CONTENTS

SECTION

BASIC INSPECTION7
DIAGNOSIS AND REPAIR WORK FLOW7 Work Flow7
INSPECTION AND ADJUSTMENT10
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT
SYSTEM DESCRIPTION11
POWER DOOR LOCK SYSTEM 11 System Diagram 11 System Description 11 Component Parts Location 14 Component Description 15
INTELLIGENT KEY SYSTEM16
INTELLIGENT KEY SYSTEM 16 INTELLIGENT KEY SYSTEM : System Diagram16 INTELLIGENT KEY SYSTEM : System Description 16 INTELLIGENT KEY SYSTEM : System Description 16 INTELLIGENT KEY SYSTEM : System Description 16 INTELLIGENT KEY SYSTEM : System Description 18 INTELLIGENT KEY SYSTEM : Component Description 20
DOOR LOCK FUNCTION20DOOR LOCK FUNCTION : System Diagram21DOOR LOCK FUNCTION : System Description21DOOR LOCK FUNCTION :24DOOR LOCK FUNCTION :24DOOR LOCK FUNCTION :26
TRUNK OPEN FUNCTION 26 TRUNK OPEN FUNCTION : System Diagram 26

TRUNK OPEN FUNCTION : System Description26 TRUNK OPEN FUNCTION :	F
Component Parts Location28 TRUNK OPEN FUNCTION : Component Description	G
REMOTE KEYLESS ENTRY FUNCTION	
REMOTE KEYLESS ENTRY FUNCTION : Sys-	Н
tem Diagram30	
REMOTE KEYLESS ENTRY FUNCTION : Sys- tem Description	
REMOTE KEYLESS ENTRY FUNCTION :	
Component Parts Location34	
REMOTE KEYLESS ENTRY FUNCTION :	J
Component Description	
KEY REMINDER FUNCTION	
KEY REMINDER FUNCTION : System Diagram36 KEY REMINDER FUNCTION : System Descrip-	DLł
tion	
KEY REMINDER FUNCTION :	L
Component Parts Location	
WARNING FUNCTION	
WARNING FUNCTION : System Description40 WARNING FUNCTION :	M
Component Parts Location	
TRUNK OPEN FUNCTION47	Ν
System Diagram47	
System Description47	
Component Parts Location	0
INTEGRATED HOMELINK TRANSMITTER49 Component Description49	Ρ
DIAGNOSIS SYSTEM (BCM)50	
COMMON ITEM50	
COMMON ITEM : CONSULT-III Function (BCM -	
COMMON ITEM)50	

DOOR & LOCK o

А

D

Е

DOOR LOCK
INTELLIGENT KEY
TRUNK
DTC/CIRCUIT DIAGNOSIS 57
U1000 CAN COMM CIRCUIT
U1010 CONTROL UNIT (CAN)
B2621 INSIDE ANTENNA59Description59DTC Logic59Diagnosis Procedure59
B2622 INSIDE ANTENNA61Description61DTC Logic61Diagnosis Procedure61
B2623 INSIDE ANTENNA63Description63DTC Logic63Diagnosis Procedure63
POWER SUPPLY AND GROUND CIRCUIT 65
BCM (BODY CONTROL MODULE)
DOOR SWITCH 66Description66Component Function Check66Diagnosis Procedure66Component Inspection68
DOOR LOCK AND UNLOCK SWITCH69
DRIVER SIDE69DRIVER SIDE : Description69DRIVER SIDE : Component Function Check69DRIVER SIDE : Diagnosis Procedure69
PASSENGER SIDE 69 PASSENGER SIDE : Description 69 PASSENGER SIDE : 69 Component Function Check 69 PASSENGER SIDE : Diagnosis Procedure 69

DOOR LOCK ACTUATOR71
DRIVER SIDE 71 DRIVER SIDE : Description 71 DRIVER SIDE : Component Function Check 71 DRIVER SIDE : Diagnosis Procedure 71
PASSENGER SIDE 71 PASSENGER SIDE : Description 72 PASSENGER SIDE : 72 Component Function Check 72 PASSENGER SIDE : Diagnosis Procedure 72
REAR LH72REAR LH : Description72REAR LH : Component Function Check73REAR LH : Diagnosis Procedure73
REAR RH73REAR RH : Description73REAR RH : Component Function Check73REAR RH : Diagnosis Procedure74
FUEL LID LOCK ACTUATOR75Description75Component Function Check75Diagnosis Procedure75
TRUNK LID OPENER ACTUATOR 76Description76Component Function Check76Diagnosis Procedure76
TRUNK ROOM LAMP SWITCH 78Description78Component Function Check78Diagnosis Procedure78Component Inspection79
DOOR KEY CYLINDER SWITCH80Description80Component Function Check80Diagnosis Procedure80Component Inspection81
REMOTE KEYLESS ENTRY RECEIVER82Description82Component Function Check82Diagnosis Procedure82
TRUNK LID OPENER SWITCH 85Description85Component Function Check85Diagnosis Procedure85Component Inspection86
TRUNK LID OPENER REQUEST SWITCH 87Description

TRUNK LID OPENER CANCEL SWITCH	, ,
Description	
Component Function Check	
Diagnosis Procedure	
Component Inspection90	
DOOR REQUEST SWITCH91	
Description	
Component Function Check	
Diagnosis Procedure91 Component Inspection92	
	-
UNLOCK SENSOR93	3
Description93	
Component Function Check93	
Diagnosis Procedure93	
Component Inspection94	ŀ
OUTSIDE KEY ANTENNA95	5
Description	
Component Function Check	
Diagnosis Procedure95	
-	
INTELLIGENT KEY WARNING BUZZER	
Description	3
Component Function Check	
Diagnosis Procedure	
	,
INTELLIGENT KEY100	
Description100)
Component Function Check100	
Diagnosis Procedure 100	
Component Inspection100	
Special Repair Requirement101	
KEY SLOT	2
Description	
Component Function Check 102	
Diagnosis Procedure 102	
Component Inspection103	3
KEY SLOT INDICATOR104 Description	
Component Function Check	
Diagnosis Procedure	
Component Inspection	
HORN FUNCTION106	
Description	
Component Function Check	
Diagnosis Procedure106	;
COMBINATION METER DISPLAY FUNC-	
TION	3
Description	
Component Function Check 108	
Diagnosis Procedure108	
BUZZER (COMBINATION METER) 109	
Description109	1

Component Function Check1 Diagnosis Procedure1	
KEY WARNING LAMP 1	
Description1 Component Function Check1	10 ^B
Diagnosis Procedure1 HAZARD FUNCTION1	
Description1 Component Function Check	11
Diagnosis Procedure1	11 D
INTEGRATED HOMELINK TRANSMITTER1 Description	12 12 ⊟
Diagnosis Procedure	
POWER DOOR LOCK SYSTEM 1 Wiring Diagram - POWER DOOR LOCK SYSTEM -	F
INTELLIGENT KEY SYSTEM1 Wiring Diagram - INTELLIGENT KEY SYSTEM1	0
TRUNK LID OPENER1 Wiring Diagram - TRUNK LID OPENER1	
INTEGRATED HOMELINK TRANSMITTER	
SYSTEM1 Wiring Diagram - INTEGRATED HOMELINK TRANSMITTER SYSTEM1	
ECU DIAGNOSIS INFORMATION1	45 J
BCM (BODY CONTROL MODULE) 1	
Reference Value1 Wiring Diagram - BCM1	
Fail-safe1 DTC Inspection Priority Chart1 DTC Index1	175 177
SYMPTOM DIAGNOSIS	
DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH	Μ
ALL DOOR1	
ALL DOOR : Description1 ALL DOOR : Diagnosis Procedure1	81
DRIVER SIDE1 DRIVER SIDE : Description1 DRIVER SIDE : Diagnosis Procedure1	81 81
PASSENGER SIDE	
PASSENGER SIDE : Description1 PASSENGER SIDE : Diagnosis Procedure1	
REAR LH1 REAR LH : Description1	
REAR LH : Diagnosis Procedure1	

REAR RH	182
REAR RH : Diagnosis Procedure DOOR DOES NOT LOCK/UNLOCK WITH	182
DOOR KEY CYLINDER OPERATION	101
Description	
Diagnosis Procedure	
DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH	185
ALL DOOR	
ALL DOOR : Description ALL DOOR : Diagnosis Procedure	
DRIVER SIDE	185
DRIVER SIDE : Description	
DRIVER SIDE : Diagnosis Procedure	185
PASSENGER SIDE	
PASSENGER SIDE : Description	
PASSENGER SIDE : Diagnosis Procedure	186
DOOR DOES NOT LOCK/UNLOCK WITH I	
TELLIGENT KEY	
Description	
Diagnosis Procedure	187
TRUNK LID DOES NOT OPEN WITH TRUN LID OPENER SWITCH	
Description	
Diagnosis Procedure	188
TRUNK LID DOES NOT OPEN WITH INTEL	
LIGENT KEY	189
Description	
Diagnosis Procedure	189
TRUNK LID DOES NOT OPEN WITH TRUN LID OPENER REQUEST SWITCH	
Description	
Diagnosis Procedure	
SELECTIVE UNLOCK FUNCTION DOES	
NOT OPERATE	191
DOOR REQUEST SWITCH	191
DOOR REQUEST SWITCH : Description	
DOOR REQUEST SWITCH : Diagnosis Proce- dure	
INTELLIGENT KEY : Description	
INTELLIGENT KEY : Description INTELLIGENT KEY : Diagnosis Procedure	
-	
DOOR KEY CYLINDER	
DOOR KEY CYLINDER : Description	
DOOR KEY CYLINDER : Diagnosis Procedure	192
VEHICLE SPEED SENSING AUTO LOCK	

OPERATION DOES NOT OPERATE 193

Description
Diagnosis Procedure 193
IGN OFF INTERLOCK DOOR UNLOCK
FUNCTION DOES NOT OPERATE194
Description
Diagnosis Procedure 194
P RANGE INTERLOCK DOOR LOCK/UN- LOCK FUNCTION DOES NOT OPERATE195
Description
AUTO DOOR LOCK OPERATION DOES NOT
OPERATE196
Description 196
Diagnosis Procedure 196
FUEL LID LOCK ACTUATOR DOES NOT OP- ERATE
Description
Diagnosis Procedure
PANIC ALARM FUNCTION DOES NOT OP-
ERATE
Description
Diagnosis Procedure 198
HAZARD AND HORN REMINDER DOES
NOT OPERATE199
Description
Diagnosis Procedure 199
HAZARD AND BUZZER REMINDER DOES
NOT OPERATE200
Description
Description
Diagnosis Procedure
Diagnosis Procedure 200
Diagnosis Procedure
Diagnosis Procedure
Diagnosis Procedure
Diagnosis Procedure
Diagnosis Procedure 200 KEY REMINDER FUNCTION DOES NOT OP- ERATE 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM : Description 201 INTELLIGENT KEY SYSTEM : Diagnosis Proce- dure 201
Diagnosis Procedure
Diagnosis Procedure 200 KEY REMINDER FUNCTION DOES NOT OP- ERATE 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM : Description 201 INTELLIGENT KEY SYSTEM : Diagnosis Proce- dure 201 POWER DOOR LOCK SYSTEM 201 POWER DOOR LOCK SYSTEM : Description 201 POWER DOOR LOCK SYSTEM : Description 201
Diagnosis Procedure
Diagnosis Procedure 200 KEY REMINDER FUNCTION DOES NOT OP- ERATE 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM : Description 201 INTELLIGENT KEY SYSTEM : Diagnosis Proce- dure 201 POWER DOOR LOCK SYSTEM 202
Diagnosis Procedure 200 KEY REMINDER FUNCTION DOES NOT OP- ERATE 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM Diagnosis Proce- dure 201 POWER DOOR LOCK SYSTEM POWER DOOR LOCK SYSTEM Description POWER DOOR LOCK SYSTEM 201 POWER DOOR LOCK SYSTEM Description 202 POWER DOOR LOCK SYSTEM POWER DOOR LOCK SYSTEM Diagnosis Pro- cedure 202 202
Diagnosis Procedure 200 KEY REMINDER FUNCTION DOES NOT OP- ERATE 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 POWER DOOR LOCK SYSTEM 201 POWER DOOR LOCK SYSTEM 201 POWER DOOR LOCK SYSTEM 202 POWER DOOR LOCK SYSTEM 203 Description 203
Diagnosis Procedure 200 KEY REMINDER FUNCTION DOES NOT OP- ERATE 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 POWER DOOR LOCK SYSTEM 201 POWER DOOR LOCK SYSTEM 201 POWER DOOR LOCK SYSTEM 202 Description 203 Diagnosis Procedure 203
Diagnosis Procedure 200 KEY REMINDER FUNCTION DOES NOT OP- ERATE 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 POWER DOOR LOCK SYSTEM 202 OFF POSITION WARNING DOES NOT OPERATE 203 OFF POSITION WARNING DOES NOT OP- 203
Diagnosis Procedure 200 KEY REMINDER FUNCTION DOES NOT OP- ERATE 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM : Description 201 INTELLIGENT KEY SYSTEM : Diagnosis Proce- dure 201 POWER DOOR LOCK SYSTEM 202 POWER DOOR LOCK SYSTEM 202 POWER DOOR LOCK SYSTEM : Diagnosis Pro- cedure 202 KEY WARNING DOES NOT OPERATE 203 Description 203 Diagnosis Procedure 203 OFF POSITION WARNING DOES NOT OP- ERATE 204
Diagnosis Procedure 200 KEY REMINDER FUNCTION DOES NOT OP- ERATE 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 INTELLIGENT KEY SYSTEM 201 POWER DOOR LOCK SYSTEM 202 OFF POSITION WARNING DOES NOT OPERATE 203 OFF POSITION WARNING DOES NOT OP- 203

P POSITION WARNING DOES NOT OPER-	
ATE	
Diagnosis Procedure	05
ACC WARNING DOES NOT OPERATE	07
Description	
Diagnosis Procedure20	07
TAKE AWAY WARNING DOES NOT OPER- ATE	08
Description	
Diagnosis Procedure2	80
INTELLIGENT KEY LOW BATTERY WARN-	
ING DOES NOT OPERATE2	
Description2 Diagnosis Procedure2	
DOOR LOCK OPERATION WARNING DOES	
NOT OPERATE	11
Description	
Diagnosis Procedure2	
KEY ID WARNING DOES NOT OPERATE 2	
Description2 Diagnosis Procedure2	
KEY WARNING LAMP DOES NOT ILLUMI-	
NATE2	13
Description	
Diagnosis Procedure2	13
INTEGRATED HOMELINK TRANSMITTER	
DOES NOT OPERATE	
C C	14
SQUEAK AND RATTLE TROUBLE DIAG- NOSES2	15
Work Flow	
Inspection Procedure2	
Diagnostic Worksheet2	
PRECAUTION2	21
PRECAUTIONS2	21
Precaution for Supplemental Restraint System	
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN- SIONER"	21
Precautions Necessary for Steering Wheel Rota-	
tion After Battery Disconnection2 Precaution for Procedure without Cowl Top Cover. 2	
Work	
PREPARATION2	23
PREPARATION2	23
Special Service Tools2	23
Commercial Service Tools	23
REMOVAL AND INSTALLATION	24

HOOD	
HOOD ASSEMBLY HOOD ASSEMBLY : Exploded View	224
HOOD ASSEMBLY : Removal and Installation HOOD ASSEMBLY : Adjustment HOOD ASSEMBLY : Disposal	225 ^B
HOOD LOCK CONTROL HOOD LOCK CONTROL : Exploded View HOOD LOCK CONTROL : Removal and Installa-	227
tion HOOD LOCK CONTROL : Inspection	
RADIATOR CORE SUPPORT Exploded View Removal and Installation	230 🛛
FRONT FENDER Exploded View Removal and Installation	233 F
DOOR	234 G
FRONT DOOR FRONT DOOR : Exploded View FRONT DOOR : Removal and Installation FRONT DOOR : Adjustment	234 234 H
REAR DOOR REAR DOOR : Exploded View REAR DOOR : Removal and Installation REAR DOOR : Adjustment	236 237 237
DOOR LOCK	ປ 240
FRONT DOOR LOCK FRONT DOOR LOCK : Exploded View FRONT DOOR LOCK : Removal and Installation	240 DLK
REAR DOOR LOCK REAR DOOR LOCK : Exploded View REAR DOOR LOCK : Removal and Installation	
TRUNK LID	246 M
TRUNK LID ASSEMBLY TRUNK LID ASSEMBLY : Exploded View TRUNK LID ASSEMBLY : Removal and Installa-	246 N
tion TRUNK LID ASSEMBLY : Adjustment TRUNK LID ASSEMBLY : Disposal	247
TRUNK LID LOCK TRUNK LID LOCK : Exploded View TRUNK LID LOCK : Removal and Installation	249
TRUNK LID WEATHERSTRIP TRUNK LID WEATHERSTRIP : Exploded View TRUNK LID WEATHERSTRIP : Removal and In- stallation	250
FUEL FILLER LID OPENER	

Exploded View
Removal and Installation251
DOOR SWITCH 252
Removal and Installation252
INSIDE KEY ANTENNA 253
INSTRUMENT CENTER253
INSTRUMENT CENTER : Exploded View253 INSTRUMENT CENTER : Removal and Installa-
tion253
CONSOLE253
CONSOLE : Exploded View
CONSOLE : Removal and Installation253
TRUNK ROOM253
TRUNK ROOM : Exploded View
TRUNK ROOM : Removal and Installation254
OUTSIDE KEY ANTENNA 255
DRIVER SIDE255
DRIVER SIDE : Exploded View255
DRIVER SIDE : Removal and Installation255
PASSENGER SIDE255
PASSENGER SIDE : Exploded View255
PASSENGER SIDE : Removal and Installation255

REAR BUMPER 255 REAR BUMPER : Exploded View 255 REAR BUMPER : Removal and Installation 255
INTELLIGENT KEY WARNING BUZZER256 Exploded View
KEY SLOT257Exploded View257Removal and Installation257
TRUNK OPENER REQUEST SWITCH
TRUNK LID OPENER SWITCH259Exploded View259Removal and Installation259
TRUNK LID OPENER CANCEL SWITCH 260 Exploded View 260 Removal and Installation 260
REMOTE KEYLESS ENTRY RECEIVER

< BASIC INSPECTION >

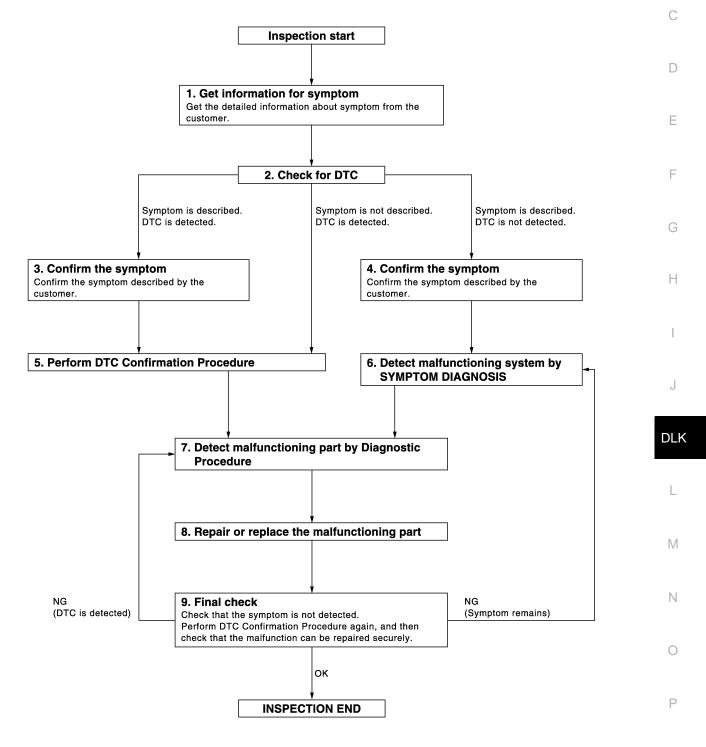
BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000006208698 B

А

OVERALL SEQUENCE



DETAILED FLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK FOR DTC

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

Are any symptoms described or any DTC detected?

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

3.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

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

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.

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

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again. At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time. If two or more DTCs are detected, refer to <u>BCS-75</u>, "<u>DTC Inspection Priority Chart</u>" (BCM) determine trouble diagnosis order.

NOTE:

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

Is DTC detected?

YES >> GO TO 7.

NO >> Refer to <u>GI-43</u>, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

>> GO TO 7.

1.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system. **NOTE:**

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

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >	
Is malfunctioning part detected?	
YES >> GO TO 8. NO >> Check voltage of related BCM terminals using CONSULT-III.	А
8. REPAIR OR REPLACE THE MALFUNCTIONING PART	
	В
 Repair or replace the malfunctioning part. Reconnect parts or connectors disconnected during Diagnostic Procedure again after repair and replacement. 	
3. Check for DTC. If DTC is displayed, erase it.	С
>> GO TO 9.	D
9.FINAL CHECK	
When DTC is detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction is completely repaired. When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.	Е
Does the symptom reappear?	F
YES (DTC is detected)>>GO TO 7. YES (Symptom remains)>>GO TO 6. NO >> INSPECTION END	1
	G
	Н

J

L

M

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:000000006208699

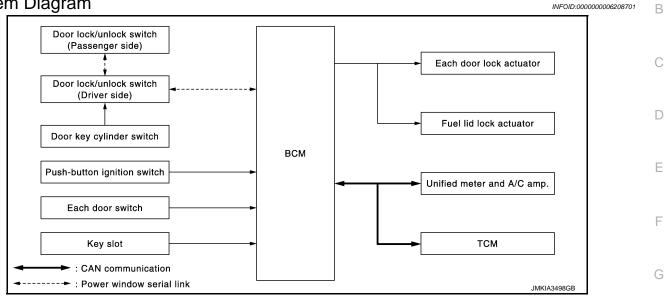
Perform the system initialization when replacing BCM, replacing Intelligent Key or registering an additional Intelligent Key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

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

SYSTEM DESCRIPTION > SYSTEM DESCRIPTION POWER DOOR LOCK SYSTEM

System Diagram



System Description

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

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

Door Key Cylinder Switch

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

Selective unlock operation mode can be changed using "DOOR LOCK-UNLOCK SET" mode in "WORK SUP- M PORT". Refer to <u>DLK-51, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u>.

KEY REMINDER FUNCTION

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

DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Driver side key cylinder LOCK/UNLOCK operation can activate driver side and passenger side power window UP/DOWN operation. Refer to <u>PWC-9</u>, "System Description".

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock*1

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

DLK-11

INFOID:000000006208702

Н

J

DLK

Ρ

А

POWER DOOR LOCK SYSTEM

< SYSTEM DESCRIPTION >

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

P Range Interlock Door Lock*²

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

position other than P.

Setting change of Automatic Door Lock/Unlock Function

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

NOTE:

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

(I) With CONSULT-III

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

Without CONSULT- III

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

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

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock*1

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

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

P Range Interlock Door Unlock*2

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

Setting change of Automatic Door Lock/Unlock Function

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

NOTE:

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

(I) With CONSULT- III

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

Without CONSULT- III

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

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

$OFF \rightarrow ON$ $ON \rightarrow OFF$: 2 blinks : 1 blink	А
	s set to ON before delivery. does not operate on M/T models.	В
		С
		D

J

DLK

L

Μ

Ν

Ο

Ρ

Е

F

G

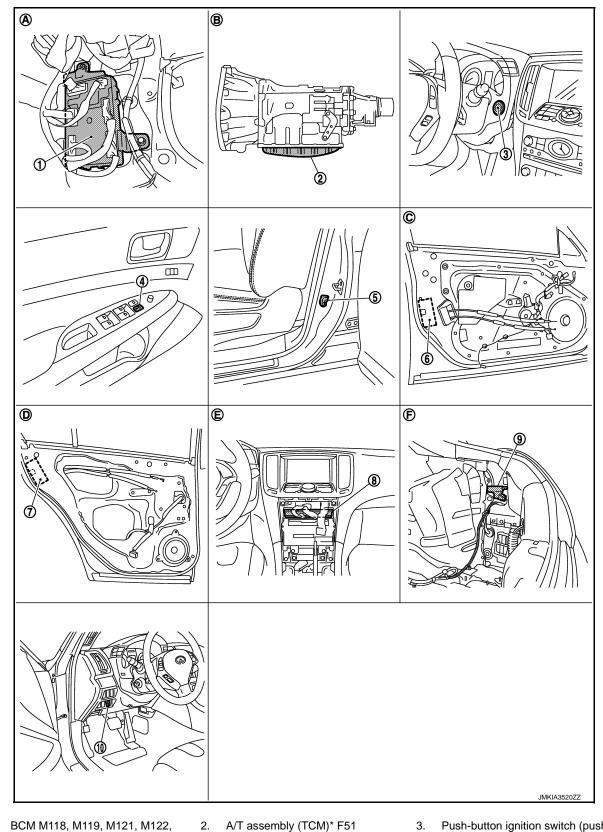
Н

POWER DOOR LOCK SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000006208703



- 1. BCM M118, M119, M121, M122, M123
- 4. Power window main switch 5. (door lock and unlock switch) D8, D9
- 7. Rear door lock assembly LH D55
- Front door switch (driver side) B16
- Unified meter and A/C amp. M67

8.

- 3. Push-button ignition switch (push switch) M50
- 6. Front door lock assembly (driver side) D15
- 9. Fuel lid lock actuator B242

POWER DOOR LOCK SYSTEM

< SYSTEM DESCRIPTION >

- 10. Key slot M22
- A. Dash side lower (passenger side)
- D. View with rear door finisher LH removed
- B. A/T assembly (TCM is built in A/T as- C. sembly)

F.

- E. View with cluster lid C removed
- View with driver side door finisher removed View with trunk side finisher removed B

*:With A/T models

Component Description

INFOID:000000006208704

Item	Function	
BCM	Controls the door lock function.	
Door lock and unlock switch	Inputs lock or unlock signal to BCM.	
Door lock actuator	Outputs lock/unlock signal from BCM and locks/unlocks each door.	
Door key cylinder switch	Built-in driver side door lock assemblyInputs lock or unlock signal to power window main switch.Power window main switch trasmits door lock/unlock signal to BCM.	
Door switch	Inputs door open/close condition to BCM.	
Key slot	Inputs key insert/remove signal to BCM.	
Unified meter and A/C amp.	Transmits vehicle speed signal to CAN communication line.	
ТСМ	Transmits shift position signal to BCM via CAN communication line.	
Fuel lid lock actuator	Performs lock/unlock of the fuel lid.	
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM.	

J

DLK

L

Μ

Ν

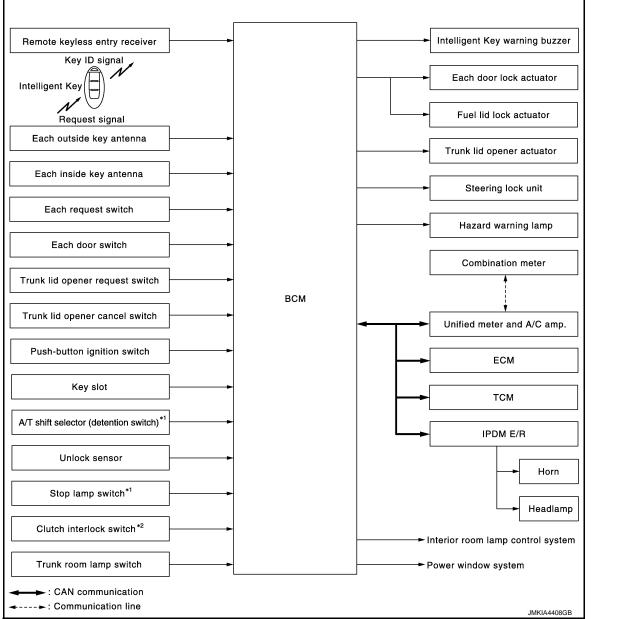
Ο

Ρ

< SYSTEM DESCRIPTION >

INTELLIGENT KEY SYSTEM INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram



*¹: With A/T models

*²: With M/T models

INTELLIGENT KEY SYSTEM : System Description

INFOID:000000006208706

INFOID-000000006208705

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

The driver should always carry the Intelligent Key

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

< SYSTEM DESCRIPTION >

Function	Description	Refer
Door lock function	Lock/unlock can be performed by pressing the request switch.	<u>DLK-21</u>
Remote keyless entry func- tion	Lock/unlock can be performed by pressing the remote controller button of the In- telligent Key.	DLK-30
Trunk open function	The trunk lid can be opened by carrying the Intelligent Key and pressing the trunk lid opener request switch.	DLK-26
Key reminder function	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle.	DLK-36
Warning function	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver.	<u>DLK-40</u>
Engine start function	The engine can be turned on while carrying the Intelligent Key.	SEC-9

Е

F

G

Н

J

DLK

L

Μ

Ν

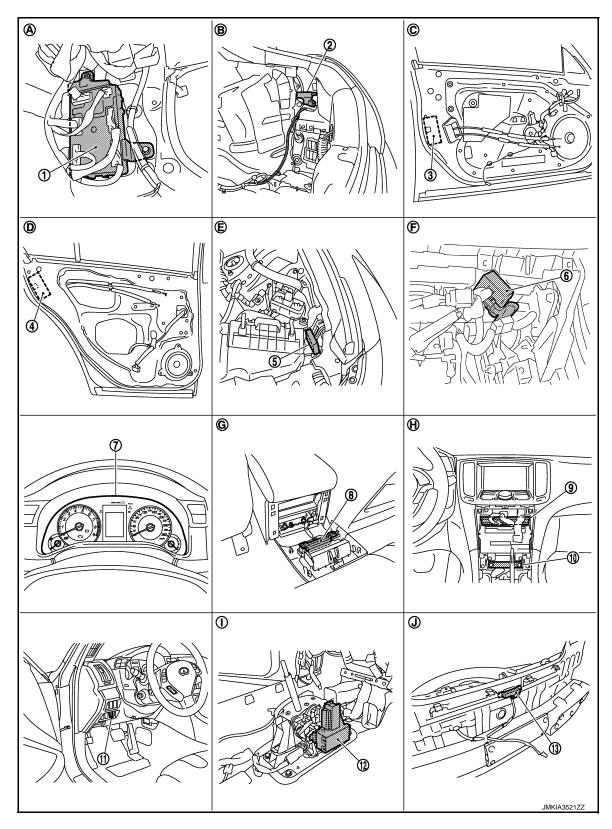
Ο

Ρ

< SYSTEM DESCRIPTION >

INTELLIGENT KEY SYSTEM : Component Parts Location

INFOID:000000006208707



- 1. BCM M118, M119, M120, M121, M122, M123
- 4. Rear door lock assembly LH D55
- 7. Combination meter M53
- 2. Fuel lid lock actuator B242
- 5. Intelligent Key warning buzzer E57
- 8. Inside key antenna (console) M146
- 3. Front door lock assembly (driver side) D15

6.

- Remote keyless entry receiver M104
- 9. Unified meter and A/C amp. M66, M67

< SYSTEM DESCRIPTION >

10. Inside key antenna (instrument cen- 11. Key slot M22 ter) M131

Β.

- 13. Outside key antenna (rear bumper) B63
- Α. Dash side lower (passenger side)
- D. View with rear door finisher LH removed
- G. View with console rear finisher removed
- View with rear bumper removed J.
- *: With A/T models

- View with trunk side finisher re-
- moved Ε. View with hood seal assembly removed
- Η. View with cluster lid C removed
- 12. A/T shift selector (detention switch)* M137
- View with driver side door finisher re-C. moved
- F. Engine room dash panel
- I. View with center console assembly removed

D

Ε

F

Н

J

DLK

L

Μ

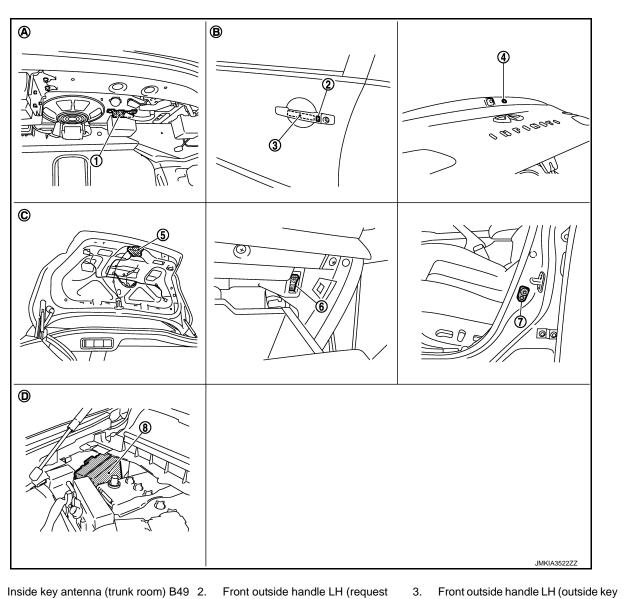
Ν

Ρ

А

В

С



- Trunk lid opener request switch 4. B304
- 7. Front door switch (driver side) B16
- Α. View with trunk front finisher removed
- D. Engine room dash panel (RH)
- switch) D13
- Trunk lid lock assembly B303 5.
- 8. IPDM E/R E5, E6
- Β. View with driver side door
- antenna) D14
- Trunk lid opener cancel switch M105 6.

C. View with trunk lid finisher removed

1.

< SYSTEM DESCRIPTION >

INTELLIGENT KEY SYSTEM : Component Description

INFOID:000000006208708

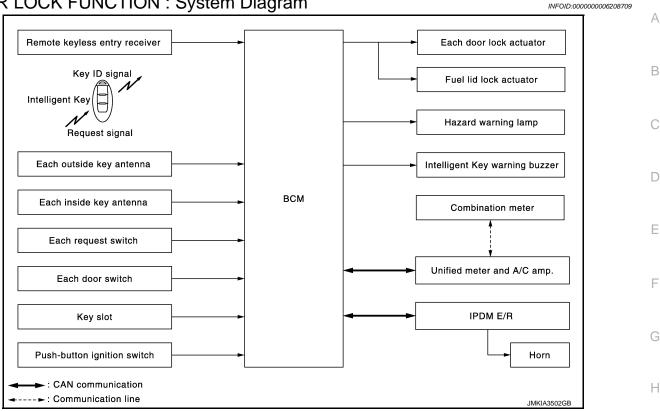
Item	Function
BCM	Controls the Intelligent Key system.
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM.
Door lock actuator	Outputs lock/unlock signal from BCM and locks/unlocks each door.
Fuel lid lock actuator	Performs lock/unlock of the fuel lid.
Door switch	Inputs door open/close condition to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Request switch	Inputs lock/unlock operation to BCM.
Key slot	Inputs key insert/remove signal to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna	Detects if Intelligent Key is outside the vehicle.
Inside key antenna	Detects if Intelligent Key is inside the vehicle.
Unlock sensor	Detects door lock condition of driver door.
A/T shift selector (detention switch)*	Detects the P range position of A/T selector lever.
Unified meter and A/C amp.	Transmits vehicle seep signal to CAN communication line.
Combination meter	Display, buzzer (combination meter) and KEY warning lamp are installed to combination meter.
Trunk lid opener actuator	Transmits trunk open operation to BCM.
Trunk lid opener request switch	Inputs lock/unlock operation to BCM.
Trunk lid opener cancel switch	Cancels the trunk open operation.
Trunk room lamp switch	Inputs trunk lid open/close condition to BCM.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.
Hazard warning lamp	Warns the user of the door and trunk lid open/close condition and inappropriate operations with the lamps blink.
TCM*	Transmits shift position signal to BCM via CAN communication line.
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM.

*: With A/T models

DOOR LOCK FUNCTION



DOOR LOCK FUNCTION : System Diagram



DOOR LOCK FUNCTION : System Description

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

OPERATION DESCRIPTION

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

OPERATION CONDITION

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

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

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

OUTSIDE KEY ANTENNA DETECTION AREA

DLK-21

J

INFOID:000000006208710

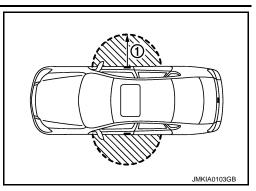
NI

Μ

L

< SYSTEM DESCRIPTION >

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



SELECTIVE UNLOCK FUNCTION

Lock Operation

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

Unlock Operation

- When an UNLOCK signal from driver side door request switch is transmitted, driver side door and fuel lid unlocks. When another UNLOCK signal is transmitted within 60 seconds, passenger side door unlock.
- When an UNLOCK signal from passenger side door request switch is transmitted, passenger side door unlock. When another UNLOCK signal is transmitted within 60 seconds, driver side door and fuel lid unlocks.

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-III Function (BCM - DOOR LOCK)"</u>.

HAZARD AND BUZZER REMINDER FUNCTION

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

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

Operating Function of Hazard and Buzzer Reminder

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

Hazard and buzzer reminder does not operate if ignition switch ON position.

How to Change Hazard and Buzzer Reminder Mode

Refer to DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

AUTO DOOR LOCK FUNCTION

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

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

- Door switch is ON (door is opened)
- Door is locked
- Ignition switch is ON (ignition switch is pressed)

• Key switch is ON (Intelligent Key is inserted in key slot)

Auto door lock mode can be changed by "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-52.</u> "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

INTERIOR ROOM LAMP CONTROL

Intelligent Key system turns on interior lamp by receiving UNLOCK signal from door request switch. For detailed description. Refer to <u>INL-5, "System Description"</u>.

LIST OF OPERATION RELATED PARTS

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

< SYSTEM DESCRIPTION >

Door lock function	Intelligent Key	Key slot	Remote keyless entry receiver	Door switch	Door request switch	Door lock actuator and fuel lid lock actuator	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Push-button ignition switch	Combination meter	A B C
Door lock/unlock function by request switch	×	×	×	×	×	×	×	×			×				D
Hazard and buzzer reminder function for door lock/ unlock operation									×	×	×	×		×	
Selective unlock function by request switch	×				×	×	×	×			×				E
Auto door lock function	×	×		×	×	×					×		×		

J

F

G

Н

L

Μ

Ν

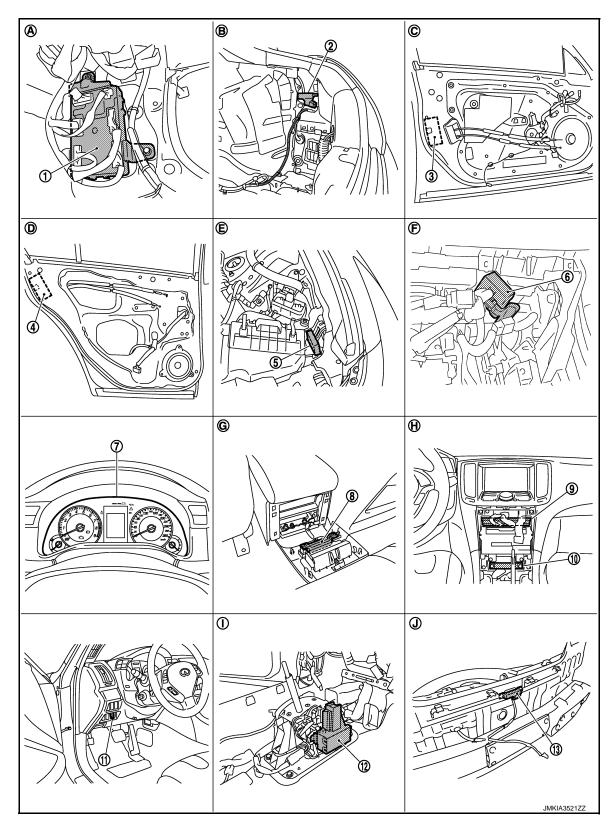
Ο

Ρ

< SYSTEM DESCRIPTION >

DOOR LOCK FUNCTION : Component Parts Location

INFOID:000000006208711



- 1. BCM M118, M119, M120, M121, M122, M123
- 4. Rear door lock assembly LH D55
- 7. Combination meter M53
- 2. Fuel lid lock actuator B242
- 5. Intelligent Key warning buzzer E57
- 8. Inside key antenna (console) M146
- 3. Front door lock assembly (driver side) D15

6.

- Remote keyless entry receiver M104
- 9. Unified meter and A/C amp. M66, M67

< SYSTEM DESCRIPTION >

10. Inside key antenna (instrument cen- 11. Key slot M22 ter) M131

Β.

- 13. Outside key antenna (rear bumper) B63
- Α. Dash side lower (passenger side)
- D. View with rear door finisher LH removed
- G. View with console rear finisher removed
- View with rear bumper removed J.
- *: With A/T models

- View with trunk side finisher re-
- moved Ε. View with hood seal assembly removed
- Η. View with cluster lid C removed
- 12. A/T shift selector (detention switch)* M137
- View with driver side door finisher re-C. moved
- F. Engine room dash panel
- I. View with center console assembly removed

D

Ε

F

Н

J

DLK

L

Μ

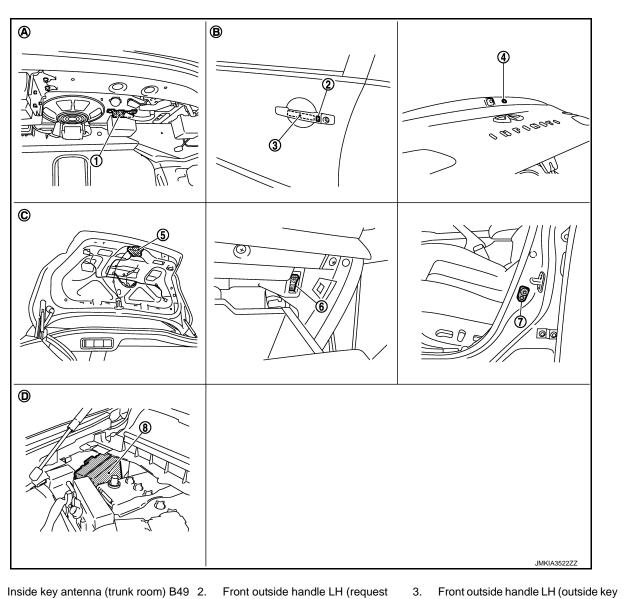
Ν

Ρ

А

В

С



- Trunk lid opener request switch 4. B304
- 7. Front door switch (driver side) B16
- Α. View with trunk front finisher removed
- D. Engine room dash panel (RH)
- switch) D13
- Trunk lid lock assembly B303 5.
- 8. IPDM E/R E5, E6
- Β. View with driver side door
- antenna) D14
- Trunk lid opener cancel switch M105 6.

C. View with trunk lid finisher removed

1.

< SYSTEM DESCRIPTION >

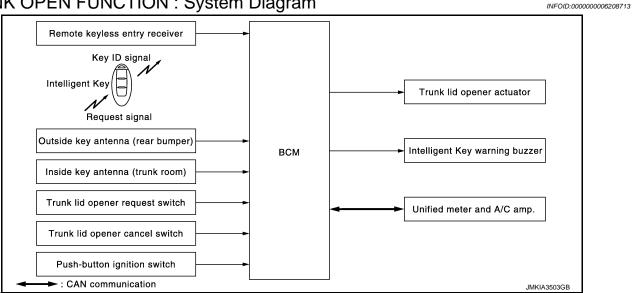
DOOR LOCK FUNCTION : Component Description

INFOID:000000006208712

ltem	Function
BCM	Controls the door lock function.
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM.
Door lock actuator	Outputs lock/unlock signal from BCM and locks/unlocks each door.
Door switch	Inputs door open/close condition to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Request switch	Inputs lock/unlock operation to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna	Detects if Intelligent Key is outside the vehicle.
Inside key antenna	Detects if Intelligent Key is inside the vehicle.
Fuel lid lock actuator	Outputs lock/unlock signal from BCM and lock/unlocks fuel filler lid.
Combination meter	Hazard warning lamp is installed to combination meter.
Unified meter and A/C amp.	Transmits hazard warning lamp signal to BCM via CAN communication line.
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM.
Key slot	Inputs key insert/remove signal to BCM.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.
Hazard warning lamp	Warns the user of the door lock/unlock condition and in appropriate operations with the lamps blink.

TRUNK OPEN FUNCTION

TRUNK OPEN FUNCTION : System Diagram



TRUNK OPEN FUNCTION : System Description

INFOID:000000006208714

TRUNK LID OPENER

- When the BCM detects that trunk lid opener request switch is pressed, it activates the outside key antenna (rear bumper) and inside key antenna and transmits the request signal to the Intelligent Key. And then, checks that the Intelligent Key is near the trunk lid.
- 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 transmits the trunk open request signal and sounds Intelligent Key warning buzzer 4 times at the same time (buzzer reminder). However, buzzer reminder does not operate when ignition switch is in the ON position.

< SYSTEM DESCRIPTION >

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

How to change buzzer reminder mode

(I) With CONSULT-III

Refer to DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

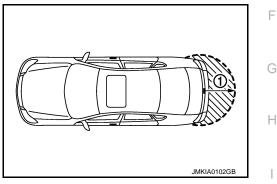
OPERATION CONDITION

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

Trunk lid opener request switch operation	Operation condition	
Trunk open operation	 Vehicle speed is less than 5 km/h (3 MPH) Intelligent Key is within outside key antenna (rear bumper) detection area Trunk cancel switch is ON 	D
	Key reminder functions operate (trunk)Vehicle security system is disarmed or in the per-armed phase.	E

OUTSIDE KEY ANTENNA DETECTION AREA

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



LIST OF OPERATION RELATED PARTS

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

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

DLK

L

А

В

С

F

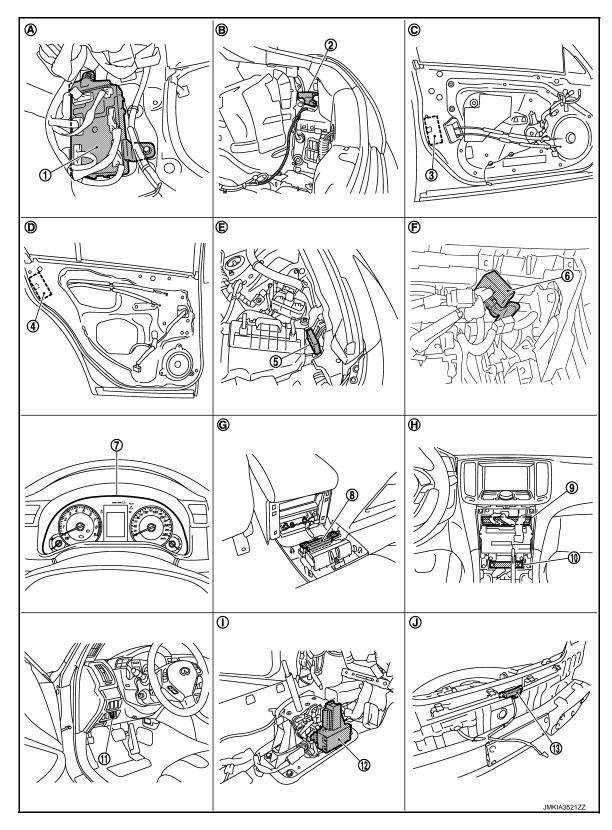
Ν

Ρ

< SYSTEM DESCRIPTION >

TRUNK OPEN FUNCTION : Component Parts Location

INFOID:000000006208715



- 1. BCM M118, M119, M120, M121, M122, M123
- 4. Rear door lock assembly LH D55
- 7. Combination meter M53
- 2. Fuel lid lock actuator B242
- 5. Intelligent Key warning buzzer E57 6.
- 8. Inside key antenna (console) M146
- 3. Front door lock assembly (driver side) D15
 - Remote keyless entry receiver M104
- 9. Unified meter and A/C amp. M66, M67

< SYSTEM DESCRIPTION >

10. Inside key antenna (instrument cen- 11. Key slot M22 ter) M131

Β.

- 13. Outside key antenna (rear bumper) B63
- Α. Dash side lower (passenger side)
- D. View with rear door finisher LH removed
- G. View with console rear finisher removed
- View with rear bumper removed J.
- *: With A/T models

- View with trunk side finisher re-
- moved Ε. View with hood seal assembly removed
- Η. View with cluster lid C removed
- 12. A/T shift selector (detention switch)* M137
- View with driver side door finisher re-C. moved
- F. Engine room dash panel
- I. View with center console assembly removed

D

Ε

F

Н

J

DLK

L

Μ

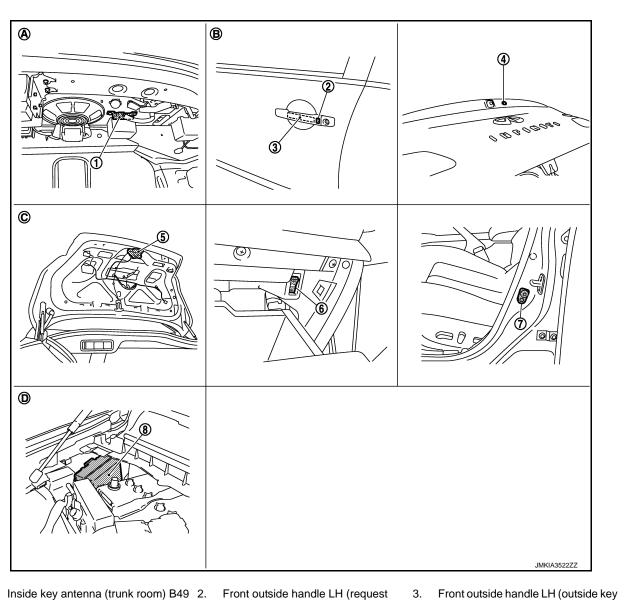
Ν

Ρ

А

В

С



- Trunk lid opener request switch 4. B304
- 7. Front door switch (driver side) B16
- Α. View with trunk front finisher removed
- D. Engine room dash panel (RH)
- switch) D13
- Trunk lid lock assembly B303 5.
- 8. IPDM E/R E5, E6
- Β. View with driver side door
- antenna) D14
- Trunk lid opener cancel switch M105 6.

C. View with trunk lid finisher removed

1.

< SYSTEM DESCRIPTION >

TRUNK OPEN FUNCTION : Component Description

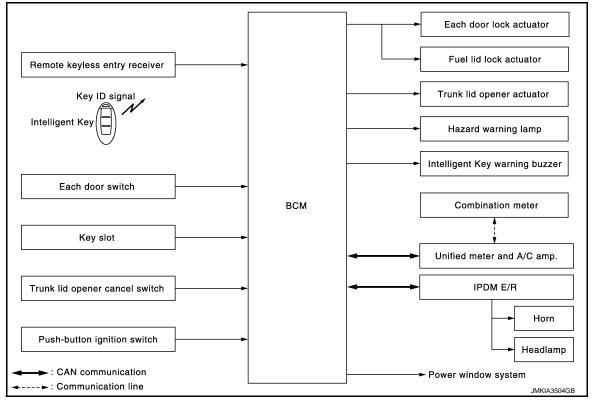
INFOID:000000006208716

Item	Function
BCM	Controls the trunk open function.
Trunk lid opener actuator	Transmits trunk open operation to BCM.
Unified meter and A/C amp.	Transmits vehicle seep signal to CAN communication line.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Trunk lid opener request switch	Inputs lock/unlock operation to BCM.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Outside key antenna (rear bumper)	Detects if Intelligent Key is outside the vehicle.
Inside key antenna (trunk room)	Detects if Intelligent Key is inside the vehicle.
Trunk lid opener cancel switch	Cancels the trunk open operation.
Intelligent Key warning buzzer	Warns the user of the open condition and inappropriate operations with the buzzer sound.
Push-button ignition switch	Inputs push-button ignition switch ON/OFF condition to BCM.

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Diagram

INFOID:000000006208717



REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:000000006208718

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

OPERATION

Remote keyless entry system controls operation of the following items.

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

Revision: 2011 November

< SYSTEM DESCRIPTION >

 Panic alarm Power window down Interior lamp 					
OPERATION AREA To check that the Intelligent ble range may differ accord	Key works normally, use within 1 m (3 ft) range of each do ing to surroundings.	oors, however the opera-	В		
Intelligent Key to BCM viaWhen BCM receives the optimized statement of the second sta	utton of the Intelligent Key is pressed, lock signal or unlock remote keyless entry receiver. door lock/unlock signal, it operates all door lock actuators	and fuel lid lock actuator	С		
 PDM E/R honks horn (lock) OPERATION CONDITION 	,	t at the same time as a	D		
Remote controller operation	Operation condition	Operation			
	operation condition	Operation			
Unlock	More than 3 seconds are passed since intelligent Key is removed from key slot.	All doors and fuel lid unlock	F		

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 J trunk.

OPERATION CONDITION

Remote controller operation	Operation condition	Operation	
Trunk open	 Press and hold the trunk open button for 0.5 second or more* Ignition switch is except the ON position Trunk lid opener cancel switch is ON Vehicle speed is less than 5 km/h (3 MPH) 	Trunk open	L

*: Pattern of trunk open button can be selected using CONSULT-III. Refer to <u>DLK-52, "INTELLIGENT KEY :</u> M <u>CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

HAZARD AND HORN REMINDER FUNCTION

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

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

Operating Function of Hazard and Horn Reminder

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

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

- Ignition switch position is ON
- Door is open

How to change hazard and horn reminder mode

0

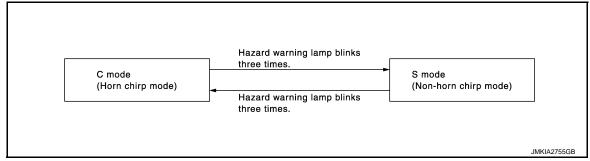
< SYSTEM DESCRIPTION >

With CONSULT-III

Refer to DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Without CONSULT-III

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



AUTO DOOR LOCK FUNCTION

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

- Door switch is ON (door is opene)
- 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 the "AUTO LOCK SET" mode in "WORK SUPPORT". Refer to <u>DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

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 blinks 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 DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

KEYLESS POWER WINDOW DOWN (OPEN) FUNCTION

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

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

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

Keyless power window down operation mode can be changed by "PW DOWN SET" mode in "WORK SUP-PORT". Refer to <u>DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

INTERIOR ROOM LAMP CONTROL

Intelligent Key system turns on interior lamp by receiving UNLOCK signal from Intelligent Key. For detailed description, refer to <u>INL-5</u>, "System Description".

LIST OF OPERATION RELATED PARTS

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

< SYSTEM DESCRIPTION >

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	Unified meter and A/C amp.	Hazard warning lamp	Horn	IPDM E/R	Head lamp	Trunk lid opener actuator	A B C D
Door lock/unlock function by remote control button	×	×		×	×		×	×								E
Trunk open function by remote control button	×					×	×	×		×					×	
Hazard and horn reminder function	×					×	×	×	×		×	×	×			_
Selective unlock function	×			×	×		×	×								F
Keyless power window down (open) function	×	×					×	×								
Auto door lock function	×	×		×			×	×								G
Panic alarm function	×		×				×	×				×	×	×		

Н

J

DLK

L

Μ

Ν

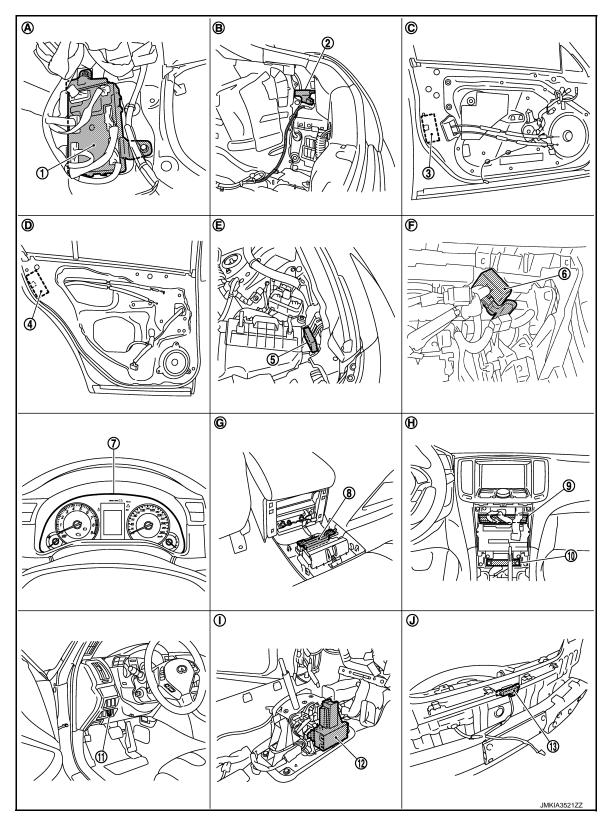
Ο

Ρ

< SYSTEM DESCRIPTION >

REMOTE KEYLESS ENTRY FUNCTION : Component Parts Location

INFOID:000000006208719



- 1. BCM M118, M119, M120, M121, M122, M123
- 4. Rear door lock assembly LH D55
- 7. Combination meter M53
- 2. Fuel lid lock actuator B242
- 5. Intelligent Key warning buzzer E57
- 8. Inside key antenna (console) M146
- 3. Front door lock assembly (driver side) D15

6.

- Remote keyless entry receiver M104
- 9. Unified meter and A/C amp. M66, M67

< SYSTEM DESCRIPTION >

10. Inside key antenna (instrument cen- 11. Key slot M22 ter) M131

Β.

- 13. Outside key antenna (rear bumper) B63
- Α. Dash side lower (passenger side)
- D. View with rear door finisher LH removed
- G. View with console rear finisher removed
- View with rear bumper removed J.
- *: With A/T models

- View with trunk side finisher re-
- moved Ε. View with hood seal assembly removed
- Η. View with cluster lid C removed
- 12. A/T shift selector (detention switch)* M137
- View with driver side door finisher re-C. moved
- F. Engine room dash panel
- I. View with center console assembly removed

D

Ε

F

Н

J

DLK

L

Μ

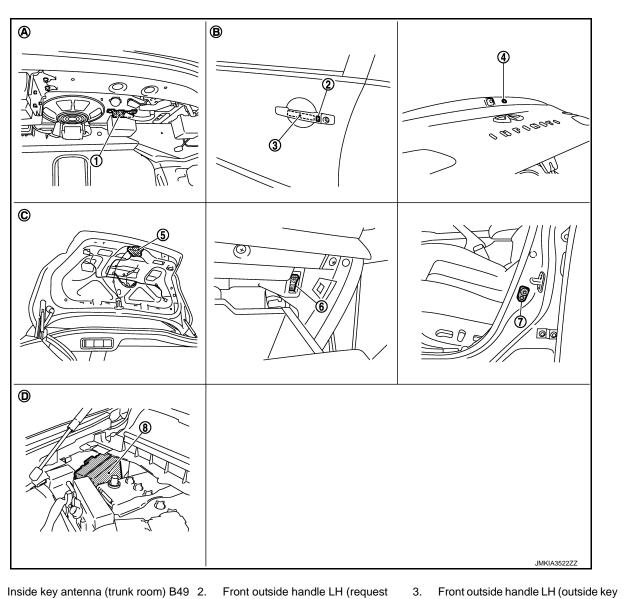
Ν

Ρ

А

В

С



- Trunk lid opener request switch 4. B304
- 7. Front door switch (driver side) B16
- Α. View with trunk front finisher removed
- D. Engine room dash panel (RH)
- switch) D13
- Trunk lid lock assembly B303 5.
- 8. IPDM E/R E5, E6
- Β. View with driver side door
- antenna) D14
- Trunk lid opener cancel switch M105 6.

C. View with trunk lid finisher removed

1.

< SYSTEM DESCRIPTION >

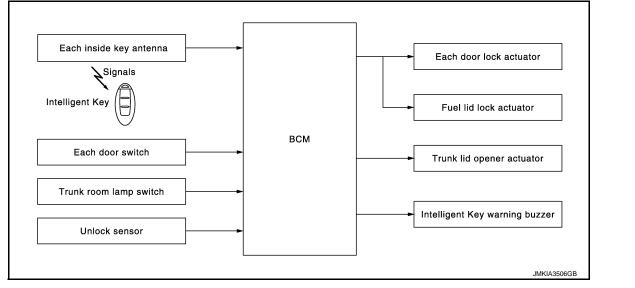
REMOTE KEYLESS ENTRY FUNCTION : Component Description

INFOID:000000006208720

Item	Function
BCM	Controls the door lock function and trunk open function.
IPDM E/R	Sounds horn and blinks head lamp via CAN communication between BCM.
Door lock actuator	Outputs lock/unlock signal from BCM and locks/unlocks each door.
Door switch	Inputs door open/close condition to BCM.
Key slot	Inputs key insert/remove signal to BCM.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Combination meter	Hazard warning lamp is installed to combination meter.
Unified meter and A/C amp.	Transmits vehicle seep signal to CAN communication line.
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Trunk lid opener actuator	Transmits trunk lid open operation to BCM.
Trunk lid opener cancel switch	Cancels the trunk open operation.
Fuel lid lock actuator	Performs lock/unlock of the fuel lid.
Push-button ignition switch	Input push-button ignition switch ON/OFF condition to BCM.
Intelligent Key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.
Hazard warning lamp	Warns the user of the door lock/unlock condition and in appropriate operations with the lamps blink.

KEY REMINDER FUNCTION

KEY REMINDER FUNCTION : System Diagram



KEY REMINDER FUNCTION : System Description

INFOID:000000006208722

INFOID:000000006208721

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

< SYSTEM DESCRIPTION >

Key remainder function	Operation condition	Operation
Driver door closed*	 Right after driver side door is closed under the following conditions Door lock operation is performed Driver side door is opene 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 opene All doors are locked by door lock and unlock switch or door lock knob 	 All doors unlock Honk Intelligent Key warning buzzer
Trunk is closed	Right after trunk is closed under the following 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 is perform in these cases.

CAUTION:

• The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key cannot be detected, and this function does 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.

G

Е

F

Н

DLK

L

Μ

Ν

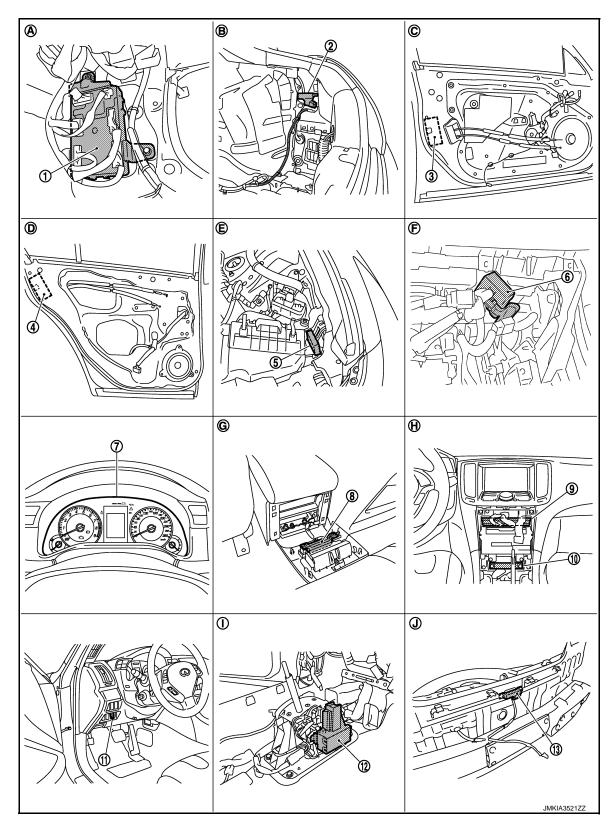
0

Ρ

< SYSTEM DESCRIPTION >

KEY REMINDER FUNCTION : Component Parts Location

INFOID:000000006208723



- 1. BCM M118, M119, M120, M121, M122, M123
- 4. Rear door lock assembly LH D55
- 7. Combination meter M53
- 2. Fuel lid lock actuator B242
- 5. Intelligent Key warning buzzer E57
- 8. Inside key antenna (console) M146
- 3. Front door lock assembly (driver side) D15

6.

- Remote keyless entry receiver M104
- 9. Unified meter and A/C amp. M66, M67

DLK-38

< SYSTEM DESCRIPTION >

10. Inside key antenna (instrument cen- 11. Key slot M22 ter) M131

Β.

Ε.

- 13. Outside key antenna (rear bumper) B63
- Α. Dash side lower (passenger side)
- D. View with rear door finisher LH removed
- G. View with console rear finisher removed
- View with rear bumper removed J.
- *: With A/T models

- View with trunk side finisher re-
- moved View with hood seal assembly re-
- moved Η. View with cluster lid C removed
- 12. A/T shift selector (detention switch)* M137
- View with driver side door finisher re-C. moved
- F. Engine room dash panel
- I. View with center console assembly removed

D

Ε

F

Н

J

DLK

L

Μ

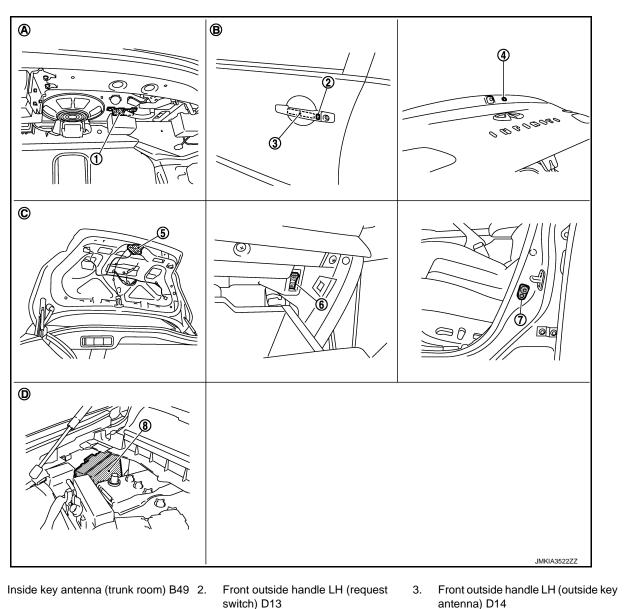
Ν

Ρ

А

В

С



- Trunk lid opener request switch 4. B304
- 7. Front door switch (driver side) B16
- Α. View with trunk front finisher removed
- D. Engine room dash panel (RH)

WARNING FUNCTION

1.

Trunk lid lock assembly B303

View with driver side door

IPDM E/R E5, E6

5.

8.

Β.

- antenna) D14
- Trunk lid opener cancel switch M105 6.

C. View with trunk lid finisher removed

< SYSTEM DESCRIPTION >

WARNING FUNCTION : System Description

INFOID:000000006208724

OPERATION DESCRIPTION

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

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

Warning/Info	rmation functions	Operation procedure
Intelligent Key system m	alfunction	When a malfunction is detected on BCM, "KEY" warning lamp illuminates.
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 (For external) active only when each of the sequence occurs as below: P position warning \rightarrow ACC warning \rightarrow OFF position warning (For internal) \rightarrow OFF position warning (For internal)
	For internal	Shift position: Except P position.Engine is running to stopped (Ignition switch is ON to OFF).
P position warning*	For external	Warning is activated when driver door is closed from the open position while the P position warning (for inside vehicle) is ON.
ACC warning*		 When P position warning is in active mode, shift position changes P position. Ignition switch: ACC position.
	Door is open to close	 Ignition switch: Except LOCK position. Door switch: ON to OFF (Door is open to close). Intelligent Key cannot be detected inside the vehicle.
Take away warning	Door is open	 Door switch: ON (Door is open). Key ID verification every 5 seconds when registered Intelligent Key cannot be detected inside the vehicle.
	Push button-ignition switch operation	 Ignition switch: Except LOCK position. Press push-button ignition switch. Intelligent Key cannot be detected inside the vehicle.
	Intelligent Key is removed from key slot	When Intelligent Key is removed from key slot, Intelligent Key cannot be de- tected inside the vehicle.
Door lock operation warr	ning	When door lock operation is requested while door lock operating condition of door request switch not satisfied.

< SYSTEM DESCRIPTION >

Warning/Inforr	nation functions	Operation procedure
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). Intelligent Key is out of key slot. Intelligent Key cannot 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 or Intelligent Key can be detected inside the vehicle.
Steering lock information		When steering lock cannot be released after ignition switch is turned ON.
Intelligent Key low battery	warning	When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON.
Key ID warning		When registered intelligent Key cannot be detected inside the vehicle after ig- nition switch is turned ON.

*: M/T models do not apply.

WARNING METHOD

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

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

					Warning	g chime	1
Warning/Informa	ation functions	"KEY" warn- ing lamp	Information display (combination meter)	Key slot in- dicator	Combination meter buzzer	Intelligent Key warning buzzer	I
Intelligent Key syster	m malfunction	Illuminate	—	—	_	—	J
OFF position warn-	For internal	_	—	_	Activate	—	_
ing	For external*	_	—	_	_	Activate	DLK
	For internal			—	Activate	_	
P position warning*	For external	_	BHIFT SHIFT		_	Active	L
							Ν
ACC warning*		_	JMKIA0047GB		_		0
							Р

G

< SYSTEM DESCRIPTION >

					Warning chime			
Warning/Informa	ation functions	"KEY" warn- ing lamp	Information display (combination meter)	Key slot in- dicator	Combination meter buzzer	Intelligent Key warning buzzer		
	Door is open to close	_		Blink	Activate	Activate		
	Door is open	_		Blink	-	-		
Take away warning	Push-ignition switch operation	—		Blink	Activate	_		
	Intelligent Key is removed from key slot	_	JMKIA0036GB	Blink	_	_		
Door lock operation warning	Request switch operation	_		_	_	Activate		
Key ID warning	,				_	_		
Key warning				Blink	Activate	_		
Intelligent Key insert	t information		JMKIA0034GB	Indicate		_		
Engine start infor-	Automatic trans mission models		BRAKE DKKIA0032GB		—	_		
mation	Manual trans- mission models		CLUCH JMKIA0049GB					

< SYSTEM DESCRIPTION >

				Warning	g chime	0
Warning/Information functions	"KEY" warn- ing lamp	Information display (combination meter)	Key slot in- dicator	Combination meter buzzer	Intelligent Keywarning buzzer	A
Steering lock information		JMKIA0033GB	_	_		B C D
Intelligent Key low battery warning		JMKIA0048GB			_	E

*: M/T models do not apply.

LIST OF OPERATION RELATED PARTS

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

																	Н
Warni	ng 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 indicator	Detention switch	"KEY" warning lamp	l J DLK
Intelligent Key system ma	alfunction										×	×				×	I
OFF position warning	For internal				×					×	×	×					L
OFF position warning	For external				×				×			×					
P position warning				×						×	×	×	×		×		M
ACC warning				×						×	×	×	×		×		
	Door is open or close	×			×		×		×	×	×	×	×	×			
	Door is open	×			×		×				×	×	×	×			Ν
Take away warning	Push-button ignition switch operation	×		×			×			×	×	×	×	×			0
	Intelligent Key is removed from key slot	×	×				×				×	×	×	×			0
Door lock operation warr	ing	×	×		×	×	×	×	×			×					P
Key ID warning			×	×			×				×	×	×				ſ
Key warning		×	×		×					×	×	×	×	×			
Intelligent Key insert info	rmation	×	×	×	×		×				×	×	×	×			

G

< SYSTEM DESCRIPTION >

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 indicator	Detention switch	"KEY" warning lamp
Engine start information	Ignition switch is ON posi- tion	×	×	×			×				×	х	х		×	
	Ignition switch is except ON position	×	×	×			×				×	×	×			
Steering lock information	•			×							×	×	×			
Intelligent Key low battery	warning	×					×				×	×	×			

< SYSTEM DESCRIPTION >

WARNING FUNCTION : Component Parts Location

INFOID:000000006208725

А

В

С

D

Е

F

G

Н

J

DLK

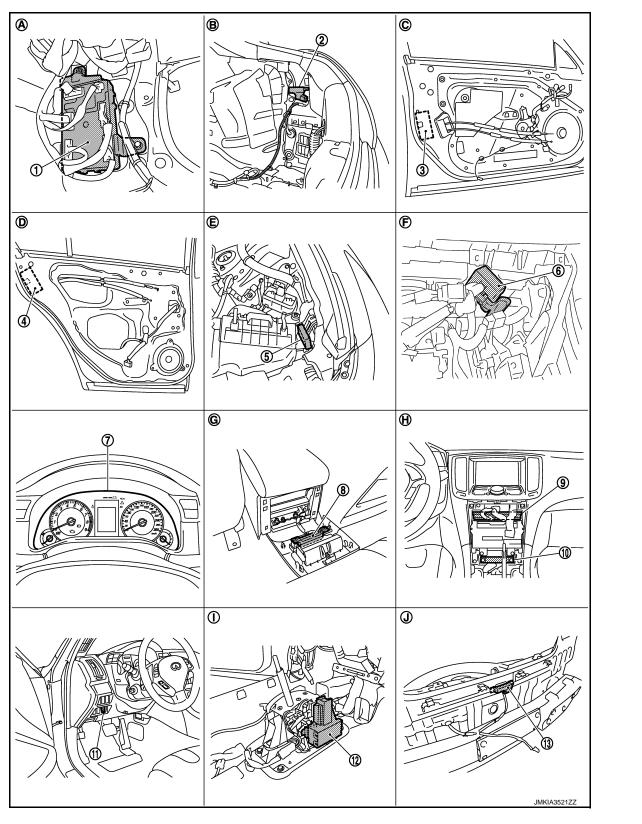
L

Μ

Ν

Ο

Ρ



- 1. BCM M118, M119, M120, M121, M122, M123
- 4. Rear door lock assembly LH D55
- 7. Combination meter M53
- 2. Fuel lid lock actuator B242
- 5. Intelligent Key warning buzzer E57
- 8. Inside key antenna (console) M146
- 3. Front door lock assembly (driver side) D15

6.

9.

- Remote keyless entry receiver M104
- Unified meter and A/C amp. M66, M67

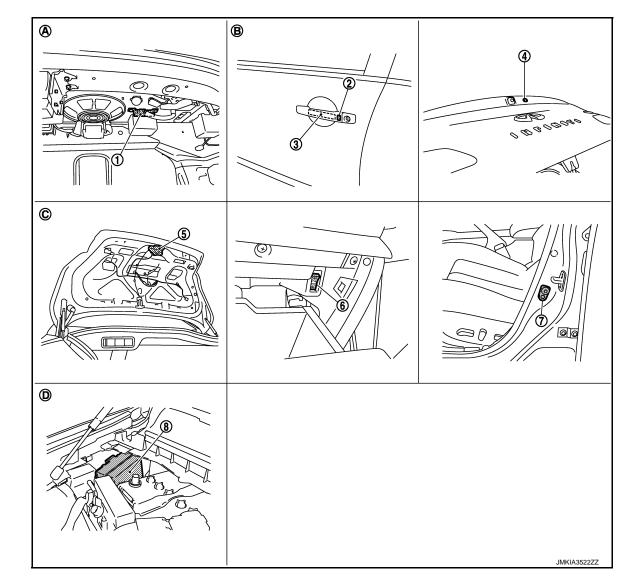
Revision: 2011 November

DLK-45

< SYSTEM DESCRIPTION >

- 10. Inside key antenna (instrument cen- 11. Key slot M22 ter) M131
- 13. Outside key antenna (rear bumper) B63
- Dash side lower (passenger side) Α.
- D. View with rear door finisher LH removed
- G. View with console rear finisher removed
- J. View with rear bumper removed
- *: With A/T models

- - View with trunk side finisher re-Β. moved
 - Ε. View with hood seal assembly removed
 - Η. View with cluster lid C removed
- 12. A/T shift selector (detention switch)* M137
- C. View with driver side door finisher removed
- F. Engine room dash panel
- View with center console assembly Ι. removed

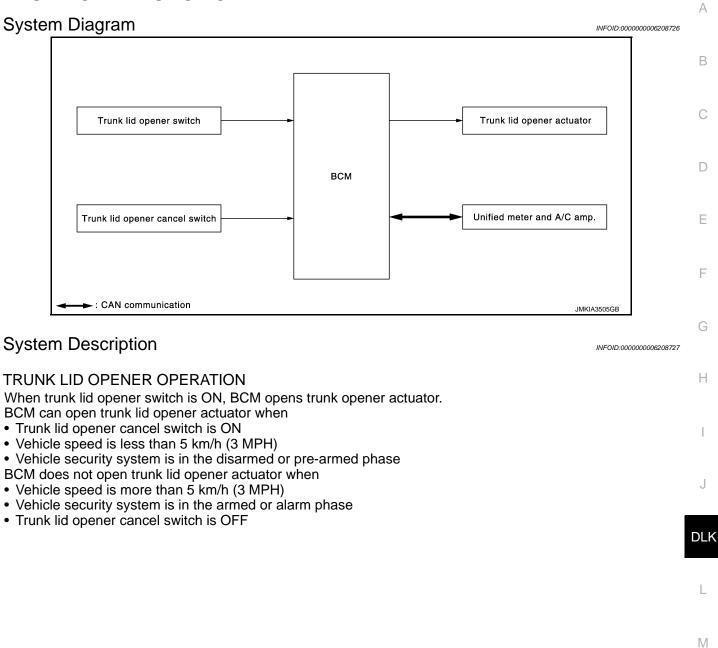


- Inside key antenna (trunk room) B49 2. 1.
- Trunk lid opener request switch 4. B304
- 7. Front door switch (driver side) B16
- Α. View with trunk front finisher removed
- D. Engine room dash panel (RH)
- Front outside handle LH (request switch) D13
- Trunk lid lock assembly B303 5.
- 8. IPDM E/R E5, E6
- Β. View with driver side door
- 3. Front outside handle LH (outside key antenna) D14
- Trunk lid opener cancel switch M105 6.
- C. View with trunk lid finisher removed

TRUNK OPEN FUNCTION

< SYSTEM DESCRIPTION >

TRUNK OPEN FUNCTION



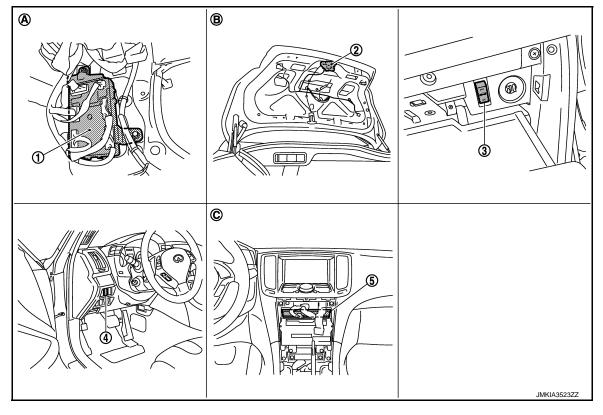
Ρ

TRUNK OPEN FUNCTION

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000006208728



- 1. BCM M118, M119, M120, M121, M122, M123
- 2. Trunk lid lock assembly B303
- 3. Trunk lid opener cancel switch M105

4. Trunk lid opener switch M20

Component Description

- A. Dash side lower (passenger side)D. View with cluster lid C removed
- Unified meter and A/C amp. M67
 View with trunk lid finisher remove
 - View with trunk lid finisher removed C. View with glove box open

INFOID:000000006208729

Item	Function
BCM	Controls trunk lid open operation.
Trunk lid opener switch	Transmits trunk open operation to BCM.
Trunk lid opener actuator	Opens the trunk after receiving the open signal from BCM.
Trunk lid opener cancel switch	Cancels the trunk open operation.
Unified meter and A/C amp.	Transmits vehicle speed signal to CAN communication line.

INTEGRATED HOMELINK TRANSMITTER

< SYSTEM DESCRIPTION >

INTEGRATED HOMELINK TRANSMITTER

Component Description

Item	Function
Integrated homelink transmitter	A maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.

J

L

Μ

Ν

Ο

Ρ

А

В

С

D

Е

F

G

Н

INFOID:000000006208730

DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

INFOID:000000006859032

APPLICATION ITEM

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

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

Curatara	Cub sustam as lastion item	Diagnosis mode						
System	Sub system selection item	Work Support	Data Monitor	Active Test				
Door lock	DOOR LOCK	×	×	×				
Rear window defogger	REAR DEFOGGER		×	×				
Warning chime	BUZZER		×	×				
Interior room lamp timer	INT LAMP	×	×	×				
Exterior lamp	HEAD LAMP	×	×	×				
Wiper and washer	WIPER	×	×	×				
Turn signal and hazard warning lamps	FLASHER	×	×	×				
	AIR CONDITONER*							
Intelligent Key systemEngine start system	INTELLIGENT KEY	×	×	×				
Combination switch	COMB SW		×					
Body control system	ВСМ	×						
IVIS - NATS	IMMU		×	×				
Interior room lamp battery saver	BATTERY SAVER	×	×	×				
Trunk lid open	TRUNK		×	×				
Vehicle security system	THEFT ALM	×	×	×				
RAP system	RETAINED PWR		×					
Signal buffer system	SIGNAL BUFFER		×	×				
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×				

NOTE:

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

FREEZE FRAME DATA (FFD)

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

DLK-50

< SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit		Description
Vehicle Speed	km/h	Vehicle speed of the mo	ment a particular DTC is detected
Odo/Trip Meter	km	Total mileage (Odomete	r value) of the moment a particular DTC is detected
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK")
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"
	ACC>ON		While turning power supply position from "ACC" to "IGN"
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN	-	While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emer- gency stop operation)
	ACC>OFF		While turning power supply position from "ACC" to "OFF"
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"
Vehicle Condition	OFF>ACC	Power position status of the moment a particular DTC is detected	While turning power supply position from "OFF" to "ACC"
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"
	OFF>SLEEP		While turning BCM status from normal mode (Power supply posi- tion is "OFF".) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply posi- tion is "LOCK".) to low power consumption mode
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steer- ing is locked.)
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)
	ACC		Power supply position is "ACC" (Ignition switch ACC)
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)
	CRANKING		Power supply position is "CRANKING" (At engine cranking)
IGN Counter	0 - 39	 The number is 0 wher The number increases whenever ignition swit 	t ignition switch is turned ON after DTC is detected a malfunction is detected now. If like $1 \rightarrow 2 \rightarrow 338 \rightarrow 39$ after returning to the normal condition the OFF \rightarrow ON.

DOOR LOCK

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

BCM CONSULT-III FUNCTION

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

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

WORK SUPPORT

INFOID:000000006208732

Ν

0

< SYSTEM DESCRIPTION >

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

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

DATA MONITOR

Monitor Item	Contents
REQ SW-DR	Indicated [ON/OFF] condition of door request switch (driver side).
REQ SW-AS	Indicated [ON/OFF] condition of door request switch (passenger side).
REQ SW-BD/TR	Indicated [ON/OFF] condition of trunk lid opener request switch.
DOOR SW-DR	Indicated [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicated [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicated [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicated [ON/OFF] condition of rear door switch LH.
DOOR SW-BK	NOTE: This item is displayed, but cannot be monitored.
CDL LOCK SW	Indicated [ON/OFF] condition of lock signal from door lock unlock switch.
CDL UNLOCK SW	Indicated [ON/OFF] condition of unlock signal from door lock unlock switch.
KEY CYL LK-SW	Indicated [ON/OFF] condition of lock signal from door key cylinder.
KEY CYL UN-SW	Indicated [ON/OFF] condition of unlock signal from door key cylinder.

ACTIVE TEST

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

INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY) INFOL:00000000208733

WORK SUPPORT

< 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. • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch (driver side and passenger side) mode can be changed to operate (ON) or not operate (OFF) in this mode.
ENGINE START BY I-KEY	Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode.
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by trunk opener request switch can be changed to operate (ON) or not operate (OFF) with this mode.
PANIC ALARM SET	 Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. MODE 1: 0.5 sec. MODE 2: Non-operation MODE 3: 1.5 sec.
PW DOWN SET	 Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. MODE 1: 3 sec. MODE 2: Non-operation MODE 3: 5 sec.
TRUNK OPEN DELAY	 Trunk button pressing on Intelligent Key button can be selected as per the following in this mode. MODE 1: Press and hold MODE 2: Press twice MODE 3: Press and hold, or press twice
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 operate during the times below. • 70 msec • 100 msec • 200 msec
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode.

SELF-DIAG RESULT Refer to <u>BCS-76, "DTC Index"</u>.

DATA MONITOR

< SYSTEM DESCRIPTION >

Monitor Item	Condition
REQ SW -DR	Indicates [ON/OFF] condition of door request switch (driver side).
REQ SW -AS	Indicates [ON/OFF] condition of door request switch (passenger side).
REQ SW -BD/TR	Indicates [ON/OFF] condition of trunk opener request switch.
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.
IGN RLY2 -F/B	Indicates [ON/OFF] condition of ignition relay 2.
ACC RLY-FB	NOTE: This item is displayed, but cannot be monitored.
CLUTCH SW*1	Indicates [ON/OFF] condition of clutch switch.
BRAKE SW 1	Indicates [ON/OFF]* ² condition of brake switch power supply.
BRAKE SW 2	Indicates [ON/OFF] condition of brake switch.
DETE/CANCL SW	Indicates [ON/OFF] condition of P position.
SFT PN/N SW	Indicates [ON/OFF] condition of P or N position.
S/L -LOCK	Indicates [ON/OFF] condition of steering lock unit (LOCK).
S/L -UNLOCK	Indicates [ON/OFF] condition of steering lock unit (UNLOCK).
S/L RELAY -F/B	Indicates [ON/OFF] condition of steering lock relay.
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
PUSH SW -IPDM	Indicates [ON/OFF] condition of push-button ignition switch.
IGN RLY1 -F/B	Indicates [ON/OFF] condition of ignition relay 1.
DETE SW -IPDM	Indicates [ON/OFF] condition of P position.
SFT PN -IPDM	Indicates [ON/OFF] condition of P or N position.
SFT P -MET	Indicates [ON/OFF] condition of P position.
SFT N -MET	Indicates [ON/OFF] condition of N position.
ENGINE STATE	Indicates [STOP/STALL/CRANK/RUN] condition of engine states.
S/L LOCK-IPDM	Indicates [ON/OFF] condition of steering lock unit (LOCK).
S/L UNLK-IPDM	Indicates [ON/OFF] condition of steering lock unit (UNLOCK).
S/L RELAY-REQ	Indicates [ON/OFF] condition of steering lock relay.
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [Km/h].
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [Km/h]
DOOR STAT-DR	Indicates [LOCK/READY/UNLOCK] condition of driver side door status.
DOOR STAT-AS	Indicates [LOCK/READY/UNLOCK] condition of passenger side door status.
ID OK FLAG	Indicates [SET/RESET] condition of key ID.
PRMT ENG STRT	Indicates [SET/RESET] condition of engine start possibility.
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.
TRNK/HAT MNTR	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.

< SYSTEM DESCRIPTION >

Monitor Item	Condition	^
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelli- gent Key, the numerical value start changing.	A
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored.	В

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

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

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp is activated after "ON" on CONSULT-III screen is touched.
PW REMOTO DOWN SET	This test is able to check power window down operation. The power window down is activated after "ON" on CONSULT-III 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-III screen is touched.
INSIDE BUZZER	 This test is able to check warning chime in combination meter operation. Take away warning chime sounds when "TAKE OUT" on CONSULT-III screen is touched. Key warning chime sounds when "KEY" on CONSULT-III screen is touched. OFF position warning chime sounds when "KNOB" on CONSULT-III screen is touched.
INDICATOR	 This test is able to check warning lamp operation. "KEY" Warning lamp illuminates when "KEY ON" on CONSULT-III screen is touched. "KEY" Warning lamp blinks when "KEY IND" on CONSULT-III 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-III screen is touched.
LCD	 This test is able to check meter display information Engine start information displays when "BP N" on CONSULT-III screen is touched. Engine start information displays when "BP I" on CONSULT-III screen is touched. Key ID warning displays when "ID NG" on CONSULT-III screen is touched. Steering lock information displays when "ROTAT" on CONSULT-III screen is touched. P position warning displays when "SFT P" on CONSULT-III screen is touched. Intelligent Key insert information displays when "INSRT" on CONSULT-III screen is touched. Intelligent Key low battery warning displays when "BATT" on CONSULT-III screen is touched. Intelligent Key low battery warning displays when "NO KY" on CONSULT-III screen is touched. Take away through window warning displays when "NO KY" on CONSULT-III screen is touched. OFF position warning display when "CUTKEY" on CONSULT-III screen is touched.
TRUNK/GLASS HATCH	This test is able to check trunk lid opener actuator open operation. This actuator opens when "OPEN" on CONSULT-III screen is touched.
FLASHER	This test is able to check security hazard lamp operation. The hazard lamps are activated after "LH/RH/OFF" on CONSULT-III screen is touched.
HORN	This test is able to check horn operation. The horn is activated after "ON" on CONSULT-III screen is touched.
PRANGE	This test is able to check A/T shift selector power supply A/T shift selector power is supplied when "ON" on CONSULT-III screen is touched.
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when "ON" on CONSULT-III screen is touched.
LOCK INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation. LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT-III screen is touched.
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-III 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-III screen is touched

С

< SYSTEM DESCRIPTION >

Test item	Description
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination blinks when "ON" on CONSULT-III screen is touched.
TRUNK/BACK DOOR	This test is able to check trunk lid opener actuator open operation. This actuator opens when "OPEN" on CONSULT-III screen is touched.

TRUNK

_

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:000000006208734

BCM CONSULT-III FUNCTION

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

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

DATA MONITOR

Monitor Item	Contents
PUSH SW	Indicates [ON/OFF] condition of push switch.
UNLK SEN -DR	Indicates [ON/OFF] condition of unlock sensor.
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter.
KEY CYL SW-TR	NOTE: This item is displayed, but cannot be monitored.
TR CANCEL SW	Indicates [ON/OFF] condition of trunk lid opener cancel switch.
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk lid opener switch.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk room lamp switch.
RKE-TR/BD	Indicates [ON/OFF] condition of trunk open signal from Intelligent Key remote controller button.
TRUNK/GLASS HATCH	This test is able to check trunk lid opener actuator open operation.

ACTIVE TEST

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

DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

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.

DTC Logic

INFOID:000000006208736

INFOID:000000006208737

INFOID:000000006208735

А

В

Ε

Н

DLK

Μ

Ν

Ρ

DTC DETECTION LOGIC

DT	CONSULT-III display description	DTC Detection Condition	Possible cause	F
U10	00 CAN COMM CIRCUIT	When BCM cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system	G

Diagnosis Procedure

1.PERFORM SELF DIAGNOSTIC

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

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to LAN-17, "Trouble Diagnosis Flow Chart".
- NO >> Refer to <u>GI-43</u>, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:000000006208738

DTC DETECTION LOGIC

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

Diagnosis Procedure

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

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

Special Repair Requirement

INFOID:000000006208740

INFOID:000000006208739

1.REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> INSPECTION END

< DTC/CIRCUIT DIAGNOSIS > **B2621 INSIDE ANTENNA**

Description

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

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

- YES >> Refer to DLK-59, "Diagnosis Procedure".
- >> Inside key antenna (instrument center) is OK. NO

Diagnosis Procedure

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM		(—)	Condition	Signal (Reference value)	
Connect	or	Terminal			
nstrument center	M122	78, 79	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB
				Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 • • • • • • • • • • • • • • • • • • •
					JMKIA0063GB

result normal?

YES >> GO TO 4.

NO >> GO TO 2.

Revision: 2011 November

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (instrument center) connector. А

INFOID:000000006208741

INFOID:000000006208742

INFOID:000000006208743

В

Н

F

J

B2621 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

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

В	BCM Connector Terminal		Inside key antenna (instrument center)		
Connector			Terminal	Continuity	
M122	78	M131	2	Existed	
111122	79	IVITOT	1	LAISIEU	

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	78	Ground	Not existed
IVI I ZZ	79		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

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

(+) BCM		(—)	Condition	Signal (Reference value)	
Connect	or	Terminal			
Instrument center	M122	78, 79	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB
				Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s JMKIA0063GB

Is the inspection result normal?

YES >> Replace inside key antenna (instrument center). Refer to <u>DLK-253, "INSTRUMENT CENTER :</u> <u>Removal and Installation"</u>.

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

< DTC/CIRCUIT DIAGNOSIS > B2622 INSIDE ANTENNA

Description

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

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

- YES >> Refer to <u>DLK-61, "Diagnosis Procedure"</u>.
- NO >> Inside key antenna (console) is OK.

Diagnosis Procedure

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

	(+)				Signal
	BCM		(-)	Condition	(Reference value)
Conn	nector	Terminal			, , , , , , , , , , , , , , , , , , ,
				Place Intelligent Key inside the vehicle.	(V) 15 0 5 0 1 s JMKIA0062GB
Console	M122	72, 73	Ground		
				Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 15 10 10 10 10 10 10 10 10 10 10
					JMKIA0063GB

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

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

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

.

Н



INFOID:000000006208744

INFOID:000000006208745

INFOID:00000006208746

А

С

F

B2622 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

BCM		Inside key ant	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M122	72	- M146	2	Existed
IVI 122	73	101140	1	Existed

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	72	Ground	Not existed
IVI 122	73		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–) Condition		Signal (Reference value)	
Con	nector	Terminal			
Console	M122	72, 73	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB
Console	IVI I Z Z	12,13	Ground	Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 15 10 5 0 15 15 15 10 15 15 10 15 15 10 15 15 10 15 15 15 10 15 15 15 10 15 15 15 15 15 15 15 15 15 15 15 15 15

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to <u>DLK-253, "CONSOLE : Removal and Installation"</u>.
 NO >> Replace BCM. Refer to <u>BCS-82, "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

< DTC/CIRCUIT DIAGNOSIS > B2623 INSIDE ANTENNA

Description

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

DTC Logic

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC detecting condition	Possible cause	D
B2623	INSIDE ANTENNA	An excessive high or low voltage from inside anten- na is sent to BCM.	 Inside key antenna (trunk room) Between BCM – Inside key antenna (trunk room) 	E

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is inside key antenna DTC detected?

- YES >> Refer to <u>DLK-63, "Diagnosis Procedure"</u>.
- NO >> Inside key antenna (trunk room) is OK.

Diagnosis Procedure

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM				Condition	Signal (Reference value)	
Conr	nector	Terminal	nal		(,	DL
Truck soon	M424	24.25	Grand	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 s JMKIA0062GB	L
Trunk room	M121	34, 35	Ground			N
				Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 1 s JMKIA0063GB	C

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

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

DLK-63

F

Н

INFOID:000000006208747

INFOID:000000006208748

INFOID:00000006208749

В

B2623 INSIDE ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

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

В	СМ	Inside key anter	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M121	34	B49	2	Existed
	35	649	1	

3. Check continuity between BCM harness connector and ground.

B	CM		
Connector	Terminal	Ground	Continuity
M121	34	Ground	Not existed
171121	35		NUL EXISIEU

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

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

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

	(+) BCM Connector Terminal		()	Condition	Signal (Reference value)
Trunk room	M121	34, 35	Ground	Place Intelligent Key inside the vehicle.	(V) 15 10 5 0 1 5 0 1 5 10 5 0 1 5 10 5 0 1 5 10 5 0 1 5 10 5 0 1 5 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 15 0 15 10 15 15 0 15 15 0 15 0 15 0 15 0 15 1 15 1 15 1 15 1 15 1 15 1 15 1 15 1 15 1 15 1 15 1 15 1 15 1
				Place Intelligent Key outside the vehicle.	(V) 15 10 5 0 15 10 5 0 15 15 10 5 0 15 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 10 10 10 10 10 10 10 10 10 10 10 10

Is the inspection result normal?

YES >> Replace inside key antenna (trunk room). Refer to <u>DLK-254, "TRUNK ROOM : Removal and</u> <u>Installation"</u>.

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

POW < DTC/CIRCUIT DIAGNOSIS >	ER SUPPLY AN	D GROUND CIF	RCUIT
POWER SUPPLY AND	GROUND CIR	CUIT	
BCM (BODY CONTROL		0011	A
BCM (BODY CONTROL M	,	nosis Procedure	INFOID:000000006208750
1. CHECK FUSE AND FUSIBLE	LINK		
Check that the following fuse and	fusible link are not fu	sing.	С
Terminal No.	Signal	name	Fuse and fusible link No.
1			K (40 A)
	Battery po	wer supply	10 (10 A)
Is the inspection result normal?			
YES >> GO TO 2. NO >> Replace the blown fu	una ar funible link after	r rangiring the offect	E
blown.	ise of fusible link alle	r repairing the arrect	ed circuit if a fuse or fusible link is
2.CHECK POWER SUPPLY CIF	RCUIT		F
1. Turn ignition switch OFF.			
 Disconnect BCM connector. Check voltage between BCM 	harnage connector a	ad around	G
3. Check voltage between BCM	namess connector a	na grouna.	9
(+)			Voltage
BCM		(-)	Voltage H (Approx.)
Connector	Terminal		
M118	1	Ground	Battery voltage
M119	11		
Is the inspection result normal?YES>> GO TO 3.NO>> Repair or replace har 3. CHECK GROUND CIRCUIT	ness.		J
Check continuity between BCM h	arness connector and	ground.	DLł
BCM			
Connector	Terminal	Ground	
M119	13		Existed
Is the inspection result normal? YES >> INSPECTION END NO >> Repair or replace har	ness.		Μ
			Ν
			0
			P

< DTC/CIRCUIT DIAGNOSIS >

DOOR SWITCH

Description

Detects door open/close condition.

Component Function Check

1.CHECK FUNCTION

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

Monitor item		Condition	Status
DOOR SW-DR	Driver side door	Open	ON
DOOR SW-DR	Driver side door	Closed	OFF
DOOR SW-AS	Dessen nor side desr	Open	ON
	Passenger side door	Closed	OFF
	Rear door LH	Open	ON
DOOR SW-RL		Closed	OFF
	Dana dana Di I	Open	ON
DOOR SW-RR	Rear door RH	Closed	OFF

Is the inspection result normal?

YES >> Door switch is OK.

NO >> Refer to <u>DLK-66, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006208753

1. CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect malfunctioning door switch connector.

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

INFOID:000000006208751

INFOID:000000006208752

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

	(+)			Signal	
Conr	Door switch Connector Terminal		(-)	(Reference value)	
Driver side	B16	2		(V) 15 10 5 0 10 ms JPMIA0011GB	
Passenger side	B216	2	- Ground	(V) 15 0 5 0 10 ms JPMIA0011GB	
Rear LH	B23	2	- Ground	(V) 15 10 5 0 10 ms JPMIA0011GB	
Rear RH	B223	2		(V) 15 0 5 0 10 ms JPMIA0011GB	
the inspection 'ES >> GO - NO >> GO -	TO 3.	∩T			
	BCM connector.	001			

Door switch			B	СМ	Continuity	IN
Con	nector	Terminal	Connector	Terminal	- Continuity	
Driver side	B16		M123	150		0
Passenger side	B216		WI123	124	- Evisted	
Rear LH	B23	2	M404	69	- Existed	
Rear RH	B223		M121	68	=	Р

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

DOOR SWITCH

< DTC/CIRCUIT DIAGNOSIS >

	Door switch			Continuity
	Connector	Terminal		Continuity
Driver side	B16		Ground	
Passenger side	B216	2	Ground	Not existed
Rear LH	B23	- Z		NUL EXISIEU
Rear RH	B223			
NO >> Rep CHECK DOC efer to <u>DLK-68</u>	8, "Component Inspection". result normal?			
NO >> Rep CHECK INTI efer to <u>GI-43.</u>	Place malfunctioning door sw ERMITTENT INCIDENT <u>Intermittent Incident</u> ".	vitch. Refer to <u>DLK</u>	-252, "Removal and Ir	nstallation".
NO >> Rep CHECK INTI efer to <u>GI-43.</u>	Place malfunctioning door sw ERMITTENT INCIDENT <u>Intermittent Incident</u> . PECTION END	vitch. Refer to <u>DLK</u>	-252, "Removal and Ir	
NO >> Rep .CHECK INTI efer to <u>GI-43.</u> >> INS Component .CHECK DOC . Turn ignition . Disconnect	Place malfunctioning door sw ERMITTENT INCIDENT 'Intermittent Incident". PECTION END Inspection	connector.	-252, "Removal and Ir	
NO >> Rep .CHECK INTI efer to <u>GI-43.</u> >> INS Component .CHECK DOC . Turn ignition . Disconnect	Place malfunctioning door sw ERMITTENT INCIDENT "Intermittent Incident". PECTION END Inspection OR SWITCH In switch OFF. malfunctioning door switch of nuity between door switch te	connector.	-252, "Removal and Ir	
NO >> Rep .CHECK INTI efer to <u>GI-43.</u> >> INS Component .CHECK DOC . Turn ignition . Disconnect	Place malfunctioning door sw ERMITTENT INCIDENT "Intermittent Incident". PECTION END Inspection OR SWITCH In switch OFF. malfunctioning door switch of	connector.	-252, "Removal and Ir	
NO >> Rep .CHECK INTI efer to <u>GI-43.</u> >> INS Component .CHECK DOC . Turn ignition . Disconnect	Place malfunctioning door sw ERMITTENT INCIDENT "Intermittent Incident". PECTION END Inspection DR SWITCH In switch OFF. malfunctioning door switch to nuity between door switch to Terminal	connector.		INFOID:00000006208;

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunction door switch. Refer to <u>DLK-252, "Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOS					
DOOR LOCK AND DRIVER SIDE	UNLOCK SWITCF	1	А		
DRIVER SIDE : Description					
Transmits door lock/unlock c					
DRIVER SIDE : Comp	onent Function Che	eck	INFOID:00000006208756		
1. CHECK FUNCTION					
Check ("CDL LOCK SW ", "C	CDL UNLOCK SW") in "Da	ta Monitor" mode with CON	ISULT-III. D		
Monitor item	Con	dition	Status		
CDL LOCK SW		Lock	ON E		
	Door lock and unlock switch	Unlock	OFF		
CDL UNLOCK SW		Lock	OFF		
		Unlock	ON F		
Is the inspection result norm YES >> Door lock and un NO >> Refer to DLK-69		sie Drocoduro"	G		
DRIVER SIDE : Diagn	-	sis Flocedule.			
1. CHECK POWER WINDO			INFOID:000000006208757		
1. Turn ignition switch ON.					
2. Check power window op			I		
<u>Does power window (driver s</u> YES >> Replace power y	, , ,				
NO-1 >> Front & rear win	window main switch. dow anti-pinch models.		J		
NO-2 >> Front window ar PASSENGER SIDE					
PASSENGER SIDE : I	Description		INF0/D:000000006208758		
Transmits door lock/unlock c	peration to BCM.				
PASSENGER SIDE : 0	Component Function	n Check	INF01D:000000006208759		
1. CHECK FUNCTION			Μ		
Check ("CDL LOCK SW ", "C	CDL UNLOCK SW") in "Da	ta Monitor" mode with CON			
Monitor item	Con	dition	Status		
CDL LOCK SW		Lock	ON		
	Door lock and unlock switch	Unlock	OFF O		
CDL UNLOCK SW		Lock	OFF		
		Unlock	ON		
Is the inspection result norm YES >> Door lock and un NO >> Refer to DLK-69		agnosis Procedure".	Р		
PASSENGER SIDE : I		-	INFOID:000000006208760		
1.CHECK POWER WINDO	W SWITCH				
1. Turn ignition switch ON.					

DOOR LOCK AND UNLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

2. Check passenger side power window operation.

Does power window (passenger side) operate?

- YES >> Replace power window sub-switch. NO-1 >> Front & rear window anti-pinch models. NO-2 >> Front window anti-pinch models.

DOOR LOCK ACTUATOR

	SNOSIS >				
OOR LOCK A	CTUATOR				
RIVER SIDE : D	escription				INFOID:000000006208761
	-				
ocks/unlocks the door	-	_	مماذ		
RIVER SIDE : C	omponent Fi	unction Che	еск		INFOID:000000006208762
.CHECK FUNCTION					
Use CONSULT-III 1 Touch "ALL LCK" c				Ι.	
the inspection result			,,	-	
YES >> Door lock a NO >> Refer to DI			oio Drocodura	, II	
	<u>LK-71, "DRIVER</u>	-	ISIS Procedure	<u>.</u> .	
RIVER SIDE : D	lagnosis Proc	cedure			INFOID:00000006208763
.CHECK DOOR LOC	CK ACTUATOR II	NPUT SIGNAL	-		
Turn ignition switch Disconnect front do Check voltage betw	oor lock assembly			arness connect	or and ground.
(+)					
Front door lock asse (driver side)	mbly (–)) Condition		Voltage (V) (Approx.)	
(unverside)					
, ,	ninal			1	
Connector Terr	1 Ground	l Door lock a	nd unlock switch		$0 \rightarrow Battery voltage \rightarrow 0$
Connector Terr D15	1 Ground	Door lock a	nd unlock switch		$0 \rightarrow \text{Battery voltage} \rightarrow 0$ $0 \rightarrow \text{Battery voltage} \rightarrow 0$
Connector Terr D15 the inspection result YES >> Replace fr	1 Ground 2 Ground normal? ront door lock a nd Installation".	ssembly (drive		Unlock	· · · ·
Connector Terr D15	1 Ground 2 Ground 2 ont door lock a <u>nd Installation"</u> . CK ACTUATOR C onnector.	ssembly (drive	er side). Refe	Unlock er to <u>DLK-240.</u>	$0 \rightarrow Battery \ voltage \rightarrow 0$
Connector Terr D15	1 Ground 2 Ground 2 ont door lock a <u>nd Installation"</u> . CK ACTUATOR C onnector.	ssembly (drive CIRCUIT	er side). Refe	Unlock er to <u>DLK-240,</u> door lock asse	0 → Battery voltage → 0 "FRONT DOOR LOCK : mbly (driver side) harness
Connector Terr D15	1 Ground 2 Ground 2 normal? 2 ont door lock a nd Installation". CK ACTUATOR C 0 onnector. 0 onnector. 0 ontector. 0 otween BCM ha CM Terminal	ssembly (drive CIRCUIT arness connect	er side). Refe	Unlock er to <u>DLK-240,</u> door lock asse	0 → Battery voltage → 0 "FRONT DOOR LOCK :
Connector Terr D15	1 Ground 2 Ground 2 normal? 5 ont door lock a <u>nd Installation</u> ". 5 CK ACTUATOR C 5 onnector. 5 petween BCM ha CM	SSEMBLY (drive CIRCUIT arness connect Fron Con	er side). Refe tor and front	Unlock er to <u>DLK-240,</u> door lock asse	0 → Battery voltage → 0 "FRONT DOOR LOCK : mbly (driver side) harness
Connector Terr D15	1 Ground 2 Ground 2 ornal? ront door lock a and Installation". CK ACTUATOR C Onnector. oetween BCM has CM Terminal 8 9	Ssembly (drive	er side). Refe tor and front t door lock assen inector	Unlock er to <u>DLK-240,</u> door lock asse nbly (driver side) Terminal 1 2	0 → Battery voltage → 0 "FRONT DOOR LOCK : mbly (driver side) harness Continuity
Connector Terr D15 the inspection result YES >> Replace fr Removal a NO NO >> GO TO 2. CHECK DOOR LOO Disconnect BCM c Check continuity b connector.	1 Ground 2 Ground 2 ornal? ront door lock a and Installation". CK ACTUATOR C Onnector. oetween BCM has CM Terminal 8 9	Ssembly (drive	er side). Refe tor and front t door lock assen inector	Unlock er to <u>DLK-240,</u> door lock asse nbly (driver side) Terminal 1 2	0 → Battery voltage → 0 "FRONT DOOR LOCK : mbly (driver side) harness Continuity Existed
Connector Terr D15 the inspection result YES >> Replace fr Removal a NO NO >> GO TO 2. CHECK DOOR LOO Disconnect BCM c Check continuity b connector.	1 Ground 2 normal? ront door lock a nd Installation". CK ACTUATOR C Onnector. oetween BCM has CM Terminal 8 9 etween BCM has BCM	Ssembly (drive	er side). Refe	Unlock er to <u>DLK-240,</u> door lock asse nbly (driver side) Terminal 1 2	0 → Battery voltage → 0 "FRONT DOOR LOCK : mbly (driver side) harness Continuity

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

PASSENGER SIDE

< DTC/CIRCUIT DIAGNOSIS >	
PASSENGER SIDE : Description	INFOID:000000006208764
Locks/unlocks the door with the signal from BCM.	
PASSENGER SIDE : Component Function Check	INFOID:00000006208765
1.CHECK FUNCTION	
 Use CONSULT-III to perform Active Test ("DOOR LOCK"). Touch "ALL LCK" or "ALL UNLK" to check that it works normally. 	
Is the inspection result normal?	
YES >> Door lock actuator is OK. NO >> Refer to <u>DLK-72, "PASSENGER SIDE : Diagnosis Procedure"</u> .	
PASSENGER SIDE : Diagnosis Procedure	INFOID:000000006208766
1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL	

1. Turn ignition switch OFF.

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

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

(+) Front door lock assembly (passenger side)		()	Condition		Voltage (V) (Approx.)
Connector	Terminal	•			
D45	1	0	Deen le als an dumla als au itals	Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$
D45	2	Ground	Door lock and unlock switch	Lock	$0 \rightarrow Battery \ voltage \rightarrow 0$

Is the inspection result normal?

YES >> Replace front door lock assembly (passenger side). Refer to <u>DLK-240, "FRONT DOOR LOCK :</u> <u>Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM connector.

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

E	BCM		Front door lock assembly (passenger side)		
Connector	Terminal	Connector	Terminal	- Continuity	
M119	5	D45	1	Existed	
101119	8	- 045	2	Existed	

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	
M119	5	Ground	Not existed
	8		NOT existed

Is the inspection result normal?

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

NO >> Repair or replace harness.

REAR LH

REAR LH : Description

Locks/unlocks the door with the signal from BCM.

DLK-72

INFOID:000000006208767

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNC				
REAR LH : Compone	ent Function	Check		INFOID:00000006208768
				NN 012.0000000200700
1.CHECK FUNCTION	orform Active To			
 Use CONSULT-III to p Touch "ALL LCK" or "A 		eck that it works norma	ally.	
Is the inspection result nor				
YES >> Door lock actu NO >> Refer to DLK-7		Diagnosis Procedure".		
REAR LH : Diagnosis	Procedure	-		INFOID:00000006208769
1.CHECK DOOR LOCK A		UT SIGNAL		
1. Turn ignition switch OF	F.			
 Disconnect rear door le Check voltage betwee 	ock assembly LH n rear door lock	H connector. assembly LH harness	connector and g	round.
(+)				Voltage (V)
Rear door lock assembly L Connector Terminal		Conditi	on	(Approx.)
1			Lock	$0 \rightarrow Battery voltage \rightarrow 0$
D55 2	Ground	Door lock and unlock swit	ch Unlock	$0 \rightarrow Battery \ voltage \rightarrow 0$
Is the inspection result nor	mal?			
NO >> GO TO 2. 2.CHECK DOOR LOCK A 1. Disconnect BCM conn 2. Check continuity between	ector.		loor lock assemb	
				ly I H barness connector
BCM				bly LH harness connector.
	Torminal		c assembly LH	Continuity
Connector	Terminal 8	Connector		Continuity
			c assembly LH Terminal	Continuity
Connector	8 10	Connector D55	c assembly LH Terminal 1 2	Continuity
Connector M119 3. Check continuity betwee	8 10	Connector D55	c assembly LH Terminal 1 2	Continuity D Existed
Connector M119 3. Check continuity betwee	8 10 een BCM harnes	Connector D55 ss connector and grour	c assembly LH Terminal 1 2	Continuity
Connector M119 3. Check continuity betwee	8 10 een BCM harnes BCM	Connector D55 Connector and grour inal	x assembly LH Terminal 1 2 nd.	Continuity D Existed
Connector M119 3. Check continuity betwee Connector	8 10 een BCM harnes BCM Termi 8 10	Connector D55 Connector and grour inal	x assembly LH Terminal 1 2 nd.	Continuity Existed Continuity Not existed
Connector M119 3. Check continuity betwee Connector M119 Is the inspection result nor	8 10 een BCM harnes BCM Term 8 10 10 10 10 10 10 10 10 10 10	Connector D55 Connector and grour inal	x assembly LH Terminal 1 2 nd. Ground	Continuity Existed Continuity Not existed
Connector M119 3. Check continuity betweet Connector M119 Is the inspection result norm YES >> Replace BCM. NO >> Repair or replace REAR RH	8 10 een BCM harnes BCM Termi 8 10 nal? Refer to <u>BCS-8</u> ce harness.	Connector D55 Ss connector and grour inal	x assembly LH Terminal 1 2 nd. Ground	Continuity Existed Continuity Not existed
Connector M119 3. Check continuity betwee Connector M119 Is the inspection result normore YES >> Replace BCM. NO >> Repair or replace REAR RH REAR RH REAR RH : Descripti	8 10 een BCM harnes BCM Term 8 10 10 10 10 10 10 10 10 10 10	Connector D55 Ss connector and grour inal D2, "Removal and Instal	x assembly LH Terminal 1 2 nd. Ground	Continuity Existed Continuity Not existed
Connector M119 3. Check continuity betweet Connector M119 Is the inspection result norm YES >> Replace BCM. NO >> Repair or replace REAR RH	8 10 een BCM harnes BCM Termi 8 10 10 10 10 10 10 10 10 10 10	Connector D55 Ss connector and grour inal D2, "Removal and Instal D3	x assembly LH Terminal 1 2 nd. Ground	Continuity Existed Continuity Not existed
Connector M119 3. Check continuity betweet Connector M119 Is the inspection result norm YES >> Replace BCM. NO >> Repair or replate REAR RH REAR RH REAR RH : Descripti Locks/unlocks the door wit	8 10 een BCM harnes BCM Termi 8 10 10 10 10 10 10 10 10 10 10	Connector D55 Ss connector and grour inal D2, "Removal and Instal D3	x assembly LH Terminal 1 2 nd. Ground	Continuity Existed Continuity Continuity Not existed
Connector M119 3. Check continuity betweet Connector M119 3. Check continuity betweet Connector M119 Is the inspection result norm YES >> Replace BCM. NO >> Repair or replace REAR RH REAR RH REAR RH : Descripti Locks/unlocks the door wit REAR RH : Compone	8 10 een BCM harnes BCM Termi 8 10 10 10 10 10 10 10 10 10 10	Connector D55 Ss connector and grour inal C, "Removal and Instal BCM. Check	x assembly LH Terminal 1 2 nd. Ground	Continuity Existed Continuity Continuity Not existed

DOOR LOCK ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

- YES >> Door lock actuator is OK.
- NO >> Refer to <u>DLK-74, "REAR RH : Diagnosis Procedure"</u>.

REAR RH : Diagnosis Procedure

INFOID:000000006208772

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.

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

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

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR CIRCUIT

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

E	ЗСМ	Rear door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M119	8	D75	2	Existed
10119	10	075	1	EXISIEU

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M119	8	Ground	Not existed
	10		NUL EXISIEU

Is the inspection result normal?

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

NO >> Repair or replace harness.

YES >> Replace rear door lock assembly RH. Refer to <u>DLK-243, "REAR DOOR LOCK : Removal and</u> <u>Installation"</u>.

FUEL LID LOCK ACTUATOR

	DIAGNOSIS						
FUEL LID L		UATOR					
Description					INFOID:00000006208773		
Locks/unlocks the	e fuel filler lid	with the signa	l from BCM.				
Component I	Function C	Check			INFOID:00000006208774		
1.CHECK FUNC	CTION						
			t ("DOOR LOCK").	- II. <i>i</i>			
2. Touch "ALL I Is the inspection			check that it works norm	ally.			
YES >> Fuel	lid lock actua	tor is OK.					
NO >> Refe Diagnosis Pro		<u>"Diagnosis Pro</u>	<u>ocedure"</u> .				
					INFOID:00000006208775		
1. CHECK FUEL		CTUATOR IN	PUT SIGNAL				
 Turn ignition Disconnect f 		tuator connec	tor				
			lator harness connector a	nd ground.			
(-	-)						
Fuel lid loc	k actuator	()	Condition		(-) U.ODOIDOD	-) U.ODOIIIOD	Voltage (V) (Approx.)
Connector	Terminal						
B242	1	Ground	Door lock and unlock switch	Unlock Lock	$0 \rightarrow \text{Battery voltage} \rightarrow 0$ $0 \rightarrow \text{Battery voltage} \rightarrow 0$		
s the inspection		?			the second se		
		ck actuator. R	efer to <u>DLK-251, "Remova</u>	al and Installa	<u>ation"</u> .		
NO >> GO ⁻ 2.CHECK FUEL	-		RCIUT				
I. Disconnect E							
			connector and fuel lid loc	k actuator ha	arness connector.		
	BCM		Fuel lid lock act	uator			
Connecto		Terminal	Connector	Terminal	Continuity		
			2				
M119		8	B242	2	Existed		
		9	B242	2	Existed		
	uity between	9	B242		Existed		
	uity between	9 BCM harness	connector and ground.				
	BCN	9 BCM harness // Termin	connector and ground.	1	Continuity		
3. Check contir	BCN	9 BCM harness	connector and ground.	1			
3. Check contin Conne M11	BCN ctor	9 BCM harness // Termin 8 9 ?	connector and ground.	1	Continuity		

< DTC/CIRCUIT DIAGNOSIS > TRUNK LID OPENER ACTUATOR

Description

Performs trunk lid open with signal from 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 OFF (CANCEL)?

YES >> Turn on trunk lid opener cancel switch.

NO >> GO TO 2.

- 2. CHECK FUNCTION
- 1. Use CONSULT-III to perform Active Test ("TRUNK/GLASS HATCH").
- 2. Touch "OPEN" to check that it works normally.

Is the inspection result normal?

- YES >> Trunk lid opener actuator is OK.
- NO >> Refer to <u>DLK-76. "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK TRUNK LID OPENER ACTUATOR INPUT SIGNAL

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

(Trunk lid lo	(+) Trunk lid lock assembly		Condition		(–) Condition		Voltage (V) (Approx.)
Connector	Terminal		()				
B303	3	Ground	Trunk lid opener switch	Pressed	$0 \rightarrow \text{Battery voltage} \rightarrow 0$		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and trunk lid lock assembly harness connector.

B	BCM		Trunk lid lock assembly	
Connector	Terminal	Connector	Terminal	Continuity
M120	23	B303	3	Existed

3. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M120	23		Not existed

Is the inspection result normal?

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

NO >> Repair or replace harness.

 ${
m 3.}$ CHECK TRUNK LID OPENER ACTUATOR GROUND CIRCUIT

Check continuity between trunk lid lock assembly harness connector and ground.

DLK-76

INFOID:000000006208776

INFOID:000000006208777

TRUNK LID OPENER ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

	Trunk lid loo	ck assembly		Continuity
Co	nnector	Terminal	Ground	Continuity
I	3303	2		Existed
ES >> R tio	<u>on"</u> .	d lock assembly. Refer to	DLK-249, "TRUNK LID LC	DCK : Removal and Installa
⊃ >> R	epair or replace	e harness.		

< DTC/CIRCUIT DIAGNOSIS >

TRUNK ROOM LAMP SWITCH

Description

Detects trunk open/close condition.

Component Function Check

1.CHECK FUNCTION

Check ("TRNK/HAT MNTR") in "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
TRNK/HAT MNTR	Trunk lid	Open	ON
		Closed	OFF

Is the inspection result normal?

YES >> Trunk room lamp switch is OK. NO >> Refer to <u>DLK-78</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000006208781

1.CHECK TRUNK ROOM LAMP SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect trunk lid lock assembly connector.
- 3. Check signal between trunk lid lock assembly harness connector and ground using oscilloscope.

Trunk lid lo	(+) Trunk lid lock assembly Connector Terminal		Signal (Reference value)	
B303	1 Ierminai	Ground	(V) 15 0 5 10 5 10 5 10 5 5 10 5 5 10 5 5 10 5 5 10 5 5 10 5 5 10 5 5 10 5 10 5 10 5 10 5 10 5 10 5 10 10 10 10 10 10 10 10 10 10 10 10 10	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.check trunk room lamp switch circuit

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and trunk lid lock assembly harness connector.

BCM		Trunk lid lock assembly		Continuity
Connector	Terminal	Connector Terminal		Continuity
M121	50	B303	1	Existed

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M121	50		Not existed

Is the inspection result normal?

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

INFOID:000000006208779

TRUNK ROOM LAMP SWITCH

neck continuity between to		issembly harness	connector and gr	ound.	
	ock assembly				Continuity
Connector B303	ler	rminal	Ground		Existed
the inspection result norn	nal?	2			LAISIEU
YES >> GO TO 4. NO >> Repair or replace • CHECK TRUNK ROOM	ce harness.	СН			
efer to DLK-79, "Compone	ent Inspection)".			
the inspection result norn		_			
YES >> GO TO 5. NO >> Replace trunk tion".	lid lock assen	nbly. Refer to <u>DL</u>	<u>K-249, "TRUNK L</u>	ID LOCK : R	emoval and Instal
CHECK INTERMITTEN	FINCIDENT				
	t Incident".				
efer to <u>GI-43, "Intermitten</u> t					
efer to <u>GI-43, "Intermittent</u> >> INSPECTION E	END				
efer to <u>GI-43, "Intermittent</u> >> INSPECTION E	END				INFOID:00000000620
efer to <u>GI-43, "Intermitten</u> t	END	СН			INF01D:00000000620
efer to <u>GI-43, "Intermittent</u> >> INSPECTION E Component Inspectio	END n LAMP SWITC F. sk assembly c	onnector.	ninals.		INFOID:00000000620
efer to <u>GI-43, "Intermittent</u> >> INSPECTION E Component Inspectio .CHECK TRUNK ROOM . Turn ignition switch OF . Disconnect trunk lid loc	END n LAMP SWITC F. sk assembly c	onnector.			
efer to <u>GI-43, "Intermittent</u> >> INSPECTION E Component Inspectio .CHECK TRUNK ROOM . Turn ignition switch OF . Disconnect trunk lid loc . Check continuity betwe	END N LAMP SWITC F. k assembly c en trunk lid lo	onnector.	ninals.		INFOID:000000000000000000000000000000000000
efer to <u>GI-43, "Intermittent</u> >> INSPECTION E Component Inspectio .CHECK TRUNK ROOM . Turn ignition switch OF . Disconnect trunk lid loc . Check continuity betwe	END N LAMP SWITC F. k assembly c en trunk lid lo	onnector.			

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

DOOR KEY CYLINDER SWITCH

Description

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

Component Function Check

INFOID:000000006208784

INFOID:00000006208783

1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

Monitor item	Con	dition	Status
KEY CYL LK-SW		Lock	ON
RET CTL LR-SW	Driver side door key cylinder	Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

Is the inspection result normal?

YES >> Door key cylinder switch is OK.

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

Diagnosis Procedure

INFOID:000000006208785

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

	+) sembly (driver side)	(-)	Voltage (V) (Approx.)
Connector	Terminal		(
D15	5	Ground	5
	6	Ground	5

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

1. Disconnect power window main switch connector.

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

Power windo	Power window main switch		Front door lock assembly (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
D8	4	D15	6	Existed
Do	6	010	5	LAISIEU

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

•	Power windo	w main switch		Continuity
-	Connector	Terminal	Ground	Continuity
-	D8	4	Ground	Not existed
	Do	6		Not existed

DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOS	IS >			
Is the inspection result norm	al?			
	window main switch. Refer	to PWC-120, "Removal a	nd Installation".	А
NO >> Repair or replac				
3.CHECK DOOR KEY CYL	INDER SWITCH GROUNI	D CIRCUIT		В
Check continuity between from	ont door lock assembly (dri	ver side) harness connect	or and ground.	D
Eront door lock as	sembly (driver side)			
Connector	Terminal	Ground	Continuity	С
D15	4	e.ea.u	Existed	
Is the inspection result norm	al?			D
YES >> GO TO 4.				
NO >> Repair or replac				_
4. CHECK DOOR KEY CYL	INDER SWITCH			Е
Refer to DLK-81, "Component	nt Inspection".			
Is the inspection result norm	al?			F
YES >> GO TO 5.				
NO >> Replace front d Removal and Ins		r side). Refer to <u>DLK-24</u>	0, "FRONT DOOR LOCK :	
5.CHECK INTERMITTENT				G
Refer to <u>GI-43</u> , "Intermittent				
Refer to <u>GI-43, International</u>				Н
>> INSPECTION E	ND			
Component Inspection	I		INFOID:00000006208786	
1. CHECK DOOR KEY CYL	INDER SWITCH			
 Turn ignition switch OFF Disconnect front door loop 	ck assembly (driver side) t	erminal.		J

Check continuity between front door lock assembly (driver side) terminals.

Front door lock ass	embly (driver side)	Condi	ion	Continuity
Term	ninal	Condi	1011	Continuity
5			Unlock	Existed
5	4	Driver eide deer key eylinder	Neutral / Lock	Not existed
6	4	Driver side door key cylinder	Lock	Existed
0			Neutral / Unlock	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-240, "FRONT DOOR LOCK :</u> <u>Removal and Installation"</u>.

0

Ν

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

REMOTE KEYLESS ENTRY RECEIVER

Description

Receives Intelligent Key operation and transmits to BCM.

Component Function Check

1.CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.

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

Diagnosis Procedure

1. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

1. Turn ignition switch OFF.

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

	+) ss entry receiver	(-)	Condition	Signal (Reference value)
Connector	Terminal			
 M104	2	Ground	During waiting	(V) 15 10 5 0 1 ms JMKIA0064GB
MTO	L	Glouid	When operating either button on the Intelligent Key	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

1. Disconnect BCM connector and remote keyless entry receiver connector

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

B	СМ	Remote keyles	s entry receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M122	83	M104	2	Existed

3. Check continuity between BCM harness connector and ground.

Revision: 2011 November

INFOID:000000006208787

INFOID:000000006208788

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

	BCM			Continuity
Connector	Termir	nal	Ground	Continuity
M122	83			Not existed
IO >> Repair or ro CHECK REMOTE K Disconnect remote	CM. Refer to <u>BCS-82</u> eplace harness. EYLESS ENTRY RE keyless entry receiv	ECEIVER POWER		round.
C C				
Remote	(+) keyless entry receiver		()	Voltage (V)
Connector	Termir	nal	()	(Approx.)
M104	4		Ground	Battery voltage
the inspection result	normal?			, ,
IO >> GO TO 4. CHECK REMOTE K Disconnect BCM co Check continuity be	onnector.			ceiver harness connecto
	СМ		less entry receiver	
Connector	Terminal	Connector	Terminal	Continuity
		Connector	Terminal	
M122	103	M104	4	Existed
M122 Check continuity be	103 etween BCM harnes	M104 s connector and gro	4 und.	Existed
			-	
	etween BCM harnes	s connector and gro	-	Existed
Check continuity be Connector M122	BCM Termir 103	s connector and gro	und.	
Check continuity be Connector M122 the inspection result (ES >> Replace BC NO >> Repair or re .CHECK REMOTE K Disconnect BCM co	BCM BCM Termir 103 normal? CM. Refer to <u>BCS-82</u> eplace harness. EYLESS ENTRY RE connector.	s connector and gro	und. Ground tallation". 3	Continuity Not existed
Check continuity be Connector M122 the inspection result (ES >> Replace BC NO >> Repair or re CHECK REMOTE K Disconnect BCM co Check continuity be	BCM BCM Termir 103 normal? CM. Refer to <u>BCS-82</u> eplace harness. EYLESS ENTRY RE connector.	s connector and gro	und. Ground tallation". 3	Continuity Not existed
Check continuity be Connector M122 the inspection result (ES >> Replace BC NO >> Repair or re CHECK REMOTE K Disconnect BCM co Check continuity be	BCM BCM Termir 103 normal? CM. Refer to <u>BCS-82</u> eplace harness. EYLESS ENTRY RE connector. etween BCM harness	s connector and gro	und. Ground tallation". 3 note keyless entry re-	Continuity
Check continuity be Connector M122 the inspection result (ES >> Replace BC IO >> Repair or re CHECK REMOTE K Disconnect BCM co Check continuity be	BCM BCM Termir 103 normal? CM. Refer to <u>BCS-82</u> eplace harness. EYLESS ENTRY RE onnector. etween BCM harness	s connector and gro	und. Ground tallation". 3 note keyless entry realess entry realess entry receiver	Continuity Not existed
Check continuity be Connector M122 the inspection result ICS >> Replace BC IO >> Repair or re CHECK REMOTE K Disconnect BCM co Check continuity be BC Connector M123	BCM BCM Termir 103 normal? CM. Refer to BCS-82 eplace harness. EYLESS ENTRY RE connector. etween BCM harness CM Terminal	s connector and gro nal 2. "Removal and Ins ECEIVER CIRCUIT s connector and rem Remote key Connector M104	Ground tallation". 3 hote keyless entry re- less entry receiver Terminal 1	Continuity Not existed ceiver harness connecto Continuity
Check continuity be Connector M122 the inspection result (ES >> Replace BC IO >> Repair or re CHECK REMOTE K Disconnect BCM co Check continuity be BC Connector M123	BCM BCM Termir 103 normal? CM. Refer to BCS-82 eplace harness. EYLESS ENTRY RE connector. etween BCM harness CM Terminal 137	s connector and gro nal 2. "Removal and Ins ECEIVER CIRCUIT s connector and rem Remote key Connector M104	Ground tallation". 3 hote keyless entry re- less entry receiver Terminal 1	Continuity Not existed Ceiver harness connecto Continuity Existed
Check continuity be Connector M122 the inspection result (ES >> Replace BC NO >> Repair or re CHECK REMOTE K Disconnect BCM co Check continuity be BC Connector M123	BCM BCM Termir 103 normal? CM. Refer to BCS-82 eplace harness. EYLESS ENTRY RE connector. etween BCM harness CM Terminal 137 etween BCM harness	s connector and gro nal 2. "Removal and Ins ECEIVER CIRCUIT s connector and rem Remote key Connector M104 s connector and gro	Ground tallation". 3 hote keyless entry re- less entry receiver Terminal 1	Continuity Not existed ceiver harness connecto Continuity

Revision: 2011 November

6. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

REMOTE KEYLESS ENTRY RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

1. Connect BCM connector.

2. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Connector Terminal		Continuity
M123	137		Existed

Is the inspection result normal?

>> Replace remote keyless entry receiver. Refer to <u>DLK-261, "Removal and Installation"</u>. >> Replace BCM. Refer to <u>BCS-82, "Removal and Installation"</u>. YES

NO

TRUNK LID OPENER SWITCH

< DTC/CIRCUIT DIAGN					
TRUNK LID OPEN	IER SWITCH	-1			
Description					INF0ID:00000006208790
Transmits trunk lid open s	gnal to BCM.				
Component Functio	n Check				INFOID:00000006208791
1. CHECK TRUNK LID O	PENER CANCEL	SWITCH			
Check trunk lid opener ca	ncel switch positio	on.			
Does trunk lid opener canYES>> Turn off trunkNO>> GO TO 2.	cel switch turn ON lid opener cancel		<u>.)?</u>		
2. CHECK FUNCTION					
Check ("TR/BD OPEN SV	/") in "Data Monito	or" mode us	sing CONSU	LT-III.	
Monitor item		Con	dition		Status
TR/BD OPEN SW	Trunk lid opener	switch	Pressed		ON
Is the inspection result no	-		Released		OFF
Diagnosis Procedure					INFOID:00000006208792
1. CHECK TRUNK LID O 1. Turn ignition switch O 2. Disconnect trunk lid o 3. Check signal between	FF. pener switch conr	nector.		tor and ground usin	na oscilloscope
 Turn ignition switch O Disconnect trunk lid o Check signal betweer 	FF. pener switch conr	nector.		tor and ground usir	ng oscilloscope.
 Turn ignition switch O Disconnect trunk lid o Check signal betweer (+) 	FF. pener switch conr i trunk lid opener s	nector. switch harn		Sigr	nal
 Turn ignition switch O Disconnect trunk lid o Check signal betweer 	FF. pener switch conr i trunk lid opener s	nector.			nal
 Turn ignition switch O Disconnect trunk lid o Check signal betweer (+) Trunk lid opene 	FF. pener switch conr trunk lid opener s	nector. switch harn		Sigr	nal
1. Turn ignition switch O 2. Disconnect trunk lid o 3. Check signal betweer (+) (+) (+) (+) (Connector (M20) (+) (+) (+) (+) (+) (+) (+) (+) (+) (+	FF. pener switch conr trunk lid opener s switch Terminal	nector. switch harn (-)		(Reference (Reference)	nal le value)
1. Turn ignition switch O 2. Disconnect trunk lid o 3. Check signal betweer (+) (+) (+) (+) (+) (+) (+) (+) (+) (+)	FF. pener switch conr trunk lid opener s switch Terminal 1 <u>mal?</u>	nector. switch harn (-) Ground		(Reference (Reference)	nal le value)
1. Turn ignition switch O 2. Disconnect trunk lid o 3. Check signal betweer (+) Trunk lid opene Connector M20 <u>Is the inspection result no</u> YES >> GO TO 3. NO >> GO TO 2. 2. CHECK TRUNK LID O	FF. pener switch conr trunk lid opener s switch Terminal 1 <u>mal?</u> PENER SWITCH	nector. switch harn (-) Ground		(Reference (Reference)	nal le value)
1. Turn ignition switch O 2. Disconnect trunk lid o 3. Check signal betweer (+) Trunk lid opene Connector M20 Is the inspection result no YES >> GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK LID O 1. Disconnect BCM control	FF. pener switch conr trunk lid opener s switch Terminal 1 <u>rmal?</u> PENER SWITCH nector.	Ground	d	(V) 15 10 5 0 10 ms	al e value)
1. Turn ignition switch O 2. Disconnect trunk lid o 3. Check signal betweer (+) Trunk lid opene Connector M20 Is the inspection result no YES > GO TO 3. NO >> GO TO 2. 2.CHECK TRUNK LID O 1. Disconnect BCM conditioned	FF. pener switch conr trunk lid opener s switch Terminal 1 <u>rmal?</u> PENER SWITCH nector.	Ground	d	(V) 15 10 5 0 10 ms 10 ms 10 ms 10 ms	arness connector.
1. Turn ignition switch O 2. Disconnect trunk lid o 3. Check signal betweer (+) Trunk lid opene Connector M20 Is the inspection result no YES >> GO TO 3. NO >> GO TO 2. 2. CHECK TRUNK LID O 1. Disconnect BCM coni Check continuity betw	FF. pener switch conr trunk lid opener s switch Terminal 1 <u>rmal?</u> PENER SWITCH nector.	CIRCUIT	r and trunk li	(V) 15 10 5 0 10 ms 10 ms 10 ms 10 ms	al e value)

TRUNK LID OPENER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

BCM			Continuity
Connector	Terminal	Ground	Continuity
M121	67		Not existed

Is the inspection result normal?

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

NO >> Repair harness or connector.

3.CHECK TRUNK LID OPENER SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch harness connector and ground.

Trunk lid opener switch			Continuity
Connector	Terminal	Ground	Continuity
M20	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK TRUNK LID OPENER SWITCH

Refer to DLK-86, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener switch. Refer to <u>DLK-259</u>, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> 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 terminals.

Terr	ninal	Condition		Continuity
Trunk lid op	pener switch			Continuity
1	2	Trunk lid opener switch	Pressed	Existed
I	2		Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener switch. Refer to <u>DLK-259, "Removal and Installation"</u>.

Revision: 2011 November

TRUNK LID OPENER REQUEST SWITCH < DTC/CIRCUIT DIAGNOSIS >							
TRUNK LID OPENE	ER REQUEST SWIT	CH					
Description							
Performs trunk lid open request Component Function	•						
1. CHECK TRUNK LID OPE	ENER CANCEL SWITCH						
Does trunk lid opener cance YES >> Turn off trunk lic NO >> GO TO 2. 2.CHECK FUNCTION	NO $>>$ GO TO 2.						
Monitor item	Condit	ion					
REQSW-BD/TR Trunk lid opener request switch Pressed Released Released							
Is the inspection result normal? YES >> Trunk lid opener request switch is OK. NO >> Refer to <u>DLK-87, "Diagnosis Procedure"</u> .							
Diagnosis Procedure							

1. CHECK TRUNK LID OPENER REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect trunk lid opener request switch connector.

3. Check signal between trunk lid opener request switch harness connector and ground with oscilloscope.

(+	·)			
Trunk lid opener	request switch	()	Signal (Reference value)	
Connector	Terminal		(
			(V) 15	
B304	1	Ground	10 5 0 	
nspection result			JPMIA0016GB	

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TRUNK LID OPENER REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and trunk lid opener request switch harness connec-Ρ tor.

BC	CM	Trunk lid opene	er request switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M121	61	B304	1	Existed

Check continuity between BCM harness connector and ground. 3.

А

В

С

D

Ε

F

Н

J

Ο

INFOID:000000006208794

INFOID:000000006208795

INFOID:000000006208796

Status

ON OFF

TRUNK LID OPENER REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

BCM			Continuity
Connector	Terminal	Ground	Continuity
M121	61		Not existed

Is the inspection result normal?

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

NO >> Repair harness or connector.

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

Check continuity between trunk lid opener request switch harness connector and ground.

Trunk lid opener request switch			Continuity
Connector	Terminal	Ground	Continuity
B304	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK TRUNK LID OPENER REQUEST SWITCH

Refer to DLK-88, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener request switch. Refer to <u>DLK-258, "Removal and Installation"</u>.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK TRUNK LID OPENER REQUEST SWITCH

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

Trunk lid opene	er request switch	Condition		Continuity
Terr	ninal			Continuity
1	2	Trunk lid opener request switch	Pressed	Existed
I	2	Trunk nu opener request switch	Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener request switch. Refer to <u>DLK-258, "Removal and Installation"</u>.

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 Check ("TR CANCEL SW") in "Data Monitor" mode using CONSULT-III. Monitor item Condition Status ON ON TR CANCEL SW Trunk lid opener cancel switch OFF (Cancel) OFF Is the inspection result normal? YES >> Trunk lid opener cancel switch is OK. NO >> Refer to DLK-89, "Diagnosis Procedure". Diagnosis Procedure 1. CHECK TRUNK LID OPENER CANCEL SWITCH INPUT SIGNAL 1. Turn ignition switch OFF. 2. Disconnect trunk lid opener cancel switch connector. 3. Check signal between trunk lid opener cancel switch harness connector and ground with oscilloscope. (+) Signal Trunk lid opener cancel switch (-) (Reference value) Connector Terminal (V M105 1 Ground 10 ms IPMIA0012GB Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 2. 2.check trunk lid opener cancel switch circuit 1. Disconnect BCM connector. 2. Check continuity between BCM harness connector and trunk lid opener cancel switch harness connector. BCM Trunk lid opener cancel switch Continuity Connector Terminal Connector Terminal 129 M123 M105 1 Existed Check continuity between BCM harness connector and ground. 3. BCM

Continuity Connector Terminal Ground M123 129 Not existed

Is the inspection result normal?

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

DLK-89

Ν

Ρ

M

Н

DLK

F

А

В

D

INFOID:00000006208798

INFOID:000000006208799

TRUNK LID OPENER CANCEL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair harness or connector.

3.CHECK TRUNK LID OPENER CANCEL SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener cancel switch harness connector and ground.

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK TRUNK LID OPENER CANCEL SWITCH

Refer to DLK-90, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace trunk lid opener cancel switch. Refer to <u>DLK-260, "Removal and Installation"</u>.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:000000006208801

1. CHECK TRUNK LID OPENER CANCEL SWITCH

1. Turn ignition switch OFF.

2. Disconnect trunk lid opener cancel switch connector.

3. Check continuity between trunk lid opener cancel switch terminals.

Trunk lid opener cancel switch		Condition		Continuity	
Terminal					
1	2	Trunk lid opener cancel switch	ON	Existed	
	2		OFF (Cancel)	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace trunk lid opener cancel switch. Refer to <u>DLK-260, "Removal and Installation"</u>.

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR REQUEST SWITCH

Description

Transmits lock/unlock operation to BCM.

Component Function Check

1.CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> Door request switch is OK.

NO >> Refer to <u>DLK-91, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

- 2. Disconnect malfunctioning front outside handle connector.
- 3. Check signal between malfunctioning front outside handle harness connector and ground with oscilloscope.

Signal		(+)		
(Reference value)	(-)	dle	Front outside hand	
		Terminal	nector	Co
(V) 15 10 5 0 10 ms JPMIA0016GB	Ground	1	D13	LH
(V) 15 10 5 0 	Ground		D43	RH
JPMIA0016GB				

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.

 Check continuity between malfunctioning front outside handle harness connector and BCM harness connector.

DLK-91

А

В

F

Н

Ρ

INFOID:000000006208803

INFOID:000000006208804

DOOR REQUEST SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Front outside handle			B	Continuity	
Coni	nector	Terminal	Connector Terminal		Continuity
LH	D13	1 M122	M100	101	Existed
RH	D43	I	M122	100	Existed

3. Check continuity between malfunctioning front outside handle harness connector and ground.

	Front outside handle			Continuity
Connector		Terminal	Ground	Continuity
LH	D13	1	Ground	Not existed
RH	D43	1		NUL EXISTED

Is the inspection result normal?

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

NO >> Repair or replace harness.

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

Check continuity between malfunctioning front outside handle harness connector and ground.

Front outside handle				Continuity
Connector		Terminal	Ground	Continuity
LH	D13	0	Giouna	Eviated
RH	D43	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK DOOR REQUEST SWITCH

Refer to <u>DLK-92</u>, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace malfunctioning front outside handle. Refer to <u>DLK-240, "FRONT DOOR LOCK : Removal</u> and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK DOOR REQUEST SWITCH

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

Terr	Terminal		Condition	
Front outs	Front outside handle			
1	1 2		Pressed	Existed
I	1 2	Door request switch	Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunctioning front outside handle. Refer to <u>DLK-240, "FRONT DOOR LOCK : Removal</u> and Installation".

DLK-92

UNLOCK SENSOR

<pre>< DTC/CIRCUIT D UNLOCK SEN</pre>		SIS >					
Description						INF01D:000000006208806	A
Detects door lock co	ondition o	of driver side door.					В
Component Fu	nction	Check				INFOID:00000006208807	,
1.CHECK FUNCT	ION						С
Check ("UNLK SEN	I -DR") in	"Data Monitor" mo	de usin	g CONSULT-III.			
Monitor iter	m		Con	dition		Status	D
		Driver eide deer		Lock		OFF	
UNLK SEN -DR		Driver side door		Unlock		ON	E
Diagnosis Proce 1. CHECK UNLOC 1. Turn ignition sw	o <u>DLK-93</u> edure K SENS(vitch OFF	8, "Diagnosis Proce OR INPUT SIGNAL	-	connector		INFOID:00000006208806	F
					ss conne	ctor and ground with oscillo-	Н
	(+)					Qianal	
Front door	lock assem	bly (driver side)		(—)		Signal (Reference value)	
Connector		Terminal					J
D15		3		Ground	(V) 15 10 5 0		DLł

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.

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

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

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity	
Connector	Connector Terminal		Continuity	
M123	119		Not existed	

L

Μ

Ν

10 ms

JPMIA0012GB

UNLOCK SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

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

NO >> Repair or replace harness.

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK UNLOCK SENSOR

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

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-240, "FRONT DOOR LOCK :</u> <u>Removal and Installation"</u>.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:000000006208809

1.CHECK UNLOCK SENSOR

1. Turn ignition switch OFF.

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

Front door lock assembly (driver side)		Condition		Continuity	
Terr	Terminal		Condition		
2	4	Driver side door	Unlock	Existed	
5			Lock	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door lock assembly (driver side). Refer to <u>DLK-240, "FRONT DOOR LOCK :</u> <u>Removal and Installation"</u>.

OUTSIDE KEY ANTENNA

< [DTC/CIR		GNOSIS :		I SIDE KEI	ANIENNA		
0	UTSID	E KEY	ANTE	NNA				А
De	escriptio	on					INFOID:00000006208810	A
					the vehicle. assenger side) and installed in rea	r bumper.	В
Со	ompone	ent Fund	ction Ch	neck			INFOID:00000006208811	С
1.	CHECK	OUT SIDE	KEY AN	ENNA FU	INCTION			
		-	-		-	detection range.		D
			<u>k when ead</u> ey antenna	-	switch is pres	<u>sed?</u>		
					Procedure".			E
Di	agnosis	s Proced	dure				INFOID:00000006208812	
1.	CHECK	OUTSIDE	KEY ANT	ENNA INF	PUT SIGNAL 1			F
1.		nition swite		hornood	oppostor and	around using speills		
2.	Checks	signal betv		namess		ground using oscillo	scope.	G
-		(+)					Signal	
-	0	BCM	Toursings	()		Condition	(Reference value)	Η
-	LH	nector	Terminal 76, 77					
-	RH	M122	74, 75	Ground	Door request	When Intelligent Key is in the antenna de- tection area.	(V) 15 10 0 1 s JMKIA0062GB	ا J DLK
	Rear bumper	M121	38, 39		pressed	When Intelligent Key is not in the antenna detection area.	(V) 15 10 5 0 1 s J J J J J J J J J J J J J	
ls	the inspe	ction resul	t normal?		1	1		
		Replace E GO TO 2.		r to <u>BCS-</u>	32, "Removal a	and Installation"		Ν
2.	CHECK	OUTSIDE	KEY ANT	ENNA CIF	RCUIT			
1.						ide key antenna con	nector. antenna harness connector and	0
2.		arness cor		nanuncuol	ing outside h	anule of outside key	antenna namess connector and	Р
								Г

OUTSIDE KEY ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

Outside	e handle/outside key	antenna	BC	Continuity	
Conr	nector	Terminal	Connector	Terminal	Continuity
LH	D14	1	M122	77	Existed
	014	2		76	
RH	D44	1	- IVI 1 Z Z	75	
КП		2		74	
Poor humpor	B63	1	M121	39	
Rear bumper	603	2	- IVI I Z I	38	

3. Check continuity between malfunctioning outside handle or outside key antenna harness connector and ground.

Ou	tside handle/outside key ant		Continuity	
Сог	nnector	Terminal		Continuity Not existed
LH	D14	1		
LN	D14	2	Ground	
RH	D44	1		
КП	D44	2		NOL EXISTED
Poor humpor	B63	1		
Rear bumper	003	2		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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

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

Is the inspection result normal?

YES-1 >> Replace outside key antenna LH (driver side). Refer to <u>DLK-255, "DRIVER SIDE : Removal and</u> <u>Installation"</u>.

OUTSIDE KEY ANTENNA

< DTC/CIRCUIT DIAGNOSIS >	
YES-2 >> Replace outside key antenna RH (passenger side). Refer to <u>DLK-255. "PASSENGER SIDE :</u> <u>Removal and Installation"</u> .	А
YES-3 >> Replace outside key antenna (rear bumper). Refer to <u>DLK-255, "REAR BUMPER : Removal and</u> Installation".	~
NO >> Replace BCM. Refer to <u>BCS-82, "Removal and Installation"</u> .	В
	С
	D
	E
	_
	F
	G
	0
	Н
	I
	J
	DU
	DLk
	L
	M
	Ν
	0

Ρ

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY WARNING BUZZER

Description

Answers back and warns for an inappropriate operation.

Component Function Check

1.CHECK FUNCTION

1. Use CONSULT-III to perform Active Test ("OUTSIDE BUZZER").

2. Touch "ON" to check that it works normally.

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.

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

Diagnosis Procedure

1.CHECK FUSE

1. Turn ignition switch OFF.

2. Check 10 A fuse, [No.6, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

1. Disconnect Intelligent Key warning buzzer connector.

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

	(+)		Voltage (V) (Approx.)	
Intelligent Ke	warning buzzer	()		
Connector	Terminal			
E57	1	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

1. Disconnect BCM connector.

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

B	СМ	Intelligent Key	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M121	64	E57	3	Existed

3. Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M121	64		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK INTELLIGENT KEY WARNING BUZZER

Refer to DLK-99, "Component Inspection".

INFOID:000000006208813

INFOID:000000006208814

INTELLIGENT KEY WARNING BUZZER

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?	
	CS-82, "Removal and Installation".
NO >> Replace Intelligent Key	varning buzzer. Refer to <u>DLK-256, "Removal and Installation"</u> .
Component Inspection	INFOID:00000000620881
1.CHECK INTELLIGENT KEY WA	NING BUZZER
2. Disconnect Intelligent Key war	g buzzer connector. rectly to Intelligent Key warning buzzer terminals and check the opera-
 Disconnect Intelligent Key warn Connect battery power supply tion. 	
 Disconnect Intelligent Key warn Connect battery power supply tion. 	rectly to Intelligent Key warning buzzer terminals and check the opera-
 Disconnect Intelligent Key warn Connect battery power supply tion. 	rectly to Intelligent Key warning buzzer terminals and check the opera-

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace Intelligent Key warning buzzer. Refer to <u>DLK-256, "Removal and Installation"</u>.

J

G

Н

DLK

L

Μ

Ν

Ο

Ρ

INTELLIGENT KEY

< DTC/CIRCUIT DIAGNOSIS >

INTELLIGENT KEY

Description

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

- Door lock/unlock
- Engine start

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

Component Function Check

1.CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Refer to <u>DLK-100, "Diagnosis Procedure"</u>.

Diagnosis Procedure

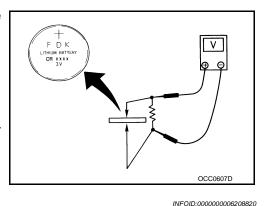
1.CHECK INTELLIGENT KEY BATTERY

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 the specification?

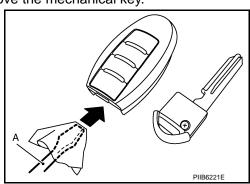
- YES >> Replace Intelligent Key.
- NO >> Replace Intelligent Key battery. Refer to <u>DLK-100</u>, <u>"Component Inspection"</u>.



Component Inspection

1. REPLACE INTELLIGENT KEY BATTERY

- 1. Release the lock knob at the back of the Intelligent Key and remove the mechanical key.
- Insert a flat-blade screwdriver (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.
 CAUTION:
 - Do not touch the circuit board or battery terminal.
 - The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.



3. Replace the battery with new one.

INFOID:000000006208817

INFOID:000000006208818

INTELLIGENT KEY

< DTC/CIRCUIT DIAGNOSIS >

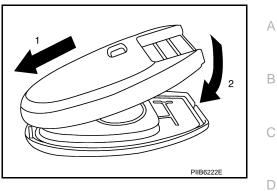
- Align the tips of the upper and lower parts, and then push them together until it is securely closed.
 CAUTION:
 - When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.
 - After replacing the battery, check that all Intelligent Key functions work normally.

Is the inspection result normal?

- YES >> Intelligent Key is OK.
- NO >> Check remote keyless entry receiver. Refer to <u>DLK-82</u>, <u>"Component Function Check"</u>.

Special Repair Requirement

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



INFOID:000000006208821

L

Μ

Ν

0

Ρ

J

Ε

F

Н

< DTC/CIRCUIT DIAGNOSIS > KEY SLOT

Description

Detects whether Intelligent Key is inserted. Immobilizer antenna amp checks Intelligent Key transponder.

Component Function Check

1.CHECK FUNCTION

Check ("KEY SW -SLOT") in "Data Monitor" mode using CONSULT-III.

Monitor item	Condition		Status
KEY SW-SLOT	Intelligent Key	Inserted in key slot	ON
	intelligent Key	Removed from key slot	OFF

Is the inspection result normal?

YES >> Key slot is OK.

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

Diagnosis Procedure

1.CHECK FUSE

1. Turn ignition switch OFF.

2. Check 10 A fuse, [No.9, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK KEY SLOT POWER SUPPLY CIRCUIT

1. Disconnect key slot connector.

2. Check voltage between key slot harness connector and ground.

(- Key		()	Voltage (V) (Approx.)
Connector	Terminal		
M22	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK KEY SLOT CIRCUIT

1. Disconnect BCM connector.

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

B	3CM Key slot		Continuity	
Connector	Terminal	Connector		
M123	121	M22	11	Existed

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity	
Connector	Terminal	Ground	Continuity	
M123	121		Not existed	

Is the inspection result normal?

YES >> GO TO 4.

INFOID:000000006208822

INEOID-000000006208823

KEY SLOT

< DTC/CIRCUIT DIAGNOSIS >							
NO >> Repair or replace harness.							
4.CHECK KEY SLOT							
Refer to DLK-103, "Component Inspection".							
Is the inspection result n	ormal?				В		
 YES >> Replace BCM. Refer to <u>BCS-82, "Removal and Installation"</u>. NO >> Replace key slot. Refer to <u>DLK-257, "Removal and Installation"</u>. 							
Component Inspec	tion			INFOID:000000006208825	С		
1.CHECK KEY SLOT							
 Turn ignition switch OFF. Disconnect key slot connector. Check continuity between key slot terminals. 							
Keys	slot		Condition	Continuity			
Term	inal		Jonation	Continuity	F		
1	11	Inserted in key slot Existed					
1 11 Intelligent Key Removed in key slot Not existed							
Is the inspection result normal?							
YES >> INSPECTIO NO >> Replace key		<u>.K-257, "Removal an</u>	d Installation".				

Н

J

L

Μ

Ν

Ο

Ρ

< DTC/CIRCUIT DIAGNOSIS >

KEY SLOT INDICATOR

Description

Blinks when Intelligent Key insertion is required.

Component Function Check

1.CHECK FUNCTION

1. Use CONSULT-III to perform Active Test ("KEY SLOT ILLUMI").

2. Touch "ON" to check that it works normally.

Is the inspection result normal?

- YES >> Key slot is OK.
- NO >> Refer to <u>DLK-104</u>, "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK FUSE

1. Turn ignition switch OFF.

2. Check 10 A fuse, [No. 6, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK KEY SLOT POWER SUPPLY CIRCUIT

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

	(+)			
Key slot		()	Voltage (V) (Approx.)	
Connector	Terminal			
M22	5	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

 ${
m 3.}$ CHECK KEY SLOT CIRCUIT

1. Disconnect BCM connector.

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

B	СМ	Key	∕ slot	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M122	92	M22	6	Existed

3. Check continuity between BCM harness connector and ground.

BC	CM		Continuity
Connector	Terminal	Ground	Continuity
M122	92		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK KEY SLOT

Refer to DLK-105, "Component Inspection".

INFOID:000000006208826

INFOID:000000006208827

KEY SLOT INDICATOR

< DTC/CIRCUIT DIAGNOSIS >		
Is the inspection result normal?		
YES >> Replace BCM. Refer to <u>BCS-82</u> NO >> Replace key slot. Refer to <u>DLK-2</u>		
Component Inspection		INF0/D:0000000620882
1.CHECK KEY SLOT INDICATOR		
 Turn ignition switch OFF. Disconnect key slot connector. 		
 Connect battery power supply directly to 	key slot terminals and o	check the operation.
Terminal		
Key slot		Operation
(+)	(-)	
5	6	Key slot illuminates
Is the inspection result normal?		
YES >> INSPECTION END		

NO >> Replace key slot. Refer to <u>DLK-257, "Removal and Installation"</u>.

J

DLK

L

Μ

Ν

Ο

Ρ

А

В

С

D

Е

F

G

Н

HORN FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

HORN FUNCTION

Description

Performs answer-back for each operation with horn.

Component Function Check

1.CHECK FUNCTION

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

2. Touch "ON" to check that it works normally.

Is the operation normal?

YES >> Horn function is OK.

NO >> Refer to <u>DLK-106, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1. CHECK HORN SWITCH

Check horn function with horn switch

Do the horns sound?

YES >> GO TO 2.

NO >> Refer to <u>HRN-2</u>, "Wiring Diagram - HORN -".

2.CHECK HORN RELAY POWER SUPPLY

1. Turn ignition switch ON.

- 2. Perform "ACTIVE TEST" ("HORN") using CONSULT-III.
- 3. Check voltage between malfunctioning horn relay harness connector and ground.

	(+)	(+)				Valtare (VI)		
	Horn relay		(—)	Test item				Voltage (V) (Approx.)
Con	nector	Terminal						
Low	E11	1	Ground	HORN	ON	Battery voltage $\rightarrow 0 \rightarrow$ Battery voltage		
High	E18	3	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.

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

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

IPE	IPDM E/R		Horn relay	
Connector	Terminal	Connector	Terminal	Continuity
E6	44	E11	1	Existed
E6	45	E18	3	LXISIEU

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

IPD	DM E/R		Continuity
Connector	Terminal	Ground	Continuity
E6	44	Ground	Not existed
E0	45		

Is the inspection result normal?

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

DLK-106

INFOID:000000006208830

INFOID:000000006208831

HORN FUNCTION

< DTC/CIRCUIT DIAGNOSIS >	
NO >> Repair or replace harness.	
4.CHECK INTERMITTENT INCIDENT	А
Refer to GI-43, "Intermittent Incident".	
Is the inspection result normal?	В
>> INSPECTION END	
	С
	D
	E
	F
	1

J

DLK

M

Ν

Ο

Ρ

G

Н

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

Use CONSULT-III to perform Active Test ("LCD").

Is each warning displayed on meter display?

Is the inspection result normal?

YES >> Combination meter display function is OK.

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

Diagnosis Procedure

1.CHECK COMBINATION METER

Refer to <u>MWI-85, "DTC Index"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check combination meter. Refer to <u>MWI-4, "Work flow"</u>.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

INFOID:000000006208833

INFOID:000000006208834

BUZZER (COMBINATION METER)

< DTC/CIRCUIT DIAGNOSIS >	
BUZZER (COMBINATION METER)	А
Description	
Performs operation method guide and warning with buzzer.	В
Component Function Check	
1.CHECK FUNCTION	С
 Use CONSULT-III to perform Active Test ("INSIDE BUZZER"). Touch "TAKE OUT", "KNOB" or "KEY" to check that it works normally. 	D
<u>Is the inspection result normal?</u> Yes >> Warning buzzer into combination meter is OK.	D
No >> Refer to <u>DLK-109, "Diagnosis Procedure"</u> .	_
Diagnosis Procedure	E
1.CHECK METER BUZZER CIRCUIT	F
Refer to WCS-23, "Component Function Check".	
<u>Is the inspection result normal?</u> Yes >> GO TO 2. No >> Repair or replace harness.	G
2. CHECK INTERMITTENT INCIDENT	
Refer to GI-43, "Intermittent Incident".	Н
>> INSPECTION END	I

J

DLK

L

Μ

Ν

0

< DTC/CIRCUIT DIAGNOSIS >	
KEY WARNING LAMP	
Description	INFOID:000000006208839
Performs operation method guide and warning together with buzzer.	
Component Function Check	INFOID:000000006208840
1.CHECK FUNCTION	
 Use CONSULT-III to perform Active Test ("INDICATOR"). Touch "KEY IND" or "KEY ON" to check that it works normally. 	
<u>Is the inspection result normal?</u> YES >> Key warning lamp is OK. NO >> Refer to <u>DLK-110, "Diagnosis Procedure"</u> .	
Diagnosis Procedure	INFOID:000000006208841
1.CHECK KEY WARNING LAMP	
Refer to <u>MWI-4, "Work flow"</u> .	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace harness.	
2.CHECK INTERMITTENT INCIDENT	

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

HAZARD FUNCTION

TALAND I ONOTION		
< DTC/CIRCUIT DIAGNOSIS >		
HAZARD FUNCTION		А
Description	INFOID:000000006208842	~
Performs answer-back for each operation with number of blinks.		В
Component Function Check	INFOID:00000006208843	
1.CHECK FUNCTION		С
 Use CONSULT-III to perform Active Test ("FLASHER"). Touch "LH" or "RH" to check that it works normally. Is the inspection result normal? YES >> Hazard warning lamp circuit is OK. NO >> Refer to DLK-111, "Diagnosis Procedure". 		D
Diagnosis Procedure	INFOID:000000006208844	E
1. CHECK HAZARD SWITCH CIRCUIT Refer to EXL-93, "Wiring Diagram - TURN AND HAZARD WARNING LAMPS -".		F
<u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace harness.		G
2.CHECK INTERMITTENT INCIDENT		Н
Refer to <u>GI-43, "Intermittent Incident"</u> .		
>> INSPECTION END		

J

DLK

L

Μ

Ν

Ο

INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

INTEGRATED HOMELINK TRANSMITTER

Description

Integrated homelink transmitter can store and transmit a maximum of 3 radio signals. Allows operation of garage doors, gates, home and office lighting, entry door locks and security system, etc. Integrated homelink transmitter power supply uses vehicle battery, which enables it to maintain every program in case battery is discharged or removed.

Component Function Check

INFOID:000000006208846

INFOID:00000006208845

1.CHECK FUNCTION

Check that system receiver (garage door opener, etc.) operates with original hand-held transmitter. <u>Is the inspection result normal?</u>

YES >> GO TO 2.

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

2. CHECK ILLUMINATE

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Refer to DLK-112, "Diagnosis Procedure".

3.CHECK TRANSMITTER

Check transmitter using Tool*.

*: For details, refer to Technical Service Bulletin.

Is the inspection result normal?

- YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
- NO >> Replace auto anti-dazzling inside mirror (integrated homelink transmitter). Refer to <u>MIR-17.</u> <u>"Removal and Installation"</u>.

Diagnosis Procedure

INFOID:000000006208847

1.CHECK POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect auto anti-dazzling inside mirror (homelink universal transceiver) connector.
- 3. Check voltage between auto anti-dazzling inside mirror (home link universal transceiver) harness connector and ground.

(·	+)				
	ing inside mirror ersal transceiver)	()	Conditio	n	Voltage (V) (Approx.)
Connector	Terminal				
R3	10	Ground	Ignition switch position	OFF	Battery voltage
КJ	6	Ground	ignition switch position	ON	Ballery Vollage

Is the inspection result normal?

YES >> GO TO 2.

- NO-1 >> Check 10 A fuse [No. 6 located in the fuse block (J/B)].
- NO-2 >> Check 10 A fuse [No. 3 located in the fuse block (J/B)].
- NO-3 >> Harness for open or short between fuse and auto anti-dazzling inside mirror (homelink universal transceiver).

2. CHECK GROUND CIRCUIT

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

DLK-112

INTEGRATED HOMELINK TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

	ling inside mirror ersal transceiver)		Continuity	A
Connector	Terminal	Ground		
R3	8		Existed	В
s the inspection result norm	al?			-
YES >> GO TO 3. NO >> Repair harness.				С
3.check intermittent	INCIDENT			
Refer to <u>GI-43, "Intermittent</u>	Incident".			D
>> INSPECTION E	ND			E
				F

J

G

Н

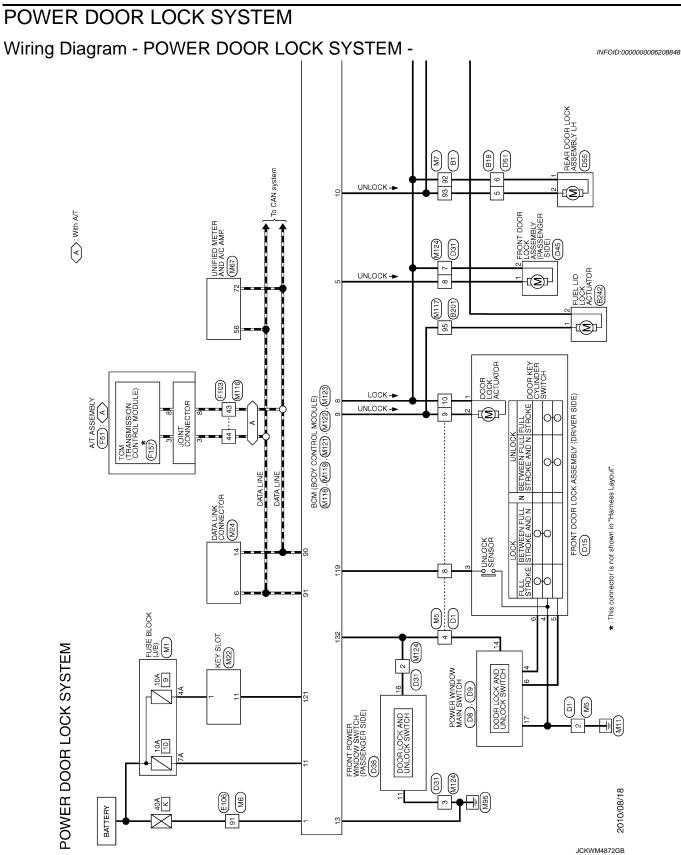
L

Μ

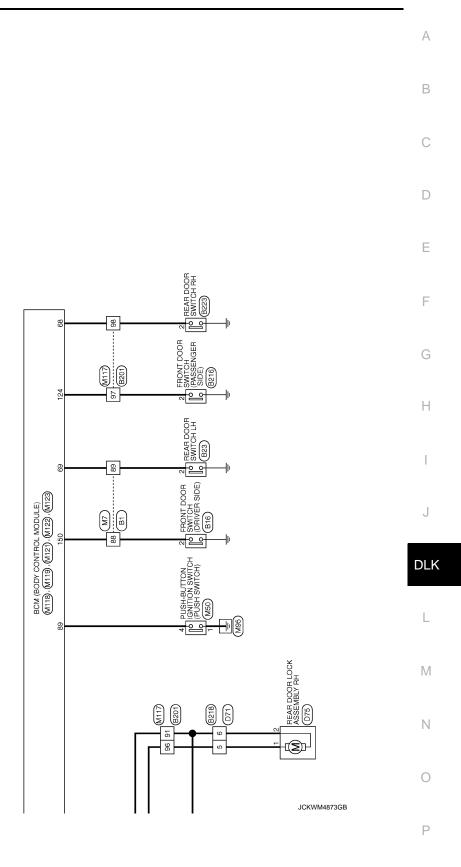
Ν

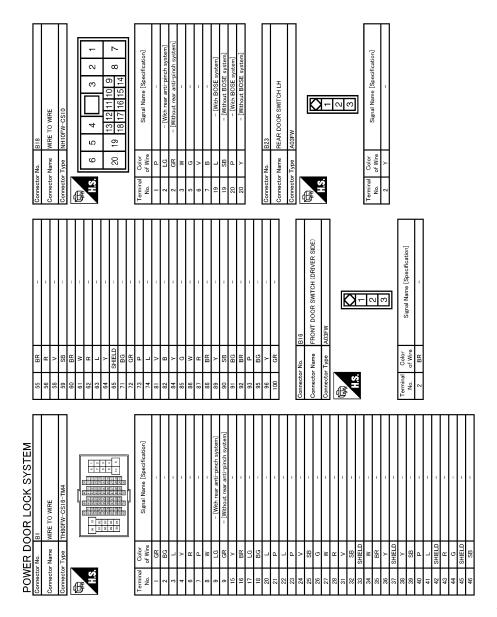
Ο

< DTC/CIRCUIT DIAGNOSIS >



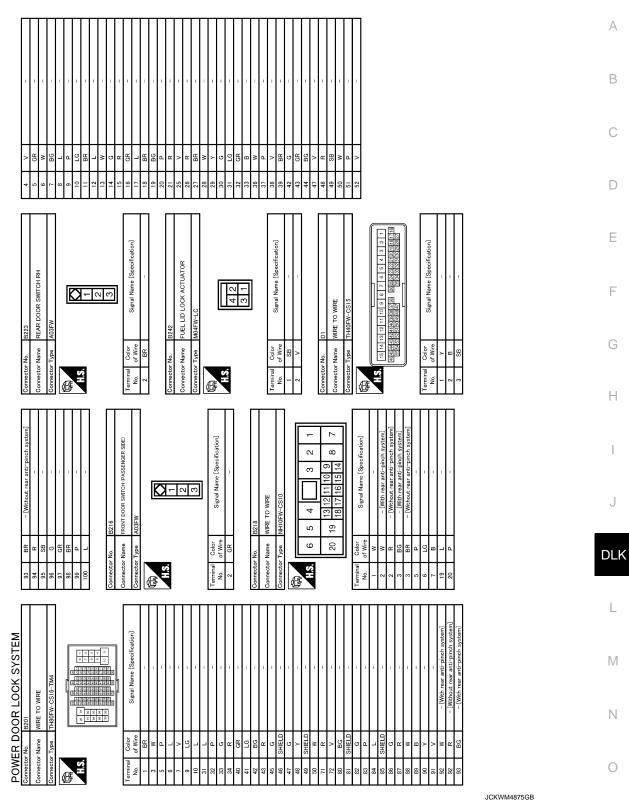
< DTC/CIRCUIT DIAGNOSIS >



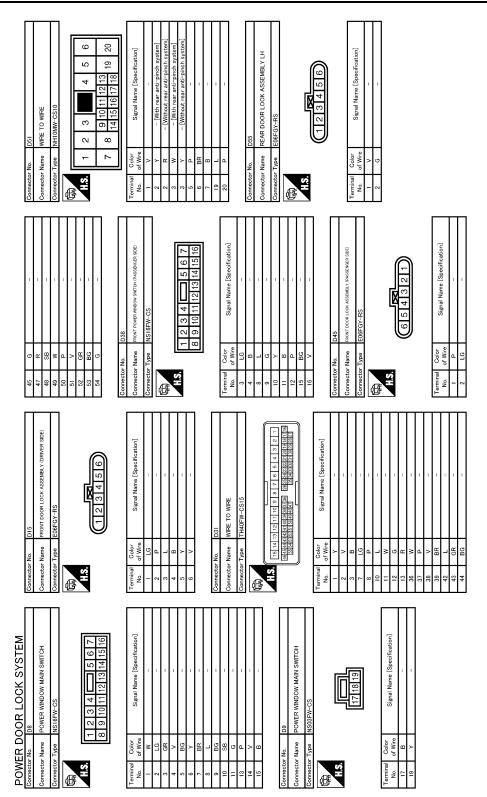


JCKWM4874GB

< DTC/CIRCUIT DIAGNOSIS >

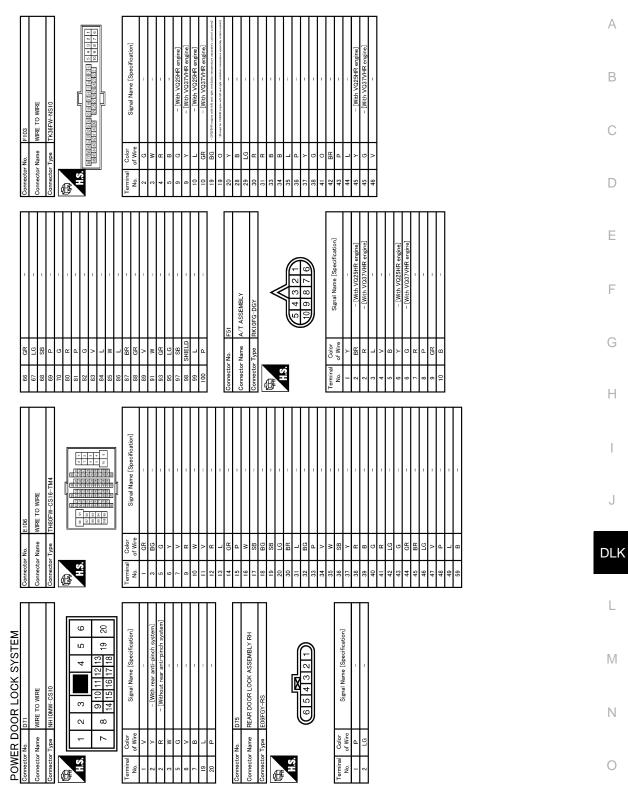


< DTC/CIRCUIT DIAGNOSIS >



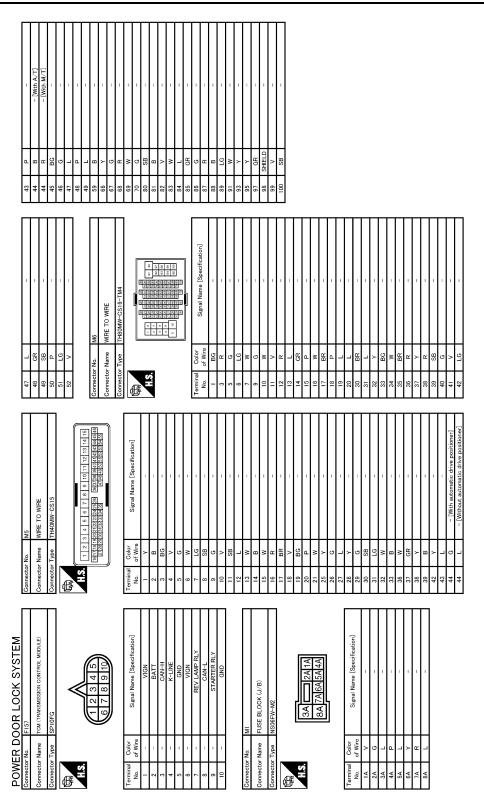
JCKWM4876GB

< DTC/CIRCUIT DIAGNOSIS >



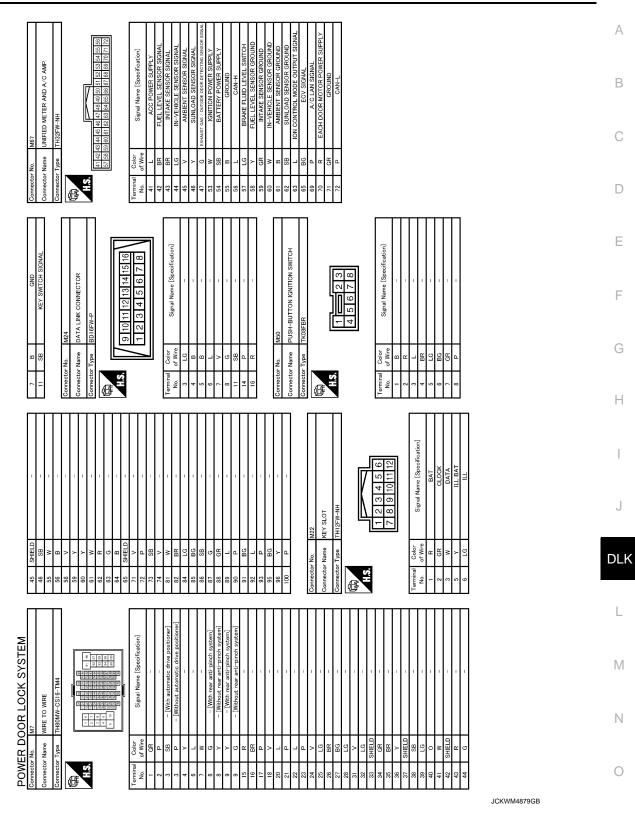
JCKWM4877GB

< DTC/CIRCUIT DIAGNOSIS >

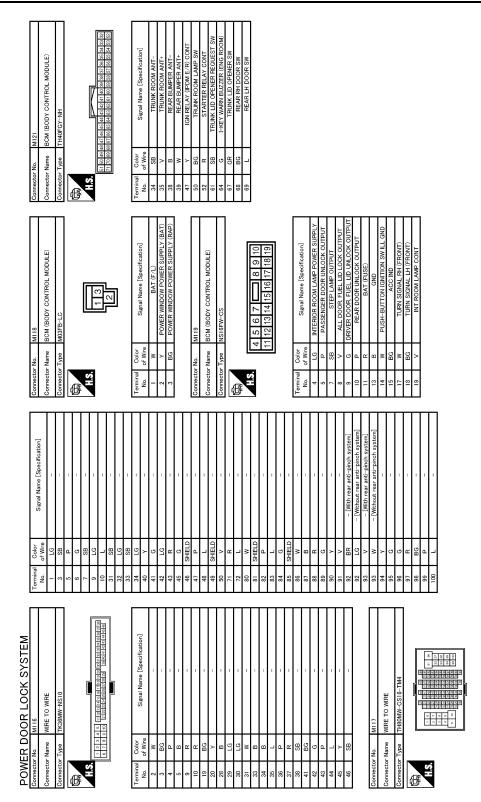


JCKWM4878GB

< DTC/CIRCUIT DIAGNOSIS >

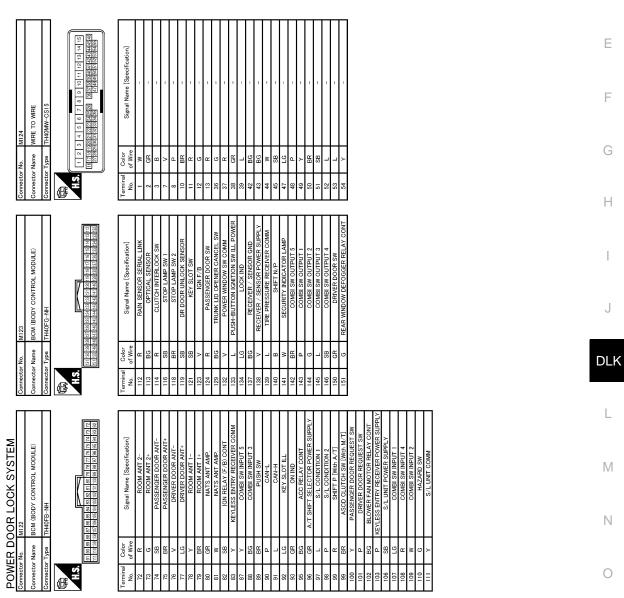


< DTC/CIRCUIT DIAGNOSIS >



JCKWM4880GB

< DTC/CIRCUIT DIAGNOSIS >



POWER DOOR LOCK SYSTEM

JCKWM4881GB

Ρ

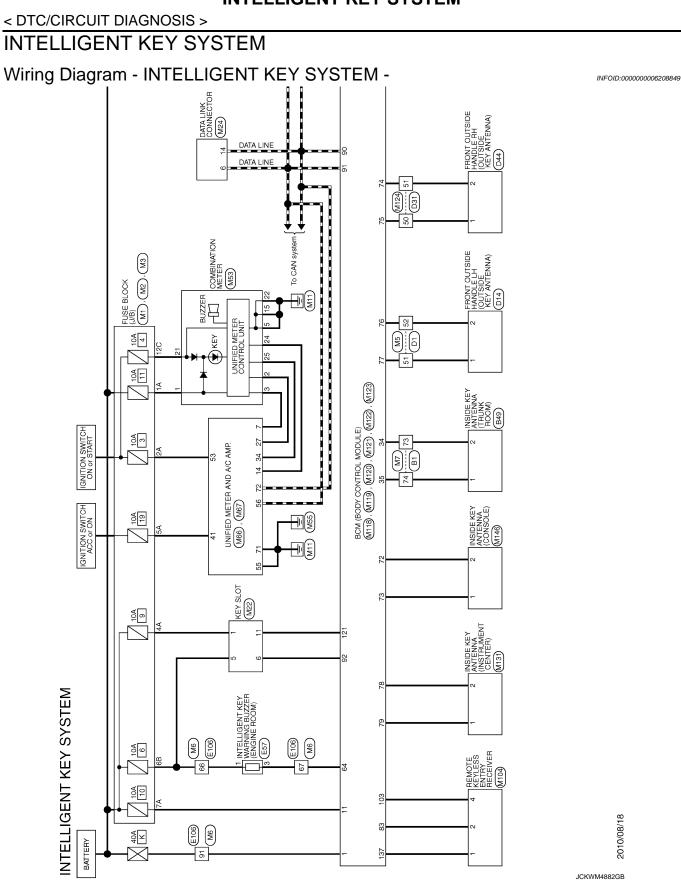
А

В

С

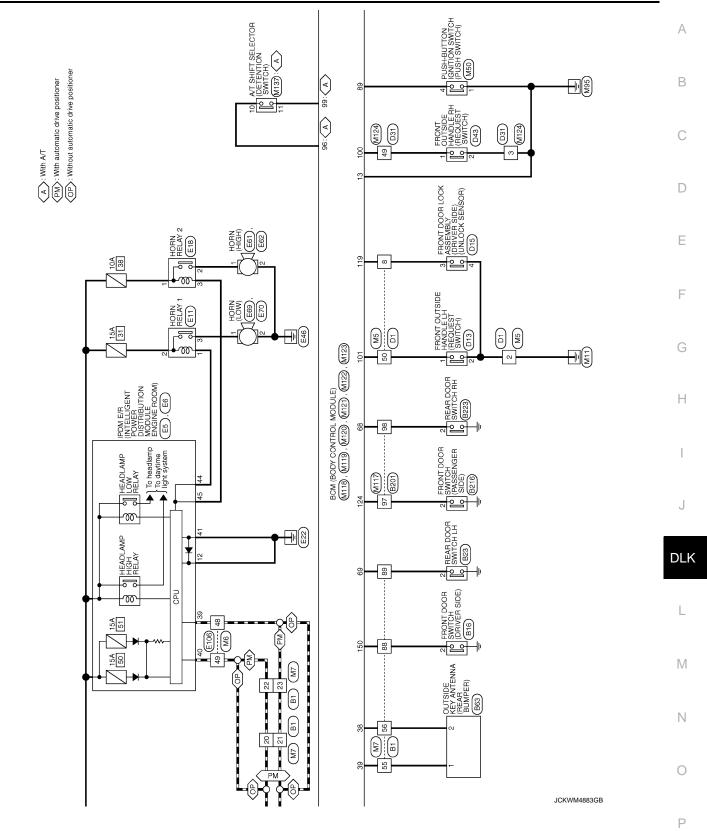
D

J

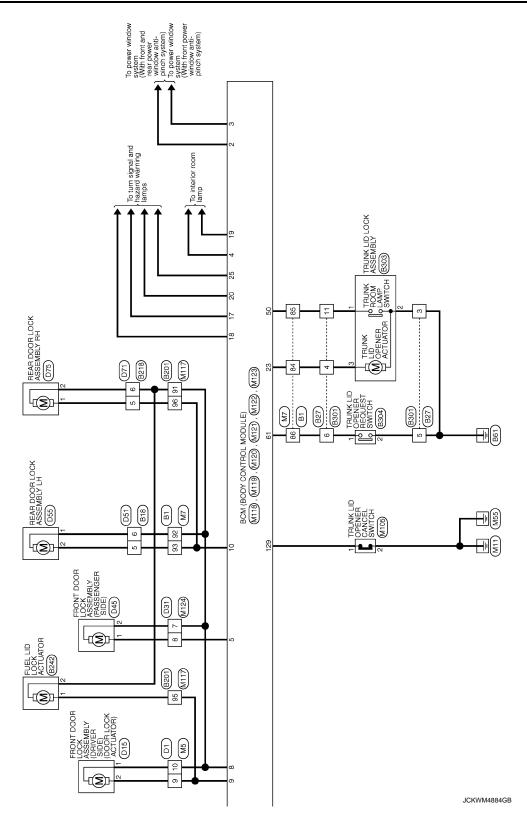


Revision: 2011 November

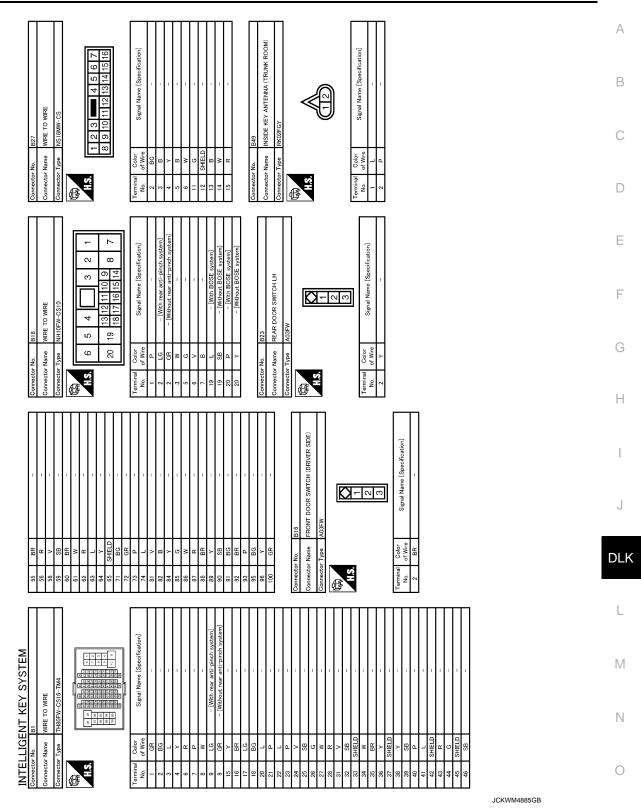
< DTC/CIRCUIT DIAGNOSIS >



< DTC/CIRCUIT DIAGNOSIS >

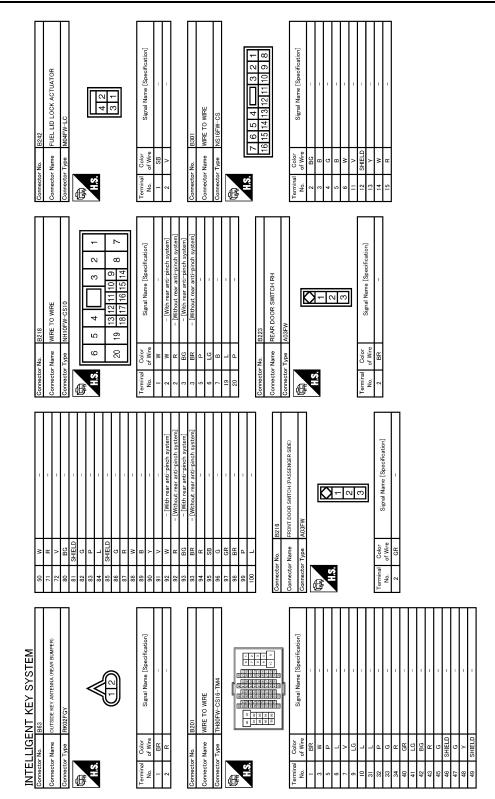


< DTC/CIRCUIT DIAGNOSIS >



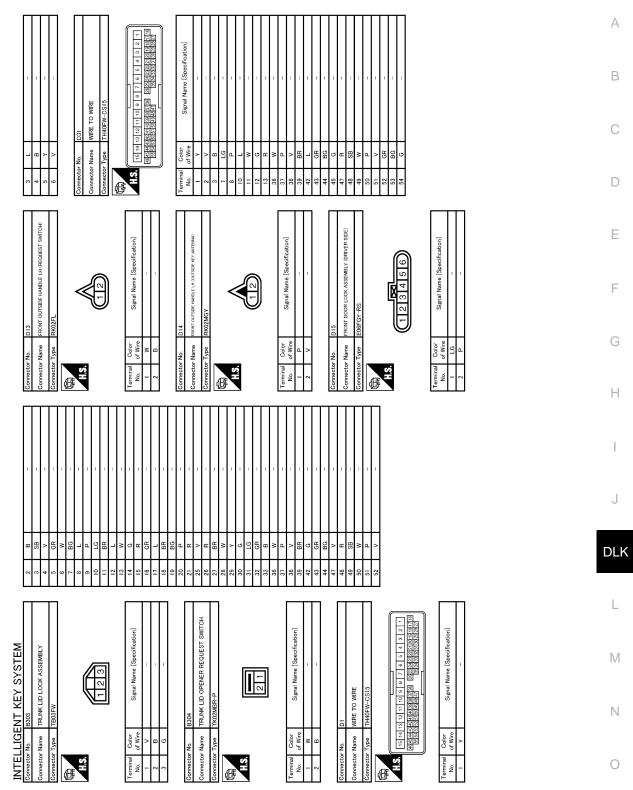
Р

< DTC/CIRCUIT DIAGNOSIS >



JCKWM4886GB

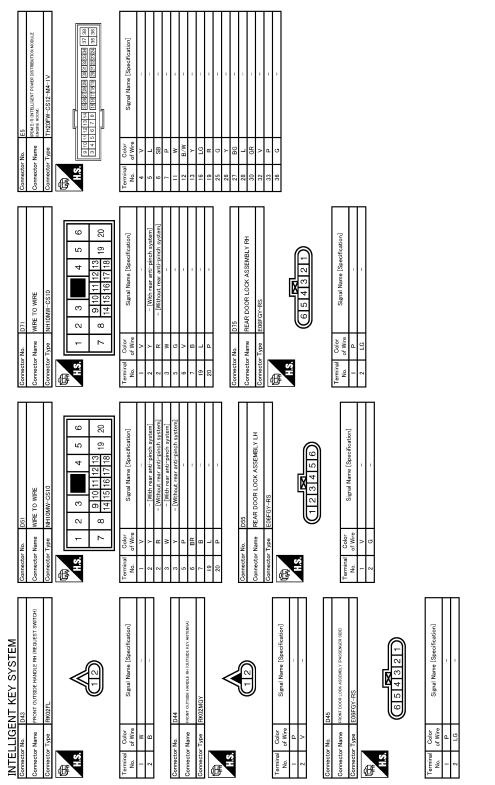
< DTC/CIRCUIT DIAGNOSIS >



JCKWM4887GB

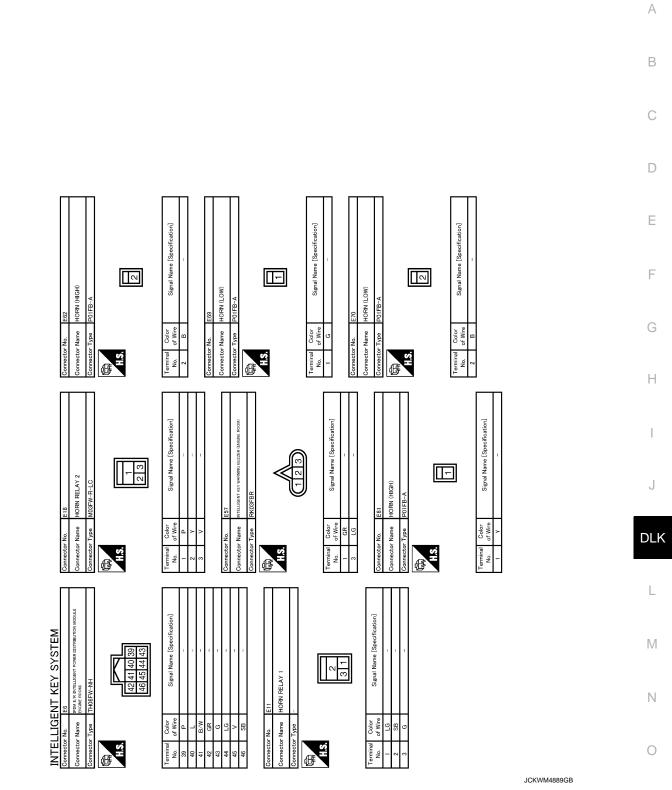
Р

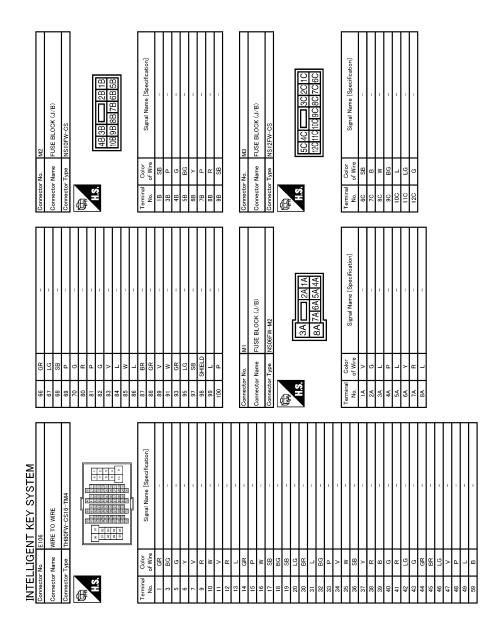
< DTC/CIRCUIT DIAGNOSIS >



JCKWM4888GB

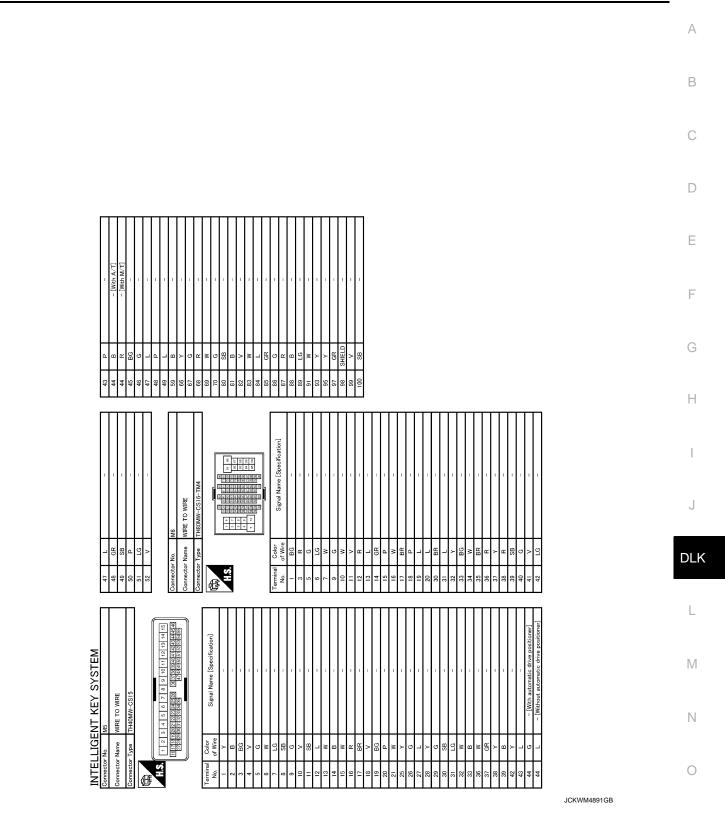
< DTC/CIRCUIT DIAGNOSIS >



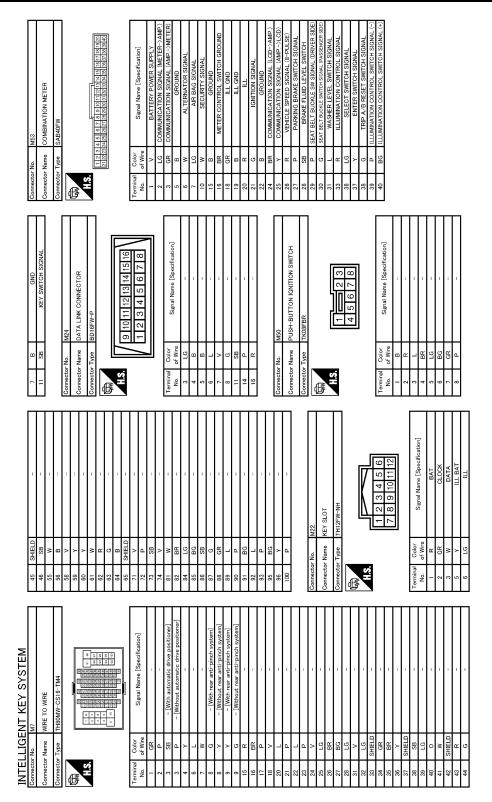


JCKWM4890GB

< DTC/CIRCUIT DIAGNOSIS >

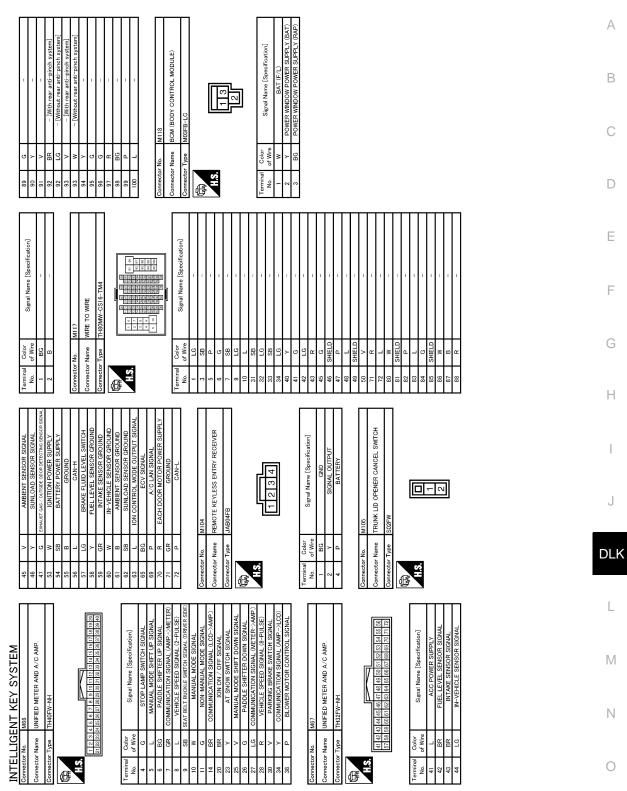


< DTC/CIRCUIT DIAGNOSIS >



JCKWM4892GB

< DTC/CIRCUIT DIAGNOSIS >



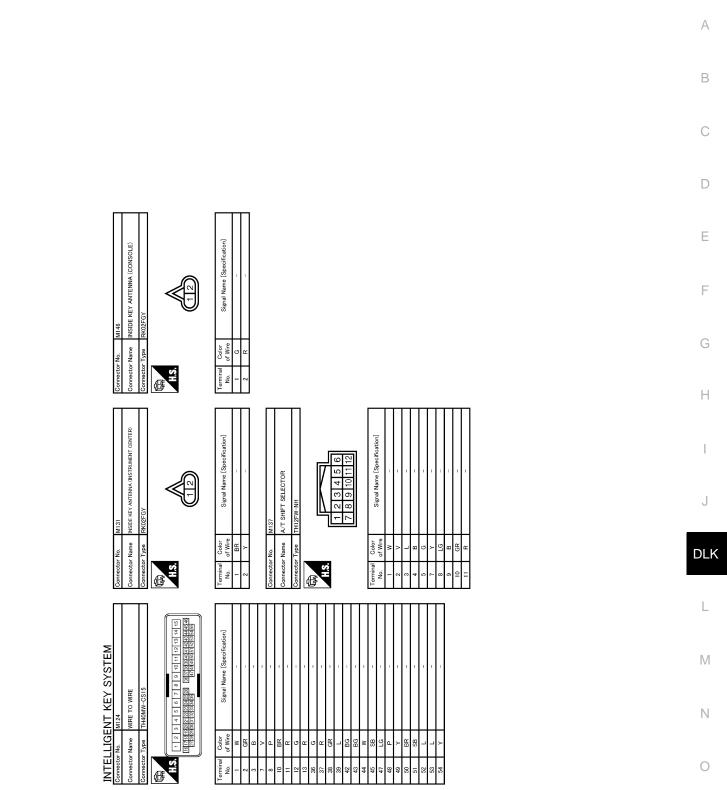
JCKWM4893GB

< DTC/CIRCUIT DIAGNOSIS >

LG PUSH-	BG RECEI	2 > -	140 R SHIFT N/D	W SECURIT	142 BR COMBI SW OUTPUT 5	۵.	144 G COMBI SW OUTPUT 2		SB BB	150 GR DRIVER DOOR SW 151 C DEAD WINDOW DECRECED DEL AY CONT	, ,				× 1		Т		1		1	Г	T									T	T	Τ-				-	-	
IGN RELAY (F/B) CONT KEYLESS ENTRY RECEIVER COMM	COMBI SW INPUT 5	COMBI SW INPUT 3	CAN-I	CAN-H	KEY SLOT ILL	ON IND	ACC RELAY CONT	A/T SHIFT SELECTOR POWER SUPPLY	S/L CONDITION 1	S/L CONDITION 2 SHIET D MARK A /TT	ASCD CLUTCH SW [With M/T]	PASSENGER DOOR REQUEST SW	DRIVER DOOR REQUEST SW	BLOWER FAN MOTOR RELAY CONT	KEYLESS ENTRY RECEIVER POWER SUPPL	S/L UNIT POWER SUPPLY		COMBLSW INFUL 4	HAZARD SW	S/L UNIT COMM			M123	BCM (BODY CONTROL MODULE)	TH40FG-NH			127 126 125 124 123 122 121 120 119 118 117 116 115 114 113 112	મન્ક મિક્ક મિક્ક વિશે મથી તેમાં મિક્ક કિક્ક કિક્ર કિક્ર કિક્ર કિક્ર કિક્ર કિક્ર કિક્ર કિક્ર	Signal Name [Soecification]		COLTCAL SENSOR	CLUTCH INTERLOCK SW	STOP LAMP SW 1	STOP LAMP SW 2	DR DOOR UNLOCK SENSOR	KEY SLOT SW	IGN F/B	PASSENGER DOOR SW	TRUNK LID OPENER CANCEL SW
8≻	~	g	6 0		ГG	Я	BG	R		• •	۲ H	~	٩		-	89 S	2 0	∠ ≥	5	~			Т	Connector Name E	Connector Type 1		10	131 130 129 128	151 150 149 148		of Wire	r d	ς α	8	BR	SB	B	>	+	192
82 83	87	88	80	6	92	93	95	96	97	86	66	100	101	102	103	106	0	109	110	111		c	Connec	Connec	Connec	Ð	HS			Terminal	.oN	112	114	116	118	119	121	123	124	129
Connector No. M121 Connector Name BCM (BODY CONTROL MODULE)		Connector Type TH40FGY-NH				51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32	20		ŀ	reminal Golor Signal Name [Specification]	$^+$	>	8	M	- K	+	22 K SIAKIEK KELAY CONI 61 CD TRIMK ITO ODENED DEGLIEET SW	g c	GR	68 BG REAR RH DOOR SW			Connector No. M122	Г		Connector lype TTH40FB-NH	L. L	HS.	91 190 89 88 87 98 83 82 81 80 79 73 77 76 73 73 72 72 72 72 72 72 72 72 72 72 72 72 72		erminal Color Signal Name [Specification]	╈	2 0	SB PASS	BR P/	>	LG	>	H	80 GR NATS ANT AMP.
IN I ELLIGEN I AET STSTEM Connector No. MI 19 Connector Name BGM (BODY CONTROL MODULE) Con		Connector Type NS16FW-CS				12 13 14 15 16 17				Terminal Color Signal Name [Specification] Ter	LG INTERIOR ROOM LAMP POWER SUPPLY	PASSENGER DOOR UNLOCK OUTPUT			G DRIVER DOOR, FUEL LID UNLOCK OUTPUT	P REAR DOOR UNLOCK OUTPUT	Ι	W PIISH-BUITTON IGNITION SWILL GND	BG ACC IND		BG TURN SIGNAL LH (FRONT)	19 V INT ROOM LAMP CONT		Connector No. M120	BCM (BODY CONTROL MODULE)	NS12FW-CS			1.5. 20 21 <u>- 22 23 24</u> 25 26 27 28 29 30 31			I erminal Color Signal Name [Specification]	V TURN SIGNAL RH (REAR)	LG TRUNK LID OPEN OUTPUT	Y TURN SIGNAL LH (REAR)	30 P TRUNK ROOM LAMP	1		1	

JCKWM4894GB

INTELLIGENT KEY SYSTEM < DTC/CIRCUIT DIAGNOSIS >



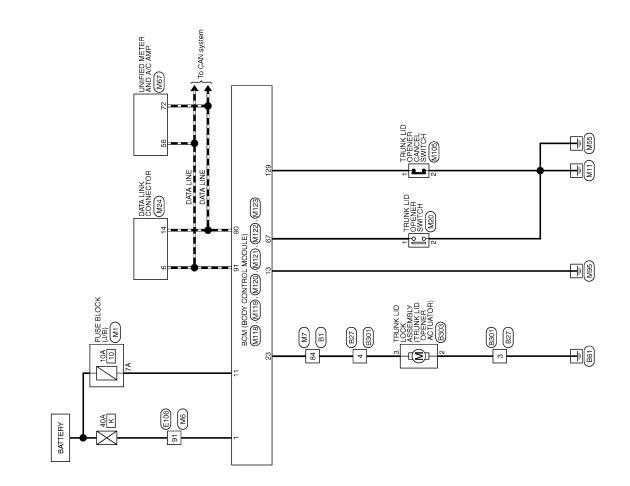
JCKWM4895GB

< DTC/CIRCUIT DIAGNOSIS >

TRUNK LID OPENER

Wiring Diagram - TRUNK LID OPENER -

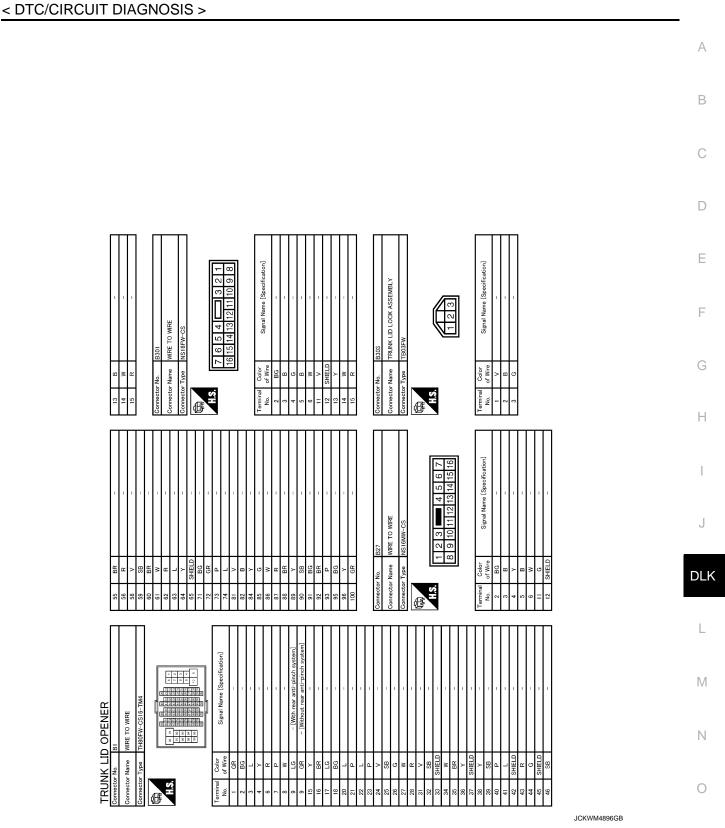
INFOID:000000006208850



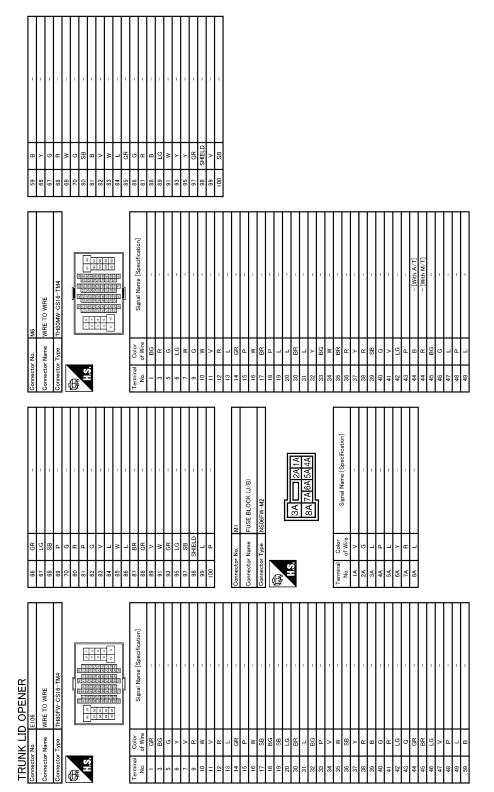
TRUNK LID OPENER

2008/08/07

JCKWA1858GB

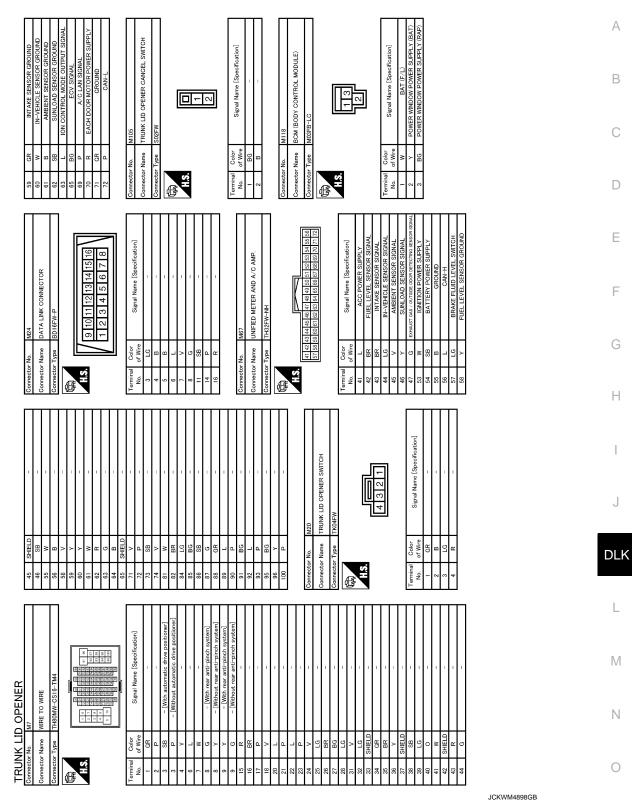


< DTC/CIRCUIT DIAGNOSIS >



JCKWM4897GB

< DTC/CIRCUIT DIAGNOSIS >



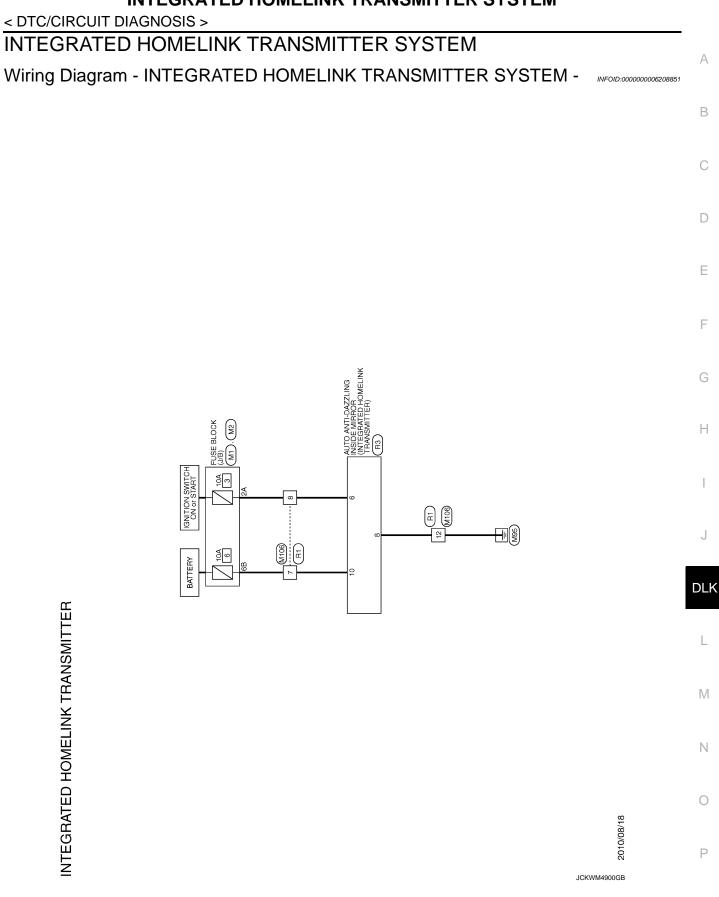
Р

< DTC/CIRCUIT DIAGNOSIS >

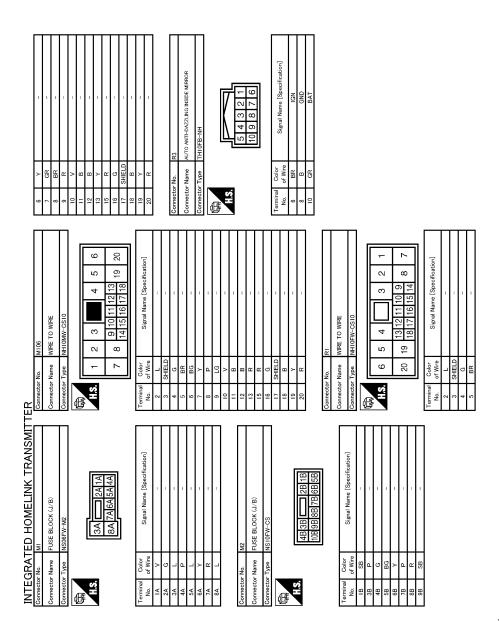
133 L PUSH-BUTTON IGNITION SW ILL POWER		ng :	۲ > ۱	L TIRE PRESS	•	w SE(142 BR COMBI SW OUTPUT 5	٩	9	145 L COMBI SW OUTPUT 3	SB	Яg	151 G REAR WINDOW DEFOGGER RELAY CONT																														
IGN RELAY (F/B) CONT KEVI ESS ENTEV BECEIVED COMM			COMBLSW INPUL 3	PUSH SW	CAN-L	CAN-H	KEY SLOT ILL	ON IND	ACC RELAY CONT	A/T SHIFT SELECTOR POWER SUPPLY	S/L CONDITION 1	S/L CONDITION 2	SHIFT P [With A/T]	ASCD CLUTCH SW [With M/T]	DRIVER DOOR REQUEST SW	BLOWER FAN MOTOR RELAY CONT	KEYLESS ENTRY RECEIVER POWER SUPPLY	S/L UNIT POWER SUPPLY	COMBI SW INPUT 1	COMBI SW INPUT 4	COMBI SW INPUT 2	HAZARD SW	S/L UNIT COMM		M123	BCM (BODY CONTROL MODULE)		1040FG-NH			127 128 125 124 123 122 121 120 119 118 117 116 115 114 113 112	स्त्री स्वही स्वही स्वरी स्वरी स्वरी स्वरी स्वरी हिडी डिडी डिटी डिडी स्टिंह स्विर्ड स्विर्ड स्वि	Signal Name [Specification]	RAIN SENSOR SERIAL LINK	OPTICAL SENSOR	CLUTCH INTERLOCK SW	STOP LAMP SW 1	STOP LAMP SW 2	DR DOOR UNLOCK SENSOR	KEY SLOT SW	IGN F/B	PASSENGER DOOR SW	TRUNK LID OPENER CANCEL SW
82 SB 83 <		╉	+	_	90	+	92 LG	_	+	96 GR	97 L	+	+	86 96	- d	102 BG	۵.	106 SB		108 R	+	110 G	× 111		Connector No. M	Connector Name B	Т	ector 1 ype	ſ	H.S.	131 130 129 128	151 150 149 149	Terminal Color No. of Wire	┢	113 BG	114 R	116 SB	+	+	121 SB	+	╉	129 BG
ГТ	Connector Name BCM (BODY CONTROL MODULE)	Ť	Connector Type TH40FGY=NH	1		51		51 50 49 48 47 46 45 44 43 42 41 40 59 58 37 56 35 34 33 22 74 77 66 69 67 66 66 64 69 69 69 64 69 67 56 56 57 56 56 56 56 57 50	00 +0 00 00 /0			nal	of Wire	34 SB TRUNK ROOM ANT-	38 B REAR RIMPER ANT-	~	Y IGN	50 BG TRUNK ROOM LAMP SW	٣	SB	G I-KEY	GR	BG .			Connector No. M122	Connector Name BCM (BODY CONTROL MODULE)	Connector Type TH40FB-NH	1		H.S.	91 100 689 881 887 884 581 821 821 81 901 729 778 775 775 773 773 775 775 775 775 775 775	Terminal Color	-	72 R ROOM ANT 2-	73 G ROOM ANT 2+	74 SB PASSENGER DOOR ANT-	BR	>	LG	> {	HE (80 GR NATS ANT AMP.
	Connector Name BCM (BODY CONTROL MODULE)	Т	Connector Lype NS16FW-CS			-H-		11 12 13 14 15 16 17 18 19	2 2. 2 2.			lar	No. of Wire		SR STEP I AMP OI ITPI I	ALL DC	G DRIVER DOOR, FUEL LID UNLOCK OUTPUT		BA	B GND	+	_	+	V INT ROOM I AMP CONT		ſ		Connector Name BCM (BODY CONTROL MODULE)	Connector Type NS12FW-CS			22 23 24 25 26 27 28 29 30 31		Ferminal Color	Ŭ	20 V TURN SIGNAL RH (REAR)	LG TRUNK LID OPEN OUTPUT	F	P TRUNK ROOM LAMP				

JCKWM4899GB

INTEGRATED HOMELINK TRANSMITTER SYSTEM



< DTC/CIRCUIT DIAGNOSIS >



JCKWM4901GB

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
	Front wiper switch INT/AUTO	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial posi- tion
TURN SIGNAL R	Other than turn signal switch RH	Off
I UIVIN SIGINAL K	Turn signal switch RH	On
	Other than turn signal switch LH	Off
IURN 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
	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAIVIP SVV I	Lighting switch 2ND	On
URN SIGNAL L AMP SW II BEAM SW IEAD LAMP SW 1 IEAD LAMP SW 2 PASSING SW UTO LIGHT SW	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On
	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
	Rear RH door closed	Off
DOOR SW-RR	Rear LH door opened	On

В

INFOID:000000006859019

Monitor Item	Condition	Value/Status
	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off
	Other than power door lock switch LOCK	Off
SDL LOCK SW	Rear LH door closed Rear LH door opened NOTE: The item is indicated, but not monitored.	On
	Other than power door lock switch UNLOCK	Off
SDE UNLOCK SVI	Power door lock switch UNLOCK	On
	Other than driver door key cylinder LOCK	Off
XET CTE LK-SW	Driver door key cylinder LOCK	On
	Rear LH door opened NOTE: The item is indicated, but not monitored. Other than power door lock switch LOCK Power door lock switch UNLOCK Power door lock switch UNLOCK Other than power door key cylinder LOCK Other than driver door key cylinder LOCK NOTE: The item is indicated, but not monitored. Hazard switch is OFF Hazard switch is ON NOTE: The item is indicated, but not monitored. NOTE: The item is indicated, but not monitored. Trunk lid opener cancel switch OFF Trunk lid opener cancel switch OFF Trunk lid opener switch OFF While the trunk lid opener switch is turned ON Trunk lid opened LOCK button of the Intelligent Key is not pressed UNLOCK button of the Intelligent Key is not pressed UNLOCK button of the Intelligent Key is not pressed UNLOCK button of the Intelligent Key is not pressed UNLOCK button of the Intelligent Key is not pressed UNLOCK button of the I	Off
NET CTL UN-SW	Driver door key cylinder LOCK	On
KEY CYL SW-TR		Off
EY CYL LK-SW EY CYL UN-SW EY CYL SW-TR AZARD SW EAR DEF SW /L WASH SW R CANCEL SW R/BD OPEN SW RNK/HAT MNTR KE-LOCK KE-UNLOCK	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW		Off
H/L WASH SW		Off
	Trunk lid opener cancel switch OFF	Off
TR CANCEL 3W	Trunk lid opener cancel switch ON	On
	Trunk lid opener switch OFF	Off
IR/BD OPEN SW	While the trunk lid opener switch is turned ON	On
	Trunk lid closed	Off
	Trunk lid opened	On
	LOCK button of the Intelligent Key is not pressed	Off
RRE-LUCK	LOCK button of the Intelligent Key is pressed	On
	UNLOCK button of the Intelligent Key is not pressed	Off
TRE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On
	TRUNK OPEN button of the Intelligent Key is not pressed	Off
EDL LOCK SW EDL UNLOCK SW EY CYL LK-SW EY CYL UN-SW EY CYL SW-TR AZARD SW EAR DEF SW I/L WASH SW R CANCEL SW R/BD OPEN SW RNK/HAT MNTR RE-LOCK EKE-LOCK EKE-UNLOCK EKE-TR/BD EKE-PANIC EKE-P/W OPEN	TRUNK OPEN button of the Intelligent Key is pressed	On
	PANIC button of the Intelligent Key is not pressed	Off
EAR DEF SW L WASH SW R CANCEL SW R/BD OPEN SW RNK/HAT MNTR KE-LOCK KE-UNLOCK KE-TR/BD KE-PANIC	PANIC button of the Intelligent Key is pressed	On
	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG		Off
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On
	Bright outside of the vehicle	Close to 5 V
OF HUAL SENSUK	Dark outside of the vehicle	Close to 0 V
	Driver door request switch is not pressed	Off
NEW ON -DK	Driver door request switch is pressed	On
	Passenger door request switch is not pressed	Off
VER 200 - 42	Passenger door request switch is pressed	On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
	Trunk lid opener request switch is not pressed	Off
KEQ SW -BD/TR	Trunk lid opener request switch is pressed	On
	W -RR NOTE: The item is indicated, but not monitored. W -RL NOTE: The item is indicated, but not monitored. W -BJ/TR Trunk lid opener request switch is not pressed Trunk lid opener request switch is pressed Trunk lid opener request switch is pressed SW Push-button ignition switch (push switch) is not pressed Y2 -F/B Ignition switch in OFF or ACC position Ignition switch in ON position NOTE: The item is indicated, but not monitored. LY -F/B NOTE: The item is indicated, but not monitored. ISW The clutch pedal is not depressed ISW The brake pedal is depressed SW 1 The brake pedal is not depressed when No. 7 fuse is blown The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is r The brake pedal is not depressed (MT models) SW 2 The brake pedal is not depressed (MT models) The clutch pedal is not depressed (MT models) * The clutch pedal is not depressed (MT models) * The clutch pedal is not depressed (MT models) * The clutch pedal is not depressed (MT models) * The clutch pedal is not depressed (MT models) * The clutch pedal is not depressed (MT models) * The clutch p	Off
PUSH SW	Push-button ignition switch (push switch) is pressed	On
	Ignition switch in OFF or ACC position	Off
GN RLY2 -F/B	Ignition switch in ON position	On
ACC RLY -F/B	-	Off
	The clutch pedal is not depressed	Off
CLUCH SW	The clutch pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is nor- mal	On
	The brake pedal is not depressed	Off
BRAKE SW 2	The brake pedal is depressed	On
		Off
DETE/CANCL SW		On
	Selector lever in any position other than P and N	Off
SFT PN/N SW	Selector lever in P or N position	On
	Steering is unlocked	Off
S/L -LOCK	Steering is locked	On
o //	Steering is locked	Off
S/L -UNLOCK	Steering is unlocked	On
	Ignition switch in OFF or ACC position	Off
S/L RELAY-F/B	Ignition switch in ON position	On
	Driver door is unlocked	Off
UNLK SEN -DR	Driver door is locked	On
	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
	Ignition switch in OFF or ACC position	Off
GN RLY1 -F/B	Ignition switch in ON position	On
	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On
	 Selector lever in any position other than P and N (Except M/T models) The clutch pedal is not depressed (M/T models) 	Off
SFT PN -IPDM	Selector lever in P or N position (Except M/T models) The clutch pedal is depressed (M/T models)	On
	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On

Revision: 2011 November

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	Steering is unlocked	Off
3/L LOCK-IF DIVI	Steering is locked	On
S/L UNLK-IPDM	Steering is locked	Off
3/L UNLK-IF DIVI	Steering is unlocked	On
S/L RELAY-REQ	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off
	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK	On
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Steering is locked	Reset
	Steering is unlocked	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off
RET 3W -3LOT	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

Revision: 2011 November

< ECU DIAGNOSIS INFORMATION >

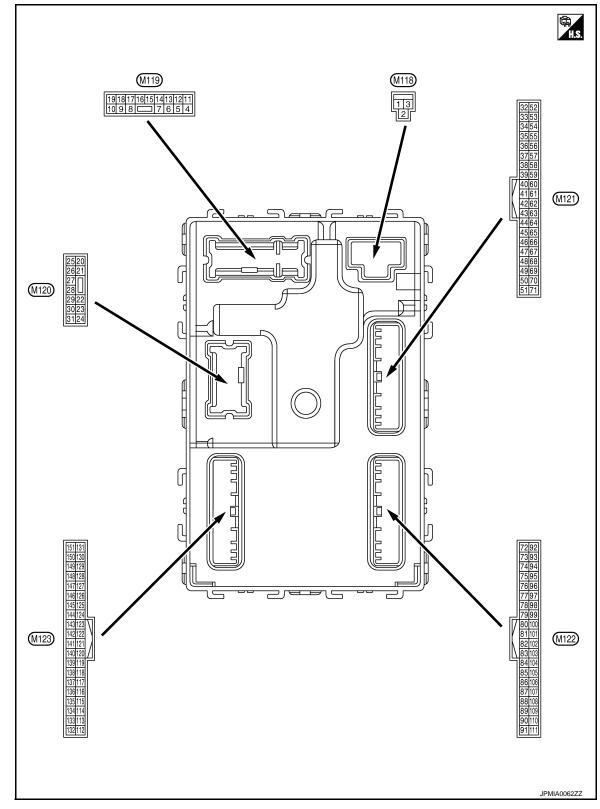
Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID reg- istered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	nd key ID regis- tey ID regis-Yetaey ID regis- tey ID registeredDoneID registeredDoneID registeredOneYetDoneID registeredYetID registeredDoneYetDoneID registeredYetID registeredPretID registeredID oneYetID oneYetDoneID registeredYetID oneYetID oneYetID oneYetID oneAir pressure of front LH tireAir pressure of rear RH
	The key ID that the key slot receives is not recognized by the first key ID regis- tered to BCM.	Yet
CONFIRMIDI	tered to BCM.FIRM ID1The key ID that the key slot receives is not recognized by the first key ID registered to BCM. The key ID that the key slot receives is recognized by the first key ID registered to BCM.The key ID that the key slot receives is recognized by the first key ID registered to BCM.The ID of fourth Intelligent Key is not registered to BCMThe ID of fourth Intelligent Key is not registered to BCMThe ID of third Intelligent Key is registered to BCMThe ID of third Intelligent Key is registered to BCMThe ID of second Intelligent Key is not registered to BCMThe ID of first Intelligent Key is registered to BCMThe ID of first Intelligent Key is registered to BCMThe ID of first Intelligent Key is registered to BCMPRESS FLIgnition switch ON (Only when the signal from the transmitter is received)AiPRESS RLIgnition switch ON (Only when the signal from the transmitter is received)AiPRESS RLID of front LH tire transmitter is registeredID of front LH tire transmitter is registeredID of front RH tire transmitter is registered	Done
$ \begin{array}{c} $	The ID of fourth Intelligent Key is not registered to BCM	Yet
1P 4	The ID of fourth Intelligent Key is registered to BCM The ID of third Intelligent Key is not registered to BCM The ID of third Intelligent Key is registered to BCM The ID of second Intelligent Key is not registered to BCM The ID of second Intelligent Key is registered to BCM The ID of second Intelligent Key is registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is not registered to BCM The ID of first Intelligent Key is registered to BCM	Done
	The ID of third Intelligent Key is not registered to BCM	Yet
IF J	The ID of third Intelligent Key is registered to BCM	Done
	The ID of second Intelligent Key is not registered to BCM	Yet
192	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
IPI	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	-
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	-
	ID of front LH tire transmitter is registered	Done
ID REGOI FLI	ID of front LH tire transmitter is not registered	Yet
istered to BCM.The key ID that the key stered to BCM.The key ID that the key stored to BCM.The ID of fourth IntelligentThe ID of fourth IntelligentThe ID of first IntelligentThe ID of first IntelligentThe ID of first IntelligentAIR PRESS FLIgnition switch ON (OnlyAIR PRESS RLID of front LH tire transmID of front LH tire transmID of front RH tire transmID of front RH tire	ID of front RH tire transmitter is registered	Done
ID REUSI FRI	istered to BCM. Tet The key ID that the key slot receives is recognized by the second key ID registered to BCM. Done The key ID that the key slot receives is not recognized by the first key ID registered to BCM. Yet The key ID that the key slot receives is recognized by the first key ID registered to BCM. Done The key ID that the key slot receives is recognized by the first key ID registered to BCM. Done The ID of fourth Intelligent Key is not registered to BCM Done The ID of fourth Intelligent Key is registered to BCM Yet The ID of third Intelligent Key is not registered to BCM Yet The ID of second Intelligent Key is registered to BCM Done The ID of first Intelligent Key is registered to BCM Yet The ID of first Intelligent Key is registered to BCM Done The ID of first Intelligent Key is registered to BCM Done Ignition switch ON (Only when the signal from the transmitter is received) Air pressure of from tire Ignition switch ON (Only when the signal from the transmitter is received) Air pressure of rea tire II Ignition switch ON (Only when the signal from the transmitter is received) Air pressure of rea tire II Ignition switch ON (Only when the signal from the transmitter is	Yet
	ID of rear RH tire transmitter is registered	Done
ID REGOT KKI	ID of rear RH tire transmitter is not registered	Yet
	ID of rear LH tire transmitter is registered	Done
ID KEGOT KLI	ID of rear LH tire transmitter is not registered	Yet
	Tire pressure indicator OFF	Off
	Tire pressure indicator ON	Yet Done d Yet Done Yet Done Yet Oone Yet Oone Yet Off
	Tire pressure warning alarm is not sounding	Off
BUZZEK	Tire pressure warning alarm is sounding	On

0

Ρ

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No.	Description				Value
(Wire +	color) –	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch (DFF	Battery voltage
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch (DFF	12 V
3 (BG)	Ground	P/W power supply (RAP)	Output	Ignition switch (N	12 V
					np battery saver is activated. or room lamp power supply)	0 V
4 (LG)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V
5	Ground	Passenger door UN-	Output	Passenger	UNLOCK (Actuator is activated)	12 V
(P)		LOCK		door	Other than UNLOCK) Ac- tuator is not activated	0 V
7	Ground	Step lamp	Output	Step lamp	ON	0 V
(SB)		erop rarrip	Culput	Stop iump	OFF	12 V
8	Ground	All doors, fuel lid	Output	All doors, fuel	LOCK (Actuator is activated)	12 V
(V) Ground I	LOCK	ouput	lid	Other than LOCK (Actuator is not activated)	0 V	
9	Ground	Driver door, fuel lid	Output	fuel lid Other than	UNLOCK (Actuator is activated)	12 V
(G)	Cround	UNLOCK	Output		Other than UNLOCK (Actuator is not activated)	0 V
10	Ground	Rear RH door and rear LH door UN-		Rear RH door and rear LH	UNLOCK (Actuator is activated)	12 V
(P)	Croana	LOCK	ouput	door	Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch (DFF	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch (N	0 V
					OFF	0 V
14		Push-button ignition				NOTE: When the illumination brighten- ing/dimming level is in the neutral position
	Ground		Output	Tail lamp	ON	10 0 2 ms JSNIA0010GB
15 (BG)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(60)					ACC	0 V

Terminal No. Description					Volue	
(Wire +	color) –	Signal name	Input/ Output		Condition	Value (Approx.)
					Turn signal switch OFF	0 V
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 0 10 10 10 10 10 10 10 10 10
					Turn signal switch OFF	0 V
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 0 10 10 10 10 10 10 10 10 10
19	Ground	Room lamp timer	Output	Interior room	OFF	12 V
(V)	Ground	control	Output	lamp	ON	0 V
					Turn signal switch OFF	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 0 15 0 15 0 15 0 15 0 15 0 0 0 0 0 0 0 0 0 0 0 0 0
23	Ground	Trunk lid open	Output	Truck lid	OPEN (Trunk lid opener actuator is activated)	12 V
(LG)	Ground	Hunk lid open	Output	Trunk lid	Other than OPEN (Trunk lid opener actuator is not activated)	0 V
					Turn signal switch OFF	0 V
25 (Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 5 0 1 5 0 FKID0926E 6.5 V
30	Ground	Trunk room lamp	Output	Trunk room	ON	0 V
(P)	Ground	Hunk toom lamp	Output	lamp	OFF	12 V

	Terminal No. Description (Wire color)				Value	٨	
(VVire +	color)	Signal name	Input/ Output		Condition	(Approx.)	A
34	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(SB)		(-)	Cutput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	E F G
35	Ground	Trunk room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 15 10 5 0 15 15 10 5 0 15 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 10 10 10 10 10 10 10 10 10 10 10 10	H
(V)					When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	J DLK
38	Ground	Rear bumper anten- na (-)		When the trunk lid opener re- ut quest switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M
(B)	Ground		Suput		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	P

Terminal No.		Description				Value		
(Wire +	color) –	Signal name	Input/ Output		Condition	(Approx.)		
39	Ground	Rear bumper anten-	Output	When the trunk lid opener re- quest switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 0 1 1 1 1 1 5 0 1 1 5 0 1 1 5 0 1 1 5 0 1 1 5 0 1 1 5 0 1 1 5 0 1 1 5 0 1 1 5 0 1 1 5 0 1 1 5 1		
(W)	Ciouna	na (+)	Guiput		When Intelligent Key is not in the antenna detection area	(V) 15 0 1 s JMKIA0063GB		
47		Ignition relay (IPDM			OFF or ACC	12 V		
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V		
50 (BG)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 10 10 10 11.8 V		
					ON (Trunk lid is opened)	0 V		
						Ignition switch ON (A/T mod-	When selector lever is in P or N position	12 V
52	Ground	Starter relay control	Output	els)	When selector lever is not in P or N position	0 V		
(R)				Ignition switch ON (M/T mod-	When the clutch pedal is depressed	Battery voltage		
				els)	When the clutch pedal is not depressed	0 V		
					ON (Pressed)	0 V		
61 (SB)	Ground	Trunk lid opener re- quest switch	Input	Trunk lid open- er request switch	OFF (Not pressed)	(V) 15 10 5 10 10 ms JPMIA0016GB 1.0 V		
		Intelligent Key warn-		Intelligent Key	Sounding	0 V		
64 (G)	Ground	ing buzzer (Engine room)	Output	warning buzzer (Engine room)	Not sounding	12 V		

Terminal No. Description (Wire color)					Value	А	
(vvire +		Signal name	Input/ Output	Condition		(Approx.)	A
					Pressed	0 V	В
67 (GR) Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Not pressed	(V) 15 10 50 10 ms JPMIA0011GB 11.8 V	C	
68 (BG)		Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0	E	
					ON (When rear RH door opens)		G
69 (L)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	H I J
					ON (When rear LH door opens)	0 V	DLK
					When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	L
72 (R)	Ground	Room antenna 2 (–) (Center console)	Output	Ignition switch OFF			Ν
					When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 	0
						JMKIA0063GB	Ρ

	nal No.	Description				Value
(Wire +	color) –	Signal name	Input/ Output	Condition		(Approx.)
73	Ground	Cround Room antenna 2 (+) Output Ignition switch	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(G)		(Center console)	Output	ŎFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB
74	Ground	Passenger door an-	Output		When Intelligent Key is in the antenna detection area	(V) 15 10 0 1 s JMKIA0062GB
74 (SB)		tenna (-)	Cutput	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 0 1 s JMKIA0063GB
75	Ground	Passenger door an- tenna (+) Output		When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 0 1 s JMKIA0062GB
(BR)			quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s 1 s JMKIA0063GB	

	Terminal No. Description (Wire color)				Value	А	
(wire +		Signal name	Input/ Output		Condition	(Approx.)	~
				When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 0 10 1 1 1 1 1 1 1 1 1 1 1 1 1	B C D
76 (V)	76 (V) Ground	Driver door antenna (–)	Output	ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 15 0 15 0 15 10 0 15 15 10 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	E
77	Ground	Driver door antenna	Output	When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 50 1 s JMKIA0062GB	G H
(LG)	Ground	(+)	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	J DLK
78	Ground	Room antenna 1 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	M
(Y)	Ground	(Instrument panel)	Cuput	ÕFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	P

	nal No.	Description				Value
(vvire +	color) –	Signal name	Input/ Output		Condition	(Approx.)
79	Ground	Room antenna 1 (+)	Outout	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)	Giouna	(Instrument panel)	Guiput	OFF -	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 s JMKIA0063GB
80 (GR)	Ground	NATS antenna amp.	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.
81 (W)	Ground	NATS antenna amp.	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.
82 (SD)	Ground	Ignition relay [Fuse	Output	Ignition switch	OFF or ACC	0 V
(SB)		block (J/B)] control		-	ON	12 V
83	Ground	Remote keyless entry receiver communica-	Input/	During waiting		(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1
(Y)		tion	Output	When operating gent Key	either button on the Intelli-	(V) 15 10 50 1 ms JMKIA0065GB

< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value	٨
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF (Wiper volume dial 4)	(V) 15 0 5 0 2 ms JPMIA0041GB 1.4 V	B C D
87 (Y)	Ground	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper volume dial 4)	(V) 15 0 2 ms JPMIA0037GB 1.3 V	E
					Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 6 • Wiper volume dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	G H I

J

L

Μ

Ν

Ο

Ρ

Terminal No. Description Value (Wire color) Condition Input/ (Approx.) Signal name + _ Output (V 15 10 5 All switches OFF Õ (Wiper volume dial 4) 2 ms JPMIA0041GB 1.4 V (V 15 iŏ Lighting switch HI 0 (Wiper volume dial 4) 2 ms JPMIA0036GB 1.3 V 88 Combination switch Combination Ground Input (BG) **INPUT 3** switch 15 10 Lighting switch 2ND n (Wiper volume dial 4) 2 ms JPMIA0037GB 1.3 V 15 Any of the conditions be-10 low with all switches OFF n • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 2 ms JPMIA0040GB 1.3 V Push-button ig-0 V Pressed 89 Push-button ignition Ground Input nition switch (BR) switch (Push switch) Not pressed Battery voltage (push switch) 90 Input/ Ground CAN-L (P) Output 91 Input/ CAN-H Ground (L) Output OFF 0 V (V 15 10 92 Key slot illumin Ground Key slot illumination Output Blinking (LG) nation 1 s JPMIA0015GB 6.5 V ON 12 V

BCM (BODY CONTROL MODULE)

	nal No.	Description				Value			
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)			
93	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage			
(GR)				-	ON	0 V			
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V			
(BG)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	12 V			
96 (GR)	Ground	A/T shift selector (De- tention switch) power supply	Output		_	12 V			
97	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V			
(L)	Cround	tion No. 1	mpar	oteening look	UNLOCK status	12 V			
98	Ground	Steering lock condi-	Input	Steering lock	LOCK status	12 V			
(P)	C. C. C. C.	tion No. 2	p at	0.000g .000.	UNLOCK status	0 V			
		Selector lever P posi-		Soloctor	P position	0 V			
		tion switch (A/T mod- els)		Selector lever	Any position other than P	12 V			
99		ASCD clutch switch (M/T models without		ASCD clutch	OFF (Clutch pedal is de- pressed)	0 V			
(R)* ¹ (BR)* ²	Ground	ICC)	Input switch	Input	Input	Input	switch	ON (Clutch pedal is not depressed)	12 V
		ICC clutch switch (M/		ICC clutch	OFF (Clutch pedal is de- pressed)	0 V			
		T models with ICC)		switch	ON (Clutch pedal is not depressed)	12 V			
					ON (Pressed)	0 V			
100 (Y)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB			
					ON (Pressed)	1.0 V 0 V			
101 (P)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 10 ms JPMIA0016GB 1.0 V			
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V			
(BG)	Ground	lay control	Output	Ignition Switch	ON	12 V			
103 (P)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch (DFF	12 V			
106	Ground	Steering lock unit	0	Ignition outlet	OFF or ACC	12 V			
(SB)	Ground	power supply	Output	Ignition switch	ON	0 V			

	nal No. color)	Description				Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 0 2 ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 0 2 ms JPMIA0037GB 1.3 V
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper volume dial 4)	Turn signal switch RH	(V) 15 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch LO	(V) 15 0 2 ms JPMIA0038GB 1.3 V
					Front washer switch ON	(V) 15 10 2 ms JPMIA0039GB 1.3 V

	nal No.	Description				Value	
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)	-
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	E
108		Combination switch		Combination	Lighting switch AUTO (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	E
(R)	Ground	INPUT 4	Input	switch	Lighting switch 1ST (Wiper volume dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	ŀ
					Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	DI

< ECU DIAGNOSIS INFORMATION >

Revision: 2011 November

M

Ν

Ο

Ρ

Terminal No. Description Value (Wire color) Condition Input/ (Approx.) Signal name + _ Output (V) 15 10 5 Õ All switches OFF 2 ms JPMIA0041GB 1.4 V (V 15 10 5 õ Lighting switch PASS 2 ms JPMIA0037GB 1.3 V (V 15 10 Combination 109 Combination switch switch Ō Lighting switch 2ND Ground Input INPUT 2 (W) (Wiper volume dial 4) 2 ms JPMIA0036GB 1.3 V (V 15 10 Front wiper switch INT/ n AUTO 2 ms JPMIA0038GB 1.3 V (V 15 10 5 ŏ Front wiper switch HI 2 ms JPMIA0040GB 1.3 V ON 0 V 110 Ground Hazard switch Input Hazard switch (G) ŏ OFF 10 ms JPMIA0012GB 1.1 V

BCM (BODY CONTROL MODULE)

Terminal No. Description				Value		
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)
					LOCK status	12 V
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 50 ms JMKIA0066GB
					For 15 seconds after UN- LOCK	12 V
					15 seconds or later after UNLOCK	0 V
112 (R)	Ground	Light and rain sensor serial link	Input/ Output	Ignition switch C	DN	(V) 15 10 5 0
113 (BG)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle When dark outside of the	8.7 V Close to 5 V
					vehicle	Close to 0 V
114	Ground	Clutch interlock	Input	Clutchinterlock	OFF (Clutch pedal is not depressed)	0 V
(R)	Ground	switch	input	switch	ON (Clutch pedal is de- pressed)	Battery voltage
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
		Stop lamp switch 2		Stop lamp	OFF (Brake pedal is not depressed)	0 V
118		(Without ICC)		switch	ON (Brake pedal is de- pressed)	Battery voltage
(BR)	Ground	Stop lamp switch 2	Input		h OFF (Brake pedal is not ICC brake hold relay OFF	0 V
		(With ICC)			h ON (Brake pedal is de- brake hold relay ON	Battery voltage
119 (SB)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 0 5 10 10 ms JPMIA0012GB 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V

	nal No.	Description				
(Wire +	color)	Signal name	Input/ Output		Condition	Value (Approx.)
121	Ground	Key slot switch	Input	When the Intellie	gent Key is inserted into key	12 V
(SB)	Cround		mpar	When the Intellig key slot	gent Key is not inserted into	0 V
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
(V)				5	ON	Battery voltage
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
129 (BG)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 0 10 10 10 ms JPMIA0012GB 1.1 V 0 V
					•••	
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch C	DN	(V) 15 10 10 10 10 10 10 ms JPMIA0013GB 10.2 V
				Ignition switch C		12 V
				-gon ownor c	ON (Tail lamps OFF)	9.5 V
133 (L)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level. (V) 15 10 5 0 U JPMIA0159GB
					OFF	0 V
134 (LG)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF ON	Battery voltage
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch C		0 V

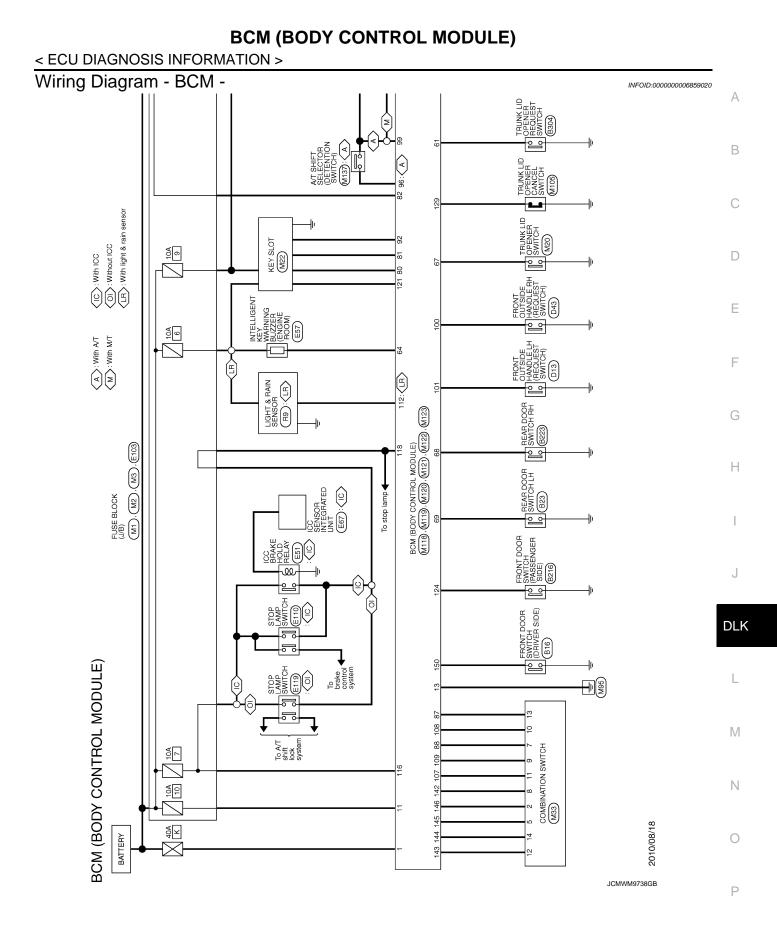
	nal No. e color)	Description	1		Que d'élan	Value
+		Signal name	Input/ Output		Condition	(Approx.)
138		Receiver and sensor			OFF	0 V
(V)	Ground	power supply	Output	Ignition switch	ACC or ON	5.0 V
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 ••• 0.2s ••• 0.2s
(L)	Ground	er communication	Output	ŌN	When receiving the signal from the transmitter	(V) 4 2 0 + 0.2s OCC3880D
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	12 V
(B)		position	input		Except P and N positions	0 V
141 (W)	Ground	Security indicator	Output	Security indica- tor	Blinking	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1
					OFF	12 V
					All switches OFF Lighting switch 1ST	0 V
142				Combination	Lighting switch HI	
(BR)	Ground	Combination switch OUTPUT 5	Output	switch (Wiper volume dial 4)	Lighting switch 2ND	10 5 0 2 ms
					All switches OFF (Wiper volume dial 4)	UPMIA0031GB 10.7 V 0 V
					Front wiper switch HI (Wiper volume dial 4)	(V) 15
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 • Wiper volume dial 6 • Wiper volume dial 7	15 0 2 ms JPMIA0032GB 10.7 V

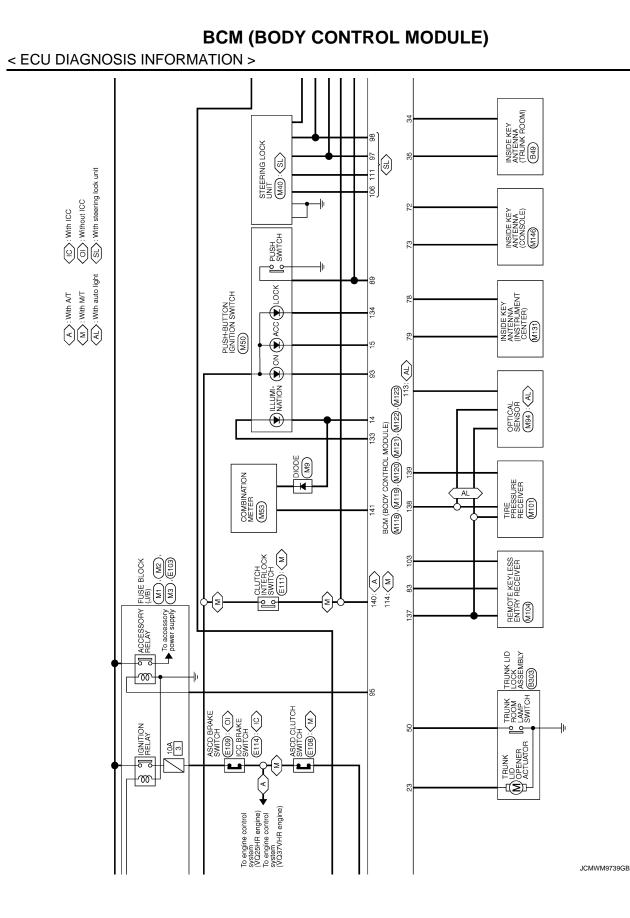
< ECU DIAGNOSIS INFORMATION >

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper volume dial 4)	0 V
					Front washer switch ON (Wiper volume dial 4)	(V) 15
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	10 5 0 2 ms 10 10.7 V
					All switches OFF	0 V
					Front wiper switch INT/ AUTO	(V)[]
145		Combination switch		Combination switch	Front wiper switch LO	
(L)	Ground	OUTPUT 3	Output	(Wiper volume dial 4)	Lighting switch AUTO	5 0 2.ms JPMIA0034GB 10.7 V
					All switches OFF	0 V
					Front fog lamp switch ON	
				Combination	Lighting switch 2ND	(V) 15
146	Ground	Combination switch	Output	switch	Lighting switch PASS	
(SB)	Cround	OUTPUT 4	Output	(Wiper volume dial 4)	Turn signal switch LH	0 2 ms JPMIA0035GB 10.7 V
						10.7 V
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 50 10 ms JPMIA0011GB
					ON (Door open)	11.8 V 0 V
454		Description		Description	Active	0 V
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window defogger	Not activated	Battery voltage
• *1· A/T r			1		I	

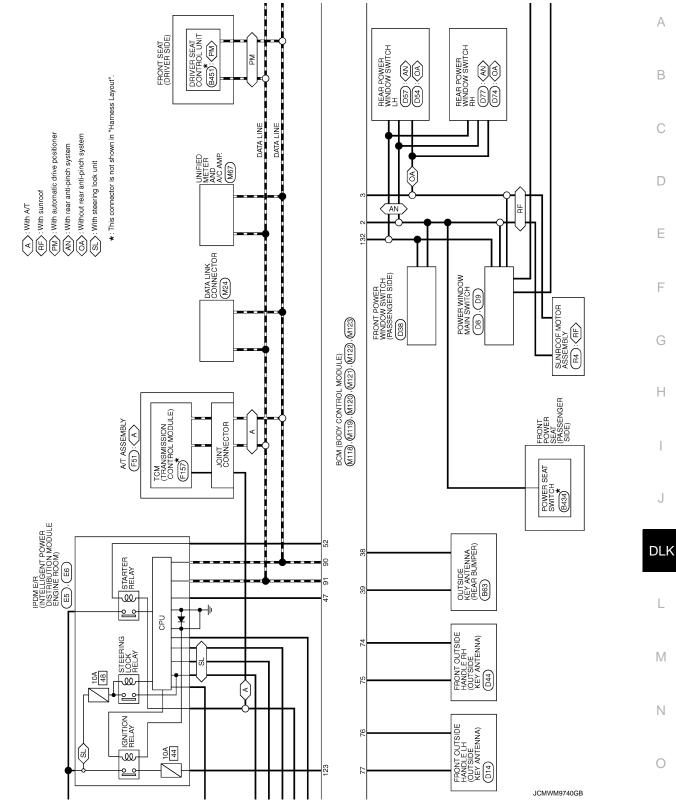
• *1: A/T models

• *2: M/T models

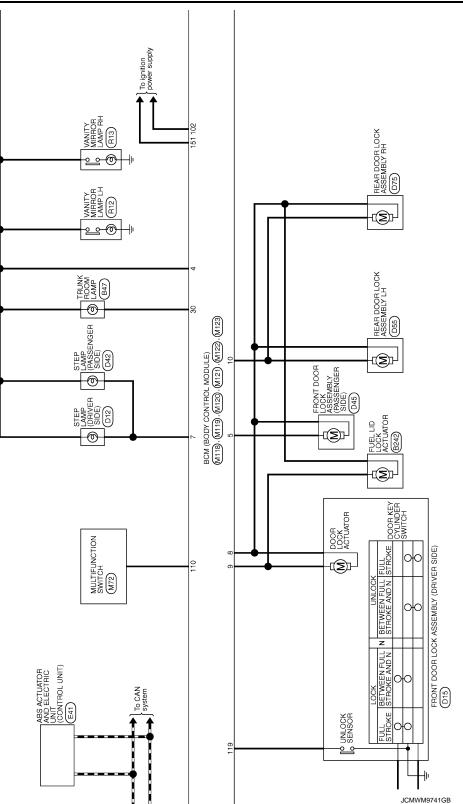




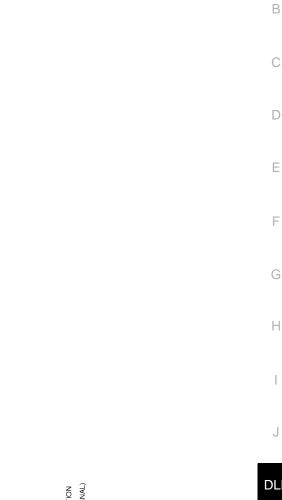
< ECU DIAGNOSIS INFORMATION >

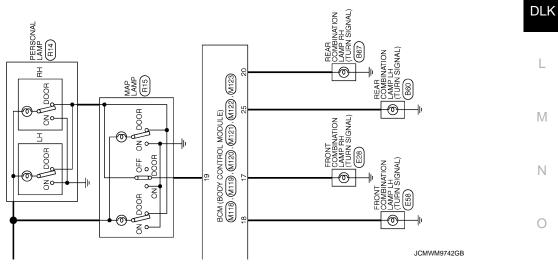


Ρ



< ECU DIAGNOSIS INFORMATION >



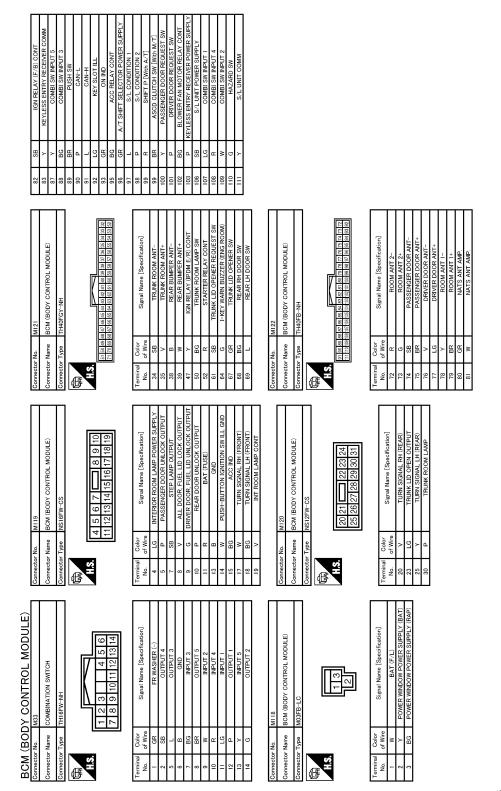


А

F

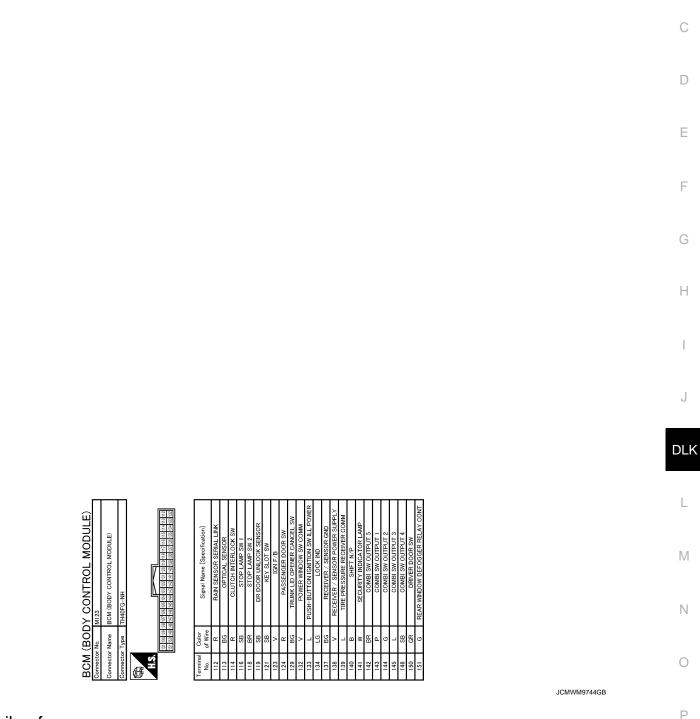
J

< ECU DIAGNOSIS INFORMATION >



JCMWM9743GB

< ECU DIAGNOSIS INFORMATION >



Fail-safe

FAIL-SAFE CONTROL BY DTC

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

INFOID:000000006859021

А

В

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actua- tor and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status be- comes consistentStarter control relay signalStarter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (12 V) Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (12 V) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP/CLUTCH SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (12 V) 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/CLUTCH SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) Interlock/PNP switch signal (CAN): OFF Status 2 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (12 V) PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation	
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN) 	AB
B2609: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status 	С
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (12 V) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal) 	D
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilledPower position changes to ACCReceives engine status signal (CAN)	E
B2612: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R) 	F
B2617: BCM	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal	G
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM be- comes normal	Н
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control in- side BCM becomes normal	
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization	
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: ON (Battery voltage) 	J
B26E9: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled Steering condition No. 1 signal: LOCK (0 V) Steering condition No. 2 signal: LOCK (12 V) 	L

DTC Inspection Priority Chart

INFOID:00000006859022

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

Priority	DTC	
1	B2562: LOW VOLTAGE	
2	U1000: CAN COMM U1010: CONTROL UNIT(CAN)	
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI-SCANNING 	

< ECU DIAGNOSIS INFORMATION >

Priority	DTC
4	 B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2555: IGNITION RELAY B2555: VEHICLE SPEED B2560: STARTER CONT RELAY B2501: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSITION B2604: PNP/CLUTCH SW B2605: SNR RELAY B2605: S/L RELAY B2606: S/L RELAY B2606: S/L RELAY B2607: S/L RELAY B2609: S/L STATUS B2609: S/L STATUS B2609: S/L STATUS B26009: S/L STATUS B2609: S/L STATUS B2609: S/L STATUS B2609: S/L STATUS B2600: STEERING LOCK UNIT B2600: STEERING LOCK UNIT B2600: STEERING LOCK UNIT B2601: SETOK UNIT B2601: STATUS B2614: BCM B2614: BCM B2616: BCM B2616: BCM B2617: BCM B2618: BCM B2618: BCM B2618: BCM B2619: SL STATUS B2619: BCM B2619: BCM B2619: BCM B2619: SL STATUS B2619: BCM B2619: SL STATUS B2619: SL STATUS
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 C1770: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1734: CONTROL UNIT
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>BCS-15, "COM-MON ITEM : CONSULT-III Function (BCM - COMMON ITEM)"</u>.

INFOID:000000006859023

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page	A
No DTC is detected. further testing may be required.	_	-	_	_	_	В
U1000: CAN COMM	_	_	_	—	BCS-34	С
U1010: CONTROL UNIT(CAN)	_	_		_	BCS-35	
U0415: VEHICLE SPEED	_	_	_	_	BCS-36	D
B2013: ID DISCORD BCM-S/L	×	×	—	—	<u>SEC-55</u>	D
B2014: CHAIN OF S/L-BCM	×	×	—	—	<u>SEC-56</u>	
B2190: NATS ANTENNA AMP	×	_	—	—	<u>SEC-47</u>	E
B2191: DIFFERENCE OF KEY	×	_	—	—	<u>SEC-50</u>	
B2192: ID DISCORD BCM-ECM	×	_	—	—	<u>SEC-51</u>	_
B2193: CHAIN OF BCM-ECM	×	_	_	_	<u>SEC-53</u>	F
B2195: ANTI-SCANNING	×	_	_	_	<u>SEC-54</u>	
B2553: IGNITION RELAY	_	×	—	—	PCS-49	G
B2555: STOP LAMP	_	×	_	_	<u>SEC-59</u>	
B2556: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-61</u>	
B2557: VEHICLE SPEED	×	×	×	_	SEC-63	
B2560: STARTER CONT RELAY	×	×	×		<u>SEC-64</u>	
B2562: LOW VOLTAGE		×		_	BCS-37	
B2601: SHIFT POSITION	×	×	×	_	<u>SEC-65</u>	
B2602: SHIFT POSITION	×	×	×	_	<u>SEC-68</u>	
B2603: SHIFT POSI STATUS	×	×	×	_	<u>SEC-70</u>	J
B2604: PNP/CLUTCH SW	×	×	×		<u>SEC-73</u>	·
B2605: PNP/CLUTCH SW	×	×	×	_	<u>SEC-75</u>	DL
B2606: S/L RELAY	×	×	×		<u>SEC-77</u>	
B2607: S/L RELAY	×	×	×		<u>SEC-78</u>	
B2608: STARTER RELAY	×	×	×	_	<u>SEC-80</u>	L
B2609: S/L STATUS	×	×	×	—	<u>SEC-82</u>	
B260A: IGNITION RELAY	×	×	×	_	PCS-51	
B260B: STEERING LOCK UNIT	_	×	×	_	<u>SEC-86</u>	- N
B260C: STEERING LOCK UNIT	_	×	×	—	<u>SEC-87</u>	
B260D: STEERING LOCK UNIT	_	×	×	_	<u>SEC-88</u>	N
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-89</u>	•
B2612: S/L STATUS	×	×	×	_	<u>SEC-94</u>	
B2614: BCM		×	×	_	PCS-53	C
B2615: BCM	_	×	×	_	PCS-55	
B2616: BCM		×	×	_	PCS-57	P
B2617: BCM	×	×	×	_	<u>SEC-98</u>	
B2618: BCM	×	×	×	_	PCS-59	
B2619: BCM	×	×	×	_	SEC-100	
B261A: PUSH-BTN IGN SW		×	×	_	PCS-60	
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-101</u>	

Revision: 2011 November

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page	
B2621: INSIDE ANTENNA	_	×	—	—	<u>DLK-59</u>	
B2622: INSIDE ANTENNA	—	×	_	_	DLK-61	
B2623: INSIDE ANTENNA	_	×	_	_	DLK-63	
B26E8: CLUTCH SW	×	×	×	_	<u>SEC-90</u>	
B26E9: S/L STATUS	×	×	imes (Turn ON for 15 seconds)	_	<u>SEC-92</u>	
B26EA: KEY REGISTRATION	_	×	imes (Turn ON for 15 seconds)	_	<u>SEC-93</u>	
C1704: LOW PRESSURE FL	_	—	_	×		
C1705: LOW PRESSURE FR	_	—	_	×	<u>WT-24</u>	
C1706: LOW PRESSURE RR		—	—	×		
C1707: LOW PRESSURE RL		—	—	×		
C1708: [NO DATA] FL	_	—	_	×	<u>WT-26</u>	
C1709: [NO DATA] FR		—	_	×		
C1710: [NO DATA] RR		—	_	×		
C1711: [NO DATA] RL	_	—	_	×		
C1716: [PRESSDATA ERR] FL		—	_	×		
C1717: [PRESSDATA ERR] FR	—	—	—	×	- <u>WT-29</u>	
C1718: [PRESSDATA ERR] RR	—	—	—	×		
C1719: [PRESSDATA ERR] RL	_	—	—	×		
C1729: VHCL SPEED SIG ERR	—	—	—	×	<u>WT-30</u>	
C1734: CONTROL UNIT	_	_	—	×	<u>WT-31</u>	

OOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH < SYMPTOM DIAGNOSIS > SYMPTOM DIAGNOSIS

DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND SWITCH	UNLOCK	А
ALL DOOR		В
ALL DOOR : Description	INFOID:000000006208857	C
All doors do not lock/unlock using door lock and unlock switch.		0
ALL DOOR : Diagnosis Procedure	INFOID:000000006208858	D
1.CHECK POWER SUPPLY AND GROUND CIRCUIT Check power supply and ground circuit.		_
Refer to <u>DLK-65, "BCM (BODY CONTROL MODULE) : Diagnosis Procedure"</u> . Is the inspection result normal?		E
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.		F
2. CHECK DOOR LOCK AND UNLOCK SWITCH		
 Check door lock and unlock switch. Driver side: Refer to <u>DLK-69, "DRIVER SIDE : Component Function Check"</u>. Passenger side: Refer to <u>DLK-69, "PASSENGER SIDE : Component Function Check"</u>. 		G
Is the inspection result normal?		Н
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.		
3. CHECK DOOR LOCK ACTUATOR		
Check door lock actuator (driver side). Refer to <u>DLK-71, "DRIVER SIDE : Component Function Check"</u> .		J
<u>Is the inspection result normal?</u> YES >> GO TO 4.	_	
NO >> Repair or replace the malfunctioning parts.		DLK
4.CONFIRM THE OPERATION		
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-43</u> , " <u>Intermittent Incident</u> ".		L
NO >> GO TO 1. DRIVER SIDE		Μ
DRIVER SIDE : Description	INFOID:000000006208859	
Driver side door does not lock/unlock using door lock and unlock switch.		Ν
DRIVER SIDE : Diagnosis Procedure	INFOID:000000006208860	
1. CHECK DOOR LOCK ACTUATOR		0
Check door lock actuator (driver side). Refer to DLK-71, "DRIVER SIDE : Component Function Check".		Ρ
Is the inspection result normal?		
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.		
2.CONFIRM THE OPERATION		
Confirm the operation again.		

Revision: 2011 November

DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOC < SYMPTOM DIAGNOSIS >	K SWITCH
Is the result normal? YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1. PASSENGER SIDE	
PASSENGER SIDE : Description	INFOID:000000006208861
Passenger side door does not lock/unlock using door lock and unlock switch. PASSENGER SIDE : Diagnosis Procedure	INFOID:000000006208862
1. CHECK DOOR LOCK ACTUATOR	
Check door lock actuator (passenger side). Refer to <u>DLK-72, "PASSENGER SIDE : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CONFIRM THE OPERATION	
Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident". NO >> GO TO 1. REAR LH	
REAR LH : Description	INFOID:000000006208863
Rear LH side door does not lock/unlock using door lock and unlock switch.	
REAR LH : Diagnosis Procedure	INFOID:000000006208864
1.CHECK DOOR LOCK ACTUATOR	
Check door lock actuator (rear LH). Refer to <u>DLK-73, "REAR LH : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CONFIRM THE OPERATION	
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1. REAR RH	
REAR RH : Description	INFOID:000000006208865
Rear RH side door does not lock/unlock using door lock and unlock switch. REAR RH : Diagnosis Procedure	INFOID:000000006208866
1. CHECK DOOR LOCK ACTUATOR	
Check door lock actuator (rear RH). Refer to <u>DLK-73, "REAR RH : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2.	

NO >> Repair or replace the malfunctioning parts.

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

< SYMPTOM DIAGNOSIS >

2.CONFIRM THE OPERATION		А
Confirm the operation again.	,	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>G</u>	3-43 "Intermittent Incident"	В
NO $>>$ GO TO 1.		
	,	С
		0
		D
		D
		E
		_
		F
	,	~
		G
		Н
		1
		1

J

DLK

L

Μ

Ν

Ο

DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION < SYMPTOM DIAGNOSIS >

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

Description

INFOID:000000006208867

INFOID:000000006208868

All doors do not lock/unlock using driver side door key cylinder.

Diagnosis Procedure

1. CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-181, "ALL DOOR : Diagnosis Procedure"</u>.

2. CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch. Refer to <u>DLK-80, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

NO >> GO TO 1.

Revision: 2011 November

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

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

ALL DOOR : Description	NF0ID:000000006208869
All doors do not lock/unlock using all door request switches. NOTE:	
Check door request switch operation in the door lock condition. Refer to <u>DLK-21, "DOOR LOCK</u> <u>System Description"</u> .	FUNCTION : C
ALL DOOR : Diagnosis Procedure	NFOID:000000006208870
1. CHECK REMOTE KEYLESS ENTRY FUNCTION	D
Check remote keyless entry function.	
Does door lock/unlock with Intelligent Key button?	E
YES >> GO TO 2. NO >> Refer to <u>DLK-30, "REMOTE KEYLESS ENTRY FUNCTION : System Description"</u> .	
2.CHECK "LOCK/UNLOCK BY I-KEY" SETTING IN "WORK SUPPORT"	F
Check "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT". Refer to <u>DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u> .	G
Is the inspection result normal?	0
YES >> GO TO 3.	
NO >> Set "LOCK/UNLOCK BY I-KEY" in "WORK SUPPORT".	Н
3.CONFIRM THE OPERATION	
Confirm the operation again.	1
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".	
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	
DRIVER SIDE	J
DRIVER SIDE : Description	NFOID:000000006208871
All doors do not lock/unlock using driver side door request switch. NOTE:	
Check door request switch operation in the door lock condition. Refer to <u>DLK-21, "DOOR LOCK</u> <u>System Description"</u> .	FUNCTION :
DRIVER SIDE : Diagnosis Procedure	NFOID:000000006208872
	M
1.CHECK DRIVER SIDE DOOR REQUEST SWITCH	
Check driver side door request switch. Refer to <u>DLK-91, "Component Function Check"</u> .	Ν
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	0
2.CHECK OUTSIDE KEY ANTENNA LH	
Check outside key antenna LH. Refer to <u>DLK-95, "Component Function Check"</u> .	P
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION	
Confirm the operation again.	

А

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

Is the result normal?

YES >> Check Intermittent Incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Description

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

Check door request switch operation in the door lock condition. Refer to <u>DLK-21, "DOOR LOCK FUNCTION :</u> <u>System Description"</u>.

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000006208874

INFOID:000000006208873

1.CHECK PASSENGER SIDE DOOR REQUEST SWITCH

Check passenger side door request switch. Refer to DLK-91, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK OUTSIDE KEY ANTENNA RH

Check outside key antenna RH. Refer to <u>DLK-95. "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 $\mathbf{3}.$ CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check Intermittent Incident. Refer to GI-43, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >	
DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY	А
Description INFOID:000000000000000000000000000000000000	
All doors do not lock/unlock using Intelligent Key. NOTE: Check Intelligent Key remote operation in the door lock condition. Refer to <u>DLK-30, "REMOTE KEYLESS</u> ENTRY FUNCTION : System Description".	В
Diagnosis Procedure	С
1. CHECK POWER DOOR LOCK OPERATION	
Check power door lock operation.	D
Does door lock/unlock with door lock and unlock switch?	
YES >> GO TO 2. NO >> Refer to <u>DLK-181, "ALL DOOR : Diagnosis Procedure"</u> .	Ε
2.CHECK REMOTE KEYLESS ENTRY RECEIVER	_
Check remote keyless entry receiver. Refer to <u>DLK-82, "Component Function Check"</u> .	F
Is the inspection result normal?	G
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK INTELLIGENT KEY	Н
Check Intelligent Key. Refer to <u>DLK-100, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4. CHECK KEY SLOT	J
Check key slot.	
Refer to <u>DLK-102, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	DLł
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	L
5. CHECK DOOR SWITCH	
Check door switch. Refer to DLK-66, "Component Function Check".	M
Is the inspection result normal?	
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	Ν
NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION	
Confirm the operation again.	0
Is the result normal?	0
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	Ρ

TRUNK LID DOES NOT OPEN WITH TRUNK LID OPENER SWITCH < SYMPTOM DIAGNOSIS >

TRUNK LID DOES NOT OPEN WITH TRUNK LID OPENER SWITCH

Description

INFOID:000000006208877

NOTE:

Check trunk lid opener switch operation in the trunk lid open condition. Refer to DLK-47, "System Description".

Diagnosis Procedure

INFOID:000000006208878

1. CHECK TRUNK LID OPENER SWITCH

Check trunk lid opener switch. Refer to <u>DLK-85, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK TRUNK LID OPENER ACTUATOR

Check trunk lid opener actuator.

Refer to DLK-76, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch. Refer to DLK-89, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK VEHICLE SPEED SIGNAL

Check unified meter A/C amp. Refer to <u>MWI-107, "DTC Index"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

TRUNK LID DOES NOT OPEN WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

TRUNK LID DOES NOT OPEN WITH INTELLIGENT KEY

	А
Description INFOID:000000006208879	
NOTE: Check Intelligent Key remote operation with trunk lid open condition. Refer to <u>DLK-30, "REMOTE KEYLESS</u> <u>ENTRY FUNCTION : System Description"</u> .	В
Diagnosis Procedure	С
1. CHECK TRUNK LID OPEN FUNCTION	
Check trunk lid open function with trunk lid opener switch.	D
Does trunk lid open with trunk lid opener switch?	
YES >> GO TO 2. NO >> Refer to <u>DLK-188, "Diagnosis Procedure"</u> .	Е
2. CHECK "TRUNK OPEN DELAY" SETTING IN "WORK SUPPORT"	
Check "TRUNK OPEN DELAY" setting in "WORK SUPPORT". Refer to <u>DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u> .	F
<u>Is the inspection result normal?</u> YES >> GO TO 3.	
YES >> GO TO 3. NO >> Set "TRUNK OPEN DELAY" setting in "WORK SUPPORT".	G
3. CHECK POWER POSITION	
Check if ignition switch position is changing or not.	Η
Does ignition switch position change?	
YES >> GO TO 4. NO >> Check DTC for BCM. Refer to <u>MWI-107. "DTC Index"</u> .	
4.CHECK INTELLIGENT KEY	
Check Intelligent Key. Refer to <u>DLK-100, "Component Function Check"</u> .	J
Is the inspection result normal?	
YES >> GO TO 5.	DLK
NO >> Repair or replace the malfunctioning parts.	
5.CONFIRM THE OPERATION	L
Confirm the operation again. <u>Is the result normal?</u>	
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	M
	Ν
	0

TRUNK LID DOES NOT OPEN WITH TRUNK LID OPENER REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

TRUNK LID DOES NOT OPEN WITH TRUNK LID OPENER REQUEST SWITCH

Description

INFOID:000000006208881

NOTE:

Check trunk lid opener request switch operation in the trunk lid open condition. Refer to <u>DLK-26</u>, "<u>TRUNK</u> <u>OPEN FUNCTION</u>: <u>System Description</u>".

Diagnosis Procedure

INFOID:000000006208882

1.CHECK TRUNK LID OPEN FUNCTION

Check trunk lid open function with Intelligent Key.

Does trunk lid open with Intelligent Key?

YES >> GO TO 2.

NO >> Refer to <u>DLK-189</u>, "Diagnosis Procedure".

2. CHECK TRUNK LID OPENER REQUEST SWITCH

Check trunk lid opener request switch. Refer to <u>DLK-87, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK OUTSIDE KEY ANTENNA (REAR BUMPER)

Check outside key antenna (rear bumper).

Refer to DLK-95, "Component Function Check".

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Repair or replace the malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.
- NO >> GO TO 1.

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS >	
SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE DOOR REQUEST SWITCH	
DOOR REQUEST SWITCH : Description	INFOID:000000006208883
NOTE: Before performing the diagnosis in the following procedure, check the operation condition. Re <u>"DOOR LOCK FUNCTION : System Description"</u> .	
DOOR REQUEST SWITCH : Diagnosis Procedure	INFOID:000000006208884
1. CHECK DOOR LOCK FUNCTION	I
Check door lock function by door request switch. <u>Does door lock/unlock with door request switch?</u> YES >> GO TO 2. NO-1 >> Driver side: Refer to <u>DLK-185, "DRIVER SIDE : Diagnosis Procedure"</u> . NO-2 >> Passenger side: Refer to <u>DLK-186, "PASSENGER SIDE : Diagnosis Procedure"</u> .	
2. CHECK "DOOR LOCK-UNLOCK SET" SETTING IN "WORK SUPPORT"	I
Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-51, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> .	(
Is the inspection result normal? YES >> GO TO 3. NO >> Set "DOOR LOCK-UNLOCK SET" in "WORK SUPPORT". 3. CONFIRM THE OPERATION	ł
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1. INTELLIGENT KEY	
INTELLIGENT KEY : Description	INFOID:000000006208885
NOTE: Before performing the diagnosis in the following procedure, check the operation condition. Re <u>"REMOTE KEYLESS ENTRY FUNCTION : System Description"</u> . INTELLIGENT KEY : Diagnosis Procedure	Defer to <u>DLK-30.</u>
1. CHECK DOOR LOCK FUNCTION	IN 012.000000000200000
Check door lock function by intelligent key.	
Does door lock/unlock with Intelligent Key button?	1
YES >> GO TO 2. NO >> Refer to <u>DLK-30, "REMOTE KEYLESS ENTRY FUNCTION : System Description"</u>	
2.CHECK "DOOR LOCK–UNLOCK SET" SETTING IN "WORK SUPPORT"	(
Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-51. "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Set "DOOR LOCK-UNLOCK SET" of "WORK SUPPORT". 3. CONFIRM THE OPERATION	I
Confirm the operation again.	
Is the result normal? YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	

SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

NO >> GO TO 1. DOOR KEY CYLINDER

DOOR KEY CYLINDER : Description

NOTE:

Before performing the diagnosis in the following procedure, check the operation condition. Refer to DLK-11. "System Description".

DOOR KEY CYLINDER : Diagnosis Procedure

1.CHECK DOOR LOCK FUNCTION

Check door lock function by door key cylinder.

Does door lock/unlock with door key cylinder?

YES >> GO TO 2.

NO >> Refer to DLK-184, "Diagnosis Procedure".

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

Check "DOOR LOCK-UNLOCK SET" setting in "WORK SUPPORT". Refer to DLK-51, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "DOOR LOCK-UNLOCK SET" of "WORK SUPPORT".

 ${
m 3.}$ CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 1.

INFOID:00000006208887

INFOID:000000006208888

VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPER- ATE	A
Description	В
NOTE: Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11.</u> <u>"System Description"</u> .	С
Diagnosis Procedure	
1.CHECK POWER DOOR LOCK OPERATION	D
Check power door lock operation. <u>Does door lock/unlock with door lock and unlock switch?</u> YES >> GO TO 2. NO >> Refer to <u>DLK-181, "ALL DOOR : Diagnosis Procedure"</u> .	E
2. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"	F
Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-51, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> . Is the inspection result normal?	G
YES \Rightarrow GO TO 3. NO \Rightarrow Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". 3. CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"	Н
Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-51, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> .	I
Is the inspection result normal? YES >> GO TO 4. NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".	J
4.CHECK VEHICLE SPEED SIGNAL Check unified meter A/C amp.	
Refer to <u>MWI-107, "DTC Index"</u> .	DLK
Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	L
5.CONFIRM THE OPERATION	
Confirm the operation again. <u>Is the result normal?</u> VES Check intermittent incident. Befor to CL 42. "Intermittent Incident"	Μ
 YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>. NO >> GO TO 1. 	Ν

Ο

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Description

INFOID:000000006208891

INFOID-000000006208892

NOTE:

Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11</u>, <u>"System Description"</u>.

Diagnosis Procedure

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.

NO >> Refer to <u>DLK-181, "ALL DOOR : Diagnosis Procedure"</u>.

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

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

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

Is the inspection result normal?

YES >> GO TO 3.

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

 $\mathbf{3.}$ CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"

Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-51, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u>.

Is the inspection result normal?

YES >> GO TO 4.

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

4.CHECK BCM

Check BCM for DTC. Refer to <u>BCS-76, "DTC Index"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

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

< SYMPTOM DIAGNOSIS >	
P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OP-	-
ERATE	А
	3 B
NOTE:	D
Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11</u> , <u>"System Description"</u> .	С
Diagnosis Procedure	4
1. CHECK POWER DOOR LOCK OPERATION	D
Check power door lock operation.	-
Does door lock/unlock with door lock and unlock switch?	E
YES >> GO TO 2. NO >> Refer to <u>DLK-181, "ALL DOOR : Diagnosis Procedure"</u> .	
2. CHECK "AUTOMATIC LOCK/UNLOCK SELECT" SETTING IN "WORK SUPPORT"	F
Check "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-51, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> .	-
Is the inspection result normal?	G
YES >> GO TO 3. NO >> Set "AUTOMATIC LOCK/UNLOCK SELECT" in "WORK SUPPORT".	
3. CHECK "AUTOMATIC DOOR LOCK SELECT" SETTING IN "WORK SUPPORT"	Н
Check "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-51, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> .	
Is the inspection result normal?	I
YES >> GO TO 4. NO >> Set "AUTOMATIC DOOR LOCK SELECT" in "WORK SUPPORT".	J
4. CHECK "AUTOMATIC DOOR UNLOCK SELECT" SETTING IN "WORK SUPPORT"	
Check "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT". Refer to <u>DLK-51, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)"</u> .	DLł
Is the inspection result normal?	
YES >> GO TO 5. NO >> Set "AUTOMATIC DOOR UNLOCK SELECT" in "WORK SUPPORT".	L
5.снеск тсм	
Check TCM for DTC. Refer to <u>TM-251, "DTC Index"</u> .	M
Is the inspection result normal?	
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	Ν
6. CONFIRM THE OPERATION	
Confirm the operation again.	0
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Description

NOTE:

Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11.</u> "System Description".

Diagnosis Procedure

INFOID:000000006208896

INFOID:00000006208895

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

Check "AUTO LOCK SET" setting in "WORK SUPPORT". Refer to <u>DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

Is the inspection result normal?

YES >> GO TO 2.

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

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

FUEL LID LOCK ACTUATOR DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

FUEL LID LOCK ACTUATOR DOES NOT OPERATE

	А
Description INFOID:000000000000000000000000000000000000	Λ
NOTE: Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-11.</u> <u>"System Description"</u> .	В
Diagnosis Procedure	С
1.CHECK FUEL LID OPENER ACTUATOR Check fuel lid opener actuator. Refer to DLK-75, "Component Function Check". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	D
Confirm the operation again.	F
Is the result normal? YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	G

|

J

Н

DLK

L

Μ

Ν

Ο

PANIC ALARM FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

PANIC ALARM FUNCTION DOES NOT OPERATE

Description

INFOID:000000006208899

INFOID-000000006208900

NOTE:

Before performing the diagnosis in the following procedure, check the operation condition. Refer to <u>DLK-30</u>. <u>"REMOTE KEYLESS ENTRY FUNCTION : System Description"</u>.

Diagnosis Procedure

1.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 2.

NO >> Refer to <u>DLK-187</u>, "Diagnosis Procedure".

2. CHECK VEHICLE SECURITY ALARM OPERATION

Check vehicle security alarm operation.

Does alarm (headlamp and horn) active?

YES >> GO TO 3.

NO >> Refer to <u>SEC-217</u>, "Diagnosis Procedure".

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

Check "PANIC ALARM SET" setting in "WORK SUPPORT".

Refer to DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "PANIC ALARM SET" setting in "WORK SUPPORT".

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.
- NO >> GO TO 1.

HAZARD AND HORN REMINDER DOES NOT OPERATE	
Description	INFOID:00000000620890
NOTE: Before performing the diagnosis, check the operation condition. Refer to <u>DLK-30, "REN</u> <u>ENTRY FUNCTION : System Description"</u> .	MOTE KEYLESS
Diagnosis Procedure	INFOID:00000000620890.
1. CHECK "HAZARD ANSWER BACK" SETTING IN "WORK SUPPORT"	
Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to <u>DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Set "HAZARD ANSWER BACK" setting in "WORK SUPPORT".	
2. CHECK "HORN WITH KEYLESS LOCK" SETTING IN "WORK SUPPORT".	
Check "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".	
Refer to <u>DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u> Is the inspection result normal?	
YES $>>$ GO TO 3.	
NO >> Set "HORN WITH KEYLESS LOCK" setting in "WORK SUPPORT".	
3.CHECK POWER POSITION	
Check if ignition switch position is changing or not.	
Does ignition switch position change? YES >> GO TO 4.	
NO >> Check BCM for DTC. Refer to <u>BCS-76, "DTC Index"</u> .	
4. CHECK HAZARD FUNCTION	
Check hazard function. Refer to <u>DLK-111, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	
5. CHECK HORN FUNCTION	
Check horn function. Refer to <u>DLK-106, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts. 6.CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

HAZARD AND BUZZER REMINDER DOES NOT OPERATE

Description

INFOID:000000006208903

NOTE:

Before performing the diagnosis, check the operation condition. Refer to <u>DLK-30, "REMOTE KEYLESS</u> <u>ENTRY FUNCTION : System Description"</u>.

Diagnosis Procedure

INFOID:000000006208904

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

Check "HAZARD ANSWER BACK" setting in "WORK SUPPORT". Refer to DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

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

2.CHECK "ANS BACK I-KEY LOCK" SETTING IN "WORK SUPPORT"

Check "ANS BACK I-KEY LOCK" setting in "WORK SUPPORT". Refer to <u>DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Set "ANS BACK I-KEY LOCK" in "WORK SUPPORT".

 ${f 3.}$ CHECK "ANS BACK I-KEY UNLOCK" SETTING IN "WORK SUPPORT"

Check "ANS BACK I-KEY UNLOCK" setting in "WORK SUPPORT". Refer to DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Set "ANS BACK I-KEY UNLOCK" in "WORK SUPPORT".

4.CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

- YES >> GO TO 5.
- NO >> Check BCM for DTC. Refer to <u>BCS-76, "DTC Index"</u>.

5.CHECK HAZARD FUNCTION

Check hazard function.

Refer to DLK-111, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer. Refer to <u>DLK-98, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-43. "Intermittent Incident"</u>.

KEY REMINDER FUNCTION DOES NOT OPERATE NTELLIGENT KEY SYSTEM	
NTELLIGENT KEY SYSTEM : Description	INFOID:000000006208905
NOTE: Before performing the diagnosis, check operation condition. Refer to <u>DLK-36, "KEY REMI</u> System Description".	NDER FUNCTION :
NTELLIGENT KEY SYSTEM : Diagnosis Procedure	INFOID:000000006208906
LCHECK "ANTI KEY LOCK IN FUNCTI" SETTING IN "WORK SUPPORT"	
Check "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT". Refer to <u>DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KE</u> `	<u>Y)"</u> .
s the inspection result normal?	
YES >> GO TO 2. NO >> Set "ANTI KEY LOCK IN FUNCTI" setting in "WORK SUPPORT".	
2. CHECK DOOR SWITCH	
Check door switch.	
Refer to <u>DLK-66, "Component Function Check"</u> . s the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	
3. CHECK TRUNK ROOM LAMP SWITCH	
Check trunk room lamp switch. Refer to <u>DLK-78, "Component Function Check"</u> .	
s the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts. 4.CHECK INSIDE KEY ANTENNA	
Check inside key antenna. Instrument center: Refer to <u>DLK-59, "DTC Logic"</u> .	
Console: Refer to <u>DLK-61, "DTC Logic"</u> .	
 Trunk room: Refer to <u>DLK-63, "DTC Logic"</u>. s the inspection result normal? 	
YES >> GO TO 5.	
NO >> Repair or replace the malfunctioning parts.	
D.CHECK UNLOCK SENSOR	
Check unlock sensor.	
Refer to <u>DLK-93, "Component Function Check"</u> . s the inspection result normal?	
YES >> GO TO 6.	
NO >> Repair or replace the malfunctioning parts.	
\mathfrak{S} .confirm the operation	
Confirm the operation again.	
<u>s the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	

KEY REMINDER FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

POWER DOOR LOCK SYSTEM : Description

INFOID:000000006208907

NOTE:

Before performing the diagnosis, check operation condition. Refer to DLK-11. "System Description".

POWER DOOR LOCK SYSTEM : Diagnosis Procedure

INFOID:000000006208908

1.CHECK KEY SLOT

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK DOOR SWITCH

Check door switch.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-43. "Intermittent Incident".

KEY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > KEY WARNING DOES NOT OPERATE

KEY WARNING DOES NOT OPERATE	А
Description	
 NOTE: Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-40, "WARNING FUNCTION : System Description"</u>. Door lock function is normal. 	
Diagnosis Procedure)
1.CHECK BUZZER (COMBINATION METER)	D
Check buzzer (combination meter). Refer to DLK-109. "Component Function Check". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK DOOR SWITCH	E
Check door switch (driver side). Refer to <u>DLK-66. "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK KEY SLOT	G
Check key slot. Refer to DLK-102, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4.CHECK COMBINATION METER DISPLAY FUNCTION	J
Check combination meter display function. Refer to <u>DLK-108, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts. 5. CHECK KEY SLOT INDICATOR	L
Check key slot indicator. Refer to <u>DLK-104. "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	M
6.CONFIRM THE OPERATION	0
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-43. "Intermittent Incident"</u> . NO >> GO TO 1.	Ρ

OFF POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

OFF POSITION WARNING DOES NOT OPERATE

Description

INFOID:000000006208911

NOTE:

- Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-40</u>, "WARNING FUNCTION : <u>System</u> <u>Description</u>".
- Door lock function is normal.

Diagnosis Procedure

INFOID:000000006208912

1.CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2.

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

2.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter). Refer to <u>DLK-109</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

Refer to DLK-98, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK DOOR SWITCH

Check door switch (driver side). Refer to <u>DLK-66. "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

P POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

P POSITION WARNING DOES NOT OPERATE

P POSITION WARNING DOES NOT OPERATE	А
Description INFOID:00000006208913	~
 NOTE: Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-40</u>, "WARNING FUNCTION : System 	В
 <u>Description</u>. Door lock function is normal. 	С
Diagnosis Procedure	
1. CHECK POWER POSITION	D
Check if ignition switch position is changing or not.	_
Does ignition switch position change? YES >> GO TO 2.	E
NO >> Check BCM for DTC. Refer to <u>BCS-76, "DTC Index"</u> .	
2.CHECK DETENTION SWITCH	F
Check BCM for DTC. Refer to <u>BCS-76, "DTC_Index"</u> .	
Is the inspection result normal?	G
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts. 3.CHECK INTELLIGENT KEY WARNING BUZZER	Н
Check Intelligent Key warning buzzer.	
Refer to <u>DLK-98, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	J
4. CHECK BUZZER (COMBINATION METER)	
Check buzzer (combination meter).	DLK
Refer to <u>DLK-109, "Component Function Check"</u> . Is the inspection result normal?	
YES >> GO TO 5.	I
NO >> Repair or replace the malfunctioning parts.	
5.CHECK DOOR SWITCH	
Check door switch (driver side). Refer to <u>DLK-66, "Component Function Check"</u> .	Μ
Is the inspection result normal?	
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	Ν
NO >> Repair or replace the malfunctioning parts. 6.CHECK INSIDE KEY ANTENNA	
Check inside key antenna.	0
 Instrument center: Refer to <u>DLK-59, "DTC Logic"</u>. 	
 Console: Refer to <u>DLK-61, "DTC Logic"</u>. Trunk room: Refer to <u>DLK-63, "DTC Logic"</u>. 	Ρ
Is the inspection result normal?	
YES >> GO TO 7. NO >> Repair or replace the malfunctioning parts.	
7. CHECK COMBINATION METER DISPLAY FUNCTION	
Check combination meter display function. Refer to DI K-108 "Component Function, Check"	

Refer to <u>DLK-108. "Component Function Check"</u>.

P POSITION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the malfunctioning parts.

8. Confirm the operation

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to GI-43. "Intermittent Incident".
- NO >> GO TO 1.

ACC WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > ACC WARNING DOES NOT OPERATE

	Δ.
Description INFOID:000000000000000000000000000000000000	A
 NOTE: Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-40</u>, "WARNING FUNCTION : System <u>Description</u>". 	В
Door lock function is normal.	С
Diagnosis Procedure	
1.CHECK POWER POSITION	D
Check if ignition switch position is changing or not. <u>Does ignition switch position change?</u> YES >> GO TO 2.	E
NO >> Check BCM for DTC. Refer to <u>BCS-76, "DTC_Index"</u> . 2.CHECK BUZZER (COMBINATION METER)	F
Check buzzer (combination meter). Refer to <u>DLK-109, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3.	G
NO >> Repair or replace the malfunctioning parts. 3.CHECK COMBINATION METER DISPLAY FUNCTION	Н
Check combination meter display function. Refer to <u>DLK-108, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	I
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4. CONFIRM THE OPERATION	J
Confirm the operation again. Is the result normal?	DLK
 YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>. NO >> GO TO 1. 	L

Revision: 2011 November

Μ

Ν

Ο

TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

TAKE AWAY WARNING DOES NOT OPERATE

Description

When door opens, take away warning does not operate. **NOTE:**

 Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-40</u>, "WARNING FUNCTION : <u>System</u> <u>Description</u>".

• Door lock function is normal.

Diagnosis Procedure

1.CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 2.

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

2. CHECK DOOR SWITCH

Check door switch.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK KEY SLOT

Check key slot.

Refer to DLK-102, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to <u>DLK-59, "DTC Logic"</u>.
- Console: Refer to <u>DLK-61, "DTC Logic"</u>.
- Trunk room: Refer to <u>DLK-63, "DTC Logic"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK BUZZER (COMBINATION METER)

Check buzzer (combination meter).

Refer to <u>DLK-109</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK COMBINATION METER DISPLAY FUNCTION

Check combination meter display function.

Refer to DLK-108, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.

INFOID:000000006208917

INFOID:000000006208918

TAKE AWAY WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
Refer to DLK-98, "Component Function Check".	
Is the inspection result normal?	А
YES >> GO TO 8.	
NO >> Repair or replace the malfunctioning parts.	5
8. CHECK KEY SLOT INDICATOR	В
Check key slot indicator.	
Refer to <u>DLK-104, "Component Function Check"</u> .	С
Is the inspection result normal?	
YES >> GO TO 9.	
NO >> Repair or replace the malfunctioning parts.	D
9. CONFIRM THE OPERATION	
Confirm the operation again.	_
Is the result normal?	E
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	
NO >> GO TO 1.	F
	Г
	G
	0

J

Н

L

M

Ν

Ο

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE < SYMPTOM DIAGNOSIS >

INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Description

INFOID:000000006208919

NOTE:

Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-40</u>, <u>"WARNING FUNCTION : System</u> <u>Description"</u>.

Diagnosis Procedure

INFOID:000000006208920

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

Check "LO- BATT OF KEY FOB WARN" setting in "WORK SUPPORT". Refer to DLK-52, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK INTELLIGENT KEY

Check Intelligent key.

Refer to DLK-100, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK COMBINATION METER DISPLAY FUNCTION

Check combination meter display function.

Refer to DLK-108, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to <u>DLK-59, "DTC Logic"</u>.
- Console: Refer to <u>DLK-61, "DTC Logic"</u>.
- Trunk room: Refer to <u>DLK-63, "DTC Logic"</u>.

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Repair or replace the malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.
- NO >> GO TO 1.

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DOOR LOCK OPERATION WARNING DOES NOT OPERATE

	Α
Description INFOID:000000005208921	
Door lock operation warning does not activate using door request switch. NOTE:	В
Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-40, "WARNING FUNCTION : System</u> <u>Description"</u> .	С
Diagnosis Procedure	
1. CHECK DOOR LOCK FUNCTION	D
Check door lock function.	
Does door lock/unlock using door request switch?	Ε
YES >> GO TO 2. NO-1 >> Driver side: Refer to <u>DLK-185, "DRIVER SIDE : Diagnosis Procedure"</u> . NO-2 >> Passenger side: Refer to <u>DLK-186, "PASSENGER SIDE : Diagnosis Procedure"</u> .	F
2.CHECK INTELLIGENT KEY WARNING BUZZER	
Check Intelligent Key warning buzzer. Refer to <u>DLK-98, "Component Function Check"</u> .	G
Is the inspection result normal?	
YES >> GO TO 3.	Н
NO >> Repair or replace the malfunctioning parts.	
3. CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	
 YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>. NO >> GO TO 1. 	J
	DLł

L

Μ

Ν

Ο

KEY ID WARNING DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

KEY ID WARNING DOES NOT OPERATE

Description

INFOID:000000006208923

NOTE:

Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-40</u>, "WARNING FUNCTION : System <u>Description</u>".

Diagnosis Procedure

INFOID:000000006208924

1.CHECK INTELLIGENT KEY

Check Intelligent Key.

Refer to DLK-100, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK COMBINATION METER DISPLAY FUNCTION

Check combination meter display function. Refer to <u>DLK-108, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.
- NO >> GO TO 1.

KEY WARNING LAMP DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

KEY WARNING LAMP DOES NOT ILLUMINATE

Description

NOTE:

rating condition is outromoly complicated. During operat

Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to check for normal operation. Refer to <u>DLK-40</u>, "WARNING FUNCTION : System <u>Description</u>".

Diagnosis Procedure	INFOID:00000006208926
1.CHECK KEY WARNING LAMP	
Check key warning lamp. Refer to <u>DLK-110, "Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2. CONFIRM THE OPERATION	
Confirm the operation again. Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-43. "Intermittent Incident"</u> NO >> GO TO 1.	

J

А

В

С

D

Ε

F

G

Н

INFOID:000000006208925

DLK

L

Μ

Ν

Ο

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000006208927

1. CHECK INTEGRATED HOMELINK TRANSMITTER

Check integrated homelink transmitter. Refer to <u>DLK-112, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

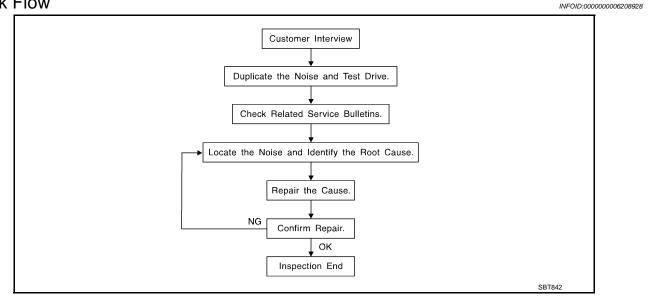
YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to <u>DLK-219</u>, "<u>Diagnostic Worksheet</u>". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics J are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak (Like tennis shoes on a clean floor)
 Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
 higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
- Creak (Like walking on an old wooden floor)
 Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle (Like shaking a baby rattle) Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock (Like a knock on a door)
 Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick (Like a clock second hand)
 Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump (Heavy, muffled knock noise) Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz (Like a bumblebee)
 Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

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

DLK-215

А

E

Ν

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

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

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

CHECK RELATED SERVICE BULLETINS

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

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

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

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

REPAIR THE CAUSE

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

CAUTION:

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

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

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

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100 \times 135 mm (3.94 \times 5.31 in)/76884-71L01: 60 \times 85 mm (2.36 \times 3.35 in)/76884-71L02:15 \times 25 mm (0.59 \times 0.98 in)

INSULATOR (Foam blocks)

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

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

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

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick, $30 \times 50 \text{ mm}$ (1.18 \times 1.97in)

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications. 68370-4B000: $15 \times 25 \text{ mm}$ (0.59 \times 0.98 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

< SYMPTOM DIAGNOSIS > Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE А Used in place of UHMW tape that is be visible or does not fit. Will only last a few months. SILICONE SPRAY Used when grease cannot be applied. В DUCT TAPE Used to eliminate movement. CONFIRM THE REPAIR Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet. Inspection Procedure D INFOID:000000006208929 Refer to Table of Contents for specific component removal and installation information. INSTRUMENT PANEL Е Most incidents are caused by contact and movement between: 1. The cluster lid A and instrument panel F Acrylic lens and combination meter housing Instrument panel to front pillar garnish Instrument panel to windshield Instrument panel mounting pins Wiring harnesses behind the combination meter A/C defroster duct and duct joint Н These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness. CAUTION: Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible. CENTER CONSOLE Components to pay attention to include: DLK 1. Shifter assembly cover to finisher A/C control unit and cluster lid C Wiring harnesses behind audio and A/C control unit The instrument panel repair and isolation procedures also apply to the center console. DOORS Pay attention to the following: M 1. Finisher and inner panel making a slapping noise Inside handle escutcheon to door finisher Ν Wiring harnesses tapping 4. Door striker out of alignment causing a popping noise on starts and stops Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise. TRUNK Ρ Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer. In addition look for the following: Trunk lid dumpers out of adjustment Trunk lid striker out of adjustment

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

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

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

SEATS

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

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet



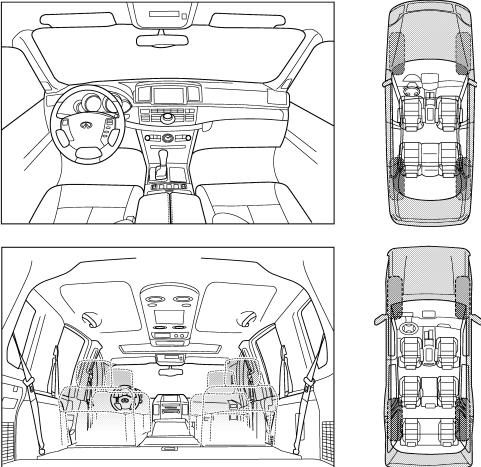
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Infiniti Customer:

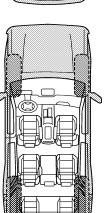
We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may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

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

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



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs. PIIB8741E



INFOID:000000006208930

А

В

D

Е

F

Н

DLK

L

Μ

Ν

Ρ

< SYMPTOM DIAGNOSIS >

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

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

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

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

< PRECAUTION > PRECAUTION PRECAUTIONS

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

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

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

Always observe the following items for preventing accidental activation.

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

Precautions Necessary for Steering Wheel Rotation After Battery Disconnection

INFOID:000000006208932

А

В

Е

F

Н

DLK

Μ

Ν

Ρ

CAUTION:

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

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

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

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

OPERATION PROCEDURE

- Connect both battery cables.
 NOTE: Supply power using jumper cables if battery is discharged.
- Turn the ignition switch to ACC position. (At this time, the steering lock will be released.)
- 3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.

DLK-221

PRECAUTIONS

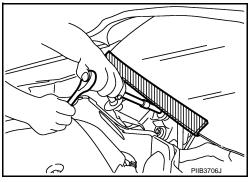
< PRECAUTION >

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

Precaution for Procedure without Cowl Top Cover

INFOID:000000006208933

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



Work

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

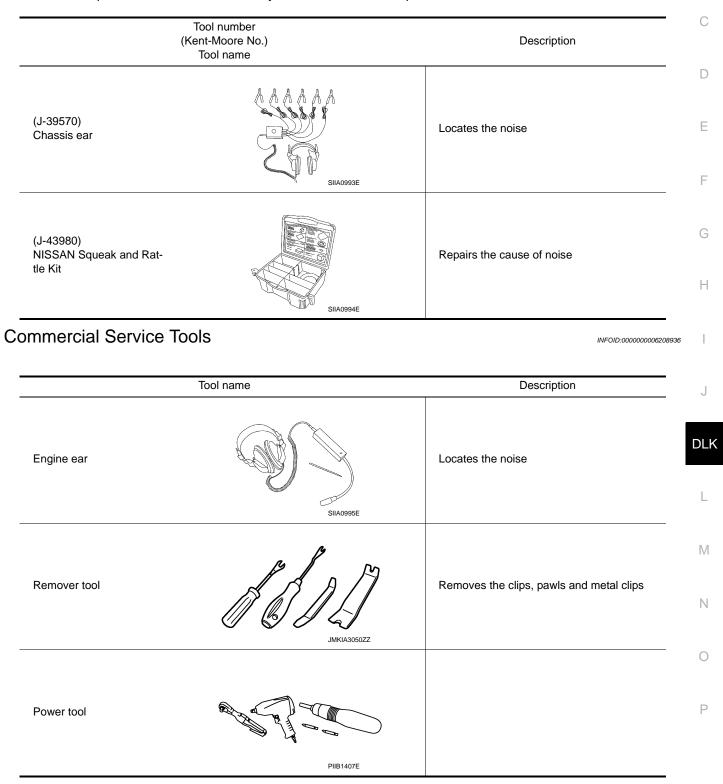
PREPARATION

<	PR	EP/	ARA T	ΓΙΟΝ	>
---	----	-----	-------	------	---

PREPARATION PREPARATION

Special Service Tools

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

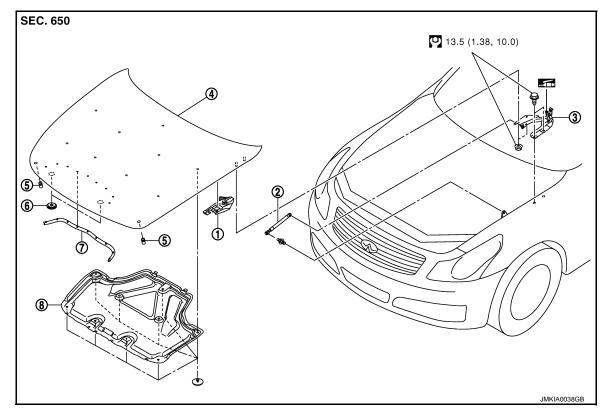


А

В

REMOVAL AND INSTALLATION HOOD HOOD ASSEMBLY HOOD ASSEMBLY : Exploded View

INFOID:000000006208937



- 1. Hood hinge cover
- 4. Hood assembly
- 5. Hood bumper rubber

Hood stay

Hood insulator

2.

8.

7. Radiator core seal

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

HOOD ASSEMBLY : Removal and Installation

CAUTION:

Operate with two workers, because of its heavy weight.

REMOVAL

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

WARNING:

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

- 2. Remove the hood hinge cover (LH/RH).
- 3. Remove the seal rubber, washer nozzle, washer tube. Refer to WW-99. "Removal and Installation".
- 4. Remove the stud balls on the hood stays at the hood side.
- 5. Remove the hinge mounting nuts on the hood to remove the hood assembly.
- 6. Remove following parts after removing the hood assembly.
 - Radiator core seal
 - Hood insulator
 - Hood bumper rubber

- Hood hinge
 Seal
 - J. Seal

INFOID:000000006208938

DLK-224

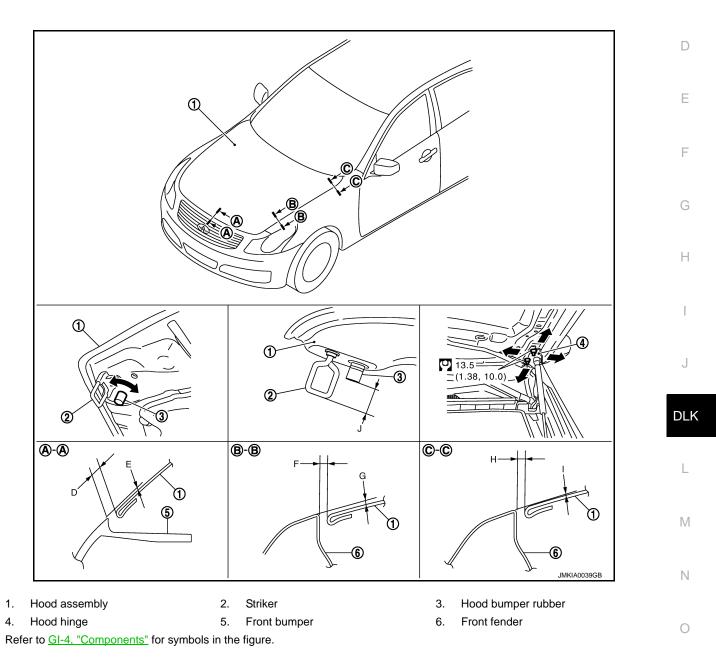
INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Before installing hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.
- After installing, perform hood fitting adjustment. Refer to <u>DLK-225, "HOOD ASSEMBLY : Adjust-ment"</u>.

HOOD ASSEMBLY : Adjustment



Portion			Standard	Right/left Clearance (MAX)	
Hood – Front bumper A	A – A	D	Clearance	2.6 – 5.6 mm (0.102 – 0.220 in)	_
	A-A	Ε	Surface height	–2.0 – 1.0 mm (–0.079 – 0.039 in)	_

А

В

С

	Portion		Standard	Right/left Clearance (MAX)	
Hood – Front fender	B – B -	F	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	2.0 mm (0.079 in)
		G	Surface height	–2.0 – 1.0 mm (–0.079 – 0.039 in)	_
	C – C –	н	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	2.0 mm (0.079 in)
		I	Surface height	–1.0 – 1.0 mm (–0.039 – 0.039 in)	_
Striker – hood bumper rubber	—	J	Clearance	32.5 – 33.5 mm (1.280 – 1.319 in)	_

- 1. Check the clearance and the surface height between the hood and each part visually and by touching. (Fitting standard dimension in the table below should be satisfied.Åj
- 2. In case out of specification, adjust them according to the procedures shown below.
- 3. Remove the striker and adjust the surface height of hood, front bumper and front fender according to the fitting standard dimension, by rotating hood bumper rubbers.
- 4. Adjust the clearance of striker, hood bumper rubber according to the fitting standard dimension.
- 5. Loosen the hood hinge mounting nuts on the hood.
- 6. Adjust the clearance of hood, front bumper and front fender according to the fitting standard dimension, for the hood.
- Check that the hood lock primary latch is securely engaged with the striker by dropping hood from approximately 200 mm (7.874 in) height or pressing lightly on the hood.
 CAUTION:

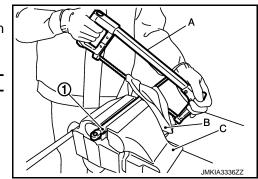
Never drop hood from a height of 300 mm (11.811 in) or more.

- 8. Install as static closing face of hood is $94 490 \text{ N} \cdot \text{m} (9.6 50.0 \text{ kg-m})$. **NOTE:**
 - Exercise vertical force on right side and left side of hood lock.
 - Do not press simultaneously both sides.
- 9. After adjustment tighten hood hinge mounting nuts to the specified torque.

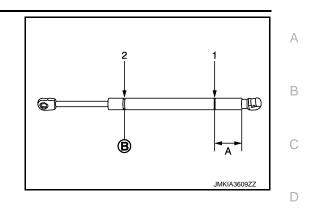
HOOD ASSEMBLY : Disposal

DISPOSAL OF HOOD STAY

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



- **A**: 20 mm (0.787 in)
- Cut at the groove. **B**:

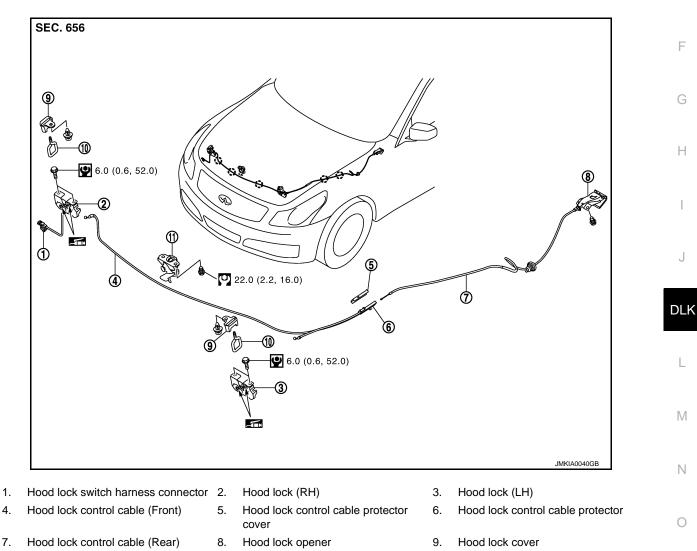


INFOID:000000006208941

Ε

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Exploded View



Striker 10.

4.

() : Clip

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

HOOD LOCK CONTROL : Removal and Installation

REMOVAL

Remove the washer tank. Refer to WW-96, "Removal and Installation". 1.

Revision: 2011 November

DLK-227

11. Secondary latch

INFOID:000000006208942

Ρ

HOOD

< REMOVAL AND INSTALLATION >

- 2. Remove the radiator core support ornament.
 - Remove the radiator core support ornament mounting bolts and clips.

NOTE:

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

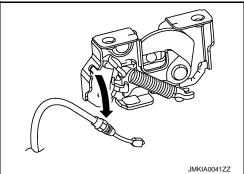
CAUTION:

Never apply excessive force while pulling front bumper to prevent front bumper and front fender from being damaged.

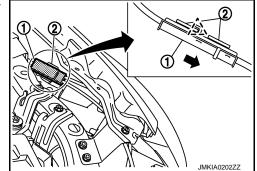
- Hold both sides of radiator core support ornament, pull it upwards and slide it rearwards of the vehicle.
- Disconnect the harness clip and hood lock control cable clip on radiator core support.



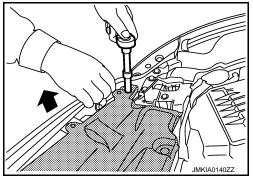
- 3. Remove the fender protector (LH). Refer to EXT-27, "FENDER PROTECTOR : Removal and Installation".
- 4. Disconnect hood lock switch harness connector (RH side).
- 5. Remove the hood lock bracket mounting bolts, and remove the hood lock bracket assembly.
- 6. Remove the hood lock mounting bolts, and disassemble the hood lock from the hood lock bracket.
- Disconnect the hood lock control cable from the hood lock and clip it to the hood-ledge.



- 8. Remove the hood lock control cable protector (1) from the headlamp assembly (2).
 - 2 : Pawl



9. Remove the hood lock control cable cover from hood lock control cable protector.



DLK-228

.IMKIA01417

partment.

INSTALLATION

CAUTION:

ment".

NOTE:

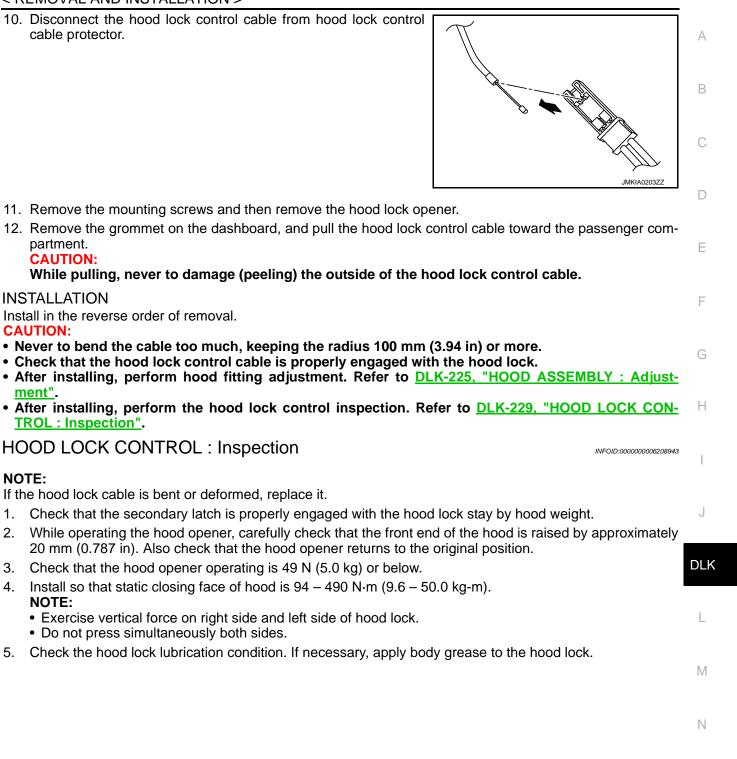
NOTE:

2.

CAUTION:

TROL : Inspection".

10. Disconnect the hood lock control cable from hood lock control cable protector.



Ρ

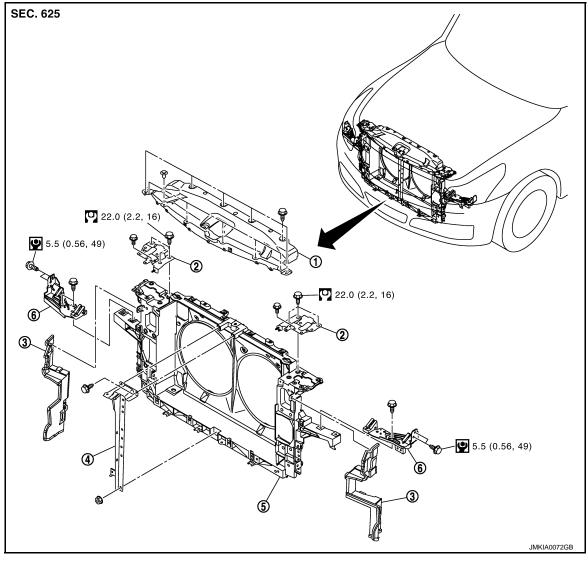
RADIATOR CORE SUPPORT

< REMOVAL AND INSTALLATION >

RADIATOR CORE SUPPORT

Exploded View

INFOID:000000006208944



Radiator core support ornament 1. 2. 4. Hood lock stay 5. Radiator core support assembly

Hood lock bracket

Air guide 3.

6. Head-lamp bracket

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

Removal and Installation

REMOVAL

- 1. Remove the front bumper fascia and front bumper reinforcement. Refer to EXT-15. "Removal and Installation".
- 2. Remove the radiator reserve tank. Refer to <u>CO-15, "Exploded View"</u>.
- 3. Remove horn (High/Low). Refer to HRN-6, "Removal and Installation".
- Remove the radiator core support ornament. 4.
 - Remove the radiator core support ornament mounting bolts and clips. NOTE:

RADIATOR CORE SUPPORT

< REMOVAL AND INSTALLATION >

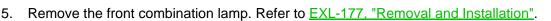
In the case that only radiator core support ornament is removed (front bumper is not removed), remove them according to the procedures shown below.

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

Never apply excessive force while pulling front bumper to prevent front bumper and front fender from being damaged.

- · Hold both sides of radiator core support ornament, pull it upwards and slide it to the rear of the vehicle.
- Disconnect the harness clip and hood lock control cable clip on radiator core support.

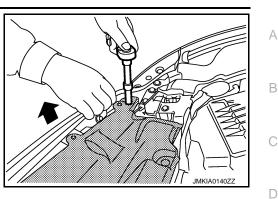
(_) : Clip



- 6. Remove the hood lock bracket assembly.
- 7. Remove the washer inlet and washer tank. Refer to <u>WW-96, "Removal and Installation"</u>.
- 8. Remove the ambient sensor. Refer to HAC-171, "Removal and Installation".
- Remove the power steering oil cooler. Refer to <u>ST-55, "2WD : Exploded View"</u> (2WD), <u>ST-57, "AWD :</u> <u>Exploded View"</u> (AWD).
- 10. Remove the air guide mounting clips and then remove air guide.
- 11. Disconnect the harness connector from liquid tank, and disconnect harness clamp from radiator core support.
- 12. Remove the hood lock stay.
- 13. Remove the engine lower cover. Refer to EXT-32, "Removal and Installation".
- 14. Drain engine coolant from radiator & condenser. Refer to CO-9, "Draining".
- 15. Remove the radiator upper hose and lower hose on radiator & condenser assembly side.
- 16. Remove the A/T fluid cooler hose on radiator & condenser assembly side. Refer to <u>TM-305. "2WD</u> : ^M <u>Removal and Installation"</u> (2WD), <u>TM-308, "AWD : Removal and Installation"</u> (AWD).
- 17. Disconnect condenser pipe assembly at one touch joint. Refer to <u>HA-48, "CONDENSER PIPE ASSEM-</u> <u>BLY : Removal and Installation"</u>.
- 18. Remove the radiator core support assembly mounting bolts, and draw out radiator core support assembly forward of the vehicle.
- 19. Disconnect the cooling fan and crush zone sensor harness connector and clamp.
- 20. Remove the radiator core support assembly.
- 21. Remove the following parts after removing the radiator core support assembly.
 - · Head lamp bracket.
 - Cooling fan. Refer to CO-19, "Removal and Installation".
 - Radiator & condenser assembly. Refer to CO-16. "Removal and Installation".
 - Crush zone sensor. Refer to <u>SR-21, "Removal and Installation"</u>.
 - Crush zone sensor bracket.

INSTALLATION

Install in the reverse order of removal.



Ε

F

Н

Ν

Ρ

JMKIA0141ZZ

CAUTION:

- After installation, refill the following parts.
- Power stealing fluid. Refer to <u>ST-12, "Inspection"</u>.
 A/T fluid. Refer to <u>TM-267, "Changing"</u>.
 Engine coolant. Refer to <u>CO-10, "Refilling"</u>.

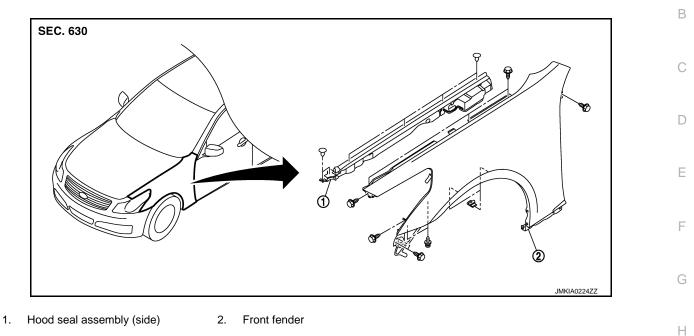
FRONT FENDER

Exploded View

INFOID:000000006208946

INFOID:000000006208947

А



Removal and Installation

REMOVAL

- 1. Remove the front bumper fascia. Refer to EXT-15. "Removal and Installation".
- 2. Remove the hood seal assembly (side).
- 3. Remove the front combination lamp. Refer to EXL-177. "Removal and Installation".
- 4. Remove the fender protector. Refer to EXT-27, "FENDER PROTECTOR : Removal and Installation".
- 5. Remove the center mudguard. Refer to EXT-30, "Removal and Installation".
- 6. Remove the mounting bolts and remove the front fender.

CAUTION:

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

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- After installing, apply touch-up paint (the body color) onto the head of the front fender mounting bolts.
- After installing, check front fender adjustment. Refer to <u>DLK-225, "HOOD ASSEMBLY : Adjustment"</u> and <u>DLK-234, "FRONT DOOR : Adjustment"</u>.

DLK

L

Μ

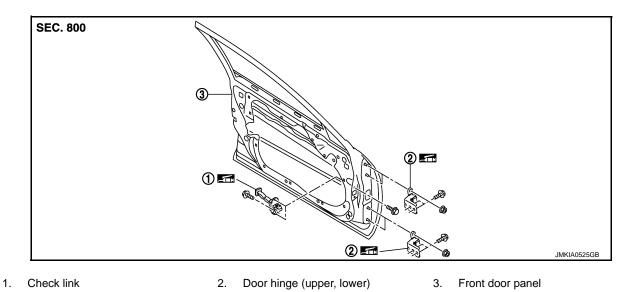
Ν

Ρ

DOOR FRONT DOOR

FRONT DOOR : Exploded View

INFOID:000000006208948



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

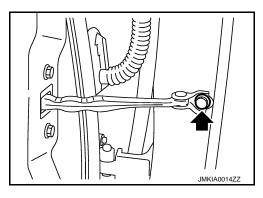
FRONT DOOR : Removal and Installation

INFOID:000000006208949

REMOVAL

CAUTION:

- When removing and installing the front door assembly, support the door with a jack and cloth to protect the door and body.
- When removing and installing front door assembly, perform the fitting adjustment. Refer to <u>DLK-234</u>, <u>"FRONT DOOR : Adjustment"</u>.
- After installing, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.
- Check the hinge rotating part for poor lubrication. If necessary, apply body grease.
- Operate with two workers, because of its heavy weight.
- Check front door open/close operation after installation.
- 1. Remove the mounting bolt of the check link on the vehicle.



- 2. Pull the lever and disconnect the door harness connector while removing tabs of door harness connector.
- 3. Remove the door side hinge mounting nuts, then remove the door assembly.

INSTALLATION

Install in the reverse order of removal.

FRONT DOOR : Adjustment

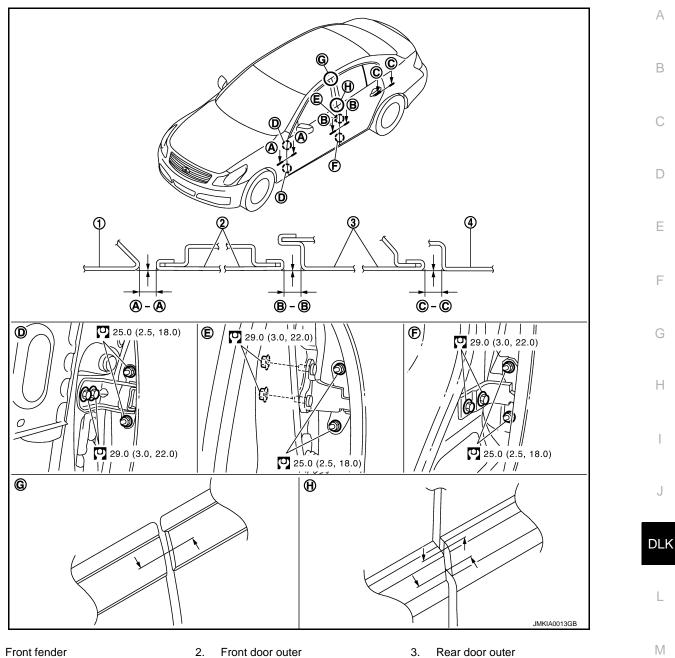
INFOID:000000006208950

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

Revision: 2011 November

DLK-234

DOOR



Front fender 1.

Rear fender 4.

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

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

Portion		Clearance	Surface height	Surface mismatch	0
Front fender – Front door	A – A	2.5 – 4.5 mm (0.098 – 0.177 in)	–1.0 – 1.0 mm (–0.039 – 0.039 in)	_	F
Front door – Rear door	B – B	2.5 – 4.5 mm (0.098 – 0.177 in)	–1.0 – 1.0 mm (–0.039 – 0.039 in)	_	_

Ν

DOOR

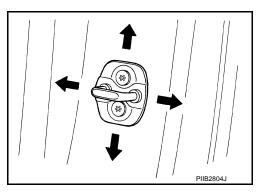
< REMOVAL AND INSTALLATION >

Portion		Clearance	Surface height	Surface mismatch
Front door sash molding – Rear door sash molding	G	_	–1.5 – 1.5 mm (–0.059 – 0.059 in)	_
Front door outside molding – Rear door outside molding	н	_	–1.5 – 1.5 mm (–0.059 – 0.059 in)	–1.5 – 1.5 mm (–0.059 – 0.059 in)

- 2. In case out of specification, adjust them according to the procedures shown below.
- 3. Remove the front fender. Refer to DLK-233, "Removal and Installation".
- 4. Loosen the hinge mounting nuts on door side.
- 5. Adjust the surface height and surface mismatch of the front door according to the fitting standard dimension.
- 6. Temporarily tighten the hinge mounting nuts on door side.
- 7. Loosen the hinge mounting bolts on body side.
- 8. Raise the front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
- 9. After adjustment tighten bolts and nuts to the specified torque.
- 10. Install the front fender. Refer to DLK-233, "Removal and Installation".

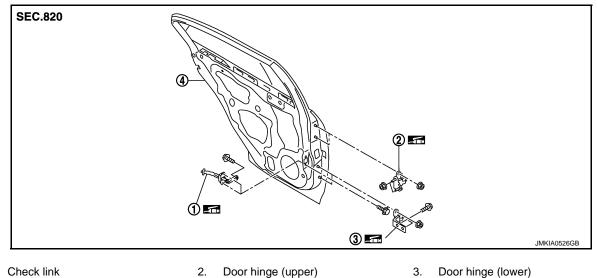
STRIKER ADJUSTMENT

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



REAR DOOR REAR DOOR : Exploded View

INFOID:000000006208951



4. Rear door panel

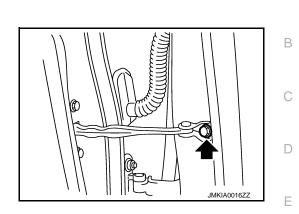
1.

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

REAR DOOR : Removal and Installation

REMOVAL

1. Remove the mounting bolt of the check link on the vehicle.



- 2. Pull out grommet and disconnect rear door harness connector.
- 3. Remove the door side hinge mounting nuts and remove the door assembly.

CAUTION:

- When removing and installing the rear door assembly, support the door with a jack and cloth to protect the door and body.
- When removing and installing rear door assembly, perform the fitting adjustment. Refer to <u>DLK-237</u>.
 <u>"REAR DOOR : Adjustment"</u>.
- Check the hinge rotating part for poor lubrication. If necessary, apply body grease.
- After installing, apply touch-up paint (the body color) onto the head of the hinge mounting nuts.
- Operate with two workers, because of its heavy weight.
- Check rear door open/close operation after installation.

INSTALLATION

Install in the reverse order of removal.

REAR DOOR : Adjustment

INFOID:000000006208953

INFOID:000000006208952

А

J

F

Н

CLEARANCE, SURFACE HEIGHT AND SURFACE MISMATCH ADJUSTMENT

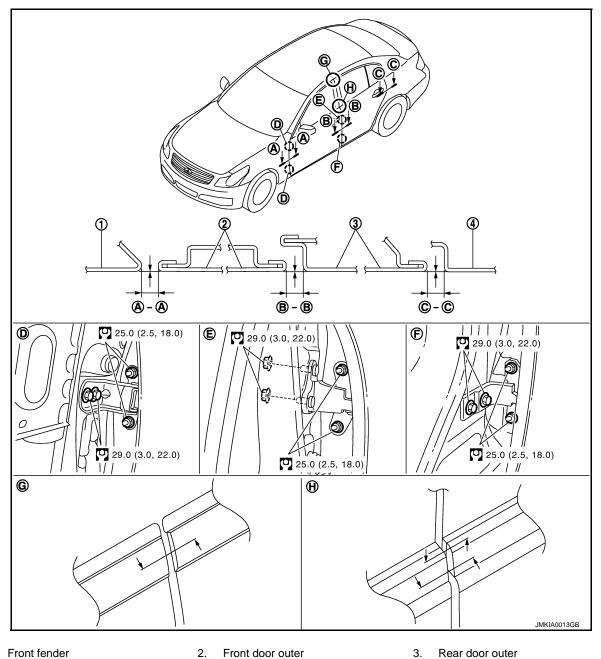
L

Μ

Ν

Ρ

DOOR



- Front fender 1. 2. Front door outer
- 4. Rear fender

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

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

Portion		Clearance	Surface height	Surface mismatch
Front door – Rear door	B – B	2.5 – 4.5 mm (0.098 – 0.177 in)	–1.0 – 1.0 mm (–0.039 – 0.039 in)	_
Rear door – Rear fender	C – C	2.5 – 4.5 mm (0.098 – 0.177 in)	–1.0 – 1.0 mm (–0.039 – 0.039 in)	_

DOOR

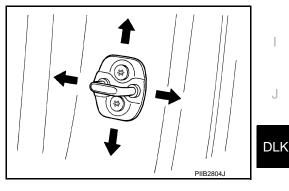
< REMOVAL AND INSTALLATION >

Portion		Clearance	Surface height	Surface mismatch	1
Front door sash molding – Rear door weather-strip	G	_	–1.5 – 1.5 mm (–0.059 – 0.059 in)	_	
Front door outside molding – Rear door outside molding	н	_	–1.5 – 1.5 mm (–0.059 – 0.059 in)	–1.5 – 1.5 mm (–0.059 – 0.059 in)	
					(

- 2. In case out of specification, adjust them according to the procedures shown below.
- 3. Remove the center pillar upper garnish and center pillar lower garnish. Refer to <u>INT-15, "Removal and</u> <u>Installation"</u>.
- 4. Loosen the hinge mounting nuts on door side.
- 5. Adjust the surface height and surface mismatch of the rear door according to the fitting standard dimension.
- 6. Temporarily tighten the hinge mounting nuts on door side.
- 7. Loosen the hinge mounting nuts and bolts on body side.
- 8. Raise the rear door at rear end to adjust clearance of the rear door according to the fitting standard dimen-
- 9. After adjustment tighten bolts and nuts to the specified torque.
- 10. Install the center pillar upper garnish and center pillar lower garnish. Refer to <u>INT-15, "Removal and Instal-</u><u>lation"</u>.

STRIKER ADJUSTMENT

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





Μ

Ν

Ρ

D

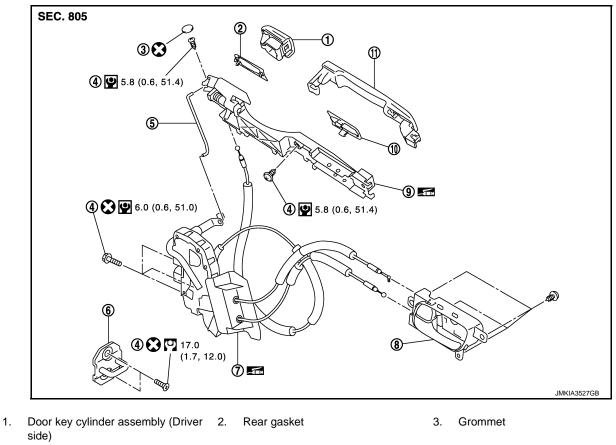
Е

Н

DOOR LOCK FRONT DOOR LOCK

FRONT DOOR LOCK : Exploded View

INFOID:000000006208954



Key rod (Driver side only)

Inside handle

Outside handle escutcheon (Passenger side)

- 4. TORX bolt
- 7. Door lock assembly
- 10. Front gasket 11. Outside handle

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

FRONT DOOR LOCK : Removal and Installation

REMOVAL

1. Remove the front door finisher. Refer to INT-12, "Removal and Installation".

5.

8.

- 2. Disconnect the inside handle knob cable and lock knob cable from the back side of the front door finisher.
-)]@[@ JMKIA0019Z2
- Remove the front door glass and front door module assembly. 3.

6.

9.

Striker

Outside handle bracket

DOOR LOCK

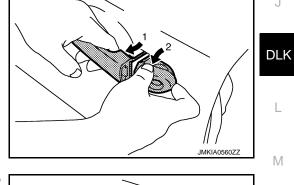
< REMOVAL AND INSTALLATION >

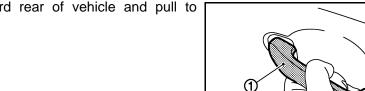
- Door glass: Refer to GW-14, "Removal and Installation".
- Door module: Refer to GW-16, "Removal and Installation".
- 4. Remove door side grommet, and remove door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) TORX bolt from grommet hole. **CAUTION:**

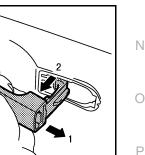
Never forcibly remove the TORX bolt.

Disconnect door antenna and door request switch connector 5. and remove harness clamp.

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







Slide outside handle (1) toward rear of vehicle and pull to remove outside handle.

8.

JMKIA0524ZZ

А

В

D

Ε

F

Н

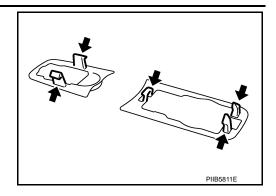
J

L

Μ

JMKIA0021ZZ

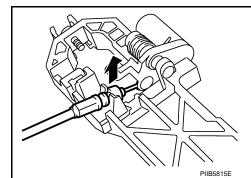
9. Remove the front gasket and rear gasket.



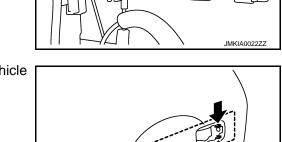
- 10. Remove the TORX bolt, and remove the door lock assembly.
- 11. Remove the TORX bolt of the outside handle bracket.

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

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



INSTALLATION Install in the reverse order of removal. CAUTION: To install each rod, rotate the rod holder until a click is felt. REAR DOOR LOCK



PIIB5814E

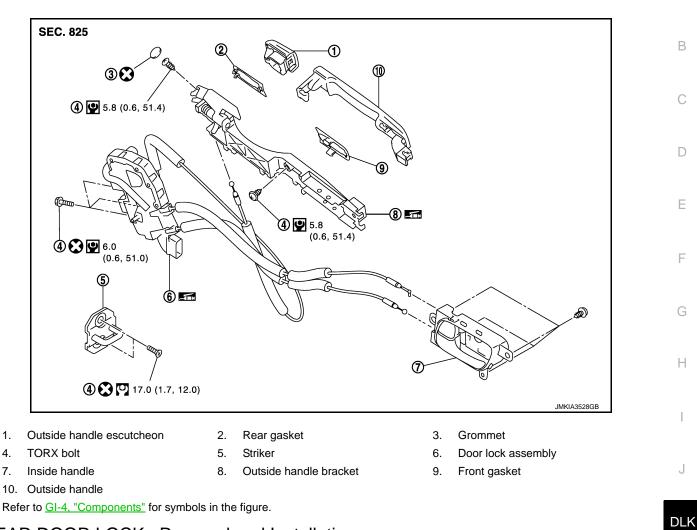
DOOR LOCK

< REMOVAL AND INSTALLATION >

REAR DOOR LOCK : Exploded View

INFOID:000000006208956

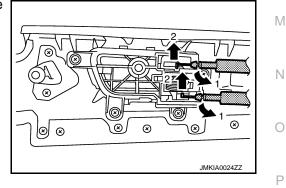
А



REAR DOOR LOCK : Removal and Installation

REMOVAL

- 1. Remove the rear door finisher. Refer to INT-12, "Removal and Installation".
- 2. Disconnect the inside handle knob cable and lock knob cable from the back side of the rear door finisher.



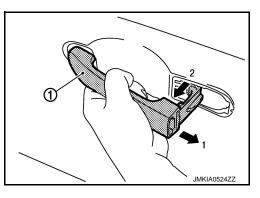
- Remove the rear door glass. Refer to <u>GW-18, "Removal and Installation"</u>.
- 4. Remove door side grommet, and remove outside handle escutcheon TORX bolt from grommet hole. CAUTION:

INFOID:000000006208957

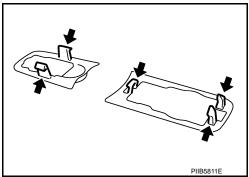
L

Never forcibly remove the TORX bolt.

- JMKIA0025ZZ
- 5. While pulling the outside handle, remove outside handle escutcheon.
- JMKIAO560ZZ
- 6. Slide outside handle (1) toward rear of vehicle and pull to remove outside handle.



7. Remove the front gasket and rear gasket.

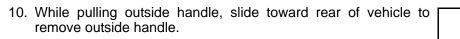


8. Remove the TORX bolt, remove the door lock assembly.

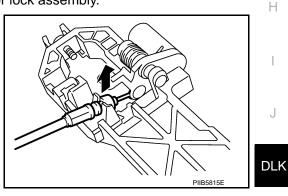
DOOR LOCK

< REMOVAL AND INSTALLATION >

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



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



INSTALLATION Install in the reverse order of removal. CAUTION: To install each rod, rotate the rod holder until a click is felt.

L

А

В

С

D

Ε

F

JMKIA0026ZZ

PIIB5814E

Ν

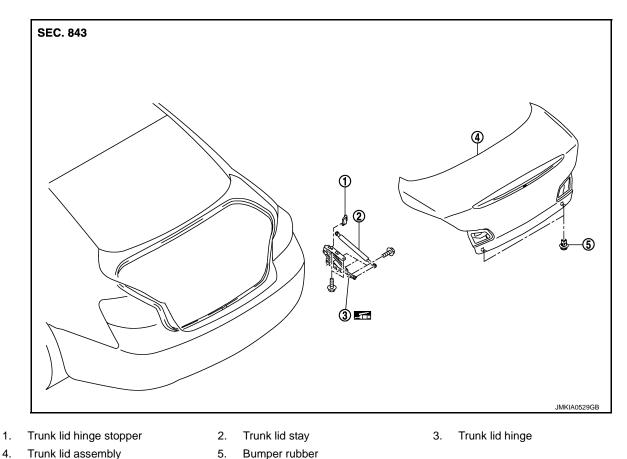
0



TRUNK LID TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY : Exploded View

INEOID-000000006208958



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

TRUNK LID ASSEMBLY : Removal and Installation

INFOID:000000006208959

REMOVAL

1.

- 1. Remove trunk lid finisher inner. Refer to INT-32, "Removal and Installation".
- 2. Disconnect the connectors in the trunk lid, and remove the harness clamps to pull the harness out of the trunk lid.
- 3. Insert flat-bladed screwdriver into the gap and remove holder.
- 4. Remove trunk lid stay.

WARNING:

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

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

INSTALLATION

Install in the reverse order of removal.

- CAUTION:
- After installing, apply touch-up paint (the body color) onto the head of the hinge mounting bolts.
- After installing, check operation.
- After installing, perform fitting adjustment. Refer to DLK-247, "TRUNK LID ASSEMBLY : Adjustment".

DLK-246

< REMOVAL AND INSTALLATION >

TRUNK LID ASSEMBLY : Adjustment

А

В

С

D

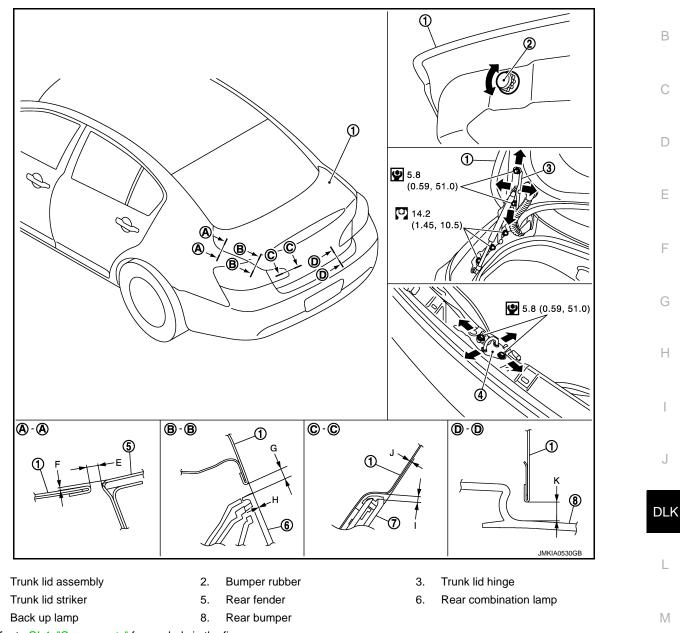
Ε

F

J

L

Ν



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

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

Portion				Standard	Right/left Clearance (MAX)	
Trunk lid – A Rear fender A	Trunk lid –		Е	Clearance	2.5 – 4.5 mm (0.098 – 0.177 in)	1.5 mm (0.059 in)
	Rear fender		F	Surface height	–1.5 – 0.5 mm (0.059 – 0.020 in)	1.5 mm (0.059 in)
Trunk lid – Rear combination lamp	D D	G	Clearance	3.9 – 7.1 mm (0.154 – 0.280 in)	2.1 mm (0.083 in)	
	B – B -	н	Surface height	–2.1 – 0.9 mm (–0.083 – 0.035 in)	2.0 mm (0.079 in)	

Revision: 2011 November

1.

4.

7.

< REMOVAL AND INSTALLATION >

	Portion		Standard	Right/left Clearance (MAX)	
Trunk lid – Back–up lamp	C – C	Т	Clearance	1.7 – 3.7 mm (0.067 – 0.146 in)	1.2 mm (0.047 in)
		J	Surface height	–1.8 – 0.6 mm (–0.071 – 0.024 in)	1.5 mm (0.059 in)
Trunk lid – Rear bumper	D – D	κ	Clearance	4.0 – 8.0 mm (0.157 – 0.315 in)	_

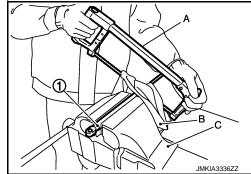
2. In case out of specification, adjust them according to the procedures shown below.

- 3. Loosen the bumper rubber.
- 4. Loosen the striker mounting bolts.
- 5. Lift up the trunk lid approximately 100 150 mm (3.937 5.906 in) height then close it lightly and check that it is engaged firmly with the trunk lid closed.
- 6. Check the clearance and evenness.
- 7. Finally tighten the trunk lid striker.

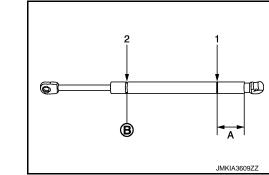
TRUNK LID ASSEMBLY : Disposal

DISPOSAL OF TRUNK LID STAY

- 1. Fix 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.



INFOID:000000006208961



A: 20 mm (0.787 in)

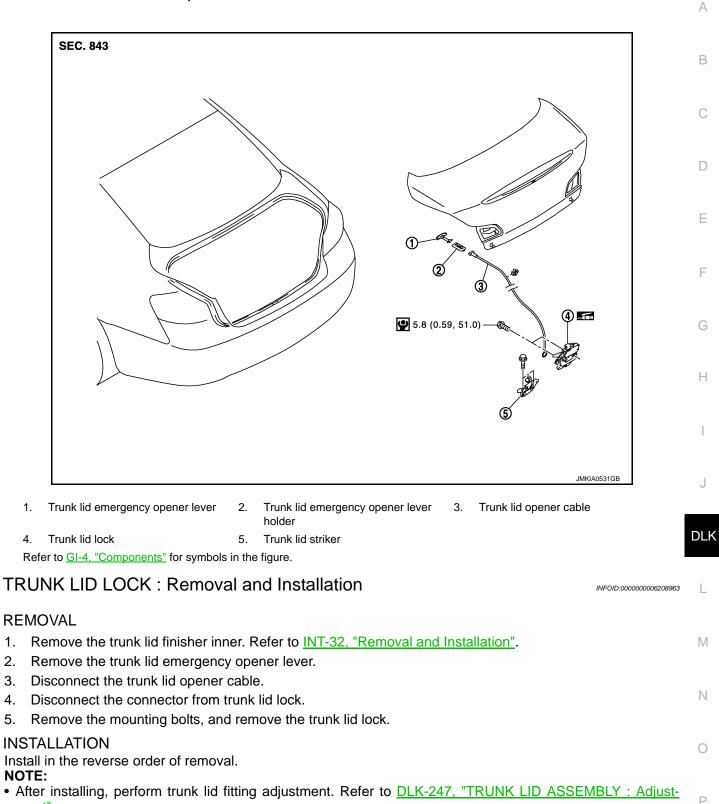
B: Cut at the groove.

TRUNK LID LOCK

< REMOVAL AND INSTALLATION >

TRUNK LID LOCK : Exploded View

INFOID:000000006208962



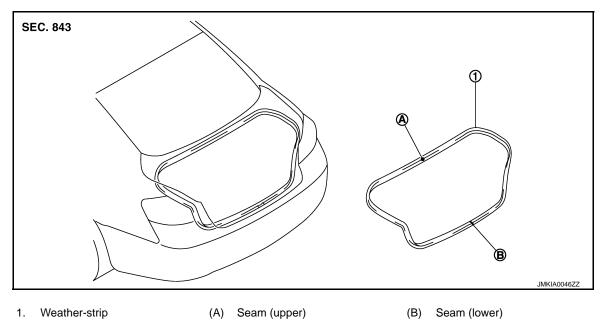
<u>ment</u>.
After installing, check the operation.

TRUNK LID WEATHERSTRIP

< REMOVAL AND INSTALLATION >

TRUNK LID WEATHERSTRIP : Exploded View

INFOID:000000006208964



TRUNK LID WEATHERSTRIP : Removal and Installation

INFOID:000000006208965

REMOVAL

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

CAUTION:

After removal, never pull strongly on the weather-strip.

INSTALLATION

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

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

FUEL FILLER LID OPENER

< REMOVAL AND INSTALLATION >

FUEL FILLER LID OPENER

Exploded View

INFOID:000000006208966

А

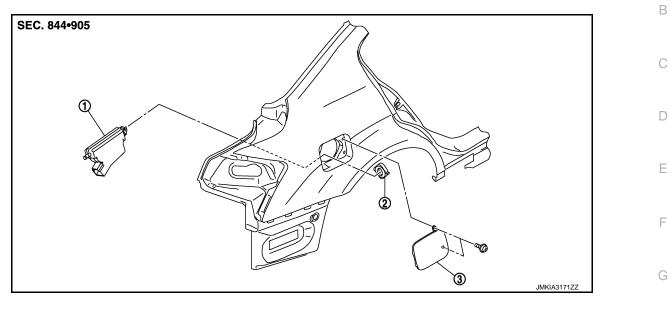
Н

Μ

Ν

Ρ

INFOID:000000006208967



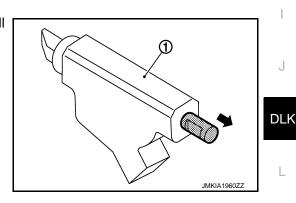
1. Fuel filler lid opener actuator 2. Lock nut

3. Fuel filler lid assembly

Removal and Installation

NOTE:

When fuel filler lid opener actuator (1) is a defective operation, pull the rod to open fuel filler lid.



REMOVAL

- 1. Remove mounting screws, and then remove fuel filler lid.
- 2. Rotate lock nut counterclockwise, and then remove lock nut.
- 3. Push fuel filler lid opener actuator behind the vehicle.
- 4. Remove trunk side finisher (RH). Refer to <u>INT-30, "Removal and Installation"</u>.
- 5. Disconnect harness connector and remove fuel filler lid opener actuator.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

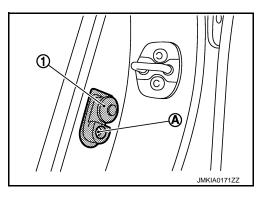
After installation, apply the touch-up paint (the body color) onto the head of the mounting screws.

DOOR SWITCH

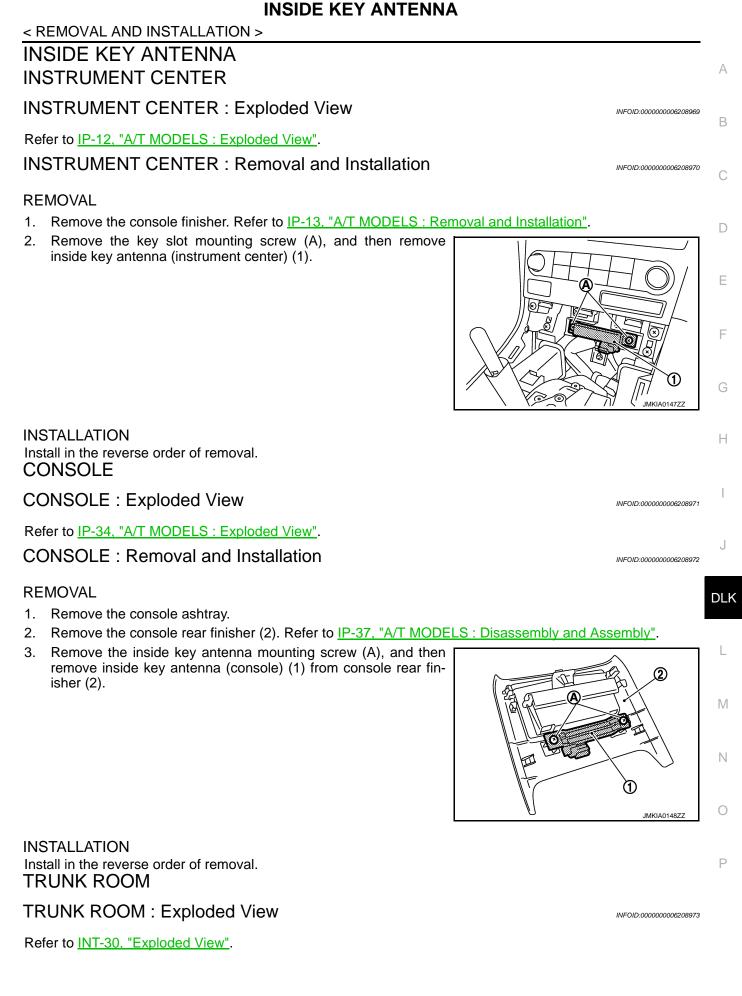
Removal and Installation

REMOVAL

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



INSTALLATION Install in the reverse order of removal.

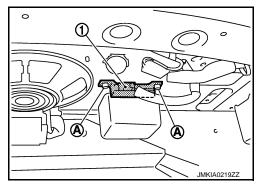


TRUNK ROOM : Removal and Installation

INFOID:000000006208974

REMOVAL

- 1. Remove the trunk trim. Refer to INT-30. "Removal and Installation".
- 2. Remove the inside key antenna (trunk room) mounting nuts (A), and then remove inside key antenna (trunk room) (1).



INSTALLATION Install in the reverse order of removal.

OUTSIDE KEY ANTENNA

< REMOVAL AND INSTALLATION >		
OUTSIDE KEY ANTENNA DRIVER SIDE		А
DRIVER SIDE : Exploded View	INFOID:000000006208975	В
Refer to <u>DLK-240, "FRONT DOOR LOCK : Exploded View"</u> . DRIVER SIDE : Removal and Installation	INFOID:000000006208976	С
REMOVAL Remove the front outside handle LH. Refer to <u>DLK-240, "FRONT DOOR LOCK : Removal and</u> INSTALLATION Install in the reverse order of removal. PASSENGER SIDE	Installation".	D
PASSENGER SIDE : Exploded View	INFOID:000000006208977	
Refer to <u>DLK-240, "FRONT DOOR LOCK : Exploded View"</u> . PASSENGER SIDE : Removal and Installation	INFOID:000000006208978	F
REMOVAL		G
Remove the front outside handle RH. Refer to <u>DLK-240, "FRONT DOOR LOCK : Removal and</u> INSTALLATION Install in the reverse order of removal. REAR BUMPER	Installation".	Н
REAR BUMPER : Exploded View	INFOID:000000006208979	
Refer to EXT-18. "Exploded View". REAR BUMPER : Removal and Installation	INFOID:000000006208980	J
 REMOVAL 1. Remove the rear bumper. Refer to <u>EXT-19, "Removal and Installation"</u>. 2. Remove the outside key antenna (rear bumper) mounting nuts (A), and then remove outside key antenna (rear bumper) (1). 		DL) L M
INSTALLATION	JMKIA0170ZZ	0
Install in the reverse order of removal.		Ρ

INTELLIGENT KEY WARNING BUZZER

< REMOVAL AND INSTALLATION >

INTELLIGENT KEY WARNING BUZZER

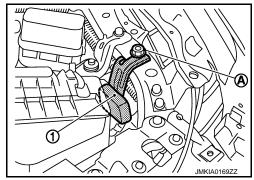
Exploded View

Refer to DLK-233, "Exploded View".

Removal and Installation

REMOVAL

- 1. Remove the hood seal assembly (side). Refer to <u>DLK-224, "HOOD ASSEMBLY : Exploded View"</u>.
- 2. Remove the Intelligent Key warning buzzer mounting bolt (A), and then remove the Intelligent Key warning buzzer (1).



INSTALLATION Install in the reverse order of removal. INFOID:000000006208981

KEY SLOT

< REMOVAL AND INSTALLATION > **KEY SLOT**

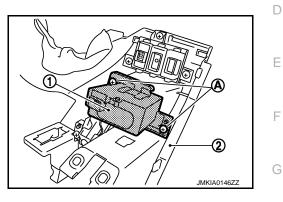
Exploded View

Refer to IP-12, "A/T MODELS : Exploded View".

Removal and Installation

REMOVAL

- 1. Remove the instrument driver lower panel (2). Refer to IP-13, "A/T MODELS : Removal and Installation".
- 2. Disconnect key slot connector.
- 3. Remove the key slot mounting screw (A), and then remove key slot (1) from instrument driver lower panel (2).



INSTALLATION Install in the reverse order of removal.

DLK

L

Μ

Ν

Ο

Ρ

J

Н

А

В

С

INFOID:000000006208983

TRUNK OPENER REQUEST SWITCH

Exploded View

Refer to EXT-41, "Exploded View".

Removal and Installation

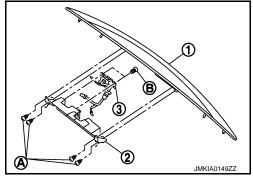
REMOVAL

- 1. Remove the trunk lid finisher outer (1). Refer to EXT-41, "Removal and Installation".
- 2. Remove the inner bracket mounting screw (A), and then remove inner bracket (2) from trunk lid finisher outer (1).

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

INSTALLATION

Install in the reverse order of removal.



INFOID:000000006208985

.

TRUNK LID OPENER SWITCH

< REMOVAL AND INSTALLATION >

TRUNK LID OPENER SWITCH

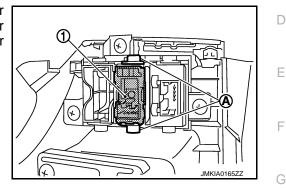
Exploded View

Refer to IP-12, "A/T MODELS : Exploded View".

Removal and Installation

REMOVAL

- 1. Remove the instrument driver lower panel. Refer to IP-13, "A/T MODELS : Removal and Installation".
- Remove the trunk lid opener switch (1) from instrument driver lower panel, and then remove pawl (A). Press trunk lid opener switch (1) front side to disengage from instrument driver lower panel.



INSTALLATION Install in the reverse order of removal.

DLK

L

Μ

Ν

0

Ρ

J

Н

А

INFOID:000000006208987

В

С

TRUNK LID OPENER CANCEL SWITCH

< REMOVAL AND INSTALLATION >

TRUNK LID OPENER CANCEL SWITCH

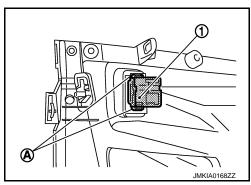
Exploded View

Refer to IP-12, "A/T MODELS : Exploded View".

Removal and Installation

REMOVAL

- 1. Remove the instrument assist lower panel. Refer to IP-13, "A/T MODELS : Removal and Installation".
- 2. Remove the trunk lid opener cancel switch (1) instrument assist lower panel, and then remove pawl (A). Press trunk lid opener cancel switch (1) backside to disengage from instrument assist lower panel.



INSTALLATION Install in the reverse order of removal. INFOID:000000006208989

REMOTE KEYLESS ENTRY RECEIVER

INSTALLATION

Install in the reverse order of removal.

Revision: 2011 November

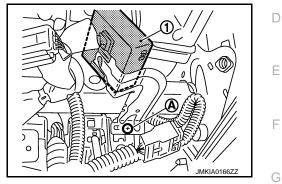
Exploded View

Refer to IP-12, "A/T MODELS : Exploded View".

Removal and Installation

REMOVAL

- 1. Remove the instrument assist lower panel. Refer to IP-13, "A/T MODELS : Removal and Installation".
- 2. Remove the remote keyless entry receiver mounting bolt (A), and then remove remote keyless entry receiver (1).



DLK

L

Μ

Ν

0

Ρ

J

А

В

С

F

Н

INFOID:000000006208991