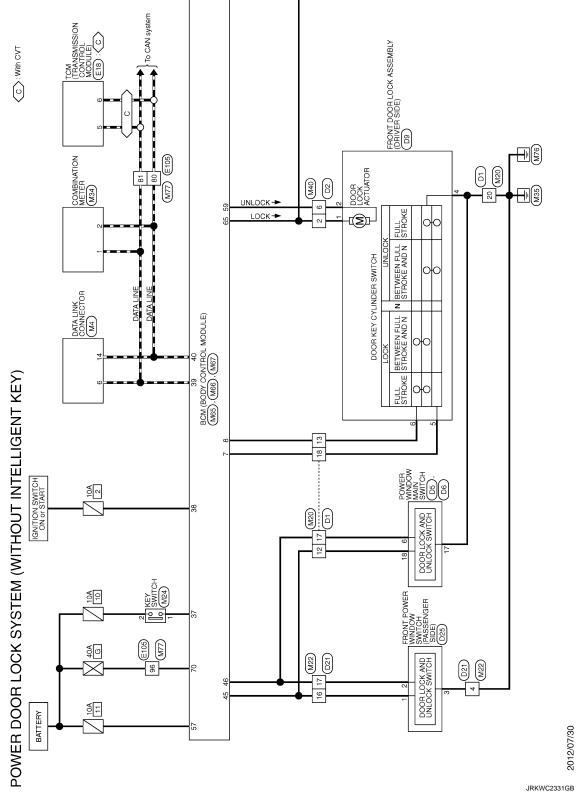
< DTC/CIRCUIT DIAGNOSIS >

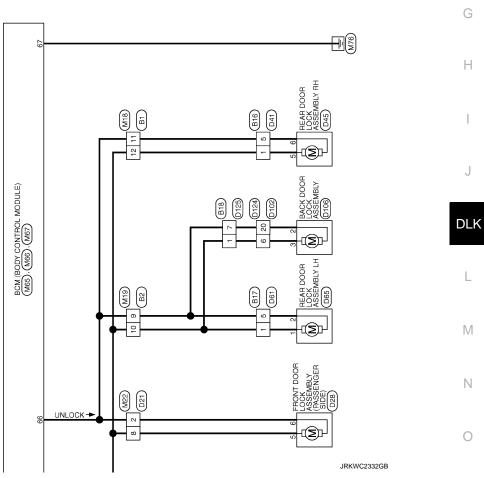
# POWER DOOR LOCK SYSTEM

Wiring Diagram - POWER DOOR LOCK SYSTEM -

INFOID:000000008453114

For connector terminal arrangements, harness layouts, and alphabets in a  $\bigcirc$  (option abbreviation; if not described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.





Ρ

А

В

С

D

Е

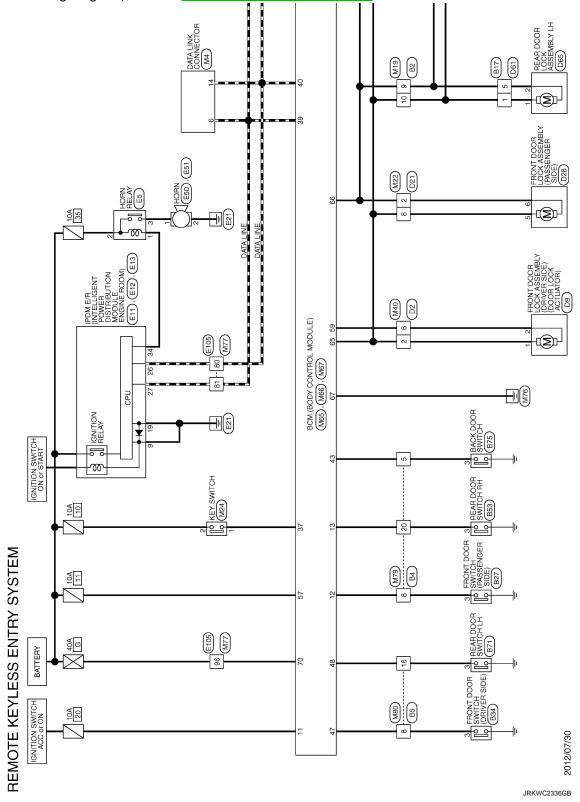
F

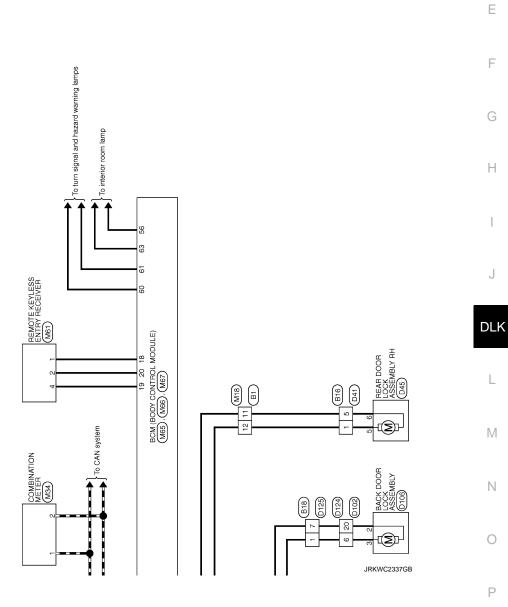
# REMOTE KEYLESS ENTRY SYSTEM

Wiring Diagram - REMOTE KEYLESS ENTRY SYSTEM -

INFOID:000000008453115

For connector terminal arrangements, harness layouts, and alphabets in a  $\bigcirc$  (option abbreviation; if not described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.





А

В

С

D

[WITHOUT INTELLIGENT KEY SYSTEM]

# ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

# **Reference Value**

INFOID:000000008831210

# VALUES ON THE DIAGNOSIS TOOL

#### 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	Value/Status
IGN ON SW	Ignition switch OFF or ACC	Off
IGN ON SW	Ignition switch ON	On
	Mechanical key is removed from key cylinder	Off
KEY ON SW	Mechanical key is inserted to key cylinder	On
	Door lock/unlock switch does not operate	Off
CDL LOCK SW	Press door lock/unlock switch to the lock side	On
CDL UNLOCK SW	Door lock/unlock switch does not operate	Off
CDL UNLOCK SW	Press door lock/unlock switch to the unlock side	On
	Driver's door closed	Off
DOOR SW-DR	Driver's door opened	On
	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
	Rear RH door closed	Off
DOOR SW-RR	Rear RH door opened	On
	Rear LH door closed	Off
DOOR SW-RL	Rear LH door opened	On
BACK DOOR SW	Back door closed	Off
	Back door opened	On
LOCK STATUS	NOTE: The item is indicated, but not monitored.	Off
	Ignition switch OFF	Off
ACC ON SW	Ignition switch ACC or ON	On
	"LOCK" button of key fob is not pressed	Off
KEYLESS LOCK	"LOCK" button of key fob is pressed	On
KEYLESS UNLOCK	"UNLOCK" button of key fob is not pressed	Off
KETLESS UNLOCK	"UNLOCK" button of key fob is pressed	On
SHOCK SENSOR	NOTE: The item is indicated, but not monitored.	NORMAL
	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
VEHICLE SPEED	While driving	Equivalent to speed- ometer reading
	Rear window defogger switch OFF	Off
REAR DEF SW	Rear window defogger switch ON	On

# **BCM (BODY CONTROL MODULE)**

# < ECU DIAGNOSIS INFORMATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status	
REVERSE SW CAN	NOTE:	Off	
	The item is indicated, but not used.	On	
TAIL LAMP SW	Lighting switch OFF	Off	
	Lighting switch 1ST	On	
R FOG SW	<b>NOTE:</b> The item is indicated, but not monitored.	Off	
BUCKLE SW	The seat belt (driver side) is fastened. [Seat belt switch (driver side) OFF]	Off	
	The seat belt (driver side) is unfastened. [Seat belt switch (driver side) ON]	On	
RNK/HAT MNTR	<b>NOTE:</b> The item is indicated, but not monitored.	Off	
	Ignition switch OFF	Off	_
ACC SW	Ignition switch ACC or ON	On	
YLS TRNK/HAT	NOTE: The item is indicated, but not monitored.	Off	
KEYLESS PANIC	PANIC button of key fob is not pressed	Off	
	PANIC button of key fob is pressed	On	
HI BEAM SW	Lighting switch OFF	Off	
	Lighting switch HI	On	
	Lighting switch OFF	Off	
IEAD LAMP SW 1	Lighting switch 2ND	On	
	Lighting switch OFF	Off	
HEAD LAMP SW 2	Lighting switch 2ND	On	
UTO LIGHT SW	NOTE: The item is indicated, but not monitored.	Off	
PASSING SW	Other than lighting switch PASS	Off	
	Lighting switch PASS	On	
R FOG SW	NOTE: The item is indicated, but not monitored.	Off	- [
TURN SIGNAL R	Turn signal switch OFF	Off	_
	Turn signal switch RH	On	
TURN SIGNAL L	Turn signal switch OFF	Off	
	Turn signal switch LH	On	
PKB SW	Parking brake switch is OFF	Off	
	Parking brake switch is ON	On	
ENGINE RUN	Engine stopped	Off	
	Engine running	On	
OPTI SEN (DTCT)	NOTE:           The item is indicated, but not monitored.	Close to 5 V	
OPTI SEN (FILT)	NOTE: The item is indicated, but not monitored.	Close to 5 V	
IG SEN COND	NOTE: The item is indicated, but not monitored.	OFF	
IGN SW CAN	Ignition switch OFF or ACC	Off	
	Ignition switch ON	On	
FR WIPER HI	Front wiper switch OFF	Off	
	Front wiper switch HI	On	

# **BCM (BODY CONTROL MODULE)**

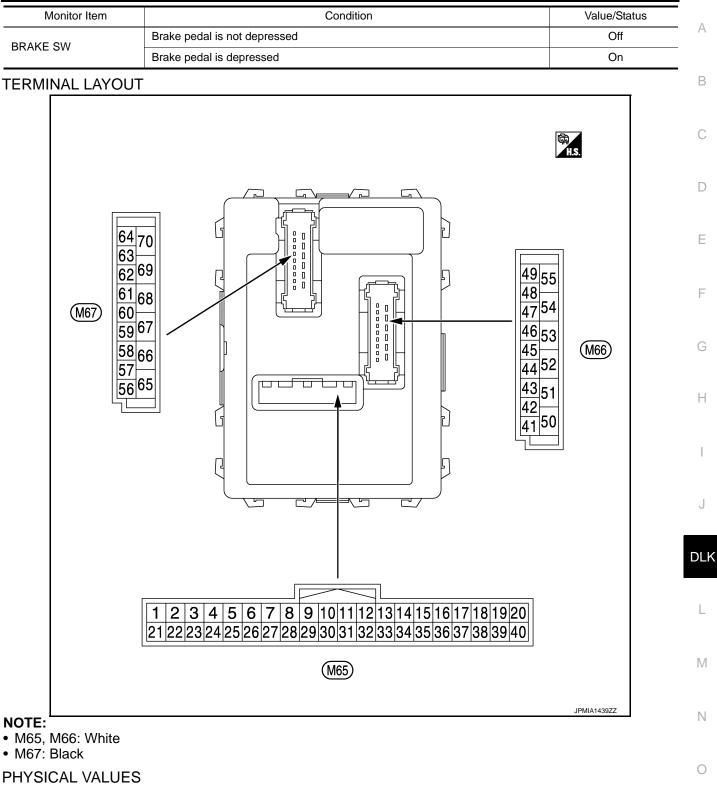
# < ECU DIAGNOSIS INFORMATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
FR WIPER LOW	Front wiper switch OFF	Off
	Front wiper switch LO	On
FR WIPER INT	Front wiper switch OFF	Off
	Front wiper switch INT	On
R WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
FR WIPER STOP	Any position other than front wiper stop position	Off
	Front wiper stop position	On
RR WIPER ON	Rear wiper switch OFF	Off
	Rear wiper switch ON	On
	Rear wiper switch OFF	Off
	Rear wiper switch INT	On
	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
RR WIPER STOP	Rear wiper stop position	Off
AR WIFER STOP	Other than rear wiper stop position	On
RAIN SENSOR	NOTE: The item is indicated, but not monitored.	Off
	Hazard switch OFF	Off
HAZARD SW	Hazard switch ON	On
AN ON SIG	Blower control dial OFF	Off
-AN ON SIG	Other than blower control dial OFF	On
	A/C switch OFF	Off
AIR COND SW	A/C switch ON	On
THERMO AMP	Ignition switch ON	Off
	Evaporator is extremely low temperature	On
	Other than A/C mode defroster ON position	Off
FR DEF SW	A/C mode defroster ON position	On
KEYLESS TRUNK	NOTE: The item is indicated, but not monitored.	Off
TRNK OPNR SW	NOTE: The item is indicated, but not monitored.	Off
TRNK OPN MNTR	NOTE: The item is indicated, but not monitored.	Off
	Close the hood	Off
HOOD SW	Open the hood	On
	Other than the ignition switch is ON by key registered to BCM.	Off
FRANSPONDER	The ignition switch is ON by key registered to BCM.	On
NTELLI KEY	NOTE: The item is indicated, but not used.	Off
AUTO RELOCK	<b>NOTE:</b> The item is indicated, but not monitored.	Off
DIL PRESS SW	<ul><li>Ignition switch OFF or ACC</li><li>Engine running</li></ul>	Off
	Ignition switch ON	On

### < ECU DIAGNOSIS INFORMATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]



Ρ

#### Revision: 2012 August

# BCM (BODY CONTROL MODULE) < ECU DIAGNOSIS INFORMATION > [WITHOUT IN]

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output	Condition		(Approx.)
					All switch OFF	0 V
					Turn signal switch RH	
					Lighting switch HI	(V) 15
2 (BR/W)	Ground	Combination switch INPUT 5	Input	Combination switch (Wiper intermit-	Lighting switch 1ST	10 5 0 ++10ms 1.0 V
				tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 ++10 ms JPMIA0342JP 2.0 V
					All switch OFF	0 V
					Turn signal switch LH	
				Combination	Lighting switch PASS	(V) 15
3 (GR)	Ground	Combination switch INPUT 4	Input	switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	10 5 0 •••10ms PKiB4958J 1.0 V
					All switch OFF	0 V
					Front wiper switch LO	
				Combination	Front wiper switch MIST	(V) 15
4 (L/Y)	Ground	Combination switch INPUT 3	Input	switch (Wiper intermit- tent dial 4)	Front wiper switch INT	10 5 0 •••10ms PKiB4958J 1.0 V

### < ECU DIAGNOSIS INFORMATION >

Conductor       Signal name       Input/ Output       Conductor       (Approx.)         +       -       Signal name       Output       (Approx.)       B         -       -       -       -       0.V       B         -       -       -       -       0.V       B         -       -       -       -       0.V       B         -       -       -       -       -       0.V       B         -       -       -       -       -       0.V       B         -       -       -       -       -       -       0.V       B         -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       <		nal No.	Description				) /= l++=	
5 (G)       Ground       Combination switch INPUT 2       Input       Combination Switch       Combination (Wiper intermittent dial 4)       Input Prot washer switch (Wiper intermittent dial 4)	· · · · · · · · · · · · · · · · · · ·	color)	Signal name		-	Condition	Value (Approx.)	A
5 (G)       Ground       Combination switch INPUT 2       Input       Combination switch       Combi						(Wiper intermittent dial 4)	0 V	В
5 (C)       Ground       Combination switch INPUT 2       Input       Combination switch       Combi						(Wiper intermittent dial 4) Rear washer switch ON		С
6 (L/R)       Combination switch       Input       Combination switch       All switch OFF (Wiper intermittent dial 4)       0 V       H         6 (L/R)       Ground       Combination switch       Input       Combination switch       All switch OFF (Wiper intermittent dial 4)       0 V       H         7       Mage: Switch OFF (Wiper intermittent dial 4)       0 V       H         8       All switch OFF (Wiper intermittent dial 4)       0 V       H         9       0       0       H         10       Viper intermittent dial 4)       0 V       H         10       Viper intermittent dial 4)       0 V       H         10       Viper intermittent dial 3       1.0 V       D         11       Wiper intermittent dial 3       1.0 V       D         11.0 V       0       0       1.0 V       0       0         11.0 V       0       0       0       0       0       0         11.0 V       0       0       0       0       0       0		Ground		Input		<ul><li>with all switch OFF</li><li>Wiper intermittent dial 1</li><li>Wiper intermittent dial 5</li></ul>	← +10ms PKIB4958J	D
6 (L/R)       Ground       Combination switch INPUT 1       Input       Combination switch       All switch OFF (Wiper intermittent dial 4)       0 V       H         6 (L/R)       Ground       Combination switch INPUT 1       Input       Combination switch       Any of the condition below with all switch OFF 0.8 V       V       H         0       Viper intermittent dial 4)       J         0       Combination (L/R)       Input       Combination switch       Any of the condition below with all switch OFF 0. Wiper intermittent dial 2)       Viper intermittent dial 4)       M         0       Any of the condition below with all switch OFF 0. Wiper intermittent dial 5       Viper intermittent dial 6       Viper intermittent dial 6       Viper intermittent dial 7	(0)				SWICH	Wiper intermittent dial 6		Ε
6 (L/R)       Ground       Combination switch       Input       Combination switch       Any of the condition below with all switch OFF       V)       H         6 (L/R)       Ground       Combination switch       Input       Combination switch       Any of the condition below with all switch OFF       V)       Input         6 (L/R)       Ground       Combination switch       Input       Combination switch       Any of the condition below with all switch OFF       V)       Input         0       Any of the condition below with all switch OFF       V)       N       N         0       Any of the condition below with all switch OFF       V)       N       N         0       V)       V)       N       N       N         0       V)       V)       V)       V)       N         0       V)       V)       V)       V)       V)       V)         0       V)       V)       V) <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>F</td></t<>								F
6 (L/R)       Ground       Combination switch INPUT 1       Input       Combination switch       Combination switch       Combination switch       Any of the condition below with all switch OFF       V I I I I I I I I I I I I I I I I I I I							PKIB4956J	G
6 (L/R)       Ground       Combination switch INPUT 1       Input       Combination switch       Combination switch       Any of the condition below with all switch OFF       Input       Combination switch       Any of the condition below with all switch OFF       Input       Combination switch       Any of the condition below with all switch OFF       Input       Combination switch       Any of the condition below with all switch OFF       Input       Combination switch       Any of the condition below with all switch OFF       Input       Input       Combination switch       Any of the condition below with all switch OFF       Input       Input       Input       Combination switch       Any of the condition below with all switch OFF       Input       Inpu							0 V	Н
6 (L/R)       Ground       Combination switch INPUT 1       Input       Combination switch       Combination switch       Any of the condition below with all switch OFF       Input       Combination switch       Any of the condition below with all switch OFF       Input       Combination switch       Any of the condition below with all switch OFF       Input       Any of the condition below with all switch OFF       Input       Input       Combination switch       Any of the condition below with all switch OFF       Input       Input <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
6 (L/R)       Ground       Combination switch INPUT 1       Input       Combination switch       Any of the condition below with all switch OFF)       Imput       Any of the condition below with all switch OFF       Imput       M         0       Imput       Combination switch       Any of the condition below with all switch OFF       Imput       Imput       Imput       Any of the condition below with all switch OFF       Imput       Impu								I
6 (L/R)       Ground       Combination switch INPUT 1       Input       Combination switch       Any of the condition below with all switch OFF       Imput       Any of the condition below with all switch OFF       Imput       Imput       Manual switch Wiper intermittent dial 1       Imput       Imput       Imput       Imput       Imput       Imput       Any of the condition below with all switch OFF       Imput								J
6 (L/R)       Ground       Combination switch INPUT 1       Input       Combination switch       Any of the condition below with all switch OFF       Imput       M         • Wiper intermittent dial 1       • Wiper intermittent dial 2       Imput       M         • Wiper intermittent dial 1       • Wiper intermittent dial 2       Imput       M         • Wiper intermittent dial 2       • Wiper intermittent dial 2       Imput       M         • Wiper intermittent dial 2       • Wiper intermittent dial 2       Imput       M         • Wiper intermittent dial 2       • Wiper intermittent dial 2       Imput       M         • Wiper intermittent dial 6       • Wiper intermittent dial 6       • • • • • • • • • • • • • • • • • • •							1.0 V	DLk
Any of the condition below with all switch OFF • Wiper intermittent dial 6 • Wiper intermittent dial 7		Ground		Input		<ul><li>with all switch OFF</li><li>Wiper intermittent dial 1</li></ul>		L
Any of the condition below with all switch OFF • Wiper intermittent dial 6 • Wiper intermittent dial 7							PKIB4952J	M
with all switch OFF • Wiper intermittent dial 6 • Wiper intermittent dial 7 PKIB4956J								Ν
						<ul><li>with all switch OFF</li><li>Wiper intermittent dial 6</li></ul>		0
								Ρ

### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(vvire +	color) –	Signal name	Input/ Output		Condition	(Approx.)
7 (W/R)	Ground	Door key cylinder switch UNLOCK	Input	Door key cylin- der switch	NEUTRAL position	(V) 15 10 5 0 • • 10ms PKIB4960J 7.0 - 8.0 V
					UNLOCK position	0 V
8	0 -	Door key cylinder		Door key cylin-	NEUTRAL position	12 V
(W/B)	Ground	switch LOCK	Input	der switch	LOCK position	0 V
9	Crownel	Stop Jomp switch	locut	Stop lamp	OFF (Brake pedal is not depressed)	0 V
(R)	Ground	Stop lamp switch	Input	switch	ON (Brake pedal is de- pressed)	Battery voltage
10	Ground	Rear window defog-	Input	Rear window	OFF (Not pressed)	12 V
(W/L)	Ground	ger switch	Input	defogger switch	ON (Pressed)	0 V
11	Ground	Ignition switch ACC	Input	Ignition switch O	FF	0 V
(L/Y)	Croana		mput	Ignition switch A	CC or ON	Battery voltage
12 (SB)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	(V) 15 0 • • 10ms • • • 10ms • • • 10ms • • • • • • • • • • • • • • • • • • •
					ON (When passenger door opened)	0 V
13 (GR/L)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closed) ON (When rear RH door	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
					opened)	0 V
18 (V)	Ground	Receiver ground	Input	Ignition switch O	Ν	0 V

### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		4		Value
(vvire +		Signal name	Input/ Output		Condition	(Approx.)
					Insert mechanical key into ignition key cylinder	0 V
					Remove mechanical key from ignition key cylinder (Any door opened)	5 V
19 (BR)	Ground	Remote keyless en- try receiver power supply	Input	ut Ignition switch OFF	Remove mechanical key from ignition key cylinder (Any door closed)	(V) 6 4 2 0 ★ +0.2 St JPMA0338JP
					Insert mechanical key into ignition key cylinder	0 V
20 (G/Y)	Ground	Remote keyless en- try receiver commu-	Input	Ignition switch OFF	Waiting	(V) 6 4 2 0 ••••1.0ms PIIB7728J
()		nication			Signal receiving	(V) 6 2 0 ••••1.0ms PIIB7729J
21 (P/L)	Ground	NATS antenna amp.	Input/ Output	Just after insertin Other than above	ng ignition key in key cylinder	Pointer of tester should move 0 V
( )					ON	0 V
23 (R/Y)	Ground	Security indicator	Input	Security indica- tor	Blinking (Ignition switch OFF)	(V) 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 15 15 15 15 15 15 15 15
					OFF	12 V
24* (GR/B)	Ground	Dongle link	Input/ Output	Ignition switch O	FF	5 V
25	Ground	NATS antenna amp.	Input/		ng ignition key in key cylinder	Pointer of tester should move
(LG)			Output	Other than above		0 V
26 (GR)	Ground	Thermo control amp.	Input	Ignition switch O		0 V
				Evaporator is ex	tremely low temperature	12 V

### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
27 (Y/G)	Ground	A/C switch	Input	A/C switch	OFF	(V) 10 10 10 10 1.0 - 1.5 V 0 V
28 (G/W)	Ground	Blower fan switch	Input	Fan switch	Blower fan switch OFF Blower fan switch ON	(V) 15 0 5 0 ••••10ms ••••10ms •••••10ms •••••• РКІВА960Ј 7.0 - 8.0 V 0 V
20					OFF	Battery voltage
29 (L/W)	Ground	Hazard switch	Input	Hazard switch	ON	0 V
					A/C mode defroster ON position	0 V
31 (G/Y)	Ground	Front defroster switch	Input	Ignition switch ON	Other than A/C mode de- froster ON position	(V) 10 5 0 <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>11</b> <b>1</b>
32	Ground	Combination switch	Output	Combination	All switch OFF (Wiper intermittent dial 4)	(V) 15 0 5 0 + 10ms PKIB4960J 7.0 - 8.0 V
(LG)	Ground	OUTPUT 5	Output	switch	Rear wiper switch ON (Wiper intermittent dial 4) Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 10 5 0 + 10ms 

### < ECU DIAGNOSIS INFORMATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

Terminal No. Description (Wire color)		Condition		Value			
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	ŀ
22		Oraclessies		Quarkinstian	All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 → + 10ms PKIB4960J 7.0 - 8.0 V	E
33 (Y/L)	Ground	Combination switch OUTPUT 4	Output	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5	E
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	0 ↓ ↓ 10ms ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	F
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 + 10ms PKIB4960J	ŀ
34 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4) Lighting switch HI	(V)	,
					(Wiper intermittent dial 4) Rear washer switch ON	(V) 15 10 5 0	D
					<ul> <li>(Wiper intermittent dial 4)</li> <li>Any of the condition below with all switch OFF</li> <li>Wiper intermittent dial 1</li> <li>Wiper intermittent dial 2</li> <li>Wiper intermittent dial 3</li> </ul>	++10ms ++10ms РКIВ4958J 1.2 V	l
35		Combination switch		Combination	All switch OFF	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	1
(R/L)	Ground	OUTPUT 2	Output	(Wiper intermit- tent dial 4)	Lighting switch 2ND Lighting switch PASS Front wiper switch INT	(V) 15 10 5 0	F
					Front wiper switch HI	• +10ms → +10ms PKIB4958J 1.2 V	

Revision: 2012 August

2013 CUBE

### < ECU DIAGNOSIS INFORMATION >

Termin		Description				Value	
(Wire o	color) –	Signal name	Input/ Output		Condition	(Approx.)	
36	Ground	Combination switch	Output	Combination	All switch OFF	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	
(L/O)	D) OUTPL	OUTPUT 1	Output	(Wiper intermit- tent dial 4)	Turn signal switch RH	(1)	
				,	Turn signal switch LH Front wiper switch LO (Front wiper switch MIST)	(V) 15 10 5 0	
					Front washer switch ON	++10ms PKIB4958J 1.2 V	
					al key into ignition key cylin-	Battery voltage	
37 (R/W)	Ground	Key switch	Input	der Remove mechar cylinder	ical key from ignition key	0 V	
38	Ground	Ignition switch ON	Input	Ignition switch O		0 V	
(O)		<b>3</b> • • • • •	-	Ignition switch O	Ν	Battery voltage	
39 (L)	Ground	CAN-H	Input/ Output		_		
40 (P)	Ground	CAN-L	Input/ Output		_	_	
43 (W)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	(V) 15 10 5 0 → 10ms PKIB4960J 7.0 - 8.0 V	
					ON (When back door opened)	0 V	
		Poor winer star as		Ignition outlet	Rear wiper stop position	12 V	
44 (LG)	Ground	Rear wiper stop po- sition	Input	Ignition switch ON	Any position other than rear wiper stop position	0 V	
45 (GR)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch	NEUTRAL position	(V) 15 10 5 10 10 ms JPMIA0012GB 1.0 - 1.5 V	
					LOCK position	0 V	

### < ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	٨
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)	А
46 (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch	NEUTRAL position	(V) 10 5 0 10 10 10 10 10 10 10 10 10	B C D
					UNLOCK position	0 V	
47 (BR/Y)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	(V) 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	E F G
					ON (When driver door opened)	0 V	Н
48 (W/G)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closed)	(V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V	l J
					ON (When rear LH door opened)	0 V	DLK
50 (SB)	Ground	A/C indicator	Output	A/C indicator	OFF ON	12 V 0 V	
54 (LG)	Ground	Rear wiper	Output	Ignition switch ON	Rear wiper switch OFF Rear wiper switch ON	0 V 0 V 12 V	L
					p battery saver is activated. room lamp power supply)	0 V	Μ
56 (L)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		12 V	Ν
57 (Y)	Ground	Battery power sup- ply	Input	Ignition switch O	FF	Battery voltage	0
59	Ground	Driver door UN-	Output	Driver door	UNLOCK (Actuator is activated)	12 V	Р
(L/B)	e.ound	LOCK	put		Other then UNLOCK (Ac- tuator is not activated)	0 V	I.

### < ECU DIAGNOSIS INFORMATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description				Value
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
60 (W/B)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 15 10 15 10 15 10 15 10 15 10 10 10 10 10 10 10 10 10 10
					Turn signal switch OFF	0 V
61 (W/L)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 
63		Interior room lamp		Interior room	OFF	6.0 V 12 V
(BR)	Ground	control signal	Output	lamp	ON	0 V
65	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activat- ed)	12 V
(V)	Ground	All doors LOCK	Output	All doors	Other then LOCK (Actua- tor is not activated)	0 V
66	Ground	Passenger door and	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
(G)	Ground	rear door UNLOCK	Output	and rear door	Other then UNLOCK (Ac- tuator is not activated)	0 V
67 (B)	Ground	Ground	Output	Ignition switch O	N	0 V
68 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		12 V
69 (P)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V
70 (Y)	Ground	Battery power sup- ply	Input	Ignition switch O	FF	Battery voltage

*: For Canada

### < ECU DIAGNOSIS INFORMATION >

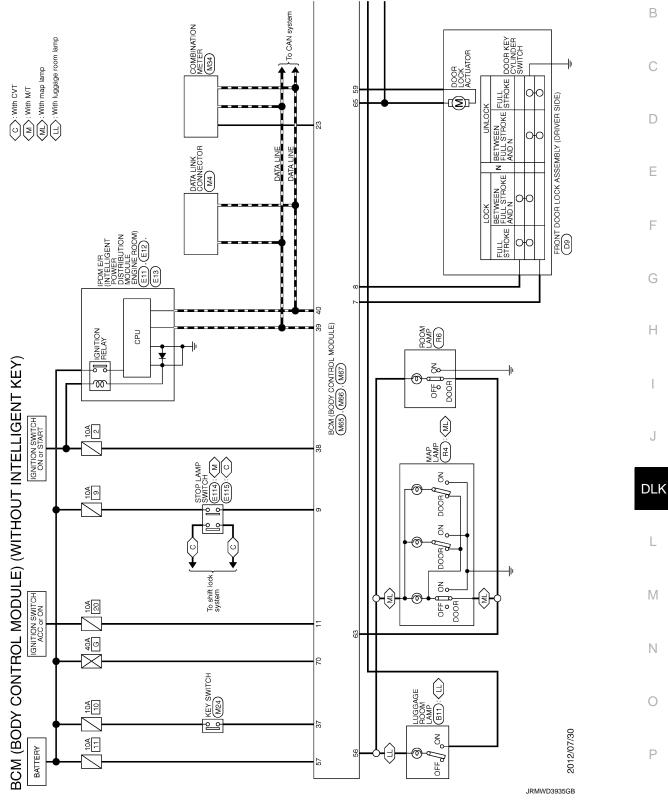
# [WITHOUT INTELLIGENT KEY SYSTEM]

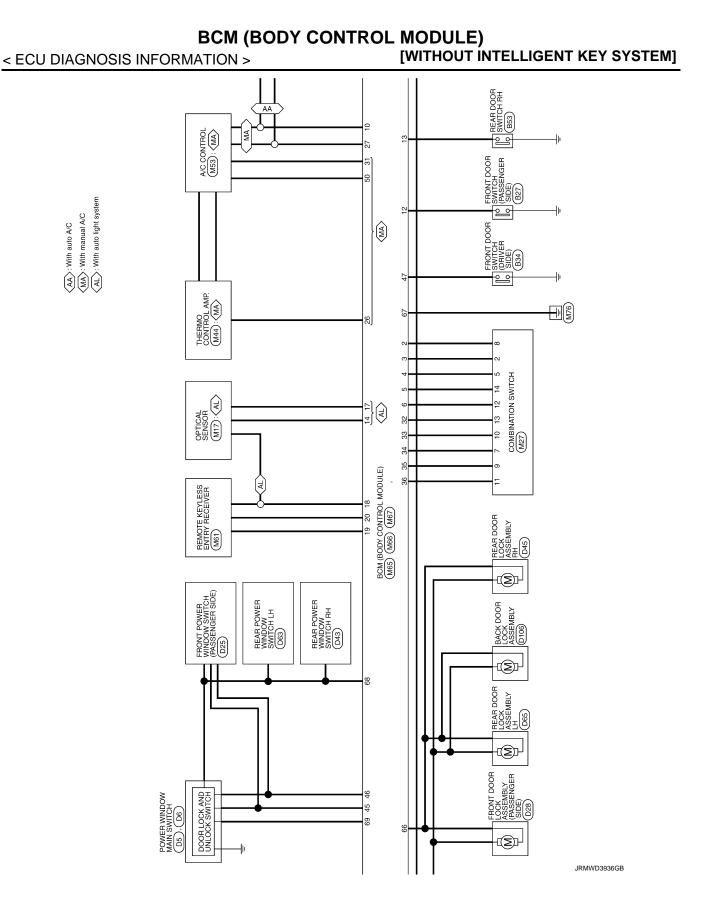
### Wiring Diagram - BCM -

INFOID:000000008831211

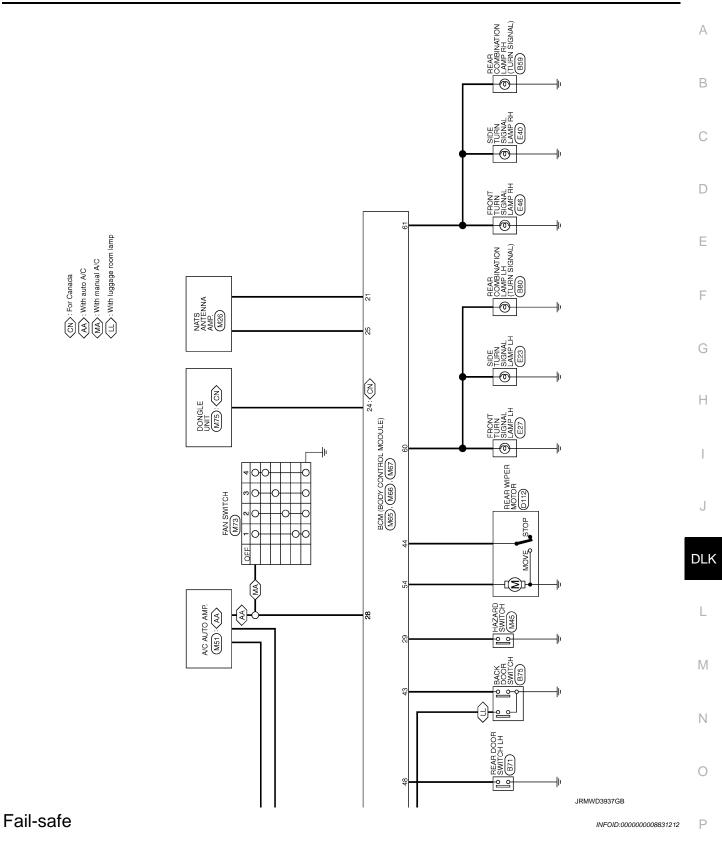
А

For connector terminal arrangements, harness layouts, and alphabets in a  $\bigcirc$  (option abbreviation; if not described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.





# BCM (BODY CONTROL MODULE) < ECU DIAGNOSIS INFORMATION > [WITHOUT INTELLIGENT KEY SYSTEM]



### FAIL-SAFE CONTROL BY DTC

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

### < ECU DIAGNOSIS INFORMATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2196: DONGLE NG	Inhibit engine cranking	Erase DTC

#### REAR WIPER MOTOR PROTECTION

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

Condition of cancellation

- 1. Pass more than 1 minute after the rear wiper stop.
- 2. Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

### DTC Inspection Priority Chart

INFOID:000000008831213

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

Priority	DTC
1	U1000: CAN COMM     U1010: CONTROL UNIT (CAN)
2	<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> <li>B2196: DONGLE NG</li> </ul>
3	C1735: IGN CIRCUIT OPEN
4	<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>C1717: [PRESSDATA ERR] FR</li> <li>C1718: [PRESSDATA ERR] RR</li> <li>C1719: [PRESSDATA ERR] RL</li> <li>C1729: VHCL SPEED SIG ERR</li> </ul>

### DTC Index

#### NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1
   → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter
   remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch
   OFF → ON after returning to the normal condition if the malfunction is detected again.

INFOID:000000008831214

# BCM (BODY CONTROL MODULE) < ECU DIAGNOSIS INFORMATION > [WITHOUT INTELLIGENT KEY SYSTEM]

CONSULT display	Fail-safe	Tire pressure monitor warn- ing lamp ON	Reference
U1000: CAN COMM	_		BCS-115
U1010: CONTROL UNIT (CAN)	_		BCS-116
B2190: NATS ANTENNA AMP	×	—	<u>SEC-173</u>
B2191: DIFFERENCE OF KEY	×	—	<u>SEC-176</u>
B2192: ID DISCORD BCM-ECM	×	—	<u>SEC-177</u>
B2193: CHAIN OF BCM-ECM	×	_	<u>SEC-178</u>
B2195: ANTI SCANNING	×	—	<u>SEC-179</u>
B2196: DONGLE NG	×	—	SEC-180
C1704: LOW PRESSURE FL	_	×	
C1705: LOW PRESSURE FR	_	×	
C1706: LOW PRESSURE RR	_	×	<u>WT-23</u>
C1707: LOW PRESSURE RL	_	×	
C1708: [NO DATA] FL	_	×	
C1709: [NO DATA] FR	_	×	
C1710: [NO DATA] RR	_	×	<u>WT-25</u>
C1711: [NO DATA] RL	_	×	
C1716: [PRESS DATA ERR] FL	_	×	
C1717: [PRESS DATA ERR] FR	_	×	
C1718: [PRESS DATA ERR] RR	_	×	<u>WT-28</u>
C1719: [PRESS DATA ERR] RL	_	×	
C1729: VHCL SPEED SIG ERR	_	×	<u>WT-30</u>
C1735: IGN CIRCUIT OPEN	_	_	BCS-117

DLK

L

Μ

Ν

Ο

Ρ

### DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH [WITHOUT INTELLIGENT KEY SYSTEM]

### < SYMPTOM DIAGNOSIS >

# SYMPTOM DIAGNOSIS

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

ALL DOOR

ALL DOOR : Description

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

### ALL DOOR : Diagnosis Procedure

CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.

Refer to DLK-222, "BCM (BODY CONTROL MODULE) : Diagnosis Procedure" (BCM).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.check door lock and unlock switch

Check door lock and unlock switch.

- Driver side: Refer to DLK-226, "DRIVER SIDE : Component Function Check".
- Passenger side: Refer to DLK-228, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK DOOR LOCK ACTUATOR

Check door lock actuator (driver side). Refer to DLK-231, "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-41, "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-231, "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:00000008453123

INFOID:000000008453124

INFOID:000000008453121

INFOID:00000008453122

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

< SYMPTOM DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYSTEM]	<u>/]</u>
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1. PASSENGER SIDE	A
PASSENGER SIDE : Description	B 8125
Passenger side door does not lock/unlock using door lock and unlock switch. PASSENGER SIDE : Diagnosis Procedure	C 8126
1. CHECK DOOR LOCK ACTUATOR	D
Check door lock actuator (passenger side). Refer to <u>DLK-232, "PASSENGER SIDE : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	E
2.CONFIRM THE OPERATION	F
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1. REAR LH	G
REAR LH : Description	3127
Rear LH side door does not lock/unlock using door lock and unlock switch. REAR LH : Diagnosis Procedure	8128
1. CHECK DOOR LOCK ACTUATOR	J
Check door lock actuator (rear LH). Refer to <u>DLK-233, "REAR LH : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. <b>2.</b> CONFIRM THE OPERATION	<b>DLK</b>
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1. REAR RH	M
REAR RH : Description	-
Rear RH side door does not lock/unlock using door lock and unlock switch. REAR RH : Diagnosis Procedure	
1.CHECK DOOR LOCK ACTUATOR         Check door lock actuator (rear RH).         Refer to DLK-233, "REAR RH : Component Function Check".         Is the inspection result normal?         YES       >> GO TO 2.         NO       >> Repair or replace the malfunctioning parts.	P

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

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

BACK DOOR

BACK DOOR : Description

Back door does not lock/unlock using door lock and unlock switch.

### BACK DOOR : Diagnosis Procedure

**1.**CHECK DOOR LOCK ACTUATOR

Check back door lock assembly. Refer to DLK-234, "BACK DOOR : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

**2.**CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

INFOID:000000008453131

INFOID:000000008453132

### DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION < SYMPTOM DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYSTEM]

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

Diagnosis Procedure	INFOID:000000008453133	В
1. CHECK POWER DOOR LOCK OPERATION		D
Check power door lock operation. Does door lock/unlock with door lock and unlock switch?		С
YES $>>$ GO TO 2. NO $>>$ Go to <u>DLK-268, "ALL DOOR : Diagnosis Procedure"</u> . <b>2.</b> CHECK DOOR KEY CYLINDER SWITCH		D
Check door key cylinder switch. Refer to <u>DLK-236, "Component Function Check"</u> . Is the inspection result normal?		E
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. <b>3.</b> CONFIRM THE OPERATION		F
Confirm the operation again. Is the result normal?		G
<ul> <li>YES &gt;&gt; Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.</li> <li>NO &gt;&gt; GO TO 1.</li> </ul>		Н

J

А

DLK

L

Μ

Ν

Ο

Ρ

### DOOR DOES NOT LOCK/UNLOCK WITH KEYFOB

### < SYMPTOM DIAGNOSIS >

### [WITHOUT INTELLIGENT KEY SYSTEM]

## DOOR DOES NOT LOCK/UNLOCK WITH KEYFOB

**Diagnosis** Procedure INFOID:000000008453134 1. CHECK POWER DOOR LOCK OPERATION Check power door lock operation. Does door lock/unlock with door lock and unlock switch? YES >> GO TO 2. NO >> Go to DLK-268, "ALL DOOR : Diagnosis Procedure". 2.CHECK REMOTE KEYLESS ENTRY RECEIVER Check remote keyless entry receiver. Refer to DLK-238, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CHECK DOOR SWITCH Check door switch. Refer to DLK-223, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. **4.**CHECK KEYFOB BATTERY Check keyfob battery. Refer to DLK-245, "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-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

### AUTO DOOR LOCK OPERATION DOES NOT OPERATE

# [WITHOUT INTELLIGENT KEY SYSTEM]

# AUTO DOOR LOCK OPERATION DOES NOT OPERATE

		Δ
Diagnosis Procedure	INFOID:000000008453135	A
1. CHECK "AUTO LOCK SET" SETTING WITH CONSULT		В
Check "AUTO LOCK SET" setting in "WORK SUPPORT". Refer to DLK-219, "MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)"		
Is the inspection result normal?		С
YES >> GO TO 2. NO >> Set "AUTO LOCK SET" in "WORK SUPPORT".		
2.CONFIRM THE OPERATION		D
Confirm the operation again. <u>Is the result normal?</u>		Е
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.		
		F

J

G

Н

DLK

L

Μ

Ν

Ο

Ρ

### SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYSTEM]

# SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

**Diagnosis Procedure** 

INFOID:000000008453136

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

Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Set "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT".

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

[WITHOUT INTELLIGENT KEY SYSTEM]

# VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

	gnosis Procedure INFOID:00000008453137 B
1. CHECK POWER DOOR LOCK OPERATION	
Check power door lock operation.	
Does door lock/unlock with door lock and unlock switch?	
YES >> GO TO 2. NO >> Refer to <u>DLK-268, "ALL DOOR : Diagnosis Procedure"</u> .	>> Refer to DLK-268 "ALL DOOR : Diagnosis Procedure"
2.CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"	
Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	
3. CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"	
Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT". G Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .	k "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".
Is the inspection result normal?	·
YES >> GO TO 4. NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".	
4. CHECK VEHICLE SPEED SIGNAL	
Check combination meter for DTC.	
Refer to <u>MWI-57, "DTC Index"</u> . Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	>> Repair or replace the malfunctioning parts.
5.CONFIRM THE OPERATION	ONFIRM THE OPERATION
Confirm the operation again.	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> .	
NO >> GO TO 1.	
M	M
N	Ν

Ρ

Ο

А

### IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYSTEM]

## IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000008453138

**1.**CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-268</u>, "<u>ALL DOOR : Diagnosis Procedure</u>".

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

Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

YES >> GO TO 3.

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

3.CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

YES >> GO TO 4.

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

4.CHECK BCM

Check BCM for DTC.

Refer to BCS-139, "DTC Index".

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-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

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

## ATE

[WITHOUT INTELLIGENT KEY SYSTEM]

# < SYMPTOM DIAGNOSIS > P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OP-ERATE

Diagnosis Procedure	
1. CHECK POWER DOOR LOCK OPERATION	В
Check power door lock operation.	0
Does door lock/unlock with door lock and unlock switch?	С
YES >> GO TO 2.	
NO >> Refer to DLK-268, "ALL DOOR : Diagnosis Procedure".	D
<b>2.</b> CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"	
Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	_
Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .	E
Is the inspection result normal?	
	F
NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	1
3. CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"	
Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".	G
Refer to DLK-217. "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".	
Is the inspection result normal?	
YES >> GO TO 4.	Н
NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".	
4. CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"	
Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".	
Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u> .	
Is the inspection result normal?	
	0
NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".	
5.снеск тсм	DLK
Check TCM for DTC. Refer to <u>TM-179</u> , "DTC Index".	
Is the inspection result normal?	I
YES >> GO TO 6.	L
NO >> Repair or replace the malfunctioning parts.	
6.CONFIRM THE OPERATION	M
Confirm the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> .	Ν
NO >> GO TO 1.	
	0

А

### KEY OUT INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYSTEM]

## KEY OUT INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000008453140

**1.**CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-268</u>, "<u>ALL DOOR : Diagnosis Procedure</u>".

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

Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

YES >> GO TO 3.

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

 $\mathbf{3.}$  CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-217, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

YES >> GO TO 4.

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

**4.**CHECK KEY SWITCH

Check key switch.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> GO TO 1.

HAZARD AND HORN REMINDER DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYSTE	<u>M]</u>
HAZARD AND HORN REMINDER DOES NOT OPERATE	
Diagnosis Procedure	453141
1.CHECK "HAZARD LAMP SET" SETTING IN "WORK SUPPORT"	
Check "HAZARD LAMP SET" setting in "WORK SUPPORT". Refer to <u>DLK-219, "MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)"</u> . Is the inspection result normal?	
YES >> GO TO 2. NO >> Set "HAZARD LAMP SET" setting in "WORK SUPPORT".	
2. CHECK "HORN CHIRP SET" SETTING IN "WORK SUPPORT".	
Check "HORN CHIRP SET" setting in "WORK SUPPORT". Refer to <u>DLK-219, "MULTI REMOTE ENT : CONSULT Function (BCM - MULTI REMOTE ENT)"</u> .	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Set "HORN CHIRP SET" setting in "WORK SUPPORT".	
3. CHECK HAZARD WARNING LAMP	
Check hazard warning lamp.	
Refer to DLK-244, "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 <u>SEC-186, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	
5. CONFIRM THE OPERATION	
Confirm the operation again.	— D
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-41. "Intermittent Incident"</u> . NO >> GO TO 1.	

0

Ρ

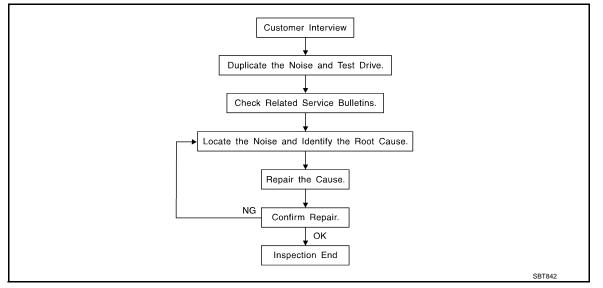
### < SYMPTOM DIAGNOSIS >

### [WITHOUT INTELLIGENT KEY SYSTEM]

INFOID:00000008453142

# 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-284</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 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-280**

### < SYMPTOM DIAGNOSIS >

cate the noise with the vehicle stopped by doing one or all of the following: 1) Close a door.	А
<ul><li>2) Tap or push/pull around the area where the noise appears to be coming from.</li><li>3) Rev the engine.</li></ul>	5
<ul> <li>4) Use a floor jack to recreate vehicle "twist".</li> <li>5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).</li> </ul>	В
<ul> <li>6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.</li> <li>Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.</li> <li>If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.</li> </ul>	С
CHECK RELATED SERVICE BULLETINS After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related	D
to that concern or symptom. If a TSB relates to the symptom, follow the procedure to repair the noise.	Е
LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE	
<ol> <li>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).</li> <li>Narrow down the point to a more appoint is a non-site area and identify the source of the point has a state of the point.</li> </ol>	F
<ul><li>2. Narrow down the noise to a more specific area and identify the cause of the noise by:</li><li>Removing the components in the area that is are suspected to be the cause of the noise.</li></ul>	
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.	G
<ul> <li>Tapping or pushing/pulling the component that is are suspected to be the cause of the noise.</li> <li>Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.</li> </ul>	Н
• Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.	
<ul> <li>Placing a piece of paper between components that are suspected to be the cause of the noise.</li> <li>Looking for loose components and contact marks. Refer to <u>DLK-282</u>, "Inspection Procedure".</li> </ul>	I
REPAIR THE CAUSE	J
<ul> <li>If the cause is a loose component, tighten the component securely.</li> <li>If the cause is insufficient elegrance between components.</li> </ul>	
<ul> <li>If the cause is insufficient clearance between components:</li> </ul>	
<ul> <li>Separate components by repositioning or loosening and retightening the component, if possible.</li> <li>Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or ure- thane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts</li> </ul>	DLK
<ul> <li>Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or ure- thane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.</li> </ul>	DLK
<ul> <li>Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or ure- thane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.</li> <li>CAUTION:</li> <li>Never use excessive force as many components are constructed of plastic and may be damaged.</li> </ul>	
<ul> <li>Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or ure- thane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.</li> <li>CAUTION:</li> <li>Never use excessive force as many components are constructed of plastic and may be damaged.</li> <li>NOTE:</li> <li>Always check with the Parts Department for the latest parts information.</li> <li>The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be</li> </ul>	
<ul> <li>Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or ure- thane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.</li> <li>CAUTION:</li> <li>Never use excessive force as many components are constructed of plastic and may be damaged.</li> <li>NOTE:</li> <li>Always check with the Parts Department for the latest parts information.</li> <li>The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.</li> </ul>	L
<ul> <li>Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or ure-thane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.</li> <li>CAUTION:</li> <li>Never use excessive force as many components are constructed of plastic and may be damaged.</li> <li>NOTE:</li> <li>Always check with the Parts Department for the latest parts information.</li> <li>The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.</li> <li>URETHANE PADS [1.5 mm (0.059 in) thick]</li> <li>Insulates connectors, harness, etc.</li> <li>76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-</li> </ul>	L
<ul> <li>Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or ure-thane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.</li> <li>CAUTION:</li> <li>Never use excessive force as many components are constructed of plastic and may be damaged.</li> <li>NOTE:</li> <li>Always check with the Parts Department for the latest parts information.</li> <li>The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.</li> <li>URETHANE PADS [1.5 mm (0.059 in) thick]</li> <li>Insulates connectors, harness, etc.</li> <li>76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)</li> </ul>	L
<ul> <li>Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or ure-thane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.</li> <li>CAUTION:</li> <li>Never use excessive force as many components are constructed of plastic and may be damaged.</li> <li>NOTE:</li> <li>Always check with the Parts Department for the latest parts information.</li> <li>The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.</li> <li>URETHANE PADS [1.5 mm (0.059 in) thick]</li> <li>Insulates connectors, harness, etc.</li> <li>76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)</li> <li>INSULATOR (Foam blocks)</li> <li>Insulates components from contact. Can be used to fill space behind a panel.</li> <li>73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-</li> </ul>	L M N
<ul> <li>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.</li> <li>CAUTION:</li> <li>Never use excessive force as many components are constructed of plastic and may be damaged.</li> <li>NOTE:</li> <li>Always check with the Parts Department for the latest parts information.</li> <li>The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.</li> <li>URETHANE PADS [1.5 mm (0.059 in) thick]</li> <li>Insulates connectors, harness, etc.</li> <li>76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)</li> <li>INSULATOR (Foam blocks)</li> <li>Insulates components from contact. Can be used to fill space behind a panel.</li> <li>73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)</li> </ul>	L M
<ul> <li>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.</li> <li>CAUTION:</li> <li>Never use excessive force as many components are constructed of plastic and may be damaged. NOTE:</li> <li>Always check with the Parts Department for the latest parts information.</li> <li>The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.</li> <li>URETHANE PADS [1.5 mm (0.059 in) thick]</li> <li>Insulates connectors, harness, etc.</li> <li>76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)</li> <li>INSULATOR (Foam blocks)</li> <li>Insulates components from contact. Can be used to fill space behind a panel.</li> <li>73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)</li> <li>INSULATOR (Light foam block)</li> <li>80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97 in)</li> <li>FELT CLOTHTAPE</li> </ul>	L M N
<ul> <li>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.</li> <li>CAUTION:</li> <li>Never use excessive force as many components are constructed of plastic and may be damaged.</li> <li>NOTE:</li> <li>Always check with the Parts Department for the latest parts information.</li> <li>The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.</li> <li>URETHANE PADS [1.5 mm (0.059 in) thick]</li> <li>Insulates connectors, harness, etc.</li> <li>76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)</li> <li>INSULATOR (Foam blocks)</li> <li>Insulates components from contact. Can be used to fill space behind a panel.</li> <li>73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)</li> <li>INSULATOR (Light foam block)</li> <li>80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97 in)</li> </ul>	L M N

#### < SYMPTOM DIAGNOSIS >

### [WITHOUT INTELLIGENT KEY SYSTEM]

Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE Used in place of UHMW tape that is be visible or does not fit. Will only last a few months. SILICONE SPRAY Used when grease cannot be applied. DUCT TAPE Used to eliminate movement.

#### CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

### Inspection Procedure

INFOID:000000008453143

Refer to Table of Contents for specific component removal and installation information.

#### INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

- 1. The cluster lid A and instrument panel
- 2. Acrylic lens and combination meter housing
- 3. Instrument panel to front pillar garnish
- 4. Instrument panel to windshield
- 5. Instrument panel mounting pins
- 6. Wiring harnesses behind the combination meter
- 7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

#### CAUTION:

Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.

#### CENTER CONSOLE

Components to pay attention to include:

- 1. Shifter assembly cover to finisher
- 2. A/C control unit and cluster lid C
- 3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

#### DOORS

Pay attention to the following:

- 1. Finisher and inner panel making a slapping noise
- 2. Inside handle escutcheon to door finisher
- 3. Wiring harnesses tapping
- 4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise.

#### TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer. In addition look for the following:

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

### SQUEAK AND RATTLE TROUBLE DIAGNOSES IOSIS > [WITHOUT INTELLIGENT KEY SYSTEM]

### < SYMPTOM DIAGNOSIS >

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) caus- ing the noise.	A
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	В
2. Sunvisor shaft shaking in the holder	
3. Front or rear windshield touching headlining and squeaking	С
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.	C
SEATS	D
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:	E
1. Headrest rods and holder	
2. A squeak between the seat pad cushion and frame	
3. The rear seatback lock and bracket	F
These noises can be isolated by moving or pressing on the suspected components while duplicating the con- ditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.	G
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:	Н
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	J
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.	DLK

L

Μ

Ν

Ο

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet



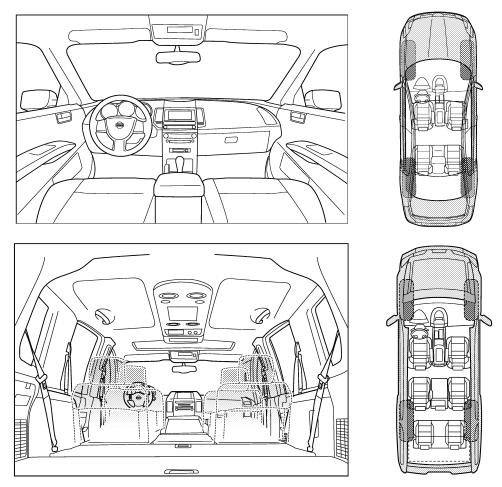
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Nissan Customer:

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

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

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



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

PIIB8740E

INFOID:000000008453144

### < SYMPTOM DIAGNOSIS >

II. WHEN DOES IT OCCUR? (please	e check the boxes that apply)
🗆 anytime	after sitting out in the rain
☐ 1st time in the morning	when it is raining or wet
only when it is cold outside	dry or dusty conditions
only when it is hot outside	□ other:
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE
☐ through driveways	squeak (like tennis shoes on a clean floor)
☐ over rough roads	creak (like walking on an old wooden floor)
□ over speed bumps	$\square$ rattle (like shaking a baby rattle)
□ only about mph	knock (like a knock at the door)
□ on acceleration	tick (like a clock second hand)
$\Box$ coming to a stop	thump (heavy, muffled knock noise)
🔲 on turns: left, right or either (circle	) 🔲 buzz (like a bumble bee)
with passengers or cargo	
🗖 other:	
$\Box$ after driving miles or	_ minutes
TO BE COMPLETED BY DEALERS	SHIP PERSONNEL
Test Drive Notes:	
Test Drive Notes:	YES NO Initials of person performing
Test Drive Notes:	YES NO Initials of person performing
	YES NO Initials of person performing
Vehicle test driven with customer	performing
Vehicle test driven with customer - Noise verified on test drive	performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired	performing

# < 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:

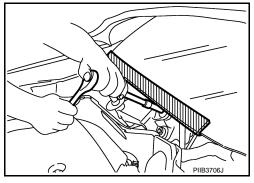
Always observe the following items for preventing accidental activation.

- 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

INFOID:000000008453146

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



Precautions Necessary for Steering Wheel Rotation After Battery Disconnection

INFOID:000000008453147

#### **CAUTION:**

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

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

### **DLK-286**

### PRECAUTIONS

### < PRECAUTION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

	vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and not be turned.	А
	Irning the steering wheel is required with the battery disconnected or discharged, follow the operation pro- lure below before starting the repair operation.	
OP	ERATION PROCEDURE	В
1.	Connect both battery cables. <b>NOTE:</b>	
	Supply power using jumper cables if battery is discharged.	С
2.	Turn the ignition switch to ACC position. (At this time, the steering lock will be released.)	
3.	Disconnect both battery cables. The steering lock will remain released with both battery cables discon- nected and the steering wheel can be turned.	D
4.	Perform the necessary repair operation.	
5.	When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the ignition switch is turned to LOCK position.)	E
6.	Perform self-diagnosis check of all control units using CONSULT.	F
Wc	INFOID:000000008453148	
	fter removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their perational.	G
	heck the lubrication level, damage, and wear of each part. If necessary, grease or replace it.	

Η

- J
- DLK

L

Μ

Ν

Ο

Ρ

# PREPARATION PREPARATION

### Special Service Tools

INFOID:000000008453149

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

Tool number (Kent-Moore No.) Tool name		Description
(J-39570) Chassis ear	SIIA0993E	Locating the noise
(J-43980) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairing the cause of noise

## **Commercial Service Tools**

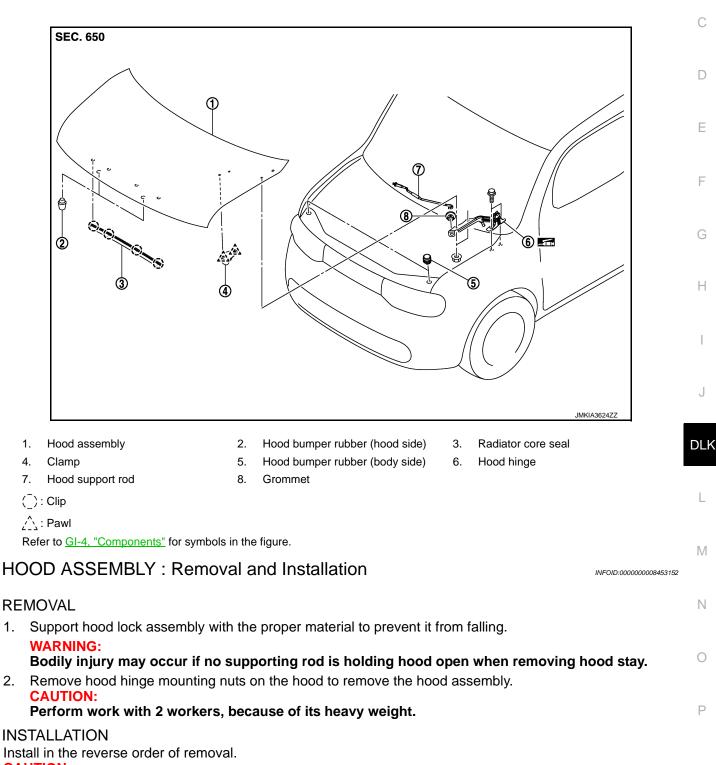
INFOID:000000008453150

Tool name		Description
Engine ear	SIIA0995E	Locating the noise
Remover tool	PIIB7923J	Remove the clips, pawls, and metal clips
Power tool		
	PIIB1407E	

### [WITHOUT INTELLIGENT KEY SYSTEM]

### < REMOVAL AND INSTALLATION >

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



#### CAUTION:

2.

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

### **DLK-289**

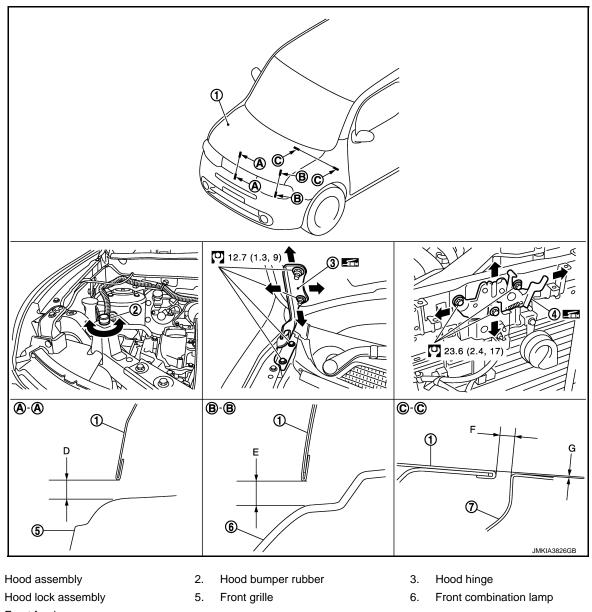
А

В

• After installing, perform hood fitting adjustment. Refer to <u>DLK-290, "HOOD ASSEMBLY : Adjust-ment"</u>.

HOOD ASSEMBLY : Adjustment

INFOID:000000008453153



7. Front fender

1.

4.

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

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

					Unit: mm (in)
Portion	Standard	Difference (RH/LH)			
Hood – Front grille	<b>A – A</b>	D	Clearance	6.0 - 10.0 (0.236 - 0.394)	< 2.0 (0.079)
Hood – Front combination lamp	<b>B</b> – <b>B</b>	Ε	Clearance	6.0 - 10.0 (0.236 - 0.394)	< 2.0 (0.079)
Hood – Front fender	C-C	F	Clearance	2.5 – 4.5 (0.098 – 0.177)	< 1.0 (0.039)
	5-0	G	Surface height	- 1.0 - 1.0 (- 0.039 - 0.039)	_

### HOOD

#### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM] Remove hood lock and adjust the surface height of hood, front grill and front fender according to the fitting

- 1. standard dimension, by rotating hood bumper rubber (body side).
- Loosen hood hinge mounting nuts on the hood. 2.
- 3. Check that hood lock primary latch is securely engaged with striker by dropping hood from approximately 200 mm (7.874 in) height or by pressing lightly on the hood. CAUTION:

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

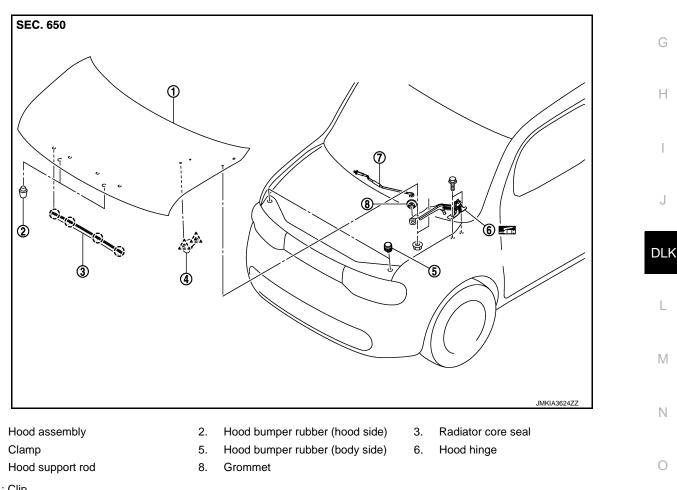
- 4. Install as static closing face of hood is 94– 490 N (9.6 – 50.0 kg, 21.1 – 110 lb).
- After adjustment tighten lock bolts to the specified torque. 5.

#### CAUTION:

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

### HOOD HINGE

### HOOD HINGE : Exploded View



( ): Clip

1.

4.

7.

/へ : Pawl

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

### HOOD HINGE : Removal and Installation

INFOID:000000008453155

А

В

D

Ε

F

INFOID:000000008453154

### REMOVAL

- Remove hood assembly. Refer to DLK-289, "HOOD ASSEMBLY : Removal and Installation". 1.
- Remove front fender. Refer to DLK-296, "Removal and Installation". 2.

### HOOD

#### < REMOVAL AND INSTALLATION >

- 3. Remove cowl top. Refer to EXT-19, "Removal and Installation"
- 4. Remove hood hinge mounting bolts, and then remove hood hinge.

#### INSTALLATION

Install in the reverse order of removal.

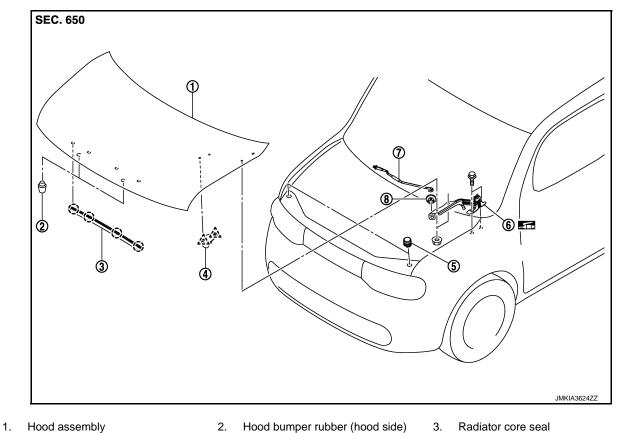
#### CAUTION:

- Check hood hinge rotating part for poor lubrication. If necessary, apply grease.
- After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.
- After installation, perform hood fitting adjustment. Refer to <u>DLK-290, "HOOD ASSEMBLY : Adjust-ment"</u>.

### HOOD SUPPORT ROD

HOOD SUPPORT ROD : Exploded View

INFOID:000000008453156



Hood bumper rubber (body side)

- 4. Clamp
- 7. Hood support rod
- ( ): Clip
- (_). Onp

```
?__`: Pawl
```

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

### HOOD SUPPORT ROD : Removal and Installation

INFOID:000000008453157

Hood hinge

6.

### REMOVAL

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

5.

8.

Grommet

#### WARNING:

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

2. Pull hood support rod from grommet and remove.

### < REMOVAL AND INSTALLATION >

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

А
В
С
D
Е
F
G
Н
I

DLK

L

Μ

Ν

Ο

Ρ

J

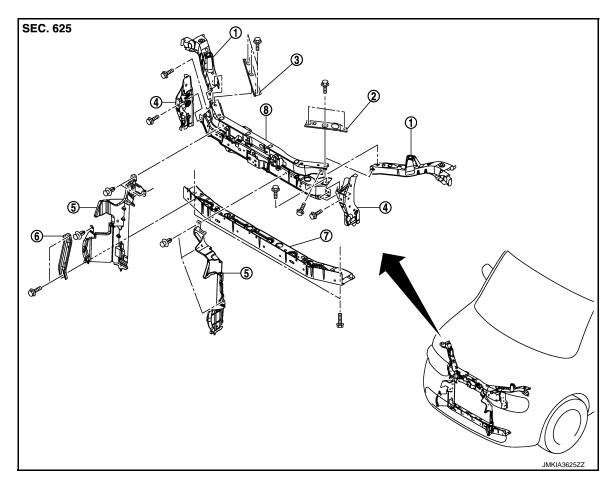
### < REMOVAL AND INSTALLATION >

### RADIATOR CORE SUPPORT

Exploded View

INFOID:000000008453158

[WITHOUT INTELLIGENT KEY SYSTEM]



- 1. Radiator core support side
- 2. Radiator core support upper bracket 3. (LH)
- Radiator core support upper bracket (RH)

Radiator core lower stay

6.

- Radiator core reinforcement side
   Radiator core support lower
- 8. Radiator core support upper

Air guide

INFOID:000000008453159

### Removal and Installation

# RADIATOR CORE SUPPORT UPPER REMOVAL

- 1. Remove front bumper fascia and bumper reinforcement. Refer to EXT-12, "Removal and Installation".
- 2. Remove hood lock. Refer to DLK-317, "Removal and Installation".
- 3. Remove front combination lamps (LH/RH). Refer to EXL-168. "Removal and Installation".
- 4. Remove air guide.
- 5. Remove horn. Refer to HRN-4, "Removal and Installation".
- 6. Remove crash zone sensor. Refer to SR-21, "Removal and Installation".

5.

- 7. Remove ambient sensor. Refer to HAC-112, "Removal and Installation".
- 8. Disconnect all harness from radiator core support upper.
- 9. Remove air duct assembly. Refer to EM-24, "Removal and Installation".
- 10. Remove radiator core support upper bracket (LH/RH).
- 11. Remove mounting bolts, and then remove radiator core support upper.

#### INSTALLATION

Revision: 2012 August

### **RADIATOR CORE SUPPORT**

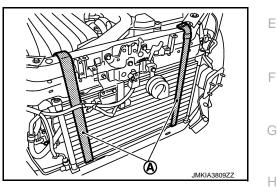
#### < REMOVAL AND INSTALLATION >

Install in the reverse order of removal.

- CAUTION:
- After installation, adjust the following parts.
- Front combination lamp: Refer to EXL-164, "Aiming Adjustment Procedure".

#### RADIATOR CORE SUPPORT LOWER REMOVAL

- 1. Remove front bumper fascia and bumper reinforcement. Refer to EXT-12, "Removal and Installation".
- 2. Remove air guide.
- 3. Remove radiator core lower stay.
- 4. Remove clips of fender protector.
- Remove floor under cover. Refer to EXT-22, "Removal and Installation".
- 6. Use a belts (A) to suspend it to prevent it from falling. **CAUTION:** Never damage radiator and condenser.



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

#### **INSTALLATION**

Install in the reverse order of removal.

- CAUTION:
- After installation, adjust the following parts.
- Front combination lamp: Refer to EXL-164, "Aiming Adjustment Procedure".

DLK

L

Μ

Ν

Ρ

А

В

D

F

### **FRONT FENDER**

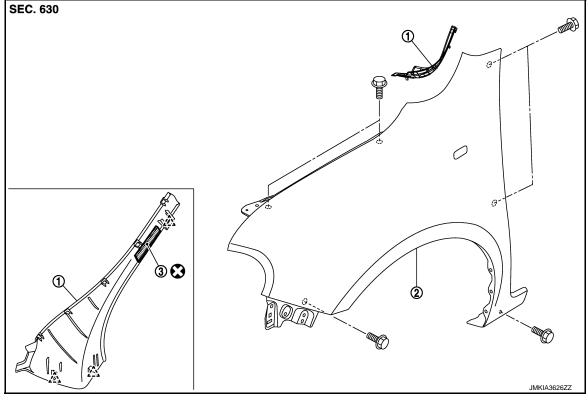
### < REMOVAL AND INSTALLATION >

### NSTALLATION >

# FRONT FENDER

Exploded View

INFOID:000000008453160



1. Front fender cover

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

 $^{1}_{2-3}$  : Pawl Refer to <u>GI-4, "Components"</u> for symbols in the figure.

### Removal and Installation

INFOID:000000008453161

#### **CAUTION:**

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

#### REMOVAL

1. Remove side turn signal lamp. Refer to EXL-175, "Removal and Installation".

2.

- 2. Remove front grille. Refer to EXT-17, "Removal and Installation".
- 3. Remove front bumper fascia. Refer to EXT-12, "Removal and Installation".
- 4. Remove front combination lamp. Refer to EXL-168. "Removal and Installation".
- 5. Remove clips and screws of fender protector. Refer to <u>EXT-21, "FENDER PROTECTOR : Removal and Installation"</u>.
- 6. Remove front fender cover.
- 7. Remove mounting bolts and remove front fender.
- CAUTION:

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

INSTALLATION Install in the reverse order of removal. CAUTION:

### **FRONT FENDER**

<ul> <li>After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.</li> <li>After installation, adjust the following part.</li> <li>Hood assembly : Refer to <u>DLK-299</u>, "HOOD ASSEMBLY : Adjustment".</li> <li>Front door: Refer to <u>DLK-299</u>, "DOOR ASSEMBLY : Adjustment".</li> <li>Front combination lamp : Refer to <u>EXL-163</u>, "Description".</li> </ul>	< REMOVAL AND INSTALLATION >	[WITHOUT INTELLIGENT KEY SYSTEM]
<ul> <li>After installation, adjust the following part.</li> <li>Hood assembly: Refer to <u>DLK-290, "HOOD ASSEMBLY: Adjustment"</u>.</li> <li>Front correction of the to <u>DLK-290, "DOOR ASSEMBLY: Adjustment"</u>.</li> <li>Front combination lamp: Refer to <u>EXL-163, "Description"</u>.</li> </ul>		color) onto the head of front fender mounting
<ul> <li>Hood assembly : Refer to <u>DLK-299, "DOOR ASSEMBLY : Adjustment"</u>.</li> <li>Front door : Refer to <u>DLK-299, "DOOR ASSEMBLY : Adjustment"</u>.</li> <li>Front combination lamp : Refer to <u>EXL-163, "Description"</u>.</li> </ul>		
- Front combination lamp : Refer to EXL-163. "Description".	- Hood assembly : Refer to DLK-290, "HOOD ASSEMBL	<u>Y : Adjustment"</u> .
	- Tront combination lamp . Refer to <u>EXE-105, Descripti</u>	<u>on</u> .
		-
		l l l l l l l l l l l l l l l l l l l

2013 CUBE

Ν

Ο

Ρ

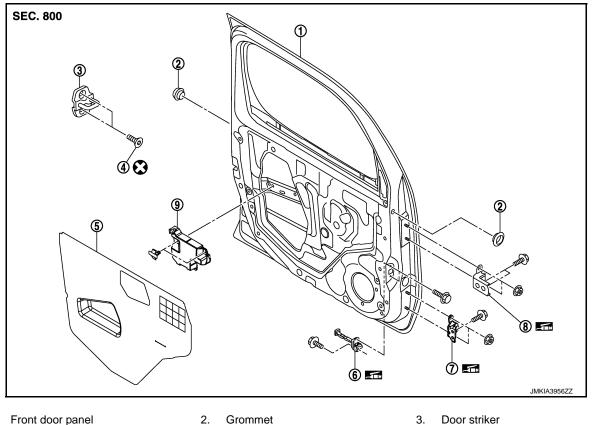
< REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

### FRONT DOOR DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:000000008453162



- 1. Front door panel 2. 4.
  - TORX bolt 5. Sealing screen
- 7. Door hinge (lower) 8. Door hinge (upper)

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

### DOOR ASSEMBLY : Removal and Installation

INFOID:000000008453163

#### **CAUTION:**

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

6.

Door check link

#### 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

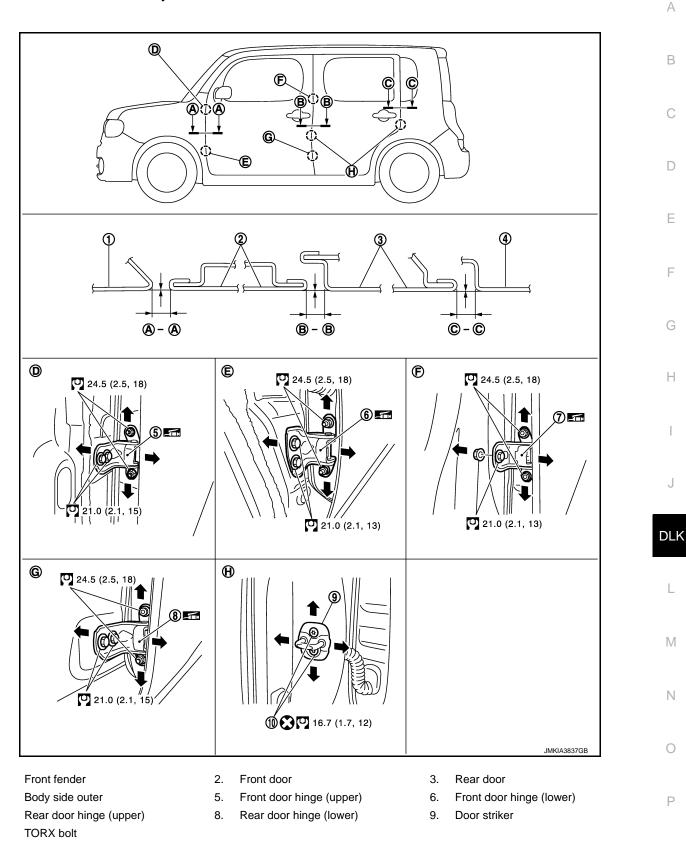
Install in the reverse order of removal.

- 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-299, "DOOR ASSEMBLY : Adjust-</u> ment".
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

### DOOR ASSEMBLY : Adjustment



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

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

1.

4.

7.

10.

#### < REMOVAL AND INSTALLATION >

			Unit : mm (in)	
Portion		Clearance	Surface height	
Front fender – Front door	<b>A</b> – A	3.5 – 5.5 (0.138 – 0.217)	- 1.0 - 1.0 (- 0.039 - 0.039)	
Front door – Rear door	<b>B</b> – B	3.4 – 5.4 (0.134 – 0.213)	- 1.0 - 1.0 (- 0.039 - 0.039)	

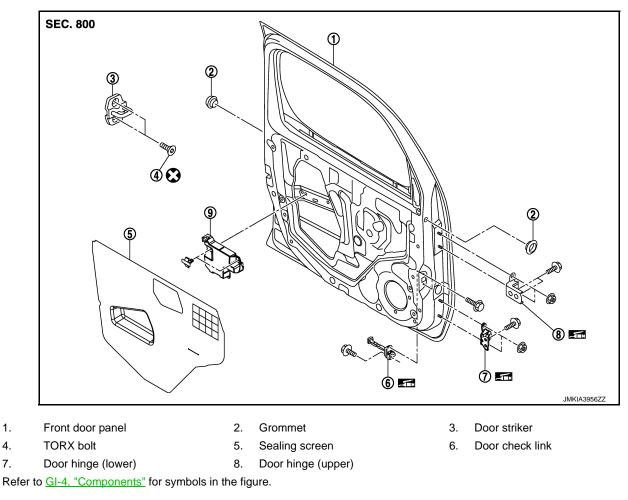
- 1. Remove front fender. Refer to <u>DLK-296, "Removal and Installation"</u>.
- 2. Loosen door hinge mounting nuts on door side.
- 3. Adjust the surface height of front door according to the fitting standard dimension.
- 4. Temporarily tighten door hinge mounting nuts on door side.
- 5. Loosen door hinge mounting bolts on body side.
- 6. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- 8. Install front fender. Refer to refer to <u>DLK-296</u>, "Removal and Installation".

#### DOOR STRIKER ADJUSTMENT

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

### DOOR STRIKER : Exploded View

INFOID:000000008453165



### DOOR STRIKER : Removal and Installation

REMOVAL

1.

4.

7.

#### < REMOVAL AND INSTALLATION >

Remove TORX bolts, and then remove door striker.

#### **INSTALLATION**

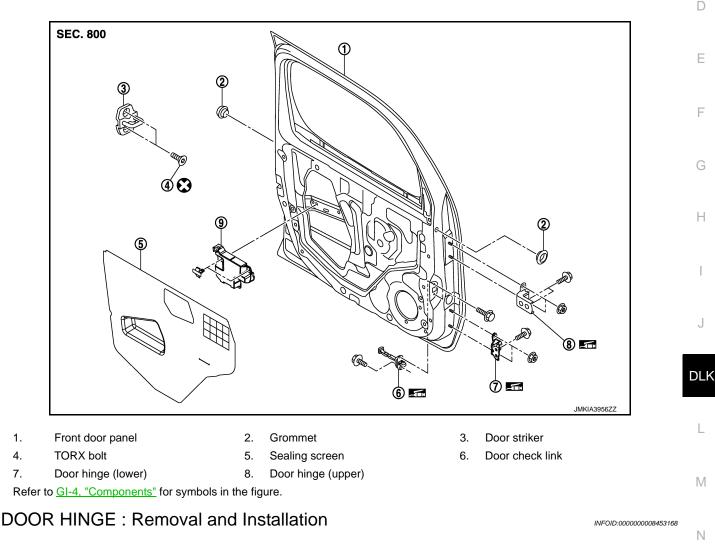
Install in the reverse order of removal.

#### **CAUTION:**

- Check front door open/close, lock/unlock operation after installation.
- After installation, be sure to perform the fitting adjustment. Refer to <u>DLK-299, "DOOR ASSEMBLY :</u> <u>Adjustment"</u>.

### DOOR HINGE

### DOOR HINGE : Exploded View



#### REMOVAL

CAUTION:

- Perform work with 2 workers, because of its heavy weight.
- When removing and installing front door assembly, support door with a jack and shop cloth to protect door and body.
- 1. Remove front fender. Refer to <u>DLK-296, "Removal and Installation"</u>.
- 2. Remove front door assembly. Refer to DLK-298, "DOOR ASSEMBLY : Removal and Installation".
- 3. Remove front door hinge mounting bolts (body side), and then remove front door hinge.

### INSTALLATION

Install in the reverse order of removal.

CAUTION:

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

### **DLK-301**

Ρ

А

В

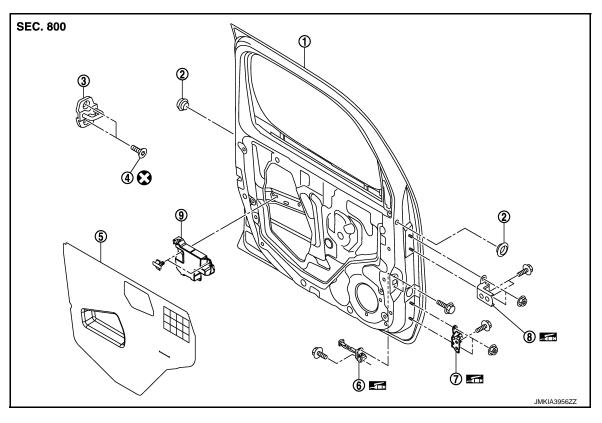
#### < REMOVAL AND INSTALLATION >

- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-299, "DOOR ASSEMBLY : Adjust-ment"</u>.

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

DOOR CHECK LINK : Exploded View

INFOID:000000008453169



- 1. Front door panel
- 4. TORX bolt
- Grommet
   Sealing screen

- 3. Door striker
- 6. Door check link
- 7. Door hinge (lower) 8. Door hinge (upper)

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

### DOOR CHECK LINK : Removal and Installation

#### REMOVAL

- 1. Remove front door finisher. Refer to INT-12, "Removal and Installation".
- 2. Fully close the front door window.
- 3. Remove sealing screen.

NOTE:

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

- 4. Remove front door speaker. Refer to AV-54. "Removal and Installation".
- 5. Remove mounting bolts of door check link on the vehicle.
- 6. Remove mounting bolts of door check link on door panel.
- 7. Take door check link out from the hole of door panel.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

Check front door open/close operation after installation.

### **DLK-302**

2013 CUBE

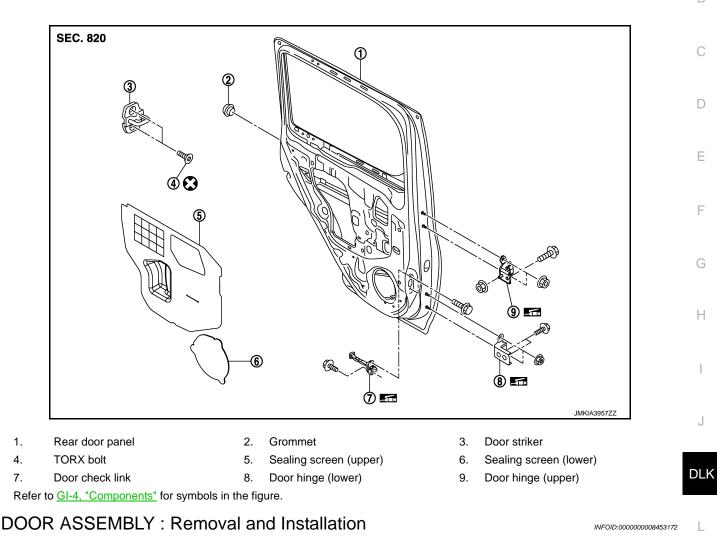
#### [WITHOUT INTELLIGENT KEY SYSTEM]

< REMOVAL AND INSTALLATION >

### REAR DOOR DOOR ASSEMBLY

DOOR ASSEMBLY : Exploded View

INFOID:000000008453171



#### **CAUTION:**

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

#### REMOVAL

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

#### **INSTALLATION**

Install in the reverse order of removal.

- **CAUTION:**
- Check rear door open/close, lock/unlock operation after installation.
- Check door hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installation, perform the fitting adjustment. Refer to <u>DLK-304, "DOOR ASSEMBLY : Adjust-ment"</u>.
- After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.

### **DLK-303**

Ν

Ρ

В

А

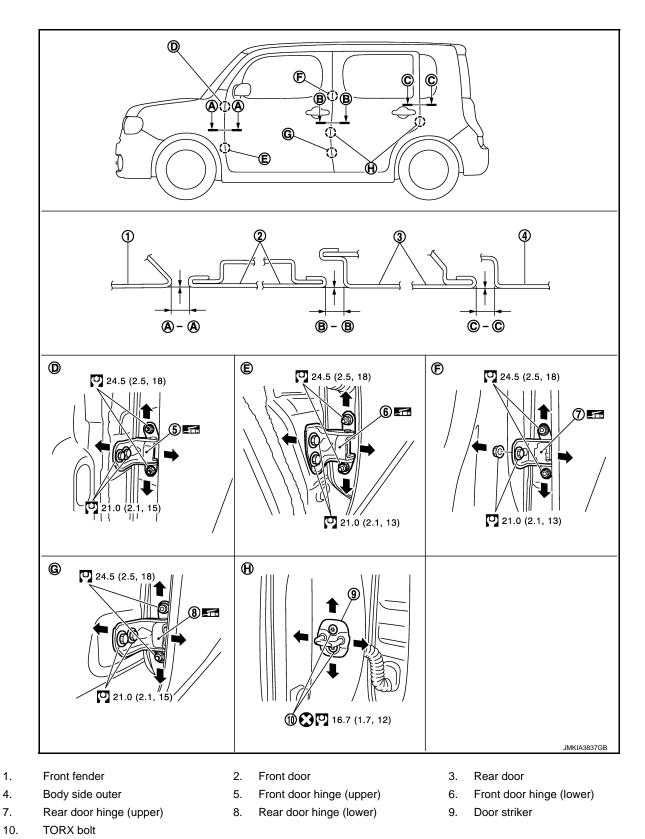
### **REAR DOOR**

### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

### DOOR ASSEMBLY : Adjustment

INFOID:000000008453173



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

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

### **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

			Unit: mm (in)	
Portion		Clearance	Surface height	А
Front door – Rear door	B – B	3.4 – 5.4 (0.134 – 0.213)	-1.0 - 1.0 (-0.039 - 0.039)	
Rear door – Body side outer	<b>C</b> – <b>C</b>	3.5 – 5.5 (0.138 – 0.217)	-1.0 – 1.0 (-0.039 – 0.039)	В

1. Remove center pillar garnish (upper/lower). Refer to INT-16, "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.
- 7. After adjustment tighten bolts and nuts to the specified torque.
- 8. Install center pillar garnish (upper/lower). Refer to INT-16, "Removal and Installation".

#### DOOR STRIKER ADJUSTMENT

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

### DOOR STRIKER : Exploded View

SEC. 820 Н 2 **((((**)) DLK ඛ Μ Ν JMKIA3957ZZ Grommet Door striker Rear door panel 2. 3. TORX bolt 5. Sealing screen (upper) 6. Sealing screen (lower) Door hinge (upper) Door check link 8. Door hinge (lower) 9. Ρ

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

### DOOR STRIKER : Removal and Installation

#### INFOID:000000008453175

D

Е

F

INFOID:00000008453174

#### REMOVAL

1.

4.

7.

Remove TORX bolts, and then remove door striker.

#### < REMOVAL AND INSTALLATION >

#### INSTALLATION

Install in the reverse order of removal.

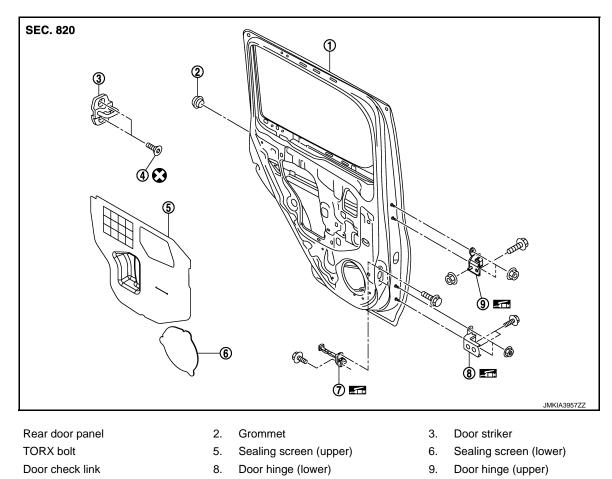
#### CAUTION:

- Check rear door open/close, lock/unlock operation after installation.
- After installation, be sure to perform the fitting adjustment. Refer to <u>DLK-304, "DOOR ASSEMBLY :</u> <u>Adjustment"</u>.

### DOOR HINGE

### DOOR HINGE : Exploded View

INFOID:000000008453176



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

### DOOR HINGE : Removal and Installation

INFOID:000000008453177

#### **CAUTION:**

1.

4.

7.

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

#### REMOVAL

- 1. Remove rear door assembly. Refer to <u>DLK-303</u>, "DOOR ASSEMBLY : Removal and Installation".
- 2. Remove center pillar garnish (upper/lower). Refer to INT-16, "Removal and Installation".
- 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.

### **REAR DOOR**

#### < REMOVAL AND INSTALLATION >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

 When removing and installing rear door assembly, perform the fitting adjustment. Refer to <u>DLK-304</u>, <u>"DOOR ASSEMBLY : Adjustment"</u>.

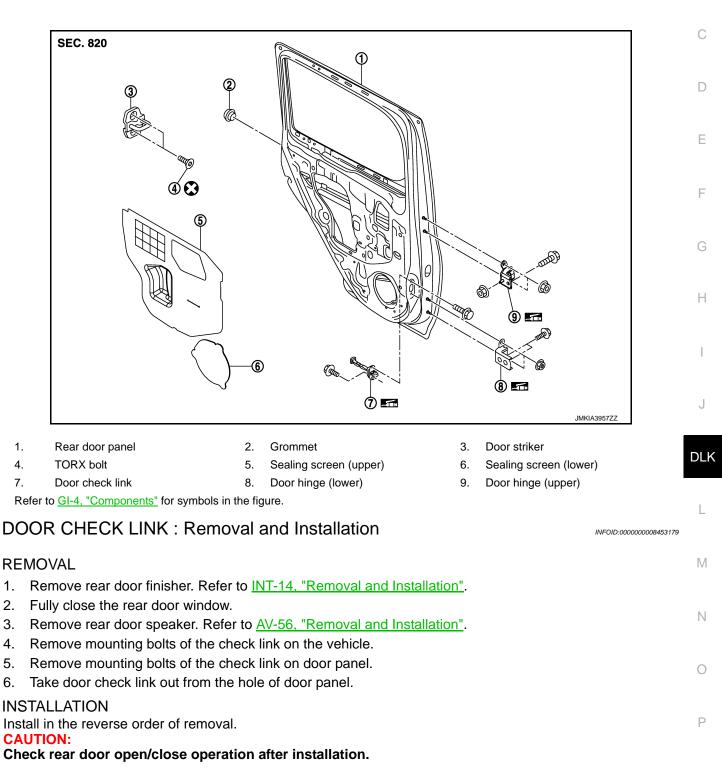
• After installing, apply the touch-up paint (the body color) onto the head of door hinge mounting nuts. DOOR CHECK LINK

DOOR CHECK LINK : Exploded View



А

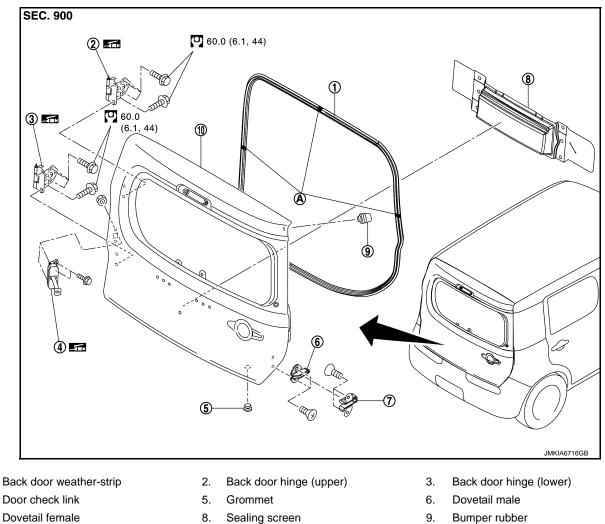
В



### **BACK DOOR** BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Exploded View

INFOID:000000008453180



7. Dovetail female 10. Back door panel 8. Sealing screen

> : Center mark А

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

INFOID:000000008453181

### BACK DOOR ASSEMBLY : Removal and Installation

#### **CAUTION:**

1.

4.

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

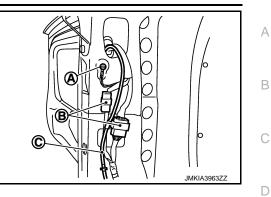
#### REMOVAL

- Remove back door finisher lower. Refer to INT-27, "Removal and Installation". 1.
- 2. Remove luggage side finisher (LH) (upper/lower). Refer to INT-24, "Removal and Installation".

### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

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



4. 5. 6. 7.	Remove back door harness grommet, and then pull out the harness from the vehcle. Support back door with the proper material to prevent it from falling. Remove mounting bolt of door check link on the vehcle. Remove back door hinge mounting bolts (back door side), and then remove back door assembly.	E
8.	<ul> <li>Remove the following parts after removing back door assembly.</li> <li>Back door finisher upper</li> <li>Sealing screen</li> <li>Dovetail (male)</li> </ul>	F
	<ul> <li>Dovetall (finale)</li> <li>Dovr check link</li> <li>Grommet</li> <li>Bumper rubber</li> </ul>	G
Inst CA • C • A	STALLATION tall in the reverse order of removal. UTION: Theck back door open/close, lock/unlock operation after installation. fter installation, perform fitting adjustment. Refer to <u>DLK-310, "BACK DOOR ASSEMBLY : Adjust-</u> tent".	
		J

L

Μ

Ν

Ο

Ρ

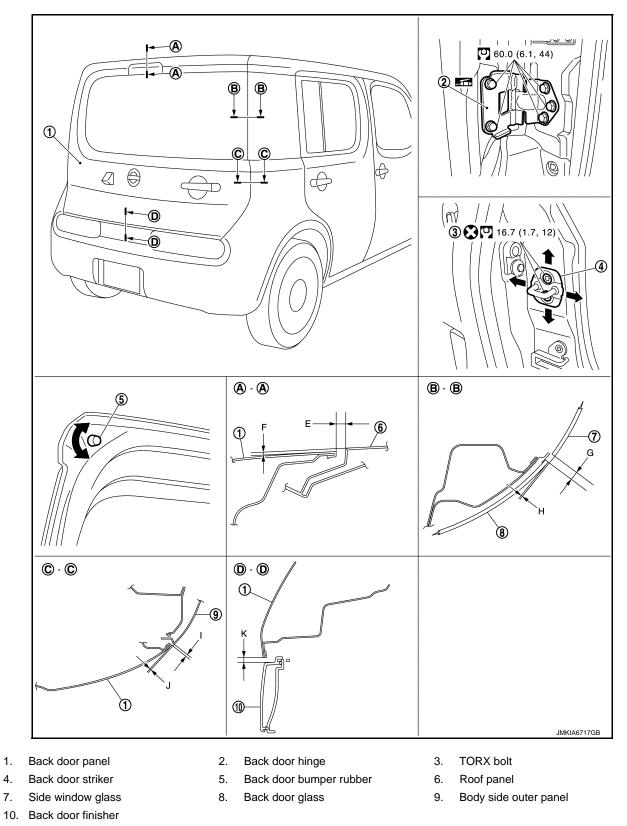
#### < REMOVAL AND INSTALLATION >

### **BACK DOOR**

#### [WITHOUT INTELLIGENT KEY SYSTEM]

### BACK DOOR ASSEMBLY : Adjustment

INFOID:000000008453182



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.

#### [WITHOUT INTELLIGENT KEY SYSTEM]

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

1. Loosen back door striker mounting bolts.

2. Loosen bumper rubber.

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

#### **CAUTION:**

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

#### BACK DOOR STRIKER ADJUSTMENT

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

J

Е

F

Н

# DLK

L

Μ

Ν

Ρ

Revision: 2012 August

#### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

Dovetail male

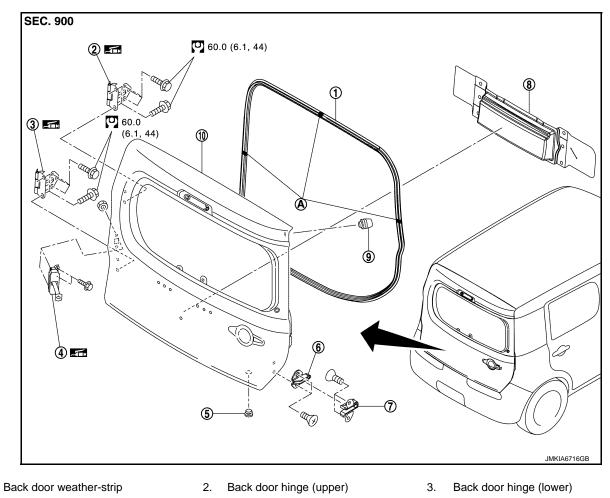
Bumper rubber

6.

9.

### BACK DOOR STRIKER : Exploded View

INFOID:000000008453183



4. Door check link

1.

- 7. Dovetail female
- 10. Back door panel

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

### BACK DOOR STRIKER : Removal and Installation

5.

8.

А

Grommet

Sealing screen

: Center mark

#### REMOVAL

Remove mounting bolts, and then remove back door striker.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

- Check back door open/close operation after installation.
- When removing and installing back door striker, be sure to perform the fitting adjustment. Refer to <u>DLK-310, "BACK DOOR ASSEMBLY : Adjustment"</u>.

### BACK DOOR HINGE

INFOID:000000008453184

Revision: 2012 August

### **DLK-312**

#### 2013 CUBE

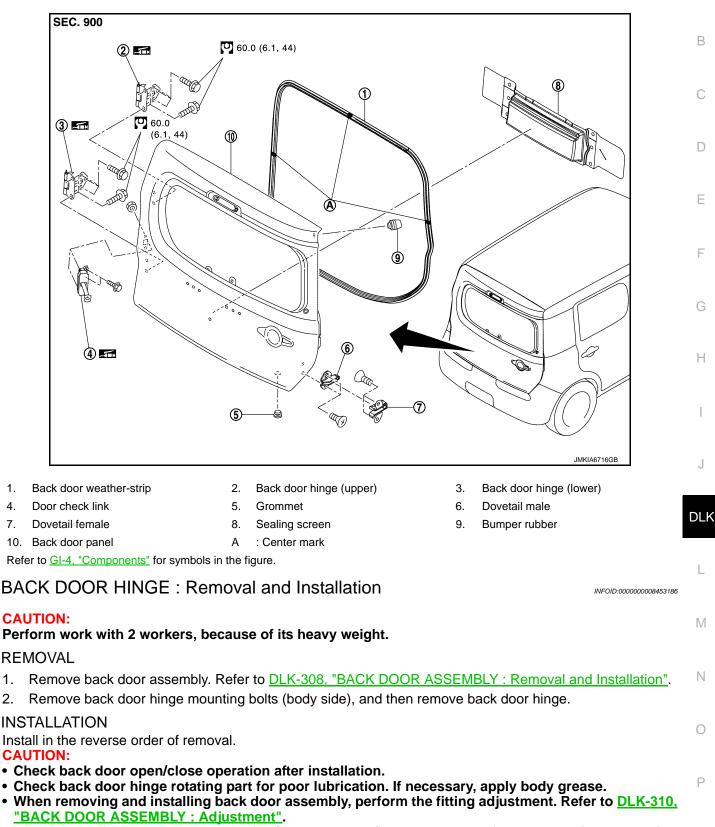
#### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

### **BACK DOOR HINGE : Exploded View**

#### INFOID:000000008453185

А



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

DOOR CHECK LINK

1.

4.

7.

1.

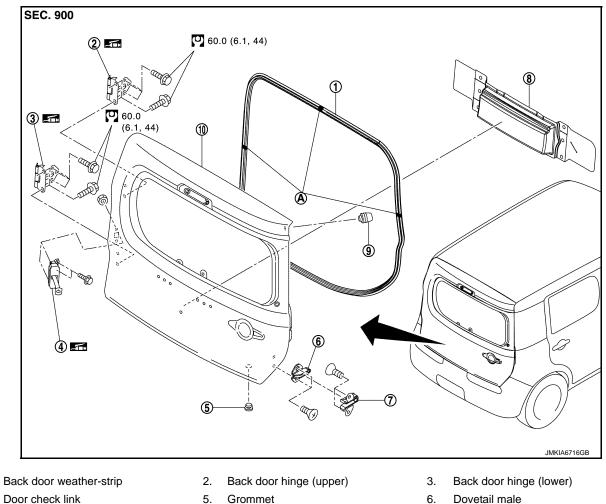
2.

#### < REMOVAL AND INSTALLATION >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

### DOOR CHECK LINK : Exploded View

INFOID:000000008453187



Door check link 4.

1.

- 7. Dovetail female
- 10. Back door panel

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

### DOOR CHECK LINK : Removal and Installation

## INFOID:000000008453188

#### REMOVAL

Remove back door finisher lower. Refer to <u>INT-27, "Removal and Installation"</u>.

8.

А

Grommet

Sealing screen

: Center mark

- 2. Remove sealing screen.
- NOTE:

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

6.

9.

Bumper rubber

- 3. Remove mounting bolts of door check link on the vehicle.
- 4. Remove mounting nuts of door check link on the back door panel.
- 5. Take door check link out from the hole of back door panel.

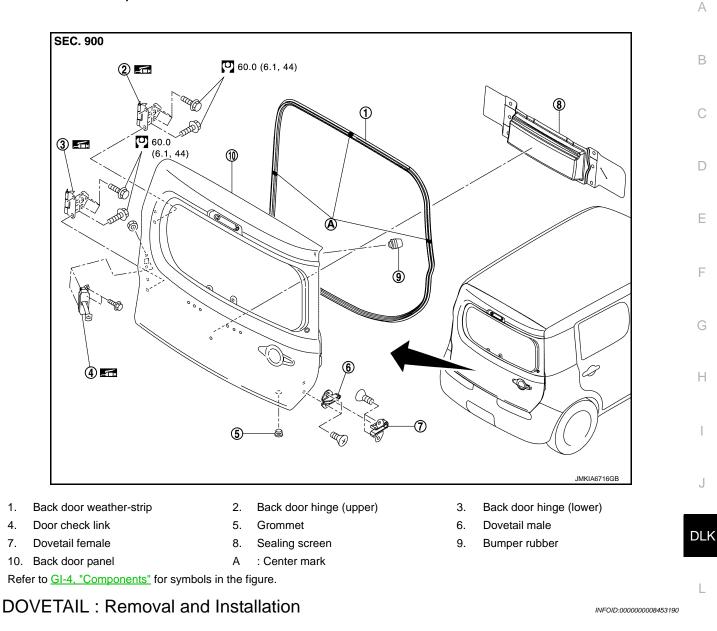
#### **INSTALLATION**

Install in the reverse order of removal. **CAUTION:** Check back door open/close operation after installation. DOVETAIL

#### [WITHOUT INTELLIGENT KEY SYSTEM]

### < REMOVAL AND INSTALLATION > DOVETAIL : Exploded View

INFOID:000000008453189



#### REMOVAL

- 1. Remove mounting bolts, and then remove dovetai (male).
- 2. Remove mounting bolts, and then remove dovetai (female).

#### INSTALLATION Install in the reverse order of removal. CAUTION: Check back door open/close operation after installation. BACK DOOR WEATHER-STRIP

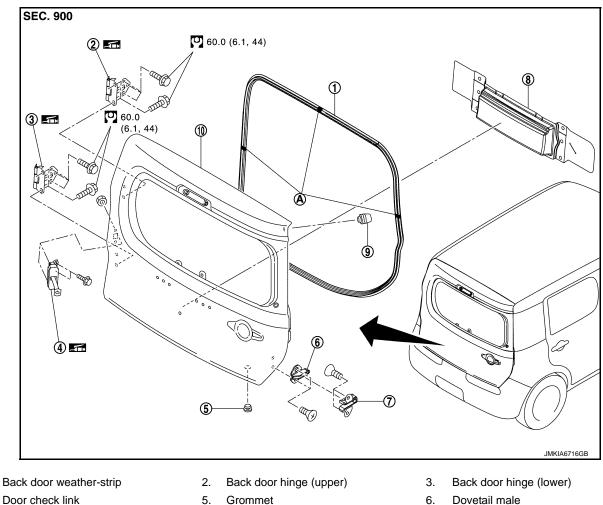
Μ

### < REMOVAL AND INSTALLATION >

#### [WITHOUT INTELLIGENT KEY SYSTEM]

### BACK DOOR WEATHER-STRIP : Exploded View

INFOID:000000008453191



Door check link 4.

1.

- 7. Dovetail female
- 10. Back door panel

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

### BACK DOOR WEATHER-STRIP : Removal and Installation

8.

А

Sealing screen

: Center mark

INFOID:000000008453192

#### REMOVAL

1. Pull and remove engagement with body from weather-strip joint. **CAUTION:** 

### Never pull strongly on weather-strip.

#### INSTALLATION

1. Working from the upper section, align weather-strip center mark (A) with vehicle center mark (cutting position) and install weather-strip onto the vehicle.

9.

Bumper rubber

2. Pull weather-strip gently to ensure that there is no loose section. NOTE:

Make sure that weather-strip is fit tightly at each corner and luggage rear plate.

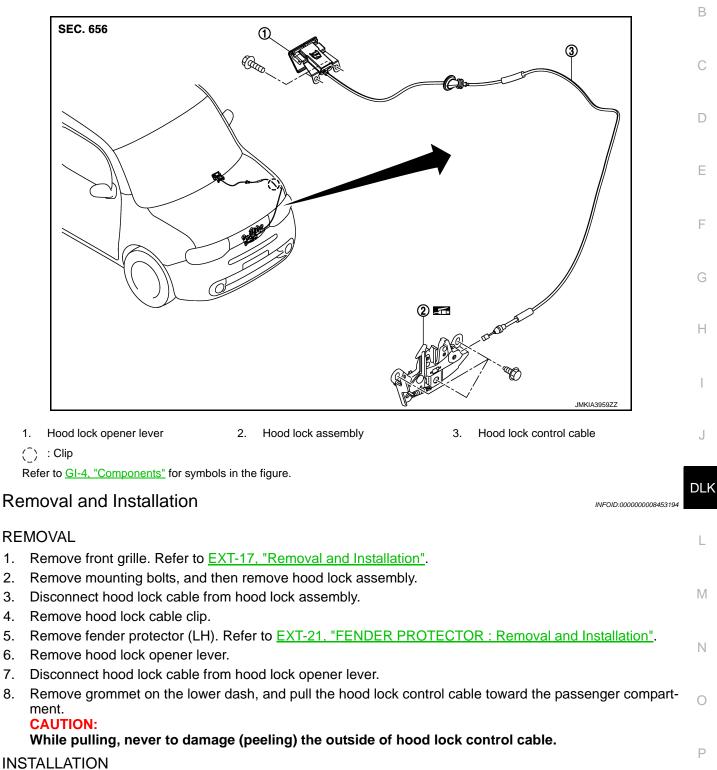
### < REMOVAL AND INSTALLATION > HOOD LOCK

### [WITHOUT INTELLIGENT KEY SYSTEM]

### **Exploded View**

INFOID:000000008453193

А



Install in the reverse order of removal.

#### CAUTION:

2.

4.

5.

7.

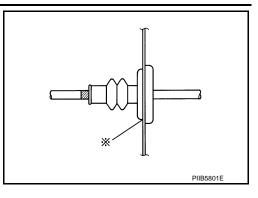
8.

Never to bend cable too much, keeping the radius 100 mm (3.937 in) or more.

### 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-290, "HOOD ASSEMBLY : Adjust-ment"</u>.
- After installation, perform hood lock control inspection. Refer to <u>DLK-318</u>, "Inspection".

#### Inspection

INFOID:000000008453195

#### NOTE:

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

- 1. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] by hood weight.
- 2. While operating hood opener, carefully check that the front end of hood is raised by approximately 20.0 mm (0.787 in). Also check that hood opener returns to the original position.
- 3. Check that hood opener operating is condition 49 N (5.0 kg, 11.0 lb) or below.
- Install so that static closing face of hood is 94 490 N⋅m (9.6 50.0 kg-m, 69 361 ft lb).
   NOTE:
  - Exert vertical force on right side and left side of hood lock.
  - Never press simultaneously both sides.
- 5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

#### < REMOVAL AND INSTALLATION >

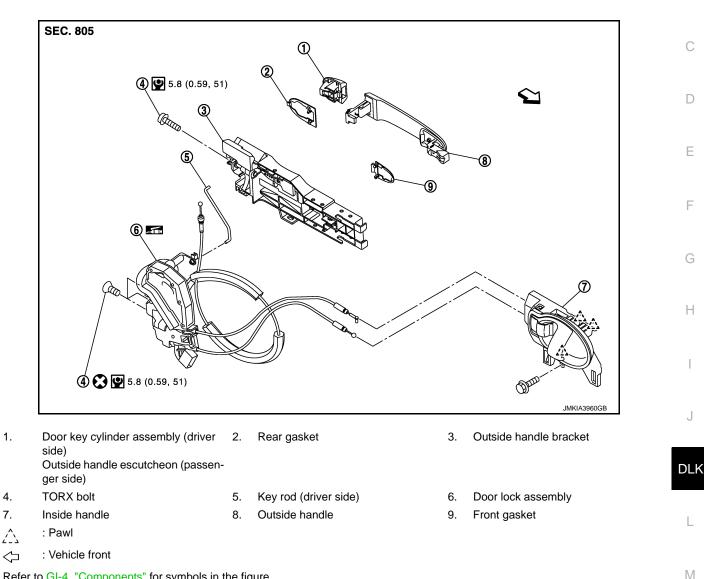
# FRONT DOOR LOCK DOOR LOCK

DOOR LOCK : Exploded View

А

В

[WITHOUT INTELLIGENT KEY SYSTEM]



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

### DOOR LOCK : Removal and Installation

### REMOVAL

- Remove front door finisher. Refer to INT-12, "Removal and Installation". 1.
- 2. Remove sealing screen. NOTE: Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.
- 3. Remove front door glass. Refer to GW-18, "Removal and Installation".
- Remove front door lower sash (rear). Refer to <u>GW-18, "Removal and Installation"</u>.
- 5. Remove outside handle. Refer to DLK-321, "OUTSIDE HANDLE : Removal and Installation".
- Remove inside handle. Refer to <u>DLK-320, "INSIDE HANDLE : Removal and Installation"</u>.
- 7. Remove door lock assembly TORX bolts.
- Disconnect door lock actuator connector, and then remove door lock assembly. 8.

### **DLK-319**

#### 2013 CUBE

INFOID:000000008453197

Ν

Ρ

< REMOVAL AND INSTALLATION >

#### INSTALLATION

Install in the reverse order of removal.

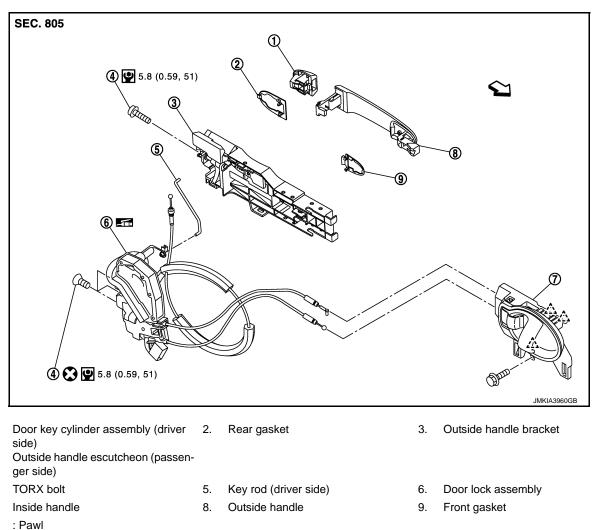
#### **CAUTION:**

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

**INSIDE HANDLE** 

### **INSIDE HANDLE : Exploded View**

INFOID:000000008453198



· Pawl

1.

4.

7.

C : Vehicle front

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

### INSIDE HANDLE : Removal and Installation

INFOID:000000008453199

#### REMOVAL

- 1. Remove front door finisher. Refer to INT-12, "Removal and Installation".
- 2. Remove inside handle mounting bolts, slide handle toward rear of vehicle, disengage handle from door panel, and remove inside handle.

#### INSTALLATION

Install in the reverse order of removal.

Check door open/close, lock/unlock operation after installation. OUTSIDE HANDLE

### FRONT DOOR LOCK

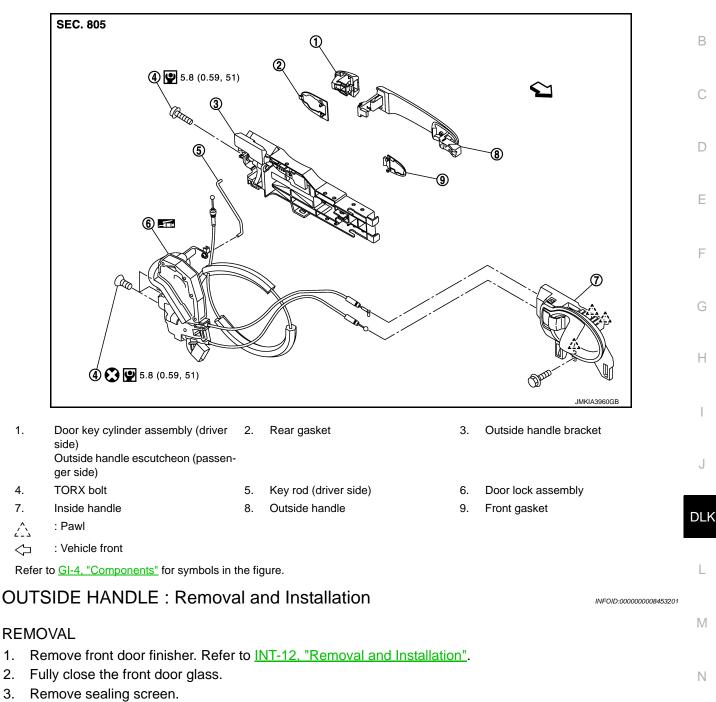
#### < REMOVAL AND INSTALLATION >

# [WITHOUT INTELLIGENT KEY SYSTEM]

### **OUTSIDE HANDLE : Exploded View**

#### INFOID:000000008453200

А



NOTE:

1.

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

- Remove front door lower sash (rear). Refer to <u>GW-18, "Removal and Installation"</u>.
- 5. Disconnect key rod (driver side).
- 6. Disconnect door antenna and door request switch connector and remove harness clamp (with Intelligent Key system) on outside handle bracket.

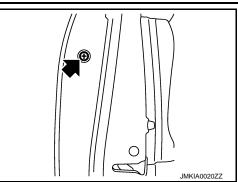
Ρ

## FRONT DOOR LOCK

### < REMOVAL AND INSTALLATION >

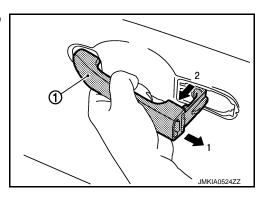
7. Remove door side grommet, and loosen TORX bolt from grommet hole.

# [WITHOUT INTELLIGENT KEY SYSTEM]



8. While pulling outside handle, remove door key cylinder assembly (diver side) or outside handle escutcheon (passenger side).

9. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



JMKIA0560ZZ

- 10. Remove front gasket and rear gasket.
- 11. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 12. Reach in to separate outside handle cable connection on outside handle bracket.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

#### < REMOVAL AND INSTALLATION >

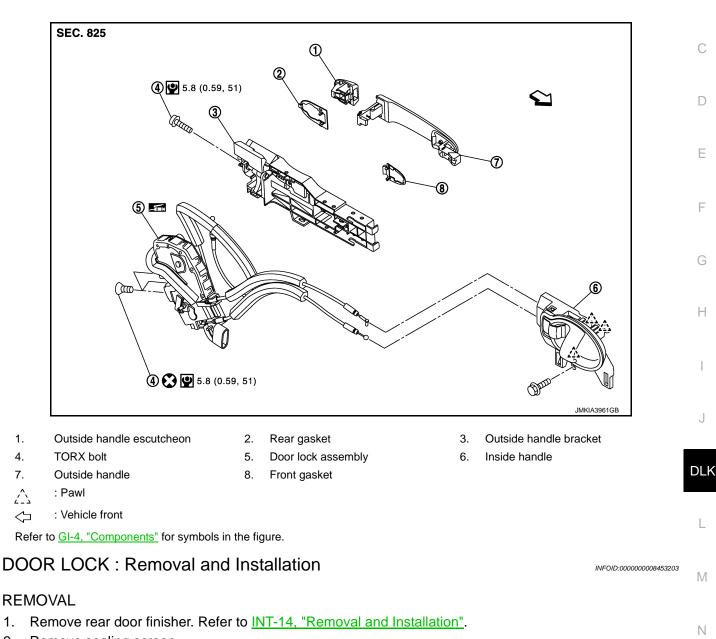
# REAR DOOR LOCK DOOR LOCK

DOOR LOCK : Exploded View

INFOID:000000008453202

А

В



#### 2. Remove sealing screen. NOTE:

1.

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

- 3. Remove rear door glass. Refer to GW-23, "Removal and Installation".
- 4. Remove outside handle. Refer to DLK-325, "OUTSIDE HANDLE : Removal and Installation".
- 5. Remove inside handle. Refer to DLK-324, "INSIDE HANDLE : Removal and Installation".
- 6. Remove door lock assembly TORX bolts.
- 7. Disconnect door lock actuator connector, and then remove door lock assembly.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

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

Revision: 2012 August

#### **DLK-323**

2013 CUBE

Ρ

[WITHOUT INTELLIGENT KEY SYSTEM]

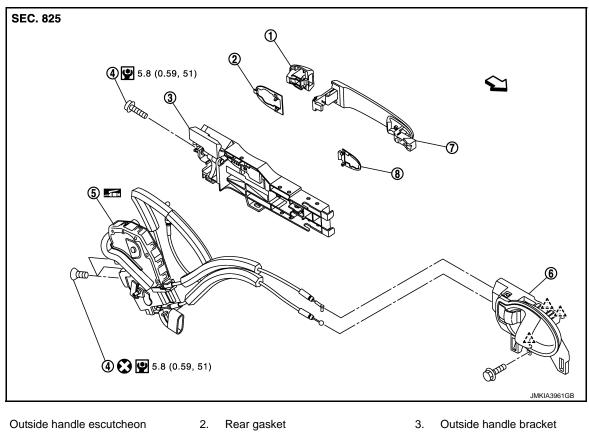
Inside handle

6.

### • Check door lock cable is properly engaged with outside handle bracket. INSIDE HANDLE

**INSIDE HANDLE : Exploded View** 

INFOID:000000008453204



4. TORX bolt

8. Front gasket

- 5. Door lock assembly
- Outside handle 7.
- : Pawl  $\hat{\Box}$

1.

: Vehicle front  $\triangleleft$ 

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

### **INSIDE HANDLE : Removal and Installation**

INFOID:000000008453205

#### REMOVAL

- 1. Remove rear door finisher. Refer to INT-14, "Removal and Installation".
- Remove inside handle mounting bolts, slide handle toward rear of vehicle, disengage handle from door 2. panel, and remove inside handle.

#### INSTALLATION

Install in the reverse order of removal. **CAUTION:** Check door open/close, lock/unlock operation after installation. **OUTSIDE HANDLE** 

### **REAR DOOR LOCK**

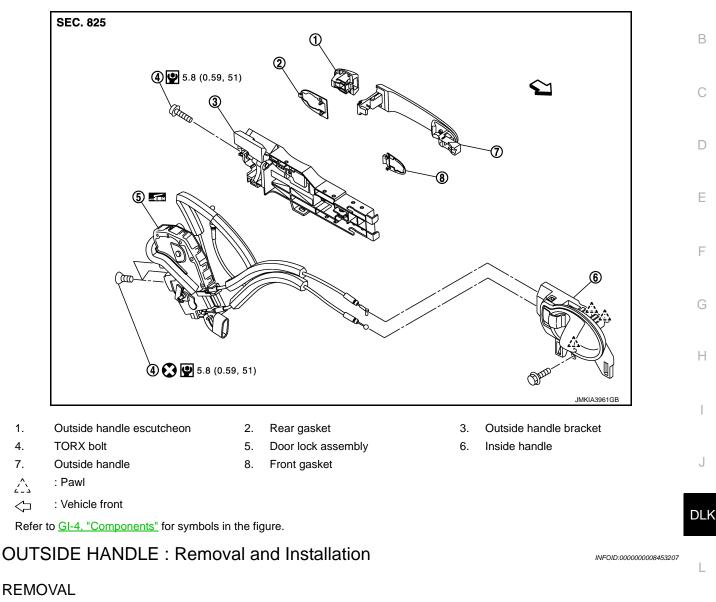
#### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

### **OUTSIDE HANDLE : Exploded View**

#### INFOID:000000008453206

А

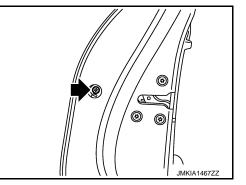


- 1. Remove rear door finisher. Refer to INT-14, "Removal and Installation".
- 2. Fully close rear door glass.
- 3. Remove sealing screen.

#### NOTE:

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

 Remove door side grommet, and loosen TORX bolt from grommet hole.



Μ

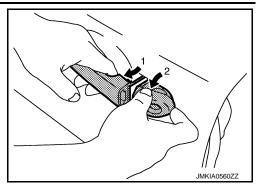
Ρ

## **REAR DOOR LOCK**

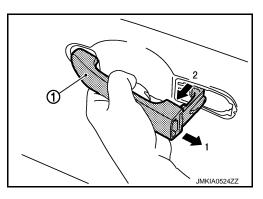
### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

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



6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 9. Reach in to separate outside handle cable connection on outside handle bracket.

#### **INSTALLATION**

Install in the reverse order of removal.

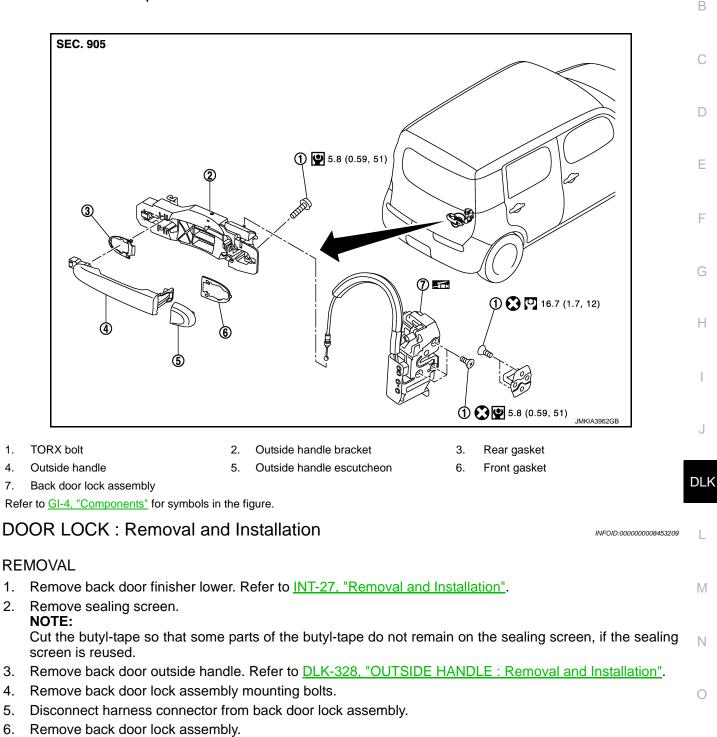
#### **CAUTION:**

- Check door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

# BACK DOOR LOCK DOOR LOCK

DOOR LOCK : Exploded View

А



#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

6.

1.

4.

7.

- · Check back door open/close, lock/unlock operation after installation.
- Check door lock cable is properly engaged with outside handle bracket.

OUTSIDE HANDLE

### **DLK-327**

Ρ

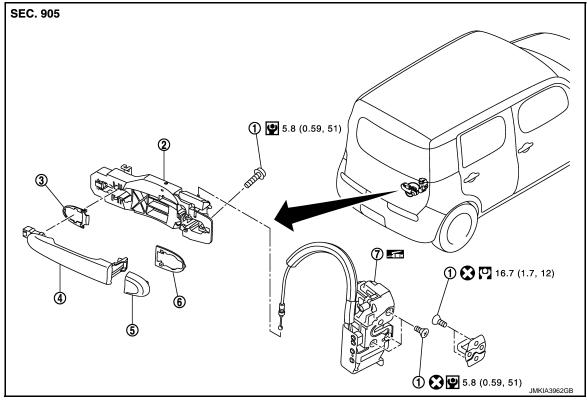
### BACK DOOR LOCK

#### < REMOVAL AND INSTALLATION >

### **OUTSIDE HANDLE : Exploded View**

INFOID:000000008453210

[WITHOUT INTELLIGENT KEY SYSTEM]



1. TORX bolt

4.

2. Outside handle bracket

Outside handle escutcheon

- 3. Rear gasket
- 6. Front gasket

7. Back door lock assembly

Outside handle

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

### OUTSIDE HANDLE : Removal and Installation

INFOID:000000008453211

### REMOVAL

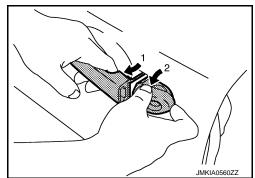
1. Remove back door finisher lower. Refer to INT-27, "Removal and Installation".

5.

2. Remove sealing screeen. **NOTE:** 

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

- 3. Disconnect back door antenna and back door request switch connector and remove harness clamp (with intelligent key system) on outside handle bracket.
- 4. Remove mounting bolt of outside handle bracket.
- 5. While pulling outside handle, remove outside habdle escutcheon.

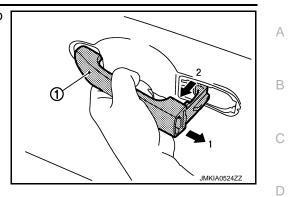


### **BACK DOOR LOCK**

#### < REMOVAL AND INSTALLATION >

### [WITHOUT INTELLIGENT KEY SYSTEM]

6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



- 7. Remove front gasket and rear gasket.
- 8. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.
- 9. Reach in to separate outside handle cable connection on outside handle bracket.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

- Check back door open/close operation after installation.
- Check door lock cable is properly engaged with outside handle bracket. EMERGENCY LEVER

**EMERGENCY LEVER : Unlock procedures** 

### UNLOCK PROCEDURES

#### NOTE:

If back door lock cannot be unlocked due to a malfunction or battery discharge, follow the procedures to unlock back door.

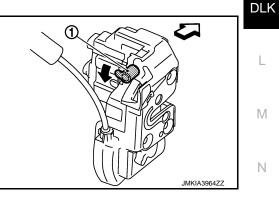
- 1. Remove back door finisher lower. Refer to INT-27, "Removal and Installation".
- 2. Remove sealing screen.

NOTE:

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

3. From inside the vehicle, rotate emergency lever (1) toward lower direction and unlock.

 $\triangleleft$ : Vehicle front



Е

F

Н

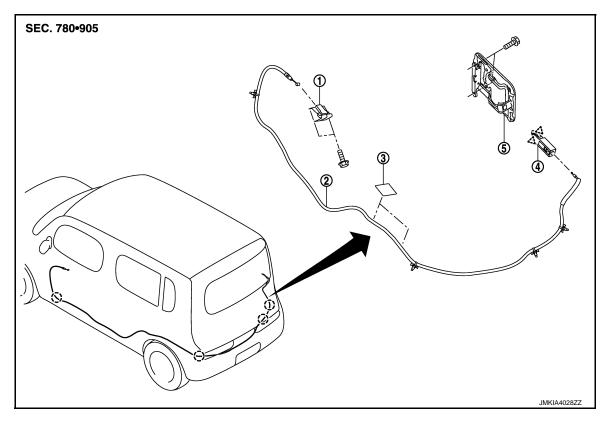
J

### < REMOVAL AND INSTALLATION >

FUEL FILLER LID OPENER

### Exploded View

INFOID:000000008453213



- 1. Fuel filler lid opener handle
  - Fuel filler lid lock assembly
- Fuel filler lid opener cable
   Fuel filler lid assembly
- 3. Cable protector

(_) : Clip

4.

کے : Pawl

### Removal and Installation

### REMOVAL

#### FUEL FILLER LID

- 1. Fully open fuel filler lid.
- 2. Remove mounting screws, and then remove fuel filler lid.

#### FUEL FILLER LID OPENER CABLE

- 1. Fully open fuel filler lid.
- 2. Remove dash side finisher (LH). Refer to INT-16, "Removal and Installation".
- 3. Remove front kicking plate inner (LH). Refer to INT-16, "Removal and Installation".
- 4. Remove center pillar lower garnish (LH). Refer to INT-16. "Removal and Installation".
- 5. Remove rear kicking plate inner (LH). Refer to INT-16, "Removal and Installation".
- 6. Remove luggage side finisher (LH) (upper/lower). Refer to INT-24, "Removal and Installation".
- 7. Remove center seat belt retractor. Refer to <u>SB-11. "SEAT BELT RETRACTOR : Removal and Installa-</u> tion".
- 8. Remove mounting bolts, and then remove fuel filler lid opener handle.
- 9. Remove fuel filler lid opener cable from fuel filler lid opener handle.
- 10. Push fuel filler lid lock assembly front the vehicle, while pushing the pawls.

### DLK-330

### FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >	[WITHOUT INTELLIGENT KEY SYSTEM]
11. Remove fuel filler lid opener cable from fuel filler lid loc	k assembly.
12. Pull up floor trim. Refer to INT-19, "Removal and Install	ation".
13. Remove fuel filler lid opener cable mounting clips.	
14. Remove fuel filler lid opener cable.	
INSTALLATION	
Install in the reverse order of removal.	

J

L

M

Ν

Ο

Ρ

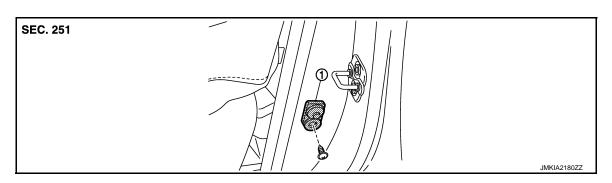
# < REMOVAL AND INSTALLATION > DOOR SWITCH

### [WITHOUT INTELLIGENT KEY SYSTEM]

Exploded View

INFOID:000000008453215

INFOID:000000008453216

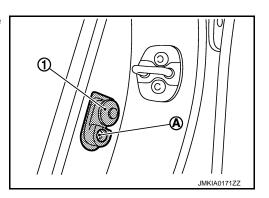


1. Door switch

### Removal and Installation

REMOVAL

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



INSTALLATION Install in the reverse order of removal.

#### **REMOTE KEYLESS ENTRY RECEIVER** [WITHOUT INTELLIGENT KEY SYSTEM]

# < REMOVAL AND INSTALLATION >

# REMOTE KEYLESS ENTRY RECEIVER

### **Exploded View**

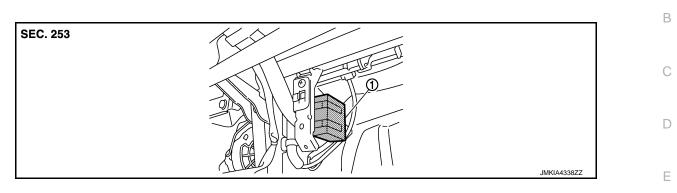
INFOID:000000008453217

INFOID:000000008453218

А

F

Н

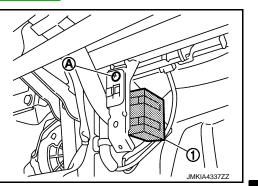


1. Remote keyless entry receiver

### **Removal and Installation**

#### REMOVAL

- 1. Remove the glove box assembly. Refer to IP-13, "Removal and Installation".
- 2. Remove the remote keyless entry receiver mounting bolt (A), and then remove remote keyless entry receiver (1).



**INSTALLATION** Install in the reverse order of removal.



L

Μ

Ν

Ο

Ρ

J

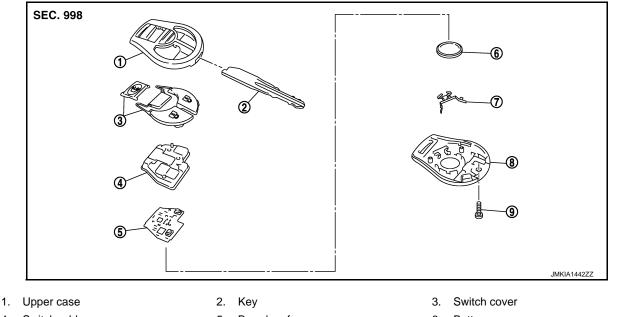
### **KEYFOB BATTERY**

### < REMOVAL AND INSTALLATION > **KEYFOB BATTERY**

INFOID:000000008453219

INFOID:000000008453220

### Exploded View



- 4. Switch rubber
  - plate

5. Board surface 8. Lower case

- 6. Battery
  - 9. Screw

### Removal and Installation

#### REMOVAL

7

- 1. Remove screw (9) on the rear of keyfob.
- 2. Place the key with the lower case (8) facing up. Set a screw-driver wrapped with tape between upper case (1) and lower case (8) and then separate the lower case (8) from the upper case (1). **CAUTION:** 
  - Do not touch the circuit board or battery terminal.

#### • The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.

3. When replacing the circuit board assembly, remove circuit board assembly from the upper case (1). [Circuit board assembly: Switch rubber (4) + Board surface (5)] **CAUTION:** 

#### Do not touch the printed circuits directly.

4. Remove the battery (6) from the lower case (8) and replace it.

**Battery replacement** : Coin-type lithium battery (CR1620)

#### **CAUTION:**

When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.

5. After replacement, fit the lower and upper cases together, part (4), (7) and tighten with the screw. **CAUTION:** 

After replacing the battery, Be sure to check that door locking operates normally using the keyfob. Refer to <u>DLK-245, "Component Function Check"</u>.

#### **INSTALLATION**

Install in the reverse order of removal.