CONTENTS

COUPE

BASIC INSPECTION8
DIAGNOSIS AND REPAIR WORKFLOW
INSPECTION AND ADJUSTMENT11
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT
SYSTEM DESCRIPTION12
AUTOMATIC DOOR LOCKS12System Diagram12System Description12Component Parts Location14Component Description14
DOOR LOCK FUNCTION15
DOOR LOCK AND UNLOCK SWITCH15DOOR LOCK AND UNLOCK SWITCH : SystemDiagram15DOOR LOCK AND UNLOCK SWITCH : SystemDescription15DOOR LOCK AND UNLOCK SWITCH :Component Parts Location16DOOR LOCK AND UNLOCK SWITCH :16Component Description16
DOOR REQUEST SWITCH

INTELLIGENT KEY	F
TRUNK OPEN FUNCTION	
TRUNK LID OPENER SWITCH28 TRUNK LID OPENER SWITCH : System Diagram	Н
TRUNK LID OPENER SWITCH : System Descrip-	
tion	
Component Parts Location	J
Component Description29	DLł
TRUNK REQUEST SWITCH	L
TRUNK REQUEST SWITCH : Component Description35	M
INTELLIGENT KEY	Ν
INTELLIGENT KEY : Component Description	0
WARNING FUNCTION40System Description40Component Parts Location45	Ρ
KEY REMINDER FUNCTION 47 System Description 47	
Component Parts Location	
DIAGNOSIS SYSTEM (BCM)	

SECTION DLK^AB

DOOR & LOCK o

Α

D

Е

COMMON ITEM	50
DOOR LOCK	51
INTELLIGENT KEY	
TRUNK	
DTC/CIRCUIT DIAGNOSIS	56
U1000 CAN COMM CIRCUIT	56 56
U1010 CONTROL UNIT (CAN)	57 57
B2622 INSIDE KEY ANTENNA 2	58 58
B2623 INSIDE KEY ANTENNA 3 6 Description 6 DTC Logic 6 Diagnosis Procedure 6	51 51
POWER SUPPLY AND GROUND CIRCUIT e Diagnosis Procedure	64
DOOR SWITCH 6 Description 6 Component Function Check 6 Diagnosis Procedure 6 Component Inspection 6	65 65 65
DOOR LOCK AND UNLOCK SWITCH	38
DRIVER SIDE	58 58
PASSENGER SIDE 7 PASSENGER SIDE : Description 7 PASSENGER SIDE : 7 Component Function Check 7 PASSENGER SIDE : Diagnosis Procedure 7	70 70
KEY SLOT	

 50 50	Component Function Check
50	KEY CYLINDER SWITCH
51	Description76 Component Function Check
51	Diagnosis Procedure76
51	Component Inspection78
51	UNLOCK SENSOR 80
51	Description
54	Diagnosis Procedure
54	Component Inspection
. 56	TRUNK LID OPENER SWITCH 84
56	Description84
56	Component Function Check84
56	Diagnosis Procedure
56	Component Inspection86
57	TRUNK LID OPENER CANCEL SWITCH 87
57	Description
57	Component Function Check
57	Diagnosis Procedure
58	
58	TRUNK LAMP SWITCH
58	Description
58	Component Function Check
61	Component Inspection
61	
61	DOOR REQUEST SWITCH
61	Description
64	Component Function Check
64	Component Inspection
64	
65	TRUNK OPENER REQUEST SWITCH
 65 65	Description
65	Diagnosis Procedure
65	Component Inspection 100
67	DOOR LOCK ACTUATOR102
68	DRIVER SIDE
68	DRIVER SIDE
68	DRIVER SIDE : Component Function Check 102
68	DRIVER SIDE : Diagnosis Procedure
68	-
	PASSENGER SIDE
70	PASSENGER SIDE : Description
70	PASSENGER SIDE : Component Function Check
70	PASSENGER SIDE : Diagnosis Procedure 103
70	-
	TRUNK LID OPENER ACTUATOR105
73	Description
73	Component Function Check 105

Diagnosis Procedure	105
INTELLIGENT KEY WARNING BUZZER	108
Description	
Component Function Check	
Diagnosis Procedure Component Inspection	
OUTSIDE KEY ANTENNA	
Description Component Function Check	
Diagnosis Procedure	
REMOTE KEYLESS ENTRY RECEIVER	
Description Component Function Check	
Diagnosis Procedure	
-	
Description Component Function Check	
Diagnosis Procedure	
Component Inspection	
Special Repair Requirement	
KEY SLOT ILLUMINATION	404
Description	
Component Function Check	
Diagnosis Procedure	
HORN FUNCTION	
Description	
Component Function Check	
Diagnosis Procedure	
COMBINATION METER DISPLAY FUNC-	
TION	126
Description	
Component Function Check	
Diagnosis Procedure	126
WARNING CHIME FUNCTION	127
Description	
Component Function Check	127
Diagnosis Procedure	127
HAZARD FUNCTION	128
Description	
Component Function Check	128
Diagnosis Procedure	128
ECU DIAGNOSIS INFORMATION	129
BCM (BODY CONTROL MODULE) Reference Value	
Terminal Layout	
Physical Values	
Fail Safe	
DTC Inspection Priority Chart	153
DTC Index	155

WIRING DIAGRAM 158	
POWER DOOR LOCK SYSTEM 158 Wiring Diagram	
INTELLIGENT KEY SYSTEM 167 Wiring Diagram	В
TRUNK LID OPENER 183 Wiring Diagram 183	С
SYMPTOM DIAGNOSIS 187	D
INTELLIGENT KEY SYSTEM SYMPTOMS 187 Symptom Table	D
DOOR LOCK FUNCTION SYMPTOMS 188	E
DOOR LOCK AND UNLOCK SWITCH	F
DOOR REQUEST SWITCH188 DOOR REQUEST SWITCH : Symptom Table188	G
INTELLIGENT KEY	
TRUNK OPEN FUNCTION SYMPTOMS 191	
TRUNK LID OPENER SWITCH191 TRUNK LID OPENER SWITCH : Symptom Table.191	
TRUNK REQUEST SWITCH191 TRUNK REQUEST SWITCH : Symptom Table191	J
INTELLIGENT KEY191 INTELLIGENT KEY : Symptom Table	DLK
WARNING FUNCTION SYMPTOMS 193 Symptom Table	
KEY REMINDER FUNCTION SYMPTOMS 195 Symptom Table	L
HAZARD FUNCTION 196 Symptom Table	Μ
HORN FUNCTION	Ν
SQUEAK AND RATTLE TROUBLE DIAG- NOSES	
PRECAUTION	
PRECAUTIONS	
PRECAUTIONS	
FIDEBULE WILLIOUL COWI TOP COVEL	

Precaution for work Precaution Necessary for Steering Wheel Rota- tion After Battery Disconnect	
PREPARATION	.206
PREPARATION	.206
REMOVAL AND INSTALLATION	. 208
HOOD	208
HOOD ASSEMBLY HOOD ASSEMBLY : Removal and Installation HOOD ASSEMBLY : Adjustment	.208
HOOD LOCK CONTROL HOOD LOCK CONTROL : Component Parts Lo- cation HOOD LOCK CONTROL : Removal and Installa- tion	.211
RADIATOR CORE SUPPORT Removal and Installation	
FRONT FENDER	.216
DOOR	219
FRONT DOOR FRONT DOOR : Removal and Installation FRONT DOOR : Adjustment	.219
DOOR LOCK	222
FRONT DOOR LOCK	.222
FRONT DOOR LOCK : Removal and Installation.	
TRUNK LID TRUNK LID ASSEMBLY TRUNK LID ASSEMBLY : Removal and Installa- tion TRUNK LID ASSEMBLY : Trunk Lid Stay Disposal	.224 .224
TRUNK LID ASSEMBLY : Adjustment	.224 .225
TRUNK LID LOCK TRUNK LID LOCK : Removal and Installation	
TRUNK LID STRIKER TRUNK LID STRIKER : Removal and Installation	
FUEL FILLER LID OPENER	227
FUEL FILLER OPENER FUEL FILLER OPENER : Removal and Installa- tion	

.204	REMOTE KEYLESS ENTRY RECEIVER	
.204	Removal Installation	
	SEDAN	220
. 206		
206	BASIC INSPECTION	229
.206	DIAGNOSIS AND REPAIR WORKFLOW	229
.207	Work Flow	229
. 208	INSPECTION AND ADJUSTMENT	232
208	ADDITIONAL SERVICE WHEN REPLACING	
.208	CONTROL UNIT	232
.208	ADDITIONAL SERVICE WHEN REPLACING	
.209	CONTROL UNIT : Description	232
	ADDITIONAL SERVICE WHEN REPLACING	~~~
.210	CONTROL UNIT : Special Repair Requirement	232
.211	SYSTEM DESCRIPTION	233
	AUTOMATIC DOOR LOCKS	233
.211	System Diagram	
214	System Description	
.214	Component Parts Location	
	Component Description	235
216 .216	DOOR LOCK FUNCTION	237
.216		
.217	DOOR LOCK AND UNLOCK SWITCH DOOR LOCK AND UNLOCK SWITCH : System	237
219	Diagram	237
.219	DOOR LOCK AND UNLOCK SWITCH : System	201
.219	Description	237
.220	DOOR LOCK AND UNLOCK SWITCH :	
0	Component Parts Location	238
222	DOOR LOCK AND UNLOCK SWITCH :	
.222	Component Description	238
	DOOR REQUEST SWITCH	238
.222	DOOR REQUEST SWITCH : System Diagram	
.222	DOOR REQUEST SWITCH : System Description.	
	DOOR REQUEST SWITCH :	
224	Component Parts Location	242
.224	DOOR REQUEST SWITCH :	
	Component Description	244
.224	INTELLIGENT KEY	244
	INTELLIGENT KEY : System Diagram	
.224	INTELLIGENT KEY : System Description	
.225	INTELLIGENT KEY : Component Parts Location.	
.226	INTELLIGENT KEY : Component Description	249
.226	TRUNK OPEN FUNCTION	250
.226	TRUNK LID OPENER SWITCH	250
.226	TRUNK LID OPENER SWITCH : System Diagram	200
227		250
	TRUNK LID OPENER SWITCH : System Descrip-	
.227	tion	250
oc 	TRUNK LID OPENER SWITCH :	05 ·
.227	Component Parts Location	251

2012 Altima GCC

TRUNK LID OPENER SWITCH : Component Description	251
TRUNK REQUEST SWITCH TRUNK REQUEST SWITCH : System Diagram TRUNK REQUEST SWITCH : System Descrip-	252
tion TRUNK REQUEST SWITCH :	
Component Parts Location TRUNK REQUEST SWITCH :	
Component Description	
INTELLIGENT KEY	
INTELLIGENT KEY : System Diagram	
INTELLIGENT KEY : System Description	
INTELLIGENT KEY : Component Parts Location.	
INTELLIGENT KEY : Component Description	
WARNING FUNCTION	
System Description	
Component Parts Location	267
KEY REMINDER FUNCTION	
System Description	
Component Parts Location	271
DIAGNOSIS SYSTEM (BCM)	274
COMMON ITEM	
COMMON ITEM : Diagnosis Description	274
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)	274
DOOR LOCK	275
DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)	275
INTELLIGENT KEY	275
INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)	
TRUNK	278
TRUNK : CONSULT Function (BCM - TRUNK)	
DTC/CIRCUIT DIAGNOSIS	280
U1000 CAN COMM CIRCUIT	280
Description	
DTC Logic	
Diagnosis Procedure	
U1010 CONTROL UNIT (CAN)	281
DTC Logic	
Diagnosis Procedure	
Special Repair Requirement	
B2622 INSIDE KEY ANTENNA 2	282
Description	
DTC Logic	
Diagnosis Procedure	
B2623 INSIDE KEY ANTENNA 3	285
Description	

DTC Logic Diagnosis Procedure		A
POWER SUPPLY AND GROUND CIRCUIT Diagnosis Procedure		_
Special Repair Requirement		В
DOOR SWITCH Description		С
Component Function Check	.289	C
Diagnosis Procedure Component Inspection	.289 .291	D
DOOR LOCK AND UNLOCK SWITCH	293	D
DRIVER SIDE		Е
DRIVER SIDE : Description DRIVER SIDE : Component Function Check		
DRIVER SIDE : Diagnosis Procedure (With LH		F
and RH Anti-Pinch) DRIVER SIDE : Diagnosis Procedure (With LH	.293	Г
Anti-Pinch Only)		
DRIVER SIDE : Special Repair Requirement		G
PASSENGER SIDE PASSENGER SIDE : Description		
PASSENGER SIDE :		Η
Component Function Check PASSENGER SIDE : Diagnosis Procedure (With	.298	
LH and RH Anti-Pinch)	.298	
PASSENGER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)		
PASSENGER SIDE : Special Repair Requirement	.302	J
KEY SLOT		
Description	. 303	DL
Component Function Check Diagnosis Procedure		
Component Inspection	.305	L
KEY CYLINDER SWITCH	306	
Description Component Function Check	.306	M
Diagnosis Procedure (With LH and RH Anti-Pinch)	. 500	
Diagnosis Procedure (With LH Anti-Pinch Only) .	.306 .308	Ν
Component Inspection	.310	
Special Repair Requirement		0
UNLOCK SENSOR		0
Component Function Check	.311	D
Diagnosis Procedure Component Inspection		Ρ
TRUNK LID OPENER SWITCH		
Description	.315	
Component Function Check Diagnosis Procedure		
Component Inspection		

TRUNK LID OPENER CANCEL SWITCH	. 318
Description	
Component Function Check	
Diagnosis Procedure	
Component Inspection	319
TRUNK LAMP SWITCH	. 321
Description	321
Component Function Check	
Diagnosis Procedure	
Component Inspection	323
DOOR REQUEST SWITCH	. 325
Description	
Component Function Check	
Diagnosis Procedure	
Component Inspection	328
TRUNK OPENER REQUEST SWITCH	. 329
Description	
Component Function Check	
Diagnosis Procedure	
Component Inspection	331
DOOR LOCK ACTUATOR	333
DRIVER SIDE	
DRIVER SIDE : Description	
DRIVER SIDE : Component Function Check	
DRIVER SIDE : Diagnosis Procedure	
PASSENGER SIDE	
PASSENGER SIDE : Description	334
PASSENGER SIDE :	
Component Function Check	
PASSENGER SIDE : Diagnosis Procedure	334
REAR LH	
REAR LH : Description	
REAR LH : Component Function Check	
REAR LH : Diagnosis Procedure	336
REAR RH	337
REAR RH : Description	337
REAR RH : Component Function Check	
REAR RH : Diagnosis Procedure	337
TRUNK LID OPENER ACTUATOR	339
Description	
Component Function Check	339
Diagnosis Procedure	
INTELLIGENT KEY WARNING BUZZER	242
Description	
Component Function Check	
Diagnosis Procedure	
Component Inspection	
OUTSIDE KEY ANTENNA	
Description Component Function Check	
Diagnosis Procedure	
5	

318	REMOTE KEYLESS ENTRY RECEIVER 349
.318	Description
.318	Component Function Check
.318	Diagnosis Procedure
.319	
	INTELLIGENT KEY
321	Description
.321	Component Function Check 353
321	Diagnosis Procedure 353
321	Component Inspection 353
323	Special Repair Requirement 354
325	KEY SLOT ILLUMINATION
.325	Description
325	Component Function Check
325	Diagnosis Procedure
.328	
	HORN FUNCTION358
329	Description
.329	Component Function Check 358
.329	Diagnosis Procedure 358
329	COMBINATION METER DISPLAY FUNC-
331	TION
333	Description
	Component Function Check
.333	Diagnosis Procedure
.333	
.333	WARNING CHIME FUNCTION
.333	Description
~~ 4	Component Function Check
. 334 .334	Diagnosis Procedure
.334	HAZARD FUNCTION
.334	
.334	Description
	Diagnosis Procedure
.336	
.336 .336	ECU DIAGNOSIS INFORMATION
.336	BCM (BODY CONTROL MODULE)
	Reference Value
.337	Terminal Layout
.337	Physical Values
.337	Fail Safe
.337	DTC Inspection Priority Chart
220	DTC Index
339	
.339	WIRING DIAGRAM
.339 .339	
.555	POWER DOOR LOCK SYSTEM
342	Wiring Diagram 392
.342	INTELLIGENT KEY SYSTEM403
.342	Wiring Diagram
.342	
.344	TRUNK LID OPENER419
245	Wiring Diagram419
345	
.345 .345	SYMPTOM DIAGNOSIS423
.345 .345	INTELLIGENT KEY SYSTEM SYMPTOMS423
545	

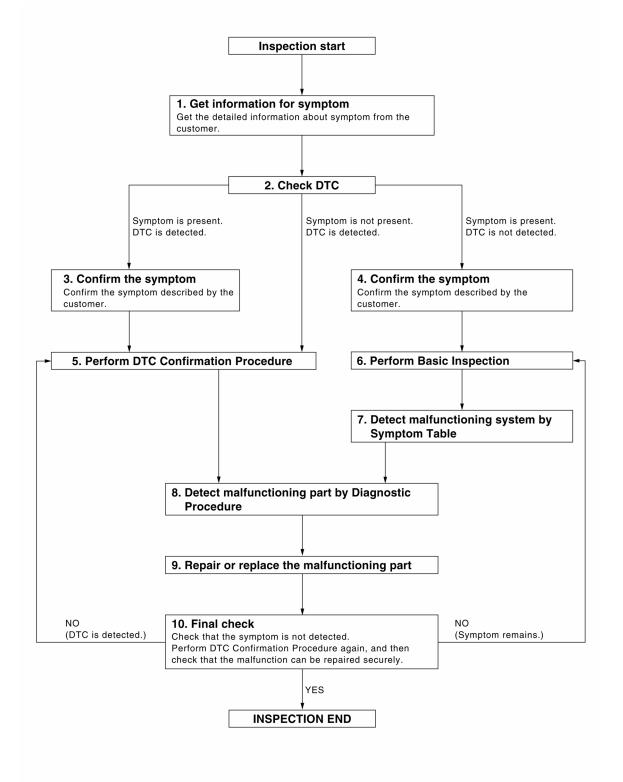
Symptom Table	423
DOOR LOCK FUNCTION SYMPTOMS	424
DOOR LOCK AND UNLOCK SWITCH DOOR LOCK AND UNLOCK SWITCH : Symptom Table	
DOOR REQUEST SWITCH DOOR REQUEST SWITCH : Symptom Table	424
INTELLIGENT KEY	425
TRUNK OPEN FUNCTION SYMPTOMS	
TRUNK LID OPENER SWITCH TRUNK LID OPENER SWITCH : Symptom Table.	
TRUNK REQUEST SWITCH TRUNK REQUEST SWITCH : Symptom Table	
INTELLIGENT KEY INTELLIGENT KEY : Symptom Table	427 427
WARNING FUNCTION SYMPTOMS	
KEY REMINDER FUNCTION SYMPTOMS Symptom Table	
HAZARD FUNCTION Symptom Table	
HORN FUNCTION	
SQUEAK AND RATTLE TROUBLE DIAG-	
NOSES	
Generic Squeak and Rattle Troubleshooting	
Diagnostic Worksheet	
PRECAUTION	440
PRECAUTIONS Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	
SIONER"	440
Procedure without Cowl Top Cover	
Precaution for work Precaution Necessary for Steering Wheel Rota-	
tion After Battery Disconnect	
-	
PREPARATION	
Special Service Tools Commercial Service Tools	
REMOVAL AND INSTALLATION	444

HOOD4	
HOOD ASSEMBLY4 HOOD ASSEMBLY : Removal and Installation4 HOOD ASSEMBLY : Adjustment4	44
HOOD LOCK CONTROL4 HOOD LOCK CONTROL : Component Parts Lo- cation4 HOOD LOCK CONTROL : Removal and Installa-	46
tion4	
Removal and Installation4	50
FRONT FENDER 4 Removal and Installation 4 Adjustment 4	.52
DOOR4	55 F
FRONT DOOR4 FRONT DOOR : Removal and Installation4 FRONT DOOR : Adjustment4	55
BACK DOOR4 BACK DOOR : Removal and Installation4 BACK DOOR : Adjustment4	57 _H
DOOR LOCK4	61
FRONT DOOR LOCK4 FRONT DOOR LOCK : Component Parts Loca- tion4	
FRONT DOOR LOCK : Removal and Installation4	
BACK DOOR LOCK	63 DLK
TRUNK LID4	65
TRUNK LID ASSEMBLY4 TRUNK LID ASSEMBLY : Removal and Installa- tion4	05
TRUNK LID ASSEMBLY : Adjustment4	
TRUNK LID LOCK 4 TRUNK LID LOCK : Removal and Installation 4	
TRUNK LID STRIKER4 TRUNK LID STRIKER : Removal and Installation.4	• ·
FUEL FILLER LID OPENER4	69
FUEL FILLER OPENER4 FUEL FILLER OPENER : Removal and Installa- tion4	P
REMOTE KEYLESS ENTRY RECEIVER 4 Removal	70

BASIC INSPECTION DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

OVERALL SEQUENCE



[COUPE]

INFOID:000000007420987

ABJIA0529GB

DETAILED FLOW

Revision: February 2013

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[COUPE]

GET INFORMATION FOR SYMPTOM Get the detailed information from the customer about the symptom (the condition and the environment	when
ne incident/malfunction occurred).	when
>> GO TO 2.	
CHECK DTC	
. Check DTC.	
 Perform the following procedure if DTC is displayed. Record DTC and freeze frame data (Print them out with CONSULT.) 	
Erase DTC.	
Study the relationship between the cause detected by DTC and the symptom described by the cust . Check related service bulletins for information.	omer.
s any symptom described and any DTC detected?	
Symptom is described, DTC is displayed>>GO TO 3.	
Symptom is described, DTC is not displayed>>GO TO 4. Symptom is not described, DTC is displayed>>GO TO 5.	
CONFIRM THE SYMPTOM	
Confirm the symptom described by the customer.	
Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. /erify relation between the symptom and the condition when the symptom is detected.	
>> GO TO 5.	
CONFIRM THE SYMPTOM	
Confirm the symptom described by the customer.	
Confirm the symptom described by the customer. Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. /erify relation between the symptom and the condition when the symptom is detected.	
Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. /erify relation between the symptom and the condition when the symptom is detected.	
Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. /erify relation between the symptom and the condition when the symptom is detected.	
Connect COŃSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. /erify relation between the symptom and the condition when the symptom is detected. >> GO TO 6. D.PERFORM DTC CONFIRMATION PROCEDURE Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected agai t this time, always connect CONSULT to the vehicle, and check diagnostic results in real time.	
 Connect COŃSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. /erify relation between the symptom and the condition when the symptom is detected. >> GO TO 6. D.PERFORM DTC CONFIRMATION PROCEDURE Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected agai at this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to <u>DLK-153. "DTC Inspection Priority Chart"</u> and determine to the termine to the termine. 	
Connect COŃSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. /erify relation between the symptom and the condition when the symptom is detected. >> GO TO 6. D.PERFORM DTC CONFIRMATION PROCEDURE Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected agai t this time, always connect CONSULT to the vehicle, and check diagnostic results in real time.	
 Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. //erify relation between the symptom and the condition when the symptom is detected. >> GO TO 6. D.PERFORM DTC CONFIRMATION PROCEDURE Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected agai at this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. It two or more DTCs are detected, refer to <u>DLK-153</u>, "<u>DTC Inspection Priority Chart</u>" and determine t iagnosis order. IOTE: Freeze frame data is useful if the DTC is not detected. 	rouble
 Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. '> GO TO 6. PERFORM DTC CONFIRMATION PROCEDURE 'Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected againate the sum or more DTCs are detected, refer to <u>DLK-153</u>, "<u>DTC Inspection Priority Chart</u>" and determine to the ingnosis order. IOTE: Freeze frame data is useful if the DTC is not detected. 	rouble al. This
 Connect COŃŚULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Yerify relation between the symptom and the condition when the symptom is detected. >> GO TO 6. D.PERFORM DTC CONFIRMATION PROCEDURE Yerform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected againt this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. It two or more DTCs are detected, refer to <u>DLK-153</u>. "<u>DTC Inspection Priority Chart</u>" and determine to iagnosis order. IOTE: Freeze frame data is useful if the DTC is not detected. Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual 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 Cordination PTC by	rouble al. This k.
 Connect COŃŚULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Yerify relation between the symptom and the condition when the symptom is detected. >> GO TO 6. DERFORM DTC CONFIRMATION PROCEDURE Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected against this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. Two or more DTCs are detected, refer to <u>DLK-153</u>, "DTC Inspection Priority Chart" and determine to the transposis order. IOTE: Freeze frame data is useful if the DTC is not detected. Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manua 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 Contino Procedure. 	rouble al. This k.
 Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. <i>(erify relation between the symptom and the condition when the symptom is detected.</i> >> GO TO 6. PERFORM DTC CONFIRMATION PROCEDURE Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected against this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. two or more DTCs are detected, refer to <u>DLK-153</u>, "<u>DTC Inspection Priority Chart</u>" and determine to iagnosis order. IOTE: Freeze frame data is useful if the DTC is not detected. Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual 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 Cort ion Procedure. <u>a DTC detected?</u> 	rouble al. This k.
 Connect COŃŚULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. Yerify relation between the symptom and the condition when the symptom is detected. >> GO TO 6. DERFORM DTC CONFIRMATION PROCEDURE Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected against this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. Two or more DTCs are detected, refer to <u>DLK-153</u>, "DTC Inspection Priority Chart" and determine to the transposis order. IOTE: Freeze frame data is useful if the DTC is not detected. Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manua 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 Contino Procedure. 	rouble al. This k.
Connect COŃSÚLT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. //erify relation between the symptom and the condition when the symptom is detected. >> GO TO 6. D.PERFORM DTC CONFIRMATION PROCEDURE Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected against this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. Two or more DTCs are detected, refer to <u>DLK-153</u> , " <u>DTC Inspection Priority Chart</u> " and determine to its or more DTCs are detected, refer to <u>DLK-153</u> , " <u>DTC Inspection Priority Chart</u> " and determine to its order. IOTE: Freeze frame data is useful if the DTC is not detected. Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual simplified check procedure is an effective alternative though DTC cannot be detected during this check of Component Function Check is NG, it is the same as the detection of DTC by DTC Cordition Procedure. <u>SDTC detected?</u> YES >> GO TO 8.	rouble al. This k.
 Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. ////////////////////////////////////	rouble al. This k.
Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results. //erify relation between the symptom and the condition when the symptom is detected. >> GO TO 6. D.PERFORM DTC CONFIRMATION PROCEDURE Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected againt this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. It wo or more DTCs are detected, refer to <u>DLK-153</u> . " <u>DTC Inspection Priority Chart</u> " and determine to tagnosis order. IOTE: Freeze frame data is useful if the DTC is not detected. Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual simplified check procedure is an effective alternative though DTC cannot be detected during this check of the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Cort ion Procedure. SDTC detected? YES >> GO TO 8. NO >> Refer to <u>GI-42, "Intermittent Incident</u> ". D.PERFORM BASIC INSPECTION	rouble al. This k.

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

8. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

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

Is malfunctioning part detected?

YES >> GO TO 9.

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

9.Repair or replace the malfunctioning part

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

>> GO TO 10.

10.FINAL CHECK

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

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

Is the inspection result normal?

NO (DTC is detected)>>GO TO 5. NO (Symptom remains)>>GO TO 6. YES >> **INSPECTION END**

INSPECTION AND ADJUSTMENT	
< BASIC INSPECTION > [COUPE]	
INSPECTION AND ADJUSTMENT	
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	A
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description	В
Perform the system initialization when replacing BCM, replacing Intelligent Key or registering an additional Intelligent Key.	С
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Re- quirement	_
Refer to the CONSULT Immobilizer mode and follow the on-screen instructions.	D
	E
	F
	G

DLK-11

Η

Ι

J

L

M

Ν

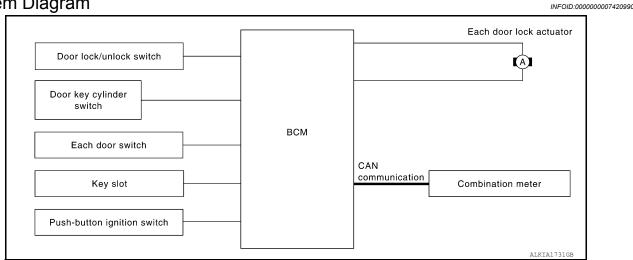
0

Ρ

2012 Altima GCC

SYSTEM DESCRIPTION AUTOMATIC DOOR LOCKS

System Diagram



System Description

INFOID:000000007420991

Input	Single	Function	Actuator
Door lock/unlock switch	Door lock/unlock signal	Door lock function	
Door key cylinder switch			
Each door switch	Door open/close signal		-
Key slot	Key insert/remove signal	Key reminder function	Each door lock actuator
	Warning buzzer signal		
Combination meter	Vehicle speed signal	Automatic door lock/unlock function	

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 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-51, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

AUTOMATIC DOOR LOCKS (LOCK OPERATION)

The automatic door locks function is the function that locks all doors linked with the vehicle speed or shift position.

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 MPH) or more.

AUTOMATIC DOOR LOCKS

< SYSTEM DESCRIPTION >

If a door is opened and closed at any time during one ignition cycle (OFF \rightarrow ON), even after initial auto door lock operation has taken place, the BCM will relock all doors when the vehicle speed reaches 24 km/h (15 MPH) or more again.

Setting change of Automatic Door Locks (LOCK) Function

The LOCK operation setting of the automatic door locks function can be changed.

With CONSULT

The ON/OFF switching of the automatic door locks (LOCK) function and the type selection of the automatic door locks (LOCK) function can be performed at the WORK SUPPORT setting of CONSULT. Refer to <u>DLK-51</u>. (<u>"DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Without CONSULT

The automatic door locks (LOCK) function can be switched ON/OFF by performing the following operation.

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

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

5. The ignition switch must be turned OFF and ON again between each setting change.

AUTOMATIC DOOR LOCKS (UNLOCK OPERATION)

The automatic door locks (UNLOCK) function is the function that unlocks all doors linked with the key position or shift position.

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.

Setting change of Automatic Door Locks (UNLOCK) Function

The UNLOCK operation setting of the automatic door locks function can be changed.

With CONSULT

The ON/OFF switching of the automatic door locks (UNLOCK) function and the type selection of the automatic door locks (UNLOCK) function can be performed at the WORK SUPPORT setting of CONSULT. Refer to <u>DLK-51. "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Without CONSULT

The automatic door locks (UNLOCK) function can be switched ON/OFF by performing the following operation.

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

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

- 5. The ignition switch must be turned OFF and ON again between each setting change.
- *1: This function is set to ON before delivery.

А

В

D

Ν

Ρ

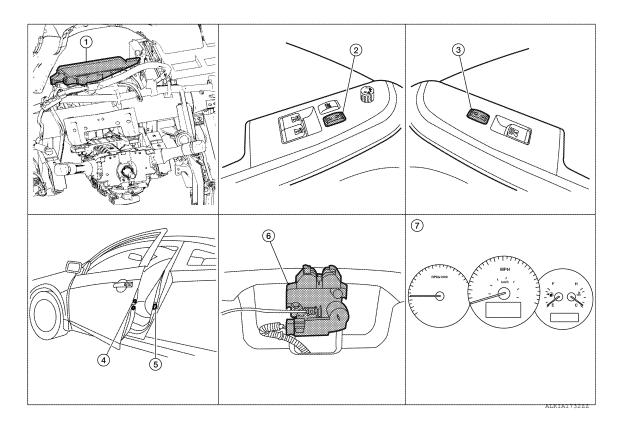
AUTOMATIC DOOR LOCKS

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000007420992

[COUPE]



- 1. BCM M16, M17, M18, M19, M21 (view with instrument panel removed)
- 4. Door lock assembly LH D10 Door lock actuator RH D108
- 7. Combination meter M24

Component Description

- 2. Main power window and door lock/un- 3. lock switch D7
- 5. Door switch LH B8 Door switch RH B108

- Power window and door lock/unlock switch RH D105
- 6. Trunk lamp switch and trunk release solenoid (trunk lamp switch) T4

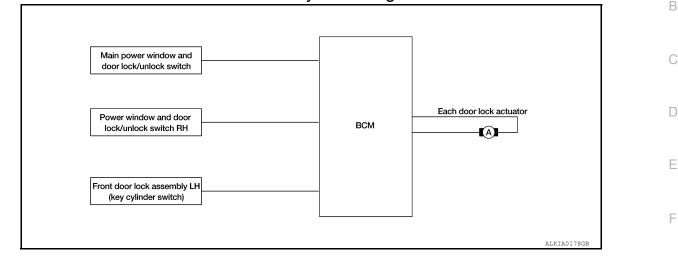
INFOID:000000007420993

Item	Function
BCM	Controls the door lock function and fuel lid door lock actuator function.
Door lock and unlock switch	Input lock or unlock signal to BCM.
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.
Door switch	Input door open/close condition to BCM.
Door key cylinder switch	Input lock or unlock signal to power window main switch.Power window main switch transmits door lock/unlock signal to BCM.
Key slot	Input key insert/remove signal to BCM.
Combination meter	 Receive buzzer signal from BCM via CAN communication line, and sounds the buzzer. Transmits vehicle speed signal to CAN communication line.
Push-button ignition switch	Input push-button ignition switch ON/OFF condition to BCM.

DOOR LOCK FUNCTION DOOR LOCK AND UNLOCK SWITCH

< SYSTEM DESCRIPTION >

DOOR LOCK AND UNLOCK SWITCH : System Diagram



DOOR LOCK AND UNLOCK SWITCH : System Description

Switch	Switch Input/output signal to BCM BCM function		Actuator	
Main power window and door lock/unlock switch				_
Power window and door lock/ unlock switch	Door lock/unlock signal	Door lock/unlock control	Door lock actuator	I
Door key cylinder switch				

DOOR LOCK FUNCTION

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

- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all door lock DLK actuators are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all door lock actuators are unlocked.

Functions Available by Operating the Key Cylinder Switch on Driver Door

 Interlocked with the locking operation of door key cylinder, door lock actuators of all door lock actuators are locked.

Selective Unlock Operation

- When door key cylinder is unlocked, door lock actuator driver side is unlocked.
- When door key cylinder is unlocked for the second time within 5 seconds after the first operation, door lock Ν actuators on all doors are unlocked.
- Select unlock operation mode can be changed using DOOR LOCK-UNLOCK SET mode in "WORK SUP-PORT". Refer to DLK-51, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Key Reminder System Refer to DLK-47, "System Description". Ο

[COUPE]

INFOID:000000007420994

А

Ε

INFOID:000000007420995

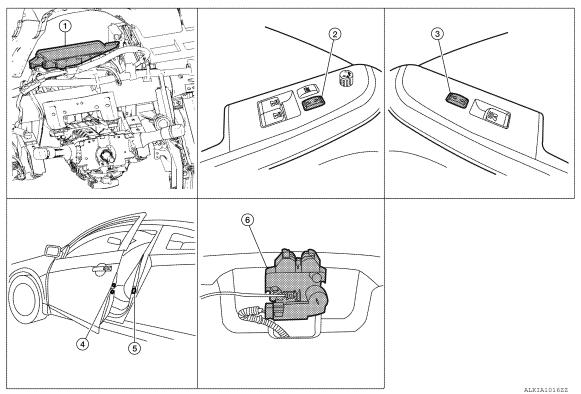
L

Μ

< SYSTEM DESCRIPTION >

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:000000007420996



- 1. BCM M16, M17, M18, M19, M21 (view with instrument panel removed)
- Door lock assembly LH D10 4 Door lock actuator RH D108
- 2. Main power window and door lock/un- 3. lock switch D7
- Door switch LH B8 5. Door switch RH B108

INFOID:000000007420997

- Power window and door lock/unlock switch RH D105
- Trunk lamp switch and trunk release 6. solenoid (trunk lamp switch) T4

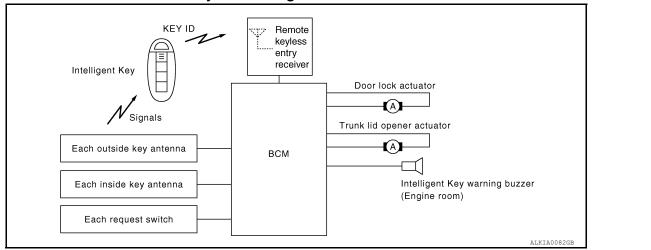
DOOR LOCK AND UNLOCK SWITCH : Component Description

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

DOOR REQUEST SWITCH

< SYSTEM DESCRIPTION >

DOOR REQUEST SWITCH : System Diagram



DOOR REQUEST SWITCH : System Description

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

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

The driver should always carry the Intelligent Key

- If an action that does not meet the operating conditions of the Intelligent Key system is taken, the buzzer goes off to inform the driver (Warning chime function).
- When a door lock is locked, unlocked or trunk open with request switch or remote controller button operation, the hazard lamps flash and the Intelligent Key warning buzzer or horn sounds (Hazard and buzzer/horn reminder function).
- The settings for each function can be changed with the CONSULT.
- If an Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It is possible to perform a diagnosis on the system and register an Intelligent Key with the CONSULT.

OPERATION DESCRIPTION/DOOR LOCK/UNLOCK

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

OPERATION CONDITION

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

Each request switch operation	Operation condition	
Lock operation	 All doors are closed Ignition switch is in OFF position Intelligent Key is out of key slot Intelligent Key is outside the vehicle Intelligent Key is within outside key antenna detection area 	F
Unlock Operation	 Intelligent Key is outside the vehicle Intelligent Key is within outside key antenna detection area * 	

А

В

D

Ε

[COUPE]

INFOID:000000007420998

INFOID:000000007420999

J

DLK

L

Μ

Н

- Ν
- Ο

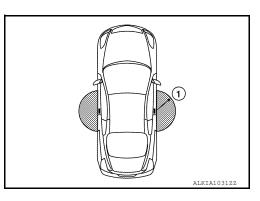
< SYSTEM DESCRIPTION >

[COUPE]

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

OUTSIDE KEY ANTENNA DETECTION AREA

The outside key antenna detection area of door lock/unlock function is in the range of approximately 80 cm (31.50 in) surrounding the driver and passenger door handles (1).



SELECTIVE UNLOCK FUNCTION

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

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

HAZARD AND BUZZER REMINDER FUNCTION

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

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

Operating function of hazard warning lamps and buzzer reminder

Operation	Hazard warning lamps flash	Intelligent Key warning buzzer honk
Unlock	Once	Once
Lock	Twice	Twice
Trunk open	—	Four times

How to change hazard and buzzer reminder mode

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

AUTO DOOR LOCK FUNCTION

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

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

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

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

ROOM LAMP OPERATION

When the following conditions are met:

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

Intelligent Key system turns on interior lamp (for up to 30 seconds maximum) by receiving UNLOCK signal from door request switch. For detailed description, refer to <u>DLK-15, "DOOR LOCK AND UNLOCK SWITCH :</u> <u>System Description"</u>.

LIST OF OPERATION RELATED PARTS

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

< SYSTEM DESCRIPTION >

[COUPE]

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

|

J

L

Μ

Ν

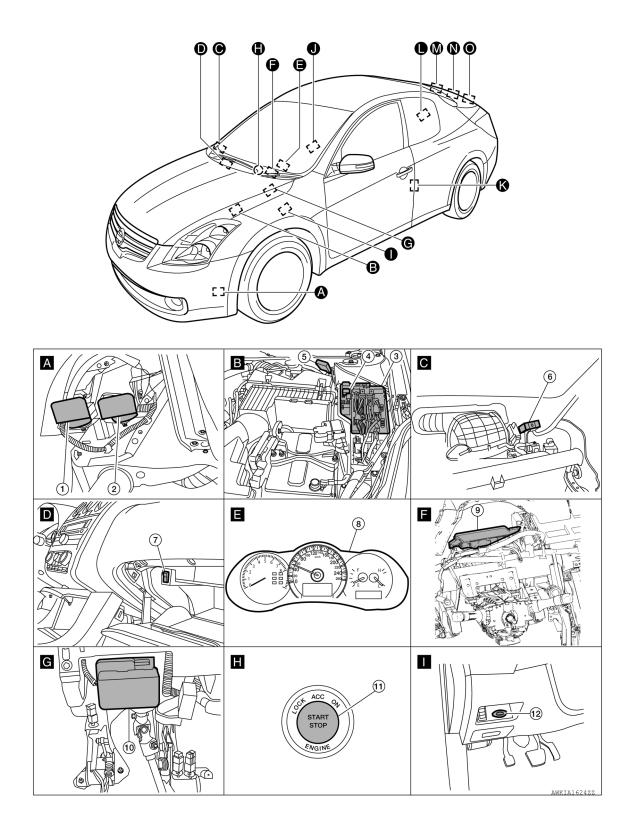
0

Ρ

DOOR REQUEST SWITCH : Component Parts Location

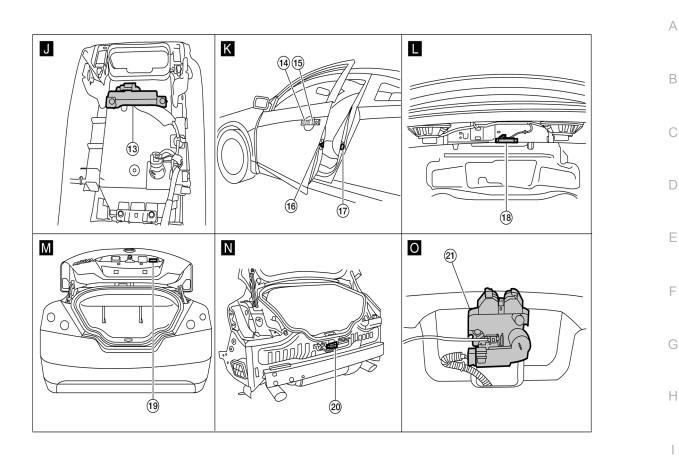
INFOID:000000007421000

[COUPE]



< SYSTEM DESCRIPTION >

[COUPE]



- Horn (low) E215 (view with front fender protector LH removed)
- 4. Horn relay H-1
- 7. Trunk lid opener cancel switch M74
- Electronic steering column lock M32 (view with instrument panel LH removed)
- Front console antenna M203 (view with center console assembly removed)
- 16. Door lock assembly LH D10 Door lock actuator RH D108
- 19. Trunk opener request switch T2

- 2. Horn (high) E216
- 5. Intelligent Key warning buzzer E73
- 8. Combination meter M24
- 11. Push button ignition switch M38
- Outside handle LH (outside key antenna)
 D6
 Outside handle RH (outside key antenna)
 D106
- 17. Door switch LH B8 Door switch RH B108
- 20. Rear bumper antenna B46

AWKIA1625ZZ

- 3. IPDM E/R E17, E18
- L

Μ

Ο

Ρ

DLK

- Remote keyless entry receiver M27 (view with instrument panel removed)
 BCM M16, M17, M18, M19, M20, M21
- BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
 Key slot M40
 - Ν
- 15. Outside handle LH (request switch)
 D6
 Outside handle RH (request switch)
 D106
- 18. Rear parcel shelf antenna B29
- 21. Trunk lamp switch and trunk release solenoid (trunk lamp switch) T4

< SYSTEM DESCRIPTION >

DOOR REQUEST SWITCH : Component Description

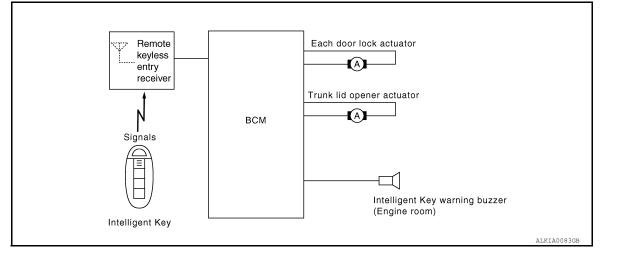
INFOID:000000007421001

[COUPE]

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

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram



INTELLIGENT KEY : System Description

INFOID:000000007421003

INFOID:000000007421002

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

OPERATION DESCRIPTION/DOOR LOCK/UNLOCK FUNCTION

- When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal is transmitted from Intelligent Key to BCM via remote keyless entry receiver.
- When BCM receives the door lock/unlock signal, it operates door lock actuator, flashes the hazard lamp (lock: 2 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

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

OPERATION AREA

Operating Range

< SYSTEM DESCRIPTION >

• To ensure the Intelligent Key works effectively, use within 80 cm range of each doors, however the operable range may differ according to surroundings. The remote control operation range is greater than that of the Intelligent Key. Refer to Owner's Manual for more details.

SELECTIVE UNLOCK FUNCTION

When a LOCK signal is transmitted from Intelligent Key, all doors will be locked. When an UNLOCK signal is transmitted from Intelligent Key once, driver's door will be unlocked. Then, if an UNLOCK signal is transmitted from Intelligent Key again within 5 seconds, all other doors will be unlocked.

HAZARD AND HORN REMINDER FUNCTION

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

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

Operating function of hazard and horn reminder

		C mode			S mode	
Intelligent Key operation	Lock	Unlock	Trunk open	Lock	Unlock	Trunk open
Hazard warning lamp flash	Twice	Once	_	Twice		
Horns sound	Once	—	—	_	—	—
Hazard and horn reminder of Hazard and horn reminder of Hazard and			or switch is ON	(any door is	OPEN).	
With CONSULT			nation (DCM			
Refer to <u>DLK-51, "INTELLIG</u> Without CONSULT	<u>SENTRET.</u>	<u>UNSULI FU</u>		INTELLIGEN	$(K \in Y)$.	
Refer to Owner's Manual for	r instructions.					
AUTO DOOR LOCK FUN	ICTION					
uto Door Lock Function						
Vhen all doors are locked, i gent Key is not inserted ir eceive the following signals Door switch is ON (door is Door is locked	n key slot), do s within 60 seo	ors are unlo	cked with Inte			
Ignition switch is ON						
Key switch is ON (Intellige				T modo in "	מסיוס אססא	
Auto door lock mode can be DLK-51, "DOOR LOCK : CO					WURN SUPP	
ANIC ALARM FUNCTIC	N					
When ignition switch is OF					OFF (Intellig	gent Key is no
nserted in key slot), BCM re BCM turns on and off head					signal to IPI	DM E/R. Then
PDM E/R turns on and off h	norn intermitte	ntly.		5	0	
The headlamp flashes and t The alarm automatically ture		us intermitter	itiy.			
After 25 seconds		- III (- 1 Z -				
When BCM receives any s Panic alarm function mode			C ALARM SE	T mode in "V	VORK SUPP	ORT". Refer to
<u>DLK-51, "INTELLIGENT KE</u>						
KEYLESS POWER WIND		· · ·				
ront power windows (with n Intelligent Key is activate lows keep opening if the ur	d and kept pre	essed for mo	re than 3 secoi			
he power window opening	stops when the	ne following o	operations are	performed:		

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

While retained power operation activate, Keyless power window down (open) function cannot be operated.

DLK-23

А

В

D

< SYSTEM DESCRIPTION >

[COUPE]

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

ROOM LAMP ILLUMINATION OPERATION

When the following conditions are met:

Condition of interior lamp switch is in DOOR position

• Door switch OFF (all the doors are closed)

Intelligent Key system turns on interior lamp (for 15 seconds) by receiving UNLOCK signal from Intelligent Key. For detailed description, refer to <u>DLK-22</u>, "INTELLIGENT KEY : System Description".

LIST OF OPERATION RELATED PARTS

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

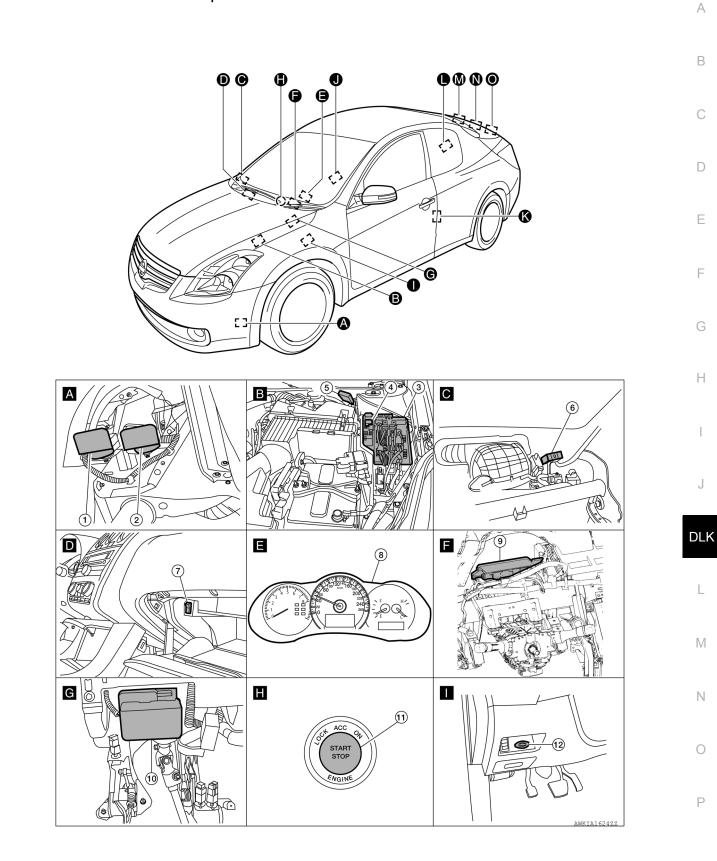
Remote keyless entry functions	Intelligent Key	Key slot	Door request switch (Driver, Passenger)	Door switch	Door lock actuator	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamp	Horn	IPDM E/R	Head lamp
Door lock/unlock function by remote control button	×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

< SYSTEM DESCRIPTION >

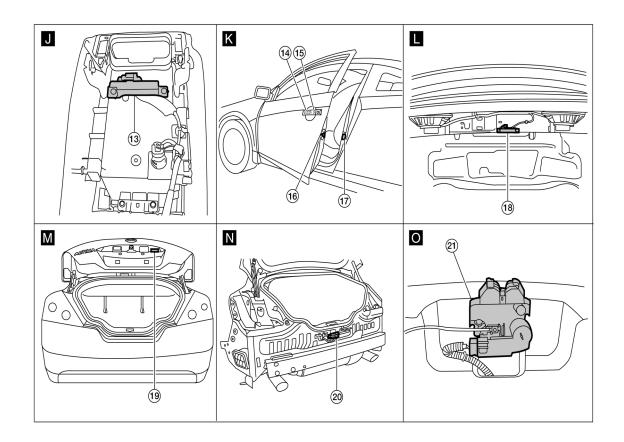
INTELLIGENT KEY : Component Parts Location

[COUPE]

INFOID:000000007421004



< SYSTEM DESCRIPTION >



- Horn (low) E215 (view with front fender protector LH removed)
- 4. Horn relay H-1
- 7. Trunk lid opener cancel switch M74
- Electronic steering column lock M32 (view with instrument panel LH removed)
- Front console antenna M203 (view with center console assembly removed)
- 16. Door lock assembly LH D10 Door lock actuator RH D108
- 19. Trunk opener request switch T2

- 2. Horn (high) E216
- 5. Intelligent Key warning buzzer E73
- 8. Combination meter M24
- 11. Push button ignition switch M38
- 14. Outside handle LH (outside key antenna) D6 Outside handle RH (outside key antenna) D106
- 17. Door switch LH B8 Door switch RH B108
- 20. Rear bumper antenna B46

INTELLIGENT KEY : Component Description

AWKIA1625ZZ

- 3. IPDM E/R E17, E18
- 6. Remote keyless entry receiver M27 (view with instrument panel removed)
- 9. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
- 12. Key slot M40
- Outside handle LH (request switch) D6 Outside handle RH (request switch) D106
- 18. Rear parcel shelf antenna B29
- 21. Trunk lamp switch and trunk release solenoid (trunk lamp switch) T4

INFOID:000000007421005

< SYSTEM DESCRIPTION >

[COUPE]

Item	Function	
BCM	Controls the door lock function and room lamp function.	
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.	
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.	
Intelligent Key	Transmits button operation to remote keyless entry receiver.	
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.	

D

Ε

F

G

|

Н

J

L

Μ

Ν

0

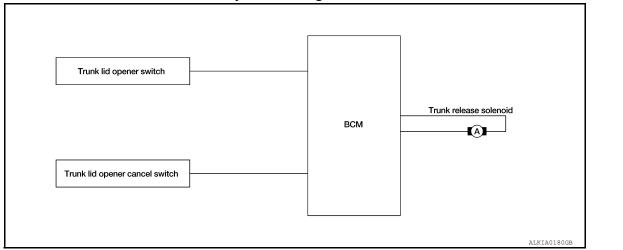
Ρ

< SYSTEM DESCRIPTION >

INFOID:000000007421006

TRUNK OPEN FUNCTION TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : System Diagram



TRUNK LID OPENER SWITCH : System Description

INFOID:000000007421007

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

TRUNK LID OPENER OPERATION

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

BCM can open trunk lid opener actuator when

vehicle speed is less than 5 km/h (3MPH)

· vehicle security system is disarmed or pre-armed phase

BCM does not open trunk lid opener actuator when

• trunk lid opener cancel switch is OFF (CANCEL)

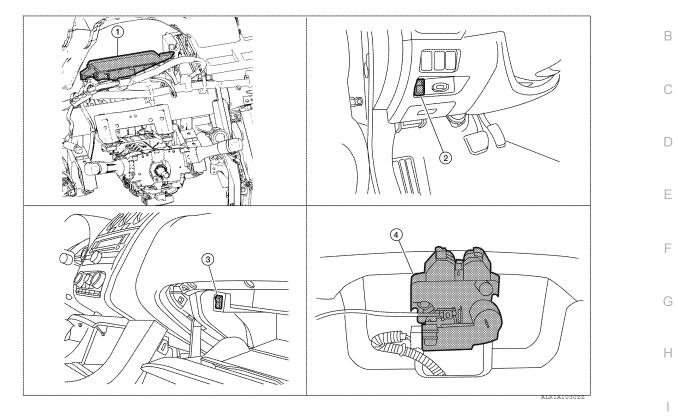
- vehicle speed is more than 5 km/h (3MPH)
- vehicle security system is armed or alarm phase

• Within 3 seconds of removing the Intelligent Key from the key slot

< SYSTEM DESCRIPTION >

TRUNK LID OPENER SWITCH : Component Parts Location





- 1. BCM M16, M17, M18, M20, M21
- 2. Trunk lid opener switch M75
- 3. Trunk lid opener cancel switch M74

- 4. Trunk lamp switch and trunk release solenoid (trunk release solenoid) T4
- TRUNK LID OPENER SWITCH : Component Description

INFOID:000000007421009

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

TRUNK REQUEST SWITCH

Ν

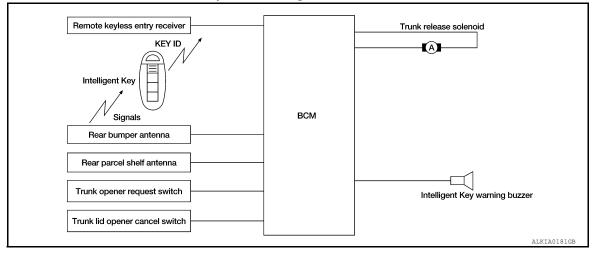
J

0

Ρ

< SYSTEM DESCRIPTION >

TRUNK REQUEST SWITCH : System Diagram



TRUNK REQUEST SWITCH : System Description

INFOID:000000007421011

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

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

The driver should always carry the Intelligent Key

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

OPERATION DESCRIPTION/TRUNK OPEN

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

OPERATION CONDITION

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

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

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

OUTSIDE KEY ANTENNA DETECTION AREA

INFOID:000000007421010

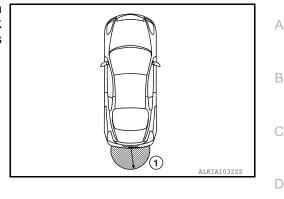
< SYSTEM DESCRIPTION >

[COUPE]

Ε

Н

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



KEY REMINDER FUNCTION

Key reminder function	Operation condition	Operation
Trunk is closed	Right after trunk is closed under the following conditionsIntelligent Key is inside trunk roomAll doors are closedAll doors are locked	 Trunk open Honk Intelligent Key warning buzzer

*: If the door closing impact shocks the door lock knob, or contacts against baggage with the door lock knob might activate the door locks accidentally but unlock operation will be perform at these cases.

CAUTION:

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

HAZARD AND BUZZER REMINDER FUNCTION

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

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

BCM flashes hazard warning lamps as a reminder.

Operating function of hazard and buzzer reminder

Operation	Hazard warning lamp flash	Intelligent Key warning buzzer honks	-
Trunk open	_	Four times	

How to change hazard and buzzer reminder mode

With CONSULT

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

LIST OF OPERATION RELATED PARTS

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

Ν

L

< SYSTEM DESCRIPTION >

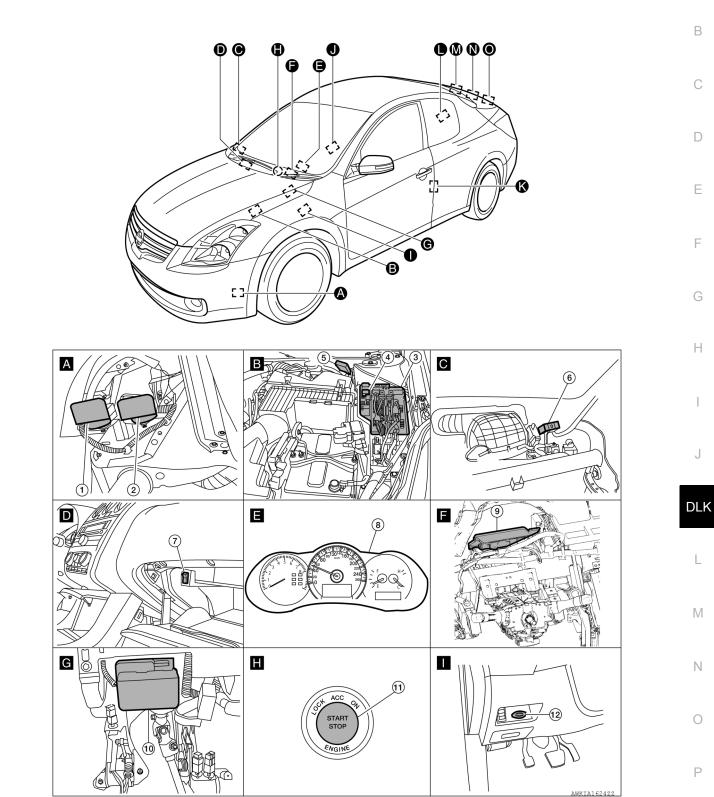
Trunk open function	Intelligent Key	Key slot	Remote keyless entry receiver	Door switch	Trunk lamp switch	Trunk opener request switch	Trunk release solenoid	Inside key antenna	Outside key antenna (Trunk)	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamps	Trunk lid opener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

< SYSTEM DESCRIPTION >

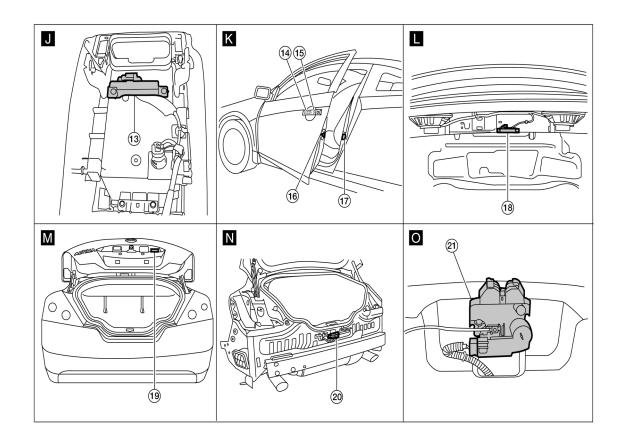
TRUNK REQUEST SWITCH : Component Parts Location

INFOID:000000007421012

А



< SYSTEM DESCRIPTION >



- Horn (low) E215 (view with front fender protector LH removed)
- 4. Horn relay H-1
- 7. Trunk lid opener cancel switch M74
- Electronic steering column lock M32 (view with instrument panel LH removed)
- Front console antenna M203 (view with center console assembly removed)
- 16. Door lock assembly LH D10 Door lock actuator RH D108
- 19. Trunk opener request switch T2

- 2. Horn (high) E216
- 5. Intelligent Key warning buzzer E73
- 8. Combination meter M24
- 11. Push button ignition switch M38
- 14. Outside handle LH (outside key antenna) D6 Outside handle RH (outside key antenna) D106
- 17. Door switch LH B8 Door switch RH B108
- 20. Rear bumper antenna B46

AWKIA1625ZZ

- 3. IPDM E/R E17, E18
- 6. Remote keyless entry receiver M27 (view with instrument panel removed)
- 9. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
- 12. Key slot M40
- Outside handle LH (request switch) D6 Outside handle RH (request switch) D106
- 18. Rear parcel shelf antenna B29
- 21. Trunk lamp switch and trunk release solenoid (trunk lamp switch) T4

< SYSTEM DESCRIPTION >

TRUNK REQUEST SWITCH : Component Description

INFOID:000000007421013

INFOID:000000007421014

INFOID:000000007421015

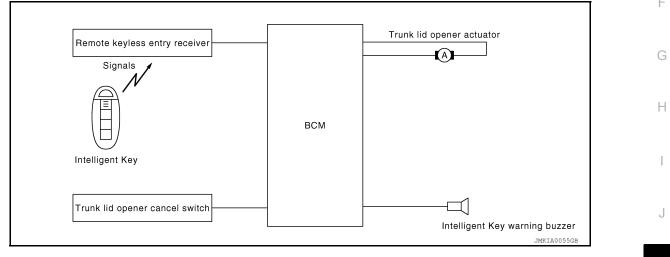
ICOUPE

А

Item	Function
BCM	Controls trunk open function.
Trunk release solenoid	Transmits trunk open operation to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Trunk opener request switch	Transmits trunk open operation to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna	Detects if Intelligent Key is outside the vehicle.
Inside key antenna	Detects if Intelligent Key is inside the vehicle.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram



INTELLIGENT KEY : System Description

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

OPERATION DESCRIPTION/TRUNK OPEN FUNCTION

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

OPERATION CONDITION

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

OPERATION AREA

Operating Range

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

HAZARD AND HORN REMINDER FUNCTION

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

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

DLK-35

M

L

DLK

N

Ρ

< SYSTEM DESCRIPTION >

Operating function of hazard and horn reminder

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

Hazard and horn reminder does not operate if any door switch is ON (any door is OPEN). How to change hazard and horn reminder mode

How to change hazard and norm reminder mode

With CONSULT

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

Without CONSULT

Refer to Owner's Manual for instructions.

LIST OF OPERATION RELATED PARTS

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

Remote keyless entry functions		Key slot	Trunk lamp switch	Trunk release solenoid	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamps	Horns	IPDM E/R	Head lamp
Trunk open function by remote control button		×	×	×		×	×					
Hazard and horn reminder function					×	×	×	×	×	×	×	

TRUNK OPEN FUNCTION

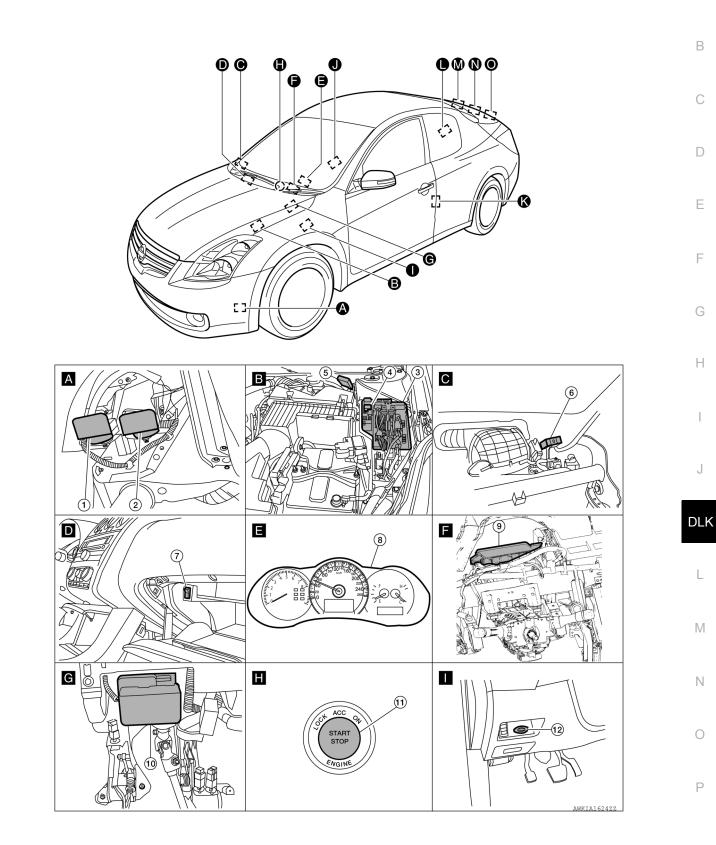
< SYSTEM DESCRIPTION >

INTELLIGENT KEY : Component Parts Location

[COUPE]

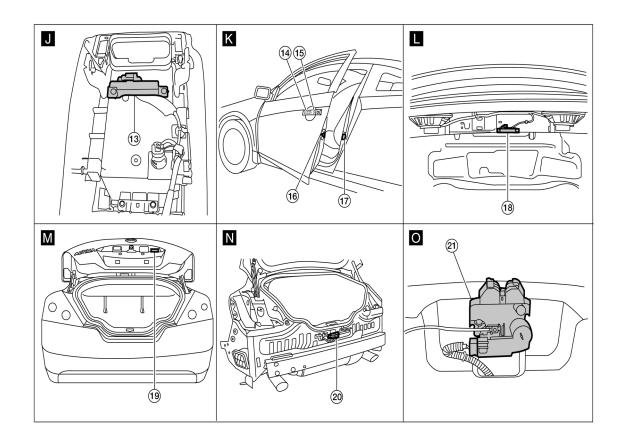
INFOID:000000007421016

А



TRUNK OPEN FUNCTION

< SYSTEM DESCRIPTION >



- Horn (low) E215 (view with front fender protector LH removed)
- 4. Horn relay H-1
- 7. Trunk lid opener cancel switch M74
- Electronic steering column lock M32 (view with instrument panel LH removed)
- Front console antenna M203 (view with center console assembly removed)
- 16. Door lock assembly LH D10 Door lock actuator RH D108
- 19. Trunk opener request switch T2

- 2. Horn (high) E216
- 5. Intelligent Key warning buzzer E73
- 8. Combination meter M24
- 11. Push button ignition switch M38
- 14. Outside handle LH (outside key antenna) D6 Outside handle RH (outside key antenna) D106
- 17. Door switch LH B8 Door switch RH B108
- 20. Rear bumper antenna B46

AWKIA1625ZZ

- 3. IPDM E/R E17, E18
- 6. Remote keyless entry receiver M27 (view with instrument panel removed)
- 9. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
- 12. Key slot M40
- Outside handle LH (request switch) D6 Outside handle RH (request switch) D106
- 18. Rear parcel shelf antenna B29
- 21. Trunk lamp switch and trunk release solenoid (trunk lamp switch) T4

TRUNK OPEN FUNCTION

< SYSTEM DESCRIPTION >

INTELLIGENT KEY : Component Description

INFOID:000000007421017

А

D

Е

F

G

Н

[COUPE]

Item	Function	
BCM	Controls trunk open function.	В
Trunk release solenoid	Opens the trunk with the open signal from BCM.	
Remote keyless entry receiver	Receives trunk open signal from the Intelligent Key, and then transmits to BCM.	0
Intelligent Key	Transmits button operation to remote keyless entry receiver.	C
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with a buzzer sound.	

J

DLK

L

Μ

Ν

Ο

Ρ

< SYSTEM DESCRIPTION >

WARNING FUNCTION

System Description

INFOID:000000007421018

[COUPE]

OPERATION DESCRIPTION

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

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

OPERATION CONDITION

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

Warning/Infor	mation functions	Operation procedure
Intelligent Key system ma	lfunction	When a malfunction is detected on BCM, "KEY" warning lamp will illuminate.
OFF position warning	For internal	 When condition A, B or condition C is satisfied Condition A Ignition switch: ACC position Door switch (driver side): ON (Door is open) Condition B Turn ignition switch from ON to OFF while door is open Condition C Intelligent Key is inserted in key slot Door switch (driver side): ON (Door is open)
	For external*	OFF position warning (for internal) is in active mode, driver side door is closed NOTE: OFF position warning (for external) operates only when driver door is closed after each of P position warning, ACC warning, and OFF position warning (in- ternal) sounds.
P position warning		 Shift position: Except P position Engine is running to stopped (Ignition switch is ON to OFF)
ACC warning		 During P position warning is in active mode, shift position has changed P position. Ignition switch: Except OFF position.

< SYSTEM DESCRIPTION >

[COUPE]

Warning/Inform	nation functions	Operation procedure
	Door is open to close	 Ignition switch: Except LOCK position. Door switch: ON to OFF (Door is open to close). Intelligent Key can not be detected inside the vehicle.
	Door is open	 Door switch: ON (Door is open) Key ID verification every 5 seconds when registered Intelligent Key can not be detected inside the vehicle.
Take away warning	Push-ignition switch oper- ation	 Ignition switch: Except LOCK position. Press ignition switch. Intelligent Key can not be detected inside the vehicle.
	Take away through win- dow	 Engine is running. Key ID verification every 30 seconds when registered Intelligent Key can not be detected inside the vehicle. After vehicle speed verification, the registered Intelligent Key can not be detect inside the vehicle.
	Intelligent Key is removed from key slot	When Intelligent Key is removed from key slot, Intelligent Key can not be de- tected inside the vehicle.
Deerleekeenstieseer	Request switch operation	When request switch is pushed (lock operation) under the following conditions.Door switch: ON (Any door is open).Intelligent Key is inside vehicle.
Door lock operation warn- ing	Intelligent Key button op- eration	 When Intelligent Key button is pushed (lock operation) under the following conditions. Door switch: ON (Any door is open). For 3 seconds after Intelligent Key is removed from key slot.
Key warning		 Ignition switch is OFF position. Driver side door switch: ON (Driver side door is open). Intelligent Key is inserted in key slot.
Intelligent Key insert inforr	nation	 Door switch: ON to OFF (Door is open to close). Ignition switch: OFF to ON position. Intelligent Key is out of key slot. Intelligent Key can not be detected inside the vehicle.
	Ignition switch is ON posi- tion	 Ignition switch: ON position. Shift position: P position Engine is stopped
Engine start information	Ignition switch is except ON position	 Ignition switch: Except ON position. Shift position: P position Intelligent Key is inserted in key slot. Intelligent Key can be detected inside the vehicle.
Steering lock information	1	When steering lock can not be released after ignition switch is turned ON.
Intelligent Key low battery	warning	When Intelligent Key has low battery, it is detected by BCM 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.

*: CVT models only

WARNING METHOD

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

					Warning	g chime
Warning/Informa	ation functions	"KEY" warn- ing lamp	Combination meter display	Key slot il- lumination	Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key syste	m malfunction	Illuminate	—	—	_	_
OFF position warn-	For internal	_	—	_	Activate	_
ing	For external	_	—	_	_	Activate

Ν

Ο

< SYSTEM DESCRIPTION >

[COUPE]

					Warning	ı chime	
Warning/Informa	ation functions	"KEY" warn- ing lamp	Combination meter display	Key slot il- lumination	Combination meter buzzer	Intelligent Key warning buzzer	
P position warning			SHIFT JMKIA0037GB		Activate	_	
ACC warning			PUSH JMKIA00476B		Activate		
	Door is open to close			Flash	Activate	Activate	
	Door is open			Flash	_		
	Push-ignition switch operation			Flash	Activate	_	
Take away warning	Take away through window			Flash	Activate	_	
	Intelligent Key is removed from key slot		JMKIA0036GB	Flash	_	_	
Door lock operation	Request switch operation	_	_	_	_	Activate	
warning	Intelligent Key operation	_			_	Activate	
Key ID warning			I NO KEY		_		
Key warning			JMKIA0035GB	Flash	Activate	_	
Intelligent Key insert	information		JMKIA0034GB	Flash	_	_	

< SYSTEM DESCRIPTION >

[COUPE]

					Warning	g chime	
Warning/Information	ation functions	"KEY" warn- ing lamp	Combination meter display	Key slot il- lumination	Combination meter buzzer	Intelligent Keywarning buzzer	A
Engine start infor-	Automatic trans- mission models	_	BRAKE UMKLA0032GB	_		_	B C D
mation	Manual trans- mission models		CLUTCH ELKIA13260B			_	E
Steering lock inform	ation	_	JMKIA0033GB	_	_	_	G
Intelligent Key low b	attery warning		JMKIA0048GB			_	J

LIST OF OPERATION RELATED PARTS

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

Warning	g function	Intelligent Key	Key slot	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Combination meter display	Key slot illumination	Transmission range switch	"KEY" warning lamp	M N O
Intelligent Key system mal	function										×	×				×	F
	For internal				×					×	×	×					
OFF position warning	For external				×				×		×	×					
P position warning				×						×	×	×	×		×		
ACC warning				×						×	×	×	×		×		

L

< SYSTEM DESCRIPTION >

[COUPE]

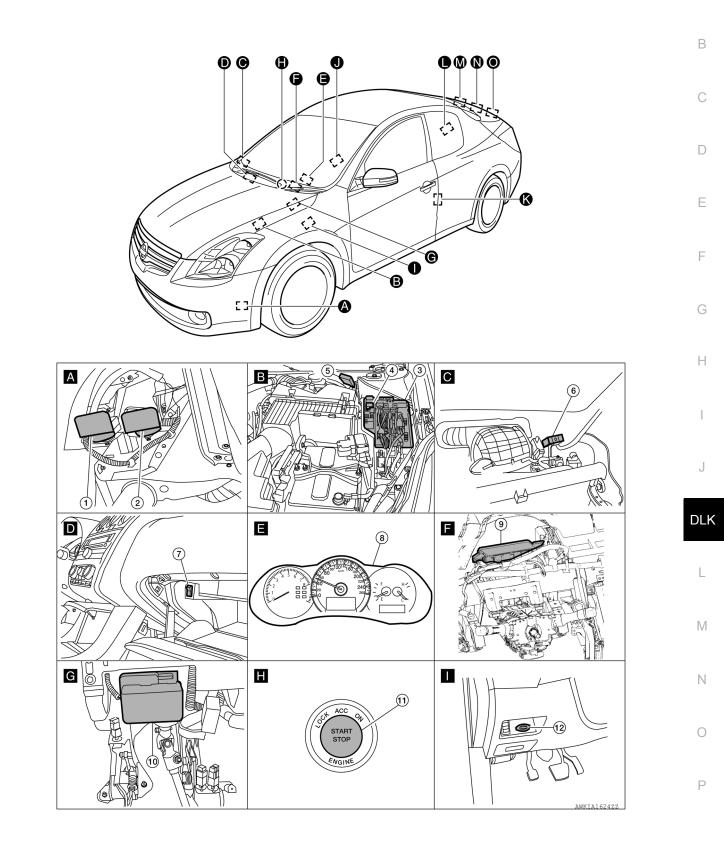
Warning	g function	Intelligent Key	Key slot	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Combination meter display	Key slot illumination	Transmission range switch	"KEY" warning lamp
	Door is open or close	×			×		×		×	×	×	×	×	×		
	Door is open	×			×		×				×	×	×	×		
Take away warning	Push-ignition switch oper- ation	×		×			×			×	×	×	×	×		
	Take away through win- dow	×					×			×	×	×	×	×		
	Intelligent Key is removed from key slot	×	×				×				×	×	×	×		
Door lock operation warnin	ig	×	×		×	×	×	×	×		×	×				
Key ID warning		×	×	×			×				×	×	×			
Key warning		×	×		×					×	×	×	×	×		
Intelligent Key insert inform	nation	×	×	×	×		×				×	×	×	×		
Engine start information	Ignition switch is ON posi- tion	×	×	×			x				×	×	×		×	
Ignition switch is except ON position		×	×	×			x				×	×	×			
Steering lock information	•			×							×	×	×			
Intelligent Key low battery	warning	×					×				×	×	×			

< SYSTEM DESCRIPTION >

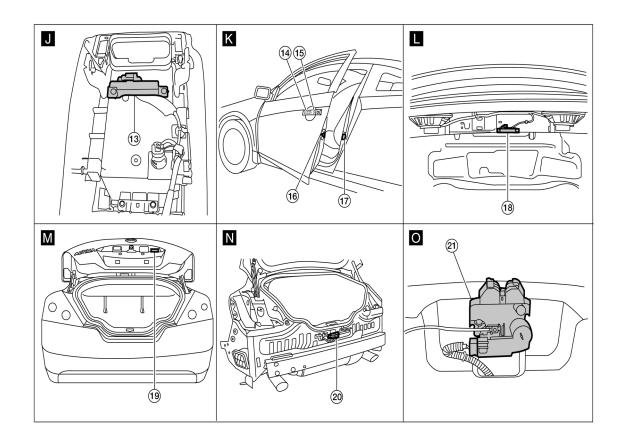
Component Parts Location

INFOID:000000007421019

А



< SYSTEM DESCRIPTION >



- Horn (low) E215 (view with front fender protector LH removed)
- 4. Horn relay H-1
- 7. Trunk lid opener cancel switch M74
- Electronic steering column lock M32 (view with instrument panel LH removed)
- Front console antenna M203 (view with center console assembly removed)
- 16. Door lock assembly LH D10 Door lock actuator RH D108
- 19. Trunk opener request switch T2

- 2. Horn (high) E216
- 5. Intelligent Key warning buzzer E73
- 8. Combination meter M24
- 11. Push button ignition switch M38
- 14. Outside handle LH (outside key antenna) D6 Outside handle RH (outside key antenna) D106
- 17. Door switch LH B8 Door switch RH B108
- 20. Rear bumper antenna B46

AWKIA1625ZZ

- 3. IPDM E/R E17, E18
- 6. Remote keyless entry receiver M27 (view with instrument panel removed)
- 9. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
- 12. Key slot M40
- Outside handle LH (request switch) D6 Outside handle RH (request switch) D106
- 18. Rear parcel shelf antenna B29
- 21. Trunk lamp switch and trunk release solenoid (trunk lamp switch) T4

KEY REMINDER FUNCTION

System Description

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

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

*: If the door closing impact shocks the door lock knob, or contacts against baggage with the door lock knob might activate the door locks accidentally but unlock operation will be performed in these cases.

CAUTION:

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

[COUPE]

INFOID:000000007421020

Μ

Ν

Ρ

DLK

В

Н

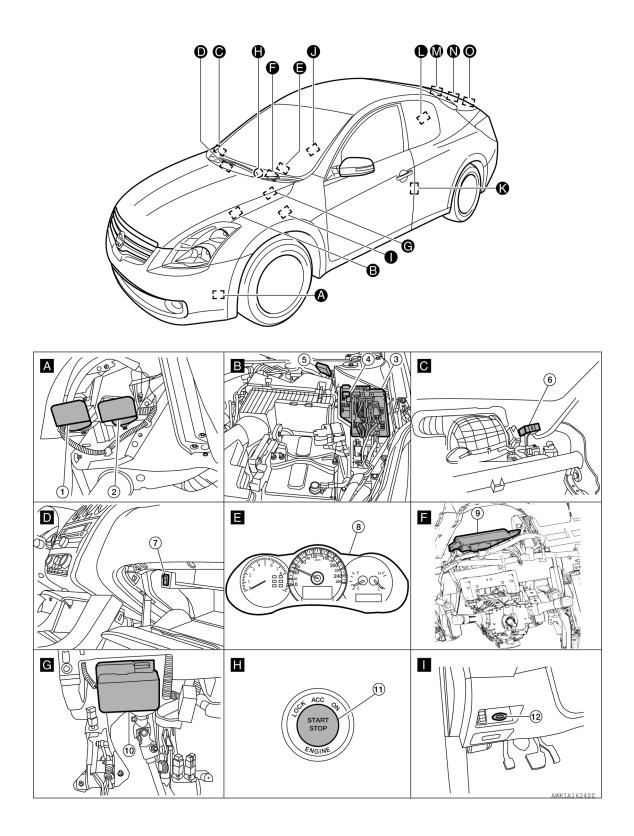
А

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000007421021

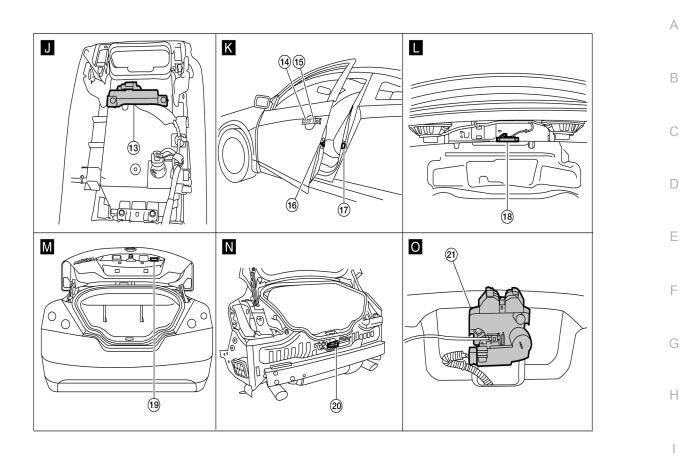
[COUPE]



KEY REMINDER FUNCTION

< SYSTEM DESCRIPTION >

[COUPE]



DLK

- Horn (low) E215 (view with front fender protector LH removed)
- 4. Horn relay H-1
- 7. Trunk lid opener cancel switch M74
- Electronic steering column lock M32 (view with instrument panel LH removed)
- Front console antenna M203 (view with center console assembly removed)
- 16. Door lock assembly LH D10 Door lock actuator RH D108
- 19. Trunk opener request switch T2

- 2. Horn (high) E216
- 5. Intelligent Key warning buzzer E73
- 8. Combination meter M24
- 11. Push button ignition switch M38
- Outside handle LH (outside key antenna)
 D6
 Outside handle RH (outside key antenna)
 D106
- 17. Door switch LH B8 Door switch RH B108
- 20. Rear bumper antenna B46

AWKIA1625ZZ

- 3. IPDM E/R E17, E18
- L

Μ

Ο

Ρ

- Remote keyless entry receiver M27 (view with instrument panel removed)
 BCM M16, M17, M18, M19, M20, M21
- (view with instrument panel removed)12. Key slot M40
 - Ν
- 15. Outside handle LH (request switch)
 D6
 Outside handle RH (request switch)
 D106
- 18. Rear parcel shelf antenna B29
- 21. Trunk lamp switch and trunk release solenoid (trunk lamp switch) T4

DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : Diagnosis Description

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.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	This function is not used even though it is displayed.

SYSTEM APPLICATION

BCM can perform the following functions for each system. **NOTE:**

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

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		×	×				
Remote keyless entry system	MULTI REMOTE ENT		×					
Exterior lamp	HEAD LAMP	×	×	×				
Wiper and washer	WIPER	×	×	×				
Turn signal and hazard warning lamps	FLASHER	×	×	×				
Air conditioner	AIR CONDITONER		×					
Intelligent Key system	INTELLIGENT KEY	×	×	×				
Combination switch	COMB SW		×					
BCM	BCM	×						
Immobilizer	IMMU		×	×				
Interior room lamp battery saver	BATTERY SAVER	×	×					
Trunk open	TRUNK		×	×				
Vehicle security system	THEFT ALM	×	×	×				
RAP system	RETAINED PWR		×					
Signal buffer system	SIGNAL BUFFER		×	×				
TPMS	AIR PRESSURE MONITOR	×	×	×				

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000007630705

ECU IDENTIFICATION Displays the BCM part No.

SELF-DIAG RESULT Refer to <u>BCS-67, "DTC Index"</u>.

Revision: February 2013

INFOID:000000007629802

< SYSTEM DESCRIPTION > **DOOR LOCK**

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

WORK SUPPORT

Work Item	Description	
DOOR LOCK-UNLOCK SET	• ON • OFF	
AUTOMATIC DOOR LOCK SELECT	P RANGE VH SPD	
AUTOMATIC DOOR UNLOCK SE- LECT	MODE1MODE2MODE3MODE4	
AUTOMATIC LOCK/UNLOCK SE- LECT	 LOCK/UNLOCK LOCK ONLY UNLOCK ONLY OFF 	

DATA MONITOR

Monitor Item [Unit]	Description	
REQ SW-DR [ON/OFF]	Indicates condition of door request switch LH	
REQ SW-AS [ON/OFF]	Indicates condition of door request switch RH	
REQ SW-BD/TR [ON/OFF]	Indicates condition of trunk request switch	
CDL LOCK SW [ON/OFF]	Indicates condition of door lock and unlock switch	
CDL UNLOCK SW [ON/OFF]	Indicates condition of door lock and unlock switch	
DOOR SW-DR [ON/OFF]	Indicates condition of front door switch LH	
DOOR SW-AS [ON/OFF]	Indicates condition of front door switch RH	
DOOR SW-RR [ON/OFF]	Indicates condition of rear door switch RH	
DOOR SW-RL [ON/OFF]	Indicates condition of rear door switch LH	
DOOR SW-BK [ON/OFF]	Indicates condition of trunk switch	
KEY CYL LK-SW [ON/OFF]	Indicates condition of lock signal from door key cylinder switch	
KEY CYL UN-SW [ON/OFF]	Indicates condition of unlock signal from door key cylinder switch	

ACTIVE TEST

Test Item	Description	
DOOR LOCK	This test is able to check door lock operation [OTR ULK / AS UNLK / DR UNLK / ALL UNLK / ALL LCK].	Ν

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

WORK SUPPORT

INFOID:000000007630657

А

В

Μ

0

Ρ

INFOID:000000007630658

< SYSTEM DESCRIPTION >

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. MODE1: 1 minute MODE2: 5 minutes MODE3: 30 seconds MODE4: 2 minutes
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch mode can be changed to operate (ON) or not operate (OFF) in this mode.
ENGINE START BY I-KEY	Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode.
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by trunk request switch can be changed to operate (ON) or not operate (OFF) with this mode.
PANIC ALARM SET	 Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. MODE1: 0.5 sec. MODE2: Non-operation MODE3: 1.5 sec.
PW DOWN SET	 Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. MODE1: 3 sec. MODE2: Non-operation MODE3: 5 sec.
TRUNK OPEN DELAY	 Trunk button pressing time on Intelligent Key button can be selected from the following with this mode. MODE1: 0.5 sec. MODE2: 1.5 sec. MODE3: OFF: No delay
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode.
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode.
HAZARD ANSWER BACK	 Hazard reminder function mode can be selected from the following with this mode. LOCK ONLY: Door lock operation only UNLOCK ONLY: Door unlock operation only LOCK/UNLOCK: Lock/unlock operation OFF: Non-operation
ANS BACK I-KEY LOCK	 Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode. Horn chirp: Sound horn Buzzer: Sound Intelligent Key warning buzzer OFF: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode.
SHORT CRANKING OUTPUT	Starter motor can be forcibly activated.
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode.

SELF-DIAG RESULT

Refer to BCS-67, "DTC Index".

DATA MONITOR

Monitor Item	Condition
REQ SW-DR	Indicates [ON/OFF] condition of door request switch (driver side).
REQ SW-AS	Indicates [ON/OFF] condition of door request switch (passenger side).

< SYSTEM DESCRIPTION >

[COUPE]

Monitor Item	Condition
REQ SW-BD/TR	Indicates [ON/OFF] condition of trunk opener request switch.
PUSH SW	Indicates [ON/OFF] condition of push button ignition switch.
CLUTCH SW	Indicates [ON/OFF] condition of clutch switch.
IGN RLY2 -F/B	Indicates [ON/OFF] condition of ignition relay 2.
ACC RLY-F/B	Indicates [ON/OFF] condition of accessory relay-1.
BRAKE SW 1	Indicates [ON/OFF] condition of brake switch.
BRAKE SW 2	Indicates [ON/OFF] condition of brake switch.
DETE/CANCL SW	Indicates [ON/OFF] condition of P position.
SFT PN/N SW	Indicates [ON/OFF] condition of P or N position.
S/L -LOCK	Indicates [ON/OFF] condition of steering lock (LOCK).
S/L -UNLOCK	Indicates [ON/OFF] condition of steering lock (UNLOCK).
S/L RELAY-F/B	Indicates [ON/OFF] condition of ignition switch.
UNLK SEN-DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
PUSH SW -IPDM	Indicates [ON/OFF] condition of push button ignition switch.
IGN RLY1 -F/B	Indicates [ON/OFF] condition of ignition relay 1.
DETE SW -IPDM	Indicates [ON/OFF] condition of P position.
SFT PN -IPDM	Indicates [ON/OFF] condition of P or N position.
SFT P -MET	Indicates [ON/OFF] condition of P position.
SFT N -MET	Indicates [ON/OFF] condition of N position.
ENGINE STATE	Indicates [STOP/STALL/CRANK/RUN] condition of engine states.
S/L LOCK-IPDM	Indicates [ON/OFF] condition of steering lock (LOCK) request.
S/L UNLOCK-IPDM	Indicates [ON/OFF] condition of steering lock (UNLOCK) request.
S/L RELAY-REQ	Indicates [ON/OFF] condition of steering lock relay.
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [Km/h].
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or CVT by numerical value [Km/h].
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver side door status.
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger side door status.
ID OK FLAG	Indicates [SET/RESET] condition of key ID.
PRMT ENG STRT	Indicates [SET/RESET] condition of engine start possibility.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
RKE-TR/BD	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.
RKE-PANIC	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.
RKE-P/W OPEN	Indicates [ON/OFF] condition of P/W DOWN signal from Intelligent Key.
RKE-MODE CHG	Indicates [ON/OFF] condition of MODE CHANGE signal from Intelligent Key.
PRMT RKE STRT	Indicates [ON/OFF] condition of ENGINE START signal from Intelligent Key.
RKE OPE COUN2	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
REVERSE SW	Indicates [ON/OFF] condition of R position.

ACTIVE TEST

< SYSTEM DESCRIPTION >

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp is activated after "ON" on CONSULT screen is touched.
PW REMOTO DOWN SET	This test is able to check power window down operation. The power window down is activated after "ON" on CONSULT screen is touched.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. The Intelligent Key warning buzzer is activated after "ON" on CONSULT screen is touched.
INSIDE BUZZER	 This test is able to check warning chime in combination meter operation. Take away warning chime sounds when "TAKE OUT" on CONSULT screen is touched. Key warning chime sounds when "KEY" on CONSULT screen is touched. OFF position warning chime sounds when "KNOB" on CONSULT screen is touched.
INDICATOR	 This test is able to check warning lamp operation. "KEY" Warning lamp illuminates when "KEY ON" on CONSULT screen is touched. "KEY" Warning lamp blinks when "KEY IND" on CONSULT screen is touched.
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp is activated after "ON" on CONSULT screen is touched.
LCD	 This test is able to check meter display information Engine start information displays when "BP N" on CONSULT screen is touched. Engine start information displays when "BP I" on CONSULT screen is touched. Key ID warning displays when "ID NG" on CONSULT screen is touched. P position warning displays when "SFT P" on CONSULT screen is touched. Intelligent Key insert information displays when "INSRT" on CONSULT screen is touched. Intelligent Key low battery warning displays when "BATT" on CONSULT screen is touched. Take away through window warning displays when "NO KY" on CONSULT screen is touched. Take away warning display when "OUTKEY" on CONSULT screen is touched. OFF position warning display when "LK WN" on CONSULT screen is touched.
FLASHER	This test is able to check hazard warning lamp operation. The hazard warning lamps are activated after "LH/RH/OFF" on CONSULT screen is touched.
HORN	This test is able to check horn operation. The horn is activated after "ON" on CONSULT screen is touched.
P RANGE	This test is able to check CVT shift selector power supply CVT shift selector power is supplied when "ON" on CONSULT screen is touched.
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when "ON" on CONSULT screen is touched.
LOCK INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation. LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.
ACC INDICATOR	This test is able to check ACC indicator in push-ignition switch operation. ACC indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.
IGNITION ON IND	This test is able to check ON indicator in push-ignition switch operation. ON indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination blinks when "ON" on CONSULT screen is touched.
TRUNK/BACK DOOR	This test is able to check trunk opener actuator open operation. This actuator opens when "OPEN" on CONSULT screen is touched.

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:000000007630659

DATA MONITOR

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

Revision: February 2013

< SYSTEM DESCRIPTION >

[COUPE]

Monitor Item	Contents	
TR CANCEL SW	Indicates [ON/OFF] condition of trunk cancel switch.	A
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk opener switch.	
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.	В
RKE-TR/BD	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.	

ACTIVE TEST

Test Item	Description	
TRUNK/GLASS HATCH	This test is able to check trunk open operation. Trunk opens when "OPEN" on CONSULT screen is touched.	D

С

Е

F

G

Н

L

Μ

Ν

0

Ρ

DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

INFOID:000000007421026

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to LAN-24, "CAN Communication Signal Chart".

DTC Logic

INFOID:000000007421027

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:000000007421028

1.PERFORM SELF DIAGNOSTIC

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

Check "Self Diagnostic Result".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to LAN-15, "Trouble Diagnosis Flow Chart".
- NO >> Refer to <u>GI-42, "Intermittent Incident"</u>.

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

DTC DETECTION LOGIC

DTC DI	ETECTION LOGIC			E
DTC	CONSULT display de- scription	DTC Detection Condition	Possible cause	(
U1010	CONTROL UNIT (CAN)	BCM detected internal CAN communication circuit malfunction.	BCM	
Diagno	osis Procedure		INFOID:00000007421030	
1.REP	LACE BCM			L
When D	TC [U1010] is detected	d, replace BCM.		E
	>> Replace BCM.			
Specia	al Repair Requirer	nent	INFOID:00000007421031	I
1.req	UIRED WORK WHEN	REPLACING BCM		
Initialize	NVIS by CONSULT.	For the details of initialization refer to CONSULT Imr	nobilizer mode and follow	(
the on-s	creen instructions.			
	>> Work end.			
				D
				ľ
				ľ

INFOID:000000007421029

А

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

B2622 INSIDE KEY ANTENNA 2

Description

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

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA 2 CIRCUIT	An excessive high or low voltage from inside anten- na is sent to BCM.	 Front console antenna Between BCM and front console antenna.

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

()With CONSULT

- 1. Perform front console antenna INSIDE ANT DIAGNOSIS on Work Support" of "INTELLIGENT KEY".
- 2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

Is front console antenna DTC detected?

- YES >> Refer to DLK-58, "Diagnosis Procedure".
- NO >> Inside front console antenna is OK.

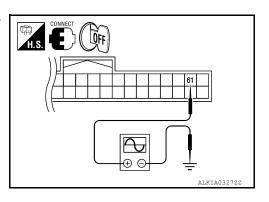
Diagnosis Procedure

INFOID:000000007421034

Regarding Wiring Diagram information, refer to <u>DLK-167, "Wiring Diagram"</u>.

1. CHECK FRONT CONSOLE ANTENNA INPUT SIGNAL 1

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



INFOID:000000007421032

INFOID:000000007421033

B2622 INSIDE KEY ANTENNA 2

< DTC/CIRCUIT DIAGNOSIS >

А Terminals Signal Condition (+) (Reference value.) (-) BCM connector Terminal В Place Intelligent Key inside the vehicle. D Front console TMKTA0062GB M19 61 Ground antenna Е Place Intelligent Key outside the vehicle. F 1.5 JMKTA0063GB Is the inspection result normal? YES >> Check the condition of harness and connector. NO >> GO TO 2 2. CHECK FRONT CONSOLE ANTENNA CIRCUIT Н 1. Disconnect BCM and front console antenna connector. 2. Check continuity between BCM connector and front console antenna connector. в (2|1)61 60 1,2 60,61 DLK Ω ALKTA0328 BCM connector Terminal Front console antenna connector Terminal Continuity Μ 60 2 A: M19 B: M203 Console Yes 61 1 Ν Check continuity between BCM connector and ground. 3. BCM connector Terminal Continuity 60 Ground

Is the inspection result normal?

YES >> GO TO 3

A: M19

NO >> Repair or replace harness between BCM and front console antenna.

 ${\it 3.}$ CHECK FRONT CONSOLE ANTENNA INPUT SIGNAL 2

Console

1. Replace front console antenna (New antenna or other antenna).

2. Connect BCM and front console antenna connector.

DLK-59

61

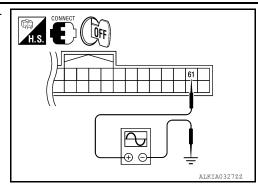
No

Ρ

B2622 INSIDE KEY ANTENNA 2

< DTC/CIRCUIT DIAGNOSIS >

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



	Terminals (+)			Condition	Signal (Reference value.)
BC	M connector	Terminal	(–)		
M19	Front console	61	Ground	Place Intelligent Key inside the ve- hicle.	(V) 15 0 0 15 0 15 0 15 0 15 0 15 0 15 0 1
W19	antenna	01	Ground	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

- >> Replace front console antenna. Refer to <u>IP-11, "Exploded View"</u>.
 >> Replace BCM. Refer to <u>BCS-92, "Removal and Installation"</u>. YES
- NO

DTC detecting condition

An excessive high or low voltage from inside anten-

Perform rear parcel shelf antenna INSIDE ANT DIAGNOSIS on Work Support" of "INTELLIGENT KEY".

. --- -

1.

2.

YES >> Refer to <u>DLK-61, "Diagnosis Procedure"</u>.

Perform "INTELLIGENT KEY" Self Diagnostic Result.

1.PERFORM DTC CONFIRMATION PROCEDURE

NO >> Rear parcel shelf antenna is OK.

Is rear parcel shelf antenna DTC detected?

Diagnosis Procedure

< DTC/CIRCUIT DIAGNOSIS >

Installed in the trunk room.

DTC DETECTION LOGIC

Description

DTC Logic

DTC No.

B2623

(P)With CONSULT

B2623 INSIDE KEY ANTENNA 3

Trouble diagnosis

name

INSIDE ANTENNA 3

CIRCUIT

DTC CONFIRMATION PROCEDURE

Detects whether Intelligent Key is inside the vehicle.

Regarding Wiring Diagram information, refer to DLK-167, "Wiring Diagram".

na is sent to BCM.

1. CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 1

Turn ignition switch OFF.
 Check signal between BCM connector and ground with oscilloscope.
 L
 M
 N
 ALKIA032922



INFOID:000000007421035

В

D

Е

F

Н

А

INFOID:000000007421036

Possible cause

Between BCM and front console

Rear parcel shelf antenna

•

antenna.

INFOID:000000007421037

Ρ

B2623 INSIDE KEY ANTENNA 3

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

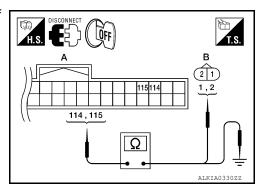
	Terminals			Condition	Signal	
BCI	(+) BCM connector Terminal		()	Condition	(Reference value.)	
M21	Rear parcel	115	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 5 10 1 5 10 1 5 10 1 5 10 10 10 10 10 10 10 10 10 10 10 10 10	
	shelf antenna		Cround	Place Intelligent Key outside the vehicle.	(V) 10 50 1 s JMKIA0063GB	

Is the inspection result normal?

- YES >> Check the condition of harness and connector.
- NO >> GO TO 2

2. CHECK REAR PARCEL SHELF ANTENNA CIRCUIT

- 1. Disconnect BCM and rear parcel shelf antenna connector.
- 2. Check continuity between BCM connector and rear parcel shelf antenna connector.



BCM connector	Terminal	Rear parcel shelf antenna connector		Terminal	Continuity
A: M21	114	B. B20	B: B29 Trunk room	2	Yes
	115	D. D23		1	

3. Check continuity between BCM connector and ground.

BC	CM connector	Terminal		Continuity
A: M21	Trunk room	114	114 Ground	No
A. WZ I	Trunk room	115		NO

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and rear parcel shelf antenna.

3.CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 2

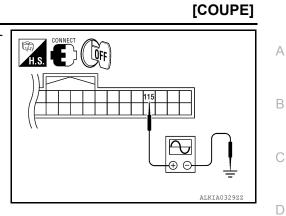
1. Replace rear parcel shelf antenna (New antenna or other antenna).

2. Connect BCM and rear parcel shelf antenna connector.

B2623 INSIDE KEY ANTENNA 3

< DTC/CIRCUIT DIAGNOSIS >

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



Terminals					2
(+)		()	Condition	Signal (Reference value.)	
BCI	M connector	Terminal	(-)		
M21	Trunk room	115	Ground	Place Intelligent Key inside the vehicle.	(V) 15 0 0 1 s JMKIA00620B
MZ I		115	Ground	Place Intelligent Key outside the vehicle.	(V) 15 0 5 0 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5

Is the inspection result normal?

- YES >> Replace rear parcel shelf antenna. Refer to <u>INT-46, "Exploded View"</u>.
- NO >> Replace BCM. Refer to <u>BCS-92, "Removal and Installation"</u>.

DLK

L

Μ

Ν

Ο

Ρ

J

Е

F

G

Н

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>BCS-70, "Wiring Diagram - Coupe"</u> or <u>BCS-79, "Wiring Diagram - Sedan"</u>.

1. CHECK FUSE AND FUSIBLE LINK

Check if the following BCM fuse or fusible link are blown.

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

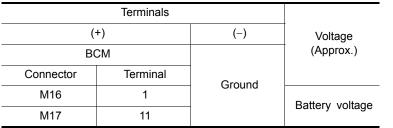
Is the fuse or fusible link blown?

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

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

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



Is the measurement normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BC	СМ		Continuity
Connector	Terminal	Ground	Continuity
M17	13	*	Yes

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.

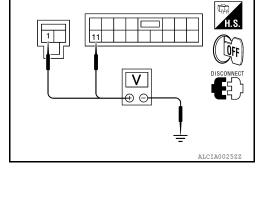
Special Repair Requirement

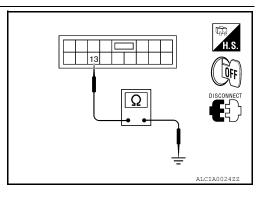
1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to <u>BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM) :</u> Work Procedure".

>> Work End.







INFOID:000000007421039

2012 Altima GCC

INFOID:000000007421038

DOOR SWITCH

DOOR SWI	ICH
< DTC/CIRCUIT DIAGNOSIS >	[COUPE]
DOOR SWITCH	
Description	INFOID:00000000742104
Detects door open/close condition.	
Component Function Check	INFQ/D:00000000742104
1.CHECK FUNCTION	
Check door switches DOOR SW-DR, DOOR SW-AS in Data	a Monitor mode with CONSULI.
Monitor item	Condition
DOOR SW-DR	$CLOSE \to OPEN : OFF \to ON$
DOOR SW-AS	
Is the inspection result normal?	
YES >> Door switch is OK. NO >> Refer to <u>DLK-65, "Diagnosis Procedure"</u> .	
Diagnosis Procedure	INFQID:00000000742104
<u>.</u>	
Descending Mining Disguster information, refer to DLK 450, W	
Regarding Wiring Diagram information, refer to <u>DLK-158, "V</u>	
1. CHECK DOOR SWITCH INPUT SIGNAL	
 Turn ignition switch OFF. Check signal between BCM connector and ground with 	n oscillo-
scope.	
	158 32 CONNECT
	<u>32,58</u>
	ALKIA1039ZZ

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

	Terminals					
BCM connector	+) Terminal	(—)	Door condition		Voltage (Appro	
connector				OPEN	0	
M18	58		Driver side	CLOSE	(V) 15 10 5 0 0 10 ms	JPMIA0011GB
IVITO		Ground		OPEN	0	
	32		Passenger side	CLOSE	(V) 15 10 5 0 ••••••	JPMIA0011GB
-	<u>n result norm</u>	al?				
'ES >> GC IO >> GC .CHECK DO		CIRCUIT				
	BCM conne			itab asa 🗖		
nector.	linuity betwee		nector and door	switch con-	A 58 32,58	
			D	oor switch		
BCM co	onnector	Termina		connector	Terminal	Continuity
A: N	v118	58		B (Driver side)	2	Yes
		32	(Passenger side)		1	

BCM connector	Terminal		Continuity
A · M19	58	Ground	No
A: M18	32		No

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and door switch.

3.CHECK DOOR SWITCH

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >	[COUPE]	
Refer to DLK-67. "Component Inspection".		
Is the inspection result normal?		А
YES >> GO TO 4 NO >> Replace malfunctioning door switch.		
4.CHECK INTERMITTENT INCIDENT		В
Refer to GI-42, "Intermittent Incident".		
		С
>> Inspection End.		
Component Inspection	INFOID:000000007421043	D
1. CHECK DOOR SWITCH		D
 Turn ignition switch OFF. Disconnect door switch connector. 		E
3. Check door switch.		F

	Term	ninal	- Door switch condition	Continuity	
	Door switch			Continuity	
	2	Ground part of door switch	Pressed	No	
			Released	Yes	

Is the inspection result normal?

YES

>> Inspection End.>> Replace malfunction door switch. NO

L

Μ

Ν

Ο

Ρ

DLK

G

Н

J

2

Ω

٠

ALKIA0747ZZ

DOOR LOCK AND UNLOCK SWITCH

< 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

With CONSULT

Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

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

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

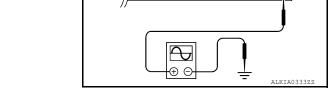
NO >> Refer to <u>DLK-68</u>, "<u>DRIVER SIDE</u> : <u>Diagnosis Procedure</u>".

DRIVER SIDE : Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-158, "Wiring Diagram"</u>.

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Read voltage signal between BCM connector and ground with oscilloscope when door lock and unlock switch (driver side) is turned "LOCK" or "UNLOCK".



2. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (driver side) is turned "LOCK" or "UNLOCK".

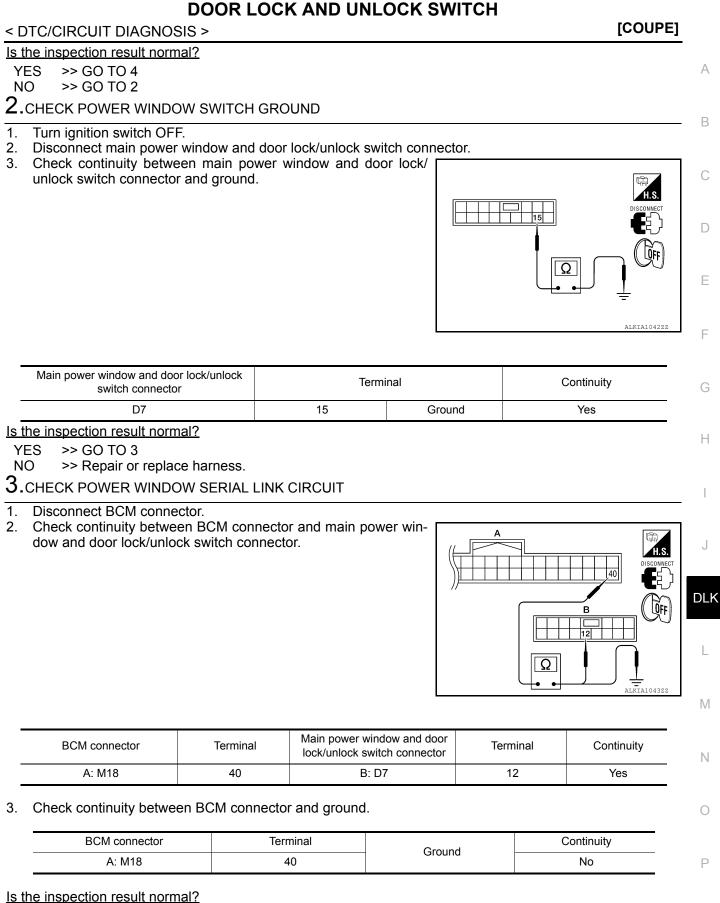
Terminal					
(+)		()	Condition	Signal (Reference value)	
BCM connector	Terminal	(-)			
M18	40	Ground	Door is closed	(V) 15 0 10 10 10 10 10 10 10 10 10 10 10 10 1	

[COUPE]

INFOID:000000007421044

INFOID:000000007421045

INFOID:000000007421046



YES >> GO TO 4

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End. PASSENGER SIDE

PASSENGER SIDE : Description

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

1.CHECK FUNCTION

With CONSULT

Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

Monitor item	C	ondition	
CDL LOCK SW	LOCK	: ON	
CDE LOCK SW	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-70, "PASSENGER SIDE : Diagnosis Procedure"</u>.

PASSENGER SIDE : Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-158, "Wiring Diagram".

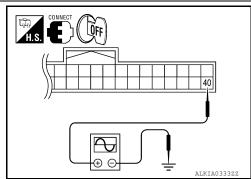
1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

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

Terminal						
(+)		()	Condition	Signal (Reference value)		
BCM connector	Terminal	()				
M18	40	Ground	Door is closed	(V) 15 0 10 10 10 10 10 10 10 10 10 10 10 10 1		

Is the inspection result normal?

Revision: February 2013



INFOID-000000007421048

INFOID:000000007421049

INFOID:000000007421047

[COUPE]

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO NO >> GO							А
2.CHECK POW	ER WINDOW SWIT	CH GROUND					
 Turn ignition Disconnect p 	switch OFF.	oor lock/unlock sw	itch RH conr	nector.			В
	nuity between front inector and ground.	power window sw	iten (passen	F	Power window a cock/unlock swi		C D E
						LIIA1258E	F
Power window a	nd door lock/unlock switc connector	h RH	Terminal			Continuity	
	D105	1	1	Gro	ound	Yes	G
· ·							Η
1. Disconnect E							1
	nuity between BCM passenger side) cor		nt power win	-			J DLł
						ALKIA03382Z	L
BCM connec	tor Terminal	Front power window s	switch (passeng	ger side)	Terminal	Continuity	M
A: M18	40		D105		16	Yes	Ν
3. Check contir	uity between BCM	connector and grou	ınd.				0
B	CM connector	Terminal			Continuity		0
	A: M18	40	– Gro	Ind No		No	
					·		Ρ

Refer to GI-42, "Intermittent Incident".

< DTC/CIRCUIT DIAGNOSIS >

YES >> INSPECTION END.

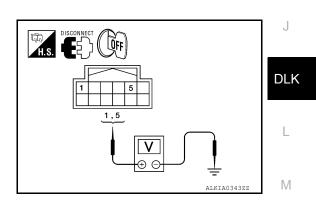
KEY SLOT

< DTC/CIRCUIT DIAGNOSIS > **KEY SLOT**

KET SLUT			А
Description		INFOID:000000007421050	
Detect whether Intelligent Key is inserted. Immobilizer antenna amp checks Intelligent Key t	ransponder.		В
Component Function Check		INFOID:000000007421051	-
1.CHECK FUNCTION			С
	n CONSULT.		D
Check KEY SW -SLOT in Data Monitor mode with			
Check KEY SW -SLOT in Data Monitor mode with	Condition		
Monitor item	Condition Key is inserted in key slot: ON		Е
			Е
Monitor item	Key is inserted in key slot: ON Key is removed from key slot: OFF		E
Monitor item KEY SW-SLOT Is the inspection result normal? YES >> Key slot is OK.	Key is inserted in key slot: ON Key is removed from key slot: OFF	INFCID:000000007421052	E F G

1. CHECK KEY SLOT POWER SUPPLY CIRCUIT

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



	Terminals			Γ
(+)	(+)		Voltage (V) (Approx.)	
Key slot connector	Terminal	- (-)	(
M40	1	Ground	Pottony voltago	C
WI40	5	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 2

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

2.check key slot ground circuit

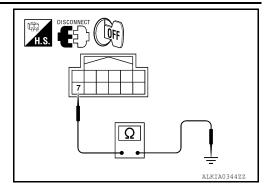
Ρ

KEY SLOT

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

Check continuity between key slot connector and ground.



Key slot connector	Terminal	Ground	Continuity
M40	7	Cround	Yes

Is the inspection result normal?

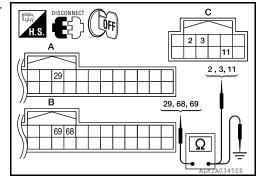
YES >> GO TO 3

NO >> Repair or replace key slot ground circuit.

3. CHECK KEY SLOT CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM connector and key slot connector.



BCM connector	Terminal	Key slot connector	Terminal	Continuity
A: M18	29		11	Yes
B: M19	68	C: M40	2	Yes
D. WI 19	69		3	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M18	29		
B: M19	68	Ground	No
D. 1019	69		

Is the inspection result normal?

YES >> GO TO 4

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

4.CHECK KEY SLOT

Refer to DLK-75, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5

NO >> Replace key slot.

5.CHECK INTERMITTENT INCIDENT

KEY SLOT

< DTC/CIRCUIT DIAGNOSIS >

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

Component Inspection

1.CHECK KEY SLOT

Check key slot.

Terminal	Condition
Key slot	Condition

Key	v slot	Condition	Continuity
1	11	Intelligent Key inserted	Yes
1		Intelligent Key removed	No

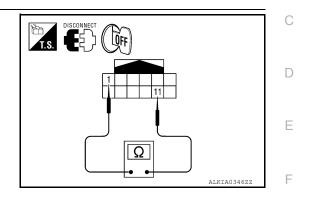
Is the inspection result normal?

YES >> Inspection End.

NO >> Replace key slot.

А

INFOID:000000007421053



	L	
	L	

G

Н

DLK

L

Μ

Ν

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

KEY CYLINDER SWITCH

Description

INFOID:000000007421054

[COUPE]

For vehicles equipped with LH and RH anti-pinch system, the main power window and door lock/unlock switch detects condition of the door key cylinder switch and transmits to BCM as the LOCK or UNLOCK signal.

For vehicles equipped with LH anti-pinch system only, the door lock assembly LH (key cylinder switch) transmits the LOCK or UNLOCK signal directly to the BCM.

Component Function Check

INFOID:000000007421055

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check KEY CYL UN-SW, KEY CYL UN-SW in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to <u>DLK-51</u>, "DOOR LOCK : <u>CONSULT Function (BCM - DOOR LOCK)</u>".

Monitor item	Со	ndition	
KEY CYL LK-SW	Lock	: ON	
KET GTE LK-SW	Neutral / Unlock	: OFF	
	Unlock	: ON	
KEY CYL UN-SW	Neutral / Lock	: OFF	

Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Refer to <u>DLK-76, "Diagnosis Procedure"</u>.

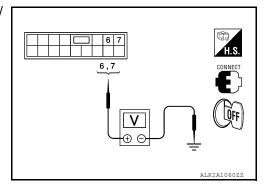
Diagnosis Procedure

INFOID:000000007421056

Regarding Wiring Diagram information, refer to <u>DLK-158, "Wiring Diagram"</u>.

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Check voltage between main power window and door lock/ unlock switch connector and ground.



< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

	Terminals				A
(+)				Voltage (V)	
Main power window and door lock/unlock switch connector	Terminal	(-)	Key position	(Approx.)	В
	e		Lock	0	
D7	6	Ground	Neutral / Unlock	5	С
DT	7	Ground	Unlock	0	
	I		Neutral / Lock	5	D

Is the inspection result normal?

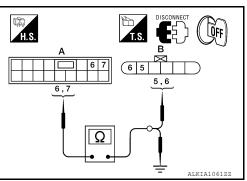
YES >> Replace main power window and door lock/unlock switch. Refer to PWC-192, "Removal and Installation". After that, Refer to DLK-11, "ADDITIONAL SERVICE WHEN REPLACING CON-TROL UNIT : Special Repair Requirement".

2. CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch connector and door lock assembly LH (key cylinder switch) connector.

3. Check continuity between main power window and door lock/ unlock switch connector and door lock assembly LH (key cylinder switch) connector.



Main power window and door lock/ unlock switch connector	Terminal	Door lock assembly LH (key cylinder switch) con- nector	Terminal	Continuity
A: D7	6	B: D10	6	Yes
A. D7	7	B. D 10	5	

ower window main switch connec- tor	Terminal		Continuity	
A: D7	6	Ground	No	N
A. D7	7	-	No	

YES >> GO TO 3

NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

LΚ

Ρ

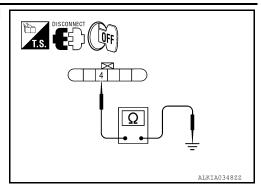
E

F

Н

< DTC/CIRCUIT DIAGNOSIS >

Check continuity between door lock assembly LH connector and ground.



Door lock assembly LH connector	Terminal	Ground	Continuity
D10	4	Ground	Yes

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch. Refer to <u>DLK-78. "Component Inspection"</u>.

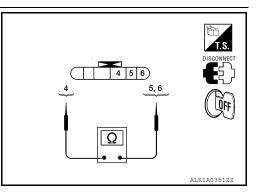
Is the inspection result normal?

- YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.
- NO >> Replace door lock assembly LH (key cylinder switch). Refer to <u>DLK-222, "FRONT DOOR LOCK :</u> <u>Removal and Installation"</u>.
- Component Inspection

COMPONENT INSPECTION

1. CHECK DOOR KEY CYLINDER SWITCH

Check front door lock assembly LH (key cylinder switch).



Terminal Front door lock assembly LH (key cylinder switch) connector			
		Key position	Continuity
E	Unlock	Yes	
5		Neutral / Lock	No
6		Lock	Yes
0		Neutral / Unlock	No

Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Replace front door lock assembly LH (key cylinder switch). Refer to <u>DLK-461, "FRONT DOOR</u> <u>LOCK : Removal and Installation"</u>.

INFOID:000000007421057

[COUPE]

< DTC/CIRCUIT DIAGNOSIS >

A
В
С
D
Е
F
G
Н
I
J
DLK
L
Μ
Ν
0

Ρ

< DTC/CIRCUIT DIAGNOSIS >

UNLOCK SENSOR

Description

Detects door lock condition of driver door.

Component Function Check

1. CHECK FUNCTION

With CONSULT

Check unlock sensor UNLK SEN-DR in "Data Monitor" mode.

Monitor item	Condition
UNLK SEN-DR	Door lock (driver side) LOCK : OFF
UNER SEN-DR	Door lock (driver side) UNLOCK : ON

Is the inspection result normal?

YES >> Unlock sensor is OK.

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

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-158, "Wiring Diagram".

1.CHECK UNLOCK SENSOR POWER SUPPLY

Check signal between BCM connector and ground with oscilloscope.

CONNECT COFF

Terminals				
(+)		()	Door lock assembly LH condition	Voltage (V) (Approx.)
BCM connector	Terminal	()		(, pp. c)
M18	27	Ground	Locked	(V) 15 10 5 0 JPMIA0011GB
			Unlocked	0
Is the inspection res	ult normal?			
YES >> GO TO NO >> GO TO				

2.CHECK UNLOCK SENSOR CIRCUIT

INFOID:000000007421058

INFOID:000000007421059

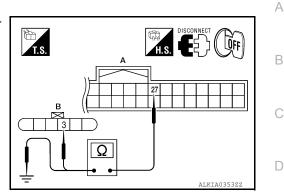
INFOID-000000007421060

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM and door lock assembly LH connector.
- 3. Check continuity between BCM connector and door lock assembly LH connector.



BCM connector	Terminal	Door lock assembly LH connector	Terminal	Continuity
A: M18	27	B: D10	3	Yes

4. Check continuity between BCM connector and ground.

BCM connector Terminal	Ground	Continuity	
A: M18 27	Ground	No	

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and door lock assembly LH.

$\mathbf{3}$.check unlock sensor ground circuit

Check continuity between door lock assembly LH connector and ground.

0

Ρ

ALKIA0348Z

Е

F

Н

Door lock assembly LH connector	Terminal	Ground	Continuity	M
D10	4		Yes	
Is the inspection result normal?				NI
				IN

YES >> GO TO 4

Revision: February 2013

NO >> Repair or replace harness.

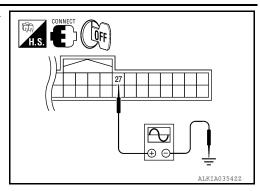
4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM harness connector.

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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



Terminals				
(+)		()	Voltage (V) (Approx.)	
BCM connector	Terminal	- (-)	(+ +	
M18	27	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB	

Is the inspection result normal?

YES >> GO TO 5

NO >> Replace BCM. Refer to <u>BCS-92. "Removal and Installation"</u>.

5. CHECK UNLOCK SENSOR

Refer to DLK-82, "Component Inspection".

Is the inspection result normal?

- YES >> GO TO 6
- NO >> Replace door lock assembly LH. Refer to <u>DLK-222, "FRONT DOOR LOCK : Removal and Instal-</u> lation".

6.CHECK INTERMITTENT INCIDENT

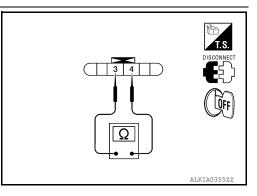
Refer to GI-42, "Intermittent Incident".

>> Inspection End.

Component Inspection

1.CHECK UNLOCK SENSOR

Check unlock sensor.



UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

Terminal		Door lock assembly LH condition	Continuity	
Door lock assembly LH				
3	4	Unlock	Yes	
		Lock	No	
inspection resu >> INSPEC1				
>> INSPECT >> Replace of	FION END. door lock assembly	LH. Refer to <u>DLK-222, "FRONT DOOR L</u>	OCK : Removal and Ir	
lation".				

TRUNK LID OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TRUNK LID OPENER SWITCH

Description

Transmits trunk lid open signal to BCM.

Component Function Check

1. CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

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

Yes >> Turn off trunk lid opener cancel switch.

No >> GO TO 2

2. CHECK FUNCTION

With CONSULT

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

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

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

Is the inspection result normal?

YES >> Trunk lid opener switch is OK.

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

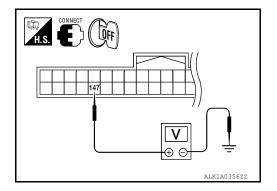
Diagnosis Procedure

INFOID:000000007421064

Regarding Wiring Diagram information, refer to DLK-183. "Wiring Diagram".

1. CHECK TRUNK LID OPEN INPUT SIGNAL

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



	Terminals			
((+)		Condition of trunk lid opener switch	Voltage (V)
BCM connector	Terminal	()		(Approx.)
M21	147	Ground	ON (press and hold)	0
IVIZ I	147	Ground	OFF (release)	Battery voltage

Is the inspection result normal?

INFOID:000000007421062

TRUNK LID OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

F

Н

J

DLK

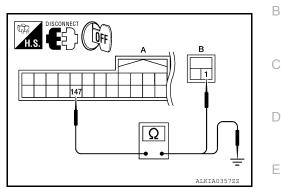
L

Μ

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

2. CHECK TRUNK LID OPENER SWITCH CIRCUIT

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



BCM connector	Terminal	Trunk lid opener switch connector	Terminal	Continuity
A: M21	147	B: M75	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M21	147	Cround	No

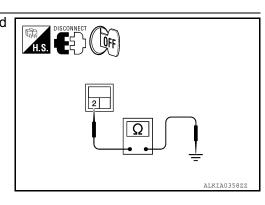
Is the inspection result normal?

YES >> GO TO 3

NO >> Repair harness or connector.

 ${\it 3.}$ check trunk lid opener switch ground circuit

Check continuity between trunk lid opener switch connector and ground.



Trunk lid opener switch	Terminal		Continuity	N	
M75	2	2 Ground Yes			
Is the inspection result normal?					
YES >> GO TO 4				0	
NO >> Repair or replace harr	iess.				
4. CHECK TRUNK LID OPENER	SWITCH				
Refer to DLK-86, "Component Insp	pection".			P	
Is the inspection result normal?					
YES >> GO TO 5					
NO >> Replace trunk lid oper	ner switch.				
5. CHECK INTERMITTENT INCIE	DENT				
Refer to GI-42, "Intermittent Incide	nt".				

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

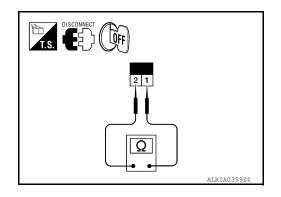
INFOID:000000007421065

>> Inspection End.

Component Inspection

1. CHECK TRUNK LID OPENER SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lid opener switch connector.
- 3. Check continuity between trunk lid opener switch connector.



Tei	rminal	Condition	Continuity	
Trunk lid o	ppener switch	Condition	Continuity	
1	2	ON (press and hold)	Yes	
Ι	2	OFF (release)	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace trunk lid opener switch.

TRUNK LID OPENER CANCEL SWITCH [COUPE] < DTC/CIRCUIT DIAGNOSIS > TRUNK LID OPENER CANCEL SWITCH А Description INFOID:000000007421066 Cancels trunk lid open operation. В **Component Function Check** INFOID:000000007421067 1.CHECK FUNCTION (R) With CONSULT Check trunk lid opener cancel switch TR CANCEL SW in Data Monitor mode with CONSULT. D Monitor item Condition Trunk lid opener cancel switch is turned to "ON": ON Е TR CANCEL SW Trunk lid opener cancel switch is turned to "OFF": OFF Is the inspection result normal? YES >> Trunk lid opener cancel switch is OK. F NO >> Refer to DLK-87, "Diagnosis Procedure". **Diagnosis** Procedure INFOID:000000007421068 Regarding Wiring Diagram information, refer to DLK-183, "Wiring Diagram". Н 1. CHECK TRUNK LID OPENER CANCEL SIGNAL Check voltage between BCM connector and ground. DLK L ALKTA036022 Μ Terminals (+) Condition of trunk lid opener Voltage (V) cancel switch (Approx.) (-) BCM Terminal Ν connector ON (press and hold) 0 M18 37 Ground OFF (cancel) Ρ 10 ms JPMIA0012GB

Is the inspection result normal?

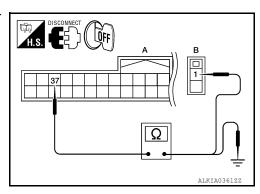
YES >> GO TO 5 NO >> GO TO 2

TRUNK LID OPENER CANCEL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

$\overline{2.}$ CHECK TRUNK LID OPENER CANCEL SWITCH CIRCUIT

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



BCM connector	Terminal	Trunk lid opener cancel switch connector	Terminal	Continuity
A: M18	37	B: M74	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity	
A: M18	37		No	

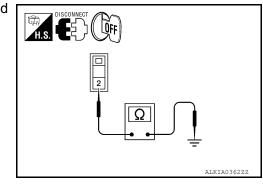
Is the inspection result normal?

YES >> GO TO 3

NO >> Repair harness or connector.

${f 3}.$ check trunk lid opener cancel switch ground circuit

Check continuity between trunk lid opener switch connector and ground.



_	Trunk lid opener cancel switch	Terminal	Ground	Continuity
	M74	2	Ground	Yes

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4.CHECK TRUNK LID OPENER CANCEL SWITCH

Refer to DLK-89, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5

NO >> Replace trunk lid opener cancel switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

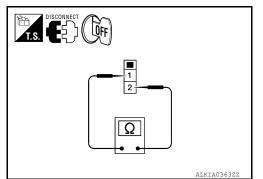
TRUNK LID OPENER CANCEL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Component Inspection

1. CHECK TRUNK LID OPENER CANCEL SWITCH

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



Terr	ninal	Condition	Continuity	F
Trunk lid opene	er cancel switch	Condition	Continuity	
4	0	ON	Yes	G
I	2	OFF (cancel)	No	

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Replace trunk lid opener cancel switch.

INFOID:000000007421069

А

В

С

D

Ε

Н

J

DLK

Μ

Ν

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

TRUNK LAMP SWITCH

Description

Detects trunk open/close condition.

Component Function Check

1. CHECK FUNCTION

(I) With CONSULT

Check TRNK/HAT MNTR in Data Monitor mode with CONSULT.

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

Is the inspection result normal?

YES >> Trunk lamp switch is OK.

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

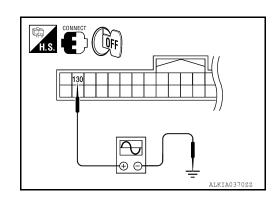
Diagnosis Procedure

INFOID:000000007421072

Regarding Wiring Diagram information, refer to DLK-158. "Wiring Diagram".

1.CHECK TRUNK LAMP SWITCH INPUT SIGNAL

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



	Terminals			
(+)		()	Trunk condition	Voltage (V) (Approx.)
BCM connector	Terminal	(-)		(+ +
			OPEN	0
M21	130	Ground	CLOSE	(V) 15 0 • • • • 10 ms JPMIA0011GB

Is the inspection result normal?

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

NO >> GO TO 2

INFOID:000000007421070

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

А

В

D

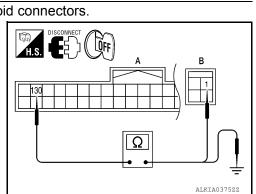
Е

Н

DLK

2. CHECK TRUNK LAMP SWITCH CIRCUIT

- Disconnect BCM and trunk lamp switch and trunk release solenoid connectors.
 Check continuity between BCM connector and trunk lamp switch
- and trunk release solenoid connector.



BCM connector	Terminal Trunk lamp switch and trunk release solenoid connector		Terminal	Continuity
A: M21	130	B: T4	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M21	130	Giouria	No

Is the inspection result normal?

YES >> GO TO 3

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

 ${\it 3.}$ CHECK TRUNK LAMP SWITCH GROUND CIRCUIT

Check continuity between trunk lid lock assembly connector and ground.

Trunk lamp switch and trunk release
solenoid connectorTerminalGroundContinuityT42Yes

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace trunk lamp switch and trunk release solenoid ground circuit.

4.CHECK BCM OUTPUT SIGNAL

1. Insure trunk remains closed during this step.

2. Connect BCM connector.

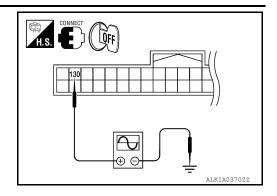
ALKIA1050ZZ

Ρ

Μ

< DTC/CIRCUIT DIAGNOSIS >

3. Check voltage between BCM connector and ground.



[COUPE]

	Terminals			
(+)			Voltage (V) (Approx.)	
BCM connector	Terminal	- (-)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
M21	130	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB	

Is the inspection result normal?

YES >> GO TO 5

NO >> Replace BCM. Refer to <u>BCS-92. "Removal and Installation"</u>.

5. CHECK TRUNK LAMP SWITCH

Refer to DLK-92, "Component Inspection".

Is the inspection result normal?

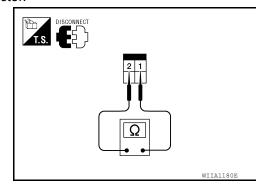
YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> Replace trunk lamp switch and trunk release solenoid.

Component Inspection

1. CHECK TRUNK LAMP SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lamp switch and trunk release solenoid connector.
- 3. Check trunk lamp switch.



Tern	Terminal		Continuity
Trunk lamp switch and	trunk release solenoid	Trunk condition	Continuity
1	2	OPEN	Yes
I	2	CLOSE	No

< DTC	CIRCUIT DIAGNOSIS >	[COUPE]
	nspection result normal?	
YES	>> Inspection End.	A
NO	>> Inspection End.>> Replace trunk lamp switch and trunk release solenoid.	
		В
		С
		D
		E
		F
		G
		0
		Н
		J
		0
		DLK
		L
		D.4
		Μ
		Ν

0

Ρ

< DTC/CIRCUIT DIAGNOSIS >

DOOR REQUEST SWITCH

Description

Transmits lock/unlock operation to BCM.

Component Function Check

1. CHECK FUNCTION

With CONSULT

Check door request switch REQ SW-DR, REQ SW-AS in Data Monitor mode.

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

Is the inspection result normal?

YES >> Door request switch is OK.

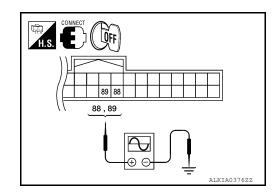
NO >> Refer to <u>DLK-94, "Diagnosis Procedure"</u>.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-167, "Wiring Diagram"</u>.

1. CHECK DOOR REQUEST SWITCH OUTPUT SIGNAL

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

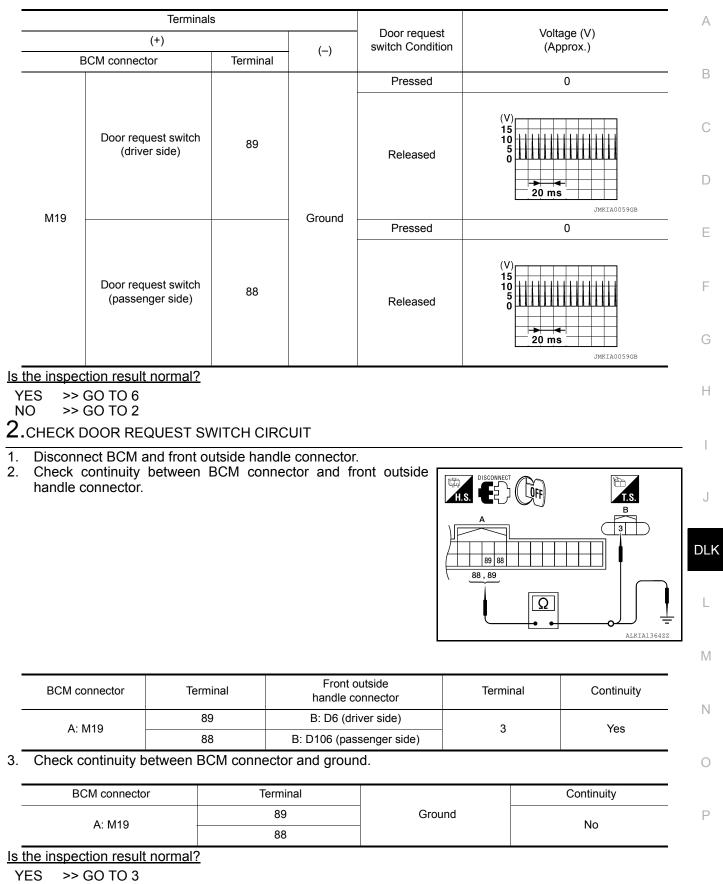


INFOID:000000007421074

INFOID:000000007421075

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

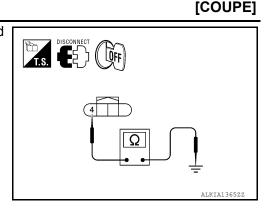


NO >> Repair or replace harness between BCM and front outside handle.

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

< DTC/CIRCUIT DIAGNOSIS >

Check continuity between front outside handle connector and ground.



Front outside handle connector	Terminal	Ground	Continuity
D6 (driver side)	4		Yes
D106 (passenger side)	4		ies

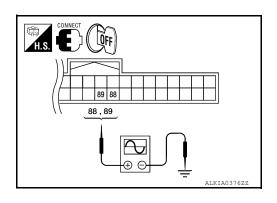
Is the inspection result normal?

YES >> GO TO 4

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

4.CHECK BCM OUTPUT SIGNAL

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



Terminals (+)				
			Voltage (V) (Approx.)	
BCM connector	Terminal	- (-)	(, , , , , , , , , , , , , , , , , , ,	
	89			
M19	88	Ground	(V) 15 10 5 0 20 ms JMKIA0059GB	

Is the inspection result normal?

YES >> GO TO 5

NO >> Replace BCM. Refer to <u>BCS-92, "Removal and Installation"</u>.

5. CHECK DOOR REQUEST SWITCH

Refer to DLK-97, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6

NO

1. CHECK DOOR REQUEST SWITCH

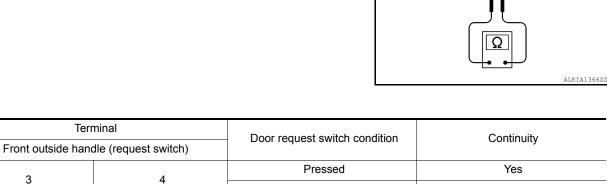
6. CHECK INTERMITTENT INCIDENT Refer to GI-42, "Intermittent Incident".

>> Inspection End.

< DTC/CIRCUIT DIAGNOSIS >

Check front outside handle (request switch).

>> Replace malfunctioning front outside handle.



Released

T.S.

(QFF

No

Is the inspection result normal?

YES >> Inspection End.

3

NO >> Replace malfunction front outside handle.

DLK

L

Μ

Ν

0

Ρ

J

Revision: February 2013

А

В

С

D

Ε

F

Н

< DTC/CIRCUIT DIAGNOSIS >

TRUNK OPENER REQUEST SWITCH

Description

Performs trunk lid open request when it is pressed.

Component Function Check

1. CHECK FUNCTION

With CONSULT

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

Monitor item	Condition
	Trunk opener request switch is pressed : ON
REQ SW -BD/TR	Trunk opener request switch is released : OFF

Is the inspection result normal?

YES >> Trunk opener request switch is OK.

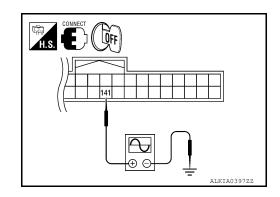
NO >> Refer to <u>DLK-98, "Diagnosis Procedure"</u>.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-167, "Wiring Diagram"</u>.

1. CHECK TRUNK OPENER REQUEST SWITCH OUTPUT SIGNAL

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



	Terminals			
(-	+)	()	(-) Trunk lid opener request Voltage (V) switch condition (Approx.)	Voltage (V) (Approx.)
BCM connector	Terminal			()
			Pressed	0
M21	141	Ground	Released	(V) 15 0 10 10 10 10 10 10 JENIA0016GB

Is the inspection result normal?

YES >> GO TO 6 NO >> GO TO 2 INFOID:000000007421078

INFOID:000000007421079

INFOID-000000007421080

TRUNK OPENER REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

А

В

D

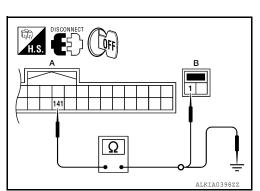
Ε

F

Н

2. CHECK TRUNK OPENER REQUEST SWITCH CIRCUIT

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



BCM connector	Terminal	Trunk opener request switch connector	Terminal	Continuity
A: M21	141	B: T2	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M21	141	- Ground	No

Is the inspection result normal?

YES >> GO TO 3

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

3.check trunk opener request switch ground circuit

Check continuity between trunk opener request switch connector and ground.

Trunk opener request switch connectorTerminalContinuityT22Yes

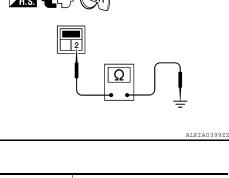
Is the inspection result normal?

YES >> GO TO 4

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

4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.



DLK

L

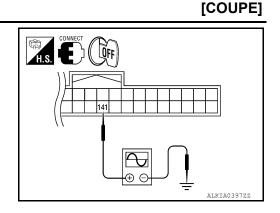
M

Р

TRUNK OPENER REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

2. Check voltage between BCM connector and ground.



	Terminals			
(+)		()	Voltage (V) (Approx.)	
BCM connector	Terminal	- (-)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
M21	141	Ground	(V) 15 10 5 0 10 ms JEMIA0016GB	

Is the inspection result normal?

YES >> GO TO 5

NO >> Replace BCM. Refer to <u>BCS-92. "Removal and Installation"</u>.

5. CHECK TRUNK OPENER REQUEST SWITCH

Refer to DLK-100, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6

NO >> Replace trunk opener request switch.

6.CHECK INTERMITTENT INCIDENT

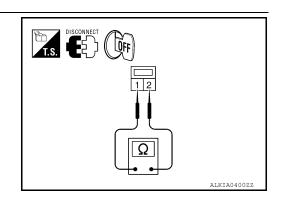
Refer to GI-42. "Intermittent Incident".

>> Inspection End.

Component Inspection

1.CHECK TRUNK OPENER REQUEST SWITCH

Check trunk opener request switch.



TRUNK OPENER REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

	Terminal Trunk opener request switch		Trunk opener request switch condition Continuity		А
			munk opener request switch condition	Continuity	
	1	2	Pressed	Yes	5
I		2	Released	No	В
ls the	inspection resu	Ilt normal?			
YES	>> Inspection	on End.			С

NO >> Replace trunk opener request switch.

DLK

L

Μ

Ν

Ο

Ρ

J

D

Е

F

G

Н

DOOR LOCK ACTUATOR

Revision: February 2013

< DTC/CIRCUIT DIAGNOSIS >

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

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

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

Is the inspection result normal?

YES >> Door lock actuator is OK. >> Refer to DLK-102, "DRIVER SIDE : Diagnosis Procedure". NO

DRIVER SIDE : Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-158, "Wiring Diagram".

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

Terminals				
(+) BCM connector Terminal		(-)	Condition of door lock and unlock switch	Voltage (V) (Approx.)
IVI I /	9	Ground	Unlock	$0 \rightarrow Battery voltage \rightarrow 0$

Is the inspection result normal?

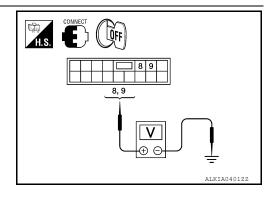
YES >> GO TO 3

NO >> GO TO 2

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.

Disconnect BCM and door lock actuator driver side connector. 2.



INFOID-000000007421082

INFOID:000000007421083

DOOR LOCK ACTUATOR

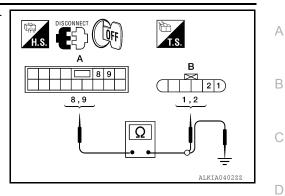
< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

Е

F

3. Check continuity between BCM connector and door lock actuator driver side connector.



BCM connector	Terminal	Door lock actuator con- nector	Terminal	Continuity
A: M17	8	B: D10	1	Yes
A. WI17	9	D. D10	2	163

4. Check continuity between BCM connector and ground.

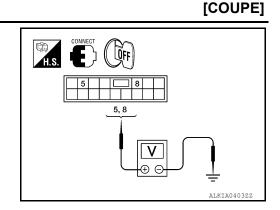
BCM connector	Tern	ninal	Continuity
A: M17	8	Ground	No
the inspection result normal	2		
YES >> Replace door lock	actuator LH.		
NO >> Repair or replace CHECK INTERMITTENT IN			
Refer to GI-42, "Intermittent Inc			
>> Inspection End. PASSENGER SIDE			
PASSENGER SIDE : De	escription		INFOID:000000007421085
ocks/unlocks the door with th	e signal from BCM.		
PASSENGER SIDE : Co	omponent Function	Check	INFOID:00000007421086
.CHECK FUNCTION			
. Use CONSULT to perform . Touch "ALL LOCK" or "ALL			
s the inspection result normal		the works normally.	
YES >> Door lock actuator NO >> Refer to <u>DLK-103.</u>	' is OK. "PASSENGER SIDE : D	liagnosis Procedure".	
PASSENGER SIDE : Di	agnosis Procedure		INFOID:0000000742108
Regarding Wiring Diagram info	ormation, refer to DLK-15	i8, "Wiring Diagram".	
.CHECK DOOR LOCK ACT	UATOR SIGNAL		

1.CHECK DOOR LOCK ACTUATOR SIGNAL

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

Check voltage between BCM connector and ground.



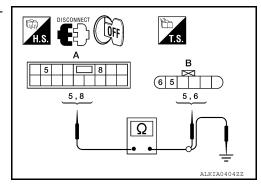
Terminals				
(+)		()	Condition of door lock and unlock switch	Voltage (V) (Approx.)
BCM connector	Terminal	()		
M17	8	Ground	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$
	5	Giodila	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

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



BCM connector	Terminal	Door lock actuator RH connector	Terminal	Continuity
A: M17	8	B: D108	5	Yes
A. WH7	5	B. 0100	6	

3. Check continuity between BCM connector and ground.

BCM connector	Terr	Continuity	
A: M17	8	Ground	No
/ . WH/	5	Cround	110

Is the inspection result normal?

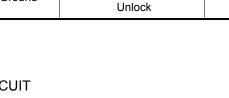
YES >> Replace door lock actuator RH.

NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.



TRUNK LID OPENER ACTUATOR

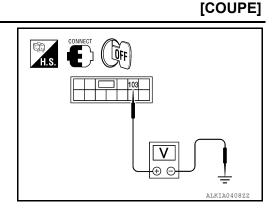
IRUNK LID OPENER ACTUATOR		
< DTC/CIRCUIT DIAGNOSIS >	[COUPE]	
TRUNK LID OPENER ACTUATOR		^
Description	INFOID:000000007421088	A
Performs trunk lid open with signal from BCM.		В
Component Function Check	INFOID:000000007421089	
1. CHECK TRUNK LID OPENER CANCEL SWITCH		С
Check trunk lid opener cancel switch position. <u>Is trunk lid opener cancel switch turned OFF (CANCEL)?</u> Yes >> Turn on trunk lid opener cancel switch. No >> GO TO 2.		D
2.CHECK FUNCTION		Е
 Perform Active Test TRUNK/GLASS HATCH with CONSULT. Touch "OPEN" and check that trunk lid opens. Is the inspection result normal? 		F
YES >> Trunk lid opener actuator is OK. NO >> Refer to <u>DLK-105, "Diagnosis Procedure"</u> .		
Diagnosis Procedure	INFOID:000000007421090	G
Regarding Wiring Diagram information, refer to <u>DLK-183. "Wiring Diagram"</u> .		Η
1.CHECK OUTPUT CIRCUIT		I
 Turn ignition switch OFF. Disconnect trunk lamp switch and trunk release solenoid connector. Check voltage between trunk lamp switch and trunk release 		J
solenoid connector and ground.		DLK
		DLK
		L
	ALKIA1051ZZ	M

Terminals					
(+)	(+)		Condition of trunk lid open-	Voltage (V)	
Trunk lamp switch and trunk release solenoid connector			er switch	(Approx.)	
B28	3	Ground	$OFF \to ON$	$0 \rightarrow Battery \text{ voltage} \rightarrow 0$	
s the inspection result r	normal?				
YES >> GO TO 4 NO >> GO TO 2					
CHECK OUTPUT SI					

TRUNK LID OPENER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

Check voltage between BCM connector and ground.



Terminals				
(+) BCM connector Terminal		()	Condition of trunk lid open- er switch	Voltage (V) (Approx.)

Is the inspection result normal?

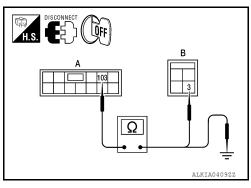
YES >> Repair or replace harness.

NO >> GO TO 3

$\mathbf{3}$.check trunk lid opener actuator circuit

1. Disconnect BCM.

2. Check continuity between BCM connector and trunk lamp switch and trunk release solenoid connector.



BCM connector	Terminal	Trunk lamp switch and trunk re- lease solenoid connector	Terminal	Continuity
A: M20	103	B: B28	3	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terr	Continuity	
A: M20	103	Ground	No

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-92. "Removal and Installation"</u>.

NO >> Repair or replace harness.

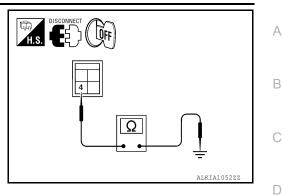
4. CHECK TRUNK LID OPENER GROUND CIRCUIT

TRUNK LID OPENER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

Check continuity between trunk lamp switch and trunk release solenoid connector and ground.



trunk lamp switch and trunk release solenoid connector	Terminal		Continuity
B28	4	Ground	Yes

Is the inspection result normal?

- YES >> Replace trunk lamp switch and trunk release solenoid.
- NO >> Repair or replace harness.

J

DLK

L

Μ

Ν

Ο

Ρ

Е

F

G

Н

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY WARNING BUZZER

Description

Answers back and warns for an inappropriate operation.

Component Function Check

1.CHECK FUNCTION

With CONSULT

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

Is the inspection result normal?

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

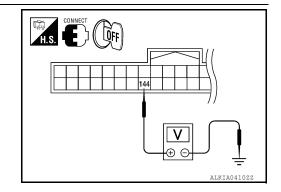
NO >> Refer to <u>DLK-108</u>, "Diagnosis Procedure".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-167, "Wiring Diagram"</u>.

1.CHECK INTELLIGENT KEY WARNING BUZZER

Check voltage between BCM connector and ground.



Terminals				
(+)		()	Warning buzzer opera- tion condition	Voltage (V) (Approx.)
BCM connector	Terminal	()		()))))))))))))))))))
M21	144	Ground	ON	0
			OFF	Battery voltage

Is the inspection result normal?

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

NO >> GO TO 2.

2. CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect Intelligent Key warning buzzer connector.

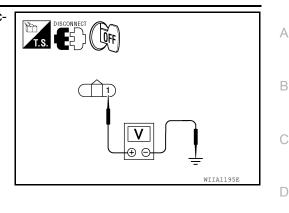
INFOID:000000007421091

INFOID:000000007421092

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

3. Check voltage between Intelligent Key warning buzzer connector and ground.



[COUPE]

Е

F

Н

L

Μ

Ο

Ρ

	Terminals			
(+)		Voltage (V)	
Intelligent Key warning buzzer connector	Terminal	(-)	(Approx.)	
E73	1	Ground	Battery voltage	

Is the inspection result normal?

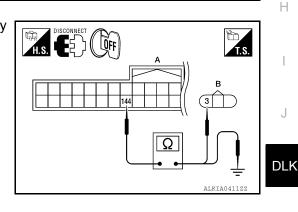
YES >> GO TO 3.

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

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

Disconnect BCM connector. 1.

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



BCM connector	Terminal	Intelligent Key warning buzzer connector	Terminal	Continuity
A: M21	144	B: E73	3	Yes

Check continuity between BCM connector and ground. 3.

-	BCM connector	Terminal	Ground	Continuity	Ν
-	A: M21	144	Clound	No	

Is the inspection result normal?

OK >> GO TO 4.

NG >> Repair or replace harness between BCM and Intelligent Key warning buzzer.

4.CHECK INTELLIGENT KEY WARNING BUZZER

Check DLK-110, "Component Inspection".

Is the inspection result normal?

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

NO >> Replace Intelligent Key warning buzzer.

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

Component Inspection

INFOID:000000007421094

1. CHECK INTELLIGENT KEY WARNING BUZZER

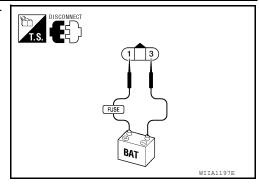
Connect battery power supply to Intelligent Key warning buzzer terminals 1 and 3, and check the operation.

1 (BAT+) - 3 (BAT-)

: the buzzer sounds

Is the inspection result normal?

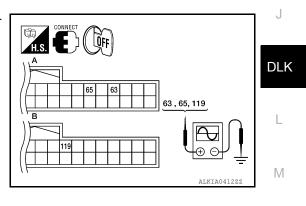
- YES >> Inspection End.
- NO >> Replace Intelligent Key warning buzzer.



< DTC/CIRCUIT DIAGNOSIS >	[COUPE]	
OUTSIDE KEY ANTENNA		А
Description	INFOID:000000007421095	
Detects whether Intelligent Key is outside the vehicle. Integrated in front outside handle (driver side, passenger side) and installed in rear bumper.		В
Component Function Check	INFOID:000000007421096	
1.CHECK DOOR REQUEST SWITCH		С
Check that door request switch operates normally.		D
Is the inspection result normal?		
YES >> GO TO 2. NO >> Inspect door request switch. Refer to <u>DLK-94. "Component Function Check"</u> . 2. CHECK FUNCTION		E
Be sure that Intelligent Key is in each outside key antenna detection range.		F
Does door lock/unlock when each request switch is pressed? YES >> Outside key antenna is OK. NO >> Refer to <u>DLK-111, "Diagnosis Procedure"</u> .		G
Diagnosis Procedure	INFOID:000000007421097	
		Н
Regarding Wiring Diagram information, refer to <u>DLK-167, "Wiring Diagram"</u> .		

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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



Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

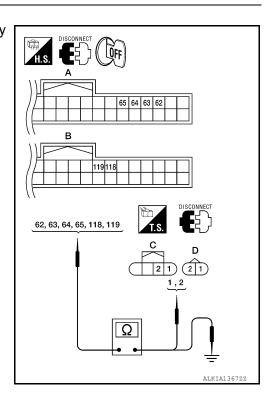
[COUPE]

Image: contract (r) Condition Condition (Reference value.) BCM connector Terminal (-) (Reference value.) Driver side 65 (V) (V) A: M19 Passenger side 63 Request switch is pushed When Intelligent Key is in the antenna detection area. B: M21 Rear bumper 119 Ground Request switch is pushed When Intelligent Key is not in the antenna detection area.		Term	ninals				Oliveral
BCM connector Terminal Terminal Terminal Terminal A: M19 Passenger side 63		(+)		Condition		Signal (Reference value.)	
A: M19 Passenger side 63 Request switch is pushed When Intelligent Key is in the antenna detection area. Image: Comparison of the system of the syst	BCM	connector	Terminal	(-)			, , , , , , , , , , , , , , , , , , ,
A: M19 Passenger side 63		Driver side	65				
B: M21 Rear bumper 119 When Intelligent Key is not in the antenna detection area.	A: M19		63	Ground		is in the antenna de-	
JMKIAUUbUGB	B: M21		119	Cround		is not in the antenna	

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

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

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



< DTC/CIRCUIT DIAGNOSIS >

BCM connector	Terminal	Outside key antenna	connector	Termina	I Continuity
	65	D6 (driver sid	a)	1	
A: M19	64			2	
7.1.1110	63	D106 (passenger	side)	1	Yes
	62	D 100 (passenger	Side)	2	
B: M21	119	B46 (rear bump	er)	1	
D. MET	118	B-10 (real bank		2	
Check continuity b	etween BCM con	nector and ground.			
BCM connecto	or	Terminal			Continuity
		62			
		63			
A: M19		64	G	Ground	
		65			No
_		118			
B: M21		119			
					<u>63</u> , 65, 119

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

Terminals					0.000	
	(+)		()	Condition		Signal (Reference value.)
BCM	connector	Terminal	()			()
	Driver side	65				
A: M19	Passenger side	63	Ground	Door request switch is	When Intelligent Key is in the antenna de- tection area.	(V) 15 10 5 0 1 s JMKIA0061GB
B: M21	Rear bumper	119	Giound	pushed	When Intelligent Key is not in the antenna detection area.	

Is the inspection result normal?

YES >> Replace outside key antenna.

NO >> GO TO 4.

 ${\bf 4.} {\bf CHECK} \text{ INTERMITTENT INCIDENT}$

Refer to GI-42, "Intermittent Incident".

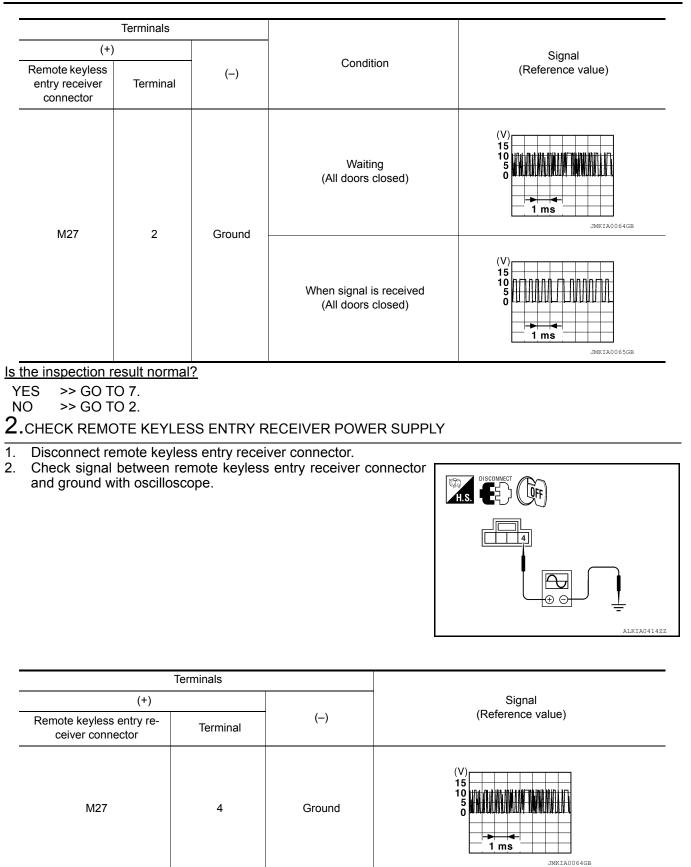
>> Inspection End.

	KETLESS ENTRY RECEIVER	[COUPE]	
< DTC/CIRCUIT DIAGNOSIS > REMOTE KEYLESS ENTRY	RECEIVER		
Description		A	
Receives Intelligent Key operation and tra	ansmits to BCM		
Component Function Check		INFOID:000000007421099	
1.CHECK FUNCTION		С	
With CONSULT			
Check remote keyless entry receiver RKE	OPE COUN1 in Data Monitor mode with CONSULT.	D	
Monitor item	Condition		
RKE OPE COUN1	Checks whether value changes when operating Intelligent Key.	E	
Is the inspection result normal?			
YES >> Remote keyless entry receive NO >> Refer to <u>DLK-115, "Diagnosis</u>		F	
Diagnosis Procedure		INFOID:000000007421100	
		G	
Regarding Wiring Diagram information, re	fer to DLK-167, "Wiring Diagram".		
		Н	
1. CHECK REMOTE KEYLESS ENTRY	RECEIVER OUTPUT SIGNAL		
 Check signal between remote keyles and ground with oscilloscope. 	ss entry receiver connector	1	
		J	
			<
		PIIB6457E	
		Μ	
		Ν	
		IN	
		0	

Ρ

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]



Is the inspection result normal?

YES >> GO TO 4. NO >> GO TO 3.

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

А

В

D

Ε

F

Н

DLK

L

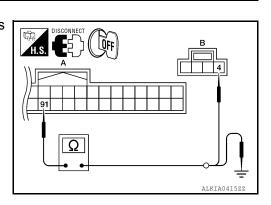
Μ

0

Ρ

3. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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



BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
A: M19	91	B: M27	4	Yes

3. Check continuity between BCM connector and ground.

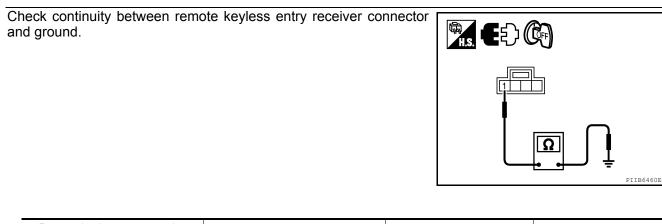
BCM connector	Terminal	Ground	Continuity
A: M19	91	Ground	No

Is the inspection result normal?

YES >> Reconnect BCM, GO TO 4.

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

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT



_	Remote keyless entry receiver connector	Terminal	Ground	Continuity	N
_	M27	1		Yes	IN
					•

Is the inspection result normal?

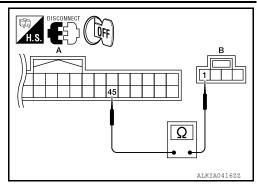
YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

< DTC/CIRCUIT DIAGNOSIS >

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



[COUPE]

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
A: M18	45	B: M27	1	Yes

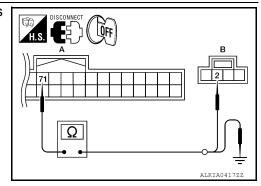
Is the inspection result normal?

YES >> GO TO 7.

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

6.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 3

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



BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
A: M19	71	B: M27	2	Yes

2. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M19	71	Giouna	No

Is the inspection result normal?

YES >> GO TO 7.

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

7. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

INTELLIGENT KEY

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY

Description

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

Door lock/unlock

Trunk open

Remote control entry function and panic alarm function are available when operating the remote buttons.

Component Function Check

1.CHECK FUNCTION

With CONSULT

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

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

Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Refer to <u>DLK-119</u>, "Diagnosis Procedure".

Diagnosis Procedure

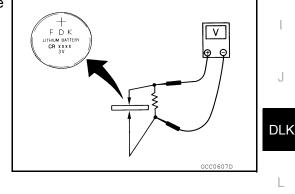
1.CHECK INTELLIGENT KEY BATTERY

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

Standard : Approx. 2.5 - 3.0V

Is the measurement value within specification?

- YES >> GO TO 2.
- NO >> Replace Intelligent Key battery.

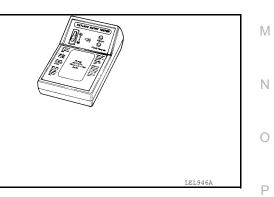


2. CHECK KEYFOB FUNCTION

Check keyfob function using Remote Keyless Entry Tester J-43241. Does the test pass?

YES >> Keyfob is OK.

NO >> Replace keyfob. Refer to CONSULT Immobilizer mode and follow the on-screen instructions.



Component Inspection

INFOID:000000007421104

1. REPLACE INTELLIGENT KEY BATTERY

1. Release the lock knob at the back of the Intelligent Key and remove the mechanical key.

INFOID:000000007421101

INFOID:000000007421102

INFOID:000000007421103

А

В

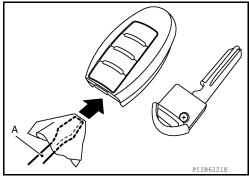
D

Н

INTELLIGENT KEY

< DTC/CIRCUIT DIAGNOSIS >

- Insert a flat-blade screwdriver (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.
 CAUTION:
 - Do not touch the circuit board or battery terminal.
 - The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.



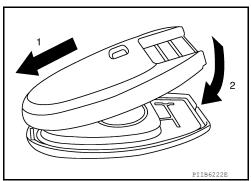
- 3. Replace the battery with new one.
- Align the tips of the upper and lower parts, and then push them together until it is securely closed.
 CAUTION:
 - When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
 - After replacing the battery, check that all Intelligent Key functions work normally.

Is the inspection result normal?

- YES >> Intelligent Key is OK.
- NO >> Check remote keyless entry receiver. Refer to <u>DLK-115.</u> <u>"Component Function Check"</u>.

Special Repair Requirement

Refer to CONSULT Immobilizer mode and follow the on-screen instructions.



INFOID:000000007421105

KEY SLOT ILLUMINATION

RET SLOT ILLUWINATION	
< DTC/CIRCUIT DIAGNOSIS >	[COUPE]
KEY SLOT ILLUMINATION	
Description	INFOID:000000007421106
Blinks when Intelligent Key insertion is required.	
Component Function Check	INFOID:000000007421107
1.CHECK FUNCTION	
With CONSULT Check key slot illumination KEY SLOT ILLUMI in Active Test mode.	
Is the inspection result normal? YES >> Key slot function is OK. NO >> Refer to <u>DLK-121, "Diagnosis Procedure"</u> .	
Diagnosis Procedure	INFOID.000000007421108
Regarding Wiring Diagram information, refer to DLK-167, "Wiring Diagram".	
1. CHECK KEY SLOT ILLUMINATION OUTPUT SIGNAL	
Check voltage between key slot connector and ground.	

	Terminals						
(+	(+)		Condition	Key slot	Voltage (V)		
Key slot connector	Terminal	()		illumination (Approx.)		.)	
M40	6	Cround	Intelligent Key inserted	OFF	Battery voltage	-	
10140) 6 Ground	Intelligent Key removed	ON	0	-		

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2. CHECK KEY SLOT POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect key slot connector.

J

DLK

Ο

Ρ

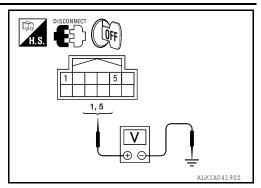
ALKIA0418ZZ

∨ ∋ ∈

KEY SLOT ILLUMINATION

< DTC/CIRCUIT DIAGNOSIS >

3. Check voltage between slot connector and ground.



	Terminals			
(+)		()	Voltage (V) (Approx.)	
Key slot connector	Terminal	- (-)	(. 1. 6. 6	
M40	1	Ground	Pattony voltago	
10140	5	Giouna	Battery voltage	

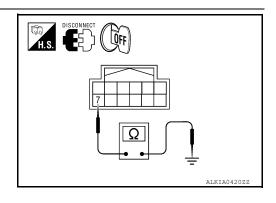
Is the inspection result normal?

YES >> GO TO 3.

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

$\mathbf{3}$. CHECK KEY SLOT GROUND CIRCUIT

Check continuity between key slot connector and ground.



Key s	slot connector	Terminal	Ground	Continuity
	M40	7	Ground	Yes

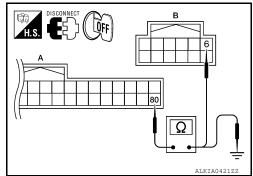
Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace key slot ground circuit.

4.CHECK KEY SLOT CIRCUIT

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



KEY SLOT ILLUMINATION

< DTC/CIRCUIT DIAGNOSIS >

[COUPE]

	BCM connector	Terminal	Key slot connector	Terminal	Continuity
	A: M19	80	B: M40	6	Yes
. (Check continuity bet	ween BCM connecto	or and ground.		
	BCM connector	Term	inal	Ground	Continuity
	A: M19	80)	Ground	No
Reference sthe YES NO	HECK KEY SLOT to <u>DLK-75, "Compo</u> inspection result no >> GO TO 6. >> Replace key	ormal? slot.	en BCM and key s	lot.	
	HECK INTERMITTE				
	>> Inspection E	nd.			

J

DLK

L

Μ

Ν

0

Ρ

HORN FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

HORN FUNCTION

Description

Perform answer-back for each operation with horn.

Component Function Check

1. CHECK FUNCTION

1. Select HORN in "ACTIVE TEST" mode with CONSULT.

2. Check the horn (high/low) operation.

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

Is the operation normal?

YES >> Inspection End. NO >> Go to <u>DLK-124</u>, "Diagnosis Procedure".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-167, "Wiring Diagram"</u>.

1.CHECK HORN FUNCTION

Check horn function with horn switch

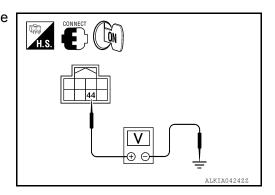
Do the horns sound?

YES >> GO TO 2.

NO >> Go to <u>HRN-4</u>, "Wiring Diagram".

2. CHECK HORN RELAY POWER SUPPLY

- 1. Turn ignition switch ON.
- 2. Perform "ACTIVE TEST" ("HORN") with CONSULT.
- 3. Using an oscilloscope or analog voltmeter, check voltage between horn relay harness connector and ground.



Horr	n relay	Ground		Tastitam	Voltage (V)
Connector	Terminal	Giouna	Test item		(Approx.)
H-1	1	Ground	HORN	ON	Battery voltage $\rightarrow 0 \rightarrow$ Battery voltage
11-1	I I	Ground	HORN	Other than above	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK HORN RELAY CIRCUIT

1. Turn ignition switch OFF.

INFOID:000000007421109

INFOID:000000007421110

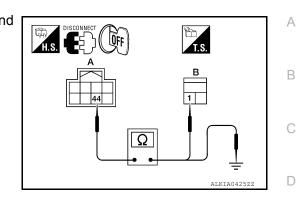
INFOID:000000007421111

HORN FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

2. Disconnect IPDM E/R and horn relay connector.

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



IPDM E/R		Horn relay		Continuity	
Connector	Terminal	Connector	Terminal	Terminal	
A: E17	44	B: H-1	1	Yes	

4. Check continuity between IPDM E/R harness connector and ground.

	IPDM E/R		Ground	Continuity	0
	Connector	Terminal	Giouna	Continuity	G
	A: E17	44	Ground	No	
<u>Is the i</u>	nspection result norma	l?			Н
YES	>> GO TO 4.				
NO	>> Repair or replace	harness.			
4. сні	4. CHECK INTERMITTENT INCIDENT				

Refer to GI-42, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-45, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

L

Μ

Ν

Ο

Ρ

J

Е

F

COMBINATION METER DISPLAY FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION METER DISPLAY FUNCTION

Description

Displays each operation method guide and warning for system malfunction.

Component Function Check

1.CHECK FUNCTION

With CONSULT

Check the operation with ("LCD") in the Active Test.

Is each warning displayed on meter display?

Is the inspection result normal?

YES >> Meter display is OK.

NO >> Refer to <u>DLK-126</u>, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK COMBINATION METER

Refer to MWI-47, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check combination meter. Refer to <u>MWI-8</u>, "<u>METER SYSTEM</u> : <u>Component Description</u>".

2. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

[COUPE]

INFOID:000000007421112

INFOID:000000007421113

INFOID:000000007421114

WARNING CHIME FUNCTION

WARNING CHIME FUNCTION	
< DTC/CIRCUIT DIAGNOSIS >	[COUPE]
WARNING CHIME FUNCTION	A
Description	INFOID:000000007421115
Performs operation method guide and warning with buzzer.	В
Component Function Check	INFOID:000000007421116
1.CHECK FUNCTION	С
 With CONSULT Check the operation with "INSIDE BUZZER" in the Active Test. Touch "TAKE OUT", "KNOB" or "KEY" on screen. 	D
<u>Is the inspection result normal?</u> YES >> Warning buzzer into combination meter is OK. NO >> Refer to <u>DLK-127, "Diagnosis Procedure"</u> .	E
Diagnosis Procedure	INFOID:000000007421117
1. CHECK METER BUZZER CIRCUIT	F
Refer to <u>WCS-18</u> , "Component Function Check".	
<u>Is the inspection result normal?</u> YES >> GO TO 2.	G
NO >> Replace combination meter. Refer to <u>MWI-139, "Removal and Installation"</u> . 2.CHECK INTERMITTENT INCIDENT	Н
Refer to <u>GI-42, "Intermittent Incident"</u> .	
	I
>> Inspection End.	
	J
	DL
	L
	Μ
	Ν
	0
	Р

HAZARD FUNCTION

< DTC/CIRCUIT DIAGNOSIS > 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. >> Refer to <u>DLK-128, "Diagnosis Procedure"</u>. NO **Diagnosis** Procedure

1. CHECK HAZARD SWITCH CIRCUIT

Operate the hazard lights by turning ON the hazard warning switch.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace hazard warning switch circuit.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

INFOID:000000007421118

INFOID:000000007421119

INFOID:000000007421120

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status	
	Other than front wiper switch HI	OFF	-
FR WIPER HI	Front wiper switch HI	ON	D
	Other than front wiper switch LO	OFF	-
FR WIPER LOW	Front wiper switch LO	ON	_
	Front washer switch OFF	OFF	
FR WASHER SW	Front washer switch ON	ON	-
	Other than front wiper switch INT	OFF	F
FR WIPER INT	Front wiper switch INT	ON	-
	Front wiper is not in STOP position	OFF	-
FR WIPER STOP	Front wiper is in STOP position	ON	G
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 6	Wiper intermittent dial position	-
	Other than turn signal switch RH	OFF	Н
TURN SIGNAL R	Turn signal switch RH	ON	-
	Other than turn signal switch LH	OFF	-
TURN SIGNAL L	Turn signal switch LH	ON	
	Other than lighting switch 1ST and 2ND	OFF	-
TAIL LAMP SW	Lighting switch 1ST or 2ND	ON	- .
	Other than lighting switch HI	OFF	
HI BEAM SW	Lighting switch HI	ON	-
	Other than lighting switch 2ND	OFF	DLk
HEAD LAMP SW 1	Lighting switch 2ND	ON	-
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF	
HEAD LAIVIP SVV 2	Lighting switch 2ND	ON	- L
	Other than lighting switch PASS	OFF	-
PASSING SW	Lighting switch PASS	ON	M
	Other than lighting switch AUTO	OFF	-
AUTO LIGHT SW	Lighting switch AUTO	ON	-
FR FOG SW	Front fog lamp switch OFF	OFF	N
FR FUG SW	Front fog lamp switch ON	ON	-
	Driver door closed	OFF	0
DOOR SW-DR	Driver door opened	ON	-
	Passenger door closed	OFF	=
DOOR SW-AS	Passenger door opened	ON	P
	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	-

INFOID:000000007630663

А

< ECU DIAGNOSIS INFORMATION >

[COUPE]

Monitor Item	Condition	Value/Status
	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
	When hazard switch is not pressed	OFF
HAZARD SW	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
FAN ON SIG	When AUTO switch or fan switch is pressed	ON
AIR COND SW	When A/C switch is pressed	ON
	Trunk lid opener cancel switch OFF	OFF
TR CANCEL SW	Trunk lid opener cancel switch ON	ON
	Trunk lid opener switch OFF	OFF
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	ON
	Trunk lid closed	OFF
TRNK/HAT MNTR	Trunk lid opened	ON
	When LOCK button of Intelligent Key is not pressed	OFF
RKE-LOCK	When LOCK button of Intelligent Key is pressed	ON
	When UNLOCK button of Intelligent Key is not pressed	OFF
RKE-UNLOCK	When UNLOCK button of Intelligent Key is pressed	ON
	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is pressed	ON
	When PANIC button of Intelligent Key is not pressed	OFF
RKE-PANIC	When PANIC button of Intelligent Key is pressed	ON
	When UNLOCK button of Intelligent Key is not pressed and held	OFF
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
RRE-WODE CHG	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V
OPTICAL SENSOR	When outside of the vehicle is dark	Close to 0 V
	When driver door request switch is not pressed	OFF
REQ SW-DR	When driver door request switch is pressed	ON
	When passenger door request switch is not pressed	OFF
REQ SW-AS	When passenger door request switch is pressed	ON
	When trunk request switch is not pressed	OFF
REQ SW-BD/TR	When trunk request switch is pressed	ON
	When engine switch (push switch) is not pressed	OFF
PUSH SW	When engine switch (push switch) is pressed	ON
	Ignition switch OFF or ACC	OFF
IGN RLY -F/B	Ignition switch ON	ON

Revision: February 2013

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
	Ignition switch OFF	OFF
ACC RLY -F/B	Ignition switch ACC or ON	ON
	When the clutch pedal is not depressed	OFF
CLUTCH SW	When the clutch pedal is depressed	ON
BRAKE SW 1	When the brake pedal is not depressed	ON
BRAKE SW 1	When the brake pedal is depressed	OFF
	When selector lever is in P position	OFF
DETE/CANCL SW	When selector lever is in any position other than P	ON
	When selector lever is in any position other than P or N	OFF
SFT PN/N SW	When selector lever is in P or N position	ON
	Electronic steering column lock LOCK status	OFF
S/L -LOCK	Electronic steering column lock UNLOCK status	ON
	Electronic steering column lock UNLOCK status	OFF
S/L -UNLOCK	Electronic steering column lock LOCK status	ON
	Ignition switch OFF or ACC	OFF
S/L RELAY-F/B	Ignition switch ON	ON
	Driver door UNLOCK status	OFF
UNLK SEN-DR	Driver door LOCK status	ON
PUSH SW -IPDM	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON
	Ignition switch OFF or ACC	OFF
GN RLY1 F/B	Ignition switch ON	ON
	When selector lever is in P position	OFF
DETE SW -IPDM	When selector lever is in any position other than P	ON
	When selector lever is in any position other than P or N	OFF
SFT PN -IPDM	When selector lever is in P or N position	ON
	When selector lever is in any position other than P	OFF
SFT P -MET	When selector lever is in P position	ON
	When selector lever is in any position other than N	OFF
SFT N -MET	When selector lever is in N position	ON
	Engine stopped	STOP
	While the engine stalls	STALL
ENGINE STATE	At engine cranking	CRANK
	Engine running	RUN
0 1 1 0 0 1 1 5 5 5	Electronic steering column lock LOCK status	OFF
S/L LOCK-IPDM	Electronic steering column lock UNLOCK status	ON
	Electronic steering column lock UNLOCK status	OFF
S/L UNLCK-IPDM	Electronic steering column lock LOCK status	ON
	Ignition switch OFF or ACC	OFF
S/L RELAY-REQ	Ignition switch ON	ON
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading

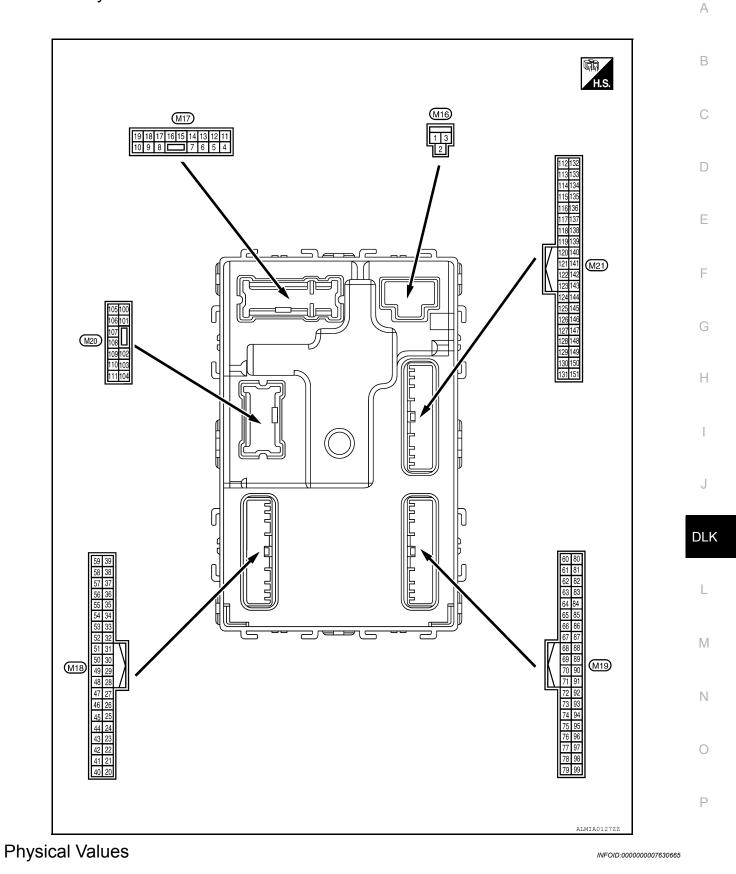
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
	Driver door LOCK status	LOCK
DR DOOR STATE	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
	Passenger door LOCK status	LOCK
AS DOOR STATE	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
	Ignition switch ACC or ON	RESET
ID OK FLAG	Ignition switch OFF	SET
PRMT ENG STAT	When the engine start is prohibited	RESET
PRIVIT ENG STAT	When the engine start is permitted	SET
	When Intelligent Key is not inserted into key slot	OFF
KEY SW -SLOT	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
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
	When ID of front LH tire transmitter is registered	DONE
ID REGST FL1	When ID of front LH tire transmitter is not registered	YET
	When ID of front RH tire transmitter is registered	DONE
ID REGST FR1	When ID of front RH tire transmitter is not registered	YET
	When ID of rear RH tire transmitter is registered	DONE
ID REGST RR1	When ID of rear RH tire transmitter is not registered	YET
	When ID of rear LH tire transmitter is registered	DONE
ID REGST RL1	When ID of rear LH tire transmitter is not registered	YET
	Tire pressure indicator OFF	OFF
WARNING LAMP	Tire pressure indicator ON	ON

< ECU DIAGNOSIS INFORMATION >

Terminal Layout





< ECU DIAGNOSIS INFORMATION >

	inal No.	Description		Condition		Value
(+)	e color) (-)	Signal name	Input/ Output			(Approx.)
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OFI	F	Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4	Ground	Interior room lamp	Output	After passing the in er operation time	terior room lamp battery sav-	0V
(P/W)	Cround	power supply	output	Any other time after lamp battery saver	er passing the interior room operation time	Battery voltage
5	Ground	Front door RH UN-	Output	Front door RH	UNLOCK (actuator is activated)	Battery voltage
(G/Y)	Cround	LOCK	Output		Other than UNLOCK (actuator is not activated)	0V
7	Ground	Step lamp	Output	Step lamp	ON	0V
(R/W)	Giouna		Output	Step lamp	OFF	Battery voltage
8 (V) Ground	d All doors LOCK	Output	All doors	LOCK (actuator is activat- ed)	Battery voltage	
	Ground	All doors LOCK	Output		Other than LOCK (actuator is not activated)	٥V
9	Ground	round Front door LH UN- LOCK	Output	Output Front door LH	UNLOCK (actuator is activated)	Battery voltage
(G)	Cround				Other than UNLOCK (actu- ator is not activated)	0V
10 ¹	Ground	Rear door RH and rear door LH UN-	Output	Rear door RH	UNLOCK (actuator is activated)	Battery voltage
(G/Y)	0.00.00	LOCK	Capat	and rear door LH	Other than UNLOCK (actuator is not activated)	0V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OFI	F	Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0V
					OFF	0V
14 ¹ (O/W)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position

< ECU DIAGNOSIS INFORMATION >

Terminal No. Description				Valua		
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)
					OFF	0V
14 ⁸ (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position (V) 10 0 2 ms JSNIA0010CB
15	Ground	ACC indicator lamp	Outout	Ignition owitch	OFF	Battery voltage
(Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	ACC	0V
					Turn signal switch OFF	0V
17 (G/B)	Ground	Turn signal (RH)	Output	lgnition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
					Turn signal switch OFF	0V
18 (G/Y)	Ground	Turn signal (LH)	Output	lgnition switch ON	Turn signal switch LH	
19		Room lamp timer		Interior room	OFF	Battery voltage
(Y)	Ground	control	Output	lamp	ON	0V
21	Ground	Optical sensor signal	Input	Ignition switch	When outside of the vehi- cle is bright	Close to 5V
(P/B)			,	ON	When outside of the vehi- cle is dark	Close to 0V
22 ²	Ground	Clutch interlock	Input	Clutch interlock	OFF (clutch pedal is not depressed)	0V
(R/Y)		switch	1	switch	ON (clutch pedal is de- pressed)	Battery voltage
24 (R/W)	Ground	Stop lamp switch 1	Input		_	Battery voltage
26	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not de- pressed)	0V
(O/L)	C. Gund		mput	Stop tomp ownon	ON (brake pedal is de- pressed)	Battery voltage

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
(Wire (+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)
27 (G/W)	Ground	Front door lock as- sembly LH (unlock sensor)	Input	Front door LH	LOCK status	(V) 15 10 10 10 ms JPMIA0011GB 11.8V
					UNLOCK status	0V
29	Cround	Kay alat awitah	البيصصا	When Intelligent K	ey is inserted into key slot	Battery voltage
(Y)	Ground	Key slot switch	Input	When Intelligent K	ey is not inserted into key slot	0V
30	Oraciand		la a st	leveitien er itek	OFF	0
(V/Y)	Ground	ACC feedback signal	Input	Ignition switch	ACC or ON	Battery voltage
31	Ground	Rear window defog-	المحمد	Rear window de-	OFF	0V
(G)	Ground	ger feedback signal	Input	fogger switch	ON	Battery voltage
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	(V) 15 0 10 10 10 10 11.8 V
					ON (when front door RH opens)	0V
33 (SB)	Ground	Compressor ON sig- nal	Input	A/C switch	OFF ON	9V - 12V 0V
34 ³ (L/R)	Ground	Front door lock as- sembly LH (key cylin- der switch) (unlock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral) ON (unlock)	Battery voltage 0V
36 ³	Oraciand	l a als assittable airmeal	la a st	Door lock/unlock	Lock	Battery voltage
(GR)	Ground	Lock switch signal	Input	switch	Unlock	0V
37 (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid opener cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1V
					ON	0V
38					OFF	Battery voltage
(GR/ W)	Ground	Rear window defog- ger ON signal	Input	Rear window de- fogger switch	ON	0V
39 ³				Door lock/unlock	Unlock	Battery voltage
(GR/ R)	Ground	Unlock switch signal	Input	switch	Lock	0V

< ECU DIAGNOSIS INFORMATION >

Write color) Signal name Input/ Output Condition Value (Approx.) 40 ⁴ (Y/G) Ground Power window serial link Input/ Output Ignition switch ON Ignition switch ON Ignition switch OF or ACC OV 41 (W) Ground Engine switch (push switch) illumination Output Engine switch (push switch) illumination ON 5.5V 42 (R) Ground LOCK indicator lamp ground Output Ignition switch ON OV OV 44 (P) Ground LOCK indicator lamp ground Output Ignition switch ON OV OV 45 (P) Ground Receiver & sensor ground Input Ignition switch ON OV OV 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch ON OFF OV 47 (G/C) Ground Tre pressure receiv- er signal Input/ Output Ignition switch ON Standby state Imput/ Ground <	scription	
(+) (-) (amo Input/ Condition (Approx.)	A
$ \begin{array}{c c c c c c c } \hline \begin{array}{c} 40^{4} \\ (Y/G) \\ (Y/G) \\ \hline \end{array} \end{array} \begin{array}{c} Ground \\ Power window serial \\ link \end{array} & \begin{array}{c} Input \\ Unput \\ \hline \end{array} \end{array} \begin{array}{c} Ignition switch ON \\ \hline \end{array} \end{array} \begin{array}{c} Ignition switch OFF or ACC \\ \hline \end{array} $ \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \hline \end{array} \hline \end{array} \\ \hline \end{array} \hline \end{array} \\ \hline \end{array} \hline \end{array} \\ \hline \end{array} \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \hline \end{array} \hline \end{array} \\ \hline \end{array} \\ \end{array} \\ \\ \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \end{array} \\ \\ \end{array} \\ \end{array} \\ \\ \\ \\ \\ \hline \end{array} \\ \\ \end{array} \\ \hline \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \hline \end{array} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \\ \end{array} \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \\ \end{array} \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \end{array} \\ \\ \\ \end{array} \\ \\ \\ \end{array} \\ \\ \end{array} \\ \\ \\ \end{array} \\ \\ \end{array} \\ \\ \\ \\	Output	
41 (W) Ground Engine switch (push switch) illumination Output Engine switch (push switch) illu- mination ON 5.5V 42 (R) Ground LOCK indicator lamp Output LOCK indicator lamp ON OV 45 (P) Ground Receiver & sensor ground Input Ignition switch ON OV OV 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF OV 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF OV 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF OV 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Standby state (V) (V) 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON When receiving the signal from the transmitter (V)	w serial Input/ Output Ignition switch ON	B C 13gb D
41 (W) Ground Engine switch (push switch) illumination Output mination (push switch) illumination OFF 0V 42 (R) Ground LOCK indicator lamp Output LOCK indicator lamp ON 0V 45 (P) Ground Receiver & sensor ground Input Ignition switch ON 0V 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF 0V 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF 0V 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF 0V 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Standby state Imput/ Standby state Imput/ Output Imput/ Output Imput/ ON Imput/ ON When receiving the signal from the transmitter Imput/ Output Imput/ Output Imput/ ON Imput/ Output Imput/ ON Imput/ ON Imput/ OUtput Imput/ ON Imput/ OUtput Imput/ ON Imput/ OUtput Imput/ ON Imput/ OUtput Imput/ OUtput Imput/ OUtput	Ignition switch OFF or ACC 0V	
(W) switch) illumination or mination OFF OV 42 (R) Ground LOCK indicator lamp Output LOCK indicator lamp ON OV 45 (P) Ground Receiver & sensor ground Input Ignition switch ON OV OV 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF OV 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF OV 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF OV 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Standby state Imput/ Output Standby state Imput/ Output Imput/ Output Imput/ ON When receiving the signal from the transmitter Imput/ Output When receiving the signal from the transmitter Imput/ Output Imput/ Output	n (push Output (push switch) illu	E
(R) Ground LOCK indicator lamp Output Lock indicator lamp Output Lock indicator lamp OFF Battery voltage 45 (P) Ground Receiver & sensor ground Input Ignition switch ON 0V 0V 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch 0FF 0V 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Standby state (V) (V) 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Standby state (V) (V) 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON When receiving the signal from the transmitter (V) (V)		
(K) Imp OFF Battery voltage 45 (P) Ground Receiver & sensor ground Input Ignition switch ON 0V 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF 0V 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF 0V 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Standby state Ignition switch OV 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON When receiving the signal from the transmitter Imput/ o	tor lamp Output Doort indicator	
(P) Ground ground input ignition switch ON OV 46 (V/W) Ground Receiver & sensor power supply output Output Ignition switch OFF OV 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Standby state Imput/ 4 Standby state Imput/ 4 Imput/ 4 Imput/ 0 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Imput/ ON Ignition switch ON Imput/ Imput/ Imput/ Output Imput/ Imput/ ON Imput/ Imput	OFF Battery voltage	F
47 (G/O) Ground Free ressure receiv- er signal Input/ Output Ignition switch 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Standby state Imput/ Output Imput/ Output 47 (G/O) Ground Tire pressure receiv- er signal Input/ Output Ignition switch ON Imput/ ON Imput/ ON Imput/ ON	ensor Input Ignition switch ON 0V	0
(V/W) power supply output ACC or ON 5.0V ACC or ON 5.0V ACC or ON 5.0V ACC or ON 5.0V	Output Ignition switch	G
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	ACC or ON 5.0V	
(G/O) er signal Output ON When receiving the signal from the transmitter	e receiv- Input/ Ignition switch	H I J
OCC3880D	When receiving the signal from the transmitter	
48 Ground Selector lever P/N Input Selector lever P/N 2.0V	P or N position 12.0V	
(R/G) position signal Except P and N positions 0V	al Except P and N positions 0V	
ON 0V	ON 0V	N
49 (L/O) Ground Security indicator signal Output Security indicator Blinking 49 (L/O) Ground Security indicator Blinking	Cator sig- Output Security indicator Blinking	О 14GB
OFF Battery voltage	OFF Battery voltage	

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)
50 (LG/ B)	Ground	Combination switch OUTPUT 5	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Lighting switch 1ST Lighting switch high-beam Lighting switch 2ND Turn signal switch RH	OV
51 (L/W)	Ground	Combination switch OUTPUT 1	Input	Combination switch	All switch OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	0V (V) 15 0 2 ms JPMIA0032GB 10.7V
52 (G/B)	Ground	Combination switch OUTPUT 2	Input	Combination switch	All switch OFF (Wiper intermittent dial 4) Front washer switch ON (Wiper intermittent dial 4) Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 5 • Wiper intermittent dial 6	0V (V) 15 0 2 ms JPMIA0033GB 10.7V
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Front wiper switch INT Front wiper switch LO Lighting switch AUTO	OV
54 (G/Y)	Ground	Combination switch OUTPUT 4	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Front fog lamp switch ON Lighting switch 2ND Lighting switch flash-to- pass Turn signal switch LH	0V
55 (BR/ W)	Ground	Front blower monitor	Input	Front blower mo- tor switch	ON OFF	Battery voltage 0V

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
	e color)	Signal name	Input/		Condition	Value (Approx.)	A
(+)	(-)	Front door lock as-	Output	Front door lock	OFF (neutral)	Patton waltaga	
56 ³ (L/B)	Ground	sembly LH (key cylin- der switch) (lock)	Input	assembly LH (key cylinder switch)	OFF (neutral) ON (lock)	Battery voltage 0V	В
57 (W)	Ground	Tire pressure warn- ing check switch	Input			Battery voltage	С
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	(V) 15 0 0 10 ms 10 ms JPMIA0011GB 11.8V	D
					ON (front door LH OPEN)	0V	F
59	Ground	Rear window defog-	Output	Rear window de-	Active	Battery voltage	
(G/R)	Crodina	ger relay	Output	fogger	Not activated	0V	G
					When Intelligent Key is in the passenger compart- ment	(V) 15 0 15 0 15 0 15 15 0 15 15 15 15 15 15 15 15 15 15 15 15 15	H
60 (B/R)	Ground	Front console anten- na 2 (-)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB	J DLK L
61	Cround	Center console an-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	M
61 Groui (W/R)	Ground	tenna 2 (+)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s 0 1 s 0 0 0 1 s 0 0 0 1 s 0 0 0 1 s 0 0 1 s 0 0 1 s 0 1 s 1 s 1 s 1 s 1 s 1 s 1 s 1 s 1 s 1 s	P

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
(+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)
62		Front outside handle		When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 0 0 1 s JMKIA0062GB
(B/Y) Ground		RH antenna (-)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s 0 1 s JMKIA0063GB
63	Ground	Front outside handle	Output	When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 0 0 1 s JMKIA0062GB
(LG)		RH antenna (+)		switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB
64	Ground	Front outside handle	Output	When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 0 5 0 15 0 15 0 15 0 15 0 15 0 15 0
64 (V)		LH antenna (-)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS INFORMATION >

[COUPE]

Terminal No. (Wire color)		Description				Value	
(Wire (+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)	
65		Front outside handle		When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0062GB	C
65 (P)	Ground	LH antenna (+)	Output	door LH request switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB	F
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	(-
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	ŀ
70 (R/B)	Ground	Ignition relay-2 con- trol	Output	Ignition switch	OFF or ACC ON	0V Battery voltage	
71	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting		(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J
(L/O)				When operating e	ither button on Intelligent Key	(V) 15 10 5 0 1 1 ms JMKIA0055GB	N
						decoortine	

Ρ

< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description				Value	
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)	
					All switch OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JEMIA00416B 1.4V	
75 (R/Y)	Ground	Combination switch INPUT 5	Output	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 0 2 ms JENIA0037GB 1.3V	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 0 2 ms JEMIA0040GB 1.3V	

< ECU DIAGNOSIS INFORMATION >

Wire color) Signal name Input/ Output Condition Value (Approx.) (*) (-) Signal name Input/ Output Condition (*) (*) (*) (-) Signal name Input/ Output (*) (*) (*) (*) (-) Signal name Input/ Output (*) (*) (*) (*) (-) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) (*	A .
76 (R/G) Ground Combination switch INPUT 3 Output Combination switch Combina	A
76 (R/G) Ground Combination switch INPUT 3 Output Combination switch Combination switch Combination switch Lighting switch 2ND (Wiper intermittent dial 4) Uput 13 Combination switch Lighting switch 2ND (Wiper intermittent dial 4) Image: Combination switch 1.3V Any of the conditions below with all switch OFF • Wiper intermittent dial 1 Image: Combination switch 1.3V Image: Combination switch 1.3V	B C B D
(R/G) Ground INPUT 3 Output switch Lighting switch 2ND (Wiper intermittent dial 4)	E F
Wiper intermittent dial 1	H B
Wiper intermittent dial 3	J DL B
77 Ensine quiteb (queb Ensine quiteb Pressed OV	
(BR) Ground Switch (push switch) Input Input (push switch) Not pressed Battery voltage	M
78 (P) Ground CAN-L Input/ Output	1 4 1
79 (L) Ground CAN-H Input/ Output — —	N
80 (R/L) Ground Key slot illumination Output Key slot illumina- tion OFF OV 80 (R/L) Ground Key slot illumina- tion Blinking Image: Comparison of the second of the	P
ON Battery voltage	

< ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value
(VVire (+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)
81		ON indiactor lamp		Institute autitab	OFF or ACC	Battery voltage
(LG)	Ground	ON indicator lamp	Output	Ignition switch	ON	0V
83	Ground	ACC relay-1 control	Output	Ignition switch	OFF	0V
(L)		,		5	ACC or ON	Battery voltage
84 ⁵ (Y/R)	Ground	CVT shift selector	Output		_	Battery voltage
85	Ground	Electronic steering column lock condition No. 1	Input	Electronic steer- ing column lock	Lock status	0V
(L/O)			Input		Unlock status	Battery voltage
86	Ground	Electronic steering	Input	Electronic steer-	Lock status	Battery voltage
(G/R)		column lock condition No. 2	input	ing column lock	Unlock status	0V
87 ⁵	Ground	Selector lever P posi-	Input	Selector lever	P position	0V
(G/B)	e.eaa	tion switch	mpar		Any position other than P	Battery voltage
					ON (pressed)	0V
88 (P/L)	Ground	Front door RH re- quest switch	Input	Front door RH re- quest switch	OFF (not pressed)	(V) 15 10 10 10 ms JPMIA0016GB 1.0V
	Ground	Front door LH re- quest switch	Input	Front door LH re- quest switch	ON (pressed)	0V
89 (B/W)					OFF (not pressed)	(V) 15 0 10 10 10 ms JPMIA0016GB
90	Cround	Blower fan motor re-	Output		OFF or ACC	1.0V 0V
(Y)	Ground	lay control	Output	Ignition switch	ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OFF		Battery voltage
94	Ground	Electronic steering d column lock power supply	Output	Ignition switch	OFF or ACC	Battery voltage
(G/Y)					ON	0V

< ECU DIAGNOSIS INFORMATION >

[COUPE]

Terminal No		Description				Value	
(Wire color (+) (-		Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF	(V) 15 0 2 ms JEFILADO41GB 1.4V	
					Turn signal switch LH	(V) 15 0 2 ms JPMIA0037GB 1.3V	
95 Grou (R/W)	und Comt INPU	bination switch T 1	Output	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 0 2 ms 2 ms JPMIA0036GB 1.3V	
				Front wiper switch LO	(V) 15 0 2 ms JEMIA0038GB 1.3V		
					Front washer switch ON	(V) 15 0 2 ms JEMIA0039GB	

Ρ

< ECU DIAGNOSIS INFORMATION >

	iinal No. e color)	Description		Condition		Value
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4V
96	Ground	und Combination switch INPUT 4 Output		Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0038GB 1.3V
(P/B)	(P/B)		switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3V	
				Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 0 2 ms JPMIA0039GB 1.3V	

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)	A
					All switch OFF	(V) 15 10 2 ms JPMIA0041GB 1.4V	B C D
					Lighting switch flash-to- pass	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3V	E
97 (R/B)	Ground	Combination switch INPUT 2	Output	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 0 2 ms JPMIA0036GB 1.3V	G H
					Front wiper switch INT	(V) 15 10 0 2 ms JPMIA0038GB 1.3V	J DLK
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB	M
					Pressed	1.3V 0 V	0
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Not pressed	(V) 15 0 10 10 10 10 10 10 10 10 10 10 10 10 1	Ρ

< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description		0		Value	
(+)	(-)	Signal name	Input/ Output	Condition		(Approx.)	
					LOCK status	Battery voltage	
99 (L/Y)	Ground	Electronic steering column lock unit com- munication	Input/ Output	Electronic steer- ing column lock	LOCK or UNLOCK	(V) 15 0 50 50 50 JMKIA0066GB	
					For 15 seconds after UN- LOCK	Battery voltage	
					15 seconds or later after UNLOCK	٥V	
103	Ground	nd Trunk lid opening	Output	Trunk lid	Open (trunk lid opener ac- tuator is activated)	Battery voltage	
(V)	(V) Ground		Output		Close (trunk lid opener ac- tuator is not activated)	٥V	
110	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V	
(V/W)	0.00.00		o alpar		OFF	Battery voltage	
114	Ground	Ground Trunk room antenna Output Ignition switch	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0062GB		
(B)	Ground		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s 1 5 0 1 s 15 10 5 0 1 s 10 5 0 1 s 10 5 0 1 s 10 5 0 1 s 10 5 0 1 s 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 5 0 10 10 10 10 10 10 10 10 10 10 10 10 1		

< ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Mahaa	
(Wire (+)	e color) (-)	Signal name	Input/ Output	-	Condition	Value (Approx.)	A
115	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKTA0062GB	B C D
(W)	Ground	1 (+)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 0 1 s JMKIA0063GB	E
118	Ground	Rear bumper anten-		When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 0 15 0 15 0 15 15 15 15 15 15 15 15 15 15	G H
(L/O)			is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB	J DLK	
119 (BR/	Ground	Rear bumper anten-	Output	When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 0 0 1 s 0 JMKIA0062GB	M
(Bro W)	(BR/ GIOUIIU	na (+) Outp		is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 1 1 1 1 1 1 1 3 JMKIA0063GB	O P

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
(vvire (+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)
127		Ignition relay (IPDM		OFF or ACC	Battery voltage	
(BR/ W)	Ground	E/R) control	Output	Ignition switch	ON	0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8V
					ON (trunk is open)	0V
				Ignition switch OFF (M/T vehi-	When the clutch pedal is depressed	Battery voltage
				cle)	When the clutch pedal is not depressed	0V
132 (R)	Ground	ound Starter motor relay control	Output	Ignition switch ON (other than M/ T vehicle)	When selector lever is in P or N position and the brake is depressed	Battery voltage
					When selector lever is in P or N position and the brake is not depressed	0V
					ON (pressed)	0V
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	OFF (not pressed)	(V) 15 10 5 10 10 ms JPMIA0016GB 1.0V
144	Ground	Request switch buzz-	Output	Request switch	Sounding	0V
(GR)		er		buzzer	Not sounding	Battery voltage
147	Ground	Trunk lid opener	Input	Trunk lid opener	Pressed	0V
(L/R)		switch		switch	Not pressed	Battery voltage
148 ¹ (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	(V) 15 0 5 0 10 ms JPMIA0011GB 11.8V
					ON (when rear door RH opens)	0V

< ECU DIAGNOSIS INFORMATION >

[COUPE]

F

Н

INFOID:000000007630666

	inal No.	Description				Value	
(Wire (+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)	A
149 ¹ (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	(V) 15 10 5 0 •••••••••••••••••••••••••••••	E
						JPMIA0011GB 11.8V	E
					ON (when rear door LH opens)	0V	

1: Sedan only

2: M/T only

3: With LH front window anti-pinch

4: With LH and RH front window anti-pinch.

5: CVT only

6: With auto lights

7: With low tire pressure warning system

8: Coupe only

Fail Safe

Display contents of CONSULT	Fail-safe	Cancellation	I
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC	1
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC	
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC	J
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC	
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC	DUK
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC	DLK
B2195: ANTI-SCANNING	Inhibit engine cranking	Erase DTC	
B2557: VEHICLE SPEED	Inhibit electronic steering column lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms	L
B2560: STARTER CONT RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Starter control relay signal Starter relay status signal 	Μ
B2562: LO VOLTAGE	 Inhibit engine cranking Inhibit electronic steering column lock 	100 ms after the power supply voltage increases to more than 8.8 V	Ν
B2601: SHIFT POSITION	Inhibit electronic steering column lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN) 	0
B2602: SHIFT POSITION	Inhibit electronic steering column lock	 5 seconds after the following BCM recognition conditions are ful- filled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery) 	Ρ

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2603: SHIFT POSI STATUS	Inhibit electronic steering column lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit electronic steering column lock	 500 ms after any of the following BCM recognition conditions is fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (battery voltage) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit electronic steering column lock	 500 ms after any of the following BCM recognition conditions is fulfilled Ignition switch is in the ON position Power position: IGN Selector lever P/N position signal: Except P and N positions (0 V) Interlock/transmission switch signal (CAN): OFF Status 2 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (battery voltage) transmission switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Electronic steering column lock relay signal (Request signal) Electronic steering column lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Electronic steering column lock relay signal (Request signal) Electronic steering column lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B2609: S/L STATUS	 Inhibit engine cranking Inhibit electronic steering column lock 	 When the following electronic steering column lock conditions agree BCM electronic steering column lock control status Electronic steering column lock condition No. 1 signal status Electronic steering column lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2612: S/L STATUS	 Inhibit engine cranking Inhibit electronic steering column lock 	 When any of the following conditions is fulfilled Electronic steering column lock unit status signal (CAN) is received normally The BCM electronic steering column lock control status matches the electronic steering column lock status recognized by the electronic steering column lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the electronic steering column lock unit power sup- ply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilledPower position changes to ACCReceives engine status signal (CAN)
B26E8: CLUTCH SW	Inhibit engine cranking	 When any of the following BCM recognition conditions are fulfilled Status 1 Clutch switch signal (CAN from ECM): ON Clutch interlock switch signal: OFF (0 V) Status 2 Clutch switch signal (CAN from ECM): OFF Clutch interlock switch signal: OFF (Battery voltage)
B26E9: S/L STATUS	 Inhibit engine cranking Inhibit electronic steering column lock 	 When BCM transmits the LOCK request signal to the steering lock unit and receives LOCK response signal from steering lock unit, the following conditions are fulfilled Steering condition No 1 signal: LOCK (0V) Steering condition No 2 signal: LOCK (Battery voltage)

DTC Inspection Priority Chart

INFOID:000000007630667

[COUPE]

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority ${}_{\mbox{H}}$ chart.

B2562: LOW VOLTAGE		- 1
U1010: CONTROL UNIT (CAN)		_
 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM 		DLK
	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM 	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM

L

Μ

Ν

Ο

Ρ

< ECU DIAGNOSIS INFORMATION >

[COUPE]

Priority	DTC
4	 B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2553: IGNITION RELAY B2555: STOP LAMP B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSI STATUS B2603: SHIFT POSI STATUS B2604: PNP SW B2605: SI RELAY B2605: SI RELAY B2606: STARTER RELAY B2607: S/L RELAY B2608: STARTER RELAY B2609: S/L STATUS B2609: S/L STATUS B2609: STEERING LOCK UNIT B26000: STEERING LOCK UNIT B26000: STEERING LOCK UNIT B26010: STEERING LOCK UNIT B26011: SATTUS B26011: CAC RELAY B26012: S/L STATUS B2611: ACC RELAY B2611: SITHER RELAY CIRC B2612: S/L STATUS B2614: ACC RELAY B2614: ACC RELAY B2614: ACC RELAY B2614: BCM B2614:
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1712: [CHECKSUM ERR] FR C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C17171: [PRESSDATA ERR] FR C17171: [PRESSDATA ERR] FR C17172: [CODE ERR] RR C1720: [CODE ERR] FR C1721: [CODE ERR] FR C1722: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FR C1727: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL C1724: CONTROL UNIT
6	B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

< ECU DIAGNOSIS INFORMATION >

DTC Index

INFOID:000000007630668

NOTE:

Details of time display

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

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_
U1000: CAN COMM CIRCUIT		—	_	BCS-32
U1010: CONTROL UNIT (CAN)	_	—	_	BCS-33
U0415: VEHICLE SPEED SIG	_	_	_	<u>BCS-34</u>
B2013: ID DISCORD BCM-S/L	×	_	_	<u>SEC-36</u> (Coupe), <u>SEC-250</u> (Sedan)
B2014: CHAIN OF S/L-BCM	×	_	_	<u>SEC-37</u> (Coupe), <u>SEC-251</u> (Sedan)
B2190: NATS ANTENNA AMP	×	_	_	<u>SEC-65</u> (Coupe), <u>SEC-281</u> (Sedan)
B2191: DIFFERENCE OF KEY	×	_		<u>SEC-69</u> (Coupe), <u>SEC-285</u> (Sedan)
B2192: ID DISCORD BCM-ECM	×	_		<u>SEC-70</u> (Coupe), <u>SEC-286</u> (Sedan)
B2193: CHAIN OF BCM-ECM	×	-	_	<u>SEC-71</u> (Coupe), <u>SEC-287</u> (Sedan)
B2195: ANTI-SCANNING	_	—	_	<u>SEC-72</u>
B2553: IGNITION RELAY	_	_	_	PCS-59
B2555: STOP LAMP	_	_	_	<u>SEC-73</u> (Coupe), <u>SEC-289</u> (Sedan)
B2556: PUSH-BTN IGN SW	_	×	_	<u>SEC-78</u> (Coupe), <u>SEC-294</u> (Sedan)
B2557: VEHICLE SPEED	×	×	_	<u>SEC-80</u> (Coupe), <u>SEC-296</u> (Sedan)
B2560: STARTER CONT RELAY	×	×	_	<u>SEC-81</u> (Coupe), <u>SEC-297</u> (Sedan)
B2562: LOW VOLTAGE			_	BCS-35
B2601: SHIFT POSITION	×	×	_	<u>SEC-82</u> (Coupe), <u>SEC-298</u> (Sedan)
B2602: SHIFT POSITION	×	×	_	<u>SEC-86</u> (Coupe), <u>SEC-302</u> (Sedan)
B2603: SHIFT POSI STATUS	×	×	_	<u>SEC-89</u> (Coupe), <u>SEC-305</u> (Sedan)
B2604: PNP SW	×	×	—	<u>SEC-92</u> (Coupe), <u>SEC-308</u> (Sedan)
B2605: PNP SW	x	×	_	<u>SEC-94</u> (Coupe), <u>SEC-310</u> (Sedan)
B2606: S/L RELAY	×	×	_	<u>SEC-96</u> (Coupe), <u>SEC-312</u> (Sedan)

А

< ECU DIAGNOSIS INFORMATION >

[COUPE]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2607: S/L RELAY	×	×	_	<u>SEC-97</u> (Coupe), <u>SEC-313</u> (Sedan)
B2608: STARTER RELAY	×	×	_	<u>SEC-99</u> (Coupe), <u>SEC-315</u> (Sedan)
B2609: S/L STATUS	×	×	_	<u>SEC-101</u> (Coupe), <u>SEC-317</u> (Sedan)
B260A: IGNITION RELAY	×	×	_	PCS-61
B260B: STEERING LOCK UNIT	_	×	_	<u>SEC-106</u> (Coupe), <u>SEC-322</u> (Sedan)
B260C: STEERING LOCK UNIT	_	×	_	<u>SEC-107</u> (Coupe), <u>SEC-323</u> (Sedan)
B260D: STEERING LOCK UNIT	_	×	_	<u>SEC-108</u> (Coupe), <u>SEC-324</u> (Sedan)
B260F: ENG STATE SIG LOST	×	×	_	<u>SEC-109</u> (Coupe), <u>SEC-325</u> (Sedan)
B2611: ACC RELAY	_	—	_	PCS-62
B2612: S/L STATUS	×	×	_	<u>SEC-110</u> (Coupe), <u>SEC-331</u> (Sedan)
B2614: ACC RELAY CIRC		×	_	<u>PCS-64</u>
B2615: BLOWER RELAY CIRC	_	×	_	PCS-67
B2616: IGN RELAY CIRC	—	×	—	<u>PCS-70</u>
B2617: STARTER RELAY CIRC	×	×	_	<u>SEC-115</u> (Coupe), <u>SEC-336</u> (Sedan)
B2618: BCM	×	×	—	<u>PCS-73</u>
B2619: BCM	×	×	_	<u>SEC-117</u> (Coupe), <u>SEC-338</u> (Sedan)
B261A: PUSH-BTN IGN SW	_	×	_	<u>SEC-118</u> (Coupe), <u>SEC-339</u> (Sedan)
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	<u>SEC-121</u>
B2622: INSIDE ANTENNA	_	—	_	DLK-282
B2623: INSIDE ANTENNA		—	_	<u>DLK-285</u>
B26E1: ENG STATE NO RES	×	×		<u>SEC-326</u>
B26E8: CLUTCH SW	×	×	_	<u>SEC-123</u>
B26E9: S/L STATUS	×	× (Turn ON for 15 seconds)	—	<u>SEC-125</u>
B26EA: KEY REGISTRATION	×	× (Turn ON for 15 seconds)	_	<u>SEC-126</u>
C1704: LOW PRESSURE FL		_	×	<u>WT-8</u>
C1705: LOW PRESSURE FR			×	<u>WT-8</u>
C1706: LOW PRESSURE RR	_	—	×	<u>WT-8</u>
C1707: LOW PRESSURE RL	_	—	×	<u>WT-8</u>
C1708: [NO DATA] FL	_	—	×	<u>WT-13</u>
C1709: [NO DATA] FR	_	—	×	<u>WT-13</u>
C1710: [NO DATA] RR	_	-	×	<u>WT-13</u>
C1711: [NO DATA] RL	-	—	×	<u>WT-13</u>
C1712: [CHECKSUM ERR] FL	—	—	×	<u>WT-15</u>

Revision: February 2013

< ECU DIAGNOSIS INFORMATION >

[COUPE]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	P
C1713: [CHECKSUM ERR] FR	_	—	×	<u>WT-15</u>	
C1714: [CHECKSUM ERR] RR	_	_	×	<u>WT-15</u>	E
C1715: [CHECKSUM ERR] RL	_	_	×	<u>WT-15</u>	
C1716: [PRESSDATA ERR] FL	_	_	×	<u>WT-17</u>	C
C1717: [PRESSDATA ERR] FR	_	_	×	<u>WT-17</u>	
C1718: [PRESSDATA ERR] RR	_	_	×	<u>WT-17</u>	
C1719: [PRESSDATA ERR] RL		_	×	<u>WT-17</u>	
C1720: [CODE ERR] FL	_	_	×	<u>WT-15</u>	
C1721: [CODE ERR] FR	_	_	×	<u>WT-15</u>	F
C1722: [CODE ERR] RR	_	_	×	<u>WT-15</u>	
C1723: [CODE ERR] RL	_	_	×	<u>WT-15</u>	
C1724: [BATT VOLT LOW] FL	_	_	×	<u>WT-15</u>	F
C1725: [BATT VOLT LOW] FR	_	_	×	<u>WT-15</u>	
C1726: [BATT VOLT LOW] RR	_	_	×	<u>WT-15</u>	
C1727: [BATT VOLT LOW] RL	—	_	×	<u>WT-15</u>	C
C1729: VHCL SPEED SIG ERR	—	_	×	<u>WT-18</u>	
C1734: CONTROL UNIT	_	_	×	<u>WT-19</u>	ŀ

DLK

L

Μ

Ν

0

Ρ

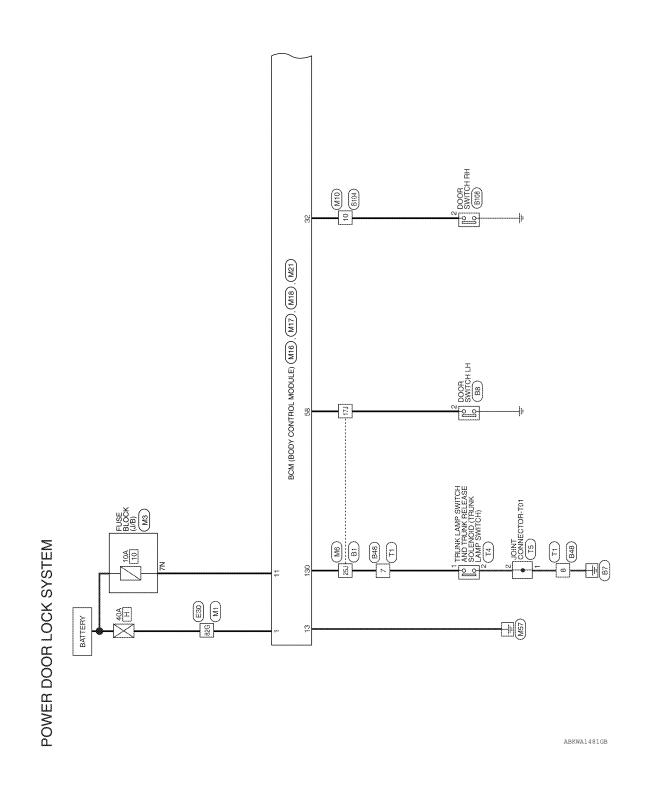
< WIRING DIAGRAM >

[COUPE]

WIRING DIAGRAM POWER DOOR LOCK SYSTEM

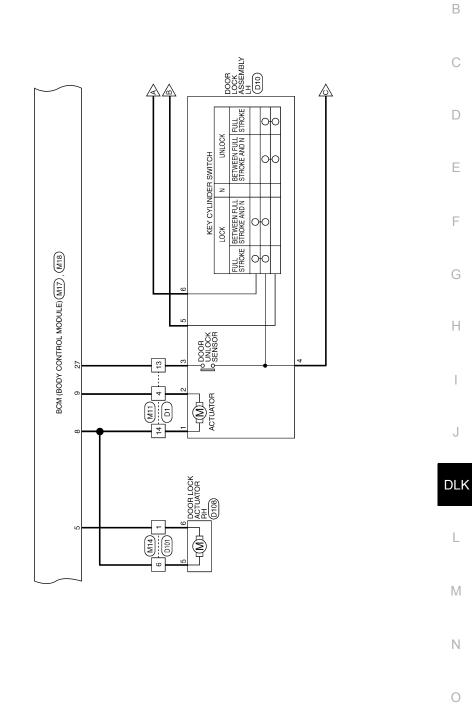
Wiring Diagram

INFOID:000000007421127



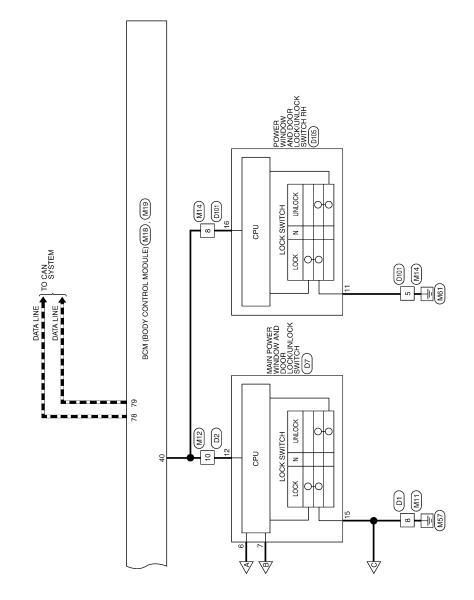
А



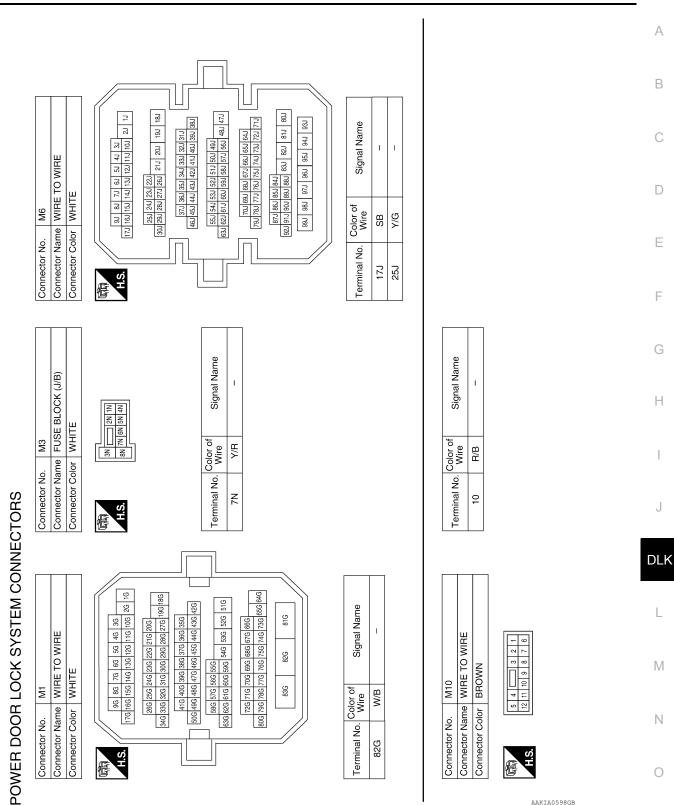


ABKWA0831GB

Ρ



ABKWA0832GB



POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

Ρ

AAKIA0598GB

< WIRING DIAGRAM >

DOOR_LOCK_STATUS

Signal Name

Color of Wire G/W R/B Y/G SB

Terminal No.

AS_DOOR_SW

27 32 58 58

DR_DOOR_SW

PW_K-LINE

[COUPE]



Connector Name WIRE TO WIRE Connector Color WHITE

Connector Name WIRE TO WIRE

M11

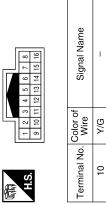
Connector No.

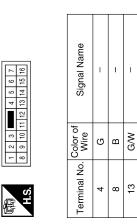
Connector Color WHITE

M12

Connector No.

Signal Name	I	I	I	I
Color of Wire	G∕Y	В	>	γ/G
Terminal No. Color of Wire	-	2	9	8





T.

>

4

_				21 20	41 40
M18	Connector Name BCM (BODY CONTROL MODULE)	GREEN		39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20	59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40
Connector No. M18	Connector Name	Connector Color GREEN	国 H.S.	39 38 37 36 35 34 3	59 58 57 56 55 54 5
Connector No M17	Connector Name BCM (BODY CONTROL MODULE)	Connector Color WHITE	H. H.S.		

H.S.

佢

Connector Name BCM (BODY CONTROL MODULE)

M16

Connector No.

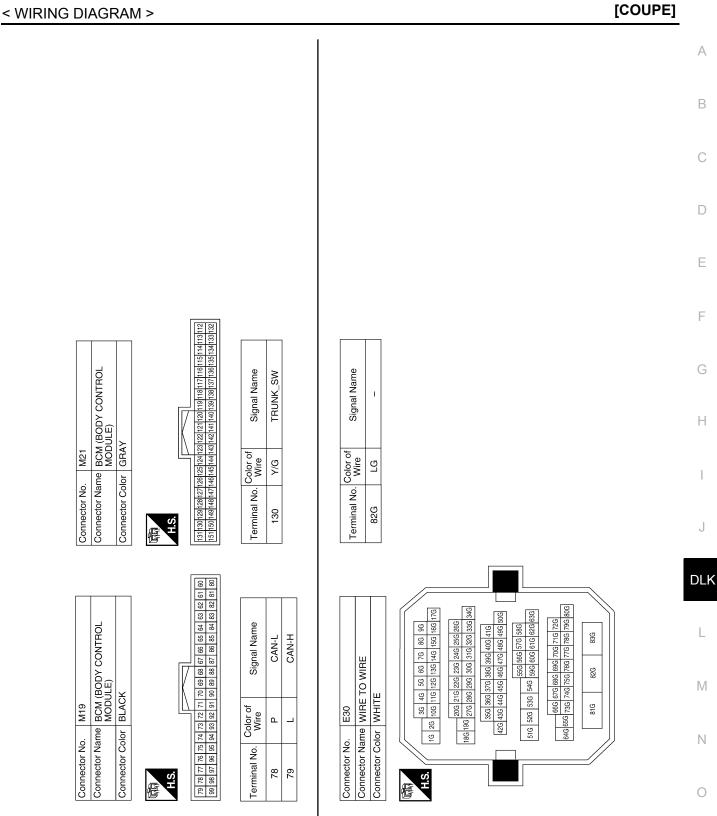
BLACK

Connector Color

Signal Name	CDL_AS	CDL_COMMON	CDL_DR/FL	BAT_BCM_FUSE	GND1	
Color of Wire	G/Y	>	σ	Y/R	ш	
Terminal No. Color of Wire	9	8	6	11	13	



ABKIA2343GB

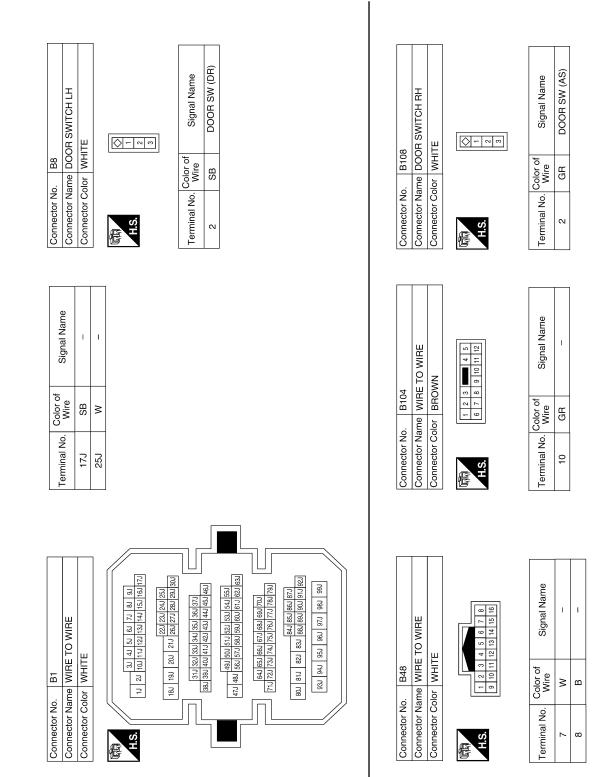


ABKIA2344GB

Ρ



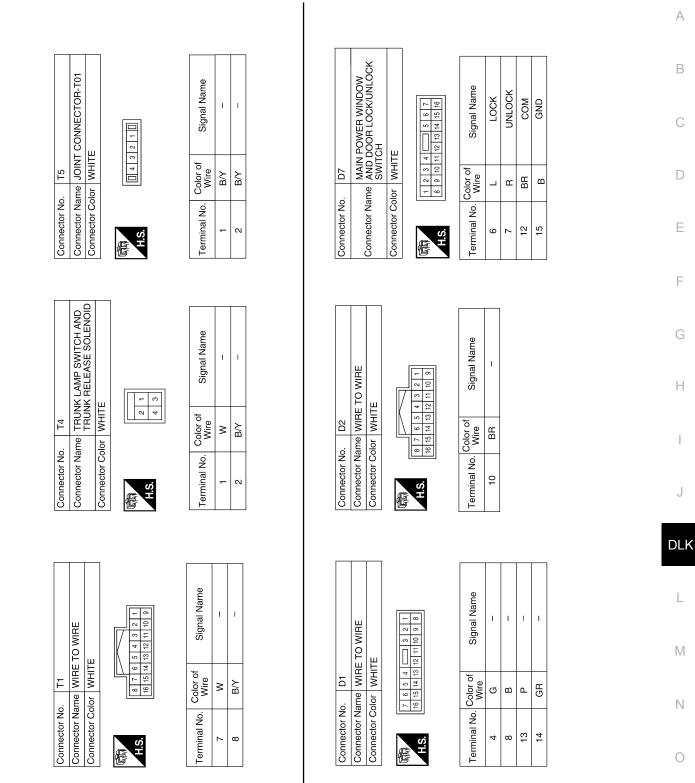
< WIRING DIAGRAM >



POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

[COUPE]



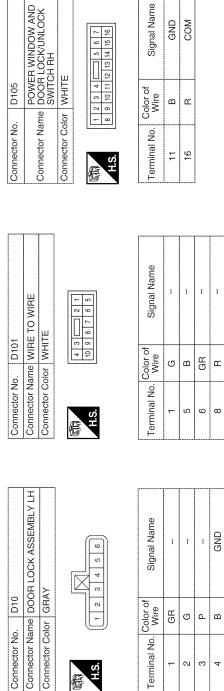
AAKIA0599GB

Р

POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

[COUPE]



E

,		·					
Signal Name		1	1	GND	DOOR_KEY/C_	DOOR_KEY/C_LOCK_	
Color of Wire	GR	U	۵.	а	œ	بہ	
Terminal No. Color of Wire	,	5	ო	4	ß	Q	

1

D108	Connector Name DOOR LOCK ACTUATOR	GRAY	
Connector No.	Connector Name	Connector Color GRAY	

(5 6
$\overline{\mathbb{X}}$	4
- LQ	3
	2
(

Terminal No. Color of Signal Name	ł	I
Color of Wire	GH	æ
Terminal No.	ۍ	9

r

ABKIA3238GB

Wiring Diagram INFOID:000000007421128 WITH M/T A \triangle ຝ DATA LINE M4 LINE UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY) DATA COMBINATION METER M24 E) (1/B) (1/ бі 888 õ 23 10¥ 4 l m PUSH-BUTTON IGNITION SWITCH M38 PUSH switch S Acc 🌒 ۲ LOCK (M21 á ۲ (M19) 68 M18 KEY SLOT (M40) 29 401 9 80 69 M17 2 3 8 1 ELECTRONIC STEERING (M32) æ r ğ BCM (BODY CONTROL MODULE) (M16) 26 ម្ល ₽ Z ES7 E BB g 2 500 E16 STOP LAMP SWITCH (E38) J JOINT CONNECTOR-E07 (E55) STOP LAMP SWITCH E38 REMOTE KEYLESS ENTRY RECEIVER (M27) 5 5 10A 0 0 INTELLIGENT KEY SYSTEM ğ N Š. INTELLIGENT KEY WARNING BUZZER (E73) ណ្ណ 10A 44 10 10 10 ņ Å H BATTERY W21 \sim 82G

[COUPE]

А

В

С

D

Ε

F

G

Н

J

DLK

L

Μ

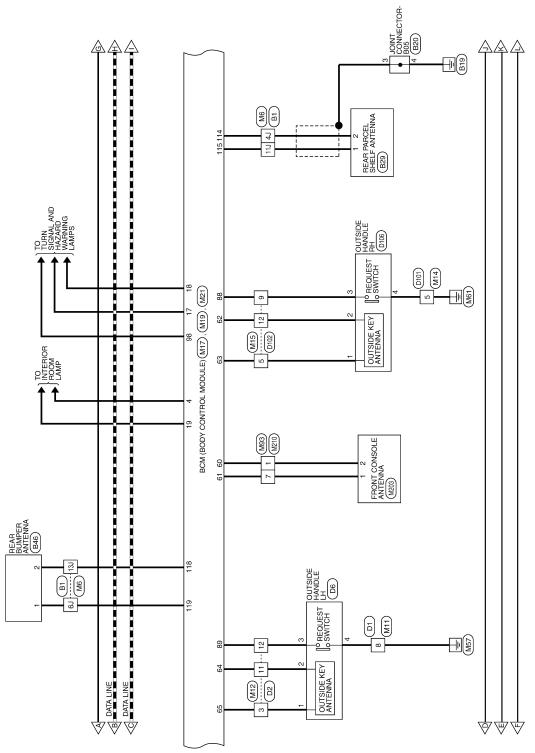
Ν

Ο

Ρ

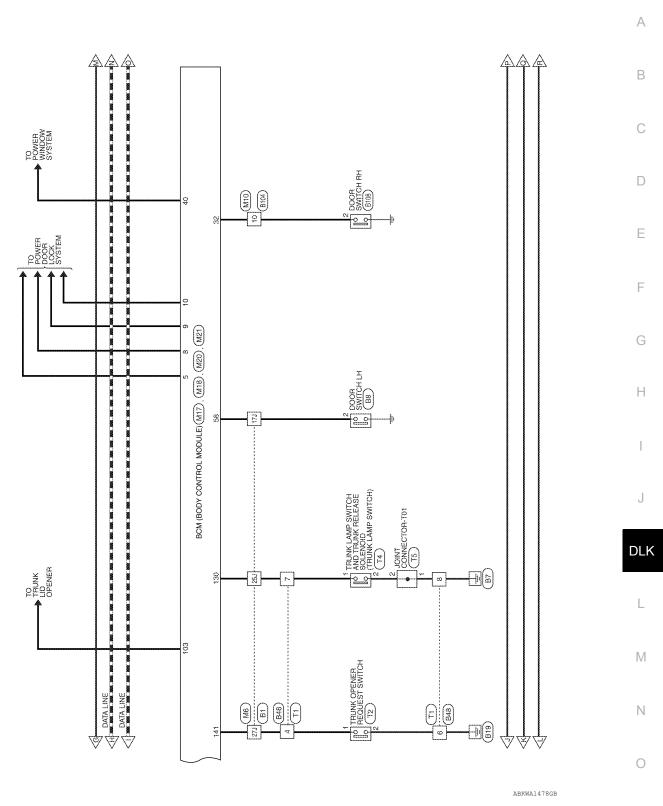
ABKWA1477GB

[COUPE]

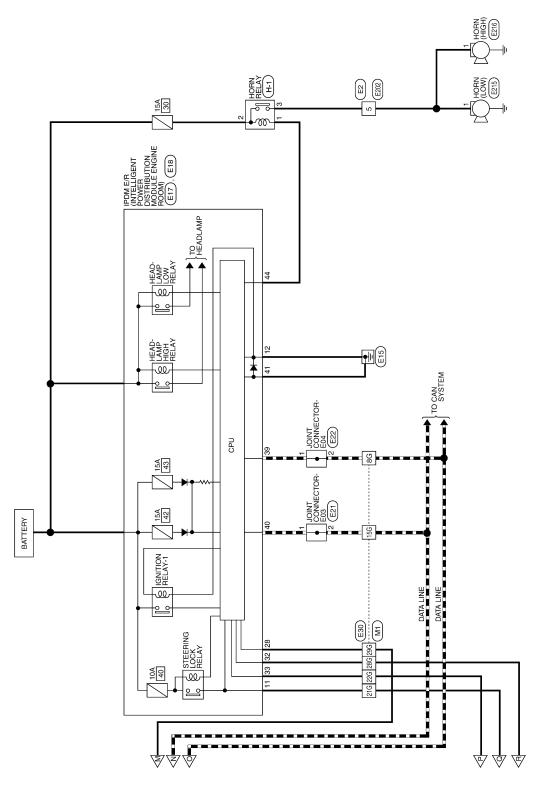


AAKWA0313GB

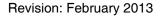
[COUPE]

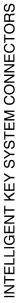


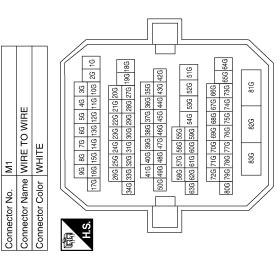
Ρ



ABKWA0836GB







Signal Name

Color of Wire

Terminal No.

T

T

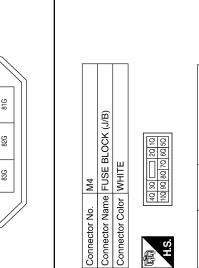
W/B

1 1

W/L G/Y

1 A V

T



DLK-171

Signal Name	I	I	
Color of Wire	O/L	R/W	
Terminal No.	g	9Q	

DLK
L
M
Ν
0

Ρ

ABKIA1001GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

Connector Name FUSE BLOCK (J/B)

β

Connector No.

Signal Name

Color of Wire

Terminal No.

Connector Color WHITE

3N 5N 6N 5N 4N

品.S.H

1 1

P/L L/O BB GR

1 1

T

15G 21G 22G 28G 57G 82G

I.

86

[COUPE]

А

В

С

D

Ε

F

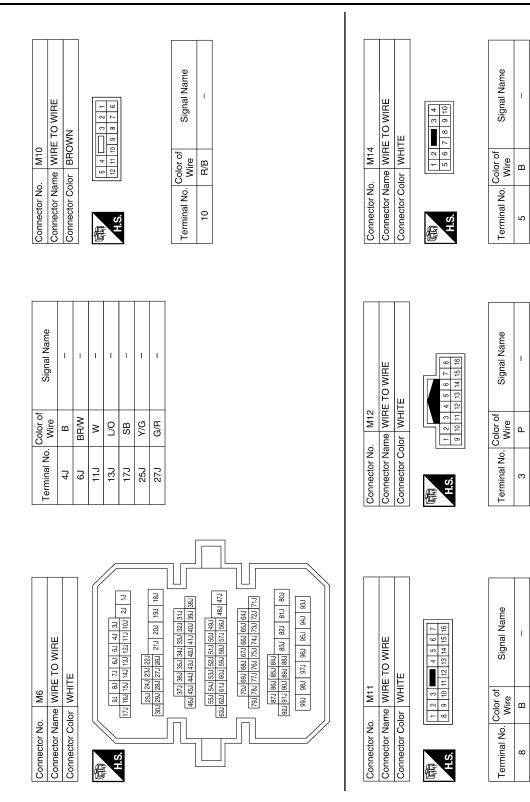
G

Н

J



< WIRING DIAGRAM >



ABKIA1002GB

1 1

B/W

12

>

Connector Name WIDE TO WIDE	Connector Nam			Connector No.		INI /
		e BCM (BOI MODULE)	Connector Name BCM (BODY CONTROL MODULE)	Connector Name		BCM (BODY CONTROL MODULE)
Connector Color WHI E	Connector Color		, X	Connector Color		WHITE
HS 7 8 9 10 11 12	。 H.S.			H.S.	4 5 6 11 12 13	4 5 6 7 1 8 9 10 11 12 13 14 15 16 17 18 19
Terminal No. Color of Signal Name	Terminal No. C	Color of Wire	Signal Name	Terminal No.	Color of Wire	Signal Name
5 LG – 9 P/L –	-	W/B	BAT_POWER_F/L	4	MA	ROOM LAMP_BAT SAVER
12 B/Y –				ъ	G∖	CDL_AS
-				œ	>	CDL_COMMON
				6	σ	CDL_DR/FL
				10	ςΩ	CDL_RR_RL_BACK
				1	Y/R	BAT_BCM_FUSE
				13	B	GND1
				15	۲/۲	ACC_LED
				17	G/B	FR_FLASHER
				18	G/Y	FL_FLASHER
				19	~	ROOM_LAMP_OUTPUT
Connector No. M18	Terminal No. C	Color of Wire	Signal Name			
Connector Color GREEN	24	R/W	STOP_LAMP_LOW_ SW			
	26	0/L	STOP_LAMP_HIGHSW			
H.S.	29	~	FOB_IN_SW_1			
	32	R/B	AS_DOOR_SW			
31 30 29 28 27 26 25	40	۲/G	PW K-LINE			
	42	æ	S/L_LOCK_LED			
	45	Ь	GND_RF2_A/L			
	58	SB	DR_DOOR_SW			

< WIRING DIAGRAM >

[COUPE]

А

В

С

D

Е

F

G

Н

J

DLK

L

Μ

Ν

Ο

Ρ

ABKIA1003GB

< WIRING DIAGRAM >

GND (CIRCUIT)

۵ ш

5 23 23

_

4 ო -

GND (POWER)

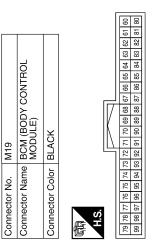
BAT

M/L ш В

GND (ILL) CAN-H CAN-L

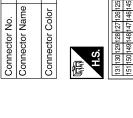
Signal Name	FOB_SLOT_	IGN_ON_LED	S/L_CONDITION_1	S/L_CONDITION_2	AS_REQUEST SWITCH	DR_REQUEST_SW	RF1_POWER_SUPPLY	S/L_POWER_SUPPLY_ 12V	HAZARD_SW	S/L_K-LINE
Color of Wire	R/L	ГG	L/O	G/R	P/L	B/W	L/R	G/Y	G/O	Z
Terminal No. Color of Wire	08	81	85	86	88	89	91	76	98	66

Signal Name	ROOM_ANT_2_B	ROOM_ANT_2_A	AS_DOOR_ANT_B	AS_DOOR_ANT_A	DR_DOOR_ANT_B	DR_DOOR_ANT_A	FOB_READER_CLOCK	FOB_READER_DATA	RF1_TUNER_SIGNAL	ENG_START_SW	CAN-L	CAN-H
Color of Wire	B/R	W/R	B/Y	ГG	>	Ч	G/O	0	Г/О	BR	Р	_
Terminal No.	60	61	62	63	64	65	68	69	71	77	78	62



l		l				
	M21	0	Connector No.	M24		
ne	ne BCM (BODY CONTROL MODULE)		Connector Na	ne CON	Connector Name COMBINATION METER	
1		<u> </u>	Connector Color WHITE	or WHI	TE	
5	ט שהאז					
145	6 125 124 123 122 122 122 121 120 149 113 117 116 115 115 114 113 112 6 145 124 143 142 141 140 139 138 137 136 135 134 133 132		H.S. 1 2 3 4 5 21 22 23 24 25	6 7 8 26 27 28 2	H.S. H.S. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 28 27 28 29 30 31 32 33 34 35 36 37 38 39 40	[2]
Color o Wire	Color of Signal Name		Terminal No. Wire	Color of Wire	Signal Name	

511								
	Signal Name	TRUNK_ANT_1_B	TRUNK_ANT_1_A	BACK_DOOR_ANT_B	BACK_DOOR_ANT_A	TRUNK_SW	TRUNK_REQUEST_SW	BUZZER
	Color of Wire	в	×	L/O	BR/W	Y/G	G/R	GR
	Terminal No. Color o	114	115	118	119	130	141	144



H.S. E

BCM (BODY CONTROL MODULE)

M20

Connector No. Connector Name E

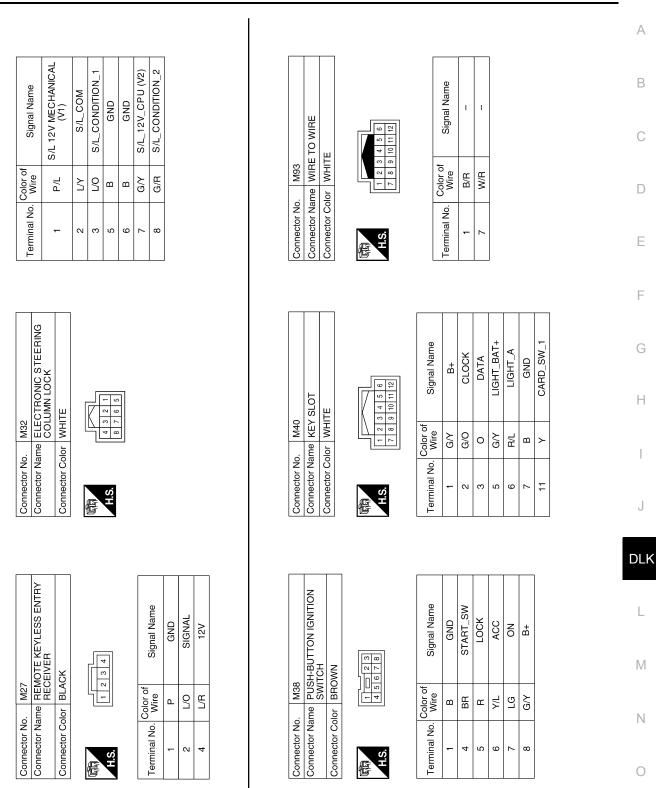
Connector Color WHITE

Cianol Nomo	olylial Nallie	CDL_BACK_TRUNK	
	Wire	٨	
Tomission No.		103	

ABKIA2348GB

< WIRING DIAGRAM >

[COUPE]

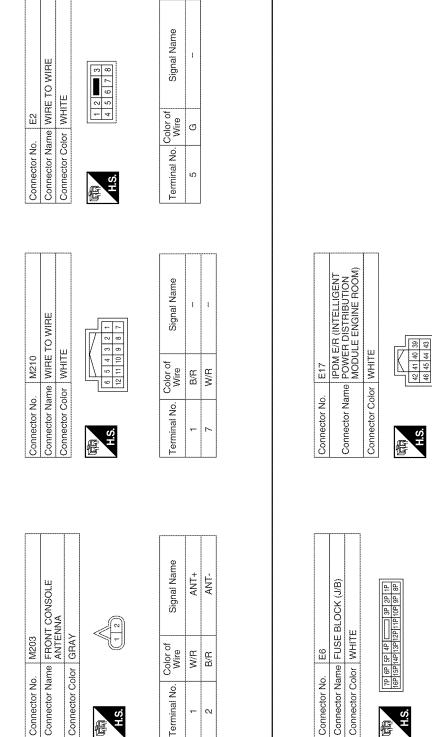


AAKIA0590GB

Ρ



< WIRING DIAGRAM >



ABKIA3237GB

GND (SIGNAL)

HORN_RLY

Signal Name

Color of Wire

Terminal No.

Signal Name

Color of Wire

Terminal No.

ł } 1

۵ α G

55 55 11p

H.S.

CAN-L CAN-H

Ω. ω∣≥

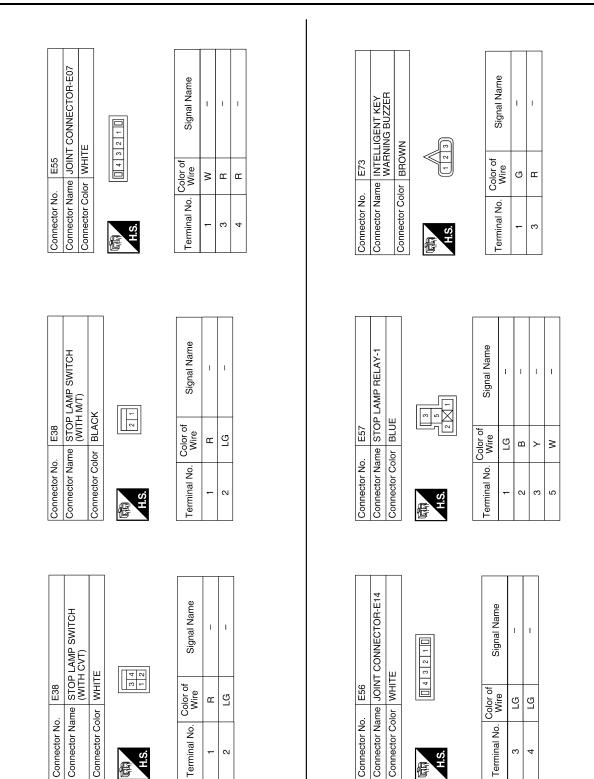
39 40 41 44

< WIRING DIAGRAM >

[COUPE]

Connector No. E21 Connector Name JOINT CONNECTOR-E03 Connector Color WHITE Mine Image: Signal Name Terminal No. Color of Nire 2 L	Signal Name	
Connector Name JOINT CONN Connector Name JOINT CONN Connector Color WHITE	No. Color of Mire of Color of LG P G G O L P G G O Color of Mire of Color of Mire of Color of	
Connector Nan Connector Nan Connector Cold H.S. Terminal No.	Terminal No. 8G 15G 21G 22G 28G 29G 29G 82G	
Signal Name ESCL GND (POWER) PUSH_START_SW SL_CONDITION_1 SL_CONDITION_2	E30 me WIRE TO WIRE lor WIRE TO WIRE lor WIRE TO WIRE lor WIRE TO WIRE lor WIRE 10 lor WIRE 10 lor WIRE 10 lor 36 lor 426 lor 46 lor 46 lor 46 lor 46 lor 16 lor 17	
Color of Wire of SB B B C Olor	Connector No. E30 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE 16 26 106 116 126 136 4 186 196 205 205 216 256 40 205 216 256 240 596 905 3 116 226 540 596 905 3 516 226 540 596 905 3 516 226 540 560 500 50 516 526 540 560 50 50 50 50 50 516 556 540 556 50 50 50 50 50 50 516 556 540 556 50 50 50 50 50 50 516 556 540 556 50 50 50 50 50 50 516 556 540 556 50 50 50 50 50 50 50 516 556 540 556 50 50 50 50 50 50 50 50 50 50 50 50 50	
Terminal No. 11 28 32 33 33 33 33	Connec	
20[21]22[23]24		
E18 POWER DISTRIBUTION MODULE ENGINE ROOM) WHITE 2526[272829] 303 7 8 1516[17]18[19] 20[2	Connector No. E22 Connector Name JOINT CONNECTOR-E04 Connector Color WHITE Terminal No. Color of Signal Name 2 P	
E18 POWER DIS MODULE EN WHITE 25 13 14 15 15 15 15 15 15 15 15 15 15	P P P Solor of Solor of Solor of P P P P P P P P P P P P P P P P P P	
	Connector No. E22 Connector Name JOINT C Connector Color WHITE Terminal No. Wire 2 P	
Connector Na Connector Na Connector Col H.S.	Connector N Connector N Connector C His His	
	AAKIA0592GB	

Revision: February 2013



< WIRING DIAGRAM >

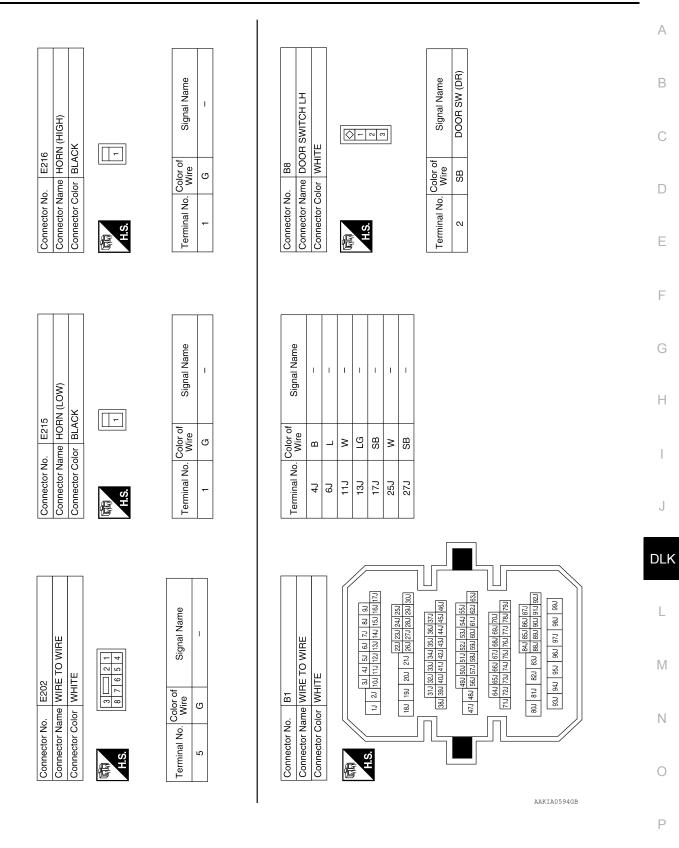
[COUPE]

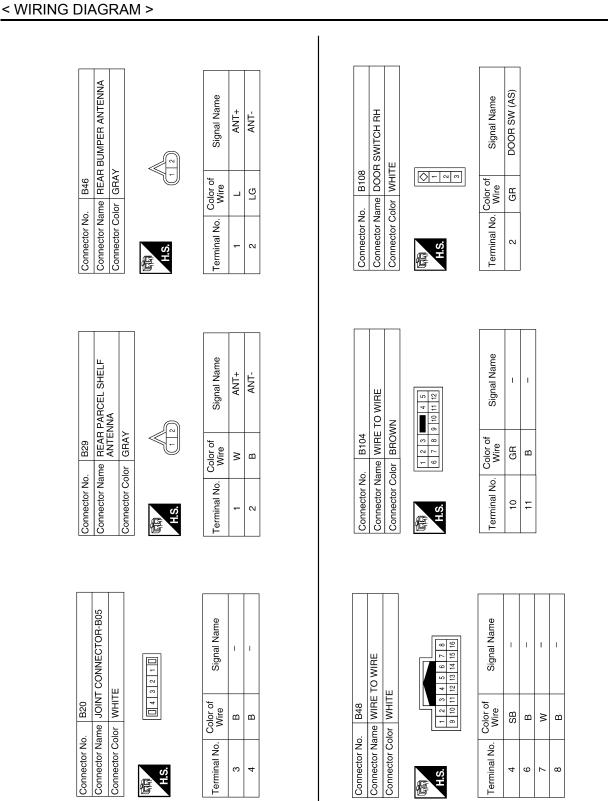
AAKIA0593GB

f

E

< WIRING DIAGRAM >





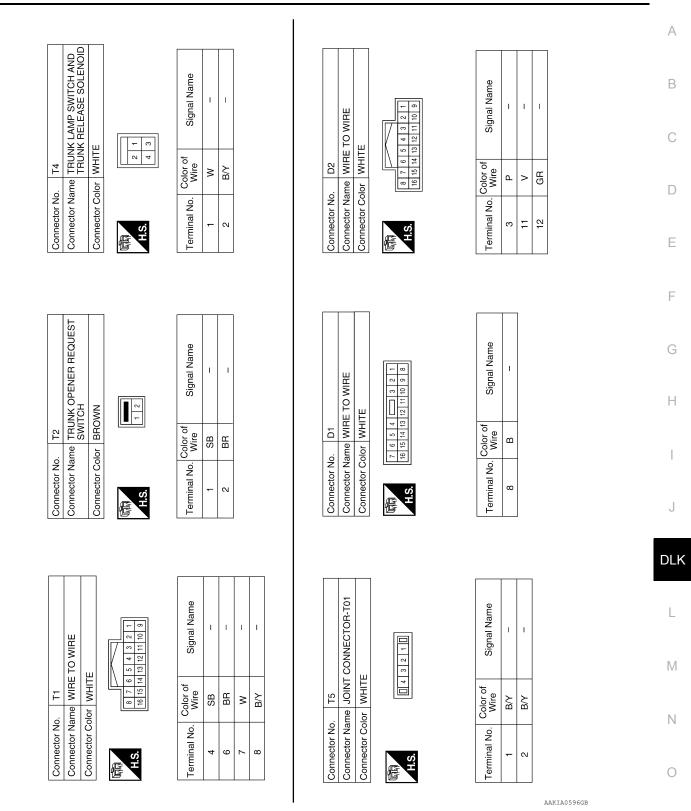
Revision: February 2013

AAKIA0595GB

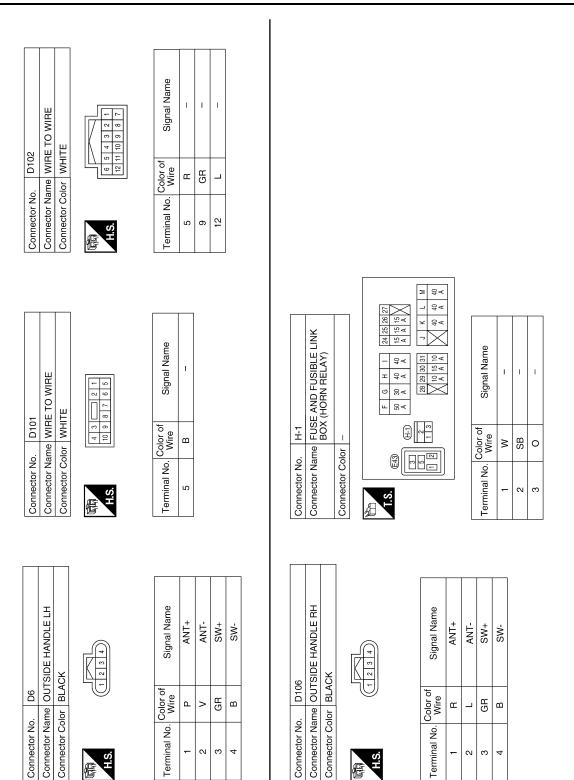


< WIRING DIAGRAM >

[COUPE]



Ρ



[COUPE]

Connector No.

Connector No.

Terminal No.

H.S. E

-

ო N

4

Terminal No.

-N ო 4

H.S.H

E

AAKIA0597GB

TRUNK LID OPENER

0

. M21

BCM (BODY CONTROL MODULE) (M16), (M17), (M18), (M20).

147

103

W (B B49 (2)

(M1) (E30)

िष्नो

TRUNK LID OPENER CANCEL SWITCH (M74)

20

₹ E

ваттеву

< WIRING DIAGRAM >

TRUNK LID OPENER

Wiring Diagram



Web

TRUNK LID OPENER SWITCH (M75)

ഘട

SWITCH AND TRUNK RELEASE SOLENOID (TRUNK RELEASE SOLENOID) TRUNK LAMP

P B49

N

(¥

[COUPE]

А

Е

F





DLK

L

Μ

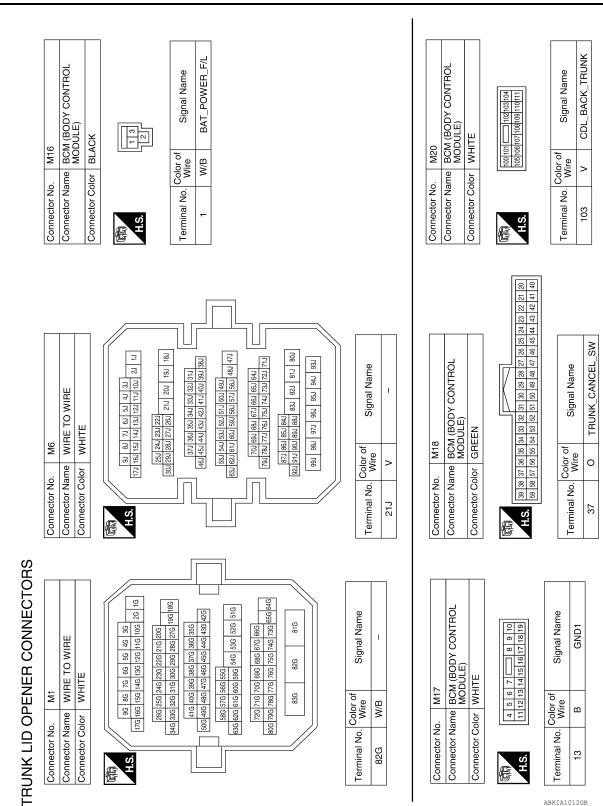
Ν

0

Ρ

TRUNK LID OPENER

ABKWA1483GB



TRUNK LID OPENER

< WIRING DIAGRAM >



< WIRING DIAGRAM >

TRUNK LID OPENER SWITCH

Connector Name Connector Color

Connector Name TRUNK LID OPENER CANCEL SWITCH

Connector Name BCM (BODY CONTROL MODULE)

M21

Connector No.

GRAY

Connector Color

M74

Connector No.

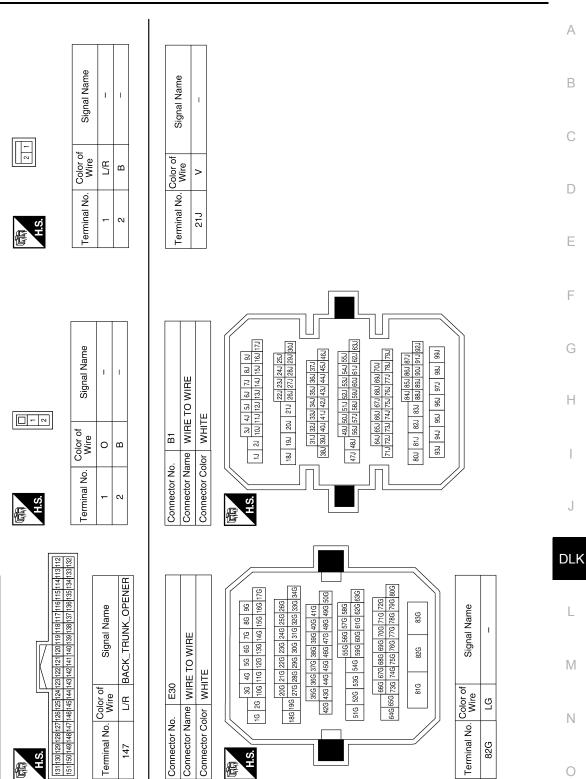
WHITE

Connector Color

M75

Connector No.

BLACK

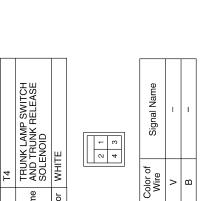


Ρ

[COUPE]

Revision: February 2013

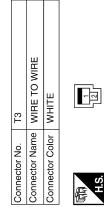
ABKIA1013GB



AHS.

Æ

H.S.

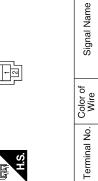


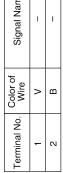
Connector Name Connector Color

Connector No.

Signal Name	
Color of Wire	
erminal No.	

Connector No. B49 Connector Name WIRE TO WIRE Connector Color WHITE		
Connector Name WIRE TO WIRE Connector Color WHITE	Connector No.	B49
Connector Color WHITE	Connector Name	WIRE TO WIRE
(中) H.S.	Connector Color	WHITE
	品 H.S.	





L Т

> ш

-

N

> m

4

Terminal No. ю

ABKIA2357GB

INTELLIGENT KEY SYSTEM SYMPTOMS [COUPE] < SYMPTOM DIAGNOSIS > SYMPTOM DIAGNOSIS А INTELLIGENT KEY SYSTEM SYMPTOMS Symptom Table INFOID:000000007421130 В ALL FUNCTIONS OF INTELLIGENT KEY SYSTEM DO NOT OPERATE NOTE: С · Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-8, "Work Flow". · Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom. D • If the following symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order. Conditions of Vehicle (Operating Conditions) Е "ENGINE START BY I-KEY" and "LOCK/UNLOCK BY I-KEY" are ON when setting on CONSULT. • All doors are closed. 0..... D' - -..... .

Symptom		Diagnosis/service procedure	Reference page	F
	1.	Check BCM power supply and ground circuit.	BCS-36	
All functions of Intelligent Key system do not operate.	2.	Check Intelligent Key function and battery inspection.	DLK-119	C
An unctions of intelligent key system do not operate.	3.	Check remote keyless entry receiver.	DLK-115	G
	4.	Check Intermittent Incident.	<u>GI-42</u>	

Н

J

L

Μ

Ν

Ο

Ρ

< SYMPTOM DIAGNOSIS >

DOOR LOCK FUNCTION SYMPTOMS DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:000000007421131

[COUPE]

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-8, "Work Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure		Reference page	
		1. Check BCM Power supply and ground circuit.		<u>BCS-36</u>
Power door lock does not operate with door	2.	Check door lock and unlock switc	h.	DLK-68
lock and unlock switch.	3.	Check door lock actuator (driver s	ide)	DLK-102
	4.	Check Intermittent Incident.		<u>GI-42</u>
Power door lock does not operate with door	1.	Check key cylinder switch.		<u>DLK-76</u>
key cylinder operation. (Power door lock operate properly with door lock and unlock switch.)	perate properly with door 2. Replace power window main switch.		<u>PWC-192</u>	
	1. Check door lock actuator.	Chack door look actuator	Driver side	DLK-102
Specific door lock actuator does not operate.		Passenger side	DLK-103	
	2.	Check Intermittent Incident.		<u>GI-42</u>
Vehicle speed sensing auto door LOCK opera-	1.	Ensure automatic door lock/unlock function (lock opera- tion) is enabled.		DLK-51
tion does not operate.	2.	Check combination meter vehicle speed signal.		<u>MWI-32</u>
	3.	Check intermittent incident.		<u>GI-42</u>
Ignition OFF interlock auto door UNLOCK	1.	Ensure automatic door lock/unloc eration) is enabled.	k function (unlock op-	DLK-51
function does not operate.	2.	Check BCM for DTCs.		DLK-155
	3.	Check intermittent incident.		<u>GI-42</u>

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:000000007421132

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-8, "Work Flow".
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

DLK-188

DOOR LOCK FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[COUPE]

Symptom	Diagnosis/service procedure	Reference page
	1. Check BCM power supply and ground circuit.	<u>BCS-36</u>
Door lock/unlock do not operate by door re-	2. Check door switch.	<u>DLK-65</u>
quest switch.	3. Check key slot.	DLK-73
	4. Check Intermittent Incident.	<u>GI-42</u>
	1. Check door request switch (driver side).	<u>DLK-94</u>
Door lock/unlock does not operate by request switch (driver side).	2. Check outside key antenna (driver side).	<u>DLK-111</u>
	3. Check Intermittent Incident.	<u>GI-42</u>
	1. Check door request switch (passenger side).	<u>DLK-94</u>
Door lock/unlock does not operate by request switch (passenger side).	2. Check outside key antenna (passenger side).	<u>DLK-111</u>
Switch (passenger side).	3. Check Intermittent Incident.	<u>GI-42</u>
Selective unlock function does not operate by	1. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT".	DLK-51
door request switch (driver side) (other door lock function operate).	2. Check selective unlock function with a remote controller or door key cylinder.	DLK-17
	3. Check Intermittent Incident.	<u>GI-42</u>
Selective unlock function does not operate by door request switch (passenger side) (other	1. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT".	DLK-51
door lock function operate).	2. Check Intermittent Incident.	<u>GI-42</u>
	1. Check "AUTO LOCK SET" setting in "WORK SUP- PORT".	DLK-51
Auto lock function does not operate.	2. Check door switch.	<u>DLK-65</u>
	3. Check key slot.	<u>DLK-73</u>
	4. Check Intermittent Incident.	<u>GI-42</u>

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

REMOTE KEYLESS ENTRY FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-8, "Work Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is out of key slot.
- Ignition switch is in OFF or ACC position.
- · All doors are closed.

Revision: February 2013

• Retained power operation does not operate. Refer to <u>DLK-22, "INTELLIGENT KEY : System Description"</u>.

Symptom	Diagnosis/service procedure	Reference page
All of the remote keyless entry functions do	1. Check Intelligent Key battery inspection.	<u>DLK-119</u>
not operate.	2. Check Intermittent Incident.	<u>GI-42</u>
Selective unlock function does not operate by Intelligent Key.	1. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUP- PORT".	<u>DLK-51</u>
	2. Check Intelligent Key battery inspection.	<u>DLK-119</u>
	3. Check Intermittent Incident.	<u>GI-42</u>

0

DLK

L

INFOID 000000007421133

Ν

Ο

Ρ

DOOR LOCK FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[COUPE]

Symptom	Diagnosis/service procedure	Reference page
	1. Check "AUTO LOCK SET" setting in "WORK SUPPORT".	DLK-51
Auto lock function does not operate nor- mally.	2. Check door switch.	DLK-65
	3. Check key slot.	DLK-73
	4. Check Intermittent Incident.	<u>GI-42</u>
Power window down function does not op-	1. Check "PW DOWN SET" setting in "WORK SUPPORT".	DLK-119
erate.	2. Check Intelligent Key battery inspection.	DLK-119

<pre>SYMPTOM DIAGNOSIS ></pre>	PEN FUNCTION STMPTOMS	[COUPE]
	VMDTOMS	[000. 5]
TRUNK OPEN FUNCTION S		
TRUNK LID OPENER SWITCH	1	
TRUNK LID OPENER SWITCH	: Symptom Table	INFOID:000000007421134
TRUNK OPEN FUNCTION MALFUNC	CTION	
 Before performing the diagnosis in the f Check that vehicle is under the condition check each symptom. 	ollowing table, check "WORK FLOW". Refer to <u>i</u> ion shown in "Conditions of vehicle" before sta , check systems shown in the "Diagnosis/service	rting diagnosis, and
Conditions of Vehicle (Operating Conditions Intelligent Key is out of key slot. All doors are closed. 	3)	
Symptom	Diagnosis/service procedure	Reference page
	1. Check trunk opener switch.	DLK-84
Trunk open function does not operate by trunk	 Check trunk lid opener cancel switch. 	DLK-87
opener switch.	3. Check Intermittent Incident.	<u>GI-42</u>
TRUNK REQUEST SWITCH	o. Oneok international molecula	0142
 check each symptom. If the following "symptoms" are detected in this order. Conditions of Vehicle (Operating Conditions Intelligent Key is out of key slot. All doors are closed. 	d, check systems shown in the "Diagnosis/servic	e procedure" column
Symptom	Diagnosis/service procedure	Reference page
	1. Check trunk opener request switch.	DLK-98
Trunk open function does not operate by trunk	2. Check trunk lid opener cancel switch.	DLK-87
opener request switch.	3. Check outside key antenna (trunk room).	<u>DLK-111</u>
	4. Check Intermittent Incident.	<u>GI-42</u>
NTELLIGENT KEY	1	
NTELLIGENT KEY : Symptom	Iadie	INFOID:000000007421136
 Check that vehicle is under the condition check each symptom. 	CTION following table, check "WORK FLOW". Refer to <u>f</u> ion shown in "Conditions of vehicle" before sta , check systems shown in the "Diagnosis/service	nting diagnosis, and
Conditions of Vehicle (Operating Conditions • Intelligent Key is out of key slot. • All doors are closed.	3)	

TRUNK OPEN FUNCTION SYMPTOMS

Revision: February 2013

DLK-191

TRUNK OPEN FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[COUPE]

Symptom		Diagnosis/service procedure	Reference page
Trunk open function does not operate by Intel- ligent Key.	1.	Check "TRUNK OPEN DELAY" setting in "WORK SUPPORT".	<u>DLK-54</u>
	2.	Check trunk open function.	DLK-35
	3.	Check trunk lamp switch.	DLK-90
	4.	Check Intelligent Key battery inspection.	DLK-119
	5.	Check Intermittent Incident.	<u>GI-42</u>

WARNING FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

WARNING FUNCTION SYMPTOMS

Symptom Table

WARNING FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-8, "Work Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following "symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

Sym	ptom	Diagnosis/service procedure	Reference page
		1. Check push button ignition switch position indicator.	<u>SEC-118</u>
	For internal	2. Check door switch.	<u>DLK-65</u>
	For internal	3. Check warning chime function.	<u>DLK-127</u>
OFF position warn-		4. Check Intermittent Incident.	<u>GI-42</u>
ing does not oper- ate.		1. Check push button ignition switch position indicator.	<u>SEC-118</u>
		2. Check door switch.	<u>DLK-65</u>
	For external	3. Check Intelligent Key warning buzzer.	DLK-108
	4. Check Intermittent Incident.	<u>GI-42</u>	
		1. Check transmission range switch.	<u>SEC-92</u>
		2. Check door switch.	<u>DLK-65</u>
		3. Check Intelligent Key warning buzzer.	<u>DLK-108</u>
P position warning d	oes not operate.	4. Check warning chime function.	DLK-127
		5. Check combination meter display function.	DLK-126
		6. Check Intermittent Incident.	<u>GI-42</u>
		1. Check push button ignition switch position indicator.	<u>SEC-118</u>
		2. Check warning chime function.	DLK-127
ACC warning does r	ioi operate	3. Check combination meter display function.	DLK-126
		4. Check Intermittent Incident.	<u>GI-42</u>

INFOID:000000007421137

11421131

В

D

Ε

F

Н

J

DLK

L

Μ

Ν

Ο

Ρ

А

WARNING FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[COUPE]

Syn	ıptom	Diagnosis/service procedure		Reference page	
		1.	Check door switch.		DLK-65
		~		Console	<u>DLK-58</u>
		2.	Check inside key antenna.	Trunk room	DLK-61
Deer open to al		3.	Check Intelligent Key warning buzzer.	IL	<u>DLK-108</u>
	Door open to close	4.	4. Check warning chime function.		DLK-127
		5.	Check key slot illumination.		DLK-121
		6.	Check combination meter display functio	า.	DLK-126
		7.	7. Check Intermittent Incident.		<u>GI-42</u>
		1.	Check push button ignition switch positio	n indicator.	<u>SEC-118</u>
		_		Console	DLK-58
	Push-button igni-	2.	Check inside key antenna.	Trunk room	DLK-61
	tion switch opera-	3.	Check warning chime function.		DLK-127
	tion	4.	Check key slot illumination.		DLK-121
Take away warning		5.	Check combination meter display functio	٦.	DLK-126
does not operate.		6.	Check Intermittent Incident.		<u>GI-42</u>
		1.	Check push button ignition switch positio	n indicator.	<u>SEC-118</u>
		_		Console	DLK-58
Door i	Door is open	pen 2.	Check inside key antenna.	Trunk room	DLK-61
	;	3.	3. Check combination meter display function.		DLK-126
		4.	Check Intermittent Incident.		<u>GI-42</u>
		1.	Check "TAKE OUT FROM WIN WARN" s SUPPORT".	etting in "WORK	DLK-51
		_	a	Console	DLK-58
	Take away through	2.	Check inside key antenna.	Trunk room	DLK-61
	window	3.	Check warning chime function.		DLK-127
		4.	4. Check key slot illumination.		DLK-121
		5.	5. Check combination meter display function.		DLK-126
		6. Check Intermittent Incident.			<u>GI-42</u>
	1	1.	Check key slot.		DLK-73
		2.	Check door switch.		DLK-65
		3. Check warning chime function.		DLK-127	
Key warning chime	does not operate.	4. Check key slot illumination.		DLK-121	
		5. Check combination meter display function.		DLK-126	
		6. Check Intermittent Incident.		<u>GI-42</u>	
			Check door switch.		DLK-65
		 Check door switch. Check key slot illumination. 		<u>DLK-121</u>	
Door lock operation	warning chime does	3.	Check Intelligent Key warning buzzer.		<u>DLK-108</u>
not operate.	J			Console	DLK-58
		4. Check inside key antenna.		Trunk room	DLK-61
		5. Check Intermittent Incident.		<u>GI-42</u>	

KEY REMINDER FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

KEY REMINDER FUNCTION SYMPTOMS

Symptom Table

KEY REMINDER FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "Work flow". Refer to <u>DLK-8, "Work Flow"</u>.
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
Key reminder function does not operate.	1. Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".	DLK-73
	2. Check door switch.	DLK-65
	3. Check inside key antenna.	DLK-127
	4. Check unlock sensor.	<u>DLK-121</u>
	5. Check Intelligent Key battery inspection.	<u>DLK-119</u>
	6. Check Intermittent Incident.	<u>GI-42</u>

Н

DLK

L

Μ

Ν

Ο

Ρ

[COUPE]

INFOID:000000007421138

В

D

Ε

F

А

HAZARD FUNCTION

< SYMPTOM DIAGNOSIS >

HAZARD FUNCTION

Symptom Table

INFOID:000000007421139

HAZARD AND BUZZER REMINDER FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "Work flow". Refer to DLK-8, "Work Flow".
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom		Diagnosis/service procedure	Reference page
Hazard reminder does not operate by request	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	<u>DLK-51</u>
switch. (Buzzer reminder operate.)	2.	Check hazard function.	DLK-128
	3.	Check Intermittent incident.	<u>GI-42</u>
Hazard reminder does not operate by Intelligent Key. (Buzzer reminder operate.)	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	<u>DLK-51</u>
	2.	Check hazard function.	DLK-128
-		Check Intelligent Key battery inspection.	DLK-119
Buzzer reminder does not operate by request switch. (Hazard reminder operate.)	1.	Check "ANS BACK I-KEY LOCK" or "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT".	<u>DLK-51</u>
	2.	Check Intelligent Key warning buzzer.	DLK-108
	3.	Check Intermittent incident.	<u>GI-42</u>
	1.	Check "TRUNK OPEN DELAY" setting in "WORK SUP- PORT".	<u>DLK-51</u>
Buzzer reminder does not operate by trunk opener	2.	Check Intelligent Key warning buzzer.	DLK-108
request switch.		Check trunk open function.	DLK-30
		Check Intermittent incident.	<u>GI-42</u>

HORN FUNCTION

< SYMPTOM DIAGNOSIS >

HORN FUNCTION

Symptom Table

HAZARD AND HORN REMINDER FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "Work flow". Refer to DLK-8, "Work Flow".
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom		Diagnosis/service procedure	Reference page
Hazard reminder does not operate by request switch. (Horn reminder operate.)	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	<u>DLK-51</u>
	2.	Check hazard function.	DLK-128
()	3.	Check Intermittent Incident.	<u>GI-42</u>
Hazard reminder does not operate by Intelligent Key.	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	<u>DLK-51</u>
(Horn reminder operate.)	2.	Check hazard function.	DLK-128
	3.	Check Intelligent Key battery inspection.	DLK-119
Horn reminder does not operate by request switch. (Hazard reminder operate.)		Check "ANSWER BACK WITH I-KEY LOCK" or "AN- SWER BACK WITH I-KEY UNLOCK" setting in "WORK SUPPORT".	<u>DLK-51</u>
		Check Intelligent Key warning buzzer.	DLK-108
		Check Intermittent Incident.	<u>GI-42</u>
Horn reminder does not operate by Intelligent Key.	1.	Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".	<u>DLK-51</u>
(Hazard reminder operate.)	2.	Check horn function.	DLK-124
-		Check Intermittent Incident.	<u>GI-42</u>

DLK

L

Μ

Ν

0

Ρ

J

INFOID:000000007421140

А

D

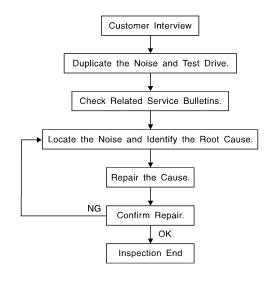
Ε

F

Н

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow



SBT842

CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to <u>DLK-202</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, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving 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 bumble bee) Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

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

DLK-198

INFOID:000000007421141

< SYMPTOM DIAGNOSIS >

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

- 1) Close a door.
- 2) Tap or push/pull around the area where the noise appears to be coming from.
- 3) Rev the engine.
- 4) Use a floor jack to recreate vehicle "twist".
- 5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on CVT and 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: J-39565 and mechanic's stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
 - removing the components in the area that you suspect the noise is coming from.
 Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
 - tapping or pushing/pulling the component that you suspect is causing the noise.
 Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
 - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
 - placing a piece of paper between components that you suspect are causing the noise.
 - looking for loose components and contact marks. Refer to <u>DLK-200, "Generic Squeak and Rattle Troubleshooting</u>".

REPAIR THE CAUSE

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

CAUTION:

Do not use excessive force as many components are constructed of plastic and may be damaged. Always check with the Parts Department for the latest parts information. The following materials are contained in the NISSAN Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed. URETHANE PADS [1.5 mm (0.059 in) thick] Insulates connectors, harness, etc. 76268-9E005: 100×135 mm (3.94×5.31 in)/76884-71L01: 60×85 mm (2.36×3.35 in)/76884-71L02: 15×25 mm (0.59×0.98 in) INSULATOR (Foam blocks) Insulates components from contact. Can be used to fill space behind a panel. 73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97×1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97×1.97 in)

INSULATOR (Light foam block)

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

FELT CLOTH TAPE

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

68370-4B000: 15×25 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

Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE

[COUPE]

А

В

D

Ε

F

DLK

Ρ

< SYMPTOM DIAGNOSIS >

[COUPE]

Used instead of UHMW tape that will be visible or not fit. Note: Will only last a few months. SILICONE SPRAY Use when grease cannot be applied. DUCT TAPE Use to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Generic Squeak and Rattle Troubleshooting

INFOID:000000007421142

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 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 silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

- 1. Shift selector assembly cover to finisher
- 2. A/C control unit and cluster lid C
- 3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

- 1. Finisher and inner panel making a slapping noise
- 2. Inside handle escutcheon to door finisher
- 3. Wiring harnesses tapping
- 4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks 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 owner. In addition look for:

- 1. Trunk lid bumpers 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.

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. Sun visor shaft shaking in the holder
- 3. Front or rear windshield touching headliner 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.

OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage. In addition look for:

- 1. Loose harness or harness connectors.
- 2. Front console map/reading lamp lens loose.
- 3. Loose screws at console attachment points.

SEATS

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

Cause of seat noise include:

- 1. Headrest rods and holder
- 2. A squeak between the seat pad cushion and frame
- 3. The rear 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 installed to the engine wall
- 2. Components that pass through the engine wall
- 3. Engine wall mounts and connectors
- 4. Loose radiator installation 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.

Ν

Ο

Ρ

Μ

[COUPE]

А

В

D

Ε

F

Н

J

DLK

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet

INFOID:000000007421143

[COUPE]

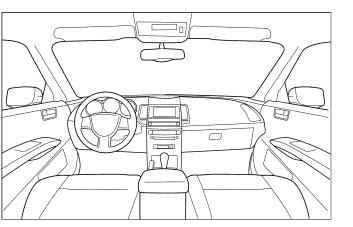
Dear Customer:

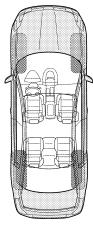
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked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

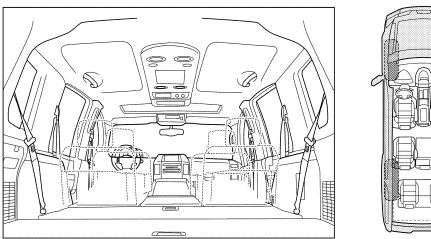
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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.

LAIA0072E

< SYMPTOM DIAGNOSIS >

[COUPE]

	ccurs:			
II. WHEN DOES IT OCCUR? (please check the state of the st	he boxes that ap	bly)		
Anytime	After sitting o	It in the ra	in	
☐ 1st time in the morning [When it is rai			
☐ Only when it is cold outside	Dry or dusty o	-	-	
☐ Only when it is hot outside [Other:			
III. WHEN DRIVING:	V. WHAT TYPE	OF NOISE	E	
Through driveways	☐ Squeak (like t	ennis shoe	es on a clean floor)	
Over rough roads			n old wooden floor)	
Over speed bumps] Rattle (like sh	aking a bal	oy rattle)	
Only about mph	☐ Knock (like a	knock at th	e door)	
On acceleration] Tick (like a clo	ck second	l hand)	
Coming to a stop] Thump (heavy	muffled kr	nock noise)	
On turns: left, right or either (circle)	Buzz (like a bi	umble bee))	
With passengers or cargo				
Other:				
After driving miles or minutes				
TO BE COMPLETED BY DEALERSHIP PERS Test Drive Notes:	JONNEL			
	YES	NO	Initials of person	
Vahiala tast drivan with sustamor	_	_	Initials of person performing	
Vehicle test driven with customer	YES		performing	
- Noise verified on test drive	_	_	performing	
		_	performing	
 Noise verified on test drive Noise source located and repaired Follow up test drive performed to confirm reported 	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		performing	
 Noise verified on test drive Noise source located and repaired Follow up test drive performed to confirm 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 SR and SB section of this Service Manual.

WARNING:

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

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

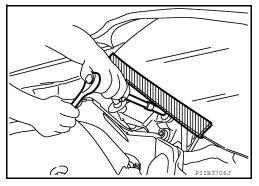
WARNING:

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

Procedure without Cowl Top Cover

INFOID:000000007421145

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



Precaution for work

INFOID:000000007421146

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

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:000000007421147

• Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.

NOTE:

PRECAUTIONS

< P	RECAUTION > [COUPE]	
ba • A a This If th If tu	fter finishing work, confirm that all control unit connectors are connected properly, then re-connect both attery cables. Iways use CONSULT to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnosis results. s vehicle is equipped with a push-button ignition switch and a steering lock unit. he battery is disconnected or discharged, the steering wheel will lock and cannot be turned. urning the steering wheel is required with the battery disconnected or discharged, follow the procedure bow before starting the repair operation.	A
OP	ERATION PROCEDURE	С
1. 2.	Connect both battery cables. NOTE: Supply power using jumper cables if battery is discharged. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position.	D
2.	(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.	E
4.	Perform the necessary repair operation.	F
5.	When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)	
6.	Perform self-diagnosis check of all control units using CONSULT.	G

I .	

J

DLK

L

Μ

Ν

0

Ρ

PREPARATION PREPARATION

Special Service Tools

INFOID:000000007421148

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	SILAO993E	Locating the noise
 (J-43980) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairing the cause of noise
 (J-43241) Remote Keyless Entry Tester	LE1946A	Used to test keyfobs
 (J-50190) Signal Tech II	ALEIAO1312Z	 Activate and display TPMS transmitter IDs Display tire pressure reported by the TPMS transmitter Read TPMS DTCs Register TPMS transmitter IDs Check Intelligent Key relative signal strength Confirm vehicle Intelligent Key antenna signal strength

PREPARATION

< PREPARATION >

Commercial Service Tools

INFOID:000000007421149

А

[COUPE]

Tool name		Description	
Engine ear		Locating the noise	
	SIIA0995E		
Power tool		Loosening nuts, screws and bolts	
	PIIB1407E		

Н

G

J

L

Μ

Ν

0

Ρ

REMOVAL AND INSTALLATION

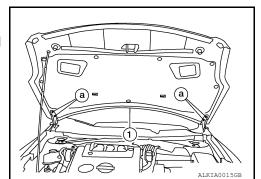
HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

REMOVAL

1. Remove the hinge nuts (a) and the hood assembly (1). CAUTION:

Remove using two workers, to avoid damaging the hood assembly.



INSTALLATION

Installation is in the reverse order of removal. After installing, perform hood fitting adjustment. Refer to <u>DLK-209</u>, "HOOD ASSEMBLY : Adjustment".

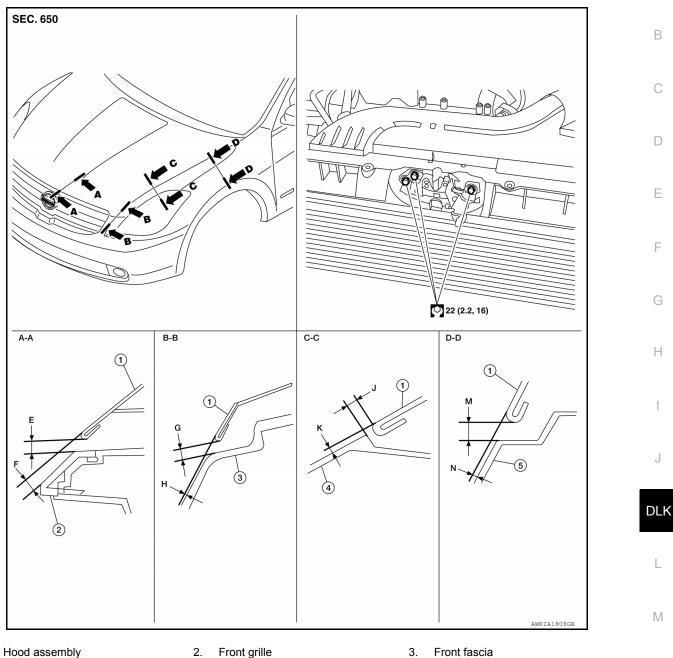
Hood hinge nuts : 13.5 N·m (1.4 kg-m, 10 ft-lb)

INFOID:000000007421150



HOOD ASSEMBLY : Adjustment

INFOID:000000007421151



HOOD

Front combination lamp

Item

Е

F

G

Н

J

Κ

1.

4.

MENT

Section

A - A

B – B

C - C

Front grille 5. Front fender

Measurement

Clearance

Surface height

Clearance

Surface height

Clearance

Surface height

3. Front fascia

Parallelism

MAX 2.0 (0.08)

_

≤ 2.0 (0.08)

≤ 2.0 (0.08)

Ο

Ν

Unit: mm (in)

Equality

_

2.1 (0.08)

< 2.0 (0.08)

 $\leq 2.2 \ (0.09)$

≤ 2.0 (0.08)

Ρ

DLK-209

FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDUNAL CLEARANCE ADJUST-

Standard

 $5.0 \pm 2.0 \ (0.20 \pm 0.08)$

 $2.3 \pm 2.1 \; (0.09 \pm 0.08)$

 $5.1\pm2.0\;(0.20\pm0.08)$

 $3.1 \pm 2.1 \ (0.12 \pm 0.08)$

 $4.0 \pm 2.0 \ (0.16 \pm 0.08)$

 $1.0 \pm 1.0 \; (0.04 \pm 0.04)$

2012 Altima GCC

А

F

J

L

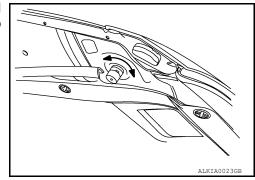
HOOD

< REMOVAL AND INSTALLATION >

Section	Item	Measurement	Standard	Parallelism	Equality
D – D	М	Clearance	$4.0\pm1.0\;(0.16\pm0.04)$	1.0 (0.04)	1.0 (0.04)
	Ν	Surface height	$0.2\pm 1.0\;(0.01\pm 0.04)$	1.0 (0.04)	1.0 (0.04)

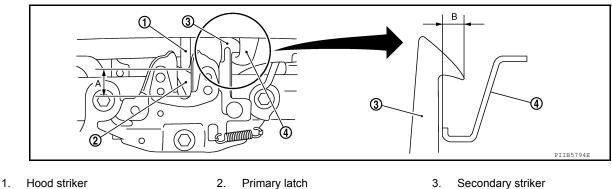
Front End Height Adjustment

- 1. Check the surface height between the hood and each part by visual inspection and tactile feeling.
- 2. Remove the front grille. Refer to EXT-20, "Removal and Installation".
- 3. Remove the hood lock.
- 4. Adjust the surface level difference of the hood, fender and head lamp by rotating the hood bumpers until the hood becomes 1 to 1.5 mm (0.04 to 0.06 in) lower than the fender.



[COUPE]

- 5. Install and align the hood lock center with the center of the hood striker. Engage the lock with the striker and check for looseness.
- 6. Adjust A and B as shown to the specifications with hood's own weight by dropping it from approx. 200 mm (7.87 in) height or by pressing the hood closed lightly [approx. 29 N (3 kg-f, 6.5 lb-f)].



4. Secondary latch

A. 20 mm (0.8 in)

- B 6.8 mm (0.27 in)
- 7. After adjustment tighten the hood lock bolts to the specified torque.

Lateral/Longitudinal Clearance Adjustment

- 1. Check the clearance between the hood and each part by visual inspection and tactile feel.
- 2. Loosen the hood hinge bolts.

NOTE:

The anticorrosive agent applied between the hoodledge and the hood hinges also acts as an adhesive. This seal must be broken before the hinges will move.

- 3. Move the hood so that the clearance measurements are within specifications.
- 4. Tighten the hood hinge bolts.

Hood hinge bolts :13.5 N·m (1.4 kg-m, 10 ft-lb)

NOTE:

After installation apply touch-up paint onto the hinge bolts and around the base of the hinge.

5. If the clearance measurements between the hood and fender cannot be corrected by moving the hood, the fender must be adjusted. Refer to <u>DLK-216</u>. "Removal and Installation".

HOOD LOCK CONTROL

DLK-210

HOOD

< REMOVAL AND INSTALLATION >

HOOD LOCK CONTROL : Component Parts Location

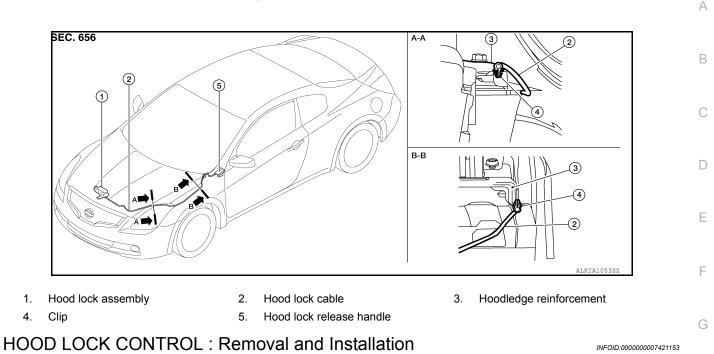
[COUPE]

INFOID:000000007421152

Н

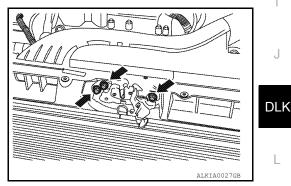
J

L

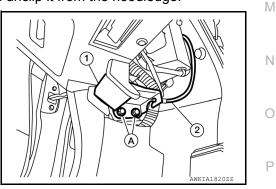


REMOVAL

- 1. Remove the screws and the LH splash guard.
- Remove the LH fender protector. Refer to <u>EXT-22, "Removal and Installation"</u>.
- 3. Remove the hood lock assembly bolts.



- 4. Disconnect the hood lock cable from the hood lock assembly, and unclip it from the hoodledge.
- 5. Remove the bolts (A), then separate the hood lock release handle (1) from the hood lock cable (2).



- Remove the instrument lower LH. Refer to <u>IP-18, "Removal and Installation"</u>.
- 7. Remove the grommet from the upper dash, and pull the hood lock cable into the passenger compartment. CAUTION:

While pulling, be careful not to damage (peel) the outside of the hood lock cable.

INSTALLATION

< REMOVAL AND INSTALLATION >

- 1. Pull the hood lock cable through the upper dash into the engine compartment. **CAUTION:**
 - Be careful not to bend the cable too much, keep the radius 100 mm (3.94 in) or more.

HOOD

2. Attach the hood lock cable (2) to the hood lock release handle (1) and install the hood lock release handle bolts (A).

3. Check that the cable is not offset from the center of the grommet, and seat the grommet into the upper dash hole. NOTE:

Make sure that the marked area (A) of the cable is located as shown after mounting grommet to dash upper. Apply the sealant around the grommet at * mark.

ALKIA2139ZZ

1

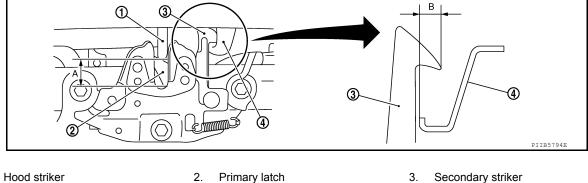
- 4. Position the hood lock cable and clip it into place.
- 5. Connect the hood lock cable to the hood lock assembly.
- 6. Loosely install the hood lock assembly.
- 7. Install the instrument lower panel LH. Refer to IP-18, "Removal and Installation".
- 8. Install the LH fender protector. Refer to EXT-22, "Removal and Installation".
- 9. Install LH splash guard, secure with screws.
- 10. Perform hood fitting adjustment. Refer to DLK-209, "HOOD ASSEMBLY : Adjustment".
- 11. Check the hood lock control operation.

INSPECTION

CAUTION:

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

Check that the secondary latch is properly engaged with the secondary striker and meets specification 1. provided (B) with hood's own weight.



DLK-212

4 Secondary latch

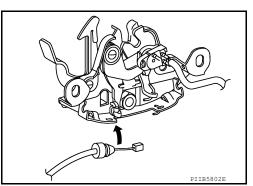
1

20 mm (0.8 in) A.

- 6.8 mm (0.27 in) B.

2

TA18202

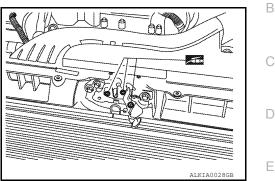


HOOD

< REMOVAL AND INSTALLATION >

2. While operating the hood opener, carefully check that the front end of the hood is raised and meets the specification provided (A). Also check that the hood opener returns to the original position.

- 3. Check that the hood lock release handle operating force is 49 N (5.0 kg-f, 11 lb-f).
- Install so the static closing force of the hood is 343 490 N (35 50 kg-f, 77.1 110.2 lb-f). 4.
- 5. Check the hood lock lubrication condition. If necessary, apply grease as shown.



J

DLK

L

Μ

Ν

Ο

Ρ

F

Н

[COUPE]

А

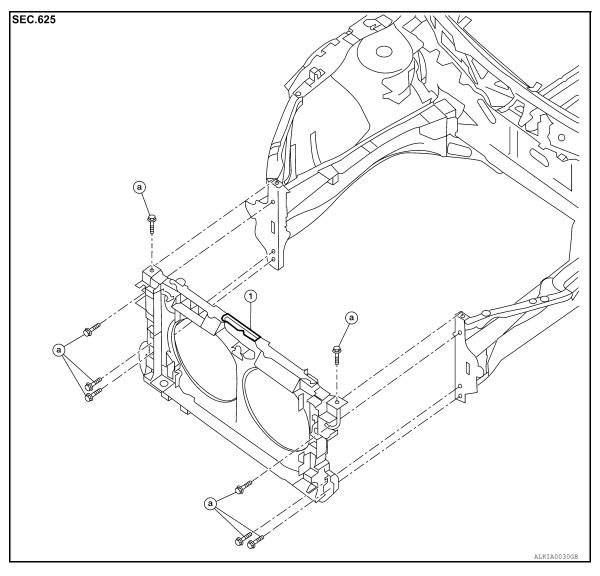
< REMOVAL AND INSTALLATION >

RADIATOR CORE SUPPORT

Removal and Installation

INFOID:000000007421154

[COUPE]



1. Radiator core support a. Radiator core support bolts

REMOVAL

- 1. Remove front bumper supports. Refer to EXT-16, "Removal and Installation Coupe".
- 2. Remove front combination lamps (LH/RH). Refer to EXL-208, "Removal and Installation".
- 3. Remove air duct. Refer to <u>EM-19</u>, "<u>Removal and Installation</u>" (QR25DE), or <u>EM-132</u>, "<u>Removal and Installation</u>" (VQ35DE).
- 4. Remove the radiator cooling fans. Refer to <u>CO-17, "Removal and Installation"</u> (QR25DE), or <u>CO-41,</u> <u>"Removal and Installation"</u> (VQ35DE).
- 5. Remove the radiator. Refer to <u>CO-17, "Removal and Installation"</u> (QR25DE), or <u>CO-39, "Removal and Installation"</u> (VQ35DE).
- 6. Remove the hood lock. Refer to <u>DLK-211, "HOOD LOCK CONTROL : Removal and Installation"</u>.
- 7. Remove ambient sensor. Refer to HA-42. "Removal and Installation".
- 8. Remove crash zone sensor. Refer to SR-17, "Removal and Installation".
- 9. Remove air guides (LH/RH).

RADIATOR CORE SUPPORT

< REMOVAL AND INSTALLATION > [COUPE]	
 Remove power steering oil cooler (if equipped). Refer to <u>ST-22, "VQ35DE : VQ35DE: Component Parts Location - 17 Inch Tire"</u> (17 inch tire) or, <u>ST-24, "VQ35DE : VQ35DE: Component Parts Location - 18 Inch Tire"</u> (18 inch tire). 	A
11. Remove the harness clips from the radiator core support assembly and position the harness aside.	
12. Remove the hood support rod.	В
Remove the bolts and the radiator core support.	
INSTALLATION Installation is in the reverse order of removal. CAUTION:	С
 After installing, perform hood fitting adjustment. Refer to <u>DLK-209, "HOOD ASSEMBLY : Adjust-ment"</u>. After adjusting, apply touch-up paint (the body color) to the radiator core support bolts. 	D
	Е

|

J

F

G

Н

L

M

Ν

0

Ρ

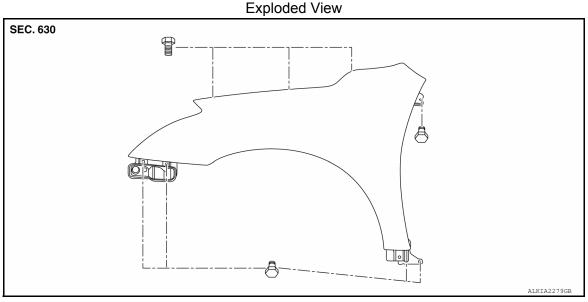
< REMOVAL AND INSTALLATION >

FRONT FENDER

Removal and Installation

INFOID:000000007421155

[COUPE]



REMOVAL

- 1. Remove the fender protector. Refer to EXT-22, "Removal and Installation".
- 2. Remove the front combination lamp. Refer to EXL-208. "Removal and Installation".
- 3. Remove the cowl top side trim cover.
- 4. Remove the center mudguard. Refer to EXT-23, "Removal and Installation".
- 5. Remove the bolts and the front fender.
 - **CAUTION:**
 - While removing, use a shop cloth to protect the body from damage.
 - Use care when removing the front fender. The front fender baffle foam adheres the front fender to the body side outer. Carefully release the foam or damage to the fender may occur.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installing, perform fender adjustment. Refer to <u>DLK-217, "Adjustment"</u>.
- After adjusting, apply touch-up paint (the body color) onto the head of the front fender bolts.

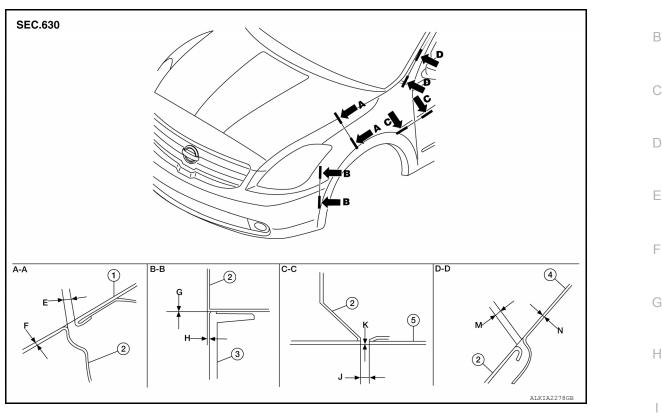
FRONT FENDER

< REMOVAL AND INSTALLATION >

Adjustment

[COUPE]

А



- 1. Hood assembly
- 2. Front fender
- 3. Front fascia

- 4. Body side outer
- 5. Front door assembly

Unit:	mm	(in)	0

Ο

Ρ

	Equality	Parallelism	Standard	Measurement	Item	Section
DL	1.0 (0.04)	1.0 (0.04)	$4.0\pm 1.0\;(0.16\pm 0.04)$	Clearance	E	
	1.0 (0.04)	1.0 (0.04)	$0.2\pm1.0\;(0.01\pm0.04)$	Surface height	F	A – A
1	—	—	0.0 + 0.8 (0.0 + 0.03)	Clearance	G	B – B
	MAX 1.0 (0.04)	MAX 1.0 (0.04)	$0.7 \pm 1.0 \; (0.03 \pm 0.04)$	Surface height	Н	В – В
	—	1.0 (0.04)	$3.6 \pm 1.0 \; (0.14 \pm 0.04)$	Clearance	J	C – C
Ν	—	—	$0.0 \pm 1.0 \; (0.0 \pm 0.04)$	Surface height	К	0-0
	—	1.0 (0.04)	$2.3 \pm 1.0 \; (0.09 \pm 0.04)$	Clearance	М	D – D
	—	_	$0.0 \pm 1.0 \; (0.0 \pm 0.04)$	Surface height	Ν	D – D

Adjustment

- 1. Remove the cowl top side trim cover.
- 2. Remove the front fender protector. Refer to EXT-22, "Removal and Installation".
- Remove the center mudguard. Refer to <u>EXT-23, "Removal and Installation"</u>.
- 4. Loosen the front fender bolts.
- 5. Adjust the clearance (J) and surface height (K) between the front fender and the front door.
- 6. Tighten the rear upper and lower front fender bolts.
- 7. Adjust the clearance (E) and surface height (F) between the front fender and the hood.
- 8. Adjust the clearance (M) and surface height (N) between the front fender and the body side outer.
- 9. Tighten the inner front fender bolts.
- 10. Adjust the clearance (G) and the surface height (H) between the front fender and the front fascia.

DLK-217

FRONT FENDER

< REMOVAL AND INSTALLATION >

- 11. Tighten the front fender to front fascia and bracket screws.
- 12. Apply touch-up paint (the body color) onto the head of the front fender bolts.
- 13. Install the center mudguard. Refer to EXT-23, "Removal and Installation".
- 14. Install the front fender protector. Refer to EXT-22, "Removal and Installation".
- 15. Install the cowl top side trim cover.

< REMOVAL AND INSTALLATION >	
DOOR	

FRONT DOOR

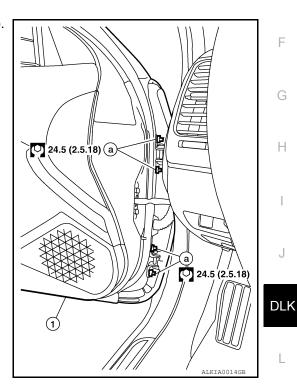
FRONT DOOR : Removal and Installation

CAUTION:

- · When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.
- · Check the hinge rotating parts for lubrication. If necessary, apply "body grease".
- · Operate with two workers, because of its heavy weight.
- Do not use air tools or electric tools for servicing.

REMOVAL

- 1. Pull the grommet and wire harness out of the front pillar until the harness connectors are accessible. Then disconnect the wire harness connectors.
- 2. Remove the check link bolt from the front pillar.
- 3. Remove the door-side hinge nuts (a) and the door assembly (1).



CAUTION:

Ρ

INFOID:000000007421156

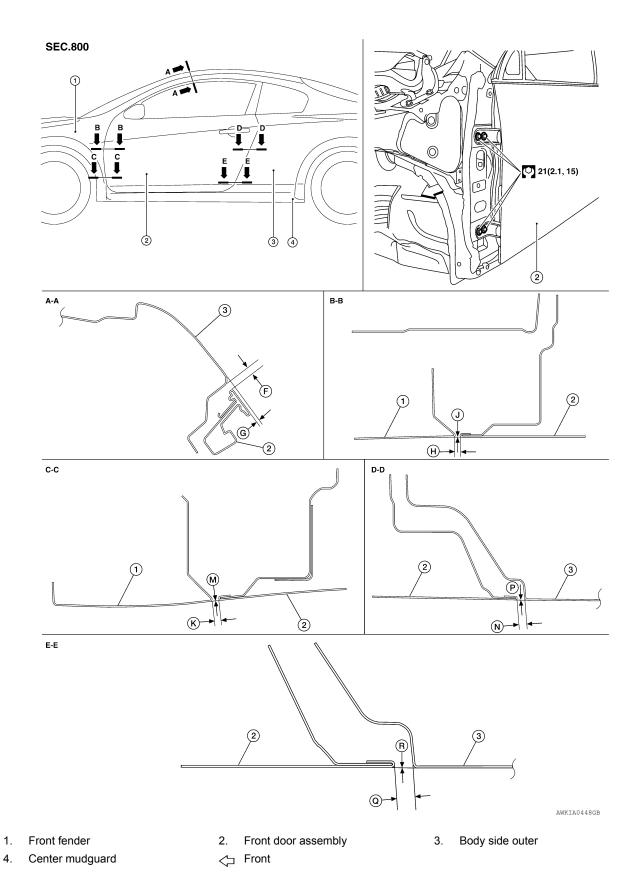
В

D

Е

FRONT DOOR : Adjustment

[COUPE]



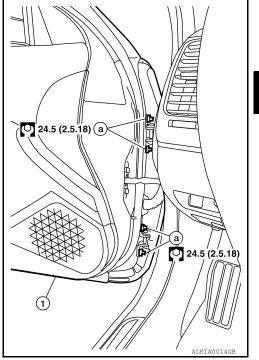
			Unit: mm (in
Section	ltem	Measurement	Standard
A – A	F	Clearance	6.2 \pm 1.6 (0.24 \pm 0.06)
A-A	G	Surface height	1.6 \pm 1.5 (0.06 \pm 0.06)
B – B	н	Clearance	3.6 \pm 1.0 (0.14 \pm 0.04)
D - D	J	Surface height	0.0 \pm 1.0 (0.0 \pm 0.04)
C – C	K	Clearance	3.6 \pm 1.0 (0.14 \pm 0.04)
U -U	Μ	Surface height	0.0 \pm 1.0 (0.0 \pm 0.04)
D – D	N	Clearance	3.6 \pm 1.0 (0.14 \pm 0.04)
0-0	Р	Surface height	0.0 \pm 1.0 (0.0 \pm 0.04)
E-E	Q	Clearance	3.6 \pm 1.0 (0.14 \pm 0.04)
c-c	R	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

LONGITUDINAL CLEARANCE

- 1. Confirm the back door adjustments and adjust if necessary. Refer to DLK-458, "BACK DOOR : Adjustment".
- 2. Remove the front fender. Refer to DLK-216. "Removal and Installation".
- 3. Loosen the hinge to body bolts. Move the door forward or backward as necessary until it is within specifications.
- 4. Tighten the hinge to body bolts to specification.
- 5. Install the front fender. Refer to DLK-216, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the front door hinge nuts (a).
- 2. Move the top and/or bottom of the front door (1) in or out as necessary until it is within specifications.
- 3. Tighten the front door hinge nuts (a) to specifications.



F

Н

DLK

Μ

Ν

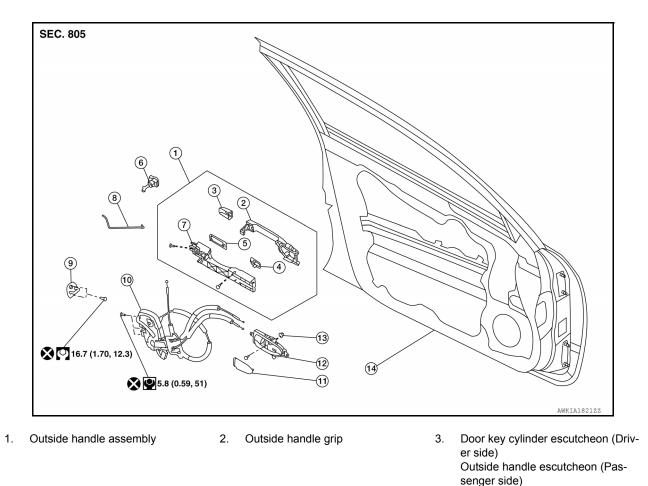
0

Ρ

DOOR LOCK FRONT DOOR LOCK

FRONT DOOR LOCK : Component Parts Location

INFOID:000000007421158



4. Front gasket

- 5. Rear gasket
- Outside handle bracket 7.

- 10. Door lock assembly 13. Grommet
- 8. Key cylinder rod (Driver side only)
- 11. Cap

FRONT DOOR LOCK : Removal and Installation

- 14. Front door assembly
- Front door striker 12. Inside door handle assembly

Key cylinder assembly (Driver side

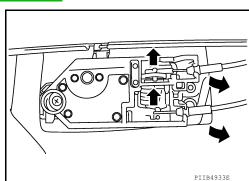
6.

9.

only)

REMOVAL

- Remove the front door finisher. Refer to INT-41. "Removal and Installation". 1.
- Disconnect the inside handle knob cable and lock knob cable 2. from the back side of the front door finisher.



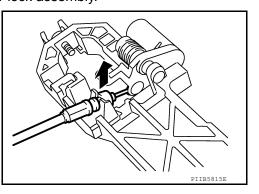
INFOID:000000007421159

DOOR LOCK

< REMOVAL AND INSTALLATION >

- 3. Remove the front door window and front door module assembly. Refer to <u>GW-19, "Removal and Installa-</u> tion".
- 4. Disconnect the key cylinder rod.
- 5. Remove the bolts (T30), remove the door lock assembly.

- 6. Disconnect the door lock actuator connector and remove the door lock assembly.
- 7. Disconnect the outside handle cable from the outside handle bracket connection.



 \odot

K

INSTALLATION Installation is in the reverse order of removal. CAUTION:

When installing the key cylinder rod be sure to rotate the key cylinder rod holder until a click is felt.

DLK

L

Μ

Ν

Ο

Ρ

J

Revision: February 2013

(0

PIIB5812E

(0)

А

В

С

D

Ε

F

Н

TRUNK LID

< REMOVAL AND INSTALLATION >

TRUNK LID TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY : Removal and Installation

REMOVAL

- 1. Remove the trunk lid lock. Refer to <u>DLK-226, "TRUNK LID LOCK : Removal and Installation"</u>.
- 2. Disconnect the connectors and harness clips as necessary, then remove the harness from the trunk lid assembly.
- 3. Remove the bolts and the trunk lid assembly.

INSTALLATION

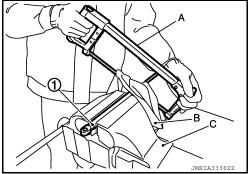
Installation is in the reverse order of removal.

- **CAUTION:**
- After installing, perform fitting adjustment. Refer to <u>DLK-225, "TRUNK LID ASSEMBLY : Adjust-ment"</u>.
- After adjusting, apply touch-up paint (the body color) to the hinge bolts and around the base of the hinge.

TRUNK LID ASSEMBLY : Trunk Lid Stay Disposal

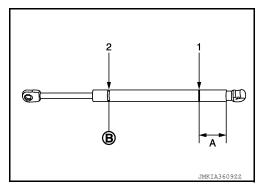
INFOID:000000007421161

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



A: 20 mm (0.787 in)

B: Cut at the groove.



INFOID-000000007421160

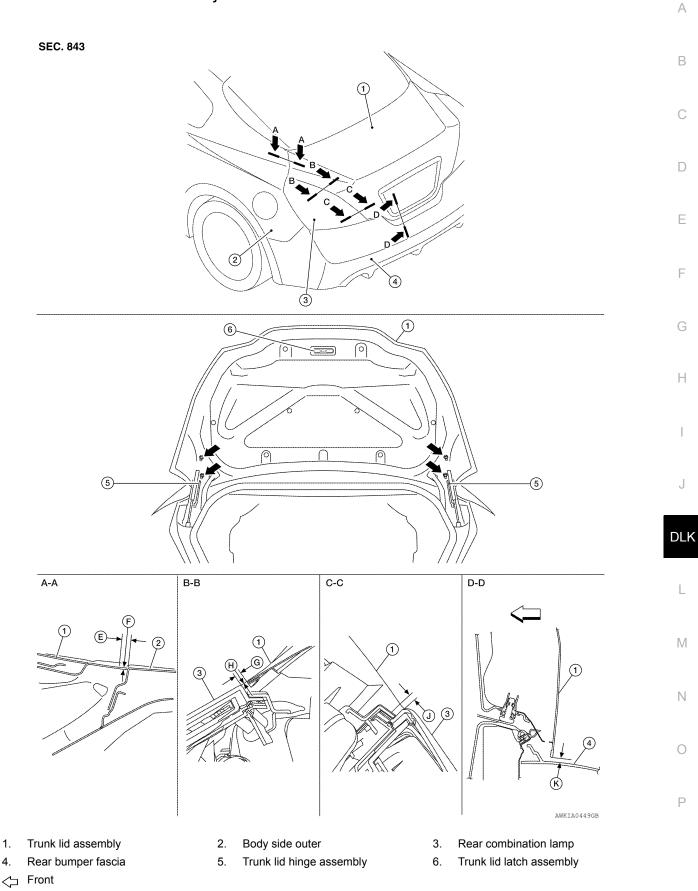
TRUNK LID

< REMOVAL AND INSTALLATION >

TRUNK LID ASSEMBLY : Adjustment

[COUPE]





1.

4.

TRUNK LID

< REMOVAL AND INSTALLATION >

[COUPE]
Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism (MAX)	Right/Left Difference (MAX)
A – A	E	Clearance	$4.0 \pm 1.6 \; (0.16 \pm 0.06)$	1.5 (0.06)	2.0 (0.08)
A-A	F	Surface height	-0.5 \pm 1.5 (-0.02 \pm 0.06)	1.5 (0.06)	2.0 (0.08)
B – B	G	Clearance	$4.0 \pm 1.5 \; (0.16 \pm 0.06)$	1.5 (0.06)	2.0 (0.08)
B - B	Н	Surface height	-0.5 \pm 1.5 (-0.02 \pm 0.06)	1.5 (0.06)	2.0 (0.08)
C – C	J	Clearance	$4.0 \pm 1.5 \; (0.16 \pm 0.06)$	_	2.0 (0.08)
D – D	К	Clearance	$7.5\pm2.3\;(0.30\pm0.09)$	2.3 (0.09)	—

LONGITUDINAL CLEARANCE

- 1. Check the clearance and the evenness between the trunk lid and each part by visual inspection and tactile feel.
- 2. Loosen the trunk lid to hinge bolts.
- 3. Move the trunk lid so that the clearance measurements are within specifications.
- 4. Tighten the trunk lid to hinge bolts.

SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the trunk lid striker bolts.
- Lift up the trunk lid approx. 100 150 mm (3.94 5.91 in) height then close it lightly. Make sure it engages firmly with the trunk lid closed.
- 3. Tighten the trunk lid striker bolts.

TRUNK LID LOCK

TRUNK LID LOCK : Removal and Installation

REMOVAL

- 1. Remove the trunk lid finisher (if equipped). Refer to INT-53, "Exploded View".
- 2. Remove the trunk lid lock bolts.
- 3. Disconnect the connector, and emergency release handle, and remove the trunk lid lock.

INSTALLATION

Installation is in the reverse order of removal. TRUNK LID STRIKER

TRUNK LID STRIKER : Removal and Installation

REMOVAL

- 1. Remove the trunk rear finisher. Refer to INT-54, "Removal and Installation".
- 2. Remove the bolts and the striker.

INSTALLATION

Installation is in the reverse order of removal.

• Adjust the trunk lid striker. Refer to <u>DLK-225, "TRUNK LID ASSEMBLY : Adjustment"</u>.

INFOID:000000007421163

INFOID:000000007631096

FUEL FILLER LID OPENER

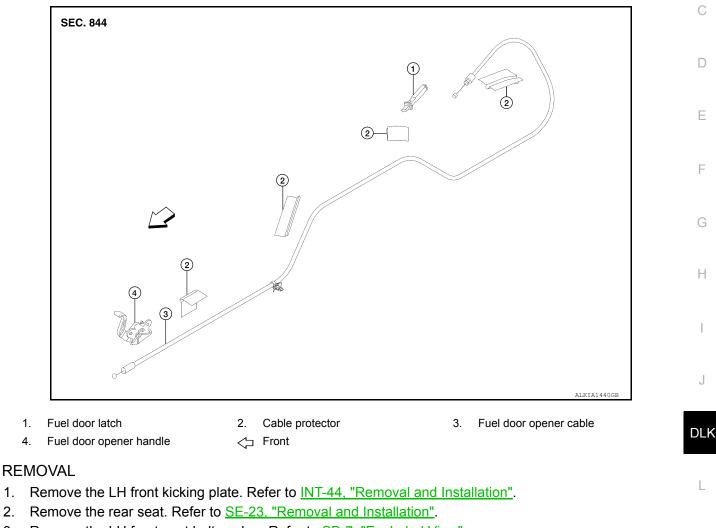
< REMOVAL AND INSTALLATION >

FUEL FILLER LID OPENER

FUEL FILLER OPENER

FUEL FILLER OPENER : Removal and Installation

COMPONENTS



- Remove the LH front seat belt anchor. Refer to <u>SB-7, "Exploded View"</u>.
- Remove the LH rear lower finisher. Refer to <u>INT-44, "Removal and Installation"</u>.
- 5. Position the carpet aside.
- Remove the LH trunk side finisher. Refer to <u>INT-54, "Removal and Installation"</u>.
- 7. Remove the fuel door opener handle and disconnect the fuel door opener cable.
- 8. Remove the fuel door latch and disconnect the fuel door opener cable.
- 9. Remove the fuel door opener cable.

INSTALLATION

1.

4.

Installation is in the reverse order of removal.

INFOID:000000007421164

А

В

D

Е

F

Н

L

Μ

Ν

Ο

Ρ

REMOTE KEYLESS ENTRY RECEIVER

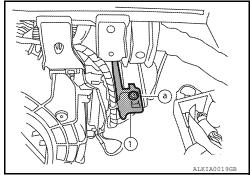
< REMOVAL AND INSTALLATION >

REMOTE KEYLESS ENTRY RECEIVER

Removal

REMOVAL

- 1. Remove glove box assembly. Refer to <u>IP-19, "Removal and Installation"</u>.
- 2. Remove the screw (a) and lower the bracket and remote keyless entry receiver (1).
- 3. Disconnect the harness and connector and remove the remote keyless entry receiver (1).



INFOID:000000007421166

Installation

Installation is in the reverse order of removal.

INFOID:000000007421165

< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORKFLOW

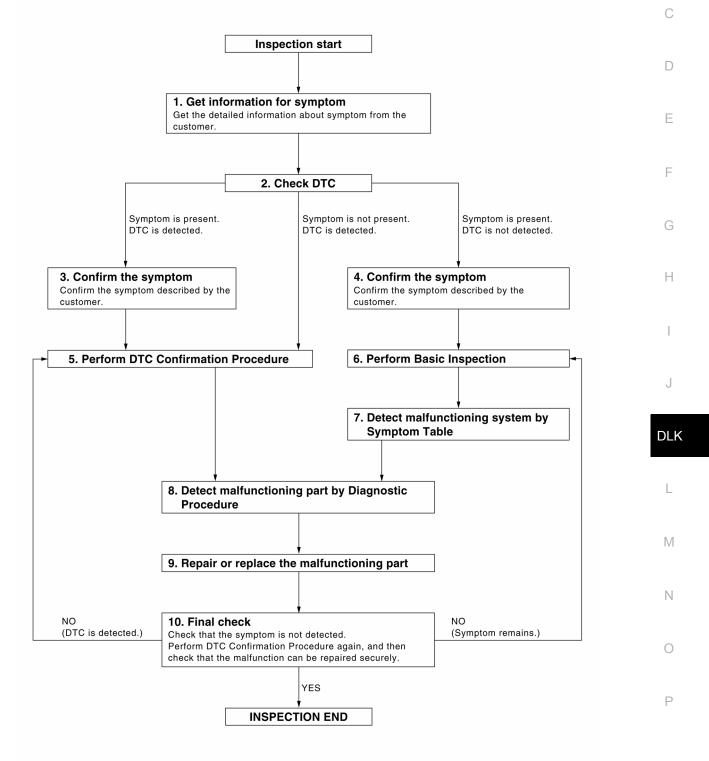
Work Flow

INFOID:000000007421167 B

А

[SEDAN]





ABJIA0529GB

Revision: February 2013

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

Is any symptom described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer. Connect CONSULT to the vehicle in "DATA MONITOR" mode and check real time diagnosis results.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

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

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to <u>BCS-65</u>, "<u>DTC Inspection Priority Chart</u>" and determine trouble diagnosis order.

NOTE:

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

Is DTC detected?

Yes >> GO TO 8.

No >> Refer to <u>GI-42, "Intermittent Incident"</u>.

6.PERFORM BASIC INSPECTION

Perform <u>DLK-229, "Work Flow"</u>.

Inspection End>>GO TO 7.

7. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to <u>DLK-423</u>, "<u>Symptom Table</u>" based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

Revision: February 2013

CNOCIO AND DEDAID WORKELOW

DIAGNOSIS AND REPAIR WORKFLOW	
< BASIC INSPECTION > [SEDAN]	
8. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE	^
Inspect according to Diagnostic Procedure of the system. NOTE:	P
The Diagnostic Procedure described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure. <u>Is malfunctioning part detected?</u>	В
YES >> GO TO 9.	C
NO >> Check voltage of related BCM terminals using CONSULT. 9.REPAIR OR REPLACE THE MALFUNCTIONING PART	
 Repair or replace the malfunctioning part. Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement. 	D
3. Check DTC. If DTC is displayed, erase it.	E
>> GO TO 10.	
10.FINAL CHECK	F
When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely. When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.	G
Is the inspection result normal? NO (DTC is detected)>>GO TO 5. NO (Symptom remains)>>GO TO 6.	F
YES >> Inspection end.	
	J
	DL
	L
	N

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:000000007421168

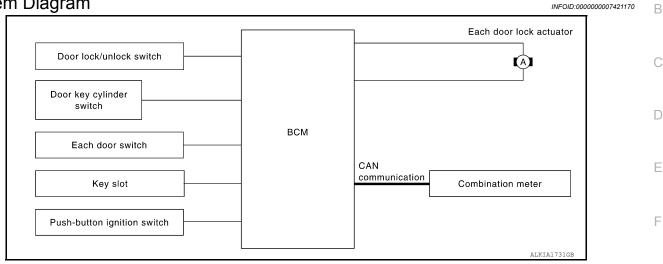
Perform the system initialization when replacing BCM, replacing Intelligent Key or registering an additional Intelligent Key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

Refer to the CONSULT Immobilizer mode and follow the on-screen instructions.

SYSTEM DESCRIPTION > SYSTEM DESCRIPTION AUTOMATIC DOOR LOCKS

System Diagram



System Description

Input	Single	Function	Actuator	
Door lock/unlock switch	Door lock/unlock signal	Door lock function		_
Door key cylinder switch				
Each door switch	Door open/close signal			
Key slot	Key insert/remove signal	Key reminder function	Each door lock actuator	
	Warning buzzer signal			
Combination meter	Vehicle speed signal	Automatic door lock/unlock function		_

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 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>BCS-17, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

AUTOMATIC DOOR LOCKS (LOCK OPERATION)

The automatic door locks function is the function that locks all doors linked with the vehicle speed or shift position.

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 MPH) or more.

DLK-233

А

Μ

Ν

AUTOMATIC DOOR LOCKS

< SYSTEM DESCRIPTION >

[SEDAN]

If a door is opened and closed at any time during one ignition cycle (OFF \rightarrow ON), even after initial auto door lock operation has taken place, the BCM will relock all doors when the vehicle speed reaches 24 km/h (15 MPH) or more again.

Setting change of Automatic Door Locks (LOCK) Function

The LOCK operation setting of the automatic door locks function can be changed.

With CONSULT

The ON/OFF switching of the automatic door locks (LOCK) function and the type selection of the automatic door locks (LOCK) function can be performed at the WORK SUPPORT setting of CONSULT. Refer to <u>BCS-17</u>, <u>"DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)"</u>.

Without CONSULT

The automatic door locks (LOCK) function can be switched ON/OFF by performing the following operation.

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

5. The ignition switch must be turned OFF and ON again between each setting change.

AUTOMATIC DOOR LOCKS (UNLOCK OPERATION)

The automatic door locks (UNLOCK) function is the function that unlocks all doors linked with the key position or shift position.

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.

Setting change of Automatic Door Locks (UNLOCK) Function

The UNLOCK operation setting of the automatic door locks function can be changed.

With CONSULT

The ON/OFF switching of the automatic door locks (UNLOCK) function and the type selection of the automatic door locks (UNLOCK) function can be performed at the WORK SUPPORT setting of CONSULT. Refer to <u>BCS-17</u>, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Without CONSULT

The automatic door locks (UNLOCK) function can be switched ON/OFF by performing the following operation.

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

 $\begin{array}{ll} \mathsf{OFF} \to \mathsf{ON} & : 2 \text{ blinks} \\ \mathsf{ON} \to \mathsf{OFF} & : 1 \text{ blink} \end{array}$

- 5. The ignition switch must be turned OFF and ON again between each setting change.
- *1: This function is set to ON before delivery.

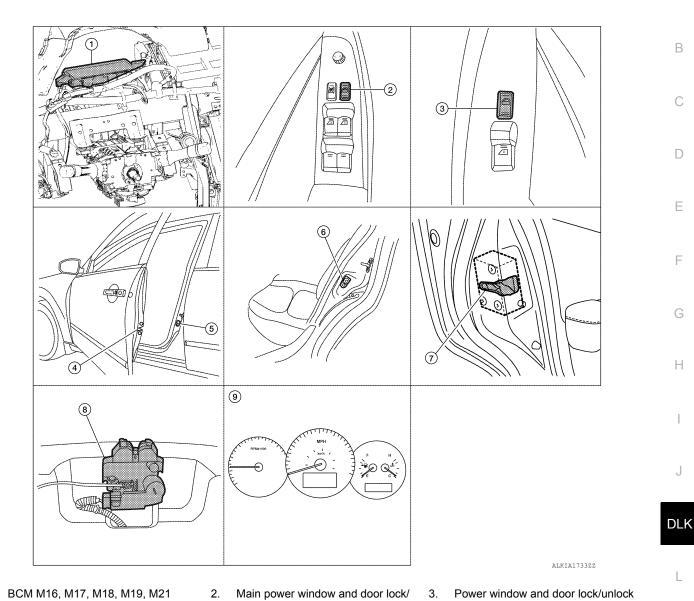
AUTOMATIC DOOR LOCKS

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000007421172

А



- 1. (view with instrument panel removed)
- Front door lock assembly LH D10 4. Front door lock actuator RH D108
- 7. Rear door lock actuator LH D205 Rear door lock actuator RH D305

Component Description

- unlock switch D7, D8
- Front door switch LH B8 5. Front door switch RH B108
- 8. Trunk lamp switch and trunk release 9. solenoid (trunk lamp switch) B28
- switch RH D105 Rear door switch LH B18
- 6. Μ Rear door switch RH B116 Combination meter M24

Ν

INFOID:000000007421173

Item	Function	
BCM	Controls the door lock function and fuel lid door lock actuator function.	
Door lock and unlock switch	Input lock or unlock signal to BCM.	
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.	
Door switch	Input door open/close condition to BCM.	
Door key cylinder switch	 Input lock or unlock signal to power window main switch. Power window main switch transmits door lock/unlock signal to BCM. 	
Key slot	Input key insert/remove signal to BCM.	

AUTOMATIC DOOR LOCKS

< SYSTEM DESCRIPTION >

Item	Function	
Combination meter	 Receive buzzer signal from BCM via CAN communication line, and sounds the buzzer. Transmits vehicle speed signal to CAN communication line. 	
Push-button ignition switch	Input push-button ignition switch ON/OFF condition to BCM.	

DOOR LOCK FUNCTION DOOR LOCK AND UNLOCK SWITCH

< SYSTEM DESCRIPTION >

DOOR LOCK AND UNLOCK SWITCH : System Diagram

DOOR LOCK AND UNLOCK SWITCH : System Description

Switch	Input/output signal to BCM	BCM function	Actuator	
Main power window and door lock/unlock switch				
Power window and door lock/ unlock switch	Door lock/unlock signal	Door lock/unlock control	Door lock actuator	
Door key cylinder switch				

DOOR LOCK FUNCTION

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

- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all door lock DLK actuators are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all door lock actuators are unlocked.

Functions Available by Operating the Key Cylinder Switch on Driver Door

• Interlocked with the locking operation of door key cylinder, door lock actuators of all door lock actuators are locked.

Selective Unlock Operation

- When door key cylinder is unlocked, door lock actuator driver side is unlocked.
- When door key cylinder is unlocked for the second time within 5 seconds after the first operation, door lock $_{\rm N}$ actuators on all doors are unlocked.
- Select unlock operation mode can be changed using DOOR LOCK-UNLOCK SET mode in "WORK SUP-PORT". Refer to <u>BCS-17, "DOOR LOCK : CONSULT Function (BCM DOOR LOCK)"</u>.

Key Reminder System Refer to <u>DLK-270, "System Description"</u>.

Ο

L

Μ

[SEDAN]

ALKIA0178GH

INFOID:000000007421175

А

В

D

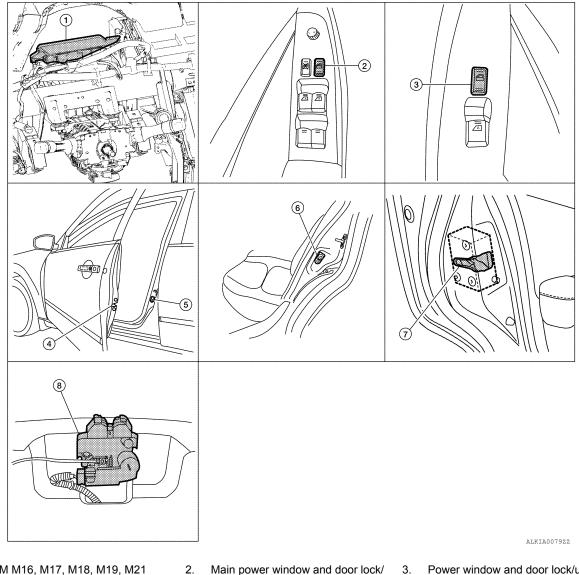
Ε

< SYSTEM DESCRIPTION >

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:000000007421176

[SEDAN]



- BCM M16, M17, M18, M19, M21 1. (view with instrument panel removed)
- Front door lock assembly LH D10 4. Front door lock actuator RH D108
- Rear door lock actuator LH D205 7. Rear door lock actuator RH D305
- 2. Main power window and door lock/ unlock switch D7, D8
- Front door switch LH B8 5. Front door switch RH B108
- Trunk lamp switch and trunk release 8. solenoid (trunk lamp switch) B28
- Power window and door lock/unlock switch RH D105
- Rear door switch LH B18 6. Rear door switch RH B116

DOOR LOCK AND UNLOCK SWITCH : Component Description

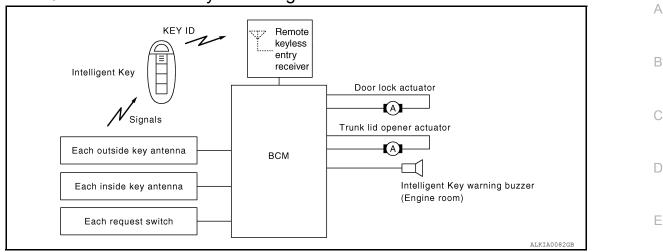
INFOID:000000007421177

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

DOOR REQUEST SWITCH

< SYSTEM DESCRIPTION >

DOOR REQUEST SWITCH : System Diagram



DOOR REQUEST SWITCH : System Description

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

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

The driver should always carry the Intelligent Key

- If an action that does not meet the operating conditions of the Intelligent Key system is taken, the buzzer goes off to inform the driver (Warning chime function).
- When a door lock is locked, unlocked or trunk open with request switch or remote controller button operation, the hazard lamps flash and the Intelligent Key warning buzzer or horn sounds (Hazard and buzzer/horn reminder function).
- The settings for each function can be changed with the CONSULT.
- If an Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It is possible to perform a diagnosis on the system and register an Intelligent Key with the CONSULT.

OPERATION DESCRIPTION/DOOR LOCK/UNLOCK

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

OPERATION CONDITION

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

Each request switch operation	Operation condition	
Lock operation	 All doors are closed Ignition switch is in OFF position Intelligent Key is out of key slot Intelligent Key is outside the vehicle Intelligent Key is within outside key antenna detection area 	F
Unlock Operation	 Intelligent Key is outside the vehicle Intelligent Key is within outside key antenna detection area * 	

[SEDAN]

INFOID:000000007421178

INFOID:000000007421179

Н

J

DLK

L

Μ

Ν

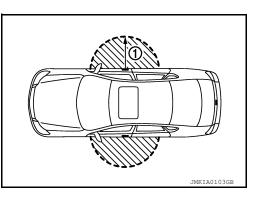
Ο

< SYSTEM DESCRIPTION >

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

OUTSIDE KEY ANTENNA DETECTION AREA

The outside key antenna detection area of door lock/unlock function is in the range of approximately 80 cm (31.50 in) surrounding the driver and passenger door handles (1).



SELECTIVE UNLOCK FUNCTION

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

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

HAZARD AND BUZZER REMINDER FUNCTION

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

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

Operating function of hazard warning lamps and buzzer reminder

Operation	Hazard warning lamps flash	Intelligent Key warning buzzer honk
Unlock	Once	Once
Lock	Twice	Twice
Trunk open		Four times

How to change hazard and buzzer reminder mode

Refer to BCS-23, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

AUTO DOOR LOCK FUNCTION

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

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

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

Auto door lock mode can be changed by "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>BCS-23.</u> "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

ROOM LAMP OPERATION

When the following conditions are met:

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

Intelligent Key system turns on interior lamp (for up to 30 seconds maximum) by receiving UNLOCK signal from door request switch. For detailed description, refer to <u>DLK-237</u>, "DOOR LOCK AND UNLOCK SWITCH : <u>System Description</u>".

LIST OF OPERATION RELATED PARTS

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

< SYSTEM DESCRIPTION >

[SEDAN]

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

|

L

Μ

Ν

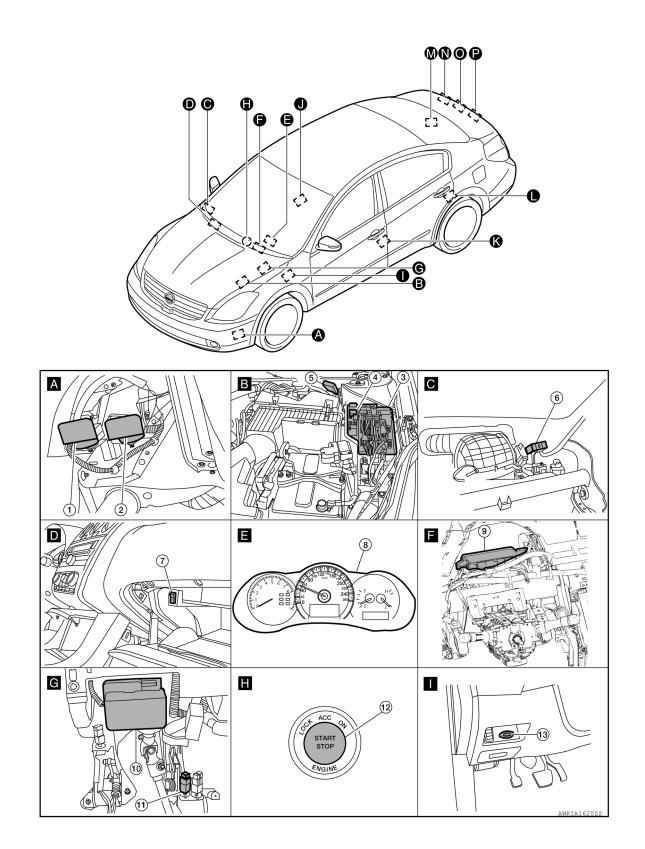
0

Ρ

< SYSTEM DESCRIPTION >

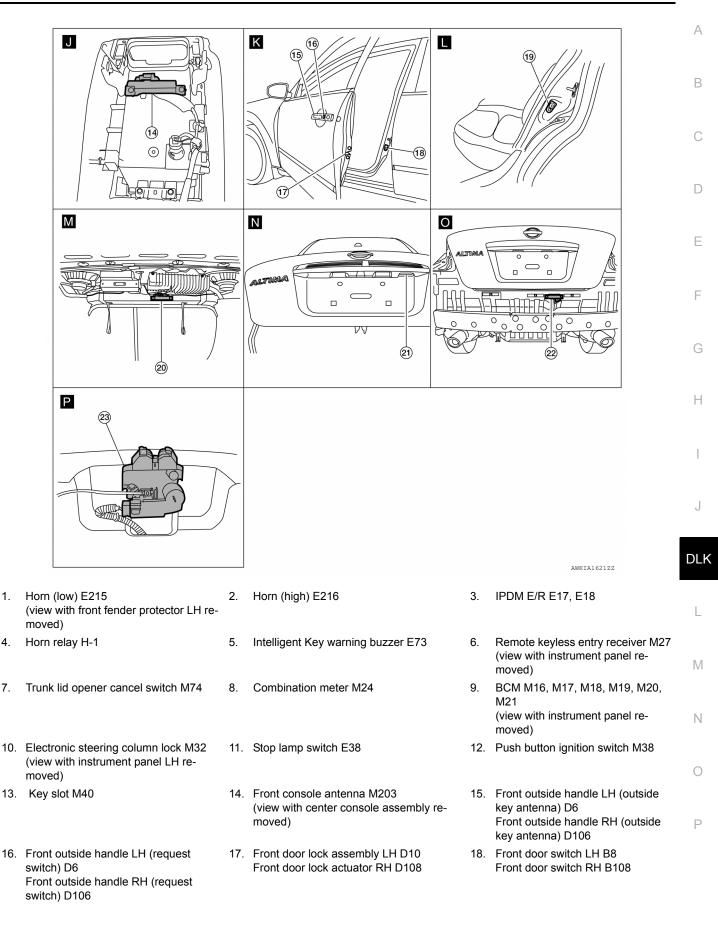
DOOR REQUEST SWITCH : Component Parts Location

INFOID:000000007421180



< SYSTEM DESCRIPTION >

[SEDAN]



< SYSTEM DESCRIPTION >

- 19. Rear door switch LH B18 Rear door switch RH B116
- 22. Rear bumper antenna B46
- 20. Rear parcel shelf antenna B29
- 21. Trunk opener request switch B33
- 23. Trunk lamp switch and trunk release solenoid (trunk lamp switch) B28

DOOR REQUEST SWITCH : Component Description

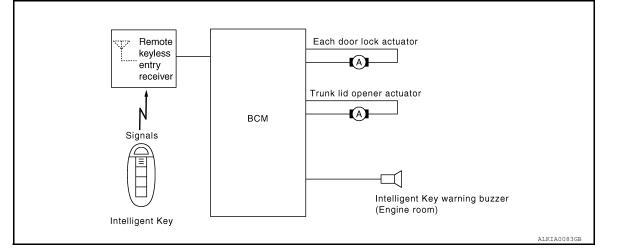
INFOID:000000007421181

[SEDAN]

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

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram



INTELLIGENT KEY : System Description

INFOID:000000007421183

INFOID-000000007421182

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

OPERATION DESCRIPTION/DOOR LOCK/UNLOCK FUNCTION

- When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal is transmitted from Intelligent Key to BCM via remote keyless entry receiver.
- When BCM receives the door lock/unlock signal, it operates door lock actuator, flashes the hazard lamp (lock: 2 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

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

Revision: February 2013

DLK-244

2012 Altima GCC

< SYSTEM DESCRIPTION >

OPERATION AREA

- Operating Range
- To ensure the Intelligent Key works effectively, use within 80 cm range of each doors, however the operable range may differ according to surroundings. The remote control operation range is greater than that of the Intelligent Key. Refer to Owner's Manual for more details.

SELECTIVE UNLOCK FUNCTION

When a LOCK signal is transmitted from Intelligent Key, all doors will be locked. When an UNLOCK signal is transmitted from Intelligent Key once, driver's door will be unlocked. Then, if an UNLOCK signal is transmitted from Intelligent Key again within 5 seconds, all other doors will be unlocked.

HAZARD AND HORN REMINDER FUNCTION

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

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

Operating function of hazard and horn reminder

		C mode			S mode		
Intelligent Key operation	Lock	Unlock	Trunk open	Lock	Unlock	Trunk open	F
Hazard warning lamp flash	Twice	Once	—	Twice	—	—	
Horns sound	Once	—	_	_	—	—	(

Hazard and horn reminder does not operate if any door switch is ON (any door is OPEN). How to change hazard and horn reminder mode

With CONSULT

Refer to BCS-23,	"INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT K	<u>.EY)"</u> .

Without CONSULT

Refer to Owner's Manual for instructions.

AUTO DOOR LOCK FUNCTION

Auto Door Lock Function

When all doors are locked, ignition switch is OFF (ignition switch is not pressed) and key switch is OFF (Intelligent Key is not inserted in key slot), doors are unlocked with Intelligent Key button. When BCM does not receive the following signals within 60 seconds, all doors are locked.

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

Auto door lock mode can be changed by DOOR LOCK-UNLOCK SET mode in "WORK SUPPORT". Refer to BCS-17, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

PANIC ALARM FUNCTION

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

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

The headlamp flashes and the horn sounds intermittently.

The alarm automatically turns off:

After 25 seconds

• When BCM receives any signal from Intelligent Key

Panic alarm function mode can be changed by PANIC ALARM SET mode in "WORK SUPPORT". Refer to BCS-23, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

KEYLESS POWER WINDOW DOWN (OPEN) FUNCTION

Front power windows (with left and right front power window anti-pinch system) open when the unlock button on Intelligent Key is activated and kept pressed for more than 3 seconds with the ignition switch OFF. The windows keep opening if the unlock button is continuously pressed.

- The power window opening stops when the following operations are performed:
- When the unlock button is kept pressed more than 15 seconds.
- When the ignition switch is turned ON while the power window opening is operated.

DLK-245

А

В

D

Ε

Н

J

DLK

Ν

Ο

Ρ

< SYSTEM DESCRIPTION >

When the unlock button is released.

While retained power operation activate, Keyless power window down (open) function cannot be operated. Keyless power window down operation mode can be changed by PW DOWN SET mode in "WORK SUP-PORT". Refer to <u>BCS-23</u>, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

ROOM LAMP ILLUMINATION OPERATION

When the following conditions are met:

Condition of interior lamp switch is in DOOR position

• Door switch OFF (all the doors are closed)

Intelligent Key system turns on interior lamp (for 15 seconds) by receiving UNLOCK signal from Intelligent Key. For detailed description, refer to <u>DLK-244</u>, "INTELLIGENT KEY : <u>System Description</u>".

LIST OF OPERATION RELATED PARTS

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

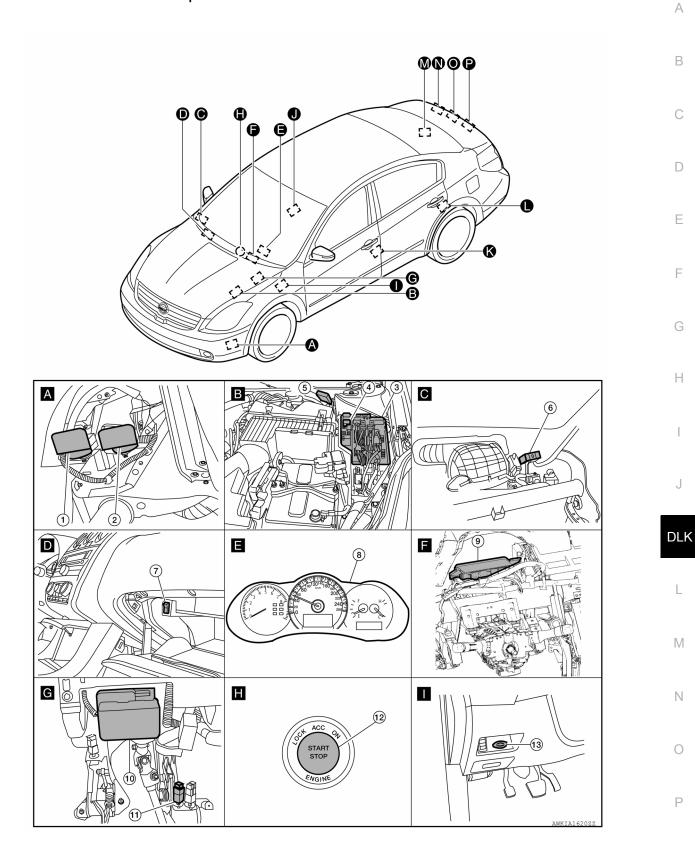
Remote keyless entry functions	Intelligent Key	Key slot	Door request switch (Driver, Passenger)	Door switch	Door lock actuator	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamp	Hom	IPDM E/R	Head lamp
Door lock/unlock function by remote control button	×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

< SYSTEM DESCRIPTION >

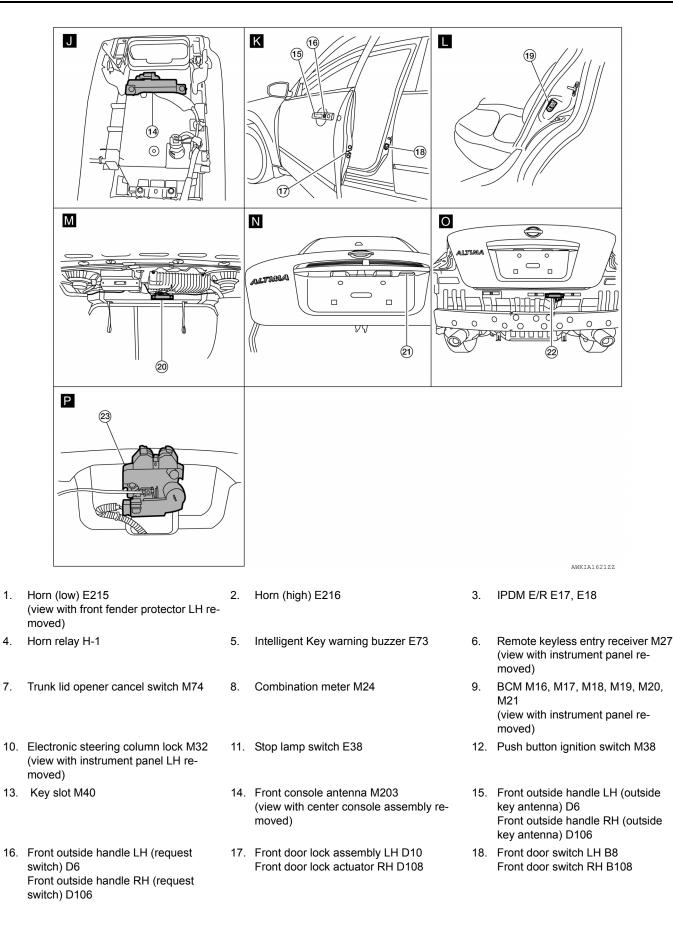
INTELLIGENT KEY : Component Parts Location

[SEDAN]

INFOID:000000007421184



< SYSTEM DESCRIPTION >



SYSTEM DESCRIPTION > 19. Rear door switch LH B18 20. Rear parcel shelf antenna B29

1 1 L D 00

[SEDAN]

INFOID:000000007421185

А

В

F

Н

 Rear door switch LH B18 Rear door switch RH B116
 Rear bumper antenna B46
 Trunk lamp switch and trunk release sole-

noid (trunk lamp switch and trunk release so

INTELLIGENT KEY : Component Description

Item	Function	С
BCM	Controls the door lock function and room lamp function.	
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.	
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.	D
Intelligent Key	Transmits button operation to remote keyless entry receiver.	
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.	E

J

DLK

L

Μ

Ν

Ο

Ρ

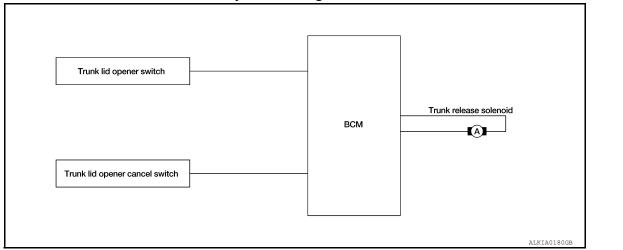
< SYSTEM DESCRIPTION >

[SEDAN]

INFOID:000000007421186

TRUNK OPEN FUNCTION TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : System Diagram



TRUNK LID OPENER SWITCH : System Description

INFOID:000000007421187

Switch	Input/output signal to BCM	BCM function	Actuator		
Trunk lid opener switch	Trunk open signal	Trunk open control	Trunk lid opener actuator		
Trunk lid opener cancel switch	Turk open signal	Hunk open control			

TRUNK LID OPENER OPERATION

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

BCM can open trunk lid opener actuator when

vehicle speed is less than 5 km/h (3MPH)

· vehicle security system is disarmed or pre-armed phase

BCM does not open trunk lid opener actuator when

• trunk lid opener cancel switch is OFF (CANCEL)

- vehicle speed is more than 5 km/h (3MPH)
- vehicle security system is armed or alarm phase

• Within 3 seconds of removing the Intelligent Key from the key slot

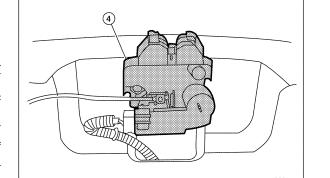
TRUNK OPEN FUNCTION

< SYSTEM DESCRIPTION >

TRUNK LID OPENER SWITCH : Component Parts Location

	С
	D
	E

2



- 1. BCM M16, M17, M18, M20, M21
- 2. Trunk lid opener switch M75
- 3. Trunk lid opener cancel switch M74

4. Trunk lamp switch and trunk release solenoid (trunk release solenoid) B28

TRUNK LID OPENER SWITCH : Component Description

3

1

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

TRUNK REQUEST SWITCH

Ν

0

INFOID:000000007421188

А

В

F

Н

J

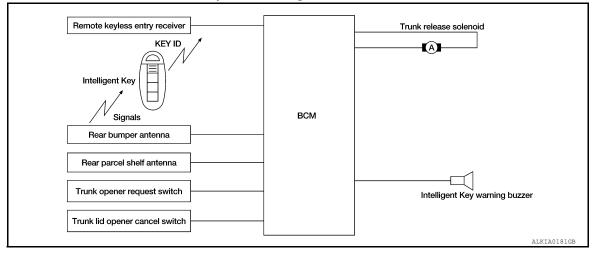
DLK

INFOID:000000007421189

TRUNK OPEN FUNCTION

< SYSTEM DESCRIPTION >

TRUNK REQUEST SWITCH : System Diagram



TRUNK REQUEST SWITCH : System Description

INFOID:000000007421191

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

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

The driver should always carry the Intelligent Key

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

OPERATION DESCRIPTION/TRUNK OPEN

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

OPERATION CONDITION

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

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

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

OUTSIDE KEY ANTENNA DETECTION AREA

INFOID:000000007421190

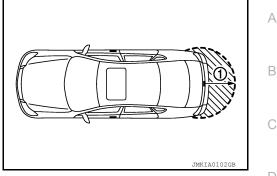
< SYSTEM DESCRIPTION >

[SEDAN]

Е

Н

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



KEY REMINDER FUNCTION

Key reminder function	Operation condition	Operation
Trunk is closed	Right after trunk is closed under the following conditionsIntelligent Key is inside trunk roomAll doors are closedAll doors are locked	 Trunk open Honk Intelligent Key warning buzzer

*: If the door closing impact shocks the door lock knob, or contacts against baggage with the door lock knob might activate the door locks accidentally but unlock operation will be perform at these cases.

CAUTION:

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

HAZARD AND BUZZER REMINDER FUNCTION

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

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

BCM flashes hazard warning lamps as a reminder.

Operating function of hazard and buzzer reminder

Operation	Hazard warning lamp flash	Intelligent Key warning buzzer honks	M
Trunk open		Four times	111

How to change hazard and buzzer reminder mode

With CONSULT

Refer to BCS-23, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

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

Ρ

Ν

L

< SYSTEM DESCRIPTION >

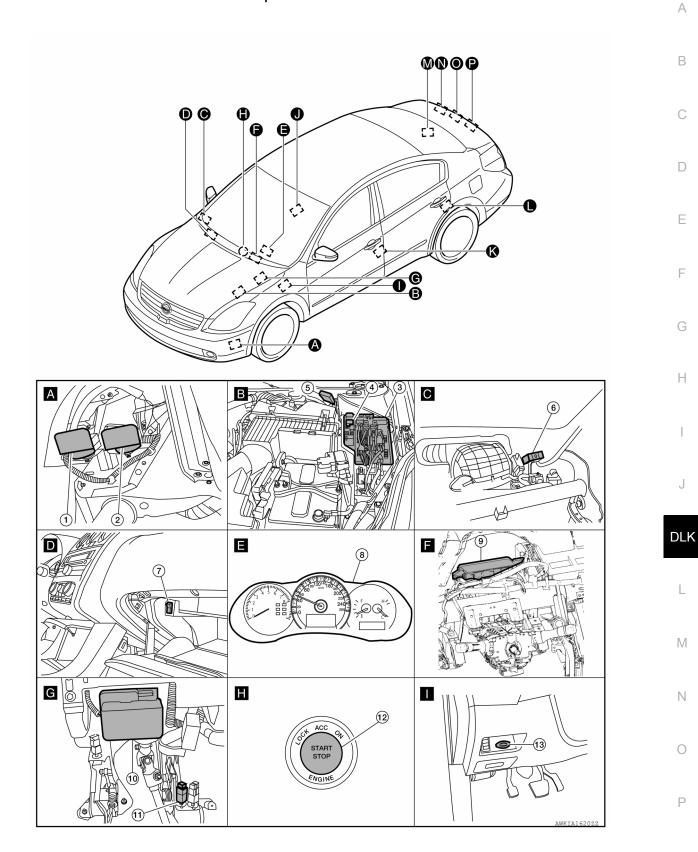
Trunk open function	Intelligent Key	Key slot	Remote keyless entry receiver	Door switch	Trunk lamp switch	Trunk opener request switch	Trunk release solenoid	Inside key antenna	Outside key antenna (Trunk)	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamps	Trunk lid opener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

< SYSTEM DESCRIPTION >

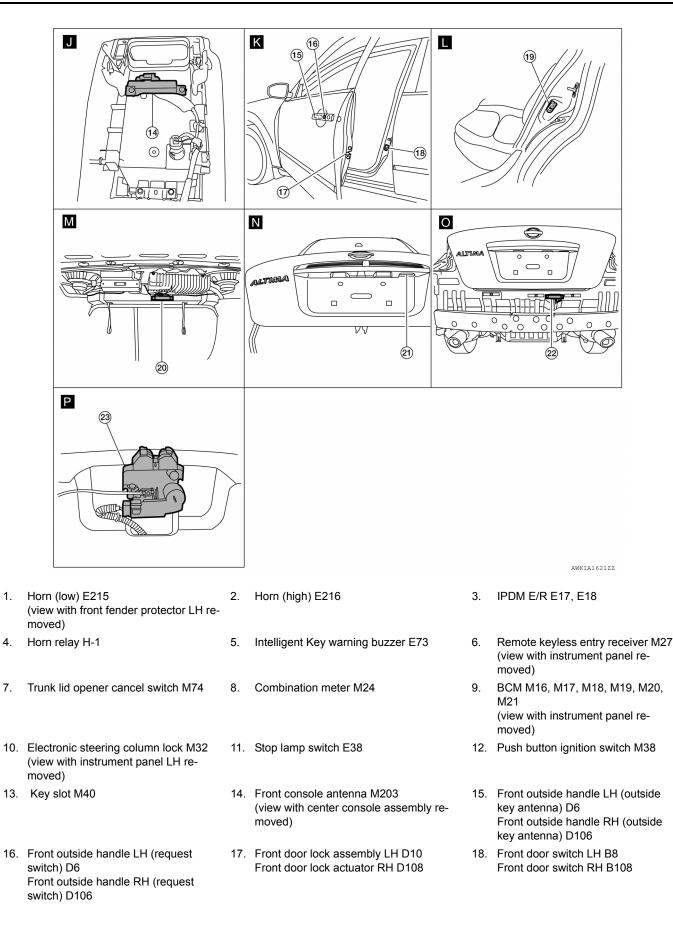
TRUNK REQUEST SWITCH : Component Parts Location



INFOID:000000007421192



< SYSTEM DESCRIPTION >



< SYSTEM DESCRIPTION >

- 19. Rear door switch LH B18 Rear door switch RH B116
- 22. Rear bumper antenna B46
- 20. Rear parcel shelf antenna B29
- Trunk opener request switch B33

[SEDAN]

А

21.

23. Trunk lamp switch and trunk release solenoid (trunk lamp switch) B28

TRUNK REQUEST SWITCH : Component Description

INFOID:000000007421193

INFOID:000000007421194

INFOID:000000007421195

Ν

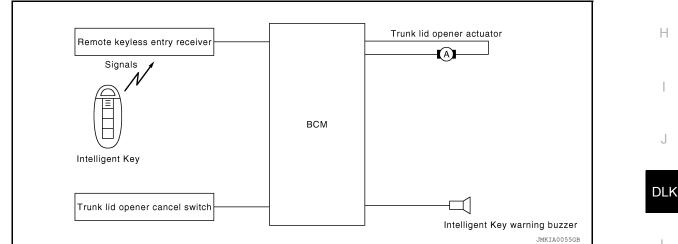
Ο

Ρ

Item	Function
BCM	Controls trunk open function.
Trunk release solenoid	Transmits trunk open operation to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Trunk opener request switch	Transmits trunk open operation to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna	Detects if Intelligent Key is outside the vehicle.
Inside key antenna	Detects if Intelligent Key is inside the vehicle.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram



INTELLIGENT KEY : System Description

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

OPERATION DESCRIPTION/TRUNK OPEN FUNCTION

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

OPERATION CONDITION

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

OPERATION AREA

• To ensure the Intelligent Key works effectively, use within 80 cm (31.50 inches) range of each door, however the operable range may differ according to surroundings.

HAZARD AND HORN REMINDER FUNCTION

< SYSTEM DESCRIPTION >

[SEDAN]

When doors are locked or unlocked by Intelligent Key, BCM flashes hazard warning lamps as a reminder and transmits horn chirp signal to IPDM E/R. IPDM E/R sound horns 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 flash	Twice	Once	_	Twice	—	—
Horn sound	Once	—	—	—	—	_

Hazard and horn reminder does not operate if any door switch is ON (any door is OPEN). How to change hazard and horn reminder mode

Refer to BCS-23, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT

Refer to Owner's Manual for instructions.

LIST OF OPERATION RELATED PARTS

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

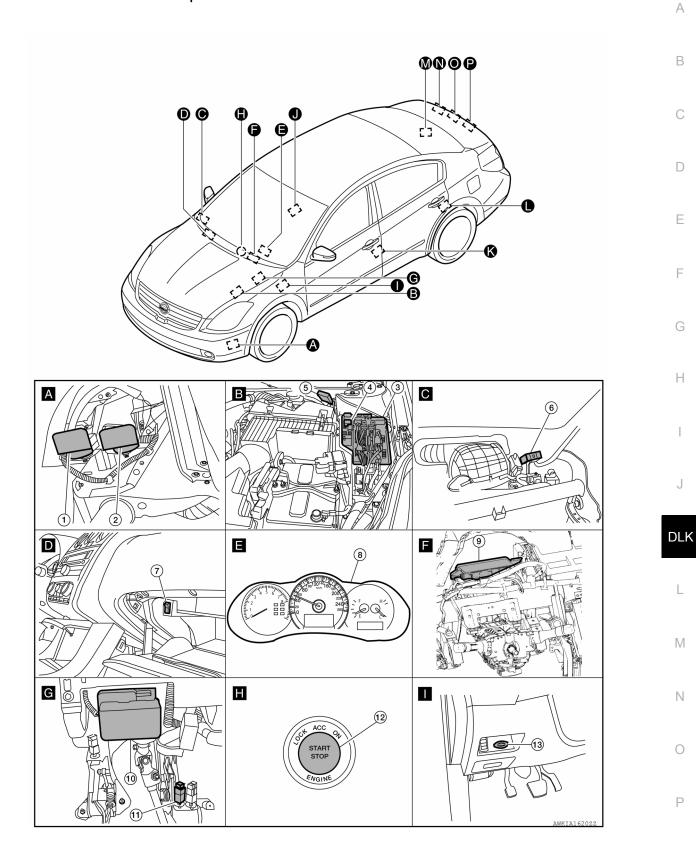
Remote keyless entry functions	Intelligent Key	Key slot	Trunk lamp switch	Trunk release solenoid	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamps	Horns	IPDM E/R
Trunk open function by remote control button	×	×	×	×		×	×				
Hazard and horn reminder function	×				×	×	×	×	×	×	×

< SYSTEM DESCRIPTION >

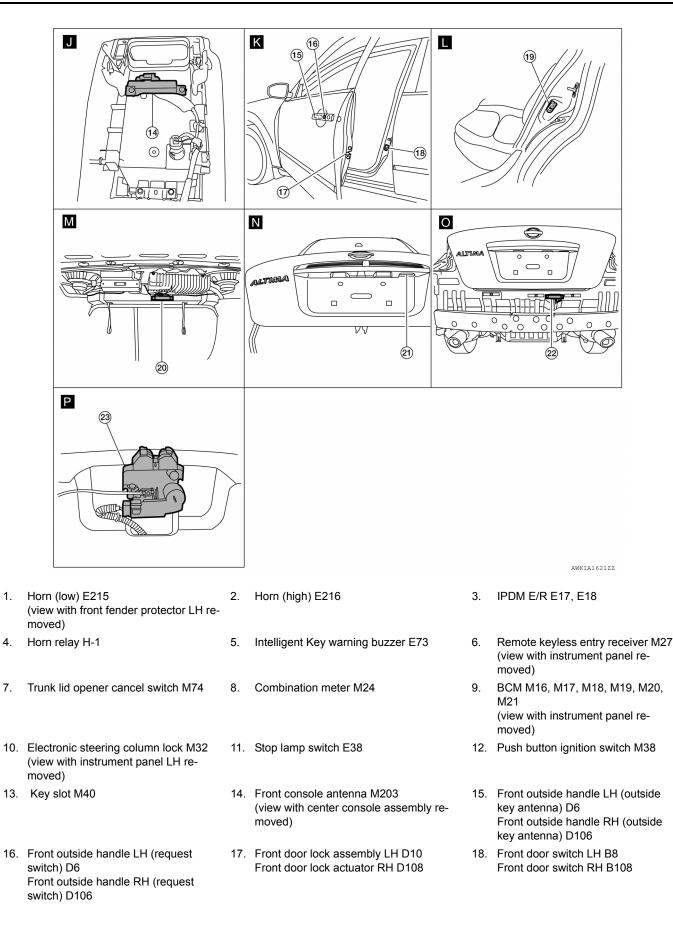
INTELLIGENT KEY : Component Parts Location

[SEDAN]

INFOID:000000007421196



< SYSTEM DESCRIPTION >



< SYSTEM DESCRIPTION >

- 19. Rear door switch LH B18 Rear door switch RH B116
- 22. Rear bumper antenna B46
- 20. Rear parcel shelf antenna B29
- 23. Trunk lamp switch and trunk release solenoid (trunk lamp switch) B28

21. Trunk opener request switch B33

INFOID:000000007421197

[SEDAN]

А

В

INTELLIGENT KEY : Component Description

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

J

Н

F

L

Μ

Ν

Ο

Ρ

< SYSTEM DESCRIPTION >

WARNING FUNCTION

System Description

INFOID:000000007421198

[SEDAN]

OPERATION DESCRIPTION

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

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

OPERATION CONDITION

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

Warning/Infor	mation functions	Operation procedure
Intelligent Key system ma	Ifunction	When a malfunction is detected on BCM, "KEY" warning lamp will illuminate.
OFF position warning	For internal	 When condition A, B or condition C is satisfied Condition A Ignition switch: ACC position Door switch (driver side): ON (Door is open) Condition B Turn ignition switch from ON to OFF while door is open Condition C Intelligent Key is inserted in key slot Door switch (driver side): ON (Door is open)
	For external*	OFF position warning (for internal) is in active mode, driver side door is closed NOTE: OFF position warning (for external) operates only when driver door is closed after each of P position warning, ACC warning, and OFF position warning (internal) sounds.
P position warning		Shift position: Except P positionEngine is running to stopped (Ignition switch is ON to OFF)
ACC warning		 During P position warning is in active mode, shift position has changed P position. Ignition switch: Except OFF position.

< SYSTEM DESCRIPTION >

[SEDAN]

Warning/Inforr	nation functions	Operation procedure					
	Door is open to close	 Ignition switch: Except LOCK position. Door switch: ON to OFF (Door is open to close). Intelligent Key can not be detected inside the vehicle. 					
	Door is open	 Door switch: ON (Door is open) Key ID verification every 5 seconds when registered Intelligent Key can not be detected inside the vehicle. 					
Take away warning	Push-ignition switch oper- ation	 Ignition switch: Except LOCK position. Press ignition switch. Intelligent Key can not be detected inside the vehicle. 					
	Take away through win- dow	 Engine is running. Key ID verification every 30 seconds when registered Intelligent Key can not be detected inside the vehicle. After vehicle speed verification, the registered Intelligent Key can not be detect inside the vehicle. 					
	Intelligent Key is removed from key slot	When Intelligent Key is removed from key slot, Intelligent Key can not be de- tected inside the vehicle.					
	Request switch operation	 When request switch is pushed (lock operation) under the following conditions. Door switch: ON (Any door is open). Intelligent Key is inside vehicle. 					
Door lock operation warn- ing	Intelligent Key button op- eration	 When Intelligent Key button is pushed (lock operation) under the following conditions. Door switch: ON (Any door is open). For 3 seconds after Intelligent Key is removed from key slot. 					
Key warning		 Ignition switch is OFF position. Driver side door switch: ON (Driver side door is open). Intelligent Key is inserted in key slot. 					
Intelligent Key insert inforr	nation	 Door switch: ON to OFF (Door is open to close). Ignition switch: OFF to ON position. Intelligent Key is out of key slot. Intelligent Key can not be detected inside the vehicle. 					
	Ignition switch is ON posi- tion	 Ignition switch: ON position. Shift position: P position Engine is stopped					
Engine start information	Ignition switch is except ON position	 Ignition switch: Except ON position. Shift position: P position Intelligent Key is inserted in key slot. Intelligent Key can be detected inside the vehicle. 					
Steering lock information	1	When steering lock can not be released after ignition switch is turned ON.					
Intelligent Key low battery	warning	When Intelligent Key has low battery, it is detected by BCM 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.					

WARNING METHOD

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

					Warning	g chime
Warning/Informa	ation functions	"KEY" warn- ing lamp Combination meter display		Key slot il- lumination	Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key syste	m malfunction	Illuminate	—	—	—	—
OFF position warn-	For internal	—	—	—	Activate	—
ing	For external	—	—	—	—	Activate

Ο

< SYSTEM DESCRIPTION >

		"KEY" warn-			Warning chime			
Warning/Informa	ation functions			Key slot il- lumination	Combination meter buzzer	Intelligent Key warning buzzer		
P position warning			SHIFT JMKIA0037GB		Activate	_		
ACC warning			PUSH JMKIA0047GB		Activate			
	Door is open to close			Flash	Activate	Activate		
	Door is open			Flash				
T . 1	Push-ignition switch operation	_		Flash	Activate			
Take away warning	Take away through window	_		Flash	Activate			
	Intelligent Key is removed from key slot	_	JMKIA0036GB	Flash	_			
Door lock operation	Request switch operation				_	Activate		
warning	Intelligent Key operation	_	_	_	_	Activate		
Key ID warning			I NO KEY		_			
Key warning		_		Flash	Activate	_		
Intelligent Key insert	: information			Flash	_			

< SYSTEM DESCRIPTION >

[SEDAN]

					Warning		
Warning/Inform	ation functions	"KEY" warn- ing lamp	Combination meter display	Key slot il- lumination	Combination meter buzzer	Intelligent Key warning buzzer	A
Engine start infor-	Automatic trans- mission models		BRAKE UMKLA0032GB				B C D
mation	Manual trans- mission models		CLUTCH ELKIA1326GB				E
Steering lock inform	ation	_	JMKIA0033GB	_		_	G
Intelligent Key low b	battery warning		JMKIA0048GB				J

LIST OF OPERATION RELATED PARTS

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

Warning	g function	Intelligent Key	Key slot	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Combination meter display	Key slot illumination	Transmission range switch	"KEY" warning lamp	M N O
Intelligent Key system mal	Ifunction										×	×				х	F
OFF position warning	For internal				×					×	×	×					
OFF position warning	For external				×				×		×	×					
P position warning				×						×	×	×	×		×		
ACC warning				×						×	×	×	×		×		

L

< SYSTEM DESCRIPTION >

[SEDAN]

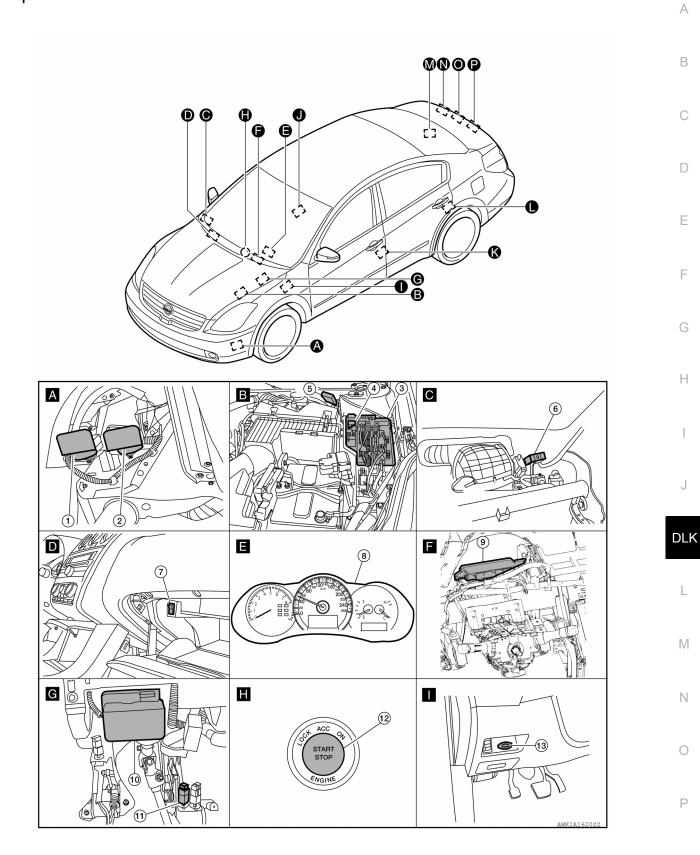
Warning	g function	Intelligent Key	Key slot	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Combination meter display	Key slot illumination	Transmission range switch	"KEY" warning lamp
	Door is open or close	×			×		×		×	×	×	×	×	×		
	Door is open	×			×		×				×	×	×	×		
Take away warning	Push-ignition switch oper- ation	×		×			×			×	×	×	×	×		
	Take away through win- dow	×					×			×	×	×	×	×		
	Intelligent Key is removed from key slot	×	×				×				×	×	×	×		
Door lock operation warnin	ig	×	×		×	×	×	×	×		×	×				
Key ID warning		×	×	×			×				×	×	×			
Key warning		×	×		×					×	×	×	×	×		
Intelligent Key insert inform	nation	×	×	×	×		×				×	×	×	×		
Engine start information	Ignition switch is ON posi- tion	×	×	×			×				×	×	×		×	
	Ignition switch is except ON position	×	×	×			×				×	×	×			
Steering lock information	•			×							×	×	×			
Intelligent Key low battery	warning	×					×				×	×	×			

< SYSTEM DESCRIPTION >

Component Parts Location

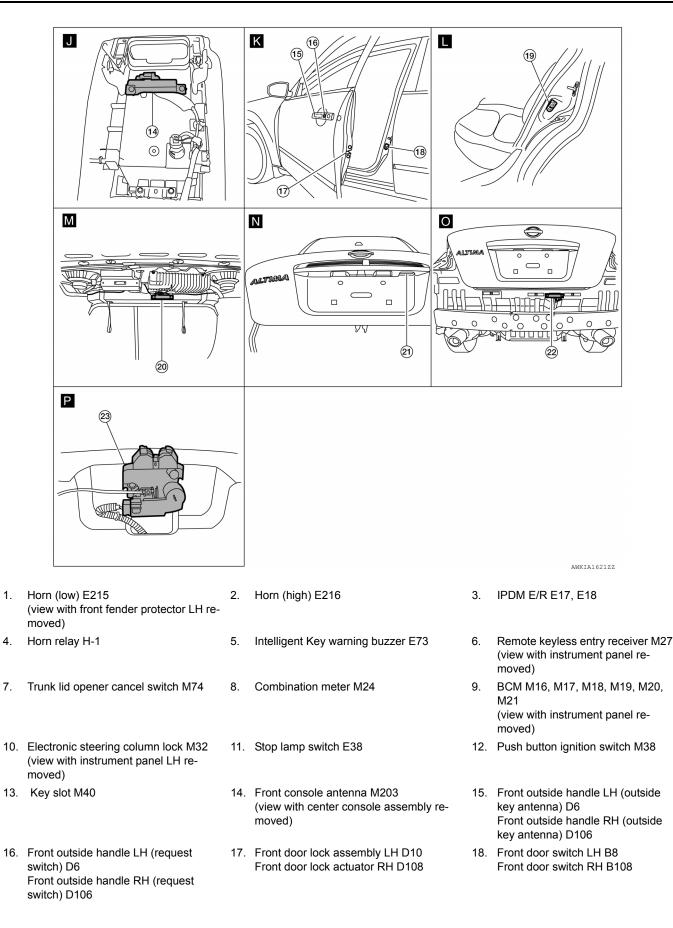
[SEDAN]

INFOID:000000007421199



Revision: February 2013

< SYSTEM DESCRIPTION >



< SYSTEM DESCRIPTION >

19. Rear door switch LH B18 Rear door switch RH B116	20. Rear parcel shelf antenna B29	21.	Trunk opener request switch B33	
22. Rear bumper antenna B46	 Trunk lamp switch and trunk release sole noid (trunk lamp switch) B28 	-		

C D E

F

G

Н

А

В

[SEDAN]

L

Μ

Ν

0

Ρ

System Description

INFOID:000000007421200

[SEDAN]

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

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

*: If the door closing impact shocks the door lock knob, or contacts against baggage with the door lock knob might activate the door locks accidentally but unlock operation will be performed in these cases.

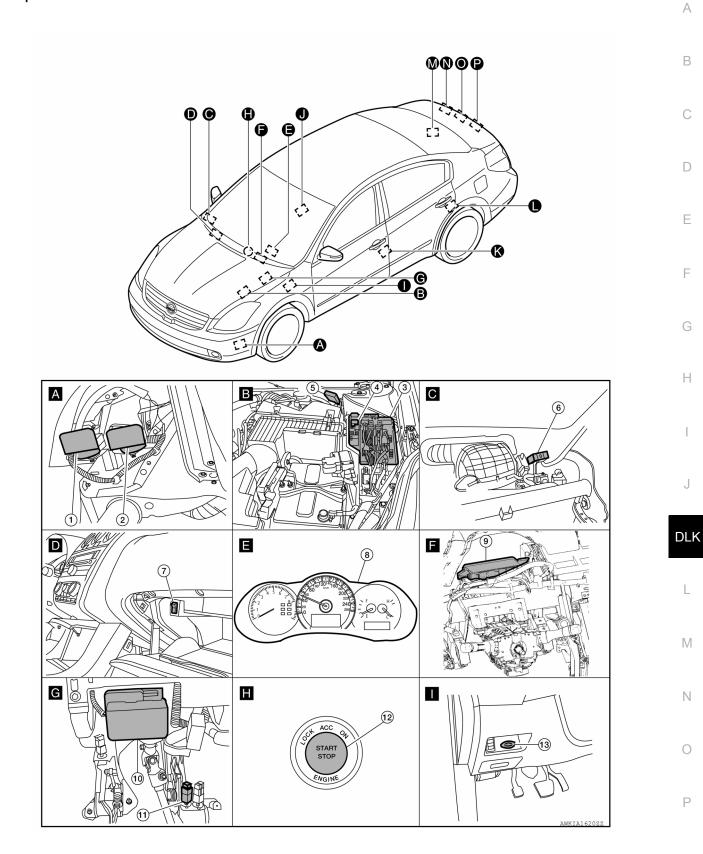
CAUTION:

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

< SYSTEM DESCRIPTION >

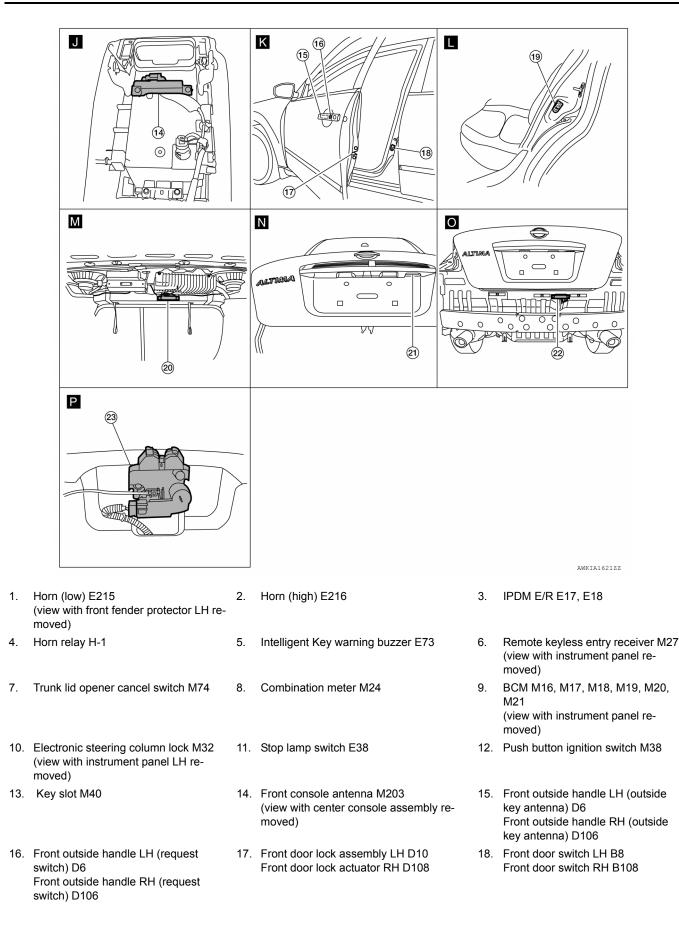
Component Parts Location

INFOID:000000007421201



< SYSTEM DESCRIPTION >

[SEDAN]



< SYSTEM DESCRIPTION >

19.	Rear door switch LH B18 Rear door switch RH B116	20.	Rear parcel shelf antenna B29	21.	Trunk opener request switch B33	А
22.	Rear bumper antenna B46	23.	Trunk lamp switch and trunk release sole- noid (trunk lamp switch) B28			
						В

J

С

D

Ε

F

G

Н

[SEDAN]

L

Μ

Ν

0

Ρ

DIAGNOSIS SYSTEM (BCM) COMMON ITEM

COMMON ITEM : Diagnosis Description

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.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	This function is not used even though it is displayed.

SYSTEM APPLICATION

BCM can perform the following functions for each system. **NOTE:**

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

System	Sub system selection item			
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		×	×
Remote keyless entry system	MULTI REMOTE ENT		×	
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	
Trunk open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000007630706

ECU IDENTIFICATION Displays the BCM part No.

SELF-DIAG RESULT Refer to <u>BCS-67, "DTC Index"</u>.

Revision: February 2013

INFOID:000000007630656

< SYSTEM DESCRIPTION > DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

WORK SUPPORT

Work Item Description		
DOOR LOCK-UNLOCK SET	• ON • OFF	
AUTOMATIC DOOR LOCK SELECT	P RANGE VH SPD	
AUTOMATIC DOOR UNLOCK SE- LECT	MODE1MODE2MODE3MODE4	
AUTOMATIC LOCK/UNLOCK SE- LECT	 LOCK/UNLOCK LOCK ONLY UNLOCK ONLY OFF 	

DATA MONITOR

Monitor Item [Unit]	Description	
REQ SW-DR [ON/OFF]	Indicates condition of door request switch LH	
REQ SW-AS [ON/OFF]	Indicates condition of door request switch RH	
REQ SW-BD/TR [ON/OFF]	Indicates condition of trunk request switch	
CDL LOCK SW [ON/OFF]	Indicates condition of door lock and unlock switch	
CDL UNLOCK SW [ON/OFF]	Indicates condition of door lock and unlock switch	
DOOR SW-DR [ON/OFF]	Indicates condition of front door switch LH	
DOOR SW-AS [ON/OFF]	Indicates condition of front door switch RH	
DOOR SW-RR [ON/OFF]	Indicates condition of rear door switch RH	
DOOR SW-RL [ON/OFF]	Indicates condition of rear door switch LH	
DOOR SW-BK [ON/OFF]	Indicates condition of trunk switch	
KEY CYL LK-SW [ON/OFF]	Indicates condition of lock signal from door key cylinder switch	
KEY CYL UN-SW [ON/OFF]	Indicates condition of unlock signal from door key cylinder switch	

ACTIVE TEST

Test Item	Description	
DOOR LOCK	This test is able to check door lock operation [OTR ULK / AS UNLK / DR UNLK / ALL UNLK / ALL LCK].	Ν

INTELLIGENT KEY

DOOR LOCK	/ ALL LCK].
ITELLIGENT KEY	

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

WORK SUPPORT

INFOID:000000007630670

INFOID:000000007630669

А

В

Ρ

0

Μ

< SYSTEM DESCRIPTION >

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. MODE1: 1 minute MODE2: 5 minutes MODE3: 30 seconds MODE4: 2 minutes 			
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch mode can be changed to operate (ON) or no operate (OFF) in this mode.			
ENGINE START BY I-KEY	Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode.			
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by trunk request switch can be changed to operate (ON) or not operate (OFF) with this mode.			
PANIC ALARM SET	 Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. MODE1: 0.5 sec. MODE2: Non-operation MODE3: 1.5 sec. 			
PW DOWN SET	 Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. MODE1: 3 sec. MODE2: Non-operation MODE3: 5 sec. 			
TRUNK OPEN DELAY	 Trunk button pressing time on Intelligent Key button can be selected from the following with this mode. MODE1: 0.5 sec. MODE2: 1.5 sec. MODE3: OFF: No delay 			
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode.			
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode.			
HAZARD ANSWER BACK	 Hazard reminder function mode can be selected from the following with this mode. LOCK ONLY: Door lock operation only UNLOCK ONLY: Door unlock operation only LOCK/UNLOCK: Lock/unlock operation OFF: Non-operation 			
ANS BACK I-KEY LOCK	 Buzzer reminder function (lock operation) mode by door request switch (driver side and senger side) can be selected from the following with this mode. Horn chirp: Sound horn Buzzer: Sound Intelligent Key warning buzzer OFF: Non-operation 			
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode.			
SHORT CRANKING OUTPUT	Starter motor can be forcibly activated.			
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.			
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode.			

SELF-DIAG RESULT

Refer to BCS-67, "DTC Index".

DATA MONITOR

Monitor Item	Condition
REQ SW-DR	Indicates [ON/OFF] condition of door request switch (driver side).
REQ SW-AS	Indicates [ON/OFF] condition of door request switch (passenger side).

< SYSTEM DESCRIPTION >

[SEDAN]

Monitor Item	Condition	
REQ SW-BD/TR	Indicates [ON/OFF] condition of trunk opener request switch.	
PUSH SW	Indicates [ON/OFF] condition of push button ignition switch.	
CLUTCH SW	Indicates [ON/OFF] condition of clutch switch.	
IGN RLY2 -F/B	Indicates [ON/OFF] condition of ignition relay 2.	
ACC RLY-F/B	Indicates [ON/OFF] condition of accessory relay-1.	
BRAKE SW 1	Indicates [ON/OFF] condition of brake switch.	
BRAKE SW 2	Indicates [ON/OFF] condition of brake switch.	
DETE/CANCL SW	Indicates [ON/OFF] condition of P position.	
SFT PN/N SW	Indicates [ON/OFF] condition of P or N position.	
S/L -LOCK	Indicates [ON/OFF] condition of steering lock (LOCK).	
S/L -UNLOCK	Indicates [ON/OFF] condition of steering lock (UNLOCK).	
S/L RELAY-F/B	Indicates [ON/OFF] condition of ignition switch.	
UNLK SEN-DR	Indicates [ON/OFF] condition of driver door UNLOCK status.	
PUSH SW -IPDM	Indicates [ON/OFF] condition of push button ignition switch.	
IGN RLY1 -F/B	Indicates [ON/OFF] condition of ignition relay 1.	
DETE SW -IPDM	Indicates [ON/OFF] condition of P position.	
SFT PN -IPDM	Indicates [ON/OFF] condition of P or N position.	
SFT P -MET	Indicates [ON/OFF] condition of P position.	
SFT N -MET	Indicates [ON/OFF] condition of N position.	
ENGINE STATE	Indicates [STOP/STALL/CRANK/RUN] condition of engine states.	
S/L LOCK-IPDM	Indicates [ON/OFF] condition of steering lock (LOCK) request.	
S/L UNLOCK-IPDM	Indicates [ON/OFF] condition of steering lock (UNLOCK) request.	
S/L RELAY-REQ	Indicates [ON/OFF] condition of steering lock relay.	
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [Km/h].	
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or CVT by numerical value [Km/h].	
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver side door status.	
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger side door status.	
ID OK FLAG	Indicates [SET/RESET] condition of key ID.	
PRMT ENG STRT	Indicates [SET/RESET] condition of engine start possibility.	
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.	
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.	
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.	
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.	
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.	
RKE-TR/BD	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.	
RKE-PANIC	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.	
RKE-P/W OPEN	Indicates [ON/OFF] condition of P/W DOWN signal from Intelligent Key.	
RKE-MODE CHG	Indicates [ON/OFF] condition of MODE CHANGE signal from Intelligent Key.	
PRMT RKE STRT	Indicates [ON/OFF] condition of ENGINE START signal from Intelligent Key.	
RKE OPE COUN2	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.	
REVERSE SW	Indicates [ON/OFF] condition of R position.	

ACTIVE TEST

< SYSTEM DESCRIPTION >

Test item	Description	
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp is activated after "ON" on CONSULT screen is touched.	
PW REMOTO DOWN SET	This test is able to check power window down operation. The power window down is activated after "ON" on CONSULT screen is touched.	
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. The Intelligent Key warning buzzer is activated after "ON" on CONSULT screen is touched	
INSIDE BUZZER	 This test is able to check warning chime in combination meter operation. Take away warning chime sounds when "TAKE OUT" on CONSULT screen is touched. Key warning chime sounds when "KEY" on CONSULT screen is touched. OFF position warning chime sounds when "KNOB" on CONSULT screen is touched. 	
INDICATOR	 This test is able to check warning lamp operation. "KEY" Warning lamp illuminates when "KEY ON" on CONSULT screen is touched. "KEY" Warning lamp blinks when "KEY IND" on CONSULT screen is touched. 	
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp is activated after "ON" on CONSULT screen is touched.	
LCD	 This test is able to check meter display information Engine start information displays when "BP N" on CONSULT screen is touched. Engine start information displays when "BP I" on CONSULT screen is touched. Key ID warning displays when "ID NG" on CONSULT screen is touched. P position warning displays when "SFT P" on CONSULT screen is touched. Intelligent Key insert information displays when "INSRT" on CONSULT screen is touched. Intelligent Key low battery warning displays when "BATT" on CONSULT screen is touched. Take away through window warning displays when "NO KY" on CONSULT screen is touched. Take away warning display when "OUTKEY" on CONSULT screen is touched. OFF position warning display when "LK WN" on CONSULT screen is touched. 	
FLASHER	This test is able to check hazard warning lamp operation. The hazard warning lamps are activated after "LH/RH/OFF" on CONSULT screen is touched.	
HORN	This test is able to check horn operation. The horn is activated after "ON" on CONSULT screen is touched.	
P RANGE	This test is able to check CVT shift selector power supply CVT shift selector power is supplied when "ON" on CONSULT screen is touched.	
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when "ON" on CONSULT screen is touched.	
LOCK INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation. LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.	
ACC INDICATOR	This test is able to check ACC indicator in push-ignition switch operation. ACC indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.	
IGNITION ON IND	This test is able to check ON indicator in push-ignition switch operation. ON indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched.	
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination blinks when "ON" on CONSULT screen is touched.	
TRUNK/BACK DOOR	This test is able to check trunk opener actuator open operation. This actuator opens when "OPEN" on CONSULT screen is touched.	

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:000000007630671

DATA MONITOR

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

Revision: February 2013

< SYSTEM DESCRIPTION >

[SEDAN]

Monitor Item	Contents	^
TR CANCEL SW	Indicates [ON/OFF] condition of trunk cancel switch.	A
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk opener switch.	
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.	В
RKE-TR/BD	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.	

ACTIVE TEST

Test Item	Description	
TRUNK/GLASS HATCH	This test is able to check trunk open operation. Trunk opens when "OPEN" on CONSULT screen is touched.	D

С

Е

F

G

Н

L

Μ

Ν

0

Ρ

DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

INFOID:000000007421206

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only. CAN Communication Signal Chart. Refer to LAN-24, "CAN Communication Signal Chart".

DTC Logic

INFOID:000000007421207

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:000000007421208

1.PERFORM SELF DIAGNOSTIC

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

Check "Self Diagnostic Result".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to LAN-15, "Trouble Diagnosis Flow Chart".
- NO >> Refer to <u>GI-42, "Intermittent Incident"</u>.

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	BCM detected internal CAN communication circuit malfunction.	BCM
Diagn	osis Procedure		INFOID:000000007421210
1.REP	LACE BCM		
When [DTC [U1010] is detecte	d, replace BCM.	
	>> Replace BCM.		
Specia	al Repair Requirer	ment	INFOID:000000007421211
1. REG	UIRED WORK WHEN	REPLACING BCM	
Initialize	NVIS by CONSULT.	For the details of initialization refer to CONSULT Imr	mobilizer mode and follow
tha an i			
	screen instructions.		
	>> Work end.		

Ο

Ρ

[SEDAN]

А

INFOID:000000007421209

< DTC/CIRCUIT DIAGNOSIS >

B2622 INSIDE KEY ANTENNA 2

Description

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

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA 2 CIRCUIT	An excessive high or low voltage from inside anten- na is sent to BCM.	 Front console antenna Between BCM and front console antenna.

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

()With CONSULT

- 1. Perform front console antenna INSIDE ANT DIAGNOSIS on Work Support" of "INTELLIGENT KEY".
- 2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

Is front console antenna DTC detected?

- YES >> Refer to DLK-282, "Diagnosis Procedure".
- NO >> Inside front console antenna is OK.

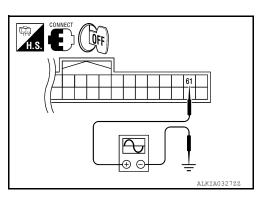
Diagnosis Procedure

INFOID:000000007421214

Regarding Wiring Diagram information, refer to <u>DLK-403, "Wiring Diagram"</u>.

1. CHECK FRONT CONSOLE ANTENNA INPUT SIGNAL 1

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



INFOID:000000007421212

INFOID:000000007421213

B2622 INSIDE KEY ANTENNA 2

< DTC/CIRCUIT DIAGNOSIS >

А Terminals Signal Condition (+) (Reference value.) (-) BCM connector Terminal В Place Intelligent Key inside the vehicle. D Front console TMKTA0062GB M19 61 Ground antenna Е Place Intelligent Key outside the vehicle. F 1.5 JMKTA0063GB Is the inspection result normal? YES >> Check the condition of harness and connector. NO >> GO TO 2 2. CHECK FRONT CONSOLE ANTENNA CIRCUIT Н 1. Disconnect BCM and front console antenna connector. 2. Check continuity between BCM connector and front console antenna connector. в (2|1)61 60 1,2 60,61 DLK Ω ALKTA0328 BCM connector Terminal Front console antenna connector Terminal Continuity Μ 60 2 A: M19 B: M203 Console Yes 61 1 Ν Check continuity between BCM connector and ground. 3. BCM connector Terminal Continuity 60 Ground A: M19 Console No

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and front console antenna.

3.CHECK FRONT CONSOLE ANTENNA INPUT SIGNAL 2

1. Replace front console antenna (New antenna or other antenna).

Connect BCM and front console antenna connector.

2.

DLK-283

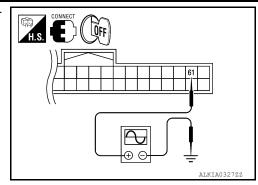
61

Ρ

B2622 INSIDE KEY ANTENNA 2

< DTC/CIRCUIT DIAGNOSIS >

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



Terminals		-	Signal		
(+)		- (-) Condition	Condition	(Reference value.)	
BCM connector Terminal					
M19	Front console	61	Ground	Place Intelligent Key inside the ve- hicle.	(V) 15 0 5 0 1 s JMKTA0062GB
	antenna	01	Ground	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 1 5 1 5 10 1 5 10 1 5 10 1 5 10 10 10 10 10 10 10 10 10 10 10 10 10

Is the inspection result normal?

YES >> Replace front console antenna.

NO >> Replace BCM. Refer to <u>BCS-92, "Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS >

B2623 INSIDE KEY ANTENNA 3

Description

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

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	D
B2623	INSIDE ANTENNA 3 CIRCUIT	An excessive high or low voltage from inside anten- na is sent to BCM.	 Rear parcel shelf antenna Between BCM and front console antenna. 	E

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

With CONSULT

- 1. Perform rear parcel shelf antenna INSIDE ANT DIAGNOSIS on Work Support" of "INTELLIGENT KEY".
- 2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

Is rear parcel shelf antenna DTC detected?

YES >> Refer to DLK-285, "Diagnosis Procedure".

NO >> Rear parcel shelf antenna is OK.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-403, "Wiring Diagram".

1. CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 1

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

А

INFOID:000000007421215

В

F

Н

INFOID:000000007421216

J

Ρ

INFOID:000000007421217

B2623 INSIDE KEY ANTENNA 3

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

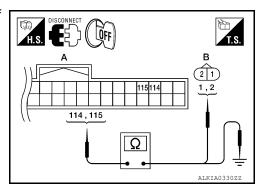
	Terminals				Signal	
	(+)		(-)	Condition	(Reference value.)	
BCI	BCM connector Terminal					
M21	Rear parcel	Place Intelligent Key inside the vehicle.	(V) 15 0 0 1 s JMKIA0062GB			
	shelf antenna	115	Ground	Place Intelligent Key outside the vehicle.	(V) 15 0 5 0 1 s JMKIA0063GB	

Is the inspection result normal?

- YES >> Check the condition of harness and connector.
- NO >> GO TO 2

2. CHECK REAR PARCEL SHELF ANTENNA CIRCUIT

- 1. Disconnect BCM and rear parcel shelf antenna connector.
- 2. Check continuity between BCM connector and rear parcel shelf antenna connector.



BCM connector	Terminal	Rear parcel shelf antenna connector		Terminal	Continuity
A: M21	114	B: B29	Trunk room	2	Yes
	115	D. D23		1	

3. Check continuity between BCM connector and ground.

BCM connector		Terminal		Continuity
A: M21	Trunk room	114	Ground	No
A. WZ I		115		

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and rear parcel shelf antenna.

3.CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 2

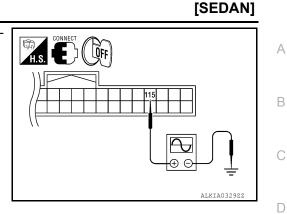
1. Replace rear parcel shelf antenna (New antenna or other antenna).

2. Connect BCM and rear parcel shelf antenna connector.

B2623 INSIDE KEY ANTENNA 3

< DTC/CIRCUIT DIAGNOSIS >

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



Terminals						
(+) BCM connector Terminal		()	Condition	Signal (Reference value.)		
		Terminal	(-)			
M21	Trunk room	115	Ground	Place Intelligent Key inside the vehicle.	(V) 15 0 5 0 1 s JMKIA0062CB	
		115	(V)			

Is the inspection result normal?

YES >> Replace rear parcel shelf antenna.

NO >> Replace BCM. Refer to <u>BCS-92. "Removal and Installation"</u>.

DLK

L

Μ

Ν

Ο

Ρ

J

Е

F

G

Н

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

gram - Sedan".

Regarding Wiring Diagram information, refer to BCS-70, "Wiring Diagram - Coupe" or BCS-79, "Wiring Dia-

1. CHECK FUSE AND FUSIBLE LINK

Check if the following BCM fuse or fusible link are blown.

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

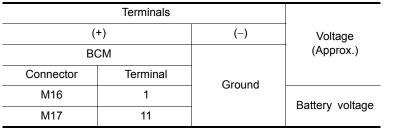
Is the fuse or fusible link blown?

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

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

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



Is the measurement normal?

YES >> GO TO 3

NO >> Repair or replace harness.

 $\mathbf{3.}$ CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	СМ		Continuity
Connector	Terminal	Ground	Continuity
M17	13	Ť	Yes

Does continuity exist?

YES >> Inspection End.

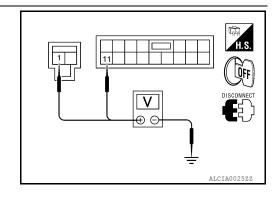
NO >> Repair or replace harness.

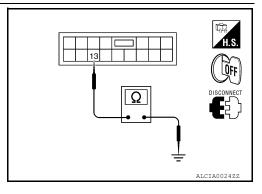
Special Repair Requirement

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to <u>BCS-3, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (BCM) :</u> Work Procedure".

>> Work End.





INFOID:000000007421219

INFOID:000000007421218

[SEDAN]

Revision: February 2013

DLK-288

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR SWITCH

Description

Detects door open/close condition.

Component Function Check

1. CHECK FUNCTION

(I) With CONSULT

Check door switches DOOR SW-DR, DOOR SW-AS, DOOR SW-RL, DOOR SW-RR in Data Monitor mode $${\rm \tiny D}$$ with CONSULT.

Monitor item	Condition
DOOR SW-DR	
DOOR SW-AS	$-$ CLOSE \rightarrow OPEN: OFF \rightarrow ON
DOOR SW-RL	
DOOR SW-RR	
s the inspection result normal?	
YES >> Door switch is OK. NO >> Refer to <u>DLK-289, "Diagnosis Procedur</u>	<u>e"</u> .
Diagnosis Procedure	INFOID:000000007421222
Regarding Wiring Diagram information, refer to DLK	-392, "Wiring Diagram".
CHECK DOOR SWITCH INPUT SIGNAL	
. Turn ignition switch OFF.	
 Check signal between BCM connector and gro 	ound with oscillo-
scope.	
	32, 58, 148, 149

INFOID:000000007421220

INFOID:000000007421221

А

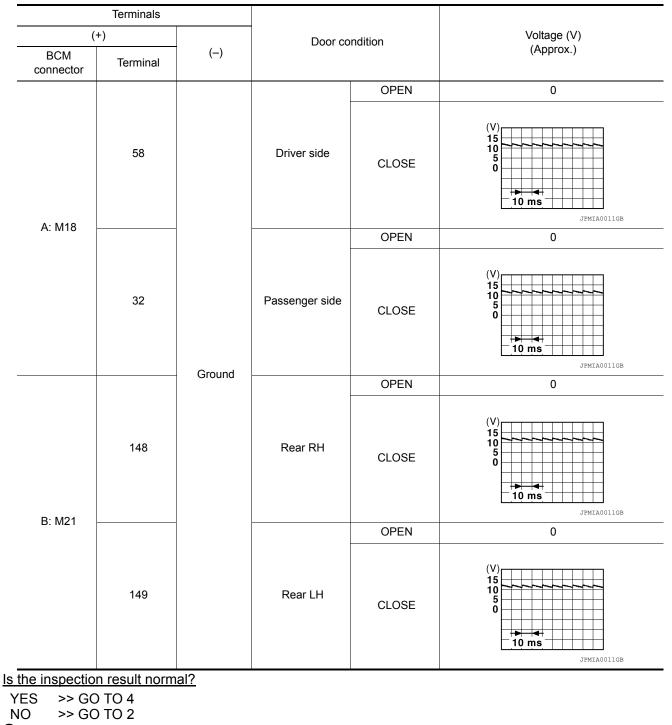
В

С

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]



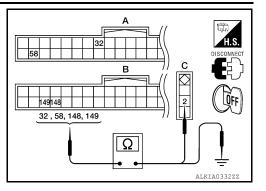
2. CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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



BCM connector	Terminal	Door switch connector	Terminal	Continuity	
A: M18	58	C: B8 (Driver side)			
A. MT0	32	C: B108 (Passenger side)	2	Yes	
B: M21	148	C: B116 (Rear RH)	Z	163	
D. WZ 1	149	C: B18 (Rear LH)			
. Check continuity betwee	en BCM connect	or and ground.			
BCM connector		Terminal		Continuity	
A: M18		58			
A. 1010		32	Ground	No	
A: M21		148			
		149			
tefer to <u>DLK-291, "Compon</u> <u>the inspection result norm</u> YES >> GO TO 4 NO >> Replace malfun .CHECK INTERMITTENT	al? ctioning door sw	itch.			
Refer to <u>GI-42, "Intermittent</u>					
>> Inspection End.					
Component Inspection	ı			INFOID:0000000074212	
.CHECK DOOR SWITCH					
. Turn ignition switch OFF . Disconnect door switch					

[SEDAN]

А

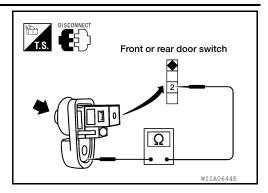
В

С

D

< DTC/CIRCUIT DIAGNOSIS >

3. Check door switch.



	Terminal Door switch		Door switch condition	Continuity
			Door switch condition	Continuity
	2 Ground part of door switch		Pressed	No
	۷.	Ground part of door switch	Released	Yes

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace malfunction door switch.

DOOR LOCK AND UNLOCK SWITCH DRIVER SIDE DRIVER SIDE : Description Transmits door lock/unlock operation to BCM.		CK AND UNLOCK SW	IICH	
DRIVER SIDE DRIVER SIDE : Description Transmits door lock/unlock operation to BCM. DRIVER SIDE : Component Function Check DRIVER SIDE : ON DRIVER SIDE : ON CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT. CDL LOCK SW DILOCK : ON CDL LOCK SW DRIVER SIDE : ON DRIVER SIDE : Diagnosis Procedure (With LH ar RH Anti-Pinch)". NO >> With LH and repinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH An Pinch Only)".	DTC/CIRCUIT DIAGNOSIS >			[SEDAN
DRIVER SIDE : Description Medicional account of the SCM. DRIVER SIDE : Component Function Check Medicional account of the SCM. DRIVER SIDE : Component Function Check Medicional account of the SCM. I.cHECK FUNCTION Import of the SCM. Import of the SCM of the	OOR LOCK AND UNLOCK S	WITCH		
Transmits door lock/unlock operation to BCM. DRIVER SIDE : Component Function Check 1.cHECK FUNCTION With CONSULT Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT. Monitor item Condition CDL LOCK SW CDL LOCK SW CDL LOCK SW UNLOCK OFF CDL UNLOCK SW Index State Sthe inspection result normal? YES YES >> Door lock and unlock switch is OK. NO >> With LH and RH anti-pinch, refer to DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH ant Pinch)". NO >> With LH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Ant Pinch Only".	RIVER SIDE			
DRIVER SIDE : Component Function Check Instrumentation 1.check FUNCTION Image: Strumentation of the strumentatin of the strumentation of the strumentatin of the strum	RIVER SIDE : Description			INFOID:0000000074212
DRIVER SIDE : Component Function Check Instrumentation 1.check FUNCTION Image: Strumentation of the strumentatin of the strumentation of the strumentatin of the strum	ransmits door lock/unlock operation to BCN	Л.		
1.CHECK FUNCTION Image: Stress of the inspection result normal? YES >> Door lock and unlock switch is OK. NO >> With LH and RH anti-pinch, refer to DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH and RH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch)".				INFOID:0000000074212
Image: Construction of the construc	•			
Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT. Monitor item Condition CDL LOCK SW LOCK : ON CDL UNLOCK SW UNLOCK : OFF CDL UNLOCK SW LOCK : OFF Sthe inspection result normal? UNLOCK : ON YES >> Door lock and unlock switch is OK. ON NO >> With LH and RH anti-pinch, refer to DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH arr RH Anti-Pinch)". NO >> With LH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anr Pinch Only)".	.CHECK FUNCTION			
Monitor item Condition CDL LOCK SW LOCK : ON CDL UNLOCK SW UNLOCK : OFF CDL UNLOCK SW LOCK : OFF S the inspection result normal? UNLOCK : ON YES >> Door lock and unlock switch is OK. ON NO >> With LH and RH anti-pinch, refer to DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH arr RH Anti-Pinch)". NO >> With LH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anr Pinch Only)".		n Data Monitor mode with CC	NSULT	
CDL LOCK SW LOCK : ON UNLOCK : OFF CDL UNLOCK SW LOCK : OFF Sthe inspection result normal? UNLOCK : ON YES >> Door lock and unlock switch is OK. ON NO >> With LH and RH anti-pinch, refer to DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH and RH anti-pinch)". NO >> With LH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch)".			NOOLI.	
CDL LOCK SW UNLOCK : OFF CDL UNLOCK SW LOCK : OFF UNLOCK : ON s the inspection result normal? YES >> Door lock and unlock switch is OK. NO >> With LH and RH anti-pinch, refer to DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH an RH Anti-Pinch)". NO >> With LH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".	Monitor item	(Condition	
UNLOCK : OFF CDL UNLOCK SW LOCK : OFF UNLOCK : ON s the inspection result normal? YES >> Door lock and unlock switch is OK. NO >> With LH and RH anti-pinch, refer to DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH ar RH Anti-Pinch)". NO >> With LH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".	CDL LOCK SW	LOCK	: ON	
CDL UNLOCK SW UNLOCK : ON S the inspection result normal? YES >> Door lock and unlock switch is OK. NO >> With LH and RH anti-pinch, refer to DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)". NO >> With LH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".		UNLOCK	: OFF	
UNLOCK : ON Is the inspection result normal? YES >> Door lock and unlock switch is OK. NO >> With LH and RH anti-pinch, refer to DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)". NO >> With LH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch)". NO >> With LH anti-pinch only, refer to DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".		LOCK	: OFF	
 YES >> Door lock and unlock switch is OK. NO >> With LH and RH anti-pinch, refer to <u>DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)"</u>. NO >> With LH anti-pinch only, refer to <u>DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)"</u>. 				
 NO >> With LH and RH anti-pinch, refer to <u>DLK-293, "DRIVER SIDE : Diagnosis Procedure (With LH ar RH Anti-Pinch)"</u>. NO >> With LH anti-pinch only, refer to <u>DLK-295, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)"</u>. 	CDE UNLOCK SW	UNLOCK	: ON	
<u>RH Anti-Pinch)</u> ". NO >> With LH anti-pinch only, refer to <u>DLK-295</u> , " <u>DRIVER SIDE</u> : <u>Diagnosis Procedure</u> (With LH Anti-Pinch Only)".		UNLOCK	: ON	
NO >> With LH anti-pinch only, refer to <u>DLK-295</u> , " <u>DRIVER SIDE</u> : <u>Diagnosis Procedure (With LH An</u> <u>Pinch Only)</u> ".	<u>s the inspection result normal?</u> YES >> Door lock and unlock switch is C	DK.	-	
	<u>s the inspection result normal?</u> YES >> Door lock and unlock switch is C NO >> With LH and RH anti-pinch, refer	DK.	-	dure (With LH an
DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)	s the inspection result normal? YES >> Door lock and unlock switch is C NO >> With LH and RH anti-pinch, refer RH Anti-Pinch)". NO >> With LH anti-pinch only, refer to	DK. r to <u>DLK-293, "DRIVER SIDE</u>	: Diagnosis Proce	
	s the inspection result normal? YES >> Door lock and unlock switch is C NO >> With LH and RH anti-pinch, refer <u>RH Anti-Pinch</u> ". NO >> With LH anti-pinch only, refer to Pinch Only)".	DK. r to <u>DLK-293, "DRIVER SIDE</u> D <u>DLK-295, "DRIVER SIDE :</u>	: Diagnosis Proce Diagnosis Proced	

Regarding Wiring Diagram information, refer to DLK-392. "Wiring Diagram".

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Read voltage signal between BCM connector and ground with oscilloscope when door lock and unlock switch (driver side) is turned "LOCK" or "UNLOCK".

2. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (driver side) is turned "LOCK" or "UNLOCK".

ඛ H.S.

OFF

 \frown

ÐΘ

J

DLK

L

Μ

Ν

40

ALKIA0333ZZ

-

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

Terminal				
(+)		(_)	Condition	Signal (Reference value)
BCM connector	Terminal	()		
M18	40	Ground	Door is closed	(V) 15 10 5 0 10 10 10 10 10 10 10 10 10 10 10 10 1

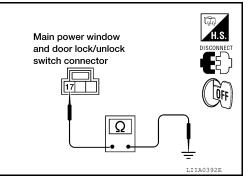
Is the inspection result normal?

YES >> GO TO 4

NO >> GO TO 2

2.CHECK POWER WINDOW SWITCH GROUND

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch connector.
- Check continuity between main power window and door lock/ unlock switch connector and ground.



Main power window and door lock/unlock switch connector	Term	inal	Continuity
D8	17	Ground	Yes

Is the inspection result normal?

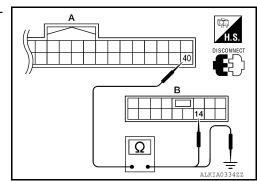
YES >> GO TO 3

NO >> Repair or replace harness.

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM connector and main power window and door lock/unlock switch connector.



BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
A: M18	40	B: D7	14	Yes

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

INFOID:000000007421227

А

В

D

Е

F

Н

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
A: M18	40	Ground	No

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

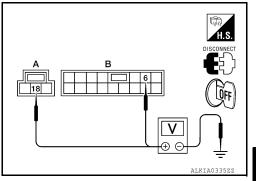
>> Inspection End.

DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)

Regarding Wiring Diagram information, refer to <u>DLK-392, "Wiring Diagram"</u>.

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

- Turn ignition switch ON. 1.
- 2. Check voltage at the main power window and door lock/unlock switch connector when the switch (driver side) is turned to "LOCK" or "UNLOCK".



	Connector	Main power window and door lock/un- lock switch state	Term	inal	Voltage	L
_	A: D8	Neutral \rightarrow Lock	18	Ground	Battery voltage \rightarrow 0	
_	B: D7	Neutral \rightarrow Unlock	6	Ground		M

Is the inspection result normal?

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

2. CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.

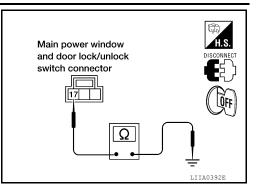
2. Disconnect main power window and door lock/unlock switch connector. Ν

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between main power window and door lock/ unlock switch connector and ground.



[SEDAN]

Main power window and door lock/unlock switch connector	Terminal		Continuity
D8	17	Ground	Yes

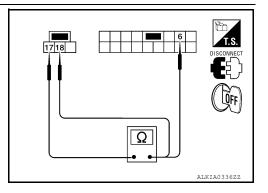
Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK POWER WINDOW SWITCH

Check continuity between main power window and door lock/unlock switch terminals.



Main power window and door lock/unlock switch state	Terminals	Continuity
Lock	17 - 18	Yes
Unlock	6 - 17	165
Neutral/Lock	6 - 17	No
Neutral/Unlock	17 - 18	INO

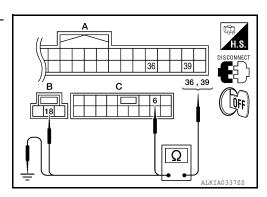
Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace main power window and door lock/unlock switch.

4.CHECK POWER WINDOW SWITCH CIRCUITS

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM connector and main power window and door lock/unlock switch connector.



< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

BCM connector	Terminal	Main power window and c lock/unlock switch connect		Continuity
A: M18	36	B: D8	18	Yes
	39	C: D7	6	
Check continuity betwee	en BCM connect	tor and ground.		
BCM connector		Terminal	(Continuity
A: M18		36 Grour	d	No
		39		
the inspection result norm (ES >> GO TO 5. NO >> Repair or replac .CHECK INTERMITTENT	e harness. INCIDENT			
efer to GI-42, "Intermittent	Incident".			
>> Inspection End.				
RIVER SIDE : Specia	al Repair Re	quirement		INFOID:000000007421228
ITIALIZATION PROCED	סוור			
Disconnect battery minunect it after a minute or furning and the organization of the o	us terminal or ma more.	ain power window and de		
already fully open) Continue pulling the pow position, keep pulling the Inspect anti-pinch function	e switch for 3 se		on). Even after glass	stops at fully closed
HECK ANTI-PINCH FUN Fully open the driver wir Place a piece of wood n	ndow.	position.		
Close door glass comple Check that glass lowers fo Check that glass does not	etely with AUTO or approximately	-UP. 150 mm or 2 seconds wi		
lowering. AUTION:				
Do not check with hands Check that AUTO-UP ope It may switch to fail-sat setting in that situation.	erates before in fe mode if ope	nspection when system n/close operation is pe	initialization is per	formed.
Perform initial setting wh Finish initial setting. Oth Auto-up operation	hen auto-up op	eration or anti-pinch fu		erate normally.
Anti-pinch function Retained power operat	, , , , , , , , , , , , , , , , , , ,		5.	
Anti-pinch function Retained power operat ASSENGER SIDE	tion when ignit		σ.	
Anti-pinch function Retained power operat	tion when ignit		σ.	INFOID:000000007421229

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE : Component Function Check

INFOID:000000007421230

1.CHECK FUNCTION

With CONSULT

Check CDL LOCK SW, CDL UNLOCK SW in Data Monitor mode with CONSULT.

Monitor item		Condition
CDL LOCK SW	LOCK	: ON
CDE LOCK SW	UNLOCK	: OFF
CDL UNLOCK SW	LOCK	: OFF
ODE UNLOOK SW	UNLOCK	: ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> With LH and RH anti-pinch, refer to <u>DLK-298, "PASSENGER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)"</u>.

NO >> With LH anti-pinch only, refer to <u>DLK-300</u>, "<u>PASSENGER SIDE</u> : <u>Diagnosis Procedure (With LH</u> <u>Anti-Pinch Only)</u>".

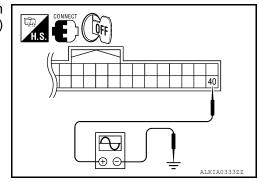
PASSENGER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)

INFOID:000000007421231

Regarding Wiring Diagram information, refer to DLK-392, "Wiring Diagram".

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Read voltage signal between BCM connector and ground with oscilloscope when door lock and unlock switch (passenger side) is turned to "LOCK" or "UNLOCK".



2. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (passenger side) is turned "LOCK" or "UNLOCK".

	Terminal				
(+)		()	Condition	Signal (Reference value)	
BCM connector	Terminal	(-)			
M18	40	Ground	Door is closed	(V) 15 10 10 10 10 10 10 10 10 10 10 10 10 10	

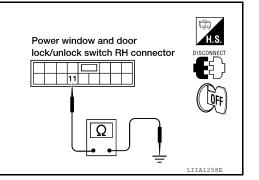
Is the inspection result normal?

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

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK POWER WINDOW SWITCH GROUND

- 1. Turn ignition switch OFF.
- 2. Disconnect power window and door lock/unlock switch RH connector.
- 3. Check continuity between front power window switch (passen-
- ger side) connector and ground.



Power window and door lock/unlock switch RH connector	Terminal		Continuity
D105	11	Ground	Yes

Is the inspection result normal?

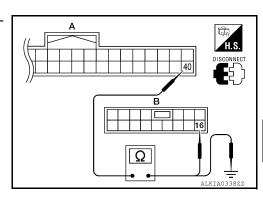
YES >> GO TO 3

NO >> Repair or replace harness.

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Disconnect BCM connector.

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



BCM connector	Terminal	Front power window switch (passenger side) connector	Terminal	Continuity
A: M18	40	B: D105	16	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
A: M18	40	Ground	No

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

YES >> Inspection End.

А

В

D

Е

F

Н

J

DLK

L

Μ

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)

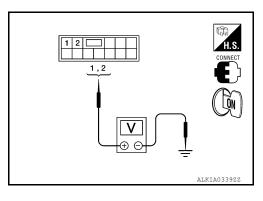
[SEDAN]

INFOID:000000007421232

Regarding Wiring Diagram information, refer to DLK-392. "Wiring Diagram".

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch ON.
- Check voltage at the power window and door lock/unlock switch RH connector when the switch (passenger side) is turned to "LOCK" or "UNLOCK".



Connector	Power window and door lock/unlock switch RH state	Term	inal	Voltage
D105	Neutral \rightarrow Lock	1	Ground	
	Neutral \rightarrow Unlock	2	Giodila	Battery voltage $\rightarrow 0$

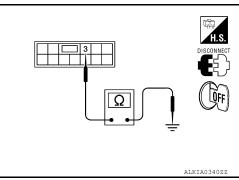
Is the inspection result normal?

YES >> GO TO 5

NO >> GO TO 2

2. CHECK POWER WINDOW SWITCH GROUND

- 1. Turn ignition switch OFF.
- 2. Disconnect power window and door lock/unlock switch RH connector.
- 3. Check continuity between power window and door lock/unlock switch RH connector and ground.



Power window and door lock/unlock switch RH connector	Termi	inal	Continuity
D105	3	Ground	Yes

Is the inspection result normal?

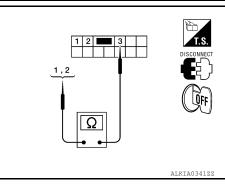
YES >> GO TO 3

NO >> Repair or replace harness.

3.CHECK POWER WINDOW SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Check continuity between power window and door lock/unlock switch RH terminals.



Power window and door lock/unlock switch RH state	Terminals	Continuity
Lock	1 - 3	Yes
Unlock	2 - 3	165
Neutral/Unlock	1 - 3	No
Neutral/Lock	2 - 3	INU

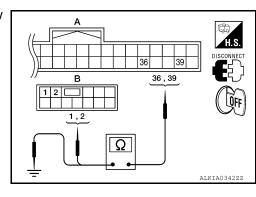
Is the inspection result normal?

YES >> GO TO 4

NO >> Replace power window and door lock/unlock switch RH.

4.CHECK POWER WINDOW SWITCH CIRCUITS

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM connector and power window and door lock/unlock switch RH connector.



BCM connectorTerminalPower window and door lock/
unlock switch RH connectorTerminalContinuityA: M1836
39B: D1051
2Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terr	ninal	Continuity
A: M18	36	Ground	No
A. M10	39	Ground	110

Is the inspection result normal?

YES >> GO TO 5

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

Ν

Ο

Ρ

А

В

D

Е

F

Н

J

DLK

[SEDAN]

< DTC/CIRCUIT DIAGNOSIS >

>> Inspection End.

PASSENGER SIDE : Special Repair Requirement

INFOID:000000007421233

NOTE:

This procedure is applicable to vehicles equipped with front LH and RH anti-pinch windows only.

INITIALIZATION PROCEDURE

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

CHECK ANTI-PINCH FUNCTION

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

CAUTION:

- Do not check with hands and other part of body because they may be pinched. Do not get pinched.
- Check that AUTO-UP operates before inspection when system initialization is performed.
- It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to <u>PWC-46, "Fail Safe"</u>.
- Perform initial setting when auto-up operation or anti-pinch function does not operate normally.
- Finish initial setting. Otherwise, next operation cannot be done.
- 1. Auto-up operation
- 2. Anti-pinch function
- 3. Retained power operation when ignition switch is OFF.

KEY SLOT

< DTC/CIRCUIT DIAGNOSIS > KEY SI OT

		A
	INFOID:000000007421234	F
transponder.		E
	INFOID:000000007421235	
		C
h CONSULT.		
Condition		_
KEY SW-SLOT Key is inserted in key slot: ON		E
Key is removed from key slot: OFF		
dure".		F
	INFOID:000000007421236	C
PLK-403, "Wiring Diagram".	INFOID:000000007421236	C F
9 <u>LK-403, "Wiring Diagram"</u> . IT	INFOID:000000007421236	
	h CONSULT. Condition Key is inserted in key slot: ON Key is removed from key slot: OFF	h CONSULT.

		ALKIA		
	Terminals			
(+)		()	Voltage (V) (Approx.)	
Key slot connector	Terminal	_ (-)	(
M40	1	Ground	Battery voltage	
IVI40	5	Cibulid	Dattery Voltage	

Is the inspection result normal?

YES >> GO TO 2

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

2. CHECK KEY SLOT GROUND CIRCUIT

DLK

L

Ρ

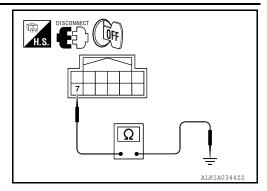
1,5

۷ ÷Θ [SEDAN]

KEY SLOT

< DTC/CIRCUIT DIAGNOSIS >

Check continuity between key slot connector and ground.



Key slot connector	Terminal	Ground	Continuity
M40	7	Oround	Yes

Is the inspection result normal?

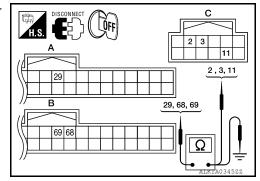
YES >> GO TO 3

NO >> Repair or replace key slot ground circuit.

3. CHECK KEY SLOT CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM connector and key slot connector.



BCM connector	Terminal	Key slot connector	Terminal	Continuity
A: M18	29		11	
B: M19	68	C: M40	2	Yes
B. M19	69	-	3	

3. Check continuity between BCM connector and ground.

BCM connector	Term	ninal	Continuity
A: M18	29		
B: M19	68	Ground	No
D. 1019	69	Î	

Is the inspection result normal?

YES >> GO TO 4

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

4.CHECK KEY SLOT

Refer to DLK-305, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5

NO >> Replace key slot.

5.CHECK INTERMITTENT INCIDENT

KEY SLOT

< DTC/CIRCUIT DIAGNOSIS >

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

Component Inspection

1.CHECK KEY SLOT

Check key slot.

Terminal	Condition
Key slot	Condition

Тегтніна		Condition	Continuity	
Key	slot	Condition	Continuity	
1	11	Intelligent Key inserted	Yes	
1		Intelligent Key removed	No	

Is the inspection result normal?

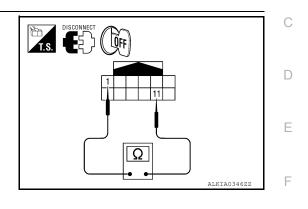
YES >> Inspection End.

NO >> Replace key slot.

А

[SEDAN]

INFOID:00000007421237 B



	I	
5		

G

Н

DLK

L

Μ

Ν

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

KEY CYLINDER SWITCH

Description

INFOID:000000007421238

[SEDAN]

For vehicles equipped with LH and RH anti-pinch system, the main power window and door lock/unlock switch detects condition of the door key cylinder switch and transmits to BCM as the LOCK or UNLOCK signal.

For vehicles equipped with LH anti-pinch system only, the front door lock assembly LH (key cylinder switch) transmits the LOCK or UNLOCK signal directly to the BCM.

Component Function Check

INFOID:000000007421239

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check KEY CYL UN-SW, KEY CYL UN-SW in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT. Refer to <u>DLK-229</u>, "Work Flow".

Monitor item	Con	dition
KEY CYL LK-SW	Lock	: ON
REF GTE ER-SW	Neutral / Unlock	: OFF
KEY CYL UN-SW	Unlock	: ON
RET CTL UN-SW	Neutral / Lock	: OFF

Is the inspection result normal?

- YES >> Key cylinder switch is OK.
- NO >> With LH and RH anti-pinch, refer to <u>DLK-306</u>. "Diagnosis Procedure (With LH and RH Anti-<u>Pinch)"</u>.
- NO >> With LH anti-pinch only, refer to DLK-308. "Diagnosis Procedure (With LH Anti-Pinch Only)".

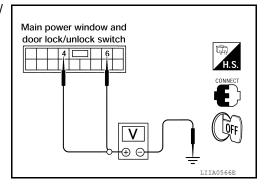
Diagnosis Procedure (With LH and RH Anti-Pinch)

INFOID:000000007421240

Regarding Wiring Diagram information, refer to DLK-392, "Wiring Diagram".

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

- 1. Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connector and ground.



< DTC/CIRCUIT DIAGNOSIS >

					_
Terminals					A
(+)				Voltage (V)	
Main power window and door lock/unlock switch connector	Terminal	(-)	Key position	(Approx.)	В
	4		Lock	0	-
D7	4	Ground	Neutral / Unlock	5	С
זט	C	- Ground	Unlock	0	-
	6	1		_	-

Neutral / Lock

Is the inspection result normal?

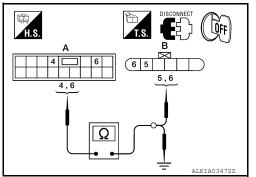
YES >> Replace main power window and door lock/unlock switch. Refer to PWC-98, "Removal and Installation". 2 Ν

2. CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect main power window and door lock/unlock switch connector and front door lock assembly LH (key cylinder switch) connector.

3. Check continuity between main power window and door lock/ unlock switch connector and front door lock assembly LH (key cylinder switch) connector.



Main power window and door lock/ unlock switch connector	Terminal	Front door lock assembly LH (key cylinder switch) connector	Terminal	Continuity	D
A: D7	4	B: D10	6	Yes	
Α. ΟΙ	6	B. D10	5	165	

Check continuity between main power window and door lock/unlock switch connector and ground. 4.

Power window main switch connec- tor	Terminal		Continuity	M
A: D7	4	Ground	No	
A. D7	6		NO	Ν
s the inspection result normal?				
YES >> GO TO 3				\sim
NO >> Repair or replace harnes	S.			0

D

Ε

F

Н

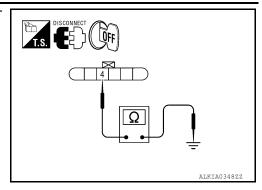
LΚ

Ρ

5

< DTC/CIRCUIT DIAGNOSIS >

Check continuity between front door lock assembly LH connector and ground.



[SEDAN]

INFOID:000000007421241

Front door lock assembly LH connector	Terminal	Ground	Continuity
D10	4	Gibuna	Yes

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch. Refer to <u>DLK-310, "Component Inspection"</u>.

Is the inspection result normal?

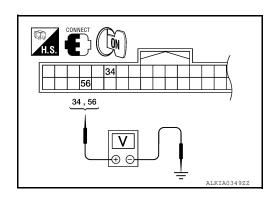
- YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.
- NO >> Replace front door lock assembly LH (key cylinder switch). Refer to <u>DLK-461, "FRONT DOOR</u> <u>LOCK : Removal and Installation"</u>.

Diagnosis Procedure (With LH Anti-Pinch Only)

Regarding Wiring Diagram information, refer to DLK-392. "Wiring Diagram".

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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



	Terminals			Voltage (V) (Approx.)
(+)	(+)		Key position	
BCM connector	Terminal	(-)		(++)
	56		Lock	0
M18	50	Ground	Neutral / Unlock	5
IVI TO	24	Ground	Unlock	0
	34		Neutral / Lock	5

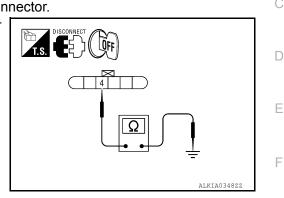
< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to <u>PWC-98</u>, "<u>Removal and Instal-</u> <u>lation</u>". After that, Refer to <u>PWC-11</u>, "<u>ADDITIONAL SERVICE WHEN REPLACING CONTROL</u> <u>UNIT : Special Repair Requirement</u>".

2. CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front door lock assembly LH (key cylinder switch) connector.
- 3. Check continuity between front door lock assembly LH (key cylinder switch) connector and ground.



Front door lock assembly LH connector	Terminal	Ground	Continuity
D10	4	Ground	Yes

Is the inspection result normal?

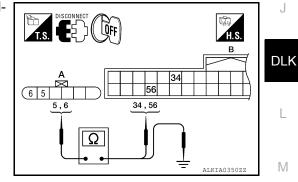
YES >> GO TO 3

NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Disconnect BCM connector M18.

 Check continuity between front door lock assembly LH (key cylinder switch) connector and BCM connector M18.



_	Front door lock assembly LH connector	Terminal	BCM connector	Terminal	Continuity	Ν
_	A: D10	5	B: M18	34	Yes	
	A. 010	6	D. WIG	56	165	0

3. Check continuity between front door lock assembly LH (key cylinder switch) connector and ground.

Front door lock assembly LH connector	Terminal		Continuity	Ρ
A: D10	5	Ground	No	
A. DTU	6		INU	

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

А

В

Н

< DTC/CIRCUIT DIAGNOSIS >

CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.

Refer to DLK-310, "Component Inspection".

Is the inspection result normal?

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

NO >> Replace front door lock assembly LH (key cylinder switch). Refer to <u>DLK-461, "FRONT DOOR</u> LOCK : Removal and Installation".

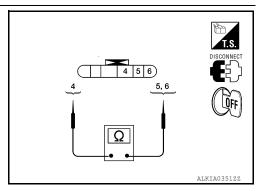
Component Inspection

INFOID:000000007421242

COMPONENT INSPECTION

1. CHECK DOOR KEY CYLINDER SWITCH

Check front door lock assembly LH (key cylinder switch).



Terminal Front door lock assembly LH (key cylinder switch) connector			Continuity
		Key position	
		Unlock	Yes
5	Λ	Neutral / Lock	No
6	4	Lock	Yes
6		Neutral / Unlock	No

Is the inspection result normal?

YES >> Key cylinder switch is OK.

NO >> Replace front door lock assembly LH (key cylinder switch). Refer to <u>DLK-461, "FRONT DOOR</u> <u>LOCK : Removal and Installation"</u>.

Special Repair Requirement

INFOID:000000007421243

1.PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.

Refer to <u>PWC-11</u>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.

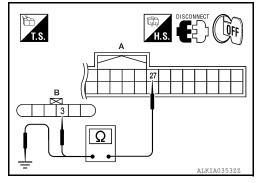
NO >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

		UNL		SENSOR	
DTC/CIRCUIT DIA	GNOSIS >				[SEDAN]
JNLOCK SEN	SOR				
Description					INFOID:000000007421244
Detects door lock cor	ndition of driver	door			
Component Fun					INFOID:000000007421245
					N4 OL.00000007421240
)N				
With CONSULT Check unlock sensor	UNLK SEN-DF	२ in "Data N	lonitor"	" mode.	
Мс	onitor item			C	ondition
UNLK SEN-DR				or lock (driver side) LOCH	
a the increation requ	It normal?	F	ront doo	or lock (driver side) UNLC	OCK : ON
s the inspection resu YES >> Unlock so NO >> Refer to l		<u>Inosis Proce</u>	edure".		
Diagnosis Proce	dure				INFOID:000000007421246
-					
Regarding Wiring Dia	Igram information	on, refer to	DLK-3	92, "Wiring Diagram	"
Regarding Wiring Dia	ıgram informati	on, refer to	<u>DLK-3</u>	92, "Wiring Diagram	<u>".</u>
	-			92. "Wiring Diagram	<u>"</u> .
Regarding Wiring Dia 1.CHECK UNLOCK Check signal betweer	SENSOR POV	VER SUPPI	_Y	n oscilloscope.	
1.CHECK UNLOCK	SENSOR POV	VER SUPPI	_Y		
1.CHECK UNLOCK	SENSOR POV	VER SUPPI	_Y	n oscilloscope.	
1.CHECK UNLOCK	SENSOR POV	VER SUPPI	_Y	n oscilloscope.	
1.CHECK UNLOCK	SENSOR POV	VER SUPPI	_Y	n oscilloscope.	
1.CHECK UNLOCK	SENSOR POV	VER SUPPI	_Y	n oscilloscope.	
1.CHECK UNLOCK	SENSOR POV	VER SUPPI	_Y	n oscilloscope.	
	SENSOR POV	VER SUPPI	_Y	n oscilloscope.	
	SENSOR POV n BCM connect	VER SUPPI	_Y	n oscilloscope.	
1.CHECK UNLOCK	SENSOR POV	VER SUPPI	_Y nd with	h oscilloscope.	S CONNECT (DF) 27 27 10 10 10 10 10 10 10 10 10 10
1.CHECK UNLOCK Check signal betweer	SENSOR POV n BCM connect	VER SUPPI	_Y nd with	n oscilloscope.	S CONNECT (DFF) 27 27 27 10 10 10 10 10 10 10 10 10 10
1.CHECK UNLOCK Check signal betweer	SENSOR POV n BCM connect	VER SUPPI	_Y nd with	h oscilloscope.	S CONNECT CFF 27 CFF CFF CFF CFF CFF CFF CFF CFF CFF CF
1.CHECK UNLOCK Check signal betweer	SENSOR POV n BCM connect	VER SUPPI	_Y nd with	h oscilloscope.	S CONNECT (DF) 27 27 10 10 10 10 10 10 10 10 10 10
1.CHECK UNLOCK Check signal between (+) BCM connector	SENSOR POV n BCM connect	VER SUPPI	_Y nd with	h oscilloscope.	S CONNECT
1.CHECK UNLOCK Check signal betweer	SENSOR POV n BCM connect	VER SUPPI	_Y nd with	h oscilloscope.	Image: Solution of the second seco
1.CHECK UNLOCK Check signal between (+) BCM connector	SENSOR POV n BCM connect	VER SUPPI	_Y nd with	h oscilloscope.	The second secon

 $2. {\sf CHECK} \text{ unlock sensor circuit}$

< DTC/CIRCUIT DIAGNOSIS >

- 1. Turn ignition switch OFF.
- 2. Disconnect BCM and front door lock assembly LH connector.
- 3. Check continuity between BCM connector and front door lock assembly LH connector.



BCM connector	Terminal	Front door lock assembly LH connector	Terminal	Continuity
A: M18	27	B: D10	3	Yes

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M18	27	Ground	No

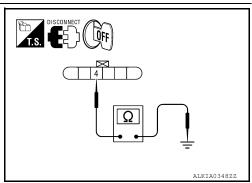
Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness between BCM and front door lock assembly LH.

$\mathbf{3}$.check unlock sensor ground circuit

Check continuity between front door lock assembly LH connector and ground.



Front door lock assembly LH connector	Terminal	Ground	Continuity
D10	4	Ciouna	Yes

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4.CHECK BCM OUTPUT SIGNAL

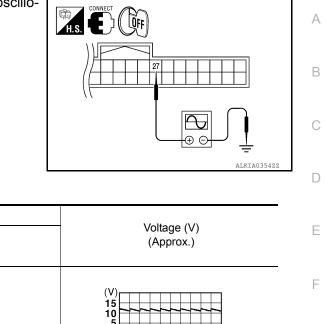
1. Connect BCM harness connector.

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

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

Terminals



(+	(+)		Voltage (V) (Approx.)
BCM connector	Terminal	(-)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
M18	27	Ground	(V) 15 10 5 0 10 ms JpmIA0011GB
Is the inspection result nor	mal?		<u> </u>
YES >> GO TO 5 NO >> Replace BCM	. Refer to <u>BCS-92. "Re</u>	moval and Installation	, "
5.CHECK UNLOCK SEN			<u>L</u> .
Refer to <u>DLK-313</u> , "Compo			
Is the inspection result nor			
YES >> GO TO 6			
	door lock assembly LI	H. Refer to <u>DLK-461,</u>	"FRONT DOOR LOCK : Removal and
Installation". 6.CHECK INTERMITTEN			
Refer to <u>GI-42, "Intermitter</u>			
	<u>it incluent</u> .		
>> Inspection End	d.		
Component Inspection	on		INFOID:000000007421247
1.CHECK UNLOCK SEN			
	SOR		
Check unlock sensor.			
			T.S.
			Ω

ALKIA0355ZZ

< DTC/CIRCUIT DIAGNOSIS >

-	Terminal		Front door lock assembly LH condition	Continuity	
-	Front door lock	assembly LH		Continuity	
-	3	Δ	Unlock	Yes	
	5	4	Lock	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front lock assembly LH. Refer to <u>DLK-461, "FRONT DOOR LOCK : Removal and Instal-</u> lation".

TRUNK LID OPENER SWITCH

		TRU	JNK LID	OPENER SWITC	CH Contraction of the second
< DTC/CIRCU					[SEDAN]
TRUNK LI	ID OPEN	ER SWI	ГСН		A
Description					INFOID:000000007421248
Transmits trun	ık lid open sig	gnal to BCM.			В
Componen	t Functior	Check			INFOID:000000007421249
1.CHECK TR	UNK LID OF	PENER CAN	CEL SWIT	СН	С
Check trunk lie	•	•			
<u>Does trunk lid</u> Yes >> Tu	opener canc urn off trunk l		-		D
No >> G	O TO 2	iu operier ca		1.	
2.CHECK FU	INCTION				E
With CONS Check trunk light		ch TR/BD O	PEN SW i	n "Data Monitor mode v	with CONSULT
When trunk	lid opener sw	vitch is turned	d to "ON".		F
	Monito	r item			Condition
TR/BD OPEN	I SW			Trunk lid opener switch is p	oressed: ON G
				Trunk lid opener switch is r	released: OFF
	on result nori runk lid open efer to <u>DLK-3</u>	er switch is C		lure".	Н
Diagnosis F	Procedure				INFOID:00000007421250
Regarding Wir	ring Diagram	information,	refer to D	LK-419, "Wiring Diagra	<u>m"</u> . J
4					
1.CHECK TR					DLk
	ntelligent Key unk lid opene				
3. Check vol	tage between	n BCM conne	ector and	ground.	
					M
					V N
					ALKIA03562Z
	Terminala				T
	Terminals (+)		0	a affirmed the second state	P Voltage (V)
BCM	Terminal	(-)	Conditio	n of trunk lid opener switch	(Approx.)
connector			<u>с</u>	DN (press and hold)	0
M21	147	Ground		OFF (release)	Battery voltage
	1		1		

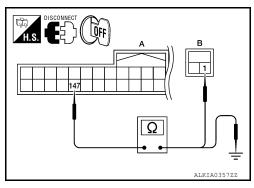
Is the inspection result normal?

< DTC/CIRCUIT DIAGNOSIS >

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

2. CHECK TRUNK LID OPENER SWITCH CIRCUIT

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



BCM connector	Terminal	Trunk lid opener switch connector	Terminal	Continuity
 A: M21	147	B: M75	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M21	147	Cround	No

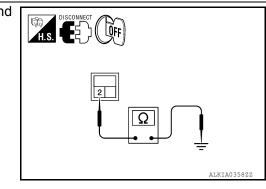
Is the inspection result normal?

YES >> GO TO 3

NO >> Repair harness or connector.

3.check trunk lid opener switch ground circuit

Check continuity between trunk lid opener switch connector and ground.



Trunk lid opener switch	Terminal	Ground	Continuity
 M75	2	Cround	Yes

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace harness.

4.CHECK TRUNK LID OPENER SWITCH

Refer to DLK-317, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5

NO >> Replace trunk lid opener switch.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

< DTC/CIRCUIT DIAGNOSIS >

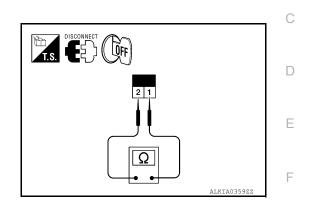
[SEDAN]

А

В

>> Inspection End. Component Inspection INFOID:00000007421251 1.CHECK TRUNK LID OPENER SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lid opener switch connector.
- 3. Check continuity between trunk lid opener switch connector.



				G
 Terminal		Condition Continuity		9
 Trunk lid op	pener switch	Condition	Continuity	
 1	2	ON (press and hold)	Yes	Н
I	2	OFF (release)	No	_

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace trunk lid opener switch.

J

DLK

L

Μ

Ν

Ο

Ρ

TRUNK LID OPENER CANCEL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TRUNK LID OPENER CANCEL SWITCH

Description

Cancels trunk lid open operation.

Component Function Check

1. CHECK FUNCTION

With CONSULT

Check trunk lid opener cancel switch TR CANCEL SW in Data Monitor mode with CONSULT.

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

Is the inspection result normal?

YES >> Trunk lid opener cancel switch is OK.

NO >> Refer to <u>DLK-318</u>, "Diagnosis Procedure".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-419, "Wiring Diagram"</u>.

1. CHECK TRUNK LID OPENER CANCEL SIGNAL

Check voltage between BCM connector and ground.

ALKIAO 3602Z

Terminals				
(+)			Condition of trunk lid opener	Voltage (V)
BCM connector	Terminal	(-)	cancel switch	(Approx.)
			ON (press and hold)	0
M18	37	Ground	OFF (cancel)	(V) 15 10 5 0 10 ms JPMIA0012GB

Is the inspection result normal?

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

NO >> GO TO 2

INFOID:000000007421252

INFOID:000000007421253

INFOID:000000007421254

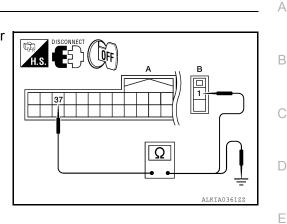
TRUNK LID OPENER CANCEL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

2. CHECK TRUNK LID OPENER CANCEL SWITCH CIRCUIT

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



BCM connector	Terminal	Trunk lid opener cancel switch connector	Terminal	Continuity
A: M18	37	B: M74	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M18	37	Ground	No

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair harness or connector.

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

Check continuity between trunk lid opener switch connector and ground.

.

ALKIA0362ZZ

DLK

F

Н

Trunk lid opener cancel switch	Terminal	Ground	Continuity
M74	2	Ground	Yes
s the inspection result normal?			
YES >> GO TO 4			
NO >> Repair or replace harne	SS.		
CHECK TRUNK LID OPENER C	ANCEL SWITCH		
efer to DLK-319, "Component Insp	ection".		
the inspection result normal?			
YES >> Check intermittent incid NO >> Replace trunk lid opene		2, "Intermittent Incide	<u>ent"</u> .
Component Inspection			INFOID:00000007421255

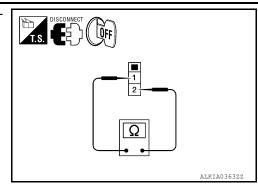
1.CHECK TRUNK LID OPENER CANCEL SWITCH

1. Disconnect trunk lid opener cancel switch connector.

TRUNK LID OPENER CANCEL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

2. Check continuity between trunk lid opener cancel switch terminals.



Ter	minal	Condition	Continuity	
Trunk lid oper	ner cancel switch	Condition	Continuity	
1	2	ON	Yes	
I	2	OFF (cancel)	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace trunk lid opener cancel switch.

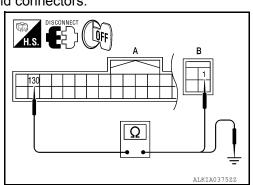
	AGNOSIS >			[SEDAN	IJ.
FRUNK LAMP					_
Description				INFOID:000000007421	256
Detects trunk open/c	close condition.				
Component Fur				INFOID:000000007421	257
1.CHECK FUNCTION					
	INTR in Data Monitor r	node with	CONSULT.		
M	lonitor item			Condition	
TRNK/HAT MNTR			OPEN	: ON	
	11		CLOSE	: OFF	
s the inspection results YES >> Trunk la NO >> Refer to	ult normal? mp switch is OK. DLK-321, "Diagnosis	Procedure	<u>e"</u> .		
Diagnosis Proce	edure			INFOID:000000007421	258
Regarding Wiring Di	agram information, refe	er to <u>DLK</u>	<u>-392, "Wiring Di</u>	iagram".	
CHECK TRUNK	LAMP SWITCH INPUT	SIGNAL			
 Turn ignition swi 					
		or and aro	und		_
	etween BCM connecto	or and gro	ound.	H.S. CONNECT	_
		or and gro	ound.		
		or and gro	bund.		
		or and gro	ound.		
		or and gro	ound.		
		or and gro	ound.		
		or and gro	ound.		
		or and gro			
2. Check voltage b	Terminals	or and gro	Trunk condition		
2. Check voltage b	Terminals		Trunk condition	Voltage (V) (Approx.)	
2. Check voltage b	Terminals		Trunk	Voltage (V)	
2. Check voltage b	Terminals		Trunk condition	Voltage (V) (Approx.)	

YES >> Check intermittent incident. Refer to <u>GI-42. "Intermittent Incident"</u>. NO >> GO TO 2

< DTC/CIRCUIT DIAGNOSIS >

$\overline{2.}$ CHECK TRUNK LAMP SWITCH CIRCUIT

- 1. Disconnect BCM and trunk lamp switch and trunk release solenoid connectors.
- 2. Check continuity between BCM connector and trunk lamp switch and trunk release solenoid connector.



BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
A: M21	130	B: B28	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	ninal Ground	
A: M21	130	Ground	No

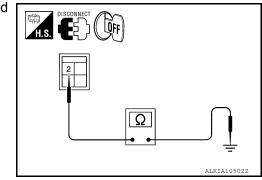
Is the inspection result normal?

YES >> GO TO 3

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

 $\mathbf{3}$.check trunk lamp switch ground circuit

Check continuity between trunk lid lock assembly connector and ground.



Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B28	2		Yes

Is the inspection result normal?

YES >> GO TO 4

NO >> Repair or replace trunk lamp switch and trunk release solenoid ground circuit.

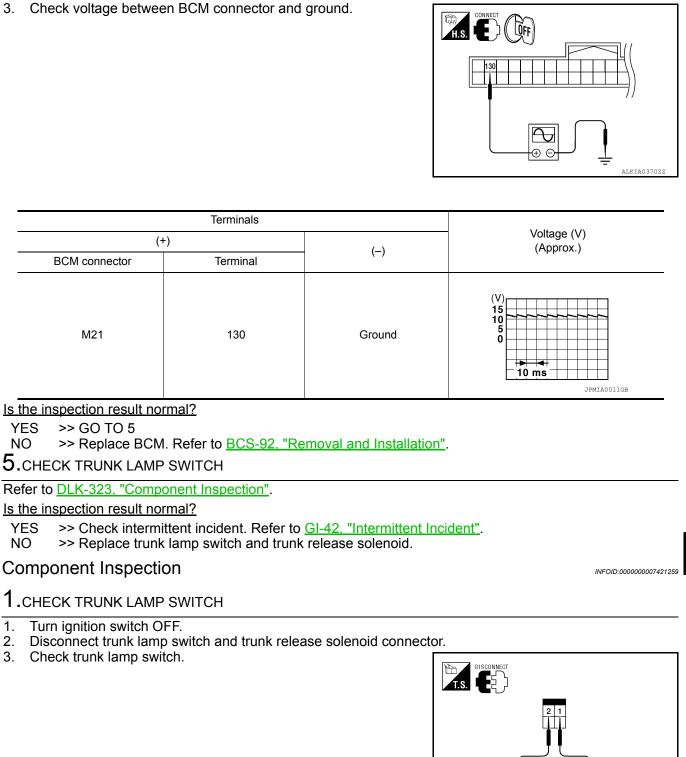
4.CHECK BCM OUTPUT SIGNAL

1. Insure trunk remains closed during this step.

2. Connect BCM connector.

< DTC/CIRCUIT DIAGNOSIS >

3.



Terminal		Trunk condition	Continuity
Trunk lamp switch and trunk release solenoid			
1	2	OPEN	Yes
		CLOSE	No

YES

NO

YES

NO

1.

2.

3.



WTTA1180F

Ω

[SEDAN]

А

В

D

Е

F

Н

J

DLK

L

Μ

Ν

Ρ

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

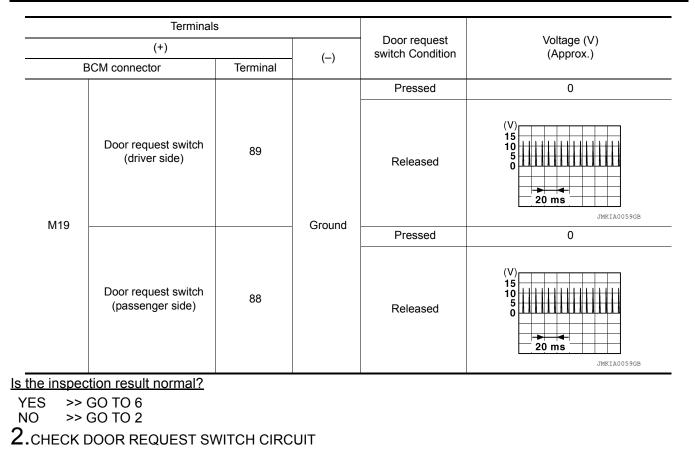
YES >> Inspection End.

NO >> Replace trunk lamp switch and trunk release solenoid.

< DTC/CIRCUIT DIAGNOSIS >	[SEDAN]
DOOR REQUEST SWITCH	
Description	INFOID:000000007421260
Transmits lock/unlock operation to BCM.	
Component Function Check	INFOID:000000007421261
1.CHECK FUNCTION	
With CONSULT Check door request switch REQ SW-DR, REQ SW-A	AS in Data Monitor mode.
Monitor item	Condition
REQ SW-DR REQ SW-AS	Door request switch is pressed : ON
Is the inspection result normal?	Door request switch is released : OFF
YES >> Door request switch is OK. NO >> Refer to <u>DLK-325, "Diagnosis Procedure</u>	<u>»"</u> .
Diagnosis Procedure	INFOID:000000007421262
2. Check voltage between BCM harness connector	and ground.
	ALKIA0376ZZ

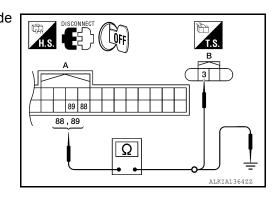
< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]



1. Disconnect BCM and front outside handle connector.

2. Check continuity between BCM connector and front outside handle connector.



BCM connector	Terminal	Front outside handle connector	Terminal	Continuity
A: M19	89	B: D6 (driver side)	3	Yes
A. 1019	88	B: D106 (passenger side)	5	165

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M19	89	Ground	No
A. 1019	88		NO

Is the inspection result normal?

YES >> GO TO 3

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

 ${f 3}.$ check door request switch ground circuit

< DTC/CIRCUIT DIAGNOSIS >

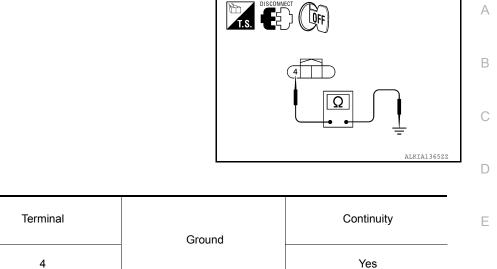
[SEDAN]

А

F

Ρ

Check continuity between front outside handle connector and ground.



D106 (passenger side)

Is the inspection result normal?

Front outside handle

connector

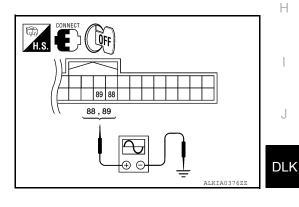
D6 (driver side)

YES >> GO TO 4

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

4.CHECK BCM OUTPUT SIGNAL

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



	Terminals		
(+)			Voltage (V) (Approx.)
BCM connector	Terminal	- (-)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	89		
M19	88	Ground	(V) 15 10 5 0
			20 ms

Is the inspection result normal?

YES >> GO TO 5

NO >> Replace BCM. Refer to BCS-92, "Removal and Installation".

5. CHECK DOOR REQUEST SWITCH

Refer to DLK-328, "Component Inspection".

Is the inspection result normal?

>> GO TO 6 YES

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace malfunctioning front outside handle.

6. CHECK INTERMITTENT INCIDENT

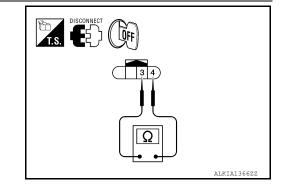
Refer to GI-42, "Intermittent Incident".

>> Inspection End.

Component Inspection

1. CHECK DOOR REQUEST SWITCH

Check front outside handle (request switch).



Terr	ninal	Door request switch condition	Continuity	
Front outside handle (request switch)		Door request switch condition	Continuity	
1	2	Pressed	Yes	
I		Released	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace malfunction front outside handle.

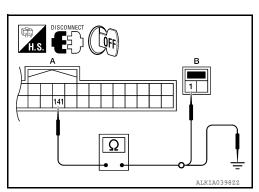
INFOID:000000007421263

TRUNK OPENER REQUEST SWITCH [SEDAN] < DTC/CIRCUIT DIAGNOSIS > TRUNK OPENER REQUEST SWITCH А Description INFOID:000000007421264 Performs trunk lid open request when it is pressed. В **Component Function Check** INFOID:000000007421265 **1.**CHECK FUNCTION With CONSULT Check trunk opener request switch REQ SW -BD/TR in Data Monitor mode. D Monitor item Condition Trunk opener request switch is pressed : ON Ε **REQ SW -BD/TR** Trunk opener request switch is released : OFF Is the inspection result normal? YES >> Trunk opener request switch is OK. F >> Refer to DLK-329, "Diagnosis Procedure". NO **Diagnosis** Procedure INFOID:000000007421266 Regarding Wiring Diagram information, refer to DLK-403. "Wiring Diagram". Н 1. CHECK TRUNK OPENER REQUEST SWITCH OUTPUT SIGNAL 1. Turn ignition switch OFF. Check voltage between BCM connector and ground. 2. DLK ALKIA0397Z Μ Terminals Trunk lid opener request Voltage (V) (+)switch condition (Approx.) (-) Ν Terminal BCM connector Pressed 0 M21 141 Ground Released Ρ 10 ms JPMIA0016GB Is the inspection result normal? YES >> GO TO 6 NO >> GO TO 2

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK TRUNK OPENER REQUEST SWITCH CIRCUIT

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



BCM connector	Terminal	Trunk opener request switch connector	Terminal	Continuity
A: M21	141	B: B33	1	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M21	141	Ground	No

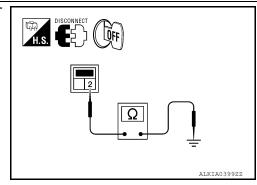
Is the inspection result normal?

YES >> GO TO 3

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

 $3. {\sf check trunk opener request switch ground circuit}$

Check continuity between trunk opener request switch connector and ground.



Trunk opener request switch connector	Terminal	Ground	Continuity
B33	2	Gibuna	Yes

Is the inspection result normal?

YES >> GO TO 4

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

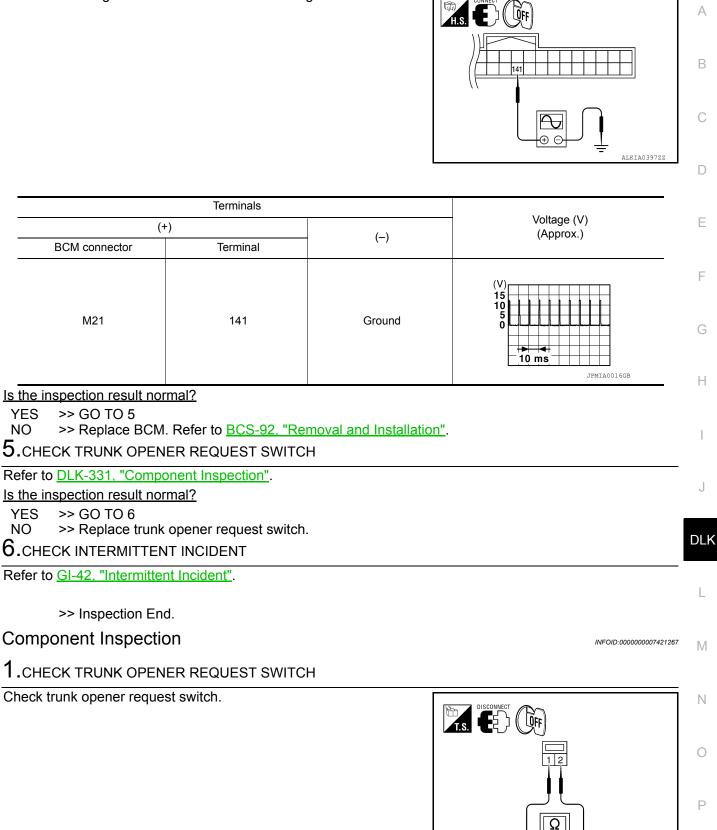
4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

TRUNK OPENER REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

2. Check voltage between BCM connector and ground.



Н

J

L

Μ

Ν

Ρ

NO

NO

ALKIA0400ZZ

[SEDAN]

А

В

D

Е

F

TRUNK OPENER REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

	Terminal Trunk opener request switch		Trunk opener request switch condition	Continuity	
			Hunk opener request switch condition		
	1	2	Pressed	Yes	
	I	2	Released	No	

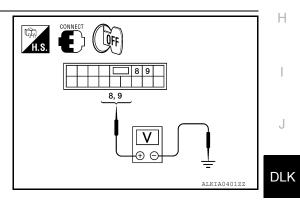
Is the inspection result normal?

YES >> Inspection End.

NO >> Replace trunk opener request switch.

< DTC/CIRCUIT DIAGNOSIS >	[SEDAN]	
DOOR LOCK ACTUATOR DRIVER SIDE		А
DRIVER SIDE : Description	INFOID:000000007421268	D
Locks/unlocks the door with the signal from BCM.		В
DRIVER SIDE : Component Function Check	INFOID:000000007421269	С
1.CHECK FUNCTION		
 Use CONSULT to perform Active Test ("DOOR LOCK"). Touch "ALL LOCK" or "ALL UNLOCK" to check that it works normally. 		D
Is the inspection result normal? YES >> Door lock actuator is OK. NO >> Refer to <u>DLK-333, "DRIVER SIDE : Diagnosis Procedure"</u> .		Е
DRIVER SIDE : Diagnosis Procedure	INFOID:000000007421270	F
Regarding Wiring Diagram information, refer to <u>DLK-392, "Wiring Diagram"</u> .		G
1.CHECK OUTPUT SIGNAL		0

Check voltage between BCM connector and ground.



Terminals					
(+)		()	Condition of door lock and unlock switch		Voltage (V) (Approx.)
BCM connector	Terminal	(-)	(, , , , , , , , , , , , , , , , , , ,		
M17	8	Ground	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$	
	9	Ground	Unlock	$0 \rightarrow Battery voltage \rightarrow 0$	

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

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

1.

Turn ignition switch OFF. Disconnect BCM and front door lock actuator driver side connector. 2.

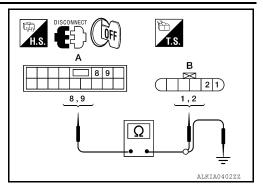
Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

3. Check continuity between BCM connector and front door lock actuator driver side connector.



BCM connector	Terminal	Door lock actuator con- nector	Terminal	Continuity
A: M17	8	B: D10	1	Yes
α , with	9	5.010	2	163

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M17	8 Ground		No
	9	Ground	NO

Is the inspection result normal?

YES >> Replace front door lock actuator LH.

NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End. PASSENGER SIDE

PASSENGER SIDE : Description

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

1.CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to <u>DLK-334</u>, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-392, "Wiring Diagram"</u>.

1.CHECK DOOR LOCK ACTUATOR SIGNAL

INFOID:000000007421271

INFOID:000000007421272

INFOID:000000007421273

< DTC/CIRCUIT DIAGNOSIS >

(+)

BCM connector

M17

actuator RH.

BCM connector

A: M17

BCM connector

A: M17

>> GO TO 3

>> GO TO 2

YES

NO

1.

2.

3.

YES

NO

Check voltage between BCM connector and ground.

喻 H.S А QFF В 5, 8 ALKIA0403Z: D Terminals Condition of door lock and Voltage (V) Е unlock switch (Approx.) (-) Terminal 8 Lock $0 \rightarrow Battery \ voltage \rightarrow 0$ F Ground 5 Unlock $0 \rightarrow Battery \ voltage \rightarrow 0$ Is the inspection result normal? 2. CHECK DOOR LOCK ACTUATOR CIRCUIT Н Disconnect BCM and front door lock actuator RH connectors. Check continuity between BCM connector and front door lock ŨFF B \bowtie 6 5 5,8 5,6 Ω DLK L Front door lock actuator Terminal Terminal Continuity RH connector Μ 8 5 B: D108 Yes 5 6 Check continuity between BCM connector and ground. Ν Terminal Continuity 8 Ο Ground No 5 Is the inspection result normal? Ρ >> Replace front door lock actuator RH. >> Repair or replace harness. **3.**CHECK INTERMITTENT INCIDENT Refer to GI-42, "Intermittent Incident".

>> Inspection End.

DLK-335

< DTC/CIRCUIT DIAGNOSIS >

REAR LH

REAR LH : Description

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

1.CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> Door lock actuator is OK.

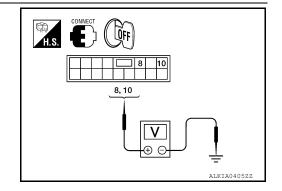
NO >> Refer to <u>DLK-336, "REAR LH : Diagnosis Procedure"</u>.

REAR LH : Diagnosis Procedure

Regarding Wiring Diagram information, refer to DLK-392, "Wiring Diagram".

1. CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.



	Terminals			
(+	(+)		Condition of door lock and unlock switch	Voltage (V) (Approx.)
BCM connector	Terminal	()		(
M17	8	Ground	Lock	$0 \rightarrow Battery voltage \rightarrow 0$
	10	Ground	Unlock	$0 \rightarrow Battery voltage \rightarrow 0$

Is the inspection result normal?

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

2.check door lock actuator circuit

1. Disconnect BCM and rear door lock actuator LH connectors.

INFOID:000000007421274

INFOID:000000007421275

INFOID:000000007421276

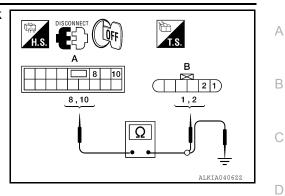
< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

Е

F

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



BCM connector	Terminal	Door lock actuator con- nector	Terminal	Continuity
A: M17	8	B: D205	1	Yes
A. WH	10	D. D203	2	163

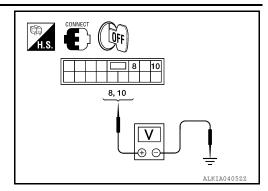
3. Check continuity between BCM connector and ground.

BCM connector	Term	ninal	Continuity
A: M17	8	Ground	No
Is the inspection result no	rmal?		
YES >> Replace rear NO >> Repair or repl	door lock actuator LH. ace harness.		
3. CHECK INTERMITTEN	NT INCIDENT		
Refer to GI-42, "Intermitte	nt Incident".		
>> Inspection En	d.		
REAR RH			
REAR RH : Descript	ion		INFOID:00000007421277
Locks/unlocks the door wi	th the signal from BCM.		
REAR RH : Compon	ent Function Check		INFOID:00000007421276
1. CHECK FUNCTION			
	form Active Test ("DOOR LOO "ALL UNLOCK" to check that		
Is the inspection result no		LIL WOLKS HOITIAILY.	
YES >> Door lock actu NO >> Refer to <u>DLK-</u>	uator is OK. -337. "REAR RH : Diagnosis F	Procedure".	
REAR RH : Diagnos	is Procedure		INFOID:00000007421279
Regarding Wiring Diagram	n information, refer to <u>DLK-39</u>	2. "Wiring Diagram".	
1			

1. CHECK DOOR LOCK ACTUATOR SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

Check voltage between BCM connector and ground.



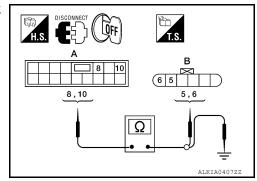
Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)				
BCM connector	Terminal	(-)		
M17	8	Ground	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$
1117	10	Ground	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

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



BCM connector	Terminal	Door lock actuator con- nector	Terminal	Continuity
A: M17	8	B: D305	5	Yes
Λ. ΜΠ	10	D. 0000	6	163

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M17	8 Ground		No
7A. WH 7	10	Ciouna	110

Is the inspection result normal?

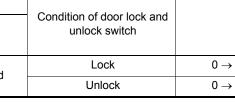
YES >> Replace rear door lock actuator RH.

NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.



ENED ACTUAT

	TRUN		NER ACTUATOR	
< DTC/CIRCUIT DIAG	NOSIS >			[SEDAN]
TRUNK LID OPE	ENER ACT	UATOR		
Description				INFOID:00000007421280
Performs trunk lid open	with signal fron	n BCM.		
Component Funct	-			INFOID:000000007421281
1.CHECK TRUNK LID		CEL SWITCH		
Check trunk lid opener cance Is trunk lid opener cance Yes >> Turn on true No >> GO TO 2. 2. CHECK FUNCTION 1. Perform Active Tess 2. Touch "OPEN" and Is the inspection result of YES >> Trunk lid op NO >> Refer to DL	cancel switch po el switch turned nk lid opener ca t TRUNK/GLAS check that trun <u>normal?</u> pener actuator is <u>K-339. "Diagno</u>	osition. OFF (CANCEL Incel switch. S HATCH with (k lid opens. s OK.		
Diagnosis Procedu	ire			INFOID:00000007421282
0				
Regarding Wiring Diagr 1. CHECK OUTPUT Cl 1. Turn ignition switch	am information, RCUIT OFF.			
Regarding Wiring Diagr	am information, RCUIT OFF. mp switch and t ween trunk lan	trunk release so	lenoid connector.	
Regarding Wiring Diagr 1. CHECK OUTPUT Cl 1. Turn ignition switch 2. Disconnect trunk la 3. Check voltage bet	am information, IRCUIT OFF. mp switch and f ween trunk lan and ground.	trunk release so	lenoid connector.	
Regarding Wiring Diagr 1. CHECK OUTPUT Cl 1. Turn ignition switch 2. Disconnect trunk la 3. Check voltage bet	am information, RCUIT OFF. mp switch and t ween trunk lan	trunk release so	lenoid connector. trunk release	
Regarding Wiring Diagr 1 .CHECK OUTPUT Cl 1. Turn ignition switch 2. Disconnect trunk la 3. Check voltage bet solenoid connector	am information, IRCUIT OFF. mp switch and f ween trunk lan and ground.	trunk release so	lenoid connector.	

Is the inspection result normal?

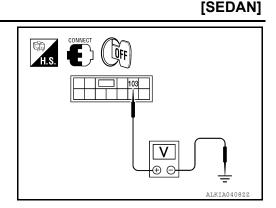
YES >> GO TO 4 NO >> GO TO 2

2. CHECK OUTPUT SIGNAL

TRUNK LID OPENER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

Check voltage between BCM connector and ground.



	Terminals			
(+)	(+)		Condition of trunk lid open- er switch	Voltage (V) (Approx.)
BCM connector	Terminal	()		
M20	103	Ground	$OFF\toON$	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

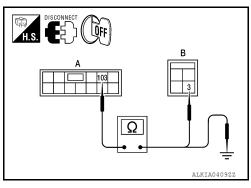
YES >> Repair or replace harness.

NO >> GO TO 3

$\mathbf{3}$.check trunk lid opener actuator circuit

1. Disconnect BCM.

2. Check continuity between BCM connector and trunk lamp switch and trunk release solenoid connector.



BCM connector	Terminal	trunk lamp switch and trunk re- lease solenoid connector	Terminal	Continuity
A: M20	103	B: T4	3	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terr	Continuity	
A: M20	103	Ground	No

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-92. "Removal and Installation"</u>.

NO >> Repair or replace harness.

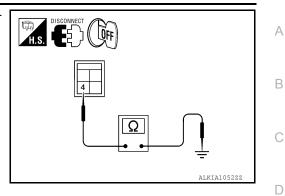
4.CHECK TRUNK LID OPENER GROUND CIRCUIT

TRUNK LID OPENER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

Check continuity between trunk lamp switch and trunk release solenoid connector and ground.



trunk lamp switch and trunk release solenoid connector	Terminal		Continuity
T4	4	Ground	Yes

Is the inspection result normal?

- YES >> Replace trunk lamp switch and trunk release solenoid.
- NO >> Repair or replace harness.

J

DLK

L

Μ

Ν

Ο

Ρ

Е

F

G

Н

Revision: February 2013

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY WARNING BUZZER

Description

Answers back and warns for an inappropriate operation.

Component Function Check

1.CHECK FUNCTION

With CONSULT

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

Is the inspection result normal?

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

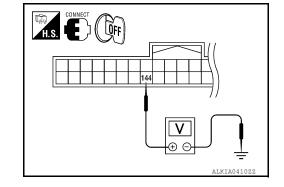
NO >> Refer to <u>DLK-342, "Diagnosis Procedure"</u>.

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-403. "Wiring Diagram"</u>.

1.CHECK INTELLIGENT KEY WARNING BUZZER

Check voltage between BCM connector and ground.



	Terminals			
(*	+)	()	Warning buzzer opera- tion condition	Voltage (V) (Approx.)
BCM connector	Terminal	()		(FF -)
M21	144	Ground	ON	0
IVIZ I	144	Ground	OFF	Battery voltage

Is the inspection result normal?

NO >> GO TO 2.

2. CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect Intelligent Key warning buzzer connector.

INFOID:000000007421283

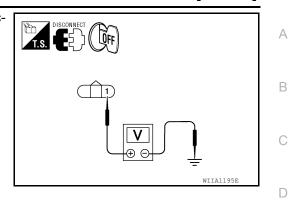
INFOID:000000007421284

INFOID:000000007421285

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

3. Check voltage between Intelligent Key warning buzzer connector and ground.



[SEDAN]

Е

F

Н

L

Μ

Ο

Ρ

(+)		Voltage (V) (Approx.)
Intelligent Key warning buzzer connector	Terminal	(-)	(Approx.)
E73	1	Ground	Battery voltage

Is the inspection result normal?

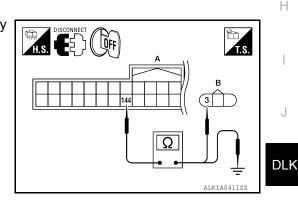
YES >> GO TO 3.

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

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

Disconnect BCM connector. 1.

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



BCM connector	Terminal	Intelligent Key warning buzzer connector	Terminal	Continuity
A: M21	144	B: E73	3	Yes

3. Check continuity between BCM connector and ground.

-	BCM connector	Terminal	Ground	Continuity	Ν
-	A: M21	144	Giouna	No	
10	be inepection regult permal?)			

Is the inspection result normal?

OK >> GO TO 4.

>> Repair or replace harness between BCM and Intelligent Key warning buzzer. NG

4.CHECK INTELLIGENT KEY WARNING BUZZER

Check DLK-344, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace Intelligent Key warning buzzer.

5. CHECK INTERMITTENT INCIDENT

Check GI-42, "Intermittent Incident".

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

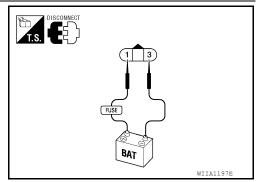
INFOID:000000007421286

>> Inspection End.

Component Inspection

1. CHECK INTELLIGENT KEY WARNING BUZZER

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



1 (BAT+) - 3 (BAT-)

B (BAT-) : the buzzer sounds

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Replace Intelligent Key warning buzzer.

< DTC/CIRCUIT DIAGNOSIS >	[SEDAN]	
OUTSIDE KEY ANTENNA		
Description	INFOID:000000007421287	
Detects whether Intelligent Key is outside the vehicle. Integrated in front outside handle (driver side, passenger side) and installed in rear bumpe	r.	
Component Function Check	INFOID:000000007421288	
1. CHECK DOOR REQUEST SWITCH		
Check that door request switch operates normally. Is the inspection result normal? YES >> GO TO 2. NO >> Inspect door request switch. Refer to DLK-325, "Component Function Check"		
Check that door request switch operates normally. Is the inspection result normal? YES >> GO TO 2. NO >> Inspect door request switch. Refer to DLK-325, "Component Function Check 2.CHECK FUNCTION	<u>.</u> .	
Check that door request switch operates normally. Is the inspection result normal? YES >> GO TO 2.	<u>"</u> .	
Check that door request switch operates normally. Is the inspection result normal? YES >> GO TO 2. NO >> Inspect door request switch. Refer to DLK-325, "Component Function Check 2.CHECK FUNCTION Be sure that Intelligent Key is in each outside key antenna detection range.	<u>.</u> .	

1. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

J 1. Turn ignition switch OFF. 2. Check signal between BCM connector and ground with oscillo-GL, ŨFF DLK 65 63 63 , 65, 119 L \oplus C Μ ALKIA0412ZZ Ν Ο Ρ

scope.

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

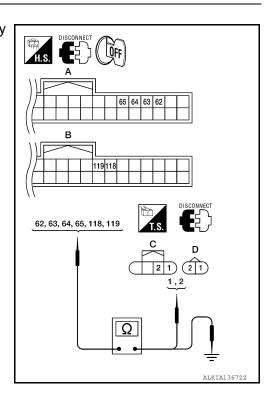
	Term	ninals						
	(+)		()	Condition		Condition Signal		Signal (Reference value.)
BCM	connector	Terminal	(—)			(Reference value.)		
	Driver side	65						
A: M19	Passenger side	63	Ground	Request switch	When Intelligent Key is in the antenna de- tection area.	(V) 15 10 5 0 1 s JMKIA0061GB		
B: M21	Rear bumper	119	Giouna	is pushed	When Intelligent Key is not in the antenna detection area.	(V) 15 0 5 0 1 s JMKIA0060GB		

Is the inspection result normal?

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

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

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



< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

BCM connector	Terminal	Outside key antenna	connector	Terminal	Continuity
	65	C: D6 (driver s	ide)	1	
A: M19	64	64 C. Do (driver side)		2	
A. 1019	63	63 C: D106 (passenger side) 62		1	Yes
-	62			2	fes
B: M21	119			1	
D. IVIZ I	118		nper)	2	
Check continuity b	etween BCM con	nector and ground.			
BCM connecto	or	Terminal			Continuity
		62	-		
		63	-		
A: M19		64	G	Ground	
		65	1		No
D 1/0/		118	1		
B: M21	B: M21		119		
Connect BCM and	l outside key ante	antenna or other and nna connector. ctor and ground with			63 , 65, 119

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

	Termi	inals				Qizzal		
	(+)		()	Condition				(Reference value.)
BCM	connector	Terminal	(-)					
	Driver side	65						
A: M19	Passenger side	63	Ground	Door request switch is	When Intelligent Key is in the antenna de- tection area.	(V) 15 0 10 0 15 0 15 15 15 15 15 15 15 15 15 15 15 15 15		
B: M21	Rear bumper	119	Ground	pushed	When Intelligent Key is not in the antenna detection area.	(V) 15 0 5 0 1 s JMKIA0060gB		

Is the inspection result normal?

YES >> Replace outside key antenna.

NO >> GO TO 4.

 ${\bf 4.} {\bf CHECK} \text{ INTERMITTENT INCIDENT}$

Refer to GI-42, "Intermittent Incident".

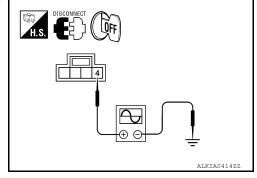
>> Inspection End.

< DTC/CIRCUIT DIAGNOSIS >			[SEDAN]
REMOTE KEYLESS ENTRY	RECEIVER		٨
Description		INFC	A ID:000000007421290
Receives Intelligent Key operation and tra	insmits to BCM.		В
Component Function Check		INFC	ID:000000007421291
1.CHECK FUNCTION			С
With CONSULT Check remote keyless entry receiver RKE	OPE COUN1 in Data Monito	r mode with CONSULT.	D
Monitor item		Condition	
RKE OPE COUN1	Checks whether value changes wh	en operating Intelligent Key.	E
Is the inspection result normal?			L
YES >> Remote keyless entry receive NO >> Refer to <u>DLK-349</u> , "Diagnosis			
	<u>rroccuare</u> .		F
Diagnosis Procedure		INFC	ID:000000007421292
Regarding Wiring Diagram information, re 1. CHECK REMOTE KEYLESS ENTRY F			G
1. Turn ignition switch OFF.		-	
 Check signal between remote keyles and ground with oscilloscope. 	s entry receiver connector		J
			DL
	L		PIIB6457E
			M
			Ν
			0

Ρ

< DTC/CIRCUIT DIAGNOSIS >

Terminals (+) Signal Condition (Reference value) Remote keyless (-) Terminal entry receiver connector Waiting (All doors closed) 1 ms JMKIA0064GB M27 2 Ground (V)15 10 When signal is received (All doors closed) 1 ms JMKIA0065GB Is the inspection result normal? >> GO TO 7. >> GO TO 2. **2.**CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY Disconnect remote keyless entry receiver connector. Check signal between remote keyless entry receiver connector and ground with oscilloscope. H.S. ₣ᡗ OFF



	Terminals		
(+)			Signal
Remote keyless entry re- ceiver connector	Terminal	(-)	(Reference value)
M27	4	Ground	(V) 15 0 0 1 ms JmkIA0064GB
the inspection result norr	nal?		

Is

YES >> GO TO 4. NO >> GO TO 3.

YES

NO

1.

2.

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

А

В

D

Е

F

Н

DLK

L

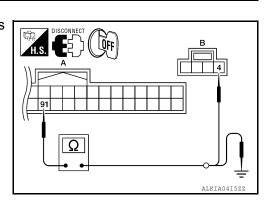
Μ

0

Ρ

3. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

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



BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
A: M19	91	B: M27	4	Yes

3. Check continuity between BCM connector and ground.

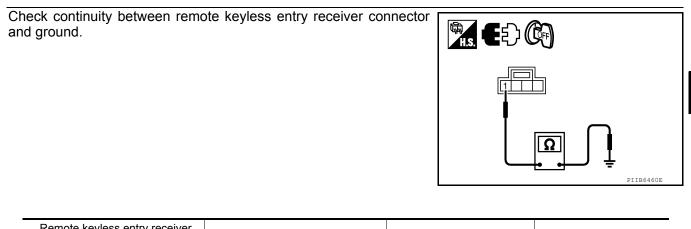
BCM connector	Terminal	Ground	Continuity
A: M19	91	Ground	No

Is the inspection result normal?

YES >> Reconnect BCM, GO TO 4.

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

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT



	Remote keyless entry receiver connector	Terminal	Ground	Continuity	
_	M27	1		Yes	IN
	he increation result normal?				

Is the inspection result normal?

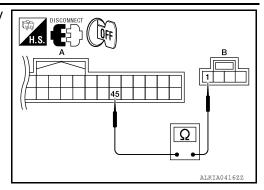
YES >> GO TO 6.

NO >> GO TO 5.

5. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

< DTC/CIRCUIT DIAGNOSIS >

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



[SEDAN]

BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
A: M18	45	B: M27	1	Yes

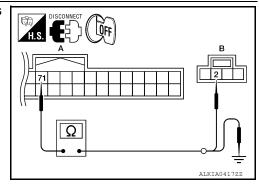
Is the inspection result normal?

YES >> GO TO 7.

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

6.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 3

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



BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
A: M19	71	B: M27	2	Yes

2. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity	
A: M19	71	Gibuna	No	

Is the inspection result normal?

YES >> GO TO 7.

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

7. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

INTELLIGENT KEY

INTELLIGENT KEY Description The following functions are available when having and carrying electronic ID. Door lock/unlock Trunk open Remote control entry function and panic alarm function are available when operating the remote buttons. **Component Function Check 1.**CHECK FUNCTION With CONSULT Check remote keyless entry receiver RKE OPE COUN1 in Data Monitor mode with CONSULT.

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

YES >> Intelligent Key is OK. >> Refer to DLK-353, "Diagnosis Procedure". NO

Diagnosis Procedure

< DTC/CIRCUIT DIAGNOSIS >

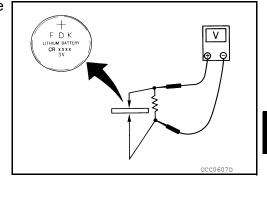
1.CHECK INTELLIGENT KEY BATTERY

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

: Approx. 2.5 - 3.0V Standard

Is the measurement value within specification?

- YES >> GO TO 2.
- NO >> Replace Intelligent Key battery.

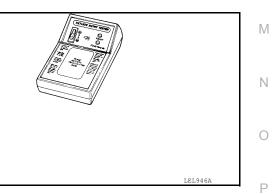


2.CHECK KEYFOB FUNCTION

Check keyfob function using Remote Keyless Entry Tester J-43241. Does the test pass?

YES >> Keyfob is OK.

>> Replace keyfob. Refer to CONSULT Immobilizer mode NO and follow the on-screen instructions.



Component Inspection

INFOID:000000007421296

1. REPLACE INTELLIGENT KEY BATTERY

Release the lock knob at the back of the Intelligent Key and remove the mechanical key. 1.

[SEDAN]

INFOID:000000007421293

INFOID:000000007421294

INFOID:000000007421295

А

В

D

Ε

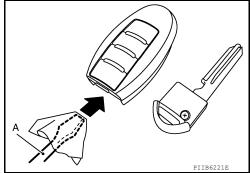
Н

DLK

INTELLIGENT KEY

< DTC/CIRCUIT DIAGNOSIS >

- Insert a flat-blade screwdriver (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.
 CAUTION:
 - Do not touch the circuit board or battery terminal.
 - The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.



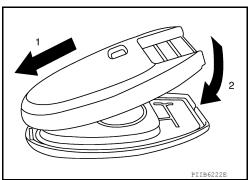
- 3. Replace the battery with new one.
- Align the tips of the upper and lower parts, and then push them together until it is securely closed.
 CAUTION:
 - When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
 - After replacing the battery, check that all Intelligent Key functions work normally.

Is the inspection result normal?

- YES >> Intelligent Key is OK.
- NO >> Check remote keyless entry receiver. Refer to <u>DLK-349</u>. <u>"Component Function Check"</u>.

Special Repair Requirement

Refer to CONSULT Immobilizer mode and follow the on-screen instructions.



INFOID:000000007421297

[SEDAN]

KEY SLOT ILLUMINATION

KEY SLOT ILLUWINATION	
< DTC/CIRCUIT DIAGNOSIS > [SEDAI	N]
KEY SLOT ILLUMINATION	
Description	21298
Blinks when Intelligent Key insertion is required.	
Component Function Check	21299
1.CHECK FUNCTION	
With CONSULT Check key slot illumination KEY SLOT ILLUMI in Active Test mode.	
Is the inspection result normal? YES >> Key slot function is OK. NO >> Refer to <u>DLK-355. "Diagnosis Procedure"</u> .	
Diagnosis Procedure	:1300
Regarding Wiring Diagram information, refer to <u>DLK-403, "Wiring Diagram"</u> .	
1. CHECK KEY SLOT ILLUMINATION OUTPUT SIGNAL	
Check voltage between key slot connector and ground.	7

	Terminals					
(+)			Condition	Key slot	Voltage (V)	
Key slot connector	Terminal	()	2 cm and m	illumination	(Approx.)	
M40	6	Ground	Intelligent Key inserted	OFF	Battery voltage	-
M40	0	Ground	Intelligent Key removed	ON	0	-

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2. CHECK KEY SLOT POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect key slot connector.

F

DLK

Ο

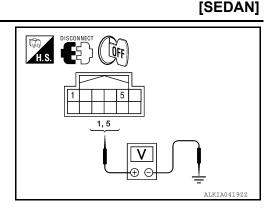
Ρ

ALKIA0418ZZ

KEY SLOT ILLUMINATION

< DTC/CIRCUIT DIAGNOSIS >

3. Check voltage between slot connector and ground.



	Terminals			
(+)		()	Voltage (V) (Approx.)	
Key slot connector	Terminal	()	(********)	
M40	1	Ground	Patton voltago	
10140	5	Giouria	Battery voltage	

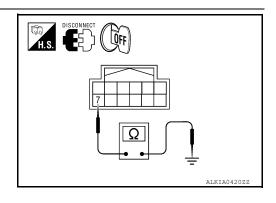
Is the inspection result normal?

YES >> GO TO 3.

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

$\mathbf{3}$. CHECK KEY SLOT GROUND CIRCUIT

Check continuity between key slot connector and ground.



Keys	slot connector	Terminal	Ground	Continuity
	M40	7	Ground	Yes

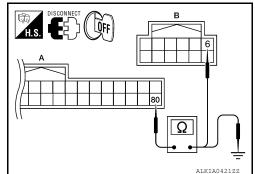
Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace key slot ground circuit.

4.CHECK KEY SLOT CIRCUIT

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



KEY SLOT ILLUMINATION

< DTC/CIRCUIT DIAGNOSIS >

[SEDAN]

BCM connector	Terminal	Key slot connector	Terminal	Continuity
A: M19	80	B: M40	6	Yes
. Check continuity be	tween BCM connecto	or and ground.		
BCM connector	Term	inal	Orecured	Continuity
A: M19	80	0	Ground	No
YES >> GO TO 5. NO >> Repair or re D.CHECK KEY SLOT Refer to <u>DLK-305, "Com</u> s the inspection result r		en BCM and key	slot.	
YES >> GO TO 6. NO >> Replace key CHECK INTERMITT	y slot.			
Refer to <u>GI-42, "Intermit</u>	tent Incident".			
>> Inspection E	End.			

J

L

Μ

Ν

0

Ρ

HORN FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

HORN FUNCTION

Description

Perform answer-back for each operation with horn.

Component Function Check

1. CHECK FUNCTION

1. Select HORN in "ACTIVE TEST" mode with CONSULT.

2. Check the horn (high/low) operation.

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

Is the operation normal?

YES >> Inspection End. NO >> Go to <u>DLK-358</u>, "Diagnosis Procedure".

Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>DLK-403, "Wiring Diagram"</u>.

1.CHECK HORN FUNCTION

Check horn function with horn switch

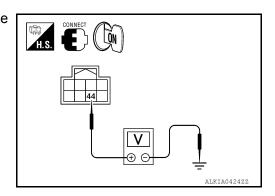
Do the horns sound?

YES >> GO TO 2.

NO >> Go to <u>HRN-4</u>, "Wiring Diagram".

2.CHECK HORN RELAY POWER SUPPLY

- 1. Turn ignition switch ON.
- 2. Perform "ACTIVE TEST" ("HORN") with CONSULT.
- 3. Using an oscilloscope or analog voltmeter, check voltage between horn relay harness connector and ground.



Horr	Horn relay Ground		Test item		Voltage (V)	
Connector	Terminal	Ground	iest item		(Approx.)	
H-1	1	Ground	HORN	ON	Battery voltage $\rightarrow 0 \rightarrow$ Battery voltage	
11-1		Ground		Other than above	Battery voltage	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK HORN RELAY CIRCUIT

1. Turn ignition switch OFF.

INFOID:000000007421301

INFOID:000000007421302

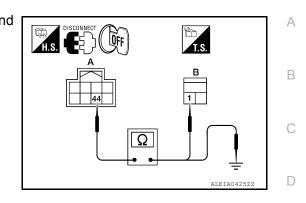
INFOID:000000007421303

HORN FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

2. Disconnect IPDM E/R and horn relay connector.

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



[SEDAN]

IPDM E/R		Horn relay		Continuity
Connector	Terminal	Connector	Terminal	Continuity
A: E17	44	B: H-1	1	Yes

4. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Cround	Continuity	
Connector	Terminal	Ground	Continuity	G
A: E17	44	Ground	No	_
s the inspection result normal?				
YES >> GO TO 4.				
NO >> Repair or replace	harness.			

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace IPDM E/R.Refer to PCS-45. "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

DLK

L

Μ

Ν

Ο

Ρ

J

Ε

F

COMBINATION METER DISPLAY FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION METER DISPLAY FUNCTION

Description

Displays each operation method guide and warning for system malfunction.

Component Function Check

1.CHECK FUNCTION

With CONSULT

Check the operation with ("LCD") in the Active Test.

Is each warning displayed on meter display?

Is the inspection result normal?

YES >> Meter display is OK.

NO >> Refer to <u>DLK-360</u>, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK COMBINATION METER

Refer to MWI-4, "Work Flow".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check combination meter. Refer to <u>MWI-28, "Diagnosis Description"</u>.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

[SEDAN]

INFOID:000000007421304

INFOID:000000007421305

INFOID:000000007421306

WARNING CHIME FUNCTION

WARNING CHIME FUNCTION		
< DTC/CIRCUIT DIAGNOSIS >	[SEDAN]	
WARNING CHIME FUNCTION		Λ
Description	INFOID:000000007421307	A
Performs operation method guide and warning with buzzer.		В
Component Function Check	INFOID:000000007421308	
1.CHECK FUNCTION		С
 With CONSULT Check the operation with "INSIDE BUZZER" in the Active Test. Touch "TAKE OUT", "KNOB" or "KEY" on screen. 		D
<u>Is the inspection result normal?</u> YES >> Warning buzzer into combination meter is OK. NO >> Refer to <u>DLK-361, "Diagnosis Procedure"</u> .		E
Diagnosis Procedure	INFOID:000000007421309	
1. CHECK METER BUZZER CIRCUIT		F
Refer to WCS-18, "Component Function Check". Is the inspection result normal? YES >> GO TO 2.		G
NO >> Replace combination meter. Refer to <u>MWI-140, "Disassembly and Assembly"</u> .		
2.CHECK INTERMITTENT INCIDENT		Η
Refer to GI-42, "Intermittent Incident".		
>> Inspection End.		
		J
	_	
		DLK
	_	
		L
		M
		Ν
		0
		0
		Ρ

HAZARD FUNCTION

< DTC/CIRCUIT DIAGNOSIS > 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-362, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1. CHECK HAZARD SWITCH CIRCUIT

Operate the hazard lights by turning ON the hazard warning switch.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace hazard warning switch circuit.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

INFOID:000000007421310

INFOID:000000007421311

INFOID:000000007421312

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status	
	Other than front wiper switch HI	OFF	
FR WIPER HI	Front wiper switch HI	ON	D
FR WIPER LOW	Other than front wiper switch LO	OFF	
FR WIPER LOW	Front wiper switch LO	ON	_
FR WASHER SW	Front washer switch OFF	OFF	_ C
FR WASHER SW	Front washer switch ON	ON	_
FR WIPER INT	Other than front wiper switch INT	OFF	F
	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	G
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 6	Wiper intermittent dial position	_
	Other than turn signal switch RH	OFF	Н
TURN SIGNAL R	Turn signal switch RH	ON	
TURN SIGNAL L	Other than turn signal switch LH	OFF	
TURN SIGNAL L	Turn signal switch LH	ON	
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	OFF	
	Lighting switch 1ST or 2ND	ON	
	Other than lighting switch HI	OFF	
HI BEAM SW	Lighting switch HI	ON	
HEAD LAMP SW 1	Other than lighting switch 2ND	OFF	DL
TEAD LAIVIP SVV I	Lighting switch 2ND	ON	
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF	1
HEAD LAIVIP SVV 2	Lighting switch 2ND	ON	
PASSING SW	Other than lighting switch PASS	OFF	
PASSING SW	Lighting switch PASS	ON	M
	Other than lighting switch AUTO	OFF	
AUTO LIGHT SW	Lighting switch AUTO	ON	
FR FOG SW	Front fog lamp switch OFF	OFF	— N
FR FUG SW	Front fog lamp switch ON	ON	
	Driver door closed	OFF	0
DOOR SW-DR	Driver door opened	ON	
DOOR SW-AS	Passenger door closed	OFF	_
DOOK 311-43	Passenger door opened	ON	P
	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	

INFOID:000000007630672

А

< ECU DIAGNOSIS INFORMATION >

[SEDAN]

Monitor Item	Condition	Value/Status
	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
	When hazard switch is not pressed	OFF
HAZARD SW	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
FAN ON SIG	When AUTO switch or fan switch is pressed	ON
AIR COND SW	When A/C switch is pressed	ON
TO ONNOEL OW	Trunk lid opener cancel switch OFF	OFF
TR CANCEL SW	Trunk lid opener cancel switch ON	ON
	Trunk lid opener switch OFF	OFF
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	ON
	Trunk lid closed	OFF
TRNK/HAT MNTR	Trunk lid opened	ON
	When LOCK button of Intelligent Key is not pressed	OFF
RKE-LOCK	When LOCK button of Intelligent Key is pressed	ON
	When UNLOCK button of Intelligent Key is not pressed	OFF
RKE-UNLOCK	When UNLOCK button of Intelligent Key is pressed	ON
	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is pressed	ON
	When PANIC button of Intelligent Key is not pressed	OFF
RKE-PANIC	When PANIC button of Intelligent Key is pressed	ON
	When UNLOCK button of Intelligent Key is not pressed and held	OFF
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
KKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V
OFTICAL SENSOR	When outside of the vehicle is dark	Close to 0 V
REQ SW-DR	When driver door request switch is not pressed	OFF
REQ 3W-DR	When driver door request switch is pressed	ON
REQ SW-AS	When passenger door request switch is not pressed	OFF
	When passenger door request switch is pressed	ON
REQ SW-BD/TR	When trunk request switch is not pressed	OFF
	When trunk request switch is pressed	ON
PUSH SW	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON
IGN RLY -F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON

Revision: February 2013

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
ACC RLY -F/B	Ignition switch OFF	OFF
ACC RLY -F/B	Ignition switch ACC or ON	ON
	When the clutch pedal is not depressed	OFF
CLUTCH SW	When the clutch pedal is depressed	ON
CLUTCH SW BRAKE SW 1	When the brake pedal is not depressed	ON
BRAKE SVV 1	When the brake pedal is depressed	OFF
	When selector lever is in P position	OFF
DETE/CANCL SW	When selector lever is in any position other than P	ON
	When selector lever is in any position other than P or N	OFF
SFT PN/N SW	When selector lever is in P or N position	ON
	Electronic steering column lock LOCK status	OFF
S/L -LOCK	Electronic steering column lock UNLOCK status	ON
	Electronic steering column lock UNLOCK status	OFF
S/L -UNLOCK	Electronic steering column lock LOCK status	ON
	Ignition switch OFF or ACC	OFF
S/L RELAY-F/B	Ignition switch ON	ON
	Driver door UNLOCK status	OFF
UNLK SEN-DR	Driver door LOCK status	ON
	When engine switch (push switch) is not pressed	OFF
PUSH SW -IPDM	When engine switch (push switch) is pressed	ON
	Ignition switch OFF or ACC	OFF
GN RLY1 F/B	Ignition switch ON	ON
	When selector lever is in P position	OFF
DETE SW -IPDM	When selector lever is in any position other than P	ON
	When selector lever is in any position other than P or N	OFF
SFT PN -IPDM	When selector lever is in P or N position	ON
	When selector lever is in any position other than P	OFF
SFT P -MET	When selector lever is in P position	ON
	When selector lever is in any position other than N	OFF
SFT N -MET	When selector lever is in N position	ON
	Engine stopped	STOP
	While the engine stalls	STALL
ENGINE STATE	At engine cranking	CRANK
	Engine running	RUN
	Electronic steering column lock LOCK status	OFF
S/L LOCK-IPDM	Electronic steering column lock UNLOCK status	ON
	Electronic steering column lock UNLOCK status	OFF
S/L UNLCK-IPDM	-	ON
	Electronic steering column lock LOCK status	
S/L RELAY-REQ	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON .
VEH SPEED 1	While driving	Equivalent to speedometer reading

< ECU DIAGNOSIS INFORMATION >

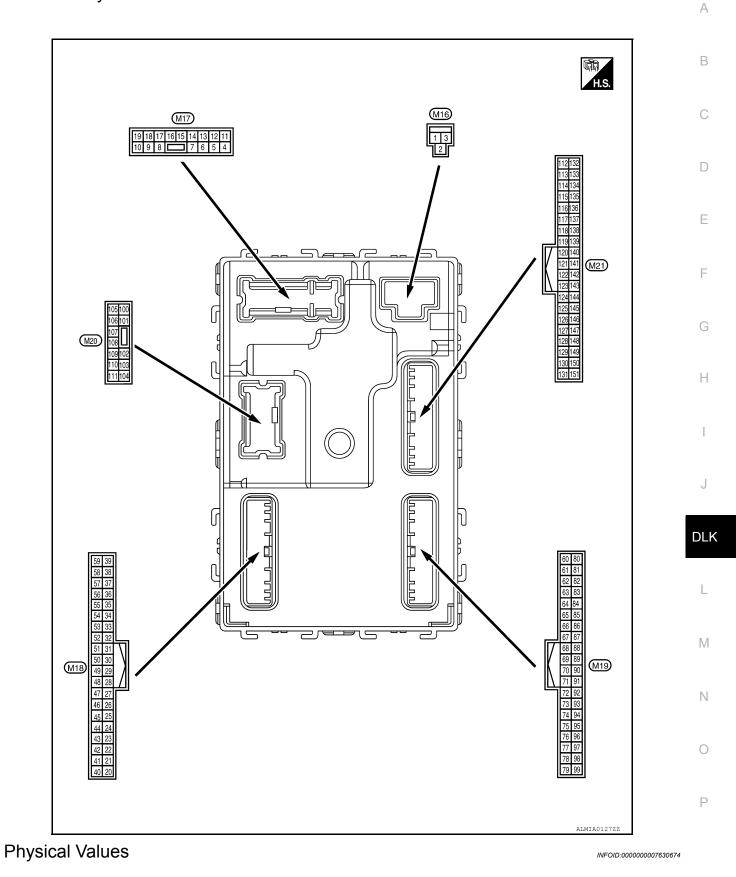
Monitor Item	Condition	Value/Status
	Driver door LOCK status	LOCK
DR DOOR STATE	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
	Passenger door LOCK status	LOCK
AS DOOR STATE	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
ID OK FLAG	Ignition switch ACC or ON	RESET
ID OK FLAG	Ignition switch OFF	SET
PRMT ENG STAT	When the engine start is prohibited	RESET
FRMITEING STAT	When the engine start is permitted	SET
KEY SW -SLOT	When Intelligent Key is not inserted into key slot	OFF
KET SW -SLOT	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
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
	When ID of front LH tire transmitter is registered	DONE
ID REGST FL1	When ID of front LH tire transmitter is not registered	YET
	When ID of front RH tire transmitter is registered	DONE
ID REGST FR1	When ID of front RH tire transmitter is not registered	YET
	When ID of rear RH tire transmitter is registered	DONE
ID REGST RR1	When ID of rear RH tire transmitter is not registered	YET
	When ID of rear LH tire transmitter is registered	DONE
ID REGST RL1	When ID of rear LH tire transmitter is not registered	YET
	Tire pressure indicator OFF	OFF
WARNING LAMP	Tire pressure indicator ON	ON

< ECU DIAGNOSIS INFORMATION >

Terminal Layout

[SEDAN]

INFOID:000000007630673



< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
(+)	e color) (-)	Signal name	Input/ Output	Condition		(Approx.)	
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage	
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OF	F	Battery voltage	
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage	
4	Ground	Interior room lamp	Output	After passing the ir er operation time	nterior room lamp battery sav-	0V	
(P/W)	Cround	power supply	Output	Any other time after lamp battery saver	er passing the interior room r operation time	Battery voltage	
5 (G/Y)	Ground	Front door RH UN- LOCK	Output	Front door RH	UNLOCK (actuator is activated)	Battery voltage	
(6/1)		LUCK			Other than UNLOCK (actuator is not activated)	0V	
7	Ground	Step lamp	Output	Step lamp	ON	0V	
(R/W)	Ciouna	Step lamp	Output		OFF	Battery voltage	
8	Ground	All doors LOCK	Output	Output	ut All doors	LOCK (actuator is activat- ed)	Battery voltage
(V)	(V) Ground All doors L				Other than LOCK (actuator is not activated)	٥V	
9	Ground	Front door LH UN- LOCK	Output	Front door LH	UNLOCK (actuator is activated)	Battery voltage	
(G)	Cround				Other than UNLOCK (actu- ator is not activated)	٥V	
10 ¹	Ground	Rear door RH and rear door LH UN-	Output	Rear door RH	UNLOCK (actuator is activated)	Battery voltage	
(G/Y)	croana	LOCK	output	and rear door LH	Other than UNLOCK (actuator is not activated)	٥V	
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage	
13 (B)	Ground	Ground	—	Ignition switch ON		0V	
					OFF	0V	
14 ¹ (O/W)		Engine switch (push switch) illumination ground	ch) illumination Input	Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position	

< ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value	
	e color)	Signal name	Input/		Condition	(Approx.)	
(+)	(-)		Output		055		
14 ⁸ (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	OV NOTE: When the illumination brighten- ing/dimming level is in the neutral position (V) 10 0 10 0 10 0 2 ms JSNIA0010GB	
15					OFF	Battery voltage	
(Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	ACC	0V	
					Turn signal switch OFF	0V	
17 (G/B)	Ground	Turn signal (RH)	Output	lgnition switch ON	Turn signal switch RH	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1	
					Turn signal switch OFF	0V	
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 0 0 1 1 1 1 1 5 0 0 0 0 0 0 0 0 0 0 0 0 0	
19		Room lamp timer		Interior room	OFF	Battery voltage	
(Y)	Ground	control	Output	lamp	ON	0V	
21	Ground	Optical sensor signal	Input	Ignition switch	When outside of the vehi- cle is bright	Close to 5V	
(P/B)	Clound	option concer eignar	mpat	ON	When outside of the vehi- cle is dark	Close to 0V	
22 ²	Ground	Clutch interlock	Input	Clutch interlock	OFF (clutch pedal is not depressed)	0V	
(R/Y)	Cround	switch	mput	switch	ON (clutch pedal is de- pressed)	Battery voltage	
24 (R/W)	Ground	Stop lamp switch 1	Input		_	Battery voltage	
26	26	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not de- pressed)	0V	
(O/L)	Ground		input		ON (brake pedal is de- pressed)	Battery voltage	

< ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value	
	e color)	Signal name	Input/		Condition	(Approx.)	
(+)	(-)	Signar name	Output			· · · · · · · · · · · · · · · · · · ·	
27 (G/W)	Ground	Front door lock as- sembly LH (unlock sensor)	Input	Front door LH	LOCK status	(V) 15 10 10 ms JUMIA0011GB 11.8V	
					UNLOCK status	0V	
29		Karalata jiak	1	When Intelligent K	ey is inserted into key slot	Battery voltage	
(Y)	Ground	Key slot switch	Input	When Intelligent K	ey is not inserted into key slot	0V	
30	<u> </u>				OFF	0	
(V/Y)	Ground	ACC feedback signal	Input	Ignition switch	ACC or ON	Battery voltage	
31	<u> </u>	Rear window defog-		Rear window de-	OFF	0V	
(G)	Ground	ger feedback signal	Input	fogger switch	ON	Battery voltage	
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	
					ON (when front door RH opens)	0V	
33	Ground	Compressor ON sig-	Input	A/C switch	OFF	9V - 12V	
(SB)	Giouna	nal	mput	A/C Switch	ON	0V	
34 ³		Front door lock as-		Front door lock	OFF (neutral)	Battery voltage	
(L/R)	Ground	sembly LH (key cylin- der switch) (unlock)	Input	assembly LH (key cylinder switch)	ON (unlock)	0V	
36 ³	Ground	Lock switch signal	Input	Door lock/unlock	Lock	Battery voltage	
(GR)			•	switch	Unlock	0V	
37 (O)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid opener cancel switch	CANCEL	(V) 15 10 10 10 ms JUMIA0012GB 1.1V	
					ON	0V	
38		Doorwindow dofor		Door window de	OFF	Battery voltage	
(GR/ W)	Ground	Rear window defog- ger ON signal	Input	Rear window de- fogger switch	ON	0V	
39 ³				Door lock/unlock	Unlock	Battery voltage	
(GR/ R)	Ground	Unlock switch signal	Input	switch	Lock	0V	

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value		
	e color)	Signal name	Input/		Condition	Value (Approx.)	А	
(+)	(-)	Signarhame	Output					
40 ⁴ (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		(V) 15 0 10 ms UPMIA0013GB 10.2V	B C D	
				Ignition switch OFI	= or ACC	0V		
41		Engine switch (push		Engine switch	ON	5.5V	Е	
(W)	Ground	switch) illumination	Output	(push switch) illu- mination	OFF	0V		
42				LOCK indicator	ON	0V		
(R)	Ground	LOCK indicator lamp	Output	lamp	OFF	Battery voltage	F	
45 (D)	Ground	Receiver & sensor	Input	Ignition switch ON		0V		
(P)		ground	•	-	OFF	0V	G	
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	ACC or ON	5.0V		
							Н	
47	Ground	. Tire pressure receiv-	d Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 2 0 ••• 0.2s OCC3881D	J
(G/O)	Clound	er signal	Output	ΟN –	When receiving the signal from the transmitter	(V) 4 0 • 0.2s D D D D D D D D D D D D D	DLł L	
48	Cround	Selector lever P/N	Innut	Salaatar lavar	P or N position	12.0V	1 v 1	
(R/G)	Ground	position signal	Input	Selector lever	Except P and N positions	0V		
					ON	0V	Ν	
49 (L/O)	Ground	Security indicator sig- nal	Output	Security indicator	Blinking	(V) 15 0 5 0 1 s JU JENTA0014GB 11.3V	0 P	
						11.5V		

< ECU DIAGNOSIS INFORMATION >

[SEDAN]

Terminal No.		Description				Value	
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)	
50 (LG/ B)	Ground	Combination switch OUTPUT 5	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Lighting switch 1ST Lighting switch high-beam Lighting switch 2ND Turn signal switch RH	OV	
51 (L/W)	Ground	Combination switch OUTPUT 1	Input	Combination switch	All switch OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	0V (V) 15 0 0 2 ms JPMIA0032GB 10.7V	
52 (G/B)	Ground	Combination switch OUTPUT 2	Input	Combination switch	All switch OFF (Wiper intermittent dial 4) Front washer switch ON (Wiper intermittent dial 4) Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 5 • Wiper intermittent dial 6	0V	
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Front wiper switch INT Front wiper switch LO Lighting switch AUTO	OV (V) 15 0 2 ms JPMIA0034GB 10.7V	
54 (G/Y)	Ground	Combination switch OUTPUT 4	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Front fog lamp switch ON Lighting switch 2ND Lighting switch flash-to- pass Turn signal switch LH	0V	
55 (BR/ W)	Ground	Front blower monitor	Input	Front blower mo- tor switch	ON OFF	Battery voltage 0V	

Revision: February 2013

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Mahaa	
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)	A
56 ³		Front door lock as-		Front door lock	OFF (neutral)	Battery voltage	D
(L/B)	Ground	sembly LH (key cylin- der switch) (lock)	Input	assembly LH (key cylinder switch)	ON (lock)	0V	В
57 (W)	Ground	Tire pressure warn- ing check switch	Input		_	Battery voltage	С
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	(V) 15 0 10 10 ms JPMIA0011GB 11.8V	D
					ON (front door LH OPEN)	0V	F
59 (G/R)	Ground	Rear window defog-	Output	Rear window de-	Active	Battery voltage	
(G/R)		ger relay		fogger	Not activated	0V	G
60					When Intelligent Key is in the passenger compart- ment	(V) 15 0 1 s JMKTA0062GB	Η
60 (B/R)	Ground	Front console anten- na 2 (-)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 1 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	J DLK
61	Ground	Center console an-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 5 10 5 10 5 10 5 10 5 10 5 10 5 1	M N
(W/R)	Ground	tenna 2 (+)	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 15 0 15 0 15 15 15 15 15 15 15 15 15 15 15 15 15	Р	

< ECU DIAGNOSIS INFORMATION >

	ninal No. Description) (clus	
(Wire (+)	e color) (-)	Signal name	Input/ Output	Condition		Value (Approx.)
62	Ground	Front outside handle	Output	When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(B/Y)		RH antenna (-)	Culput	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1
63	53 Occurred Front outside handle	Output	When the front door RH request	When Intelligent Key is in the antenna detection area	(V) 15 0 10 10 10 10 10 10 10 10 10 10 10 10 1	
(LG)		RH antenna (+)	RH antenna (+)		When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB
64	Ground	Ground Front outside handle Output		When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1
64 (V)	Ground		switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	

< ECU DIAGNOSIS INFORMATION >

[SEDAN]

	inal No.	Description		Value		Value	٨
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)	A
65	Casuad	Front outside handle	Outeut	When the front door LH request	When Intelligent Key is in the antenna detection area	(V) 15 0 1 s JMKIA0062GB	B C D
(P)	Ground	LH antenna (+)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	G
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	Η
70 (R/B)	Ground	Ignition relay-2 con- trol	Output	Ignition switch	OFF or ACC ON	0V Battery voltage	I
71	Ground	Remote keyless entry	Input/	During waiting		(V) 15 10 5 0 1 1 1 1 ms JMKIA0064GB	J DLM
(L/O)	Ground	receiver signal	Output	When operating ei	ther button on Intelligent Key	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1	M
		1		1			0

Ρ

< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description	• • • •		Condition	Value
(+)	(-)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4V
75 (R/Y)	Ground	Combination switch INPUT 5	Output	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 0 2 ms JDMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 0 2 ms JDMIA0040GB 1.3V

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value	
(Win (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switch OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4V	B C D
					Lighting switch high-beam (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0036GB	E
76 (R/G)	Ground	Combination switch INPUT 3	Output	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	1.3V	G H
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3V	J DLK
77 (BR)	Ground	Engine switch (push switch)	Input	Engine switch (push switch)	Pressed Not pressed	0V Battery voltage	
78 (P)	Ground	CAN-L	Input/ Output		_	_	Μ
79 (L)	Ground	CAN-H	Input/ Output		— OFF		Ν
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 1 s JPMIA0015GB 6.5V	O
					ON	Battery voltage	

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
·	e color)	Signal name	Input/ Output		Condition	(Approx.)
(+)	(-)		Output		OFF or ACC	Battery voltage
81 (LG)	Ground	ON indicator lamp	Output	Ignition switch	ON	0V
83			• • •		OFF	0V
(L)	Ground	ACC relay-1 control	Output	Ignition switch	ACC or ON	Battery voltage
84 ⁵ (Y/R)	Ground	CVT shift selector	Output		_	Battery voltage
85	Oraciand	Electronic steering	la a d	Electronic steer-	Lock status	0V
(L/O)	Ground	column lock condition No. 1	Input	ing column lock	Unlock status	Battery voltage
86	<u> </u>	Electronic steering		Electronic steer-	Lock status	Battery voltage
(G/R)	Ground	column lock condition No. 2	Input	ing column lock	Unlock status	0V
87 ⁵	Ground	Selector lever P posi-	Input	nput Selector lever Any po	P position	0V
(G/B)	Giouna	tion switch	input		Any position other than P	Battery voltage
					ON (pressed)	0V
88 (P/L)	Ground	Front door RH re- quest switch	Input Front door RH quest switch	Front door RH re- quest switch	OFF (not pressed)	(V) 15 0 0 10 ms JPMIA0016GB 1.0V
					ON (pressed) 0V	0V
89 (B/W)	Ground	Front door LH re- quest switch	Input	Front door LH re- quest switch	OFF (not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0V
90	Cround	Blower fan motor re-	Quitaut	lopition quitab	OFF or ACC	0V
(Y)	Ground	lay control	Output	Ignition switch	ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OFF	=	Battery voltage
94	Organisat	Electronic steering	0	Ignition cuitch	OFF or ACC	Battery voltage
(G/Y)	Ground	column lock power supply	Output	Ignition switch	ON	0V

< ECU DIAGNOSIS INFORMATION >

[SEDAN]

	inal No.	Description				Value	٨
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switch OFF	(V) 15 0 2 ms JPMIA0041GB 1.4V	B C D
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3V	F
95 (R/W)	Ground	Combination switch INPUT 1	Output	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 0 2 ms JEMIA0036GB 1.3V	G H I
					Front wiper switch LO	(V) 15 0 2 ms JPMIA0038GB 1.3V	J DLK
					Front washer switch ON	(V) 15 0 2 ms JPMIA0039GB	M
						1.3V	0

Ρ

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description		Oradilian		Value	
(+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)	
		Combination switch INPUT 4	Output	Combination	All switch OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JUNIADO41GB 1.4V	
96	Ground				Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 0 2 ms JEMIA0030GB 1.3V	
(P/B)					Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 0 2 ms JDMIA0036GB 1.3V	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 0 0 2 ms JDMIA0039GB 1.3V	

< ECU DIAGNOSIS INFORMATION >

	Terminal No. Description (Wire color)				Value		
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	Value (Approx.)	А
(')			Cutput		All switch OFF	(V) 15 0 2 ms JPMIA0041GB 1.4V	B C D
					Lighting switch flash-to- pass	(V) 15 0 2.ms JPMIA0037GB 1.3V	E F G
97 (R/B)	Ground	Combination switch INPUT 2	Output	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 0 2 ms JDMIA0036GB 1.3V	H
					Front wiper switch INT	(V) 15 0 2 ms JPMIA0038GB 1.3V	J DLK L
					Front wiper switch HI	(V) 15 0 2 ms JPMIA0040GB 1.3V	M
					Pressed	0 V	0
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Not pressed	(V) 15 10 10 10 ms JDMIA0012GB 1.1V	Ρ

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value	
(VVire (+)	e color) (-)	Signal name	Input/ Output			(Approx.)	
					LOCK status	Battery voltage	
99 (L/Y)	Ground	Electronic steering column lock unit com- munication	Input/ Output	Electronic steer- ing column lock	LOCK or UNLOCK	(V) 15 0 50 ms JMKIA0066GB	
					For 15 seconds after UN- LOCK	Battery voltage	
					15 seconds or later after UNLOCK	0V	
103	Ground	Trunk lid opening	Output	utput Trunk lid tuator is activat	Open (trunk lid opener ac- tuator is activated)	Battery voltage	
(V)	Ground	Turk in opening	Output		Close (trunk lid opener ac- tuator is not activated)	0V	
110	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V	
(V/W)	0.04.14		o alpar		OFF	Battery voltage	
114	Ground	Trunk room antenna	Outout	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 5 0 1 5 1 5 0 1 5 1 5 0 1 5 1 5 0 1 5 1 5 0 1 5 1 5 0 1 5 1 5 0 1 5 1 5 0 1 5 1 5 0 1 5 1 5 0 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	
(B)	Ground	Tround 1 (-)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 1 1 1 5 JMKIA0063GB	

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
(Wire (+)	e color) (-)	Signal name	Input/ Output		Condition	(Approx.)	A
115	Ground	Trunk room antenna	Outout	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 1 s JMKIA0062GB	B C D
(W)	Ground	1 (+)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 s JMKIA0063GB	E
118	Ground	Rear bumper anten-	Output	When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	G H I
(L/O)	Giouna	na (-)	Cutput	is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1	J DLK L
119 (BR/	Ground	Rear bumper anten-	Output	When the trunk lid request switch	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M
(BIV W)		na (+)	Satput	lid request switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB	O P

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				
	e color)	Signal name	Input/		Condition	Value (Approx.)
(+)	(-)	oignaí naine	Output		1	
127 (BR/ W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC ON	Battery voltage 0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	(V) 15 10 10 ms JPMIA0011GB 11.8V OV
				lanition switch	ON (trunk is open) When the clutch pedal is	Battery voltage
			Ignition switch OFF (M/T vehi- cle) Output Ignition switch ON (other than M/ T vehicle)	depressed When the clutch pedal is not depressed	0V	
132 (R)	Ground	Starter motor relay control	Output	tput Ignition switch ON (other than M/ T vehicle) V o is	When selector lever is in P or N position and the brake is depressed	Battery voltage
					When selector lever is in P or N position and the brake is not depressed	0V
					ON (pressed)	0V
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	OFF (not pressed)	(V) 15 10 10 ms JPMIA0016GB 1.0V
144	- ·	Request switch buzz-		Request switch	Sounding	0V
(GR)	Ground	er	Output	buzzer	Not sounding	Battery voltage
147	0	Trunk lid opener	1. 1	Trunk lid opener	Pressed	0V
(L/R)	Ground	switch	Input	switch	Not pressed	Battery voltage
148 ¹ (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	(V) 15 0 10 ms JPMIA0011GB
					ON (when rear door RH opens)	11.8V 0V

< ECU DIAGNOSIS INFORMATION >

[SEDAN]

F

G

Н

INFOID:000000007630675

	r) Condition		Value			
e color) (-)			Condition	(Approx.)		
Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	(V) 15 10 5 0 •••••••••••••••••••••••••••••	
					JPMIA0011GB 11.8V	
				ON (when rear door LH opens)	0V	
		e color) (-) Signal name	e color) (-) Signal name Input/ Output	e color) Signal name Input/ Output (-) Signal name Rear door LH	a color) Signal name Input/ Output Condition (-) Signal name Input/ Output OFF (when rear door LH closes) Ground Rear door LH switch Input Rear door LH switch OFF (when rear door LH closes) ON (when rear door LH ON (when rear door LH ON (when rear door LH	e color) Signal name Input/ Output Condition Value (Approx.) Ground Rear door LH switch Input Rear door LH switch OFF (when rear door LH closes) OFF (when rear door LH closes) Imput JUNIADOLIGE 11.8V ON (when rear door LH ON (when rear door LH OV

1: Sedan only

2: M/T only

3: With LH front window anti-pinch

4: With LH and RH front window anti-pinch.

5: CVT only

6: With auto lights

7: With low tire pressure warning system

8: Coupe only

Fail Safe

Display contents of CONSULT	Fail-safe	Cancellation	
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC	I
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC	
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC	J
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	DLK
B2195: ANTI-SCANNING	Inhibit engine cranking	Erase DTC	
B2557: VEHICLE SPEED	Inhibit electronic steering column lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms	L
B2560: STARTER CONT RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Starter control relay signal Starter relay status signal 	Μ
B2562: LO VOLTAGE	 Inhibit engine cranking Inhibit electronic steering column lock 	100 ms after the power supply voltage increases to more than 8.8 V	Ν
B2601: SHIFT POSITION	Inhibit electronic steering column lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN) 	0
B2602: SHIFT POSITION	Inhibit electronic steering column lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery selector) 	Ρ

voltage)

· Vehicle speed: 4 /h or more

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2603: SHIFT POSI STATUS	Inhibit electronic steering column lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit electronic steering column lock	 500 ms after any of the following BCM recognition conditions is fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (battery voltage) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit electronic steering column lock	 500 ms after any of the following BCM recognition conditions is fulfilled Ignition switch is in the ON position Power position: IGN Selector lever P/N position signal: Except P and N positions (0 V) Interlock/transmission switch signal (CAN): OFF Status 2 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (battery voltage) transmission switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Electronic steering column lock relay signal (Request signal) Electronic steering column lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has become consistent Electronic steering column lock relay signal (Request signal) Electronic steering column lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B2609: S/L STATUS	 Inhibit engine cranking Inhibit electronic steering column lock 	 When the following electronic steering column lock conditions agree BCM electronic steering column lock control status Electronic steering column lock condition No. 1 signal status Electronic steering column lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2612: S/L STATUS	 Inhibit engine cranking Inhibit electronic steering column lock 	 When any of the following conditions is fulfilled Electronic steering column lock unit status signal (CAN) is received normally The BCM electronic steering column lock control status matches the electronic steering column lock status recognized by the electronic steering column lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the electronic steering column lock unit power sup- ply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilledPower position changes to ACCReceives engine status signal (CAN)
B26E8: CLUTCH SW	Inhibit engine cranking	 When any of the following BCM recognition conditions are fulfilled Status 1 Clutch switch signal (CAN from ECM): ON Clutch interlock switch signal: OFF (0 V) Status 2 Clutch switch signal (CAN from ECM): OFF Clutch interlock switch signal: OFF (Battery voltage)
B26E9: S/L STATUS	 Inhibit engine cranking Inhibit electronic steering column lock 	 When BCM transmits the LOCK request signal to the steering lock unit and receives LOCK response signal from steering lock unit, the following conditions are fulfilled Steering condition No 1 signal: LOCK (0V) Steering condition No 2 signal: LOCK (Battery voltage)

DTC Inspection Priority Chart

INFOID:000000007630676

[SEDAN]

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority ${}_{\mbox{H}}$ chart.

Priority	DTC	
1	B2562: LOW VOLTAGE	
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)	1
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING 	DLK

L

Μ

Ν

Ο

Ρ

< ECU DIAGNOSIS INFORMATION >

[SEDAN]

Priority	DTC
4	 B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2553: IGNITION RELAY B2555: STOP LAMP B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2600: SHIFT POSITION B2601: SHIFT POSI STATUS B2602: SHIFT POSI STATUS B2603: SHIFT POSI STATUS B2605: SN BW B2606: SN RELAY B2608: STARTER RELAY B2609: S/L STATUS B2609: S/L STATUS B2609: S/L STATUS B2609: S/L STATUS B26000: STEERING LOCK UNIT B26000: STEERING LOCK UNIT B26000: STEERING LOCK UNIT B26001: STEERING LOCK UNIT B26001: STEERING LOCK UNIT B26001: STEERING LOCK UNIT B2601: STEERING LOCK UNIT B2601: STEERING LOCK UNIT B2601: STEERING LOCK UNIT B2611: ACC RELAY B2611: ACC RELAY B2612: S/L STATUS B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2616: BCM B2617: STARTER RELAY CIRC B2618: BCM B2618: BCM B2619: BCM B2614: PUSH-BTN IGN SW B2616: VEHICLE TYPE B2616: VEHICLE SPEED SIG ERR U0415: VEHICLE SPEED SIG ERR U0415: VEHICLE SPEED SIG ERR
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C17179: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] FR C1719: [CDE ERR] FR C1720: [CODE ERR] FR C1720: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FR C1727: [BATT VOLT LOW] RL C1724: CONTROL UNIT
6	B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

< ECU DIAGNOSIS INFORMATION >

DTC Index

[SEDAN]

А

NOTE:

Details of time display

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

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_
U1000: CAN COMM CIRCUIT		—	_	BCS-32
U1010: CONTROL UNIT (CAN)	_	—	—	BCS-33
U0415: VEHICLE SPEED SIG	_	—	_	BCS-34
B2013: ID DISCORD BCM-S/L	×	_	—	<u>SEC-36</u> (Coupe), <u>SEC-250</u> (Sedan)
B2014: CHAIN OF S/L-BCM	×	_	_	<u>SEC-37</u> (Coupe), <u>SEC-251</u> (Sedan)
B2190: NATS ANTENNA AMP	×	_	-	<u>SEC-65</u> (Coupe), <u>SEC-281</u> (Sedan)
B2191: DIFFERENCE OF KEY	×	_	_	<u>SEC-69</u> (Coupe), <u>SEC-285</u> (Sedan)
B2192: ID DISCORD BCM-ECM	×	_	_	<u>SEC-70</u> (Coupe), <u>SEC-286</u> (Sedan)
B2193: CHAIN OF BCM-ECM	×	_	_	<u>SEC-71</u> (Coupe), <u>SEC-287</u> (Sedan)
B2195: ANTI-SCANNING	_	—	—	<u>SEC-72</u>
B2553: IGNITION RELAY	_	_	_	PCS-59
B2555: STOP LAMP	_	_	_	<u>SEC-73</u> (Coupe), <u>SEC-289</u> (Sedan)
B2556: PUSH-BTN IGN SW	_	×	_	<u>SEC-78</u> (Coupe), <u>SEC-294</u> (Sedan)
B2557: VEHICLE SPEED	×	×	_	<u>SEC-80</u> (Coupe), <u>SEC-296</u> (Sedan)
B2560: STARTER CONT RELAY	×	×	_	<u>SEC-81</u> (Coupe), <u>SEC-297</u> (Sedan)
B2562: LOW VOLTAGE	_	_	_	<u>BCS-35</u>
B2601: SHIFT POSITION	×	×	_	<u>SEC-82</u> (Coupe), <u>SEC-298</u> (Sedan)
B2602: SHIFT POSITION	×	×	_	<u>SEC-86</u> (Coupe), <u>SEC-302</u> (Sedan)
B2603: SHIFT POSI STATUS	×	×	_	<u>SEC-89</u> (Coupe), <u>SEC-305</u> (Sedan)
B2604: PNP SW	×	×	_	<u>SEC-92</u> (Coupe), <u>SEC-308</u> (Sedan)
B2605: PNP SW	×	×	_	<u>SEC-94</u> (Coupe), <u>SEC-310</u> (Sedan)
B2606: S/L RELAY	×	×	_	<u>SEC-96</u> (Coupe), <u>SEC-312</u> (Sedan)

Revision: February 2013

2012 Altima GCC

< ECU DIAGNOSIS INFORMATION >

[SEDAN]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2607: S/L RELAY	×	×	_	<u>SEC-97</u> (Coupe), <u>SEC-313</u> (Sedan)
B2608: STARTER RELAY	×	×	—	<u>SEC-99</u> (Coupe), <u>SEC-315</u> (Sedan)
B2609: S/L STATUS	×	×	_	<u>SEC-101</u> (Coupe), <u>SEC-317</u> (Sedan)
B260A: IGNITION RELAY	×	×	_	PCS-61
B260B: STEERING LOCK UNIT	_	×	_	<u>SEC-106</u> (Coupe), <u>SEC-322</u> (Sedan)
B260C: STEERING LOCK UNIT	_	×	_	<u>SEC-107</u> (Coupe), <u>SEC-323</u> (Sedan)
B260D: STEERING LOCK UNIT	—	×	_	<u>SEC-108</u> (Coupe), <u>SEC-324</u> (Sedan)
B260F: ENG STATE SIG LOST	×	×	—	<u>SEC-109</u> (Coupe), <u>SEC-325</u> (Sedan)
B2611: ACC RELAY	—	—	_	PCS-62
B2612: S/L STATUS	×	×	_	<u>SEC-110</u> (Coupe), <u>SEC-331</u> (Sedan)
B2614: ACC RELAY CIRC		×	_	PCS-64
B2615: BLOWER RELAY CIRC		×	_	PCS-67
B2616: IGN RELAY CIRC	—	×	—	<u>PCS-70</u>
B2617: STARTER RELAY CIRC	×	×	_	<u>SEC-115</u> (Coupe), <u>SEC-336</u> (Sedan)
B2618: BCM	×	×	_	PCS-73
B2619: BCM	×	×	—	<u>SEC-117</u> (Coupe), <u>SEC-338</u> (Sedan)
B261A: PUSH-BTN IGN SW	_	×	_	<u>SEC-118</u> (Coupe), <u>SEC-339</u> (Sedan)
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	<u>SEC-121</u>
B2622: INSIDE ANTENNA	—	—	_	DLK-282
B2623: INSIDE ANTENNA	_	_	_	DLK-285
B26E1: ENG STATE NO RES	×	×	—	<u>SEC-326</u>
B26E8: CLUTCH SW	×	×		<u>SEC-123</u>
B26E9: S/L STATUS	×	× (Turn ON for 15 seconds)	_	<u>SEC-125</u>
B26EA: KEY REGISTRATION	×	× (Turn ON for 15 seconds)	_	<u>SEC-126</u>
C1704: LOW PRESSURE FL		—	×	<u>WT-8</u>
C1705: LOW PRESSURE FR		_	×	<u>WT-8</u>
C1706: LOW PRESSURE RR		_	×	<u>WT-8</u>
C1707: LOW PRESSURE RL			×	<u>WT-8</u>
C1708: [NO DATA] FL		_	×	<u>WT-13</u>
C1709: [NO DATA] FR	—	—	×	<u>WT-13</u>
C1710: [NO DATA] RR	—	—	×	<u>WT-13</u>
C1711: [NO DATA] RL	—	_	×	<u>WT-13</u>
C1712: [CHECKSUM ERR] FL	—	—	×	<u>WT-15</u>

Revision: February 2013

< ECU DIAGNOSIS INFORMATION >

[SEDAN]

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	А
C1713: [CHECKSUM ERR] FR	—	—	×	<u>WT-15</u>	
C1714: [CHECKSUM ERR] RR	—	—	×	<u>WT-15</u>	В
C1715: [CHECKSUM ERR] RL	—	—	×	<u>WT-15</u>	
C1716: [PRESSDATA ERR] FL	—	—	×	<u>WT-17</u>	C
C1717: [PRESSDATA ERR] FR	—	—	×	<u>WT-17</u>	0
C1718: [PRESSDATA ERR] RR	—	—	×	<u>WT-17</u>	
C1719: [PRESSDATA ERR] RL	—	—	×	<u>WT-17</u>	D
C1720: [CODE ERR] FL	—	—	×	<u>WT-15</u>	
C1721: [CODE ERR] FR	—	—	×	<u>WT-15</u>	E
C1722: [CODE ERR] RR	—	—	×	<u>WT-15</u>	
C1723: [CODE ERR] RL	—	—	×	<u>WT-15</u>	
C1724: [BATT VOLT LOW] FL	—	—	×	<u>WT-15</u>	F
C1725: [BATT VOLT LOW] FR	—	—	×	<u>WT-15</u>	
C1726: [BATT VOLT LOW] RR	—	—	×	<u>WT-15</u>	
C1727: [BATT VOLT LOW] RL	—	—	×	<u>WT-15</u>	G
C1729: VHCL SPEED SIG ERR	—	—	×	<u>WT-18</u>	
C1734: CONTROL UNIT	_	—	×	<u>WT-19</u>	Н

J

L

Μ

Ν

0

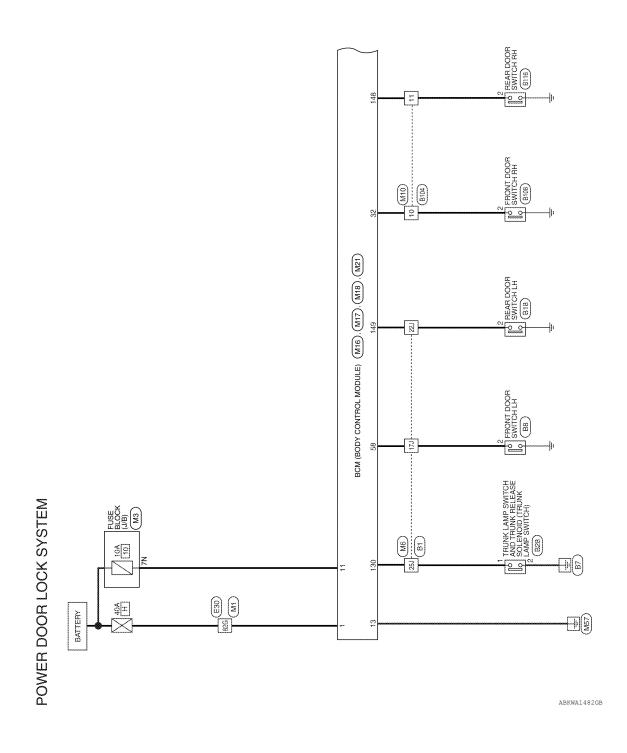
Ρ

< WIRING DIAGRAM >

WIRING DIAGRAM POWER DOOR LOCK SYSTEM

Wiring Diagram

INFOID:000000007421319



POWER DOOR LOCK SYSTEM

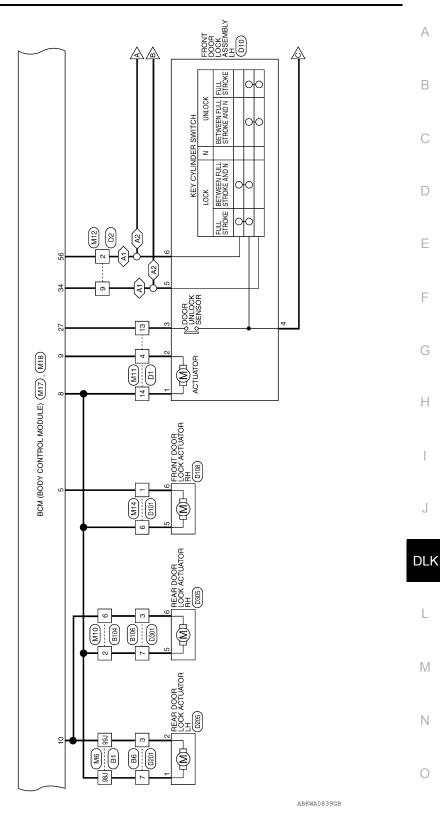
< WIRING DIAGRAM >

[SEDAN]

J

L

Ρ



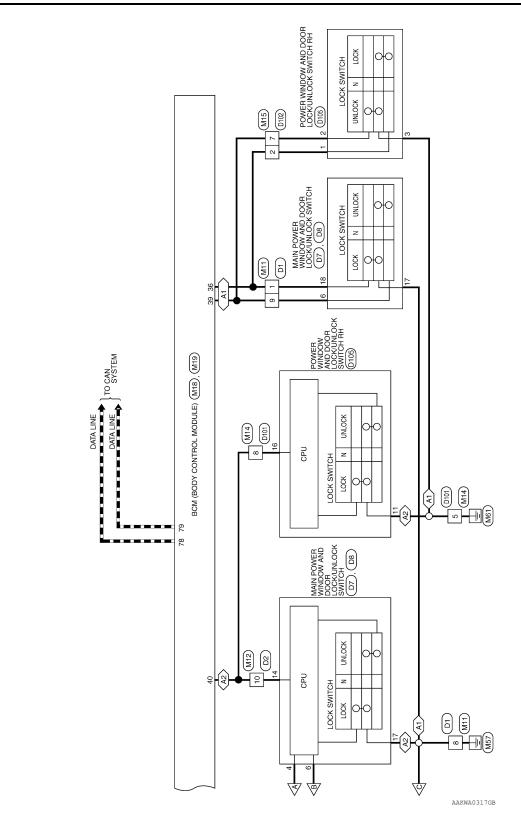
WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM ... (A2

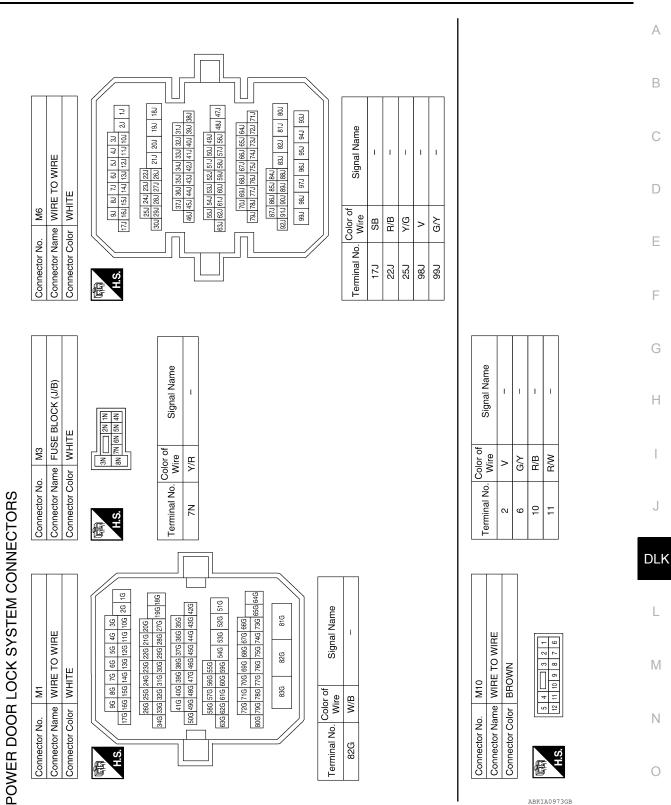


< WIRING DIAGRAM >

WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM

(A2)





POWER DOOR LOCK SYSTEM

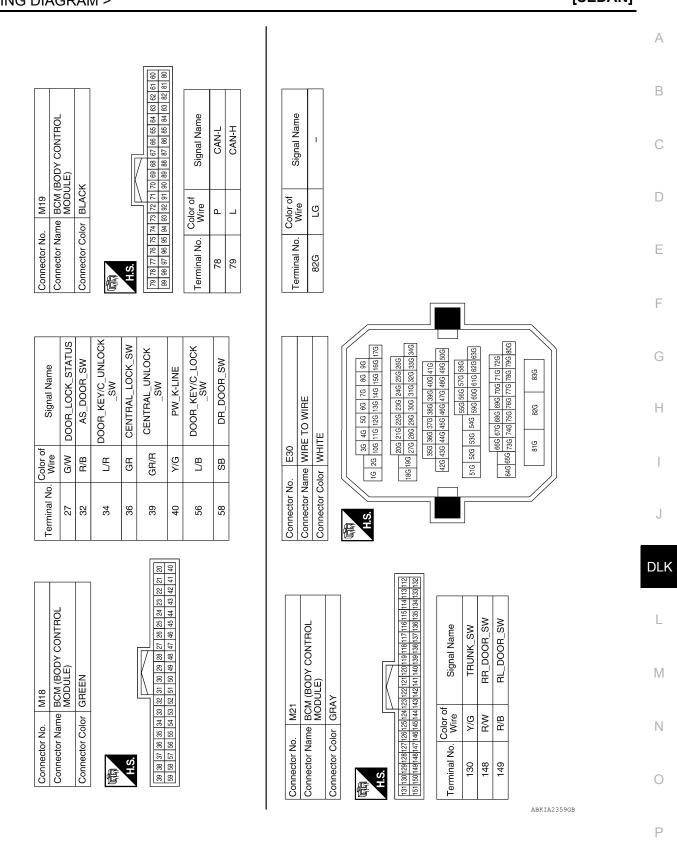
Ρ

Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE Terminal No. WIRE 10 WIRE 1 2 3 112 13 14 15 13 G/W 513nal 13 G/W 15 Connector Name WIRE TO WIRE Connector Name WIRE TO

ABKIA2358GB

POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >



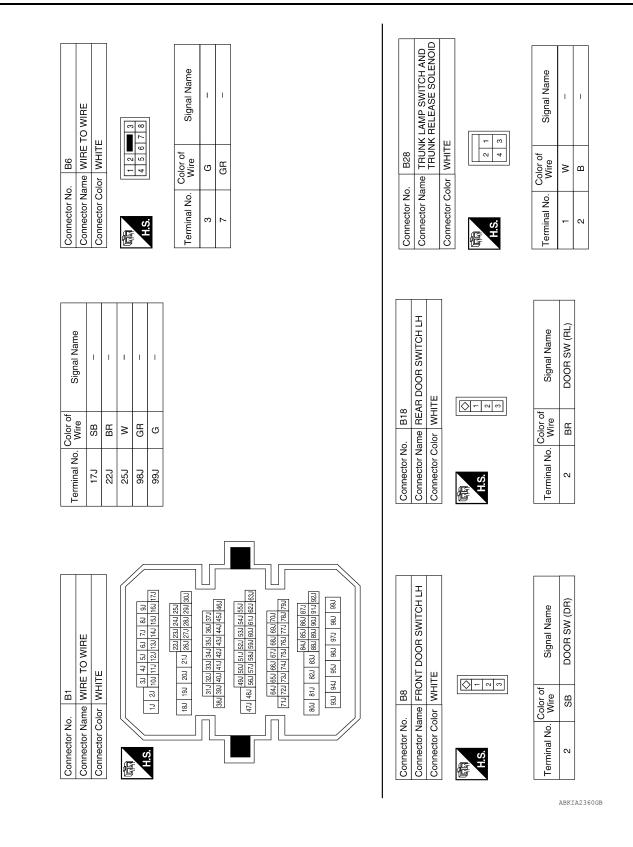
POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

[SEDAN]



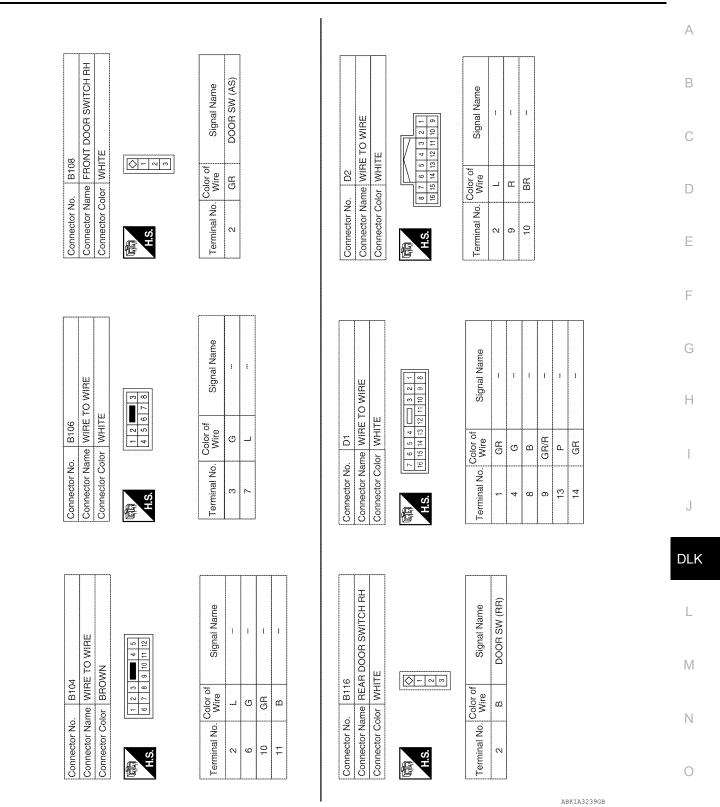
< WIRING DIAGRAM >



POWER DOOR LOCK SYSTEM

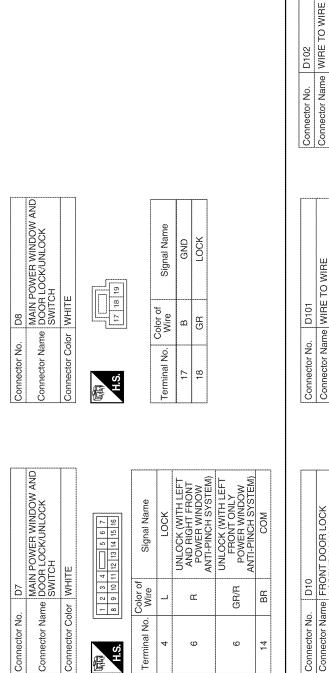
< WIRING DIAGRAM >

[SEDAN]



Revision: February 2013

Ρ



Connector No.	D10
Connector Name	Connector Name FRONT DOOR LOCK ASSEMBLY LH
Connector Color GRAY	GRAY
CT I	

Signal Name	Đ		ł	GND	DOOR_KEY/C	DOOR_KEV/C_LOCKSW
Color of Wire	GR	Q	۵.	۵	œ	اس
Terminal No. Color of Wire		2	ო	4	a	Q

ABKIA3240GB

Signal Name ł ł

Color of Wire

Terminal No. 2 7

Signal Name

Color of Wire

Terminal No.

1 1

U ω

···· ഗ မ ω

ł ł

GR

α

σH

H.S. E

> 5 2

4 5

H.S.

4 5 6

H.S.

悟

Connector Color WHITE

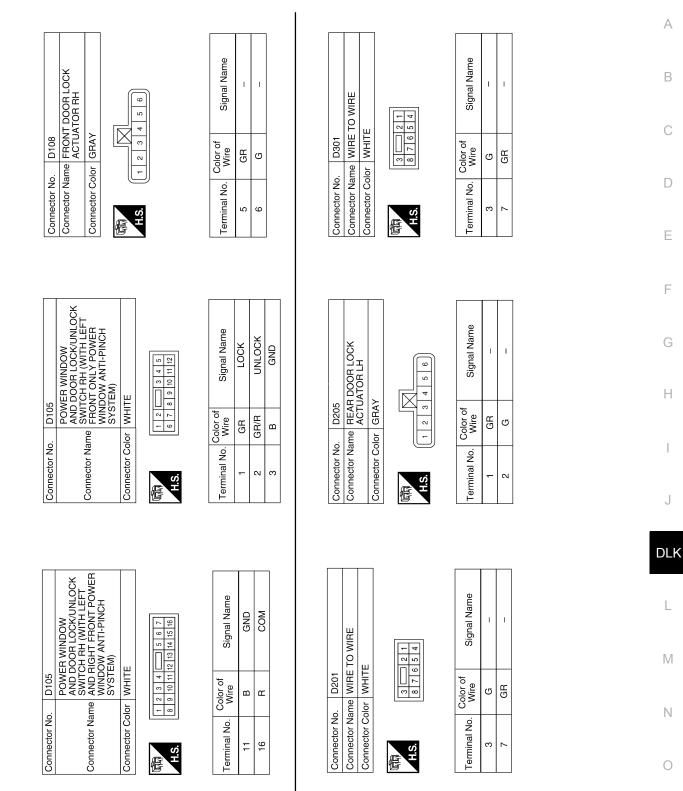
Connector Color WHITE

E

POWER DOOR LOCK SYSTEM

< WIRING DIAGRAM >

[SEDAN]



ABKIA2363GB

Ρ

ABKIA2364GB



< WIRING DIAGRAM >

4 5 6	Signal Name	-	H
1 2 3	Color of Wire	GR	G
H.S.	Terminal No.	5	9

Wiring Diagram INFOID:000000007421320 M >: WITH M/T VT >: WITH CVT DATA LINE 14 KEY (YELLOW) FUSE BLOCK (J/B) M3 , M4 UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY) COMBINATION METER M24 2 4 23 10A l, PUSH-BUTTON IGNITION SWITCH M38 0 SWITCH NO ()ACC M21 ۲ LOCK (M19 Ð M18) 88 (M17). KEY SLOT (M40) 29 ÷ 10A 69 œ (M16) , 2 3 8 1 ELECTRONIC STEERING COLUNIN LOCK Å 80 ¢ ~ g BCM (BODY CONTROL MODULE) 8 Wei ~ <u>~ ~</u> CTOR-E14 5 STOP LLAMP RELAY-1 (E57) g Z -000-E16 STOP LAMP SWITCH E38 J JOINT CONNECTOR-E07 (E65) STOP LAMP SWITCH E38 5 REMOTE KEYLESS ENTRY RECEIVER (M27) 10A 2 0 5 INTELLIGENT KEY SYSTEM KEY WARNING BUZZER (E73) 5 ŝ (E30 (IM) 10A 57G 10A 13 WI E30 ¥0¥ H BATTERY \sim 826

ABKWA1479GB

А

В

С

D

Ε

F

G

Н

1

J

DLK

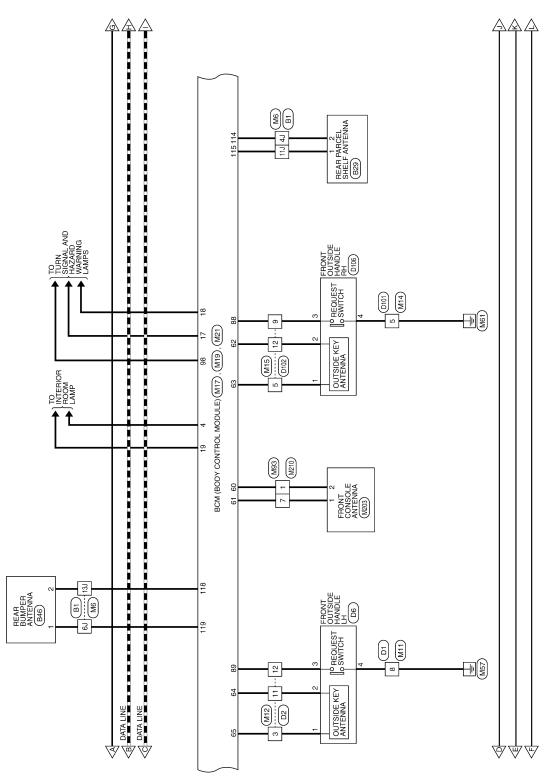
L

Μ

Ν

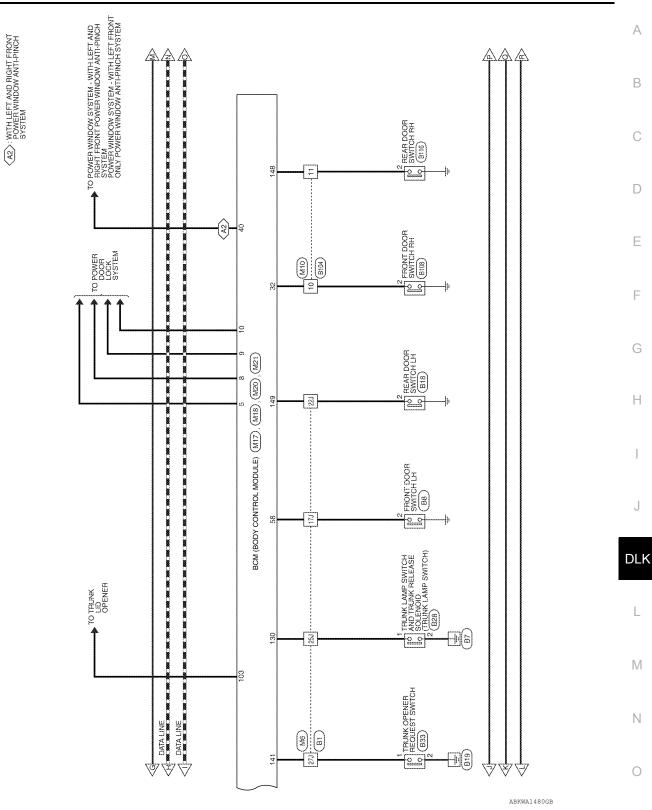
Ο

Ρ

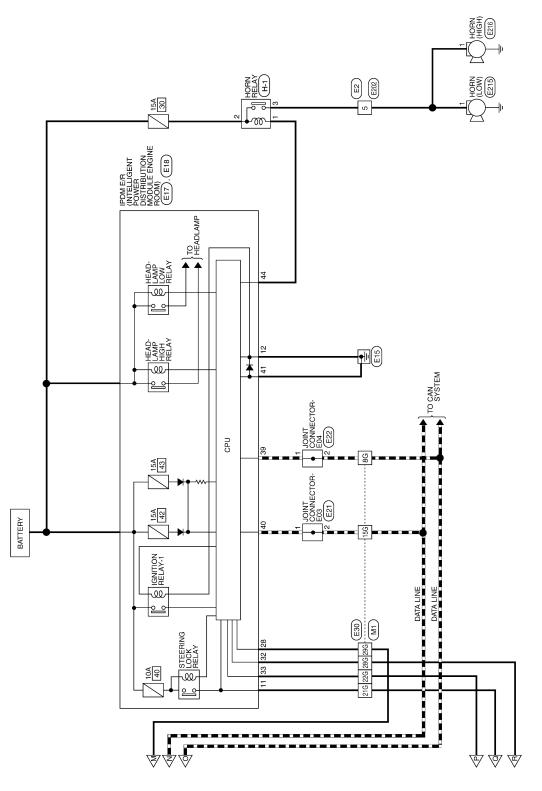


ABKWA0842GB

< WIRING DIAGRAM >



Ρ

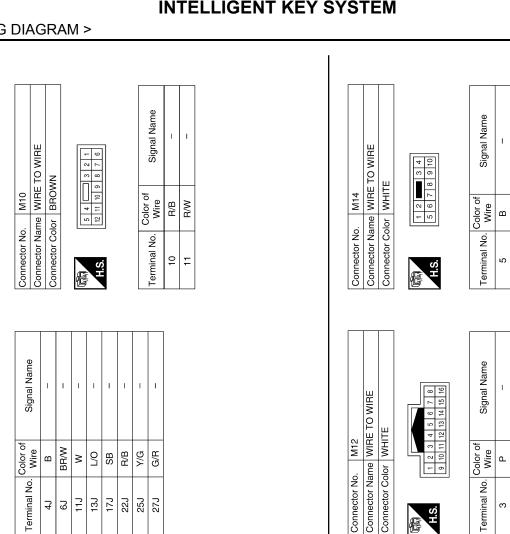


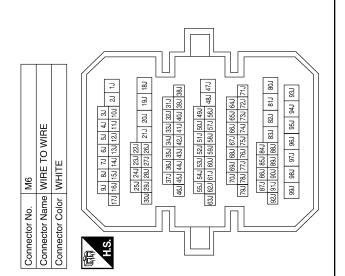
ABKWA0844GB

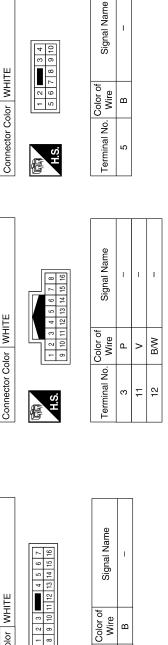
		А
Signal Name		В
		С
Connector No. M3 Connector Name FUSE E Connector Color WHITE Terminal No. Color of Nice 1N W/L 4N G/Y		D
Connector No. Connector Nam Connector Cold HN 1N 7N 7N		E
		F
Signat Name Signat Name		G
Color of Wire Wire L/O L/O BR BR GR W/B		Н
		I
S Terminal No. 15G 21G 22G 28G 57G 82G		J
ЕСТОВ		DLK
Image: State Stat	Signal Name	L
ELLIGENT KEY SYSTE Connector No. M1 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Color WHITE Connector Color WHITE 176 166 156 146 136 125 110 176 166 156 146 136 125 110 1410 400 386 370 38 340 338 228 316 306 386 370 38 340 338 228 316 306 386 370 38 340 338 228 316 376 36 346 34 340 338 228 316 376 36 346 34 340 338 228 316 376 36 346 34 340 338 328 316 376 36 346 34 340 379 36 376 376 356 346 34 340 379 36 376 376 356 346 34 340 378 378 378 378 35 340 378 378 378 378 37 356 376 376 376 376 356 346 34 340 378 378 378 378 37 356 376 376 376 376 376 376 376 376 376 34 356 376 376 376 376 376 376 376 376 34 356 376 376 376 376 376 376 376 376 376 37	Connector No. M4 Connector Name FUSE BLOCK (J/B) Connector Name FUSE BLOCK (J/B) Connector Color WHITE Mine Color 3Q O/L 9Q R/W	
ELLIGENT KEY S Connector No. M1 Connector Name WIRE T Connector Name WIRE T Connector Color WHITE 170 166 156 146 346 356 246 146 506 466 446 476 506 466 466 466 466 506 466 466 466 466 466 466 466 466 466 4	Connector No. M4 Connector Name FUSE E Connector Color WHITE Connector Color WHITE 30 0/L 90 R/W	Ν
		0

< WIRING DIAGRAM >

Р







M12

Connector No.

Connector Name WIRE TO WIRE

Connector No. | M11

Connector Color WHITE

H.S.

E

Terminal No. ω

ш

Color of Wire

ABKIA0982GB

INTELLIGENT KEY SYSTEM

< WIRING DIAGRAM >

Color of Wire

Terminal No.

BR/W

ш

4 6 2 SB R/B Y/G G/R

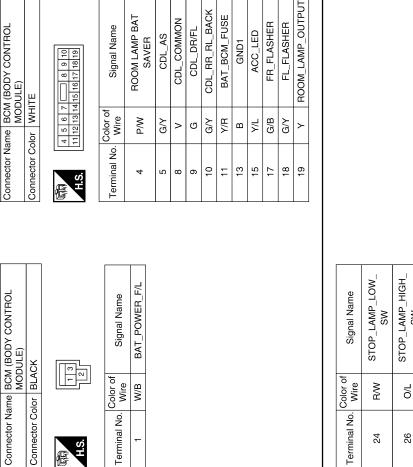
13J 17J 25J 27J

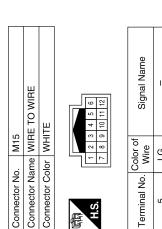
22J

≥

11J

[SEDAN]

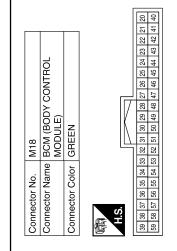




	Signal Name	I	I	I	
> > -	Color of Wire	ГG	P/L	B/Y	
	Terminal No. Wire	5	6	12	

	Signal Name	STOP_LAMP_LOW_ SW	STOP_LAMP_HIGH_ SW	FOB_IN_SW_1	AS_DOOR_SW	PW K-LINE	S/L_LOCK_LED	GND_RF2_A/L	DR_DOOR_SW
	Solor of Wire	R/W	O/L	7	R/B	γ/G	щ	Ч	SB

32 32 40 42 45 58



ABKIA0983GB

Н

J

DLK

L

Μ

Ν

Ο

Ρ

M17

Connector No.

M16

Connector No.

Revision: February 2013

А

В

С

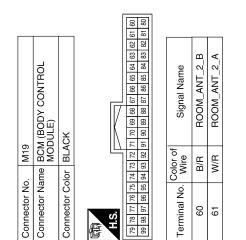
D

Ε

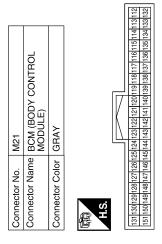
< WIRING DIAGRAM >

Signal Name	IGN_ON_LED	S/L_CONDITION_1	S/L_CONDITION_2	AS_REQUEST SWITCH	DR_REQUEST_SW	RF1_POWER_SUPPLY	S/L_POWER_SUPPLY_ 12V	MS_GAAAN	S/L_K-LINE
Color of Wire	ГG	L/0	G/R	P/L	B/W	L/R	G/Y	G/O	Γ
Terminal No.	81	85	86	88	89	91	94	98	66

Signal Name	AS_DOOR_ANT_B	AS_DOOR_ANT_A	DR_DOOR_ANT_B	DR_DOOR_ANT_A	FOB_READER_CLOCK	FOB_READER_DATA	RF1_TUNER_SIGNAL	ENG_START_SW	CAN-L	CAN-H	FOB_SLOT_ ILLUMINATION	
Color of Wire	Β/Υ	ГG	>	٩	G/O	0	L/0	BR	Р	L	R/L	
Terminal No.	62	63	64	65	68	69	71	77	78	62	80	



Signal Name	TRUNK_ANT_1_B	TRUNK_ANT_1_A	BACK_DOOR_ANT_B	BACK_DOOR_ANT_A	TRUNK_SW	TRUNK_REQUEST_SW	BUZZER	RR_DOOR_SW	RL_DOOR_SW	
Color of Wire	в	Μ	Г/О	BR/W	Y/G	G/R	GR	R/W	R/B	
Terminal No.	114	115	118	119	130	141	144	148	149	



Signal Name	CDL_BACK_TRUNK
Color of Wire	^
Terminal No.	103

103104 110111

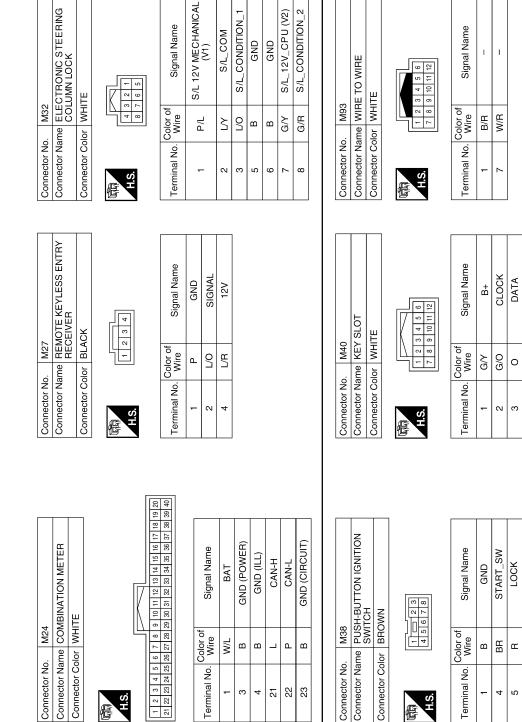
H.S.

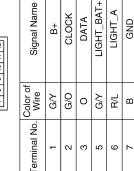
E

ABKIA2463GB

Connector No. M20 Connector Name BCM (BODY CONTROL MODULE)

Connector Color WHITE







ЯH	1 2	З	2 3 4 5 6	5	9	
	7 8	6	9 10 11 12	11	12	
]]]]	_
erminal No.	Color of Wire				Sign	Signal Name
-	G/Y					њ
2	G/D					сгоск
3	0				_	DATA
5	G/Y				Ū	LIGHT_BAT
•	i				-	< HICH

Signal Name	B+	CLOCK	DATA	LIGHT_BAT+	LIGHT_A	GND	CARD SW 1
Color of Wire	G/Y	G/O	0	G∕	R/L	ш	>
Terminal No.	-	2	3	5	9	7	11

DLK
L
M
Ν

Ν 0

ABKIA2365GB

ACC NO ÷

4 ß 9 \sim

H.S.

E

ŋ ۲L

ζŋ

ω

Ρ

< WIRING DIAGRAM >

[SEDAN]

А

В

С

D

Е

F

Н

1

J

5

22 23

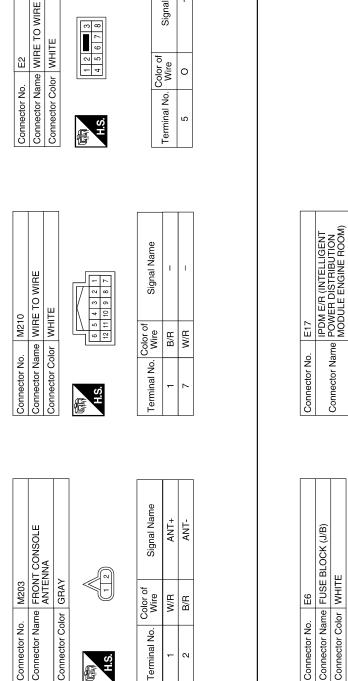
ო 4

-

H.S.

1 21

佢



N

-

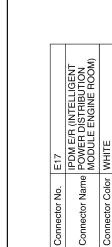
H.S.

E

Signal Name I

Color of Wire

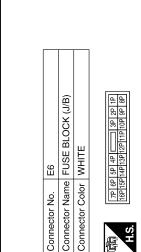
0



	-				
40 39 44 43	Signal Name	CAN-L	CAN-H	GND (SIGNAL)	HORN_RLY
42 41 40 39 46 45 44 43	Color of Wire	٩	_	в	Μ
H.S.	Terminal No.	39	40	41	44

ľ

Æ



悟

Signal Name	I	I	I	
Color of Wire	Ч	щ	g	
Terminal No. Color of Wire	2P	8P	11P	

AAKIA0600GB

< WIRING DIAGRAM >

ШZ

INTELLIGENT KEY SYSTEM	

< WIRING DIAGRAM >

[SEDAN]

А

В

С

D

Ε

F

G

Н

J

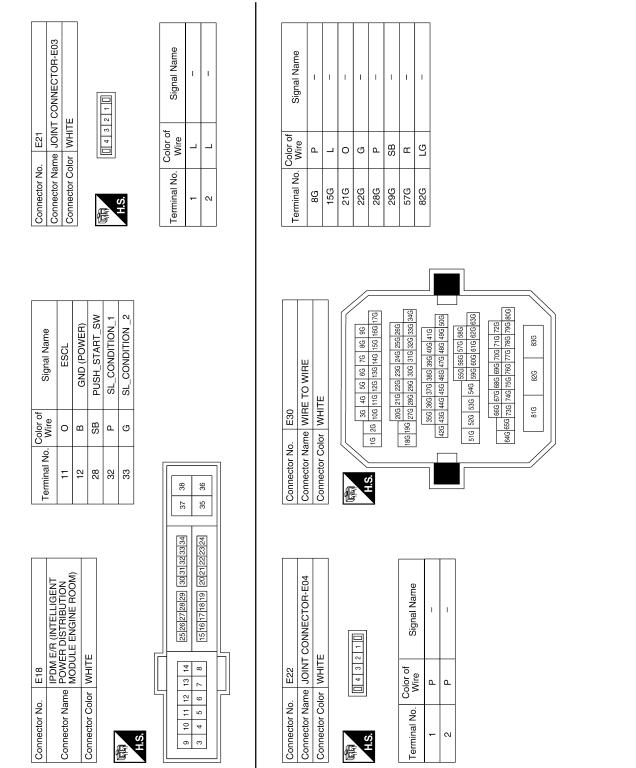
DLK

L

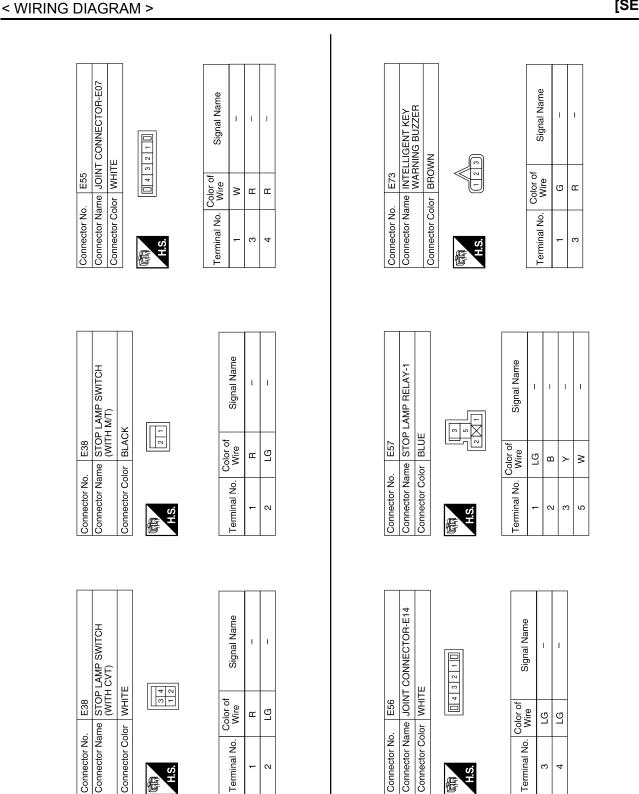
Μ

Ν

Ο



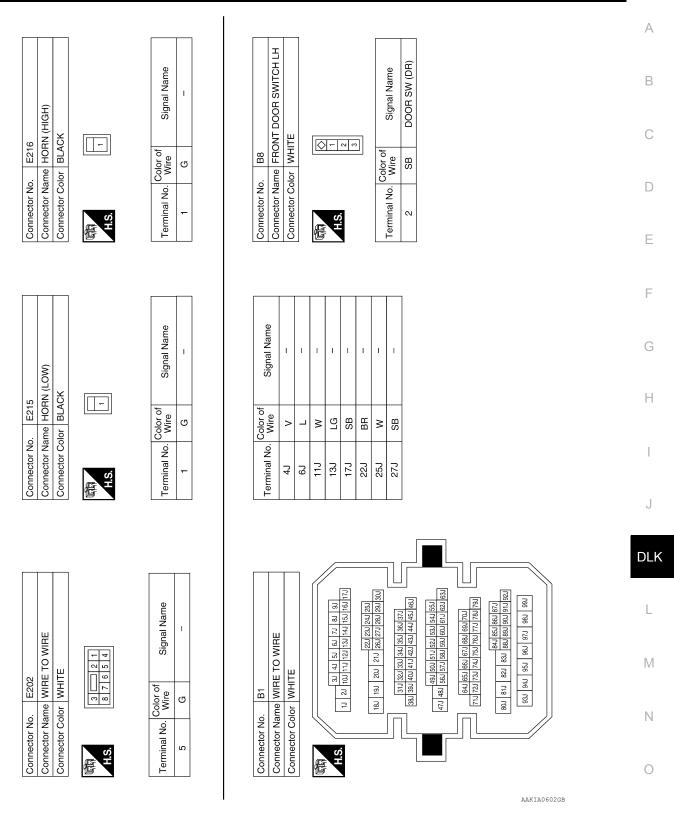
Р



Revision: February 2013

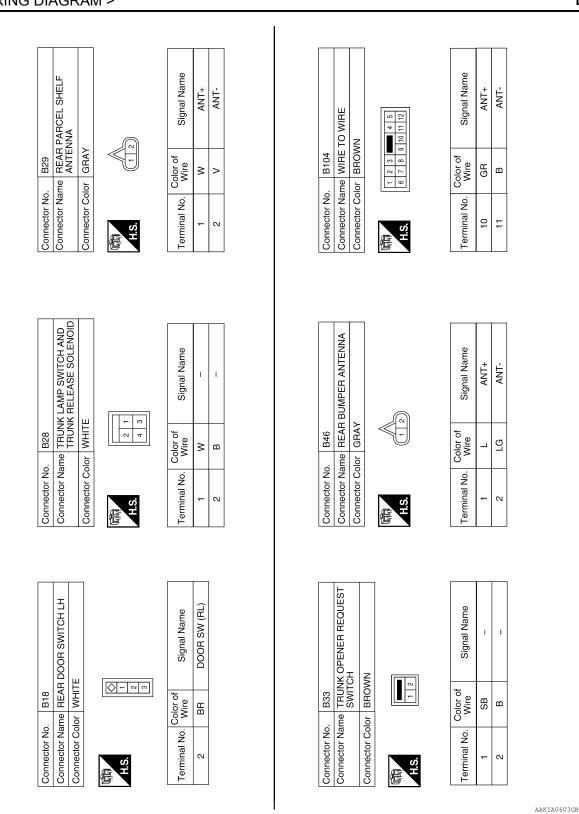
AAKIA0601GB

< WIRING DIAGRAM >

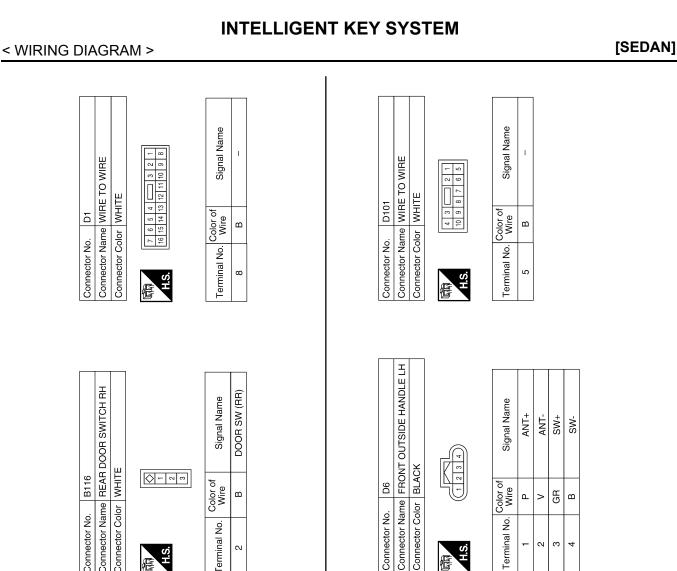


Ρ

[SEDAN]



< WIRING DIAGRAM >



Connector Color BLACK

00 0

Connector No.

Connector Name WIRE TO WIRE

Connector No. D2

Connector Color WHITE

Color of Wire

Terminal No.

Signal Name

Color of Wire

Terminal No.

I. I. I

٩ >

ო

GR

AAKIA0604GB

÷ 42

H.S. 臣

10

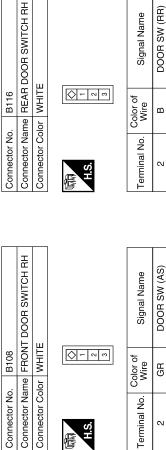
H.S.

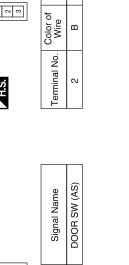
E

٩ >

- \sim ო 4

B B





俉

А

В

С

D

Ε

F

Н

J

DLK

L

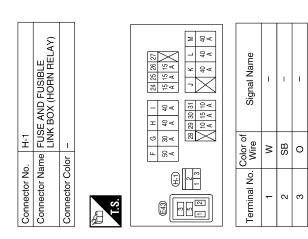
Μ

Ν

0

Ρ

[SEDAN]



Connector Na	ame FRC	Connector Name FRONT OUTSIDE HANDLE RH
Connector Color BLACK	olor BLA	CK
H.S.		
Terminal No.	Color of Wire	Signal Name
1	Я	ANT+
2	Γ	ANT-
3	ЯÐ	SW+

SW-

m

4

1 1

_

9 2

	E TO WIRE	E	6 5 4 3 2 1
D102	WIRE	LIHM	6
Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	SH E

_

D106

Connector No.

12 11 10 9 8 7	Signal Name	I	I
12 11	Color of Wire	щ	GR
0. 1	Terminal No.	5	6

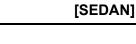
AAKIA0605GB

TRUNK LID OPENER

< WIRING DIAGRAM >

Wiring Diagram

TRUNK LID OPENER



A



DLK

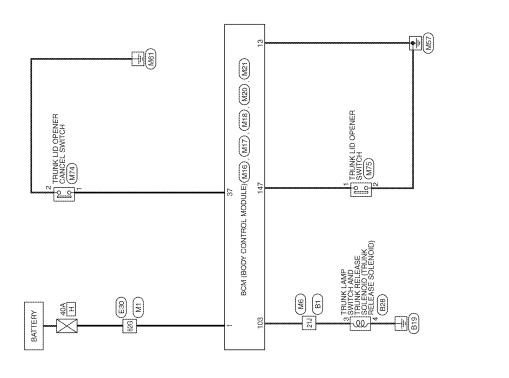
L

Μ

Ν

Ο

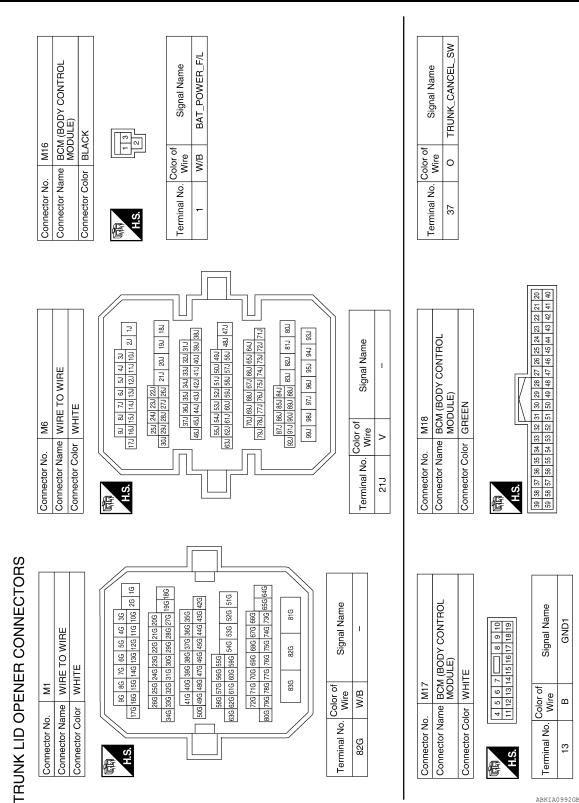
Ρ



TRUNK LID OPENER

Revision: February 2013

ABKWA1484GB



TRUNK LID OPENER

[SEDAN]

GND1

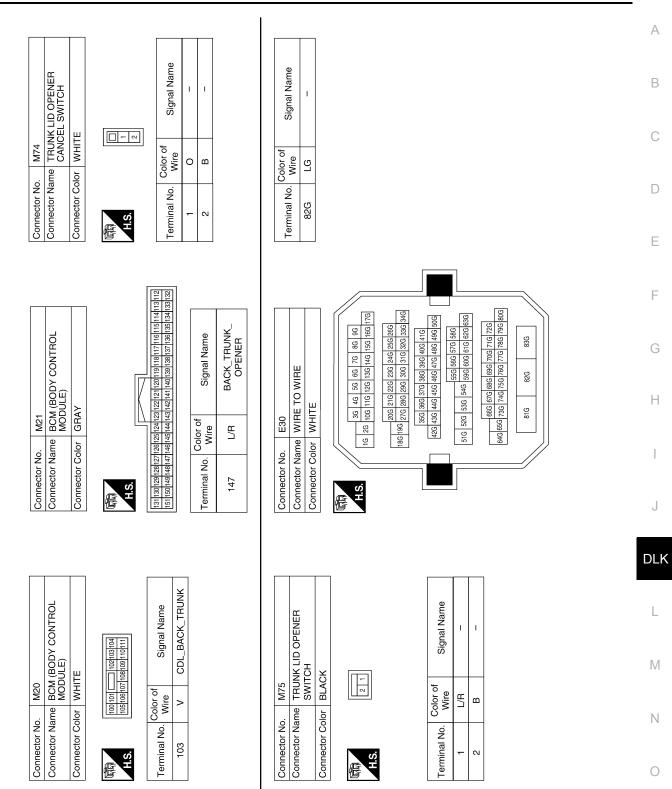
മ

33



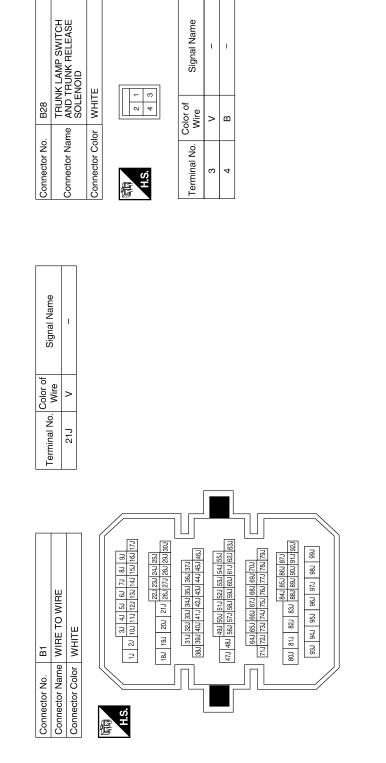
< WIRING DIAGRAM >

[SEDAN]



ABKIA0993GB

Р



ABKIA0994GB

All functions of Intelligent Key system do not operate.		Check Intelligent Key function and battery inspection.	
Air functions of intelligent key system do not operate.	3.	Check remote keyless entry receiver.	
	4.	Check Intermittent Incident.	

Symptom Table

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

ALL FUNCTIONS OF INTELLIGENT KEY SYSTEM DO NOT OPERATE NOTE:

- · Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-229, "Work Flow".
- · Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

• "ENGINE START BY I-KEY" and "LOCK/UNLOCK BY I-KEY" are ON when setting on CONSULT.

· All doors are closed.

Symptom		Diagnosis/service procedure	Reference page
All functions of Intelligent Key system do not operate.	1.	Check BCM power supply and ground circuit.	BCS-36
	2.	Check Intelligent Key function and battery inspection.	DLK-353
	3.	Check remote keyless entry receiver.	DLK-349
	4.	Check Intermittent Incident.	<u>GI-42</u>

INFOID:000000007421322

С

D

Ε

F

А

INTELLIGENT KEY SYSTEM SYMPTOMS

Н

DLK

L

Μ

Ν

Ο

Ρ

< SYMPTOM DIAGNOSIS >

DOOR LOCK FUNCTION SYMPTOMS DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:000000007421323

[SEDAN]

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-229</u>, "Work <u>Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

• "LOCK/UNLOCK BY I-KEY" is ON when setting on CONSULT.

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

Symptom		Diagnosis/service proce	edure	Reference page
	1.	Check BCM Power supply and gro	BCS-36	
Power door lock does not operate with door	2.	Check door lock and unlock switc	า.	DLK-293
lock and unlock switch.	3.	Check door lock actuator (driver s	ide)	DLK-333
	4.	Check Intermittent Incident.		<u>GI-42</u>
Power door lock does not operate with door	1.	Check key cylinder switch.		DLK-306
key cylinder operation. (Power door lock operate properly with door lock and unlock switch.)	2.	Replace power window main swite	Replace power window main switch.	
		Check door lock actuator.	Driver side	DLK-333
Specific door lock actuator does not operate.	1.		Passenger side	DLK-334
	1.		Rear LH	DLK-336
			Rear RH	DLK-337
	2.	Check Intermittent Incident.	<u>GI-42</u>	
Vehicle speed sensing auto door LOCK opera-		Ensure automatic door lock/unlock function (lock opera- tion) is enabled.		<u>BCS-17</u>
tion does not operate.	2.	Check combination meter vehicle speed signal.		<u>MWI-32</u>
	3.	Check intermittent incident.		<u>GI-42</u>
Ignition OFF interlock auto door UNLOCK	1.	Ensure automatic door lock/unlock function (unlock op- eration) is enabled.		<u>BCS-17</u>
function does not operate.	2.	Check BCM for DTCs.		BCS-67
	3.	Check intermittent incident.		<u>GI-42</u>

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:000000007421324

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-229</u>, "Work <u>Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

DLK-424

DOOR LOCK FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
	1. Check BCM power supply and ground circuit.	<u>BCS-36</u>
Door lock/unlock do not operate by door re-	2. Check door switch.	DLK-289
quest switch.	3. Check key slot.	DLK-303
	4. Check Intermittent Incident.	<u>GI-42</u>
	1. Check door request switch (driver side).	DLK-325
Door lock/unlock does not operate by request switch (driver side).	2. Check outside key antenna (driver side).	DLK-345
Switch (unver side).	3. Check Intermittent Incident.	<u>GI-42</u>
	1. Check door request switch (passenger side).	DLK-325
Door lock/unlock does not operate by request switch (passenger side).	2. Check outside key antenna (passenger side).	DLK-345
switch (passenger side).	3. Check Intermittent Incident.	<u>GI-42</u>
Selective unlock function does not operate by	1. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT".	<u>BCS-17</u>
Selective unlock function does not operate by door request switch (driver side) (other door lock function operate).	2. Check selective unlock function with a remote controller or door key cylinder.	DLK-239
	3. Check Intermittent Incident.	<u>GI-42</u>
Selective unlock function does not operate by loor request switch (passenger side) (other	1. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT".	<u>BCS-17</u>
door lock function operate).	2. Check Intermittent Incident.	<u>GI-42</u>
	1. Check "AUTO LOCK SET" setting in "WORK SUP- PORT".	<u>BCS-17</u>
Auto lock function does not operate.	2. Check door switch.	DLK-289
	3. Check key slot.	DLK-303
	4. Check Intermittent Incident.	<u>GI-42</u>

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:000000007421325

Μ

Ν

Ο

Ρ

REMOTE KEYLESS ENTRY FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-229</u>, "Work <u>Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is out of key slot.
- Ignition switch is in OFF or ACC position.
- · All doors are closed.
- Retained power operation does not operate. Refer to <u>DLK-244, "INTELLIGENT KEY : System Description"</u>.

Symptom	Diagnosis/service procedure	Reference page
All of the remote keyless entry functions do	1. Check Intelligent Key battery inspection.	DLK-353
not operate.	2. Check Intermittent Incident.	<u>GI-42</u>

А

[SEDAN]

DOOR LOCK FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[SEDAN]

Symptom	Diagnosis/service procedure	Reference page
Selective unlock function does not operate by Intelligent Key.	1. Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUP- PORT".	BCS-17
	2. Check Intelligent Key battery inspection.	DLK-353
	3. Check Intermittent Incident.	<u>GI-42</u>
Auto lock function does not operate nor- mally.	1. Check "AUTO LOCK SET" setting in "WORK SUPPORT".	BCS-17
	2. Check door switch.	DLK-289
	3. Check key slot.	DLK-303
	4. Check Intermittent Incident.	<u>GI-42</u>
Power window down function does not operate.	1. Check "PW DOWN SET" setting in "WORK SUPPORT".	BCS-23
	2. Check Intelligent Key battery inspection.	DLK-353

TRUNK O < SYMPTOM DIAGNOSIS >	PEN FUNCTION SYMPTOMS	[SEDAN]
TRUNK OPEN FUNCTION S TRUNK LID OPENER SWITCH		ļ
TRUNK LID OPENER SWITCH	: Symptom Table	INFOID:000000007421326
 Flow". Check that vehicle is under the condit check each symptom. 	CTION e following table, check "WORK FLOW". Ref ion shown in "Conditions of vehicle" before s , check systems shown in the "Diagnosis/serv	starting diagnosis, and
Conditions of Vehicle (Operating ConditionsIntelligent Key is out of key slot.All doors are closed.	·)	E
Symptom	Diagnosis/service procedure	Reference page
	1. Check trunk opener switch.	DLK-315
Trunk open function does not operate by trunk opener switch.	2. Check trunk lid opener cancel switch.	<u>DLK-318</u>
opener switch.	3. Check Intermittent Incident.	<u>GI-42</u>
 Flow". Check that vehicle is under the condit check each symptom. 	e following table, check "WORK FLOW". Ref ion shown in "Conditions of vehicle" before s I, check systems shown in the "Diagnosis/serv	starting diagnosis, and
Symptom	Diagnosis/service procedure	Reference page
	1. Check trunk opener request switch.	DLK-329
Trunk open function does not operate by trunk	2. Check trunk lid opener cancel switch.	<u>DLK-318</u>
opener request switch.	3. Check outside key antenna (trunk room).	DLK-345
	4. Check Intermittent Incident.	<u>GI-42</u>
INTELLIGENT KEY		
INTELLIGENT KEY : Symptom	Table	INFOID:000000007421328
 Flow". Check that vehicle is under the condit check each symptom. 	CTION e following table, check "WORK FLOW". Ref ion shown in "Conditions of vehicle" before s , check systems shown in the "Diagnosis/serv	starting diagnosis, and

DLK-427

TRUNK OPEN FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[SEDAN]

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure		Reference page
Trunk open function does not operate by Intel- ligent Key.	1.	Check "TRUNK OPEN DELAY" setting in "WORK SUPPORT".	<u>BCS-23</u>
	2.	Check trunk open function.	<u>DLK-257</u>
	3.	Check trunk lamp switch.	DLK-321
	4.	Check Intelligent Key battery inspection.	DLK-353
	5.	Check Intermittent Incident.	<u>GI-42</u>

< SYMPTOM DIAGNOSIS >

WARNING FUNCTION SYMPTOMS

Symptom Table

WARNING FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to <u>DLK-229</u>, "Work <u>Flow"</u>.
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
- If the following "symptoms are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

Sym	ptom	Diagnosis/service procedure	Reference page
		1. Check push button ignition switch position indicator.	<u>SEC-294</u>
	For internal	2. Check door switch.	DLK-289
	FOI IIItemai	3. Check warning chime function.	DLK-361
OFF position warn-		4. Check Intermittent Incident.	<u>GI-42</u>
ing does not oper- ate.		1. Check push button ignition switch position indicator.	<u>SEC-294</u>
	For external	2. Check door switch.	DLK-289
	FOI EXIEITIAI	3. Check Intelligent Key warning buzzer.	DLK-342
	4.	4. Check Intermittent Incident.	<u>GI-42</u>
I		1. Check transmission range switch.	<u>SEC-308</u>
		2. Check door switch.	DLK-289
D position worning d	and not operate	3. Check Intelligent Key warning buzzer.	DLK-342
position warning d	oes not operate.	4. Check warning chime function.	DLK-361
		5. Check combination meter display function.	DLK-360
		6. Check Intermittent Incident.	<u>GI-42</u>
ACC warning does not operate		1. Check push button ignition switch position indicator.	<u>SEC-294</u>
		2. Check warning chime function.	DLK-361
		3. Check combination meter display function.	DLK-360
		4. Check Intermittent Incident.	<u>GI-42</u>

INFOID:000000007421329

В

С

D

Ε

F

Н

А

DLK

L

Μ

Ν

Ο

Ρ

J

WARNING FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

[SEDAN]

Symptom		Diagnosis/service procedure			Reference page
	1.	Check door switch.	DLK-289		
		•		Console	DLK-282
		2.	Check inside key antenna.	Trunk room	DLK-285
		3.	Check Intelligent Key warning buzzer.		DLK-342
	Door open to close	4. Check warning chime function.			DLK-361
		5.	Check key slot illumination.		DLK-355
		6.	6. Check combination meter display function.		DLK-360
		7.	Check Intermittent Incident.		<u>GI-42</u>
		1.	Check push button ignition switch position	n indicator.	<u>SEC-294</u>
		_		Console	DLK-282
	Push-button igni-	2.	Check inside key antenna.	Trunk room	DLK-285
	tion switch opera-	3.	Check warning chime function.		DLK-361
	tion	4.	Check key slot illumination.		DLK-355
Take away warning		5.	Check combination meter display function	۱.	DLK-360
does not operate.		6.	Check Intermittent Incident.		<u>GI-42</u>
-		1.	Check push button ignition switch position	n indicator.	<u>SEC-294</u>
		_		Console	DLK-282
	Door is open	2.	Check inside key antenna.	Trunk room	DLK-285
		3.	Check combination meter display function	۱.	DLK-285 DLK-342 DLK-361 DLK-355 DLK-360 GI-42 SEC-294 DLK-361 DLK-361 DLK-362 DLK-363 DLK-364 DLK-365 DLK-360 GI-42 SEC-294 DLK-360 GI-42 SEC-294 DLK-360 GI-42 BCS-23 DLK-360 GI-42 BCS-23 DLK-361 DLK-385 DLK-361 DLK-361 DLK-362 DLK-363 DLK-360 GI-42 DLK-361 DLK-362 DLK-363 DLK-361 DLK-363 DLK-361 DLK-385 DLK-362 DLK-363 DLK-363 DLK-364 DLK-365 DLK-360 GI-42 DLK-363
		4.	Check Intermittent Incident.		<u>GI-42</u>
		1.	Check "TAKE OUT FROM WIN WARN" s SUPPORT".	etting in "WORK	BCS-23
		~		Console	DLK-282
	Take away through	2.	Check inside key antenna.	Trunk room	DLK-285
	window	3.	Check warning chime function.		DLK-361
		4.	Check key slot illumination.		DLK-355
		5.	Check combination meter display function	DLK-360	
		6.	6. Check Intermittent Incident.		<u>GI-42</u>
		1.	Check key slot.		DLK-303
		2. Check door switch.			DLK-289
Kouwerning chime	daga pat aparata	3. Check warning chime function.			DLK-361
Key warning chime	udes not operate.	4. Check key slot illumination.		<u>DLK-355</u>	
			5. Check combination meter display function.		DLK-360
		6. Check Intermittent Incident.		<u>GI-42</u>	
Door lock operation warning chime does not operate.		1.	Check door switch.		<u>DLK-289</u>
		2. Check key slot illumination.		DLK-355	
		3.	Check Intelligent Key warning buzzer.		DLK-342
				Console	DLK-282
		4.	Check inside key antenna.	Trunk room	DLK-285
		5.	Check Intermittent Incident.	1	<u>GI-42</u>

KEY REMINDER FUNCTION SYMPTOMS

< SYMPTOM DIAGNOSIS >

KEY REMINDER FUNCTION SYMPTOMS

Symptom Table

KEY REMINDER FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "Work flow". Refer to DLK-229, "Work Flow".
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
Key reminder function does not operate.	1. Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".	DLK-303
	2. Check door switch.	DLK-289
	3. Check inside key antenna.	DLK-361
	4. Check unlock sensor.	DLK-355
	5. Check Intelligent Key battery inspection.	DLK-360
	6. Check Intermittent Incident.	<u>GI-42</u>

Н

DLK

L

Μ

Ν

Ο

Ρ

Revision: February 2013

[SEDAN]

INFOID:000000007421330

В

А

D

Ε

F

HAZARD FUNCTION

< SYMPTOM DIAGNOSIS >

HAZARD FUNCTION

INFOID:000000007421331

Symptom Table

HAZARD AND BUZZER REMINDER FUNCTION MALFUNCTION **NOTE**:

- Before performing the diagnosis in the following table, check "Work flow". Refer to <u>DLK-229</u>, "Work Flow".
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom		Diagnosis/service procedure	Reference page
Hazard reminder does not operate by request	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	<u>BCS-23</u>
switch. (Buzzer reminder operate.)	2.	Check hazard function.	DLK-362
	3.	Check Intermittent incident.	<u>GI-42</u>
Hazard reminder does not operate by Intelligent Key. (Buzzer reminder operate.)	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	<u>BCS-23</u>
	2.	Check hazard function.	DLK-362
	3.	Check Intelligent Key battery inspection.	DLK-353
Buzzer reminder does not operate by request switch. (Hazard reminder operate.)	1.	Check "ANS BACK I-KEY LOCK" or "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT".	<u>BCS-23</u>
	2.	Check Intelligent Key warning buzzer.	DLK-342
	3.	Check Intermittent incident.	<u>GI-42</u>
Buzzer reminder does not operate by trunk opener request switch.	1.	Check "TRUNK OPEN DELAY" setting in "WORK SUP- PORT".	<u>BCS-23</u>
	2.	Check Intelligent Key warning buzzer.	DLK-342
	3.	Check trunk open function.	DLK-252
		Check Intermittent incident.	<u>GI-42</u>

HORN FUNCTION

< SYMPTOM DIAGNOSIS >

HORN FUNCTION

Symptom Table

HAZARD AND HORN REMINDER FUNCTION MALFUNCTION NOTE:

- Before performing the diagnosis in the following table, check "Work flow". Refer to DLK-229, "Work Flow".
- If the following symptoms" are detected, check systems shown in the "Diagnosis/service procedure" column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom		Diagnosis/service procedure		
Hazard reminder does not operate by request	1.	Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	<u>BCS-23</u>	
switch. (Horn reminder operate.)	2.	Check hazard function.	DLK-362	
()	3.	Check Intermittent Incident.	<u>GI-42</u>	
Hazard reminder does not operate by Intelligent Key		Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	<u>BCS-23</u>	
(Horn reminder operate.)	2.	Check hazard function.	DLK-362	
	3.	Check Intelligent Key battery inspection.	DLK-353	
Horn reminder does not operate by request switch.		Check "ANSWER BACK WITH I-KEY LOCK" or "AN- SWER BACK WITH I-KEY UNLOCK" setting in "WORK SUPPORT".	<u>BCS-23</u>	
(Hazard reminder operate.)	2.	Check Intelligent Key warning buzzer.	DLK-342	
		Check Intermittent Incident.	<u>GI-42</u>	
Horn reminder does not operate by Intelligent Key.		Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".	<u>BCS-23</u>	
(Hazard reminder operate.)	2.	Check horn function.	DLK-358	
	3.	Check Intermittent Incident.	<u>GI-42</u>	

DLK

L

Μ

Ν

0

Ρ

J

INFOID:000000007421332

В

D

Ε

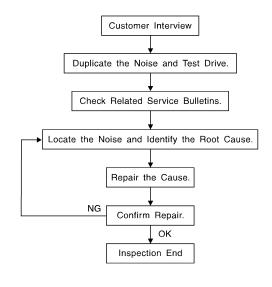
F

Н

А

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow



SBT842

CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to <u>DLK-438</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, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving 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 bumble bee) Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

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

DLK-434

INFOID:000000007421333

< SYMPTOM DIAGNOSIS >

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

- 1) Close a door.
- 2) Tap or push/pull around the area where the noise appears to be coming from.
- 3) Rev the engine.
- 4) Use a floor jack to recreate vehicle "twist".
- 5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on CVT and 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: J-39565 and mechanic's stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
 - removing the components in the area that you suspect the noise is coming from.
 Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
 - tapping or pushing/pulling the component that you suspect is causing the noise.
 Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
 - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
 - placing a piece of paper between components that you suspect are causing the noise.
 - looking for loose components and contact marks. Refer to <u>DLK-436</u>, "Generic Squeak and Rattle Troubleshooting".

REPAIR THE CAUSE

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

CAUTION:

Do not use excessive force as many components are constructed of plastic and may be damaged. Always check with the Parts Department for the latest parts information. The following materials are contained in the NISSAN Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed. URETHANE PADS [1.5 mm (0.059 in) thick] Insulates connectors, harness, etc. 76268-9E005: 100×135 mm (3.94×5.31 in)/76884-71L01: 60×85 mm (2.36×3.35 in)/76884-71L02: 15×25 mm (0.59×0.98 in) INSULATOR (Foam blocks) Insulates components from contact. Can be used to fill space behind a panel. 73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97×1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97×1.97 in)

INSULATOR (Light foam block)

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

FELT CLOTH TAPE

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

68370-4B000: 15×25 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

Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE

[SEDAN]

А

В

D

Ε

F

DLK

< SYMPTOM DIAGNOSIS >

[SEDAN]

Used instead of UHMW tape that will be visible or not fit. Note: Will only last a few months. SILICONE SPRAY Use when grease cannot be applied. DUCT TAPE Use to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Generic Squeak and Rattle Troubleshooting

INFOID:000000007421334

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 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 silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

- 1. Shift selector assembly cover to finisher
- 2. A/C control unit and cluster lid C
- 3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

- 1. Finisher and inner panel making a slapping noise
- 2. Inside handle escutcheon to door finisher
- 3. Wiring harnesses tapping
- 4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks 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 owner. In addition look for:

- 1. Trunk lid bumpers 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.

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. Sun visor shaft shaking in the holder
- 3. Front or rear windshield touching headliner 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.

OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage. In addition look for:

- 1. Loose harness or harness connectors.
- 2. Front console map/reading lamp lens loose.
- 3. Loose screws at console attachment points.

SEATS

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

Cause of seat noise include:

- 1. Headrest rods and holder
- 2. A squeak between the seat pad cushion and frame
- 3. The rear 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 installed to the engine wall
- 2. Components that pass through the engine wall
- 3. Engine wall mounts and connectors
- 4. Loose radiator installation 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.

Ν

Μ

[SEDAN]

А

В

D

Ε

F

Н

J

DLK

Ο

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet

[SEDAN]

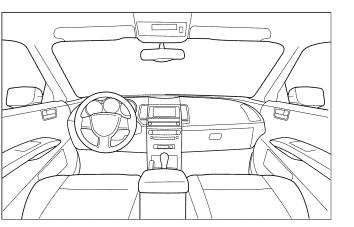
Dear Customer:

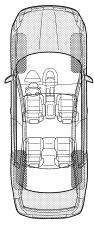
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked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

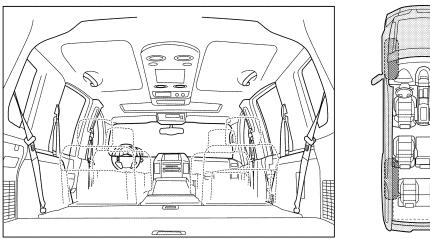
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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.

LAIA0072E

< SYMPTOM DIAGNOSIS >

[SEDAN]

Briefly describe the location where the n	oise occurs	:		
I. WHEN DOES IT OCCUR? (please cl	heck the bo	oxes that app	oly)	
Anytime	🗆 Af	fter sitting o	ut in the rai	in
☐ 1st time in the morning	Πw	/hen it is rair	ning or wet	t
Only when it is cold outside	🗆 Di	ry or dusty c	onditions	
Only when it is hot outside		ther:		
II. WHEN DRIVING:	IV. W	HAT TYPE	OF NOISE	E
Through driveways	🗆 sa	queak (like t	ennis shoe	es on a clean floor)
Over rough roads		reak (like wa	alking on ar	n old wooden floor)
Over speed bumps		attle (like sh	-	-
Only about mph		nock (like a l		
On acceleration		ck (like a clo		,
Coming to a stop		nump (heavy		
On turns: left, right or either (circle)		uzz (like a bı	umble bee))
With passengers or cargo				
☐ Other: miles or mi	nutee			
O BE COMPLETED BY DEALERSHIP	PERSONN	1EL		
est Drive Notes:				
		YES	NO	Initials of person performing
/ehicle test driven with customer				
/ehicle test driven with customer - Noise verified on test drive			_	
- Noise verified on test drive	irm repair			
- Noise verified on test drive - Noise source located and repaired		tomer Name		

< 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 SR and SB section of this Service Manual.

WARNING:

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

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

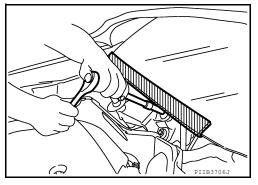
WARNING:

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

Procedure without Cowl Top Cover

INFOID:000000007421337

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



Precaution for work

INFOID:000000007421338

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

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:000000007421339

- NOTE:
- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.

PRECAUTIONS

< P	RECAUTION > [SEDAN]	
ba • A a Thi If th If th	fter finishing work, confirm that all control unit connectors are connected properly, then re-connect both attery cables. Iways use CONSULT to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnosis results. s vehicle is equipped with a push-button ignition switch and a steering lock unit. he battery is disconnected or discharged, the steering wheel will lock and cannot be turned. urning the steering wheel is required with the battery disconnected or discharged, follow the procedure ow before starting the repair operation.	A
OP	ERATION PROCEDURE	С
1. 2.	Connect both battery cables. NOTE: Supply power using jumper cables if battery is discharged. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)	D
3.	Disconnect both battery cables. The steering lock will remain released with both battery cables discon- nected and the steering wheel can be turned.	E
4.	Perform the necessary repair operation.	F
5.	When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)	G
6.	Perform self-diagnosis check of all control units using CONSULT.	G

Н

J

L

Μ

Ν

0

PREPARATION PREPARATION

Special Service Tools

INFOID:000000007421340

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	SILAO993E	Locating the noise
 (J-43980) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairing the cause of noise
 (J-43241) Remote Keyless Entry Tester	LE1946A	Used to test keyfobs
 (J-50190) Signal Tech II	DO OO OO OO OO OO ALEIA013122	 Activate and display TPMS transmitter IDs Display tire pressure reported by the TPMS transmitter Read TPMS DTCs Register TPMS transmitter IDs Check Intelligent Key relative signal strength Confirm vehicle Intelligent Key antenna signal strength

PREPARATION

< PREPARATION >

Commercial Service Tools

INFOID:000000007421341

А

[SEDAN]

Tool name		Description	
Engine ear		Locating the noise	
	SIIA0995E		
Power tool		Loosening nuts, screws and bolts	
	PIIB1407E		

Н

G

J

L

Μ

Ν

Ο

REMOVAL AND INSTALLATION

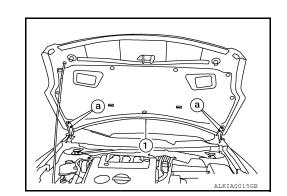
HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

REMOVAL

1. Remove the hinge nuts (a) and the hood assembly (1). CAUTION:

Operate with two workers, because of its large size.



INSTALLATION

Installation is in the reverse order of removal. After installing, perform hood fitting adjustment. Refer to <u>DLK-445, "HOOD ASSEMBLY : Adjustment"</u>.

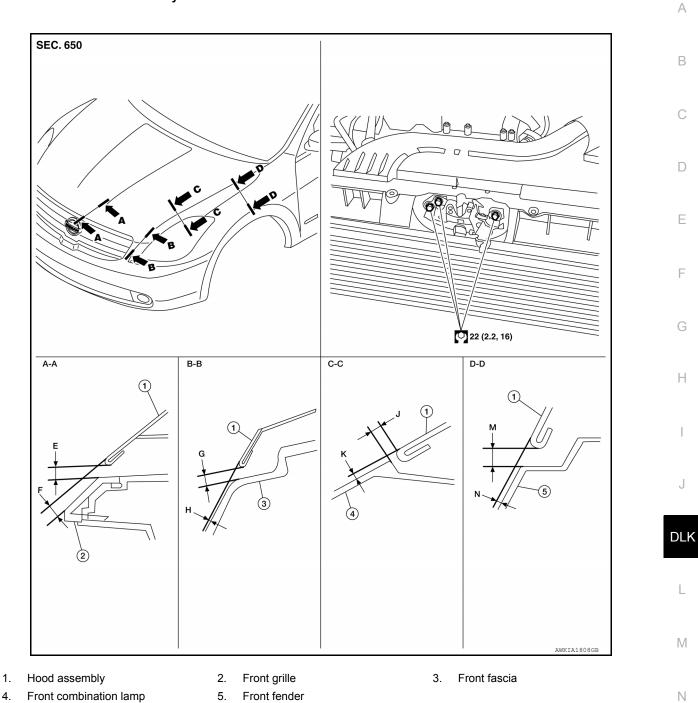
Hood hinge nuts

: 13.5 N·m (1.4 kg-m, 10 ft-lb)

INFOID:000000007421342

HOOD ASSEMBLY : Adjustment





FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDUNAL CLEARANCE ADJUST-MENT

					Unit: mm (in
Section	Item	Measurement	Standard	Parallelism	Equality
A – A	Ε	Clearance	5.0 \pm 2.0 (0.20 \pm 0.08)	MAX 2.0 (0.08)	_
A-A	F	Surface height	$\textbf{2.3} \pm \textbf{2.1} ~ \textbf{(0.09} \pm \textbf{0.08)}$	—	_
B – B	G	Clearance	5.1 \pm 2.0 (0.20 \pm 0.08)	—	2.1 (0.08)
В-В Н	Н	Surface height	3.1 \pm 2.1 (0.12 \pm 0.08)	—	< 2.0 (0.08)
C – C	J	Clearance	$\textbf{4.0} \pm \textbf{2.0} \; \textbf{(0.16} \pm \textbf{0.08)}$	≤ 2.0 (0.08)	≤ 2.2 (0.09)
0-0	K	Surface height	1.0 \pm 1.0 (0.04 \pm 0.04)	≤ 2.0 (0.08)	≤ 2.0 (0.08)

Revision: February 2013



2012 Altima GCC

Ο

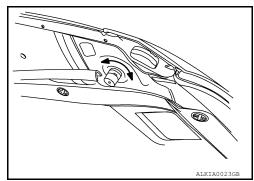
HOOD

< REMOVAL AND INSTALLATION >

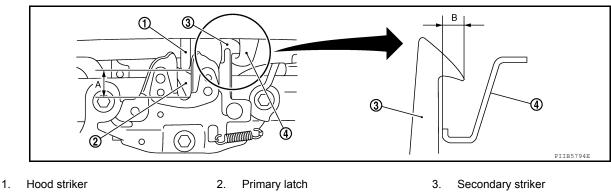
Section	ltem	Measurement	Standard	Parallelism	Equality
D – D	Μ	Clearance	$4.0 \pm 1.0 \; (0.16 \pm 0.04)$	1.0 (0.04)	1.0 (0.04)
0-0	N	Surface height	$0.2 \pm 1.0 \; (0.01 \pm 0.04)$	1.0 (0.04)	1.0 (0.04)

FRONT END HEIGHT ADJUSTMENT

- Check the surface height between the hood and each part by visual inspection and tactile feel. 1.
- 2. Remove the front grille. Refer to EXT-44, "Removal and Installation".
- 3. Remove the hood lock.
- 4 Adjust the surface level difference of the hood, fender and head lamp by rotating the hood bumpers until the hood becomes 1 to 1.5 mm (0.04 to 0.06 in) lower than the fender.



- 5. Install and align the hood lock center with the center of the hood striker. Engage the lock with the striker and check for looseness.
- Adjust A and B as shown to specification with hood's own weight by dropping it from approx. 200 mm 6. (7.87 in) height or by pressing the hood closed lightly [approx. 29 N (3 kg-f, 6.5 lb-f)].



Secondary latch 4.

Α. 20 mm (0.8 in) Β. 6.8 mm (0.27 in)

7. After adjustment tighten the hood lock bolts to the specified torque.

LATERAL/LONGITUDUNAL CLEARANCE ADJUSTMENT

- Check the clearance between the hood and each part by visual inspection and tactile feel.
- 2. Loosen the hood hinge bolts. NOTE:

The anticorrosive agent applied between the hoodledge and the hood hinges also acts as an adhesive. This seal must be broken before the hinges will move.

- 3. Move the hood so that the clearance measurements are within specifications.
- Tighten the hood hinge bolts. 4.

Hood hinge bolts : 13.5 N·m (1.4 kg-m, 10 ft-lb)

NOTE:

After installation apply touch-up paint onto the hinge bolts and around the base of the hinge.

If the clearance measurements between the hood and fender cannot be corrected by moving the hood, 5. the fender must be adjusted. Refer to DLK-452. "Removal and Installation".

HOOD LOCK CONTROL

DLK-446

HOOD

< REMOVAL AND INSTALLATION >

HOOD LOCK CONTROL : Component Parts Location

[SEDAN]

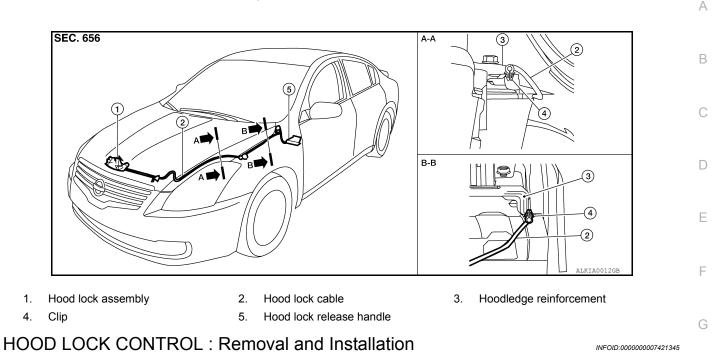
INFOID:000000007421344

Н

J

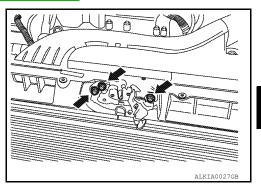
DLK

L

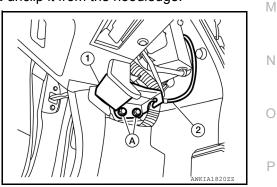


REMOVAL

- 1. Remove the front grille. Refer to EXT-44, "Removal and Installation".
- 2. Remove the LH fender protector. Refer to EXT-46, "Removal and Installation".
- 3. Remove the hood lock assembly bolts.



- 4. Disconnect the hood lock cable from the hood lock assembly, and unclip it from the hoodledge.
- 5. Remove the bolts (A) then, separate the hood lock release handle (1) from the hood lock cable (2).



- 6. Remove the instrument lower panel LH. Refer to IP-18, "Removal and Installation".
- 7. Remove the grommet from the upper dash, and pull the hood lock cable into the passenger compartment. CAUTION:

While pulling, be careful not to damage (peel) the outside of the hood lock cable.

INSTALLATION

DLK-447

HOOD

< REMOVAL AND INSTALLATION >

- Pull the hood lock cable through the upper dash into the engine compartment. CAUTION:
 Be corrected not to bend the cable too much keep the radius 100 mm (2.04 in)
 - Be careful not to bend the cable too much, keep the radius 100 mm (3.94 in) or more.
- 2. Attach the hood lock release cable (2) to the hood lock release handle (1) and install the hood lock release handle bolts (A).

Check that the cable is not offset from the center of the grommet, and seat the grommet into the upper dash hole.
 NOTE:

Make sure that the marked area (A) of the cable is located as shown after mounting grommet to dash upper. Apply the sealant around the grommet at * mark.

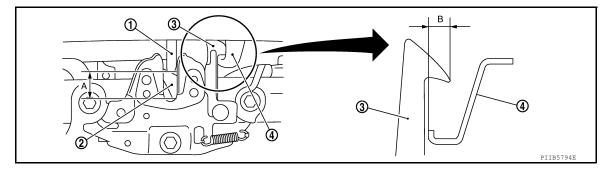
- 4. Position the hood lock cable and clip it into place.
- 5. Connect the hood lock cable to the hood lock assembly.
- 6. Loosely install the hood lock assembly.
- 7. Install the instrument lower panel LH. Refer to <u>IP-18, "Removal</u> <u>and Installation"</u>.
- 8. Install the LH fender protector. Refer to <u>EXT-46</u>. "Removal and <u>Installation"</u>.
- 9. Install the front grille. Refer to <u>EXT-44, "Removal and Installa-</u> tion".
- 10. Perform hood fitting adjustment. Refer to <u>DLK-445, "HOOD</u> <u>ASSEMBLY : Adjustment"</u>.
- 11. Check the hood lock control operation.

INSPECTION

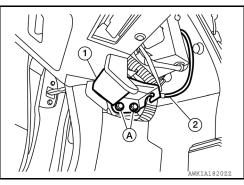
CAUTION:

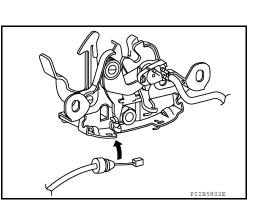
If the hood lock cable is bent or deformed, replace it.

1. Check that the secondary latch is properly engaged with the secondary striker and meets specification provided (B) with hood's own weight.



DLK-448





×

ALKIA2139ZZ

< REMOVAL AND INSTALLATION >

А

В

1. Hood striker

- 2. Primary latch
- 4. Secondary latch
- 20 mm (0.8 in) Α.

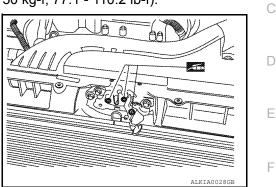
3. Secondary striker 6.8 mm (0.27 in)

Β.

2. While operating the hood opener, carefully check that the front end of the hood is raised and meets the specification provided (A). Also check that the hood opener returns to the original position.

HOOD

- 3. Check that the hood lock release handle operating force is 49 N (5.0 kg-f, 11 ft-lb) or less.
- Install so the static closing force of the hood is 343 490 N (35 50 kg-f, 77.1 110.2 lb-f). 4.
- 5. Check the hood lock lubrication condition. If necessary, apply "body grease" as shown.



Н

DLK

L

Μ

Ν

Ο

Ρ

J

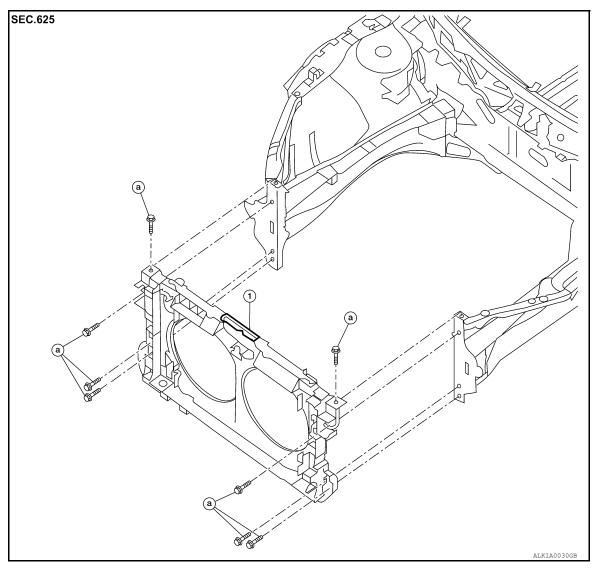
< REMOVAL AND INSTALLATION >

RADIATOR CORE SUPPORT

Removal and Installation

INFOID:000000007421346

[SEDAN]



1. Radiator core support a. Radiator core support bolts

REMOVAL

- 1. Remove front bumper supports. Refer to EXT-40. "Removal and Installation".
- 2. Remove front combination lamps (LH/RH). Refer to EXL-208, "Removal and Installation".
- 3. Remove air duct. Refer to <u>EM-25, "Removal and Installation"</u> (QR25DE) or <u>EM-132, "Removal and Installation"</u> (VQ35DE).
- 4. Remove the radiator cooling fans. Refer to <u>CO-17, "Removal and Installation"</u> (QR25DE) or <u>CO-41,</u> <u>"Removal and Installation"</u> (VQ35DE).
- 5. Remove the radiator. Refer to <u>CO-15, "Removal and Installation"</u> (QR25DE) or <u>CO-39, "Removal and Installation"</u> (VQ35DE).
- 6. Remove the hood lock. Refer to <u>DLK-447, "HOOD LOCK CONTROL : Removal and Installation"</u>.
- 7. Remove ambient sensor. Refer to HA-42. "Removal and Installation".
- 8. Remove crash zone sensor. Refer to SR-17, "Removal and Installation".
- 9. Remove air guides (LH/RH).

RADIATOR CORE SUPPORT

< REMOVAL AND INSTALLATION > [SEDAN]	
 Remove power steering oil cooler (if equipped). Refer to <u>ST-22, "VQ35DE : VQ35DE: Component Parts Location - 17 Inch Tire"</u> (17 inch tire) or <u>ST-24, "VQ35DE : VQ35DE: Component Parts Location - 18 Inch Tire"</u> (18 inch tire). 	А
11. Remove the harness clips from the radiator core support assembly, the harness is separate.	
12. Remove the hood support rod.	В
13. Remove the bolts and the radiator core support.	
INSTALLATION Installation is in the reverse order of removal. CAUTION:	С
 After installing, perform hood fitting adjustment. Refer to <u>DLK-445, "HOOD ASSEMBLY : Adjust-ment"</u>. After adjusting, apply touch-up paint (the body color) to the radiator core support bolts. 	D
	Е

J

F

G

Н

DLK

L

M

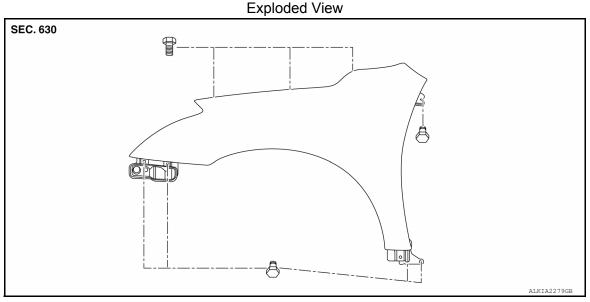
Ν

Ο

FRONT FENDER

INFOID:000000007421347

[SEDAN]



REMOVAL

- 1. Remove the fender protector. Refer to EXT-46, "Removal and Installation".
- 2. Remove the front combination lamp. Refer to EXL-208. "Removal and Installation".
- 3. Remove the cowl top side trim cover.
- 4. Remove the center mudguard. Refer to EXT-47, "Removal and Installation".
- 5. Remove the bolts and the front fender.
 - **CAUTION:**
 - While removing use a shop cloth to protect body from damaging.
 - Use care when removing the front fender. The front fender baffle foam adheres the front fender to the body side outer. Carefully release the foam or damage to the fender may occur.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- After installing, perform fender adjustment. Refer to <u>DLK-453, "Adjustment"</u>.
- After adjusting, apply touch-up paint (the body color) onto the head of the front fender bolts.

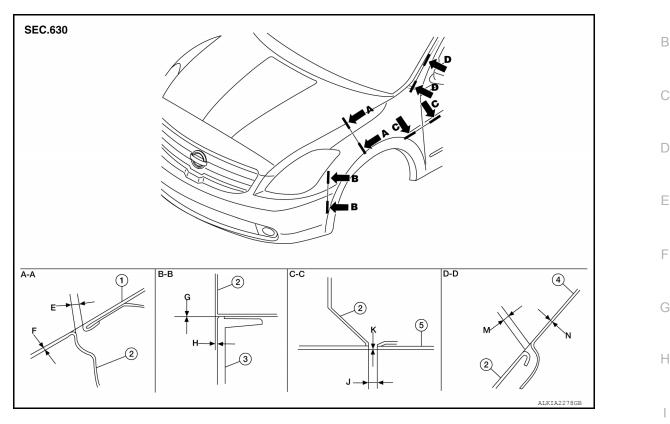
FRONT FENDER

< REMOVAL AND INSTALLATION >

Adjustment

[SEDAN]

А



1. Hood assembly

4.

Body side outer

2. Front fender

5.

Front door assembly

3.

Front fascia

, J

					Unit: mm (ir	ר)
Section	Item	Measurement	Standard	Parallelism	Equality	٦_
A – A	E	Clearance	$4.0 \pm 1.0 \; (0.16 \pm 0.04)$	1.0 (0.04)	1.0 (0.04)	
A-A	F	Surface height	$0.2\pm 1.0\;(0.01\pm 0.04)$	1.0 (0.04)	1.0 (0.04)	
B – B	G	Clearance	0.0 + 0.8 (0.0 + 0.03)	—	_	
в-в Н	Н	Surface height	$0.7 \pm 1.0 \; (0.03 \pm 0.04)$	MAX 1.0 (0.04)	MAX 1.0 (0.04)	
C – C	J	Clearance	$3.7 \pm 1.0 \; (0.15 \pm 0.04)$	1.0 (0.04)	_	
0-0	К	Surface height	$0.0 \pm 1.0 \; (0.0 \pm 0.04)$	_	_	
D – D	М	Clearance	$2.3 \pm 1.0 \; (0.09 \pm 0.04)$	1.0 (0.04)	-	1
U-U	Ν	Surface height	0.0 ± 1.0 (0.0 ± 0.04)		_	

ADJUSTMENT

- 1. Remove the cowl top side trim cover.
- 2. Remove the front fender protector. Refer to EXT-46, "Removal and Installation".
- Remove the center mudguard. Refer to <u>EXT-47, "Removal and Installation"</u>.
- 4. Loosen the front fender bolts.
- 5. Adjust the clearance (J) and surface height (K) between the front fender and the front door.
- 6. Tighten the rear upper and lower front fender bolts.
- 7. Adjust the clearance (E) and surface height (F) between the front fender and the hood.
- 8. Adjust the clearance (M) and surface height (N) between the front fender and the body side outer.
- 9. Tighten the inner front fender bolts.
- 10. Adjust the clearance (G) and the surface height (H) between the front fender and the front fascia.

Revision: February 2013

DLK-453

2012 Altima GCC

Ο

FRONT FENDER

< REMOVAL AND INSTALLATION >

- 11. Tighten the front fender to front fascia and bracket screws.
- 12. Apply touch-up paint (the body color) onto the head of the front fender bolts.
- 13. Install the center mudguard. Refer to EXT-47, "Removal and Installation".
- 14. Install the front fender protector. Refer to EXT-46. "Removal and Installation".
- 15. Install the cowl top side trim cover.

FRONT DOOR

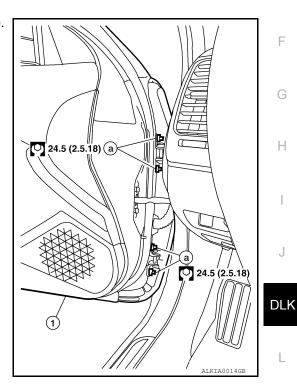
FRONT DOOR : Removal and Installation

CAUTION:

- When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.
- Check the hinge rotating parts for lubrication. If necessary, apply "body grease".
- Operate with two workers, because of its heavy weight.
- Do not use air tools or electric tools for servicing.

REMOVAL

- 1. Pull the grommet and wire harness out of the front pillar until the harness connectors are accessible. Then disconnect the wire harness connectors.
- 2. Remove the check link bolt from the front pillar.
- 3. Remove the door-side hinge nuts (a) and the door assembly (1).



Ρ

INFOID:000000007421348

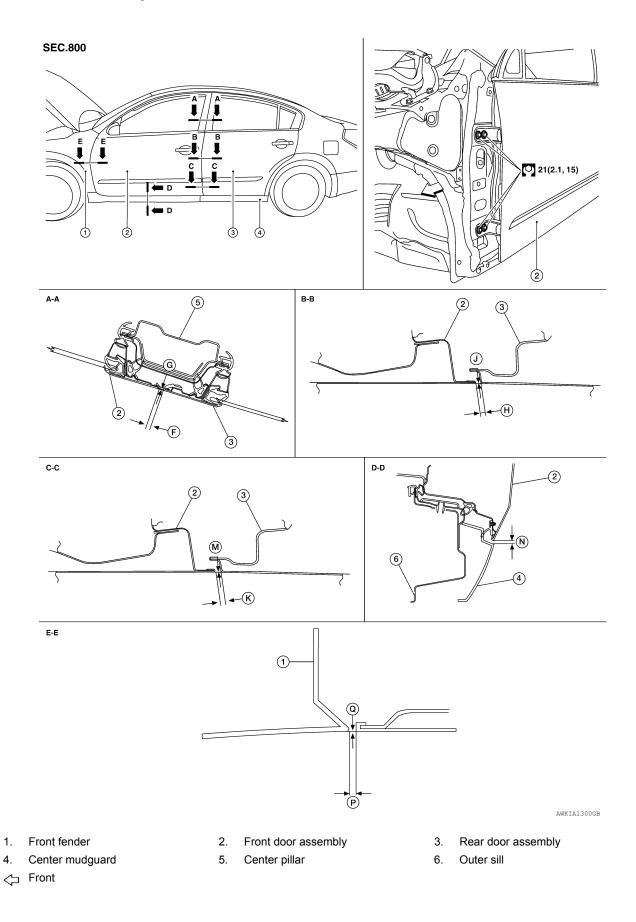
В

D

Ε

FRONT DOOR : Adjustment

INFOID:000000007421349



А

В

D

Е

Н

REMOVAL ANI	D INSTALLAT	TION >	[SEDAN]
			Unit: mm (in
Section	ltem	Measurement	Standard
A – A	F	Clearance	4.6 \pm 1.5 (0.18 \pm 0.06)
A-A	G	Surface height	0.35 ± 1.4 (0.014 \pm 0.06)
	Н	Clearance	4.2 \pm 1.0 (0.17 \pm 0.04)
B – B	J	Surface height	$0.0 \pm 1.0 \; (0.0 \pm 0.04)$
	К	Clearance	4.2 \pm 1.0 (0.17 \pm 0.04)
C – C M		Surface height	0.0 ± 1.0 (0.0 ± 0.04)
D – D	N	Clearance	3.1 \pm 1.0 (0.12 \pm 0.04)
	Р	Clearance	3.7 \pm 1.0 (0.15 \pm 0.04)
E-E	Q	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

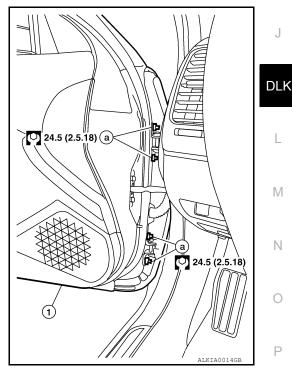
LONGITUDINAL CLEARANCE

1. Confirm the back door adjustments and adjust if necessary. Refer to <u>DLK-457, "BACK DOOR : Removal</u> F and Installation".

- Remove the front fender. Refer to <u>DLK-452</u>, "Removal and Installation".
- 3. Loosen the hinge to body bolts. Move the front door forward or backward as necessary until within specifications.
- 4. Tighten the hinge to body bolts to specification.
- 5. Install the front fender. Refer to DLK-452, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the front door hinge nuts (a).
- 2. Move the top and/or bottom of the front door (1) in or out as necessary until it is within specifications.
- Tighten the hinge nuts to specifications. 3.



BACK DOOR

BACK DOOR : Removal and Installation

INFOID:000000007421350

CAUTION:

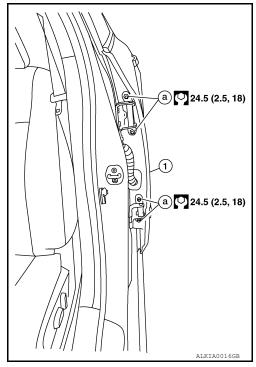
 When removing and installing the rear door assembly, support the door with a jack and cloth to protect the door and body.

< REMOVAL AND INSTALLATION >

- Check the hinge rotating parts for poor lubrication. If necessary, apply "body grease".
- Operate with two workers, because of its heavy weight.

REMOVAL

- 1. Pull out grommet and disconnect rear door harness connector.
- 2. Remove the check link bolt from the center pillar.
- 3. Remove the door-side hinge nuts (a) and the door assembly (1).



INSTALLATION Installation is in the reverse order of removal. CAUTION:

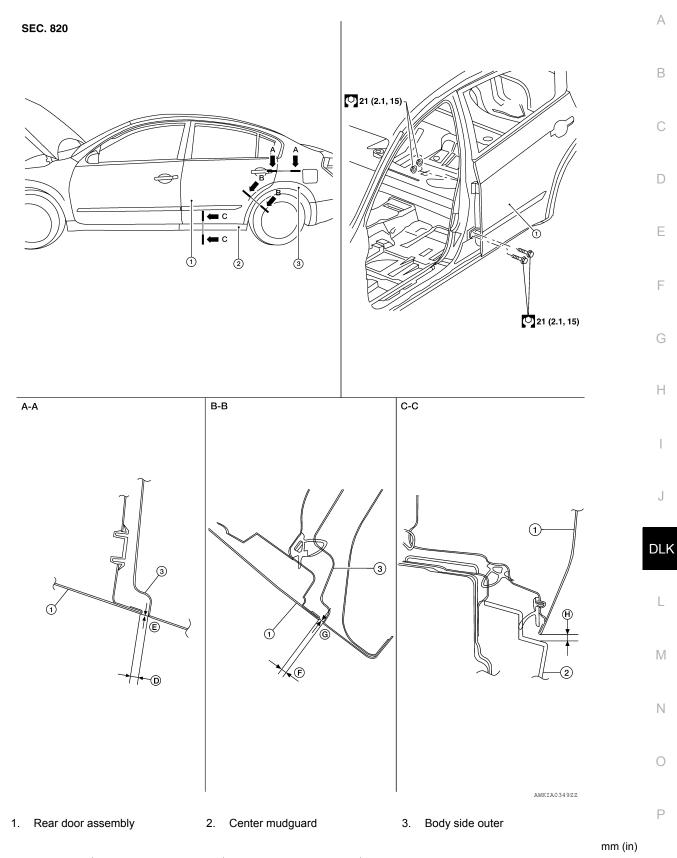
- After installing, perform rear door adjustment. Refer to <u>DLK-458, "BACK DOOR : Adjustment"</u>.
- After adjusting, apply touch-up paint (the body color) to the door nuts and bolts.

BACK DOOR : Adjustment

INFOID:000000007421351

ADJUSTMENT

DOOR



Section	Item	Measurement	Standard
A-A	D	Clearance	$3.6 \pm 1.0 \; (0.14 \pm 0.04)$
	E	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

DOOR

< REMOVAL AND INSTALLATION >

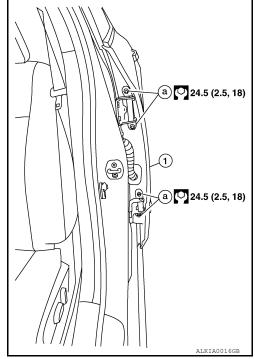
Section	Item	Measurement	Standard	
B-B	F	Clearance	3.6 ± 1.0 (0.14 ± 0.04)	
D-D	G	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	
C-C	Н	Clearance	3.1 ± 1.0 (0.12 ± 0.04)	

LONGITUDINAL CLEARANCE

- 1. Remove the center pillar upper and lower trim. Refer to INT-18, "Removal and Installation".
- 2. Loosen the upper pillar hinge nuts.
- 3. Loosen the lower pillar hinge bolts.
- 4. Move the rear door forward or backward as necessary until within specifications.
- 5. Tighten the lower pillar hinge bolts.
- 6. Tighten the upper pillar hinge nuts.
- 7. Install the center pillar upper and lower trim. Refer to INT-18. "Removal and Installation".

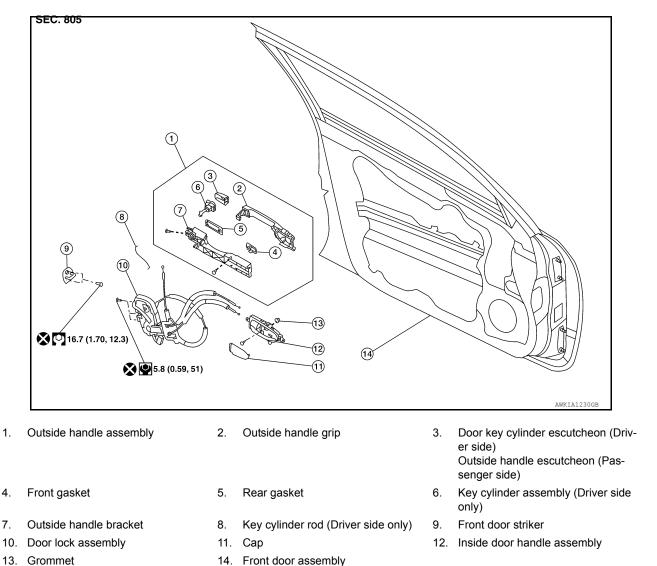
SURFACE HEIGHT ADJUSTMENT

- 1. Loosen the rear door hinge nuts (a).
- 2. Move the top and/or the bottom of the rear door (1) in or out as necessary until it is within specification.
- 3. Tighten the rear door hinge nuts (a) to specification.



DOOR LOCK FRONT DOOR LOCK

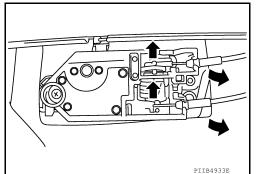
FRONT DOOR LOCK : Component Parts Location



FRONT DOOR LOCK : Removal and Installation

REMOVAL

- 1. Remove the front door finisher. Refer to INT-13. "Removal and Installation".
- 2. Disconnect the inside handle knob cable and lock knob cable from the back side of the front door finisher.



INFOID:000000007421352

А

В

D

Ε

F

Н

J

DLK

L

Μ

Ν

Ο

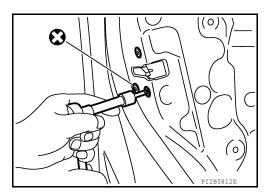
Ρ

INFOID:000000007421353

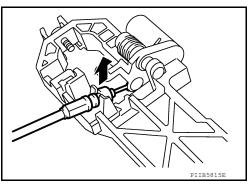
DOOR LOCK

< REMOVAL AND INSTALLATION >

- Remove the front door window and front door module assembly. Refer to <u>GW-19, "Removal and Installa-</u> tion".
- 4. Disconnect the key cylinder rod.
- 5. Remove the bolts (T30), remove the door lock assembly.



- 6. Disconnect the door lock actuator connector and remove the door lock assembly.
- 7. Disconnect the outside handle cable from the outside handle bracket connection.



INSTALLATION Installation is in the reverse order of removal.

When installing the key cylinder rod be sure to rotate the rod holder until a click is felt. BACK DOOR LOCK

DOOR LOCK

< REMOVAL AND INSTALLATION >

BACK DOOR LOCK : Component Parts Location

[SEDAN]



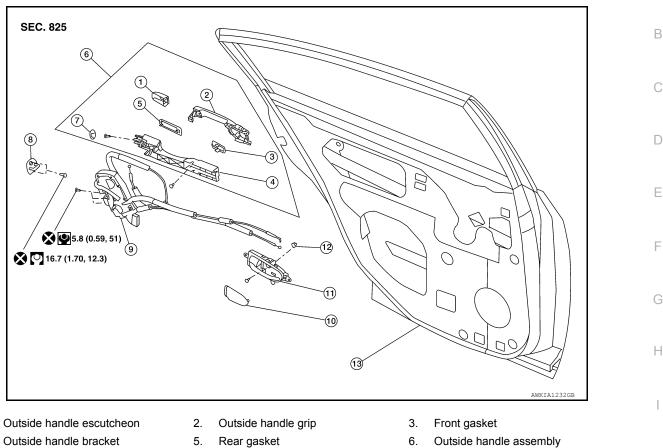
А

J

DLK

L

INFOID:000000007421355



9.

12. Grommet

- 1.
- Outside handle bracket 4.
- Hole plug 7.
- 10. Cap
- 13. Rear door assembly

BACK DOOR LOCK : Removal and Installation

REMOVAL

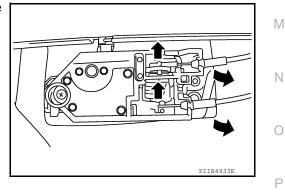
1. Remove the rear door finisher. Refer to INT-13, "Removal and Installation".

8.

Rear door striker

11. Inside handle assembly

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

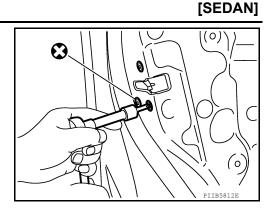


Rear door lock assembly

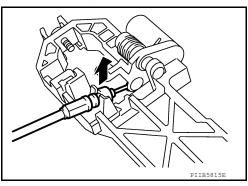
DOOR LOCK

< REMOVAL AND INSTALLATION >

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



- 4. Disconnect the door lock actuator connector and remove the door lock assembly.
- 5. Disconnect the outside handle cable from the outside handle bracket.



INSTALLATION Installation is in the reverse order of removal.

TRUNK LID

< REMOVAL AND INSTALLATION > [SEDAN]	
TRUNK LID TRUNK LID ASSEMBLY	A
TRUNK LID ASSEMBLY : Removal and Installation	6 B
REMOVAL	D
 Remove trunk lid lock. Refer to <u>DLK-467</u>, <u>"TRUNK LID LOCK : Removal and Installation"</u>. Disconnect the connectors in the trunk lid assembly, and remove the harness clips to remove the harness from the trunk lid assembly. 	C
 Remove the bolts, and remove the trunk lid assembly. Remove the rear spoiler (if equipped) to transfer to new trunk lid, if necessary. Refer to <u>EXT-53</u>, "<u>Remova</u> and <u>Installation</u>". 	D
INSTALLATION Installation is in the reverse order of removal. CAUTION:	E
 After installing, perform fitting adjustment. Refer to <u>DLK-466, "TRUNK LID ASSEMBLY : Adjust ment"</u>. After adjusting, apply touch-up paint (the body color) to the hinge bolts and around the base of the base	_
hinge.	G

Н

- J
- DLK

L

M

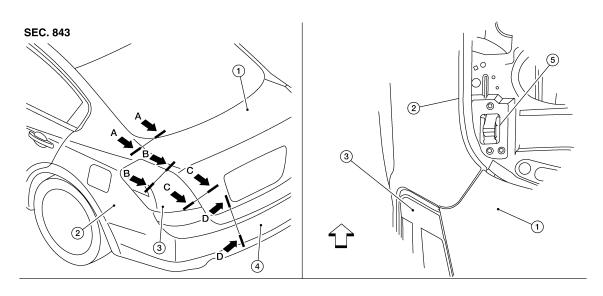
Ν

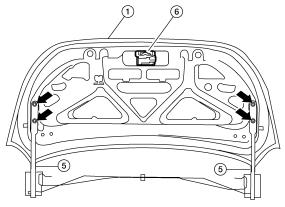
Ο

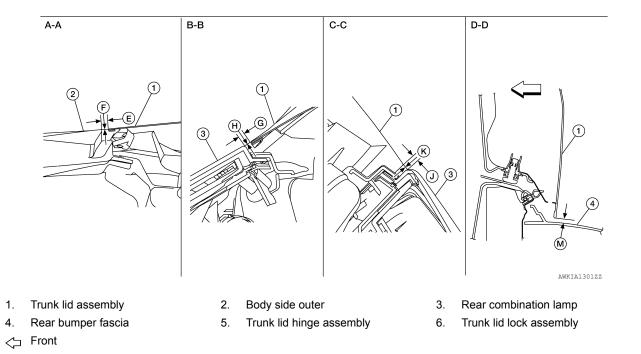
< REMOVAL AND INSTALLATION >

TRUNK LID ASSEMBLY : Adjustment

INFOID:000000007421357







TRUNK LID

< REMOVAL AND INSTALLATION >

[SEDAN]

REINOVA	L AND	INSTALLATION >			Unit: mm (in
Section	Item	Measurement	Standard	Parallelism (MAX)	Right/Left Difference (MAX)
	Е	Clearance	4.0 \pm 1.0 (0.16 \pm 0.04)	1.5 (0.06)	2.0 (0.08)
A – A	F	Surface height	-0.5 \pm 1.0 (-0.02 \pm 0.04)	1.5 (0.06)	2.0 (0.08)
	G	Clearance	$4.0 \pm 1.5 \; (0.16 \pm 0.06)$	1.5 (0.06)	2.0 (0.08)
B – B	Н	Surface height	-0.5 \pm 1.5 (-0.02 \pm 0.06)	1.5 (0.06)	2.0 (0.08)
C – C	J	Clearance	$4.0 \pm 1.5 \ \textbf{(0.16} \pm \textbf{0.06)}$	_	2.0 (0.08)
D – D	K	Clearance	7.0 \pm 2.0 (0.28 \pm 0.08)	2.0 (0.08)	_
unk Lid Re Check tl feel. Loosen Move th Tighten unk Lid Hin Remove Loosen Move th Tighten Install th URFACE Loosen Loosen Lift up th firmly wi	moved F he clear the trunk the trunk the trunk e the par the hing the hing he parce HEIGH the burr the strik he trunk the trunk	k lid to hinge bolts. lid so that the cleara k lid to hinge bolts. loved From Vehicle rcel shelf trim. Refer ge to parcel shelf bo lid so that the cleara ge to parcel shelf bo el shelf trim. Refer to T ADJUSTMENT hper rubber. ter bolts. lid approx. 100 - 15 unk lid closed. k lid striker bolts.	ance measurements are with	nin specifications. Installation - Rear Parcel S nin specifications.	Shelf Finisher". elf Finisher".
RUNK L	ID LO	CK : Removal a	and Installation		INFOID:00000000763132
Remove Disconn	e the trui lect the	nk lid lock bolts.	to <u>INT-31, "Removal and In</u> rgency release handle, and		
	s in the trunk lic		noval. <u>K-466, "TRUNK LID ASSEI</u>	<u> MBLY : Adjustment"</u> .	
RUNK L	ID ST	RIKER : Remov	al and Installation		INFOID:00000000763133
			er to <u>INT-31, "Removal and</u> release cable and remove t		

INSTALLATION Revision: February 2013

DLK-467

< REMOVAL AND INSTALLATION >

Installation is in the reverse order of removal.
Adjust the trunk lid striker. Refer to <u>DLK-466, "TRUNK LID ASSEMBLY : Adjustment"</u>.

FUEL FILLER LID OPENER

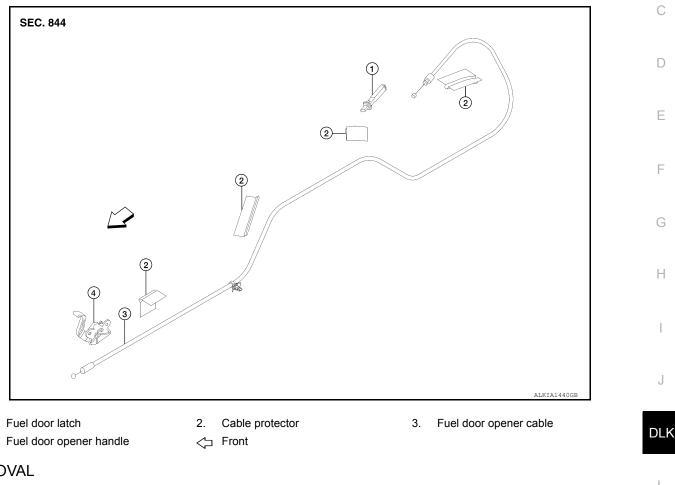
< REMOVAL AND INSTALLATION >

FUEL FILLER LID OPENER

FUEL FILLER OPENER

FUEL FILLER OPENER : Removal and Installation

COMPONENTS



REMOVAL

1.

4.

- 1. Remove the front and rear LH kicking plates. Refer to INT-18, "Removal and Installation".
- 2. Remove the rear seat. Refer to SE-73, "Removal and Installation".
- Remove the LH front seat belt anchor. Refer to <u>SB-8, "Removal and Installation"</u>.
- Remove the LH center pillar lower finisher. Refer to <u>INT-17, "Exploded View"</u>. 5. Position the carpet aside.
- Remove the LH trunk side finisher. Refer to <u>INT-31, "Removal and Installation"</u>.
- 7. Remove the fuel door opener handle and disconnect the fuel door opener cable.
- 8. Remove the fuel door latch and disconnect the fuel door opener cable.
- 9. Remove the fuel door opener cable.

INSTALLATION

Installation is in the reverse order of removal.

INFOID:000000007421359

А

В

D

Е

F

Н

L

Μ

Ν

Ο

REMOTE KEYLESS ENTRY RECEIVER

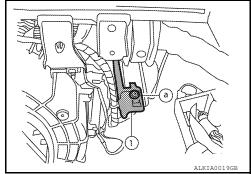
< REMOVAL AND INSTALLATION >

REMOTE KEYLESS ENTRY RECEIVER

Removal

REMOVAL

- 1. Remove glove box assembly. Refer to IP-19, "Removal and Installation".
- 2. Remove the screw (a), lower the bracket and remote keyless entry receiver (1).
- 3. Disconnect the harness and connector and remove the remote keyless entry receiver (1).



INFOID:000000007421361

Installation

Installation is in the reverse order of removal.

[SEDAN]

INFOID:000000007421360