SECTION DLK
DOOR & LOCK

CONTENTS

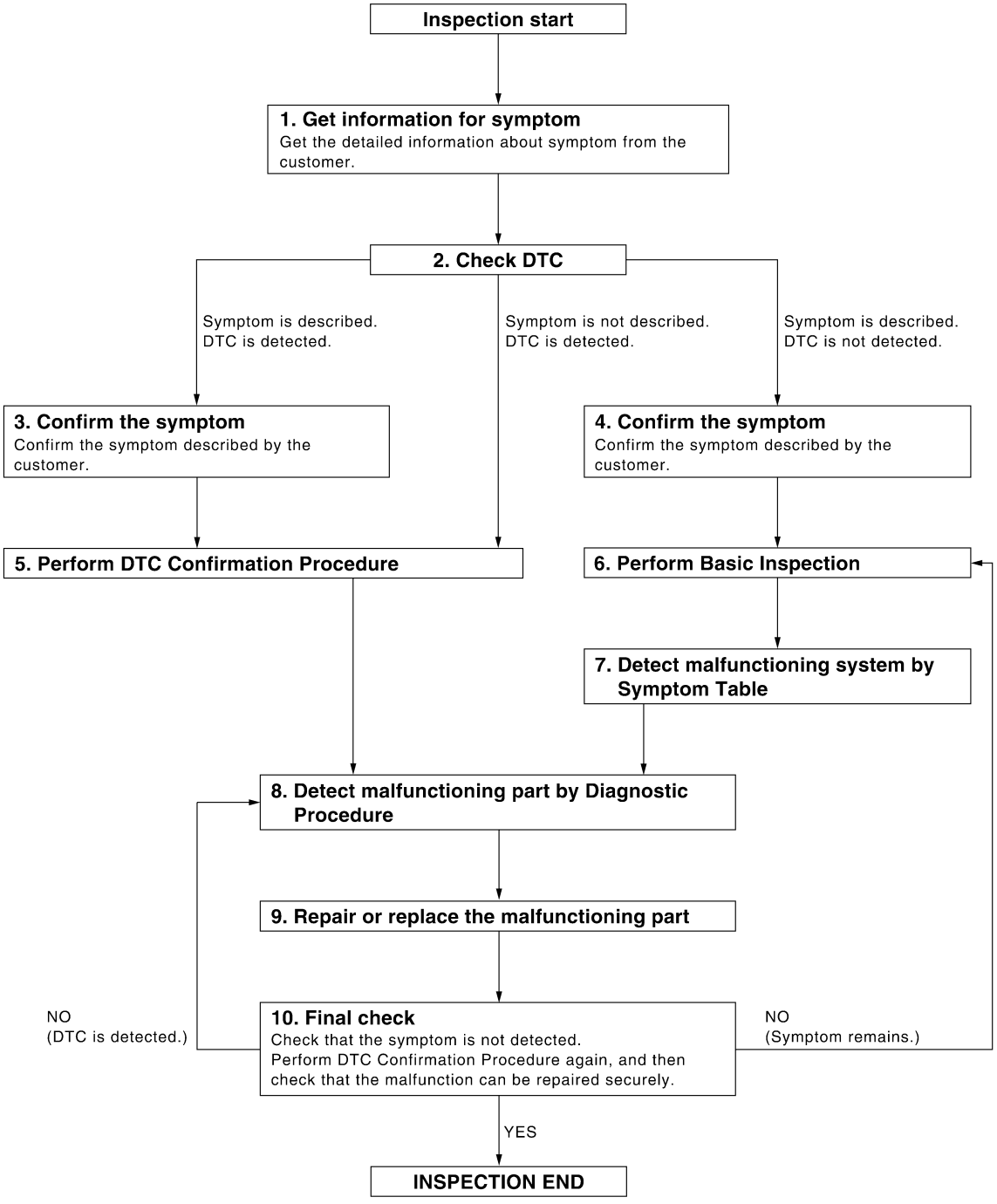
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001504916

OVERALL SEQUENCE



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DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

Is any symptom described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

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

>> GO TO 5.

4.CONFIRM THE SYMPTOM

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

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again.
At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time.
If two or more DTCs are detected, refer to DLK-157, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

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

Is DTC detected?

Yes >> GO TO 8.
No >> Refer to GI-42, "Intermittent Incident".

6.PERFORM BASIC INSPECTION

Perform DLK-5, "Work Flow".

Inspection End>>GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to DLK-162, "Symptom Table" based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

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

Is malfunctioning part detected?

Yes >> GO TO 9.
No >> Check voltage of related BCM terminals using CONSULT-III.

9.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 10.

10.FINAL CHECK

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

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

OK or NG

NG (DTC is detected)>>GO TO 8.
NG (Symptom remains)>>GO TO 6.
OK >> **INSPECTION END**

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001504917

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

INFOID:0000000001504918

Refer to the CONSULT-III operation manual for the initialization procedure.

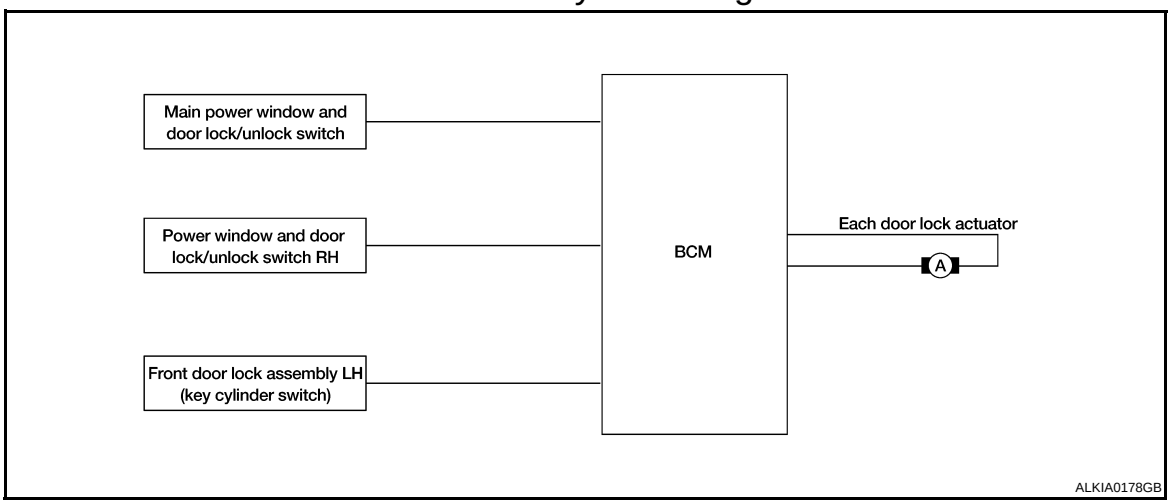
FUNCTION DIAGNOSIS

DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001504919



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001504920

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

DOOR LOCK FUNCTION

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

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

Functions Available by Operating the Key Cylinder Switch on Driver Door

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

Selective Unlock Operation

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

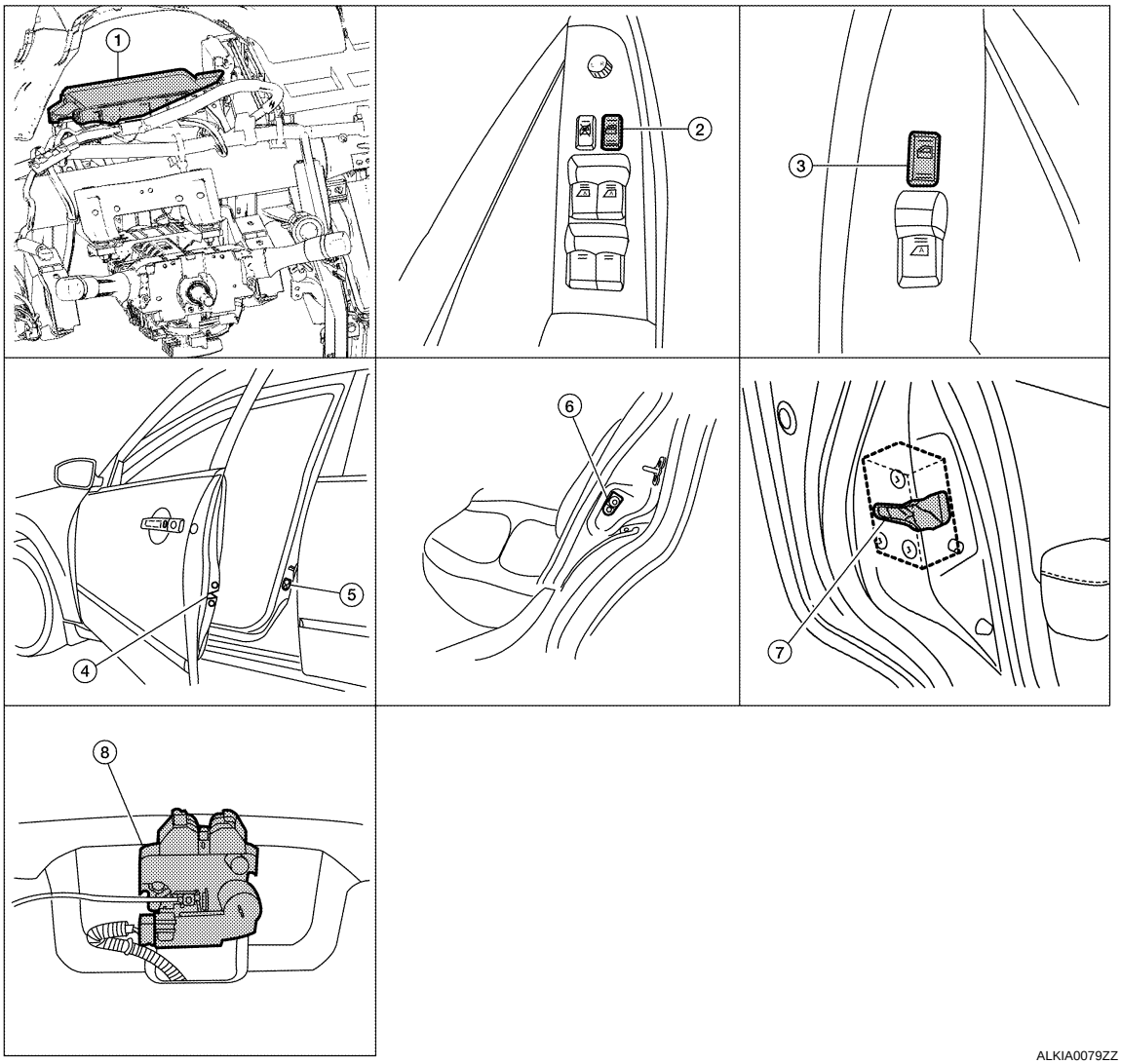
Select unlock operation mode can be changed using DOOR LOCK-UNLOCK SET mode in “WORK SUPPORT”. Refer to DLK-34, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Key Reminder System

Refer to DLK-32, "System Description".

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:0000000001504921



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

DOOR LOCK AND UNLOCK SWITCH : Component Description

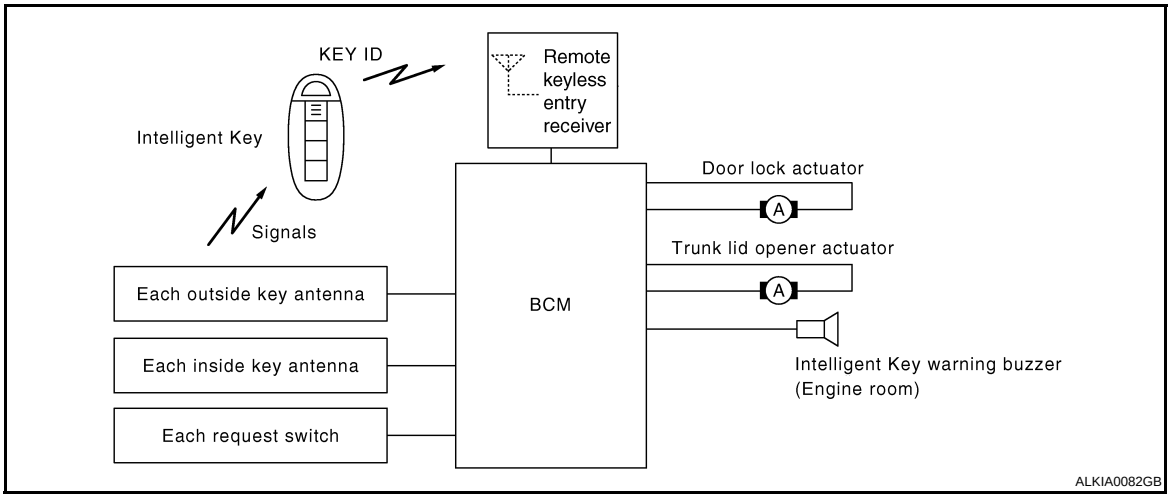
INFOID:0000000001504922

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

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : System Diagram

INFOID:0000000001504923



DOOR REQUEST SWITCH : System Description

INFOID:0000000001504924

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

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

CAUTION:

The driver should always carry the Intelligent Key

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

OPERATION DESCRIPTION/DOOR LOCK/UNLOCK

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

OPERATION CONDITION

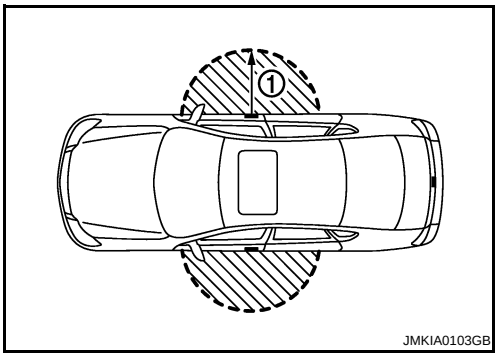
If the following conditions are not satisfied, door lock/unlock operation is not performed even if the request switch is operated.

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

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



SELECTIVE UNLOCK FUNCTION

When an LOCK signal is sent from door request switch (driver side or passenger side), all doors will be locked.
When an UNLOCK signal is sent from door request switch (driver side or passenger side) once, driver's door will be unlocked.
Then, if an UNLOCK signal is sent from door request switch (driver side and passenger side) again within 5 seconds, all other door will be unlocked.

HAZARD AND BUZZER REMINDER FUNCTION

During lock, unlock, or trunk opening operation by each request switch, the hazard warning lamps and Intelligent Key warning buzzer will blink or honk as a reminder.
When doors are locked, unlocked by each request switch, IPDM E/R honks Intelligent Key warning buzzer as a reminder and transmits hazard request signal to BCM via CAN communication line.
BCM flashes hazard warning lamps as a reminder.

Operating function of hazard warning lamps and buzzer reminder

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

How to change hazard and buzzer reminder mode
Refer to DLK-35, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

AUTO DOOR LOCK FUNCTION

When all doors are locked, ignition switch is in OFF position and key switch is OFF (Intelligent Key is not inserted in key slot), doors are unlocked with door request switch
When BCM does not receive the following signals within 60 seconds, all doors are locked.
- Door switch is ON (door is opened)
- Door is locked
- Ignition switch is ON (ignition switch is pressed)
- Key switch is ON (Intelligent Key is inserted in key slot)

Auto door lock mode can be changed by “AUTO LOCK SET” mode in “WORK SUPPORT”. Refer to DLK-35, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

ROOM LAMP OPERATION

When the following conditions are met:
- Condition of interior lamp switch is in DOOR position
- Door switch OFF (all the doors are closed)

Intelligent Key system turns on interior lamp (for up to 30 seconds maximum) by receiving UNLOCK signal from door request switch. For detailed description, refer to DLK-9, "DOOR LOCK AND UNLOCK SWITCH : System Description".

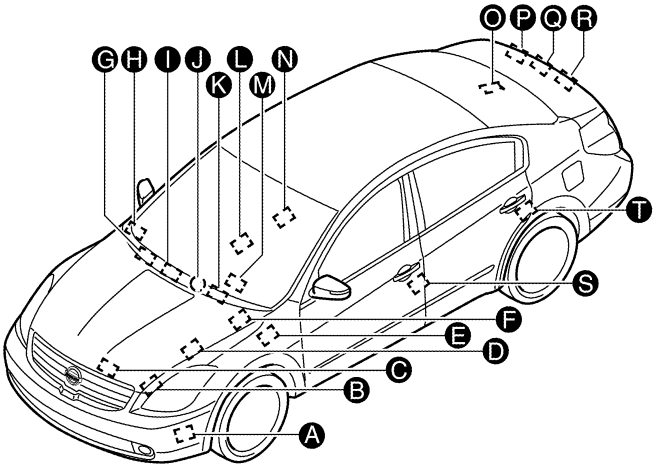
LIST OF OPERATION RELATED PARTS

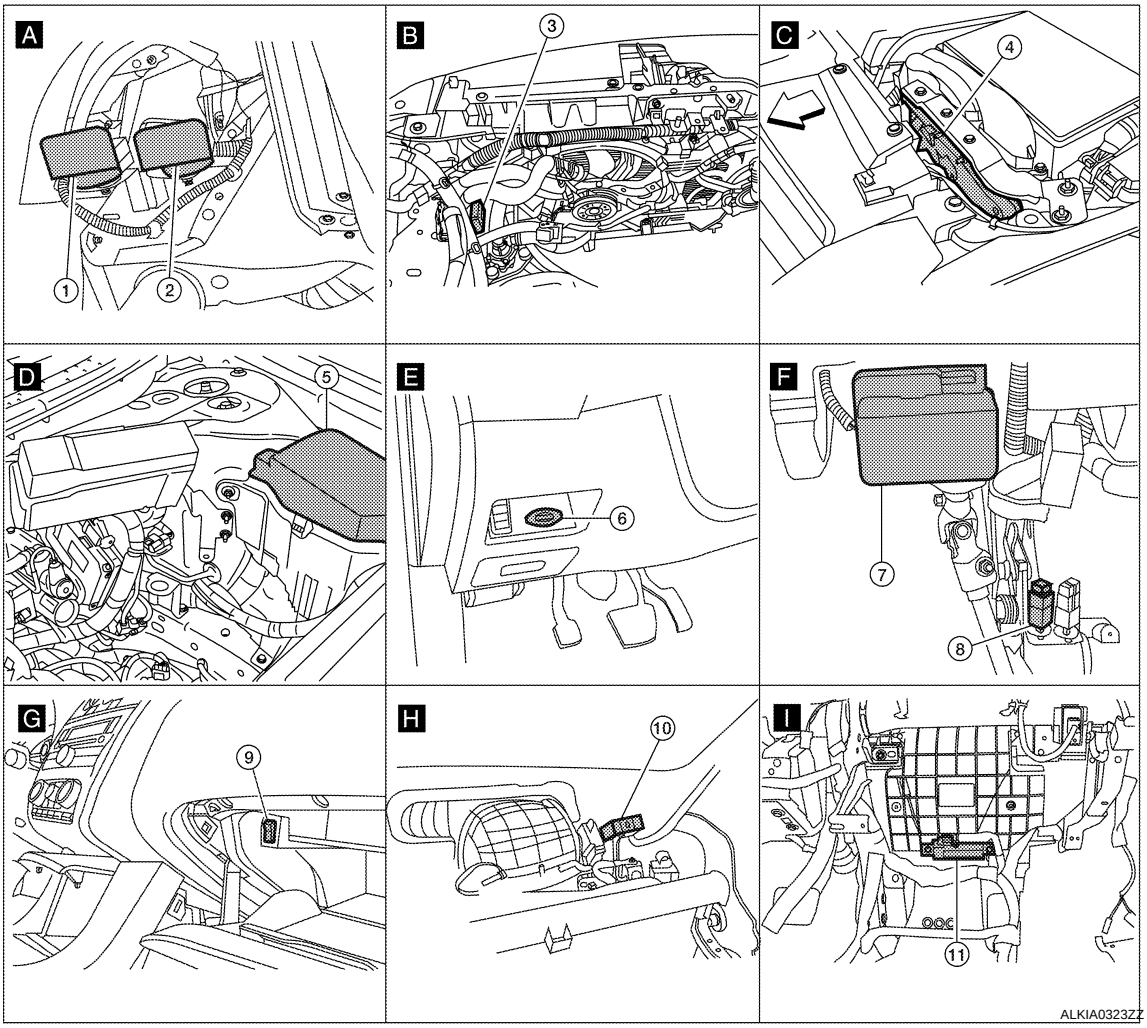
Parts marked with × are the parts related to operation.

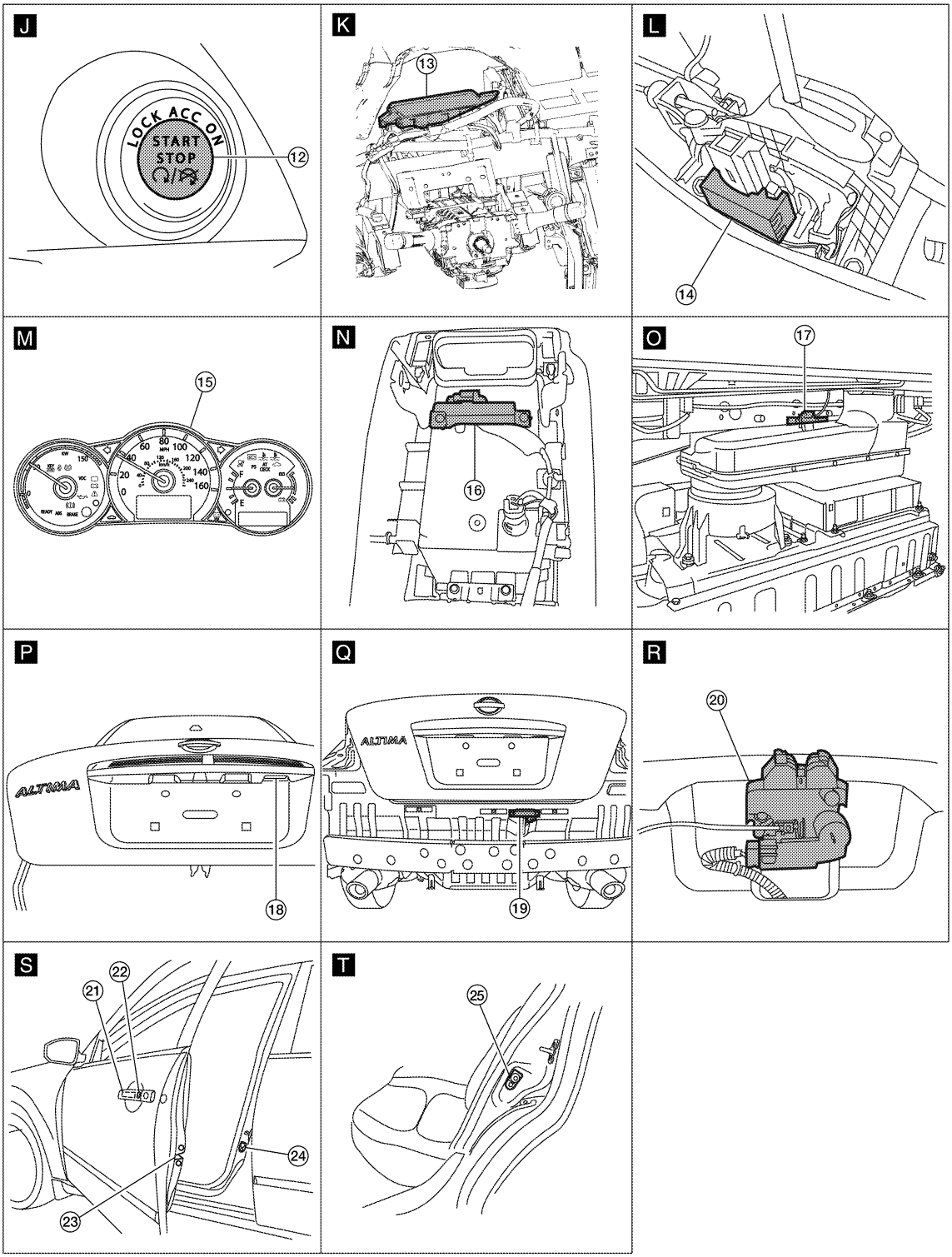
Door lock function	Intelligent Key	Key slot	Remote keyless entry receiver	Door switch	Door request switch (Driver, Passenger)	Door lock actuator	Inside key antenna	Outside key antenna (Driver, Passenger)	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamp	Push-button ignition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

DOOR REQUEST SWITCH : Component Parts Location

INFOID:0000000001504925







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1. Horn (low) E215 (view with front fender protector LH removed)
2. Horn (high) E216
3. Intelligent key warning buzzer E73
4. ECM
5. IPDM E/R E17, E18
6. Key slot M40
7. Electronic steering column lock M32 (view with instrument panel LH removed)
8. Stop lamp switch E38
9. Trunk lid opener cancel switch M74

10. Remote keyless entry receiver M27 (view with instrument panel removed)
11. Instrument panel antenna M49 (view with center console assembly removed)
12. Push button ignition switch M38.
13. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
14. ECVT device (detent switch)
15. Combination meter M24
16. Front console antenna M203 (view with center console assembly removed)
17. Rear parcel shelf antenna B29
18. Trunk opener request switch B33
19. Rear bumper antenna B46
20. Trunk lamp switch and trunk release solenoid B28 (view with trunk lid inner trim panel removed)
21. Front outside handle LH (outside key antenna) D6
    Front outside handle RH (outside key antenna) D106
22. Front outside handle LH (request switch) D6
    Front outside handle RH (request switch) D106
23. Front door lock assembly LH D10
    Front door lock actuator RH D108
24. Front door switch LH B8
    RH B108
25. Rear door switch LH B18
    RH B116
    Rear bumper antenna B46

DOOR REQUEST SWITCH : Component Description

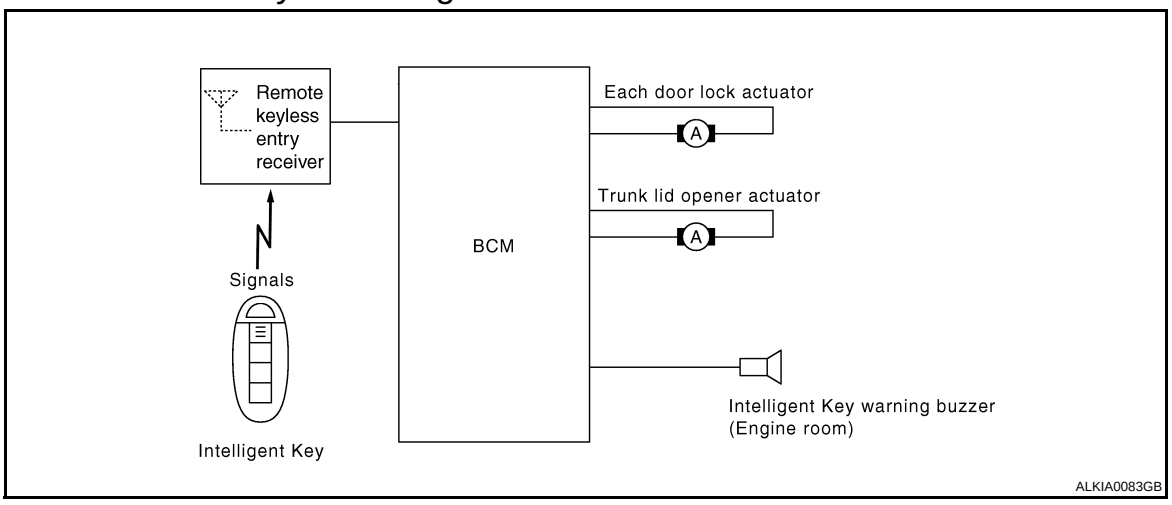
INFOID:0000000001504926

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

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram

INFOID:0000000001504927



INTELLIGENT KEY : System Description

INFOID:0000000001504928

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

OPERATION DESCRIPTION/DOOR LOCK/UNLOCK FUNCTION

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

OPERATION CONDITION

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

OPERATION AREA

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

SELECTIVE UNLOCK FUNCTION

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

HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by Intelligent Key, BCM flashes hazard warning lamps as a reminder and sends horn chirp signal to IPDM E/R. IPDM E/R sounds horn as a reminder.
The hazard and horn reminder has a horn chirp mode (C mode) and a non-horn chirp mode (S mode).

Operating function of hazard and horn reminder

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

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

How to change hazard and horn reminder mode

With CONSULT-III

Refer to DLK-35, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Without CONSULT-III

Refer to Owner's Manual for instructions.

AUTO DOOR LOCK FUNCTION

Auto Door Lock Function

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

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

Auto door lock mode can be changed by DOOR LOCK-UNLOCK SET mode in “WORK SUPPORT”. Refer to DLK-34, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

PANIC ALARM FUNCTION

When ignition switch is OFF (ignition switch is not pressed) and key switch is OFF (Intelligent Key is not inserted in key slot), BCM receives PANIC ALARM signal from Intelligent Key.
BCM turns on and off headlamp intermittently and transmits theft warning horn signal to IPDM E/R. Then, IPDM E/R turns on and off horn intermittently.
The headlamp flashes and the horn sounds intermittently.
The alarm automatically turns off:

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

Panic alarm function mode can be changed by PANIC ALARM SET mode in “WORK SUPPORT”. Refer to DLK-35, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

KEYLESS POWER WINDOW DOWN (OPEN) FUNCTION

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

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

While retained power operation activate, Keyless power window down (open) function cannot be operated.
Keyless power window down operation mode can be changed by PW DOWN SET mode in “WORK SUPPORT”. Refer to DLK-35, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

ROOM LAMP ILLUMINATION OPERATION

When the following conditions are met:

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

Intelligent Key system turns on interior lamp (for 15 seconds) by receiving UNLOCK signal from Intelligent Key. For detailed description, refer to DLK-16, "INTELLIGENT KEY : System Description".

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

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

INTELLIGENT KEY : Component Parts Location

INFOID:0000000001504929

Refer to DLK-14, "DOOR REQUEST SWITCH : Component Parts Location".

INTELLIGENT KEY : Component Description

INFOID:0000000001504930

Item	Function
BCM	Controls the door lock function and room lamp function.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.

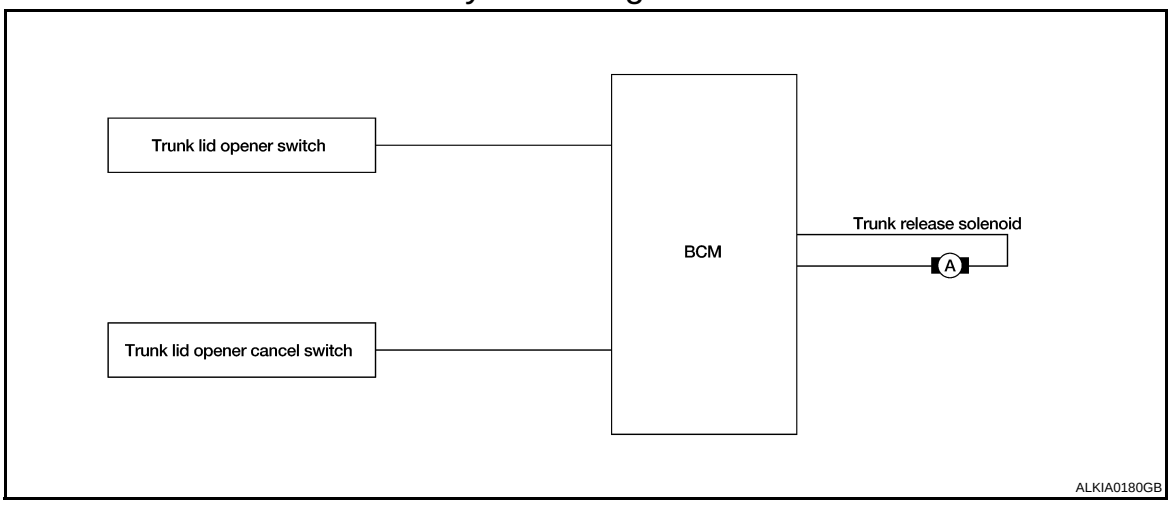
Item	Function
Intelligent Key	Transmits button operation to remote keyless entry receiver.
Fuel lid opener actuator	Performs lock/unlock of the fuel lid.
Intelligent key warning buzzer	Warns the user of the lock/unlock condition and inappropriate operations with the buzzer sound.

TRUNK OPEN FUNCTION

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : System Diagram

INFOID:0000000001504931



TRUNK LID OPENER SWITCH : System Description

INFOID:0000000001504932

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

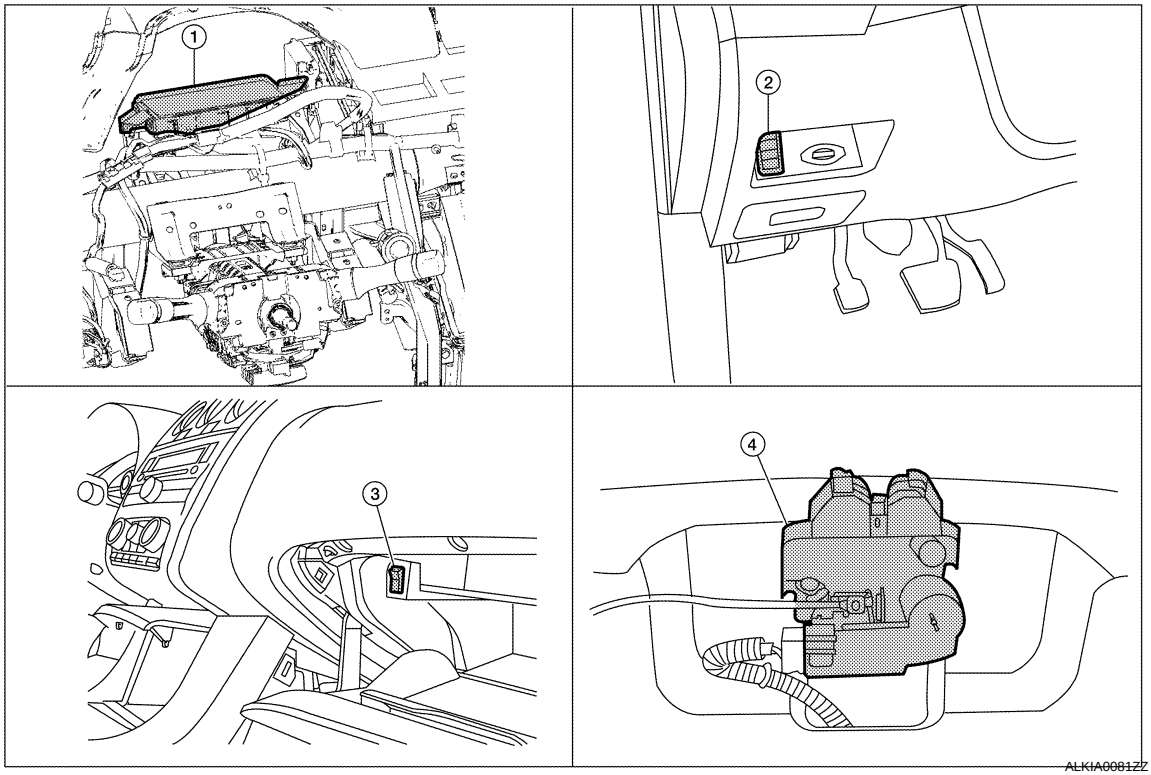
TRUNK LID OPENER OPERATION

When trunk lid opener switch is ON, BCM opens trunk opener actuator.
BCM can open trunk lid opener actuator when
- vehicle speed is less than 5 km/h (3MPH)
- vehicle security system is disarmed or pre-armed phase

BCM does not open trunk lid opener actuator when
- trunk lid opener cancel switch is OFF (CANCEL)
- vehicle speed is more than 5 km/h (3MPH)
- vehicle security system is armed or alarm phase
- Intelligent Key is inserted in key slot

TRUNK LID OPENER SWITCH : Component Parts Location

INFOID:0000000001504933



1. BCM M16, M17, M18, M20, M21
2. Trunk lid opener switch M75
3. Trunk lid opener cancel switch M74
4. Trunk lamp switch and trunk release solenoid B28 (view with trunk lid inner trim panel removed)

TRUNK LID OPENER SWITCH : Component Description

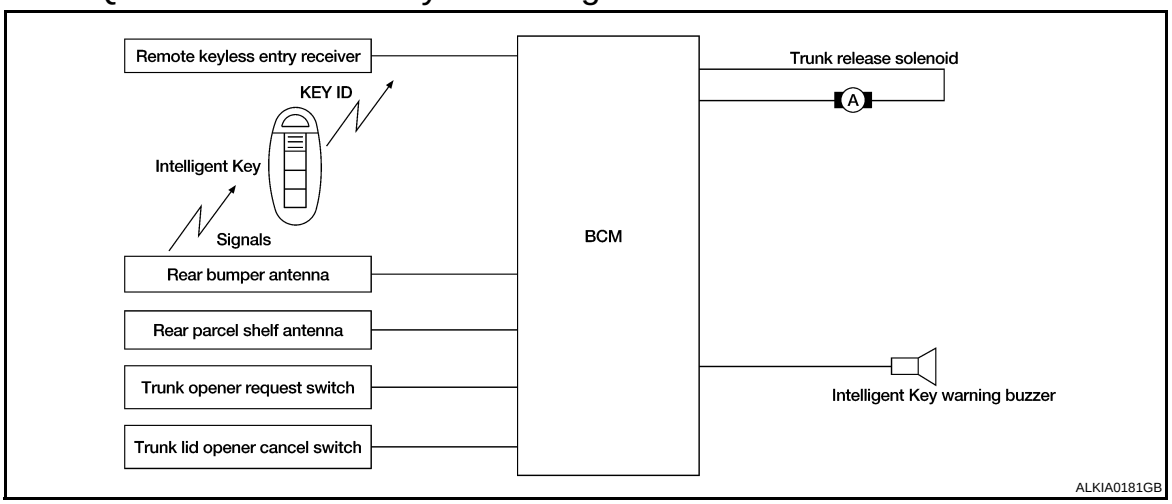
INFOID:0000000001504934

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

TRUNK REQUEST SWITCH

TRUNK REQUEST SWITCH : System Diagram

INFOID:0000000001504935



TRUNK REQUEST SWITCH : System Description

INFOID:0000000001504936

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

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

CAUTION:

The driver should always carry the Intelligent Key

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

OPERATION DESCRIPTION/TRUNK OPEN

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

OPERATION CONDITION

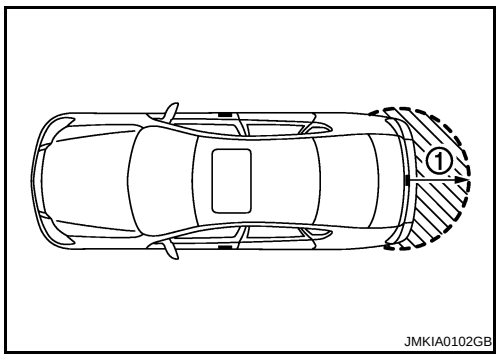
If the following conditions are not satisfied, trunk open operation is not performed even if the request switch is operated.

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

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

OUTSIDE KEY ANTENNA DETECTION AREA

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



KEY REMINDER FUNCTION

Key reminder function	Operation condition	Operation
Trunk is closed	Right after trunk is closed under the following conditions • Intelligent Key is inside trunk room • All doors are closed • All doors are locked	• Trunk open • Honk Intelligent Key warning buzzer

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

CAUTION:

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

- Remote controller door lock button operation of Intelligent Key
- Remote controller door unlock button operation of Intelligent Key
- When the trunk is closed, the Intelligent Key is not inside the vehicle
- When any door is open

HAZARD AND BUZZER REMINDER FUNCTION

During trunk opening operation by request switch, the hazard warning lamps and Intelligent Key warning buzzer will flash or honk as a reminder.
When trunk open by each request switch, IPDM E/R honks Intelligent Key warning buzzer as a reminder and transmits hazard request signal to BCM via CAN communication line.
BCM flashes hazard warning lamps as a reminder.

Operating function of hazard and buzzer reminder

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

How to change hazard and buzzer reminder mode

With CONSULT-III

Refer to DLK-35, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

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

TRUNK REQUEST SWITCH : Component Parts Location

INFOID:0000000001504937

Refer to DLK-18, "INTELLIGENT KEY : Component Parts Location".

TRUNK REQUEST SWITCH : Component Description

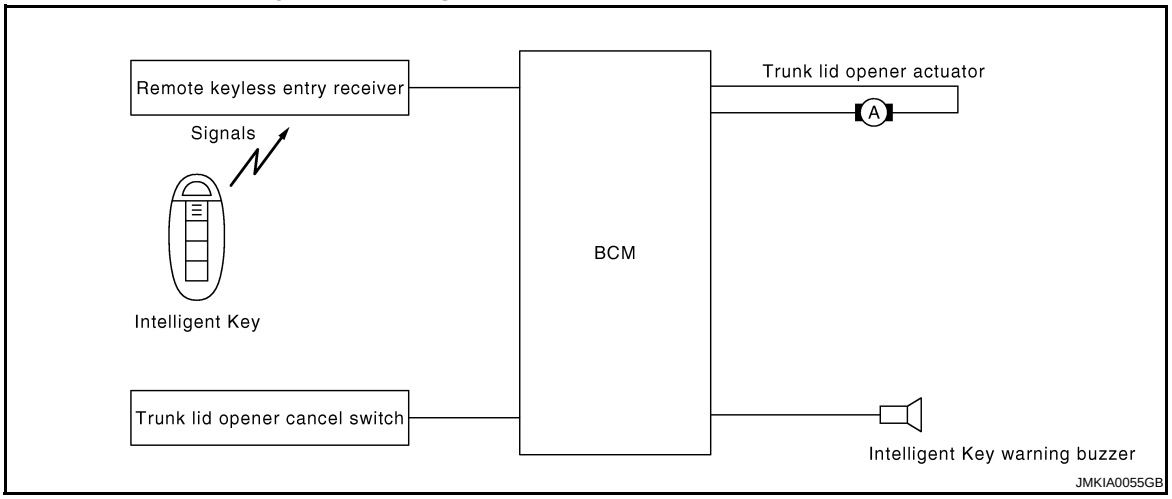
INFOID:0000000001504938

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

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram

INFOID:0000000001504939



INTELLIGENT KEY : System Description

INFOID:0000000001504940

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

OPERATION DESCRIPTION/TRUNK OPEN FUNCTION

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

OPERATION CONDITION

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

OPERATION AREA

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

HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by Intelligent Key. BCM flashes hazard warning lamps as a reminder and transmits horn chirp signal to IPDM E/R. IPDM E/R sound horns as a reminder.
The hazard and horn reminder has a horn chirp mode (C mode) and a non-horn chirp mode (S mode).

Operating function of hazard and horn reminder

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

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

How to change hazard and horn reminder mode

With CONSULT-III

Refer to DLK-35, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Without CONSULT-III

Refer to Owner's Manual for instructions.

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

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

INTELLIGENT KEY : Component Parts Location

INFOID:0000000001504941

Refer to DLK-18, "INTELLIGENT KEY : Component Parts Location".

INTELLIGENT KEY : Component Description

INFOID:0000000001504942

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

WARNING FUNCTION

System Description

INFOID:0000000001504943

OPERATION DESCRIPTION

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

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

OPERATION CONDITION

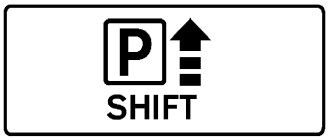
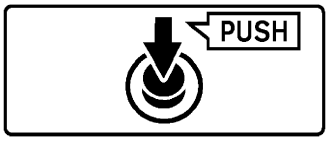
Once the following condition from below is established, alert or warning will be executed.

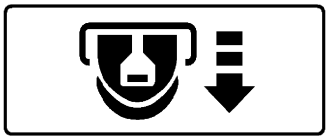
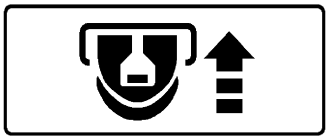
Warning/Information functions		Operation procedure
Intelligent Key system malfunction		When a malfunction is detected on BCM, “KEY” warning lamp will illuminate.
OFF position warning	For internal	• Ignition switch: ACC position. • Door switch (driver side): ON (Door is open).
	For external	OFF position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

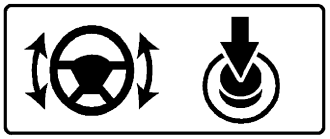
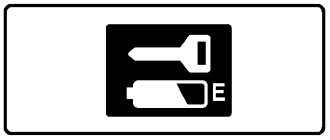
Warning/Information functions		Operation procedure
Door lock operation warning	Request switch operation	When request switch is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • Intelligent Key is inside vehicle.
	Intelligent Key button operation	When Intelligent Key button is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • For 3 seconds after Intelligent Key is removed from key slot.
Key warning		• Ignition switch is OFF position. • Driver side door switch: ON (Driver side door is open). • Intelligent Key is inserted in key slot.
Intelligent Key insert information		• Door switch: ON to OFF (Door is open to close). • Ignition switch: OFF to ON position. • Intelligent Key is out of key slot. • Intelligent Key can not be detected inside the vehicle.
Engine start information	Ignition switch is ON position	• Ignition switch: ON position. • Shift position: P position • Engine is stopped
	Ignition switch is except ON position	• Ignition switch: Except ON position. • Shift position: P position • Intelligent Key is inserted in key slot. • Intelligent Key can be detected inside the vehicle.
Steering lock information		When steering lock can not be released after ignition switch is turned ON.
Intelligent Key low battery warning		When Intelligent Key has low battery, it is detected by BCM after ignition switch is turned ON.
Key ID warning		When registered intelligent Key cannot be detected inside the vehicle after ignition switch is turned ON.

WARNING METHOD

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

Warning/Information functions		“KEY” warning lamp	Combination meter display	Key slot illumination	Warning chime	
					Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key system malfunction		Illuminate	—	—	—	—
OFF position warning	For internal	—	—	—	Activate	—
	For external	—	—	—	—	Activate
P position warning		—	 JMKIA0037GB	—	Activate	—
ACC warning		—	 JMKIA0047GB	—	Activate	—

Warning/Information functions		"KEY" warning lamp	Combination meter display	Key slot illumination	Warning chime	
					Combination meter buzzer	Intelligent Key warning buzzer
Take away warning	Door is open to close	—	 JMKIA0036GB	Flash	Activate	Activate
	Door is open	—		Flash	—	—
	Push-ignition switch operation	—		Flash	Activate	—
	Take away through window	—		Flash	Activate	—
	Intelligent Key is removed from key slot	—		Flash	—	—
Door lock operation warning	Request switch operation	—	—	—	—	Activate
	Intelligent Key operation	—	—	—	—	Activate
Key ID warning		—	 JMKIA0036GB	—	—	—
Key warning		—	 JMKIA0035GB	Flash	Activate	—
Intelligent Key insert information		—	 JMKIA0034GB	Flash	—	—
Engine start information		—	 JMKIA0032GB	—	—	—

Warning/Information functions	"KEY" warning lamp	Combination meter display	Key slot illumination	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Steering lock information	—	 JMKIA0033GB	—	—	—
Intelligent Key low battery warning	—	 JMKIA0048GB	—	—	—

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Warning function		Intelligent Key	Key slot	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Combination meter display	Key slot illumination	Park position switch	"KEY" warning lamp
Intelligent Key system malfunction											×	×				×
OFF position warning	For internal				×					×	×	×				
	For external				×				×		×	×				
P position warning				×						×	×	×	×		×	
ACC warning				×						×	×	×	×		×	
Take away warning	Door is open or close	×			×		×		×	×	×	×	×	×		
	Door is open	×			×		×				×	×	×	×		
	Push-ignition switch operation	×		×			×			×	×	×	×	×		
	Take away through window	×					×			×	×	×	×	×		
	Intelligent Key is removed from key slot	×	×				×				×	×	×	×		
Door lock operation warning		×	×		×	×	×	×	×		×	×				
Key ID warning		×	×	×			×				×	×	×			
Key warning		×	×		×					×	×	×	×	×		
Intelligent Key insert information		×	×	×	×		×				×	×	×	×		

Warning function		Intelligent Key	Key slot	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Combination meter display	Key slot illumination	Park position switch	"KEY" warning lamp
Engine start information	Ignition switch is ON position	×	×	×			×				×	×	×		×	
	Ignition switch is except ON position	×	×	×			×				×	×	×			
Steering lock information				×							×	×	×			
Intelligent Key low battery warning		×					×				×	×	×			

Component Parts Location

INFOID:0000000001504944

Refer to DLK-18, "INTELLIGENT KEY : Component Parts Location".

KEY REMINDER FUNCTION

System Description

INFOID:0000000001504945

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

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

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

CAUTION:

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

- Remote controller door lock button operation of Intelligent Key
- Remote controller door unlock button operation of Intelligent Key
- When the trunk is closed, the Intelligent Key is not inside the vehicle
- When any door is open

Component Parts Location

INFOID:0000000001504946

Refer to DLK-18, "INTELLIGENT KEY : Component Parts Location".

HOMELINK UNIVERSAL TRANSCEIVER

Component Description

INFOID:0000000001504947

Item	Function	Reference page
Homelink universal transceiver	A maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.	Refer to Owner's Manual

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000001504948

APPLICATION ITEM

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to DLK-157, "DTC Index".
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFUCATION	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 subsystem selection items.

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
Door lock	DOOR LOCK	×	×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Intelligent Key system	INTELLIGENT KEY	×	×	×
BCM	BCM	×		
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
RAP system	RETAINED PWR		×	

DOOR LOCK

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

INFOID:0000000001504949

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

Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operate (WITH) or not operate (WITHOUT) with this mode.

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

ACTIVE TEST

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

INTELLIGENT KEY

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

INFOID:0000000001504950

BCM CONSULT-III FUNCTION

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

WORK SUPPORT

Monitor item	Description
REMO CONT ID CONFIR	It can be checked whether Intelligent Key ID code is registered or not in this mode.
TAKE OUT FROM WINDOW WARN	Take away warning chime (from window) mode can be changed to operate (ON) or not operate (OFF) with this mode. The operation mode will be changed when (CHANGE SETT" on CONSULT-III screen is touched.
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch (driver side, passenger side and trunk) mode can be changed to operate (ON) or not operate (OFF) with 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.

Monitor item	Description
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. • 0.5 sec. • 1.5 sec. • OFF: Non-operation
PW DOWN SET	Unlock button pressing time on Intelligent Key button to lower front windows can be selected from the following with this mode. • 3 sec. • 5 sec. • OFF: Non-operation
TRUNK OPEN DELAY	Trunk button pressing time on Intelligent Key button can be selected from the following with this mode. • 0.5 sec. • 1.5 sec. • OFF: No delay
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode.
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode.
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode.
HAZARD ANSWER BACK	Hazard reminder function mode can be selected from the following with this mode. • LOCK ONLY: Door lock operation only • UNLOCK ONLY: Door unlock operation only • LOCK AND UNLOCK: Lock/unlock operation • OFF: Non operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode. • HORN CHIRP: Sound horn • BUZZER: Sound Intelligent Key warning buzzer • OFF: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode.
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.

SELF-DIAG RESULT

Refer to DLK-157, "DTC Index".

DATA MONITOR

Monitor Item	Condition
REQ SW-DR	Indicates [ON/OFF] condition of door request switch (driver side).
REQ SW-AS	Indicates [ON/OFF] condition of door request switch (passenger side).
REQ SW-BD/TR	Indicates [ON/OFF] condition of trunk opener request switch.
PUSH SW	Indicates [ON/OFF] condition of push button ignition switch.
CLUTCH SW	Indicates [ON/OFF] condition of clutch switch.
BRAKE SW 1	Indicates [ON/OFF] condition of brake switch.
DETE/CANCL SW	Indicates [ON/OFF] condition of P position.
SFT PN/N SW	Indicates [ON/OFF] condition of P or N position.
S/L -LOCK	Indicates [ON/OFF] condition of steering lock (LOCK).
S/L -UNLOCK	Indicates [ON/OFF] condition of steering lock (UNLOCK).
S/L RELAY-F/B	Indicates [ON/OFF] condition of ignition switch.
UNLK SEN-DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
PUSH SW -IPDM	Indicates [ON/OFF] condition of push button ignition switch.
IGN RLY1 F/B	Indicates [ON/OFF] condition of ignition relay 1.

Monitor Item	Condition
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.
S/L LOCK-IPDM	Indicates [ON/OFF] condition of steering lock (LOCK) request.
S/L UNLOCK-IPDM	Indicates [ON/OFF] condition of steering lock (UNLOCK) request.
S/L RELAY-REQ	Indicates [ON/OFF] condition of steering lock relay.
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [Km/h].
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or CVT by numerical value [Km/h].
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver side door status.
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger side door status.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2	**NOTE:** This item is displayed, but cannot be monitored.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
RKE-TR/BD	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.
RKE-PANIC	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.
RKE-P/W OPEN	Indicates [ON/OFF] condition of P/W DOWN signal from Intelligent Key.
RKE-MODE CHG	Indicates [ON/OFF] condition of MODE CHANGE signal from Intelligent Key.

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp will be activated after “ON” on CONSULT-III screen is touched.
PW REMOTO DOWN SET	This test is able to check power window down operation. The power window down will be activated after “ON” on CONSULT-III screen is touched.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. Intelligent Key warning buzzer sounds when “ON” on CONSULT-III screen is touched.
INSIDE BUZZER	This test is able to check warning chime by combination meter operation. • Take out warning chime sounds when “TAKE OUT” on CONSULT-III screen is touched. • Key warning chime sounds when “KEY WARN” on CONSULT-III screen is touched. • P position warning chime sounds when “P RNG WARN” on CONSULT-III screen is touched. • ACC warning chime sounds when “ACC WARN” on CONSULT-III screen is touched.
INDICATOR	This test is able to check warning lamp operation. • “KEY” Warning lamp illuminates when “KEY IND ON” on CONSULT-III screen is touched. • “KEY” Warning lamp flashes when “KEY IND FSH” on CONSULT-III screen is touched.
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp will be activated after “ON” on CONSULT-III screen is touched.

Test item	Description
LCD	This test is able to check meter display information • Engine start information displays when “BRAKE/P” on CONSULT-III screen is touched. • Engine start information displays when “BRAKE/P/ON” on CONSULT-III screen is touched. • Key ID warning displays when “KEY ID NG” on CONSULT-III screen is touched. • Steering lock information displays when “STLCK RELES” on CONSULT-III screen is touched. • P position warning displays when “P RNG IND” on CONSULT-III screen is touched. • Intelligent Key insert information displays when “INSERT KEY” on CONSULT-III screen is touched. • Intelligent Key low battery warning displays when “KEY BAT LOW” on CONSULT-III screen is touched. • Take away window warning displays when “TK AWAY WDW” on CONSULT-III screen is touched. • Take away warning display when “TAKE AWAY” on CONSULT-III screen is touched. • OFF position warning display when “IGN OFF WARN” on CONSULT-III screen is touched.
TRUNK/GLASS HATCH	This test is able to check trunk lid opener actuator open operation. This actuator opens when “ON” on CONSULT-III screen is touched.
FLASHER	This test is able to check security hazard lamp operation. The hazard lamps will be activated after “ON” on CONSULT-III screen is touched.
HORN	This test is able to check horn operation. The horn will be activated after “ON” on CONSULT-III screen is touched.
IGN CONT2	This test is able to check security hazard lamp operation. The hazard lamps will be activated after “ON” on CONSULT-III screen is touched.
P RANGE	This test is able to check CVT device power supply CVT device power is supplied when “ON” on CONSULT-III screen is touched.
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when “ON” on CONSULT-III screen is touched.
LOCK 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. LOCK indicator in push-ignition switch illuminates when “ON” on CONSULT-III screen is touched.
IGNITION ON IND	This test is able to check INGITION ON indicator in push-ignition switch operation. LOCK indicator in push-ignition switch illuminates when “ON” on CONSULT-III screen is touched.
KEY SLOT ILLUMI	This test is able to check key slot illumination operation. Key slot illumination flash when “ON” on CONSULT-III screen is touched.

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000001504951

BCM CONSULT-III FUNCTION

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

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

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.

Monitor Item	Contents
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk lid opener switch.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk room lamp switch.
RKE-TR/BD	Indicates [ON/OFF] condition of trunk open signal from Intelligent Key remote controller button.

ACTIVE TEST

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

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001504952

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-27, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000001504953

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000001504954

1.PERFORM SELF DIAGNOSTIC

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

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to DLK-40, "Diagnosis Procedure".
NO >> Refer to GI-42, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000001504955

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000001504956

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

>> Replace BCM.

Special Repair Requirement

INFOID:0000000001504957

1.REQUIRED WORK WHEN REPLACING BCM

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

>> Work end.

B2621 INSIDE KEY ANTENNA 1

Description

INFOID:0000000001504958

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

DTC Logic

INFOID:0000000001504959

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

With CONSULT-III

1. Perform INSIDE ANT DIAGNOSIS on "WORK SUPPORT" of "INTELLIGENT KEY".
2. Perform "INTELLIGENT KEY" Self Diagnostic Result.

Is inside key antenna DTC detected?

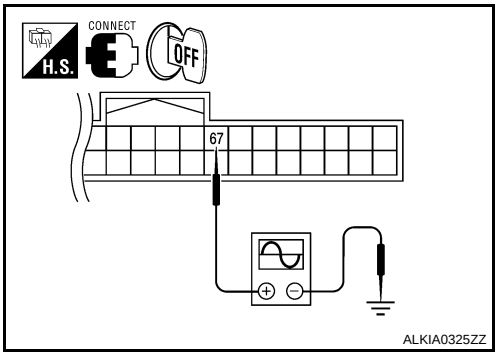
YES >> Refer to DLK-42, "Diagnosis Procedure".
NO >> Inside key antenna (instrument panel) is OK.

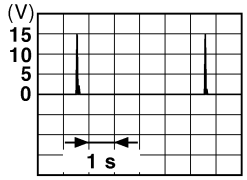
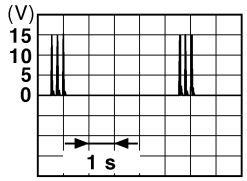
Diagnosis Procedure

INFOID:0000000001504960

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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



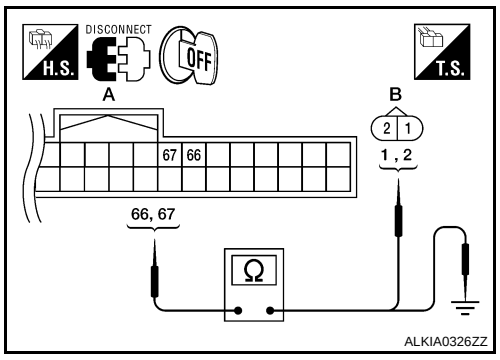
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M19	Instrument panel antenna	67	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

Is the inspection result normal?

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

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM and instrument panel antenna connector.
2. Check continuity between BCM connector and instrument panel antenna connector.



BCM connector	Terminal	Instrument panel antenna connector		Terminal	Continuity
M19	66	M49	Instrument center	2	Yes
	67			1	

3. Check continuity between BCM connector and ground.

BCM connector		Terminal		Continuity
M19	Instrument panel antenna	66	Ground	No
		67		

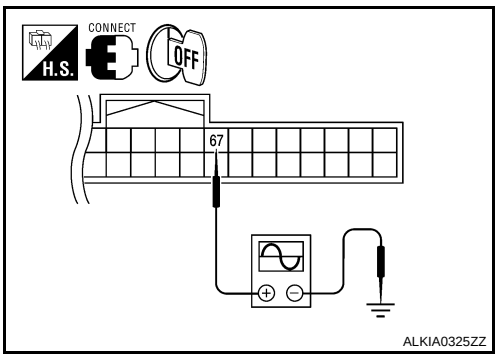
Is the inspection result normal?

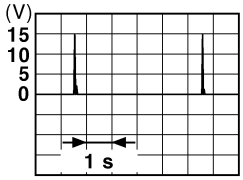
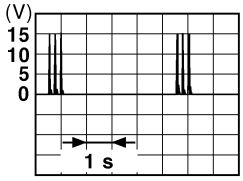
YES >> GO TO 3.
NO >> Repair or replace harness between BCM and instrument panel antenna.

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace instrument panel antenna (New antenna or other antenna).
2. Connect BCM and instrument panel antenna connector.

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



Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M19	Instrument panel antenna	67	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

Is the inspection result normal?

YES >> Replace instrument panel antenna.
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

B2622 INSIDE KEY ANTENNA 2

Description

INFOID:0000000001504961

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

DTC Logic

INFOID:0000000001504962

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

With CONSULT-III

1. Perform front console antenna INSIDE ANT DIAGNOSIS on “WORK SUPPORT” of “INTELLIGENT KEY”.
2. Perform “INTELLIGENT KEY” Self Diagnostic Result.

Is front console antenna DTC detected?

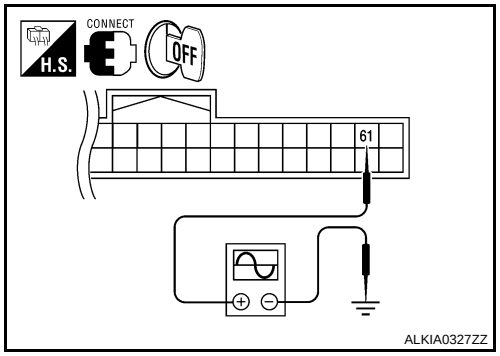
YES >> Refer to DLK-45, "Diagnosis Procedure".
NO >> Front console antenna is OK.

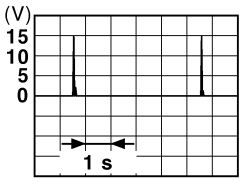
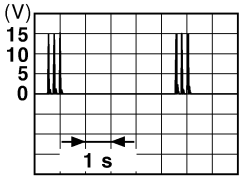
Diagnosis Procedure

INFOID:0000000001504963

1.CHECK FRONT CONSOLE ANTENNA INPUT SIGNAL 1

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



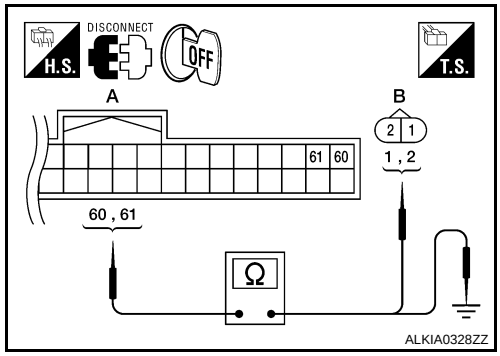
Terminals (+) BCM connector		Terminal	(–)	Condition	Signal (Reference value.)
M19	Front console antenna	61	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

Is the inspection result normal?

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

2.CHECK FRONT CONSOLE ANTENNA CIRCUIT

1. Disconnect BCM and front console antenna connector.
2. Check continuity between BCM connector and front console antenna connector.



BCM connector	Terminal	Front console antenna connector		Terminal	Continuity
M19	60	M203	Console	2	Yes
	61			1	

3. Check continuity between BCM connector and ground.

BCM connector		Terminal		Continuity
M19	Console	60	Ground	No
		61		

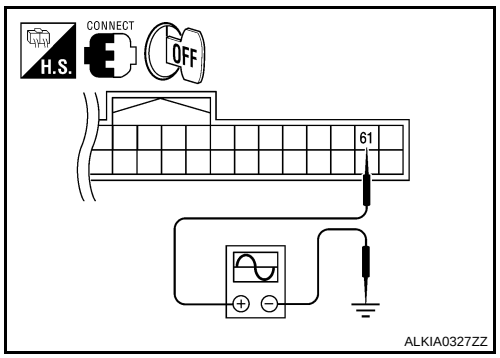
Is the inspection result normal?

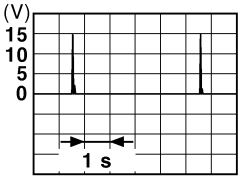
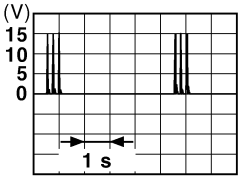
YES >> GO TO 3
NO >> Repair or replace harness between BCM and front console antenna.

3.CHECK FRONT CONSOLE ANTENNA INPUT SIGNAL 2

1. Replace front console antenna (New antenna or other antenna).
2. Connect BCM and front console antenna connector.

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



Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M19	Front console antenna	61	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

Is the inspection result normal?

YES >> Replace front console antenna.
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

B2623 INSIDE KEY ANTENNA 3

Description

INFOID:0000000001504964

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

DTC Logic

INFOID:0000000001504965

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA 3 CIRCUIT	An excessive high or low voltage from rear parcel shelf antenna is sent to BCM.	• rear parcel shelf antenna • Between BCM and rear parcel shelf antenna

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

With CONSULT-III

1. Perform rear parcel shelf antenna INSIDE ANT DIAGNOSIS on “WORK SUPPORT” of “INTELLIGENT KEY”.
2. Perform “INTELLIGENT KEY” Self Diagnostic Result.

Is rear parcel shelf antenna DTC detected?

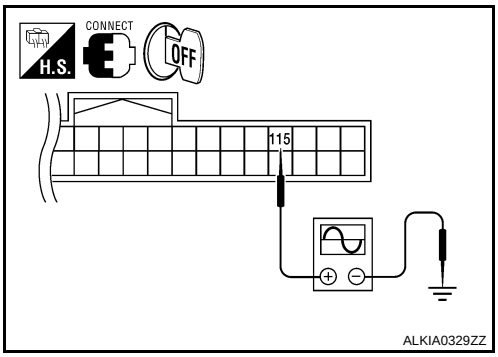
YES >> Refer to DLK-48, "Diagnosis Procedure".
NO >> rear parcel shelf antenna is OK.

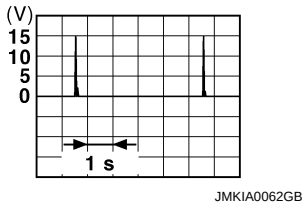
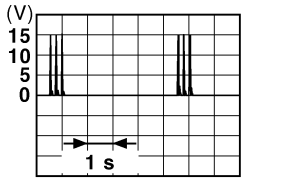
Diagnosis Procedure

INFOID:0000000001504966

1.CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 1

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



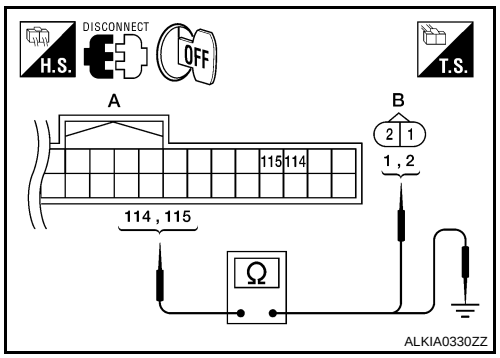
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M21	Rear parcel shelf antenna	115	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

Is the inspection result normal?

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

2. CHECK REAR PARCEL SHELF ANTENNA CIRCUIT

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



ALKIA0330ZZ

BCM connector	Terminal	Rear parcel shelf antenna connector		Terminal	Continuity
M21	114	B29	Trunk room	2	Existed
	115			1	

3. Check continuity between BCM connector and ground.

BCM connector		Terminal	Ground	Continuity
M21	Trunk room	114		Not existed
		115		

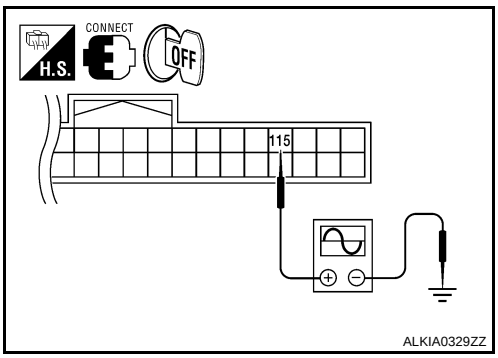
Is the inspection result normal?

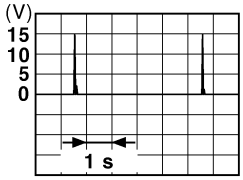
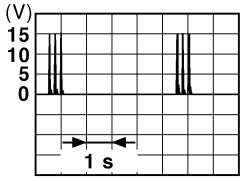
YES >> GO TO 3
NO >> Repair or replace harness between BCM and rear parcel shelf antenna.

3. CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 2

1. Replace rear parcel shelf antenna (New antenna or other antenna).
2. Connect BCM and rear parcel shelf antenna connector.

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



Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M21	Trunk room	115	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

Is the inspection result normal?

YES >> Replace rear parcel shelf antenna.
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000001504967

Refer to BCS-34, "Diagnosis Procedure".

DOOR SWITCH

Description

INFOID:0000000001504968

Detects door open/close condition.

Component Function Check

INFOID:0000000001504969

1.CHECK FUNCTION

With CONSULT-III

Check door switches DOOR SW-DR, DOOR SW-AS, DOOR SW-RL, DOOR SW-RR in DATA MONITOR mode with CONSULT-III.

Monitor item	Condition
DOOR SW-DR	CLOSE → OPEN: OFF → ON
DOOR SW-AS	
DOOR SW-RL	
DOOR SW-RR	

Is the inspection result normal?

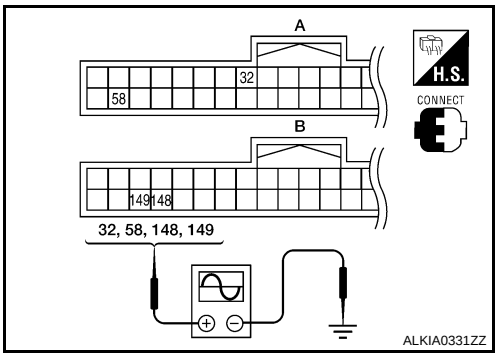
YES >> Door switch is OK.
NO >> Refer to DLK-52, "Diagnosis Procedure".

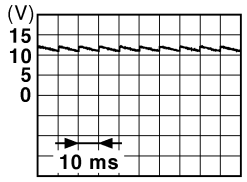
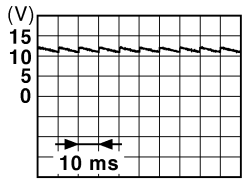
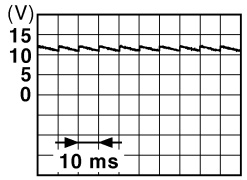
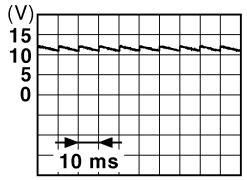
Diagnosis Procedure

INFOID:0000000001504970

1.CHECK DOOR SWITCH INPUT SIGNAL

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



Terminals (+) BCM connector	Terminals (+) Terminal	Terminals (–)	Door condition		Voltage (V) (Approx.)
A: M18	58	Ground	Driver side	OPEN	0
				CLOSE	 JPMIA0011GB
	32		Passenger side	OPEN	0
				CLOSE	 JPMIA0011GB
B: M21	148		Rear RH	OPEN	0
				CLOSE	 JPMIA0011GB
	149		Rear LH	OPEN	0
				CLOSE	 JPMIA0011GB

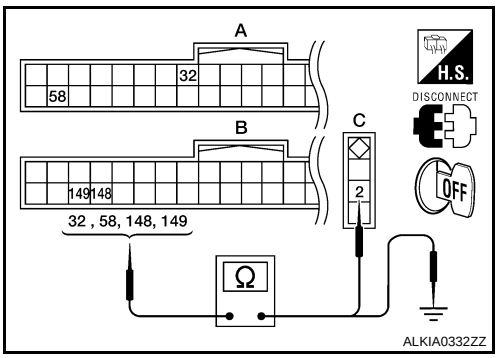
Is the inspection result normal?

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

2. CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

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



BCM connector	Terminal	Door switch connector	Terminal	Continuity
A: M18	58	C: B8 (Driver side)	2	Yes
	32	C: B108 (Passenger side)		
B: M21	148	C: B116 (Rear RH)		
	149	C: B18 (Rear LH)		

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M18	58	Ground	No
	32		
B: M21	148		
	149		

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and door switch.

3.CHECK DOOR SWITCH

Refer to DLK-54, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace malfunctioning door switch.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

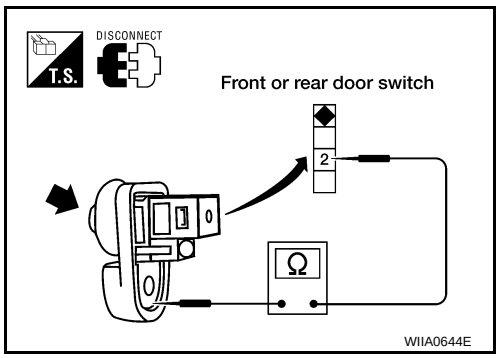
Component Inspection

INFOID:0000000001504971

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect door switch connector.

3. Check door switch.



Terminal		Door switch condition	Continuity
Door switch			
2	Ground part of door switch	Pressed	No
		Released	Yes

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace malfunction door switch.

DOOR LOCK AND UNLOCK SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001504972

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001504973

1.CHECK FUNCTION

With CONSULT-III

Check CDL LOCK SW, CDL UNLOCK SW in "DATA MONITOR" mode with CONSULT-III.

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

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.

NO >> With LH and RH anti-pinch, refer to DLK-56, "DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)".

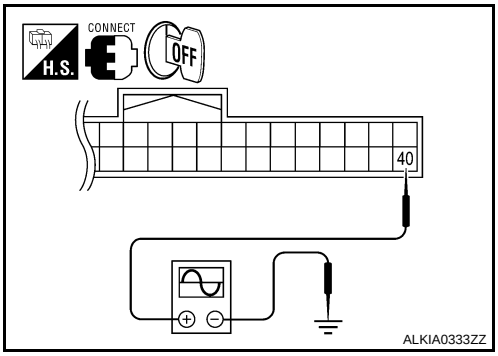
NO >> With LH anti-pinch only, refer to DLK-57, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".

DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)

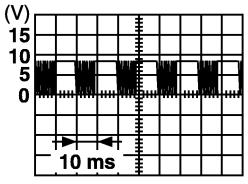
INFOID:0000000001504974

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

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



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

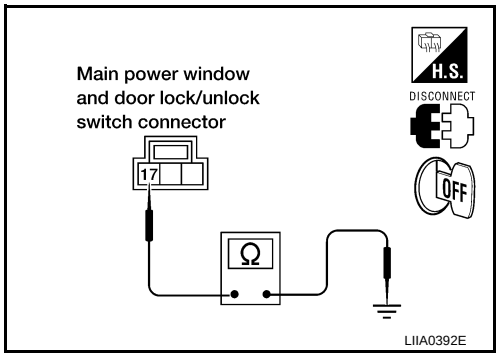
Terminal			Condition	Signal (Reference value)
(+)		(–)		
BCM connector	Terminal			
M18	40	Ground	Door is closed	

Is the inspection result normal?

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

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch connector and ground.



Main power window and door lock/unlock switch connector	Terminal		Continuity
D8	17	Ground	Yes

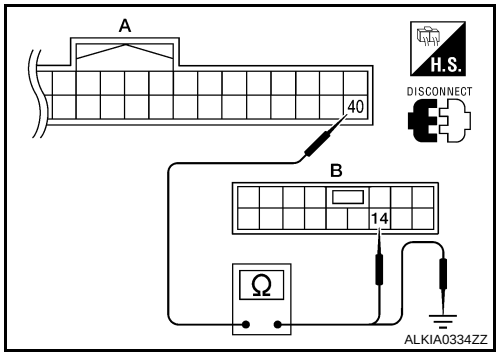
Is the inspection result normal?

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

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector M18 (A) terminal 40 and main power window and door lock/unlock switch connector D8 (B) terminal 14.

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
A: M18	40	B: D8	14	Yes



3. Check continuity between BCM connector M18 (A) terminal 40 and ground.

BCM connector	Terminal		Continuity
A: M18	40	Ground	No

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

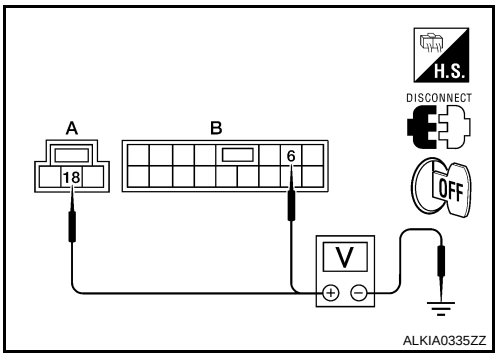
>> INSPECTION END.

DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:0000000001504975

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the main power window and door lock/unlock switch connector when the switch (driver side) is turned to “LOCK” or “UNLOCK”.



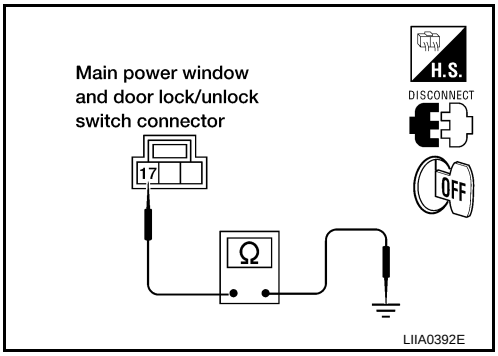
Connector	Main power window and door lock/unlock switch state	Terminal		Voltage
A: D7	Neutral → Unlock	6	Ground	Battery voltage → 0
B: D8	Neutral → Lock	18	Ground	Battery voltage → 0

Is the inspection result normal?

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

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch connector and ground.



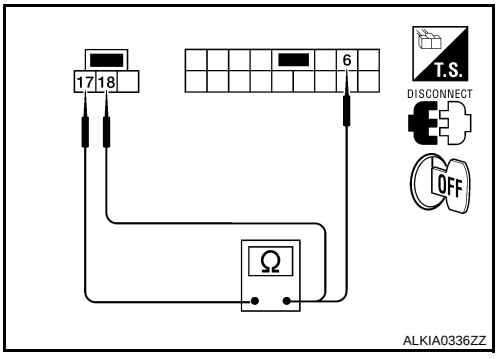
Main power window and door lock/unlock switch connector	Terminal		Continuity
D8	17	Ground	Yes

Is the inspection result normal?

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

3.CHECK POWER WINDOW SWITCH

Check continuity between main power window and door lock/unlock switch terminals.



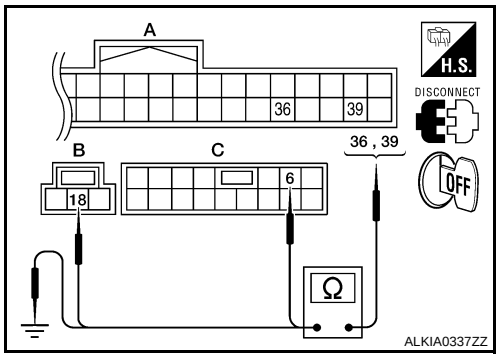
Main power window and door lock/unlock switch state	Terminals	Continuity
Lock	17 - 18	Yes
Unlock	6 - 17	Yes
Neutral	6 - 17	No
	17 - 18	No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace main power window and door lock/unlock switch.

4. CHECK POWER WINDOW SWITCH CIRCUITS

1. Disconnect BCM connector.
2. Check continuity between BCM connector and main power window and door lock/unlock switch connector.



BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
A: M18	36	B: D8	18	Yes
	39	C: D7	6	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M18	36	Ground	No
	39		

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

DRIVER SIDE : Special Repair Requirement

INFOID:0000000001504976

INITIALIZATION PROCEDURE

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

5. Inspect anti-pinch function.

CHECK ANTI-PINCH FUNCTION

1. Fully open the driver window.
2. Place a piece of wood near fully closed position.
3. Close door glass completely with AUTO-UP.

- Check that glass lowers for approximately 150 mm or 2 seconds without pinching piece of wood and stops.
- Check that glass does not rise when operating the main power window and door lock/unlock switch while lowering.

CAUTION:

- **Do not check with hands and other part of body because they may be pinched. Do not get pinched.**
- **Check that AUTO-UP operates before inspection when system initialization is performed.**
- **It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to PWC-47, "Fail Safe"**
- **Perform initial setting when auto-up operation or anti-pinch function does not operate normally.**
- **Finish initial setting. Otherwise, next operation cannot be done.**

1. Auto-up operation
2. Anti-pinch function
3. Retained power operation when ignition switch is OFF.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001504977

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001504978

1. CHECK FUNCTION

With CONSULT-III

Check CDL LOCK SW, CDL UNLOCK SW in "DATA MONITOR" mode with CONSULT-III.

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

Is the inspection result normal?

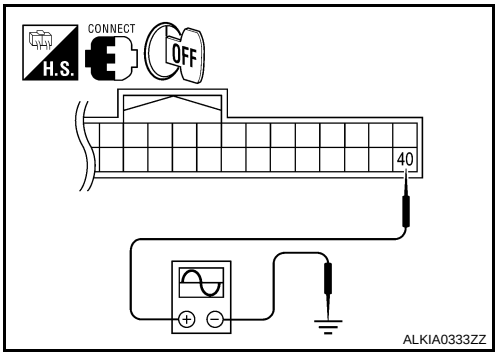
YES >> Door lock and unlock switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-60, "PASSENGER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)".
NO >> With LH anti-pinch only, refer to DLK-62, "PASSENGER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".

PASSENGER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)

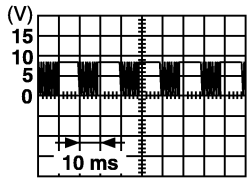
INFOID:0000000001504979

1. CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

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



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

Terminal			Condition	Signal (Reference value)
(+)		(–)		
BCM connector	Terminal			
M18	40	Ground	Door is closed	

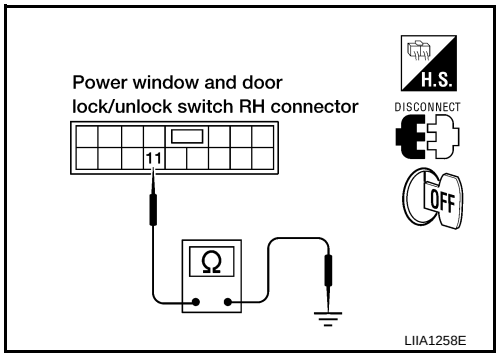
PIIA1297E

Is the inspection result normal?

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

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check continuity between front power window switch (passenger side) connector and ground.



LIIA1258E

Power window and door lock/unlock switch RH connector	Terminal		Continuity
D105	11	Ground	Yes

Is the inspection result normal?

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

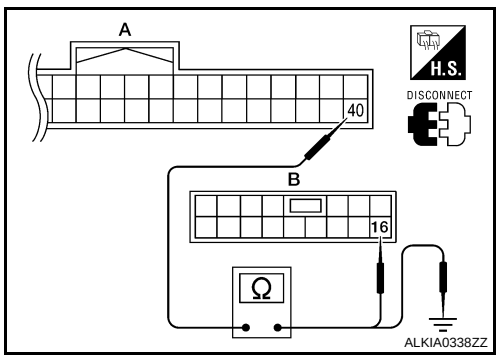
3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector M18 (A) terminal 40 and front power window switch (passenger side) connector D105 (B) terminal 16.

BCM connector	Terminal	Front power window switch (passenger side) connector	Terminal	Continuity
A: M18	40	B: D105	16	Yes

3. Check continuity between BCM connector M18 (A) terminal 40 and ground.

BCM connector	Terminal		Continuity
A: M18	40	Ground	No



ALKIA0338ZZ

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

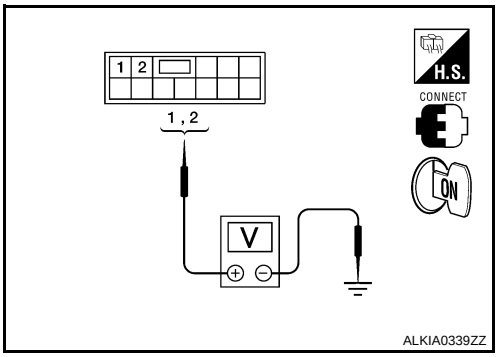
YES >> INSPECTION END.

PASSENGER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:0000000001504980

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the power window and door lock/unlock switch RH connector when the switch (passenger side) is turned to “LOCK” or “UNLOCK”.



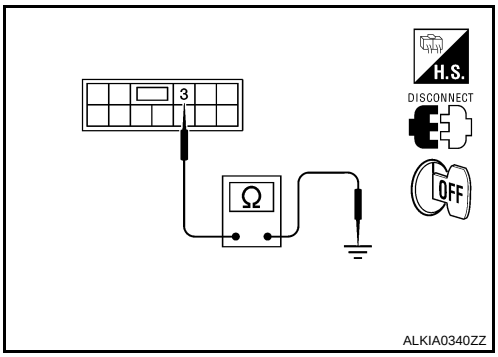
Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage
D105	Neutral → Lock	2	Ground	Battery voltage → 0
	Neutral → Unlock	1	Ground	Battery voltage → 0

Is the inspection result normal?

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

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check continuity between power window and door lock/unlock switch RH connector and ground.



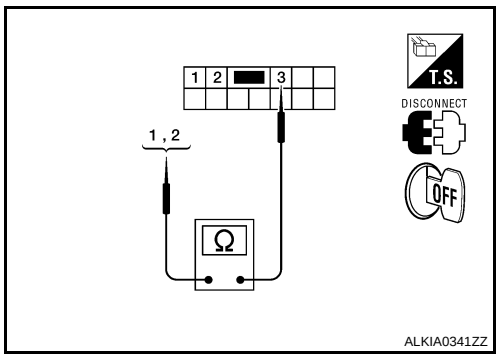
Power window and door lock/unlock switch RH connector	Terminal		Continuity
D105	3	Ground	Yes

Is the inspection result normal?

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

3.CHECK POWER WINDOW SWITCH

Check continuity between power window and door lock/unlock switch RH terminals.



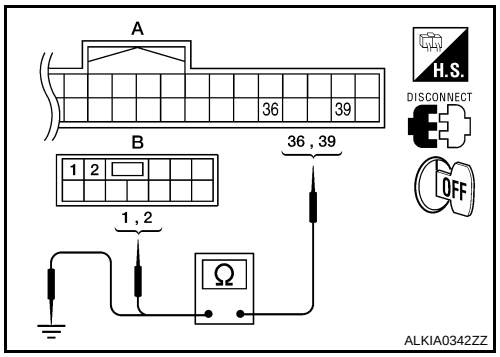
Power window and door lock/unlock switch RH state	Terminals	Continuity
Lock	2 - 3	Yes
Unlock	1 - 3	Yes
Neutral	2 - 3	No
	1 - 3	No

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace power window and door lock/unlock switch RH.

4. CHECK POWER WINDOW SWITCH CIRCUITS

1. Disconnect BCM connector.
2. Check continuity between BCM connector M18 (A) terminals 36, 39 and power window and door lock/unlock switch RH connector D105 (B) terminals 1 and 2.



BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
A: M18	36	B: D105	1	Yes
	39		2	Yes

3. Check continuity between BCM connector M18 (A) terminals 36, 39 and ground.

BCM connector	Terminal		Continuity
A: M18	36	Ground	No
	39		

Is the inspection result normal?

YES >> GO TO 5
NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

PASSENGER SIDE : Special Repair Requirement

INFOID:0000000001504981

NOTE:
This procedure is applicable to vehicles equipped with front LH and RH anti-pinch windows only.

INITIALIZATION PROCEDURE

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

CHECK ANTI-PINCH FUNCTION

1. Fully open the door window.
2. Place a piece of wood near fully closed position.
3. Close door glass completely with AUTO-UP.

- Check that glass lowers for approximately 150 mm or 2 seconds without pinching piece of wood and stops.
- Check that glass does not rise when operating the power window main switch while lowering.

CAUTION:

- **Do not check with hands and other part of body because they may be pinched. Do not get pinched.**
- **Check that AUTO-UP operates before inspection when system initialization is performed.**
- **It may switch to fail-safe mode if open/close operation is performed continuously. Perform initial setting in that situation. Refer to DLK-154, "Fail Safe"**
- **Perform initial setting when auto-up operation or anti-pinch function does not operate normally.**
- **Finish initial setting. Otherwise, next operation cannot be done.**

1. **Auto-up operation**
2. **Anti-pinch function**
3. **Retained power operation when ignition switch is OFF.**

KEY SLOT

Description

INFOID:0000000001504982

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

Component Function Check

INFOID:0000000001504983

1.CHECK FUNCTION

With CONSULT-III
Check KEY SW -SLOT in "DATA MONITOR" mode with CONSULT-III.

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

Is the inspection result normal?

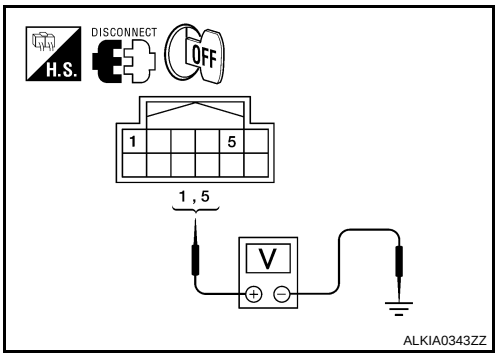
YES >> Key slot is OK.
NO >> Refer to DLK-65, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001504984

1.CHECK KEY SLOT POWER SUPPLY CIRCUIT

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



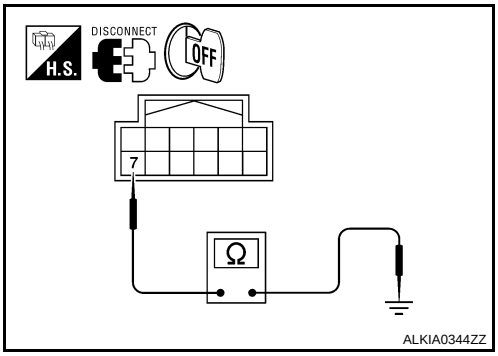
Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key slot connector	Terminal		
M40	1	Ground	Battery voltage
	5		

Is the inspection result normal?

YES >> GO TO 2
NO >> Repair or replace key slot power supply circuit.

2.CHECK KEY SLOT GROUND CIRCUIT

Check continuity between key slot connector and ground.



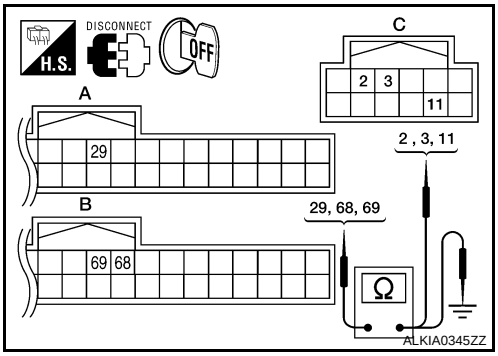
Key slot connector	Terminal	Ground	Continuity
M40	7		Yes

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace key slot ground circuit.

3.CHECK KEY SLOT CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector M18 (A) terminal 29, M19 (B) terminals 68, 69 and key slot connector M40 (C) terminals 2, 3, 11.



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

3. Check continuity between BCM connector M18 (A) terminal 29, M19 (B) terminals 68, 69 and ground.

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

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace harness between BCM and key slot.

4.CHECK KEY SLOT

Refer to DLK-67, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace key slot.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

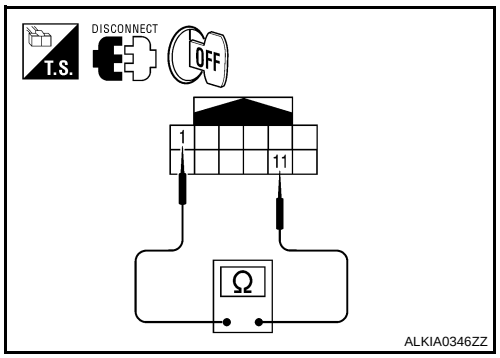
>> INSPECTION END

Component Inspection

INFOID:0000000001504985

1.CHECK KEY SLOT

Check key slot.



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

Is the inspection result normal?

OK >> INSPECTION END.
NG >> Replace key slot.

KEY CYLINDER SWITCH

Description

INFOID:0000000001504986

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

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

Component Function Check

INFOID:0000000001504987

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check KEY CYL LK-SW and KEY CYL UN-SW in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT-III. Refer to DLK-5, "Work Flow".

Monitor item	Condition	
KEY CYL LK-SW	Lock	: ON
	Neutral / Unlock	: OFF
KEY CYL UN-SW	Unlock	: ON
	Neutral / Lock	: OFF

Is the inspection result normal?

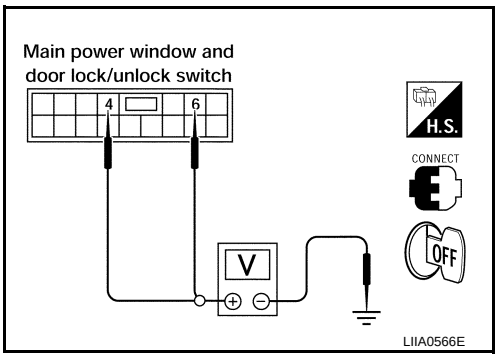
YES >> Key cylinder switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-68, "Diagnosis Procedure (With LH and RH Anti-Pinch)".
NO >> With LH anti-pinch only, refer to DLK-70, "Diagnosis Procedure (With LH Anti-Pinch Only)".

Diagnosis Procedure (With LH and RH Anti-Pinch)

INFOID:0000000001504988

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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



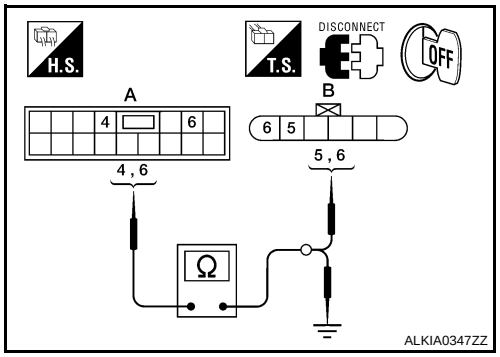
Terminals			Key position	Voltage (V) (Approx.)
(+)		(–)		
Main power window and door lock/unlock switch connector	Terminal			
D7	4	Ground	Lock	0
			Neutral / Unlock	Battery voltage
	6		Unlock	0
			Neutral / Lock	Battery voltage

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to DLK-198, "FRONT DOOR LOCK : Removal and Installation". After that, Refer to PWC-8, "BASIC INSPECTION : Special Repair Requirement".
NO >> GO TO 2

2.CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector and front door lock assembly LH (key cylinder switch) connector.
3. Check continuity between main power window and door lock/unlock switch connector (A) and front door lock assembly LH (key cylinder switch) connector (B).



Main power window and door lock/unlock switch connector	Terminal	Front door lock assembly LH (key cylinder switch) connector	Terminal	Continuity
A: D7	4	B: D10	6	Yes
	6		5	

4. Check continuity between main power window and door lock/unlock switch connector and ground.

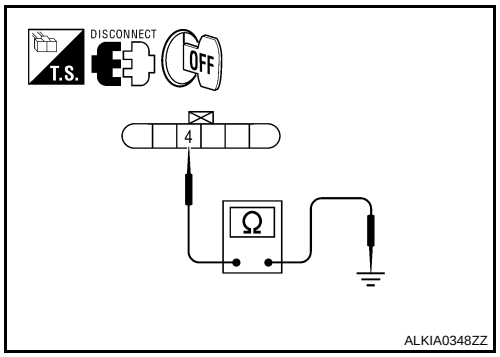
Power window main switch connector	Terminal	Ground	Continuity
A: D7	4		No
	6		

Is the inspection result normal?

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

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly LH connector and ground.



Front door lock assembly LH connector	Terminal	Ground	Continuity
D10	4		Yes

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace harness.

4.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-71, "Component Inspection".

Is the inspection result normal?

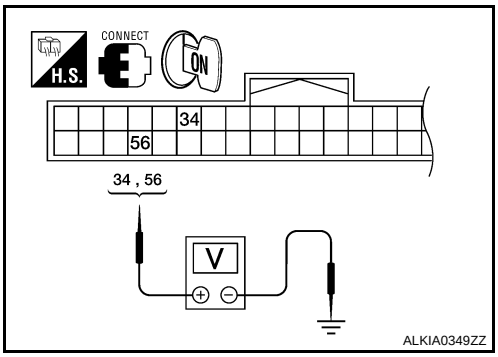
YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace front door lock assembly LH (key cylinder switch). Refer to DLK-198, "FRONT DOOR LOCK : Removal and Installation". After that, Refer to DLK-72, "Special Repair Requirement".

Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:0000000001504989

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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



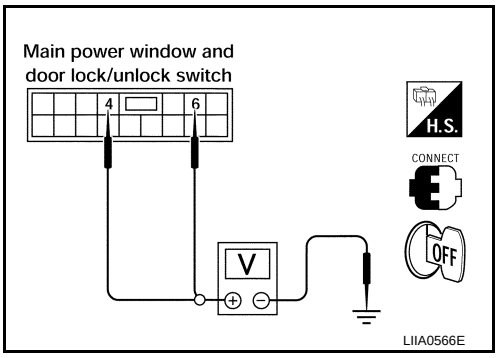
Terminals			Key position	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	56	Ground	Lock	0
			Neutral / Unlock	Battery voltage
	34		Unlock	0
			Neutral / Lock	Battery voltage

Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-60, "Removal and Installation". After that, Refer to PWC-8, "BASIC INSPECTION : Special Repair Requirement".
NO >> GO TO 2

2.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH (key cylinder switch) connector.
3. Check continuity between front door lock assembly LH (key cylinder switch) connector and ground.



Front door lock assembly LH connector	Terminal	Ground	Continuity
D10	4		Yes

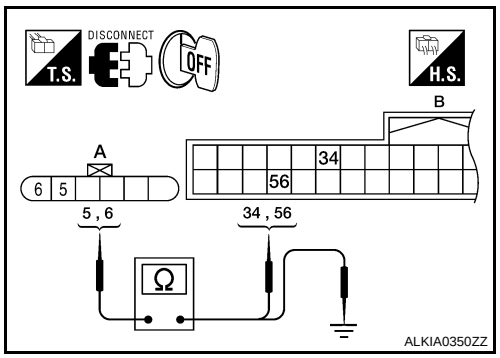
Is the inspection result normal?

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

3.CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Disconnect BCM connector M18.

2. Check continuity between front door lock assembly LH (key cylinder switch) connector D10 (A) terminals 5, 6 and BCM connector M18 (B) terminals 34, 35.



Front door lock assembly LH connector	Terminal	BCM connector	Terminal	Continuity
A: D10	5	B: M18	34	Yes
	6		56	

3. Check continuity between front door lock assembly LH (key cylinder switch) connector D10 (A) terminals 5, 6 and ground.

Front door lock assembly LH connector	Terminal	Ground	Continuity
A: D10	5		No
	6		

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace harness.

4.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-71, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace front door lock assembly LH (key cylinder switch). Refer to DLK-198, "FRONT DOOR LOCK : Removal and Installation". After that, Refer to PWC-8, "BASIC INSPECTION : Special Repair Requirement".

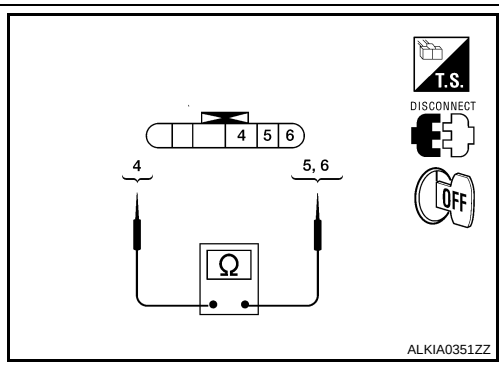
Component Inspection

INFOID:0000000001504990

COMPONENT INSPECTION

1.CHECK DOOR KEY CYLINDER SWITCH

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



Terminal		Key position	Continuity
Front door lock assembly LH (key cylinder switch)			
5	4	Unlock	Yes
		Neutral / Lock	No
6		Lock	Yes
		Neutral / Unlock	No

Is the inspection result normal?

YES >> Key cylinder switch is OK.
NO >> Replace front door lock assembly LH (key cylinder switch). Refer to DLK-198, "FRONT DOOR LOCK : Removal and Installation". After that, refer to DLK-72, "Special Repair Requirement".

Special Repair Requirement

INFOID:0000000001504991

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure.
Refer to PWC-8, "BASIC INSPECTION : Special Repair Requirement".

Is the inspection result normal?

YES >> Inspection end.
NO >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

UNLOCK SENSOR

Description

INFOID:0000000001504992

Detects door lock condition of driver door.

Component Function Check

INFOID:0000000001504993

1.CHECK FUNCTION

With CONSULT-III

Check unlock sensor DR DOOR STATE in “DATA MONITOR” mode.

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

Is the inspection result normal?

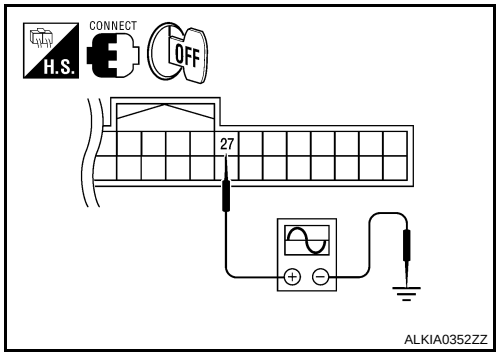
YES >> Unlock sensor is OK.
NO >> Refer to DLK-73, "Diagnosis Procedure".

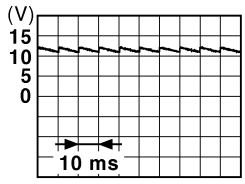
Diagnosis Procedure

INFOID:0000000001504994

1.CHECK UNLOCK SENSOR POWER SUPPLY

Check signal between BCM connector and ground with oscilloscope.



Terminals			Front door lock assembly LH consition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	27	Ground	Locked	
			Unlocked	0

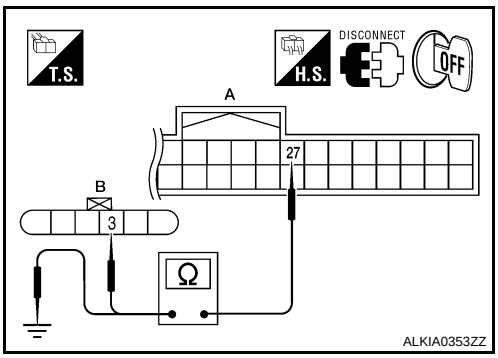
Is the inspection result normal?

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

2.CHECK UNLOCK SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front door lock assembly LH connector.

3. Check continuity between BCM connector M18 (A) terminal 27 and front door lock assembly LH connector D10 (B) terminal 3.



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

4. Check continuity between BCM connector and ground.

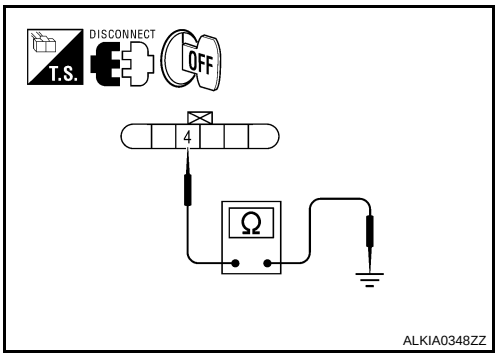
BCM connector	Terminal	Ground	Continuity
A: M18	27		No

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and front door lock assembly LH.

3. CHECK UNLOCK SENSOR GROUND CIRCUIT

Check continuity between front door lock assembly LH connector and ground.



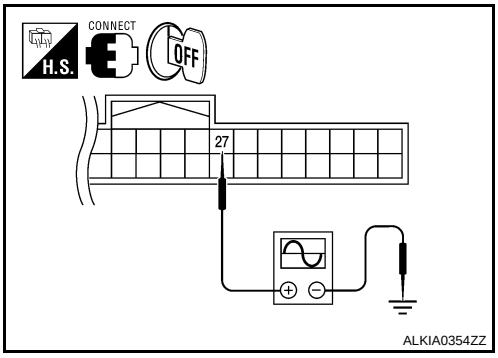
Front door lock assembly LH connector	Terminal	Ground	Continuity
D10	4		Yes

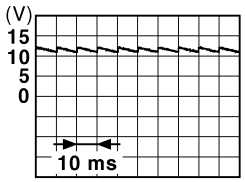
Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

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



Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M18	27	Ground	

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Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. BCS-78, "Removal and Installation"

5.CHECK UNLOCK SENSOR

Refer to DLK-75, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6
NO >> Replace front door lock assembly LH. Refer to DLK-198, "FRONT DOOR LOCK : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

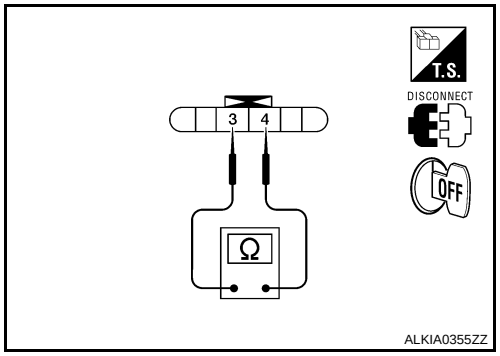
>> INSPECTION END.

Component Inspection

INFOID:0000000001504995

1.CHECK UNLOCK SENSOR

Check unlock sensor.



ALKIA0355ZZ

Terminal		Front door lock assembly LH condition	Continuity
Front door lock assembly LH			
3	4	Unlock	Yes
		Lock	No

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace front lock assembly LH. Refer to DLK-198, "FRONT DOOR LOCK : Removal and Installation".

TRUNK LID OPENER SWITCH

Description

INFOID:0000000001504996

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000001504997

1.CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

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

Yes >> Turn off trunk lid opener cancel switch.
No >> GO TO 2

2.CHECK FUNCTION

With CONSULT-III

Check trunk lid opener switch TR/BD OPEN SW in “DATA MONITOR" mode with CONSULT-III.

- When trunk lid opener switch is turned to “ON”.

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

Is the inspection result normal?

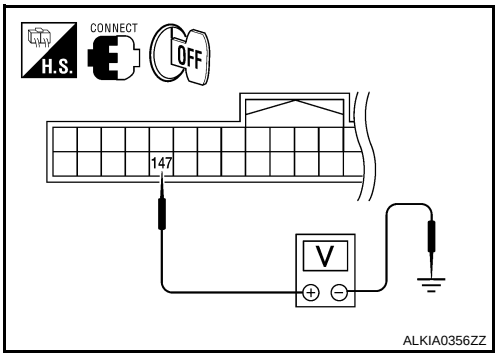
YES >> Trunk lid opener switch is OK.
NO >> Refer to DLK-76, "Diagnosis Procedure".

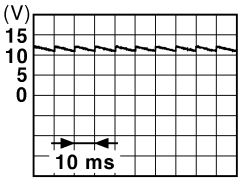
Diagnosis Procedure

INFOID:0000000001504998

1.CHECK TRUNK LID OPEN INPUT SIGNAL

1. Remove Intelligent Key from key slot.
2. Turn on trunk lid opener cancel switch.
3. Check voltage between BCM connector M21 terminal 147 and ground with an oscilloscope.



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

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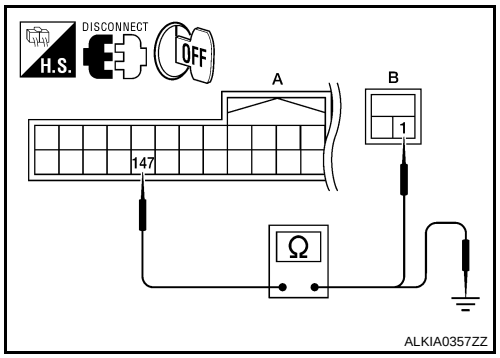
Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector M21 (A) terminal 147 and trunk lid opener switch connector M75 (B) terminal 1.



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

3. Check continuity between BCM connector M21 (A) terminal 147 and ground.

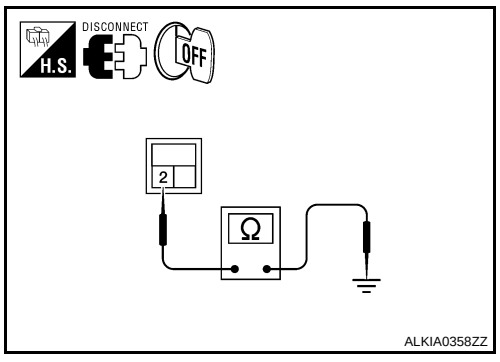
BCM connector	Terminal	Ground	Continuity
A: M21	147		No

Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch connector and ground.



ALKIA0358ZZ

Trunk lid opener switch	Terminal	Ground	Continuity
M75	2		Yes

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace harness.

4.CHECK TRUNK LID OPENER SWITCH

Refer to DLK-78, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace trunk lid opener switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

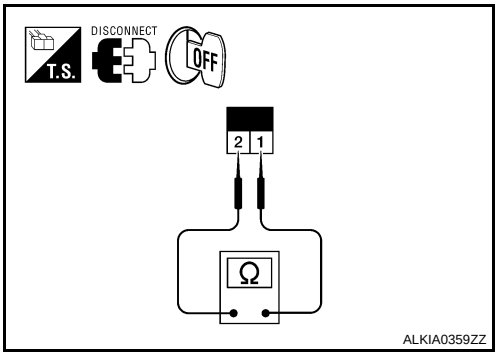
>> INSPECTION END.

Component Inspection

INFOID:0000000001504999

1.CHECK TRUNK LID OPENER SWITCH

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



Terminal		Condition	Continuity
Trunk lid opener switch			
1	2	ON (press and hold)	Yes
		OFF (release)	No

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace trunk lid opener switch.

TRUNK LID OPENER CANCEL SWITCH

Description

INFOID:0000000001505000

Cancels trunk lid open operation.

Component Function Check

INFOID:0000000001505001

1.CHECK FUNCTION

With CONSULT-III

Check trunk lid opener cancel switch TR CANCEL SW in "DATA MONITOR" mode with CONSULT-III.

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

Is the inspection result normal?

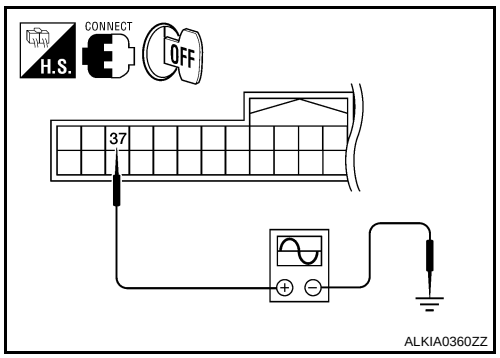
YES >> Trunk lid opener cancel switch is OK.
NO >> Refer to DLK-79, "Diagnosis Procedure".

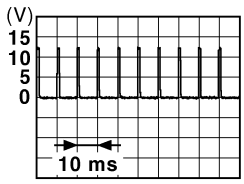
Diagnosis Procedure

INFOID:0000000001505002

1.CHECK TRUNK LID OPENER CANCEL SIGNAL

1. Check voltage between BCM connector and ground with an oscilloscope.



Terminals			Condition of trunk lid opener cancel switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	37	Ground	ON (press and hold)	0
			OFF (cancel)	

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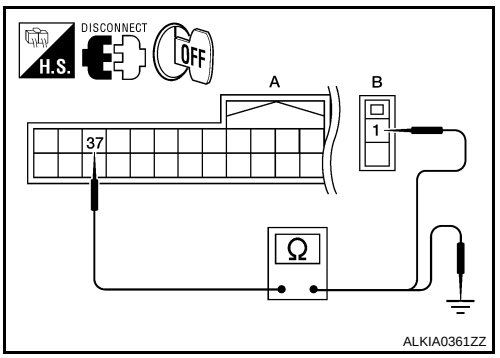
Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER CANCEL SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM connector M18 (A) terminal 37 and trunk lid opener cancel switch connector M74 (B) terminal 1.



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

3. Check continuity between BCM connector and ground.

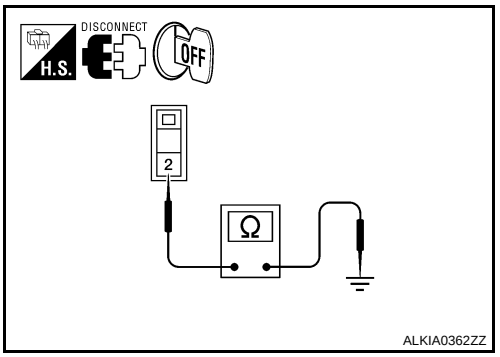
BCM connector	Terminal	Ground	Continuity
A: M18	37		No

Is the inspection result normal?

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

3. CHECK TRUNK LID OPENER CANCEL SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch connector and ground.



Trunk lid opener cancel switch	Terminal	Ground	Continuity
M74	2		Yes

Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace harness.

4. CHECK TRUNK LID OPENER CANCEL SWITCH

Refer to DLK-81, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace trunk lid opener cancel switch.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

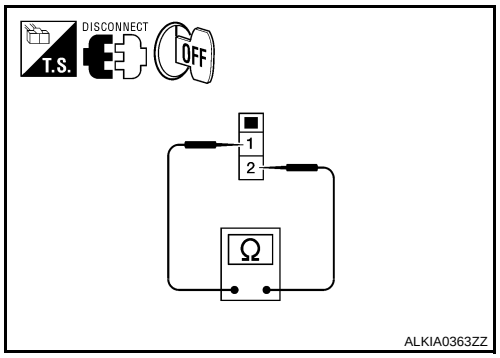
>> INSPECTION END.

Component Inspection

INFOID:0000000001505003

1. CHECK TRUNK LID OPENER CANCEL SWITCH

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



Terminal		Condition	Continuity
Trunk lid opener switch			
1	2	ON	Yes
		OFF (cancel)	No

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace trunk lid opener cancel switch.

TRUNK ROOM LAMP SWITCH

Description

INFOID:0000000001505004

Detects trunk open/close condition.

Component Function Check

INFOID:0000000001505005

1.CHECK FUNCTION

With CONSULT-III

Check TRNK/HAT MNTR in "DATA MONITOR" mode with CONSULT-III.

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

Is the inspection result normal?

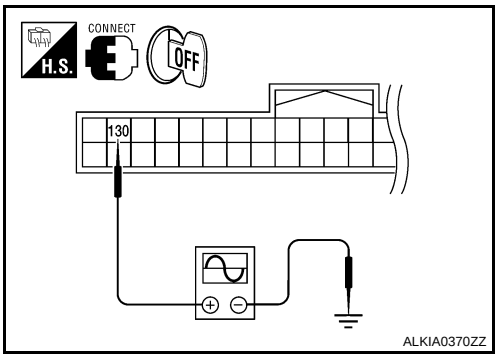
YES >> Trunk room lamp switch is OK.
NO >> Refer to DLK-82, "Diagnosis Procedure".

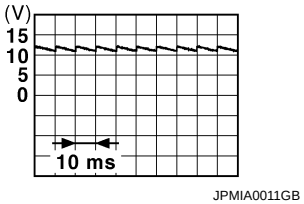
Diagnosis Procedure

INFOID:0000000001505006

1.CHECK TRUNK LAMP SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector and ground using an oscilloscope.



Terminals			Trunk condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	130	Ground	OPEN	0
			CLOSE	

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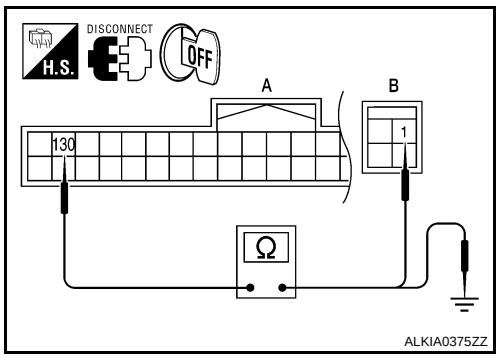
Is the inspection result normal?

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

2.CHECK TRUNK LAMP SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM connector M21 (A) terminal 130 and trunk lamp switch and trunk release solenoid connector B28 (B) terminal 1.



BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
A: M21	130	B: B28	1	Yes

3. Check continuity between BCM connector M21 (A) terminal 130 and ground.

BCM connector	Terminal	Ground	Continuity
A: M21	130		No

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and trunk lamp switch and trunk release solenoid.

3.CHECK TRUNK LAMP SWITCH GROUND CIRCUIT

Check continuity between trunk lid lock assembly connector and ground.

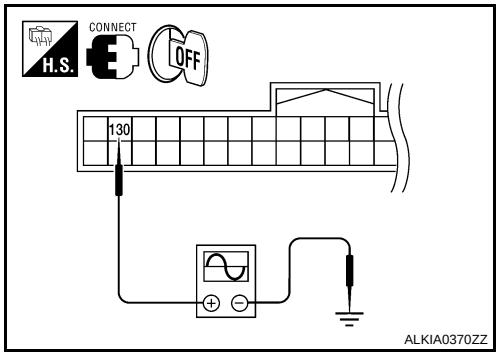
Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B28	2		Yes

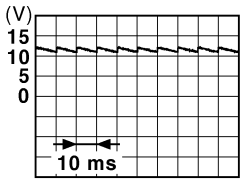
Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace trunk lamp switch and trunk release solenoid ground circuit.

4.CHECK BCM OUTPUT SIGNAL

1. Insure trunk remains closed during this step.
2. Connect BCM connector.
3. Check voltage between BCM connector and ground.



Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M21	130	Ground	

JPMIA0011GB

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

5.CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-84, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6
NO >> Replace trunk lamp switch and trunk release solenoid.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

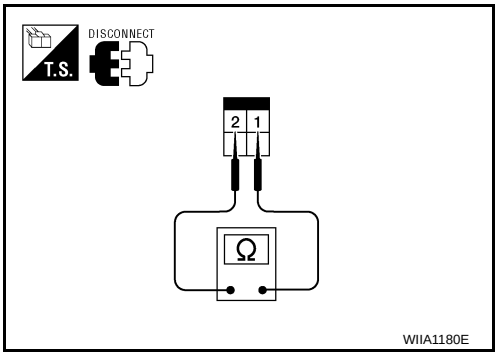
>> INSPECTION END.

Component Inspection

INFOID:0000000001505007

1.CHECK TRUNK LAMP SWITCH

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



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

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace trunk lamp switch and trunk release solenoid.

DOOR REQUEST SWITCH

Description

INFOID:0000000001505008

Transmits lock/unlock operation to BCM.

Component Function Check

INFOID:0000000001505009

1.CHECK FUNCTION

With CONSULT-III

Check door request switch REQ SW-DR, REQ SW-AS in "DATA MONITOR" mode.

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

Is the inspection result normal?

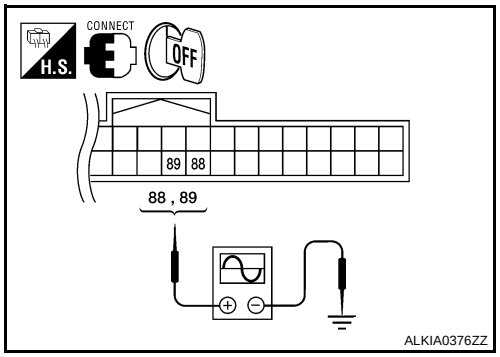
YES >> Door request switch is OK.
NO >> Refer to DLK-85, "Diagnosis Procedure".

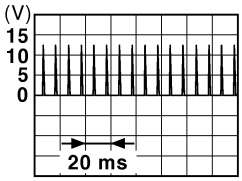
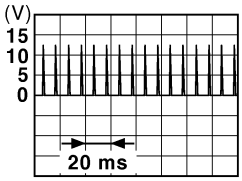
Diagnosis Procedure

INFOID:0000000001505010

1.CHECK DOOR REQUEST SWITCH OUTPUT SIGNAL

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



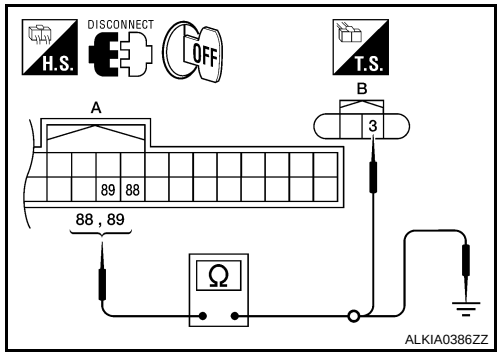
Terminals				Door request switch Condition	Voltage (V) (Approx.)
(+)			(–)		
BCM connector		Terminal			
M19	Door request switch (driver side)	89	Ground	Pressed	0
				Released	 JMKIA0059GB
	Door request switch (passenger side)	88		Pressed	0
				Released	 JMKIA0059GB

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM and front outside handle connector.
2. Check continuity between BCM connector M19 (A) terminals 88, 89 and front outside handle connector LH D6 or RH D106 (B) terminal 3.



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BCM connector	Terminal	Front outside handle connector	Terminal	Continuity
A: M19	89	B: D6 (driver side)	3	Yes
	88	B: D106 (passenger side)		

3. Check continuity between BCM connector M19 (A) terminals 88, 89 and ground.

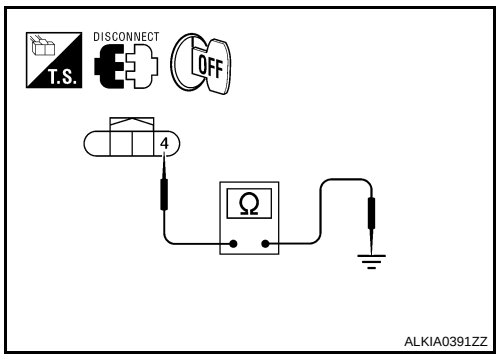
BCM connector	Terminal	Ground	Continuity
A: M19	89		No
	88		

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and front outside handle.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front outside handle connector and ground.



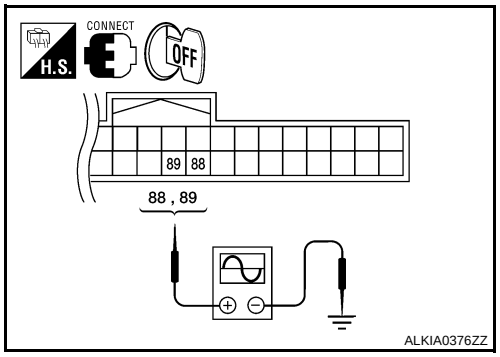
Front outside handle connector	Terminal	Ground	Continuity
D6 (driver side)	4		Yes
D106 (passenger side)			

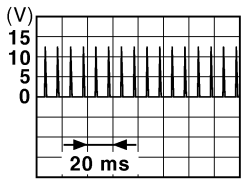
Is the inspection result normal?

YES >> GO TO 4
NO >> Repair or replace front outside handle ground circuit.

4. CHECK BCM OUTPUT SIGNAL

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



Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M19	89	Ground	
	88		

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Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

5. CHECK DOOR REQUEST SWITCH

Refer to DLK-88, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6

NO >> Replace malfunctioning front outside handle.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

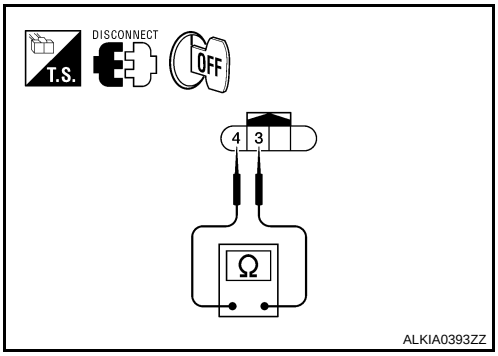
>> INSPECTION END

Component Inspection

INFOID:0000000001505011

1.CHECK DOOR REQUEST SWITCH

Check front outside handle (request switch).



Terminal		Door request switch condition	Continuity
Front outside handle (request switch)			
3	4	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace malfunctioning front outside handle.

TRUNK OPENER REQUEST SWITCH

Description

INFOID:0000000001505012

Performs trunk lid open request when it is pressed.

Component Function Check

INFOID:0000000001505013

1.CHECK FUNCTION

With CONSULT-III

Check trunk opener request switch REQ SW -BD/TR in "DATA MONITOR" mode.

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

Is the inspection result normal?

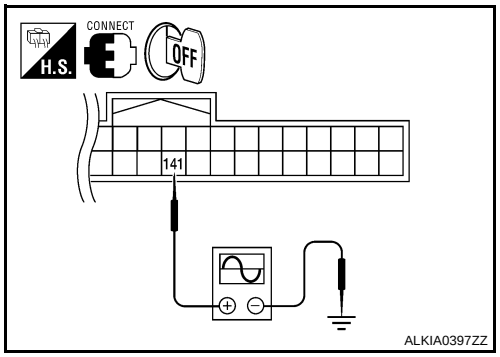
YES >> Trunk opener request switch is OK.
NO >> Refer to DLK-89, "Diagnosis Procedure".

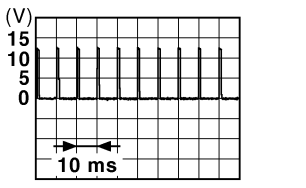
Diagnosis Procedure

INFOID:0000000001505014

1.CHECK TRUNK OPENER REQUEST SWITCH OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector and ground using an oscilloscope.



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

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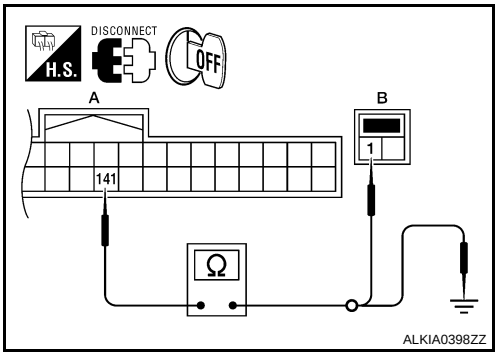
Is the inspection result normal?

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

2.CHECK TRUNK OPENER REQUEST SWITCH CIRCUIT

1. Disconnect BCM and trunk opener request switch connector.

2. Check continuity between BCM connector M21 (A) terminal 141 and trunk opener request switch connector B33 (B) terminal 1.



BCM connector	Terminal	Trunk opener request switch connector	Terminal	Continuity
A: M21	141	B: B33	1	Yes

3. Check continuity between BCM connector M21 (A) terminal 141 and ground.

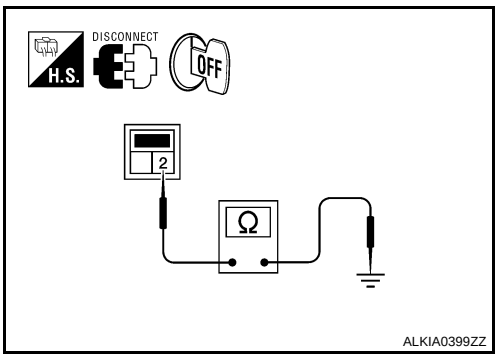
BCM connector	Terminal	Ground	Continuity
A: M21	141		No

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and trunk opener request switch.

3.CHECK TRUNK OPENER REQUEST SWITCH GROUND CIRCUIT

Check continuity between trunk opener request switch connector and ground.



Trunk opener request switch connector	Terminal	Ground	Continuity
B33	2		Yes

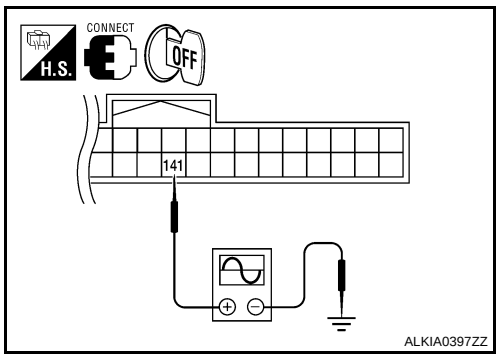
Is the inspection result normal?

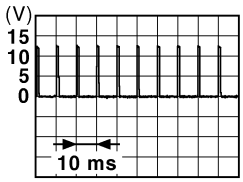
YES >> GO TO 4
NO >> Repair or replace trunk opener request switch ground circuit.

4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM connector and ground.



Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M21	141	Ground	

JPMIA0016GB

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-78, "Removal and Installation".

5.CHECK TRUNK OPENER REQUEST SWITCH

Refer to DLK-91, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6
NO >> Replace trunk opener request switch.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

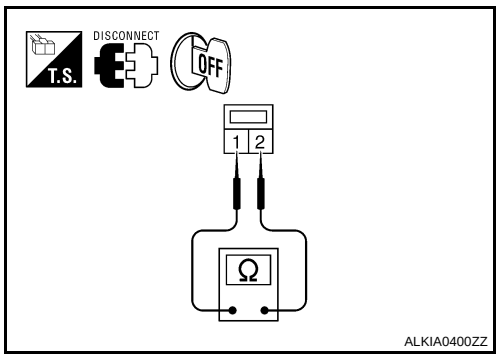
>> INSPECTION END.

Component Inspection

INFOID:0000000001505015

1.CHECK TRUNK OPENER REQUEST SWITCH

Check trunk opener request switch.



Terminal		Trunk opener request switch condition	Continuity
Trunk opener request switch			
1	2	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace trunk opener request switch.

DOOR LOCK ACTUATOR

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001505016

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001505017

1.CHECK FUNCTION

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

Is the inspection result normal?

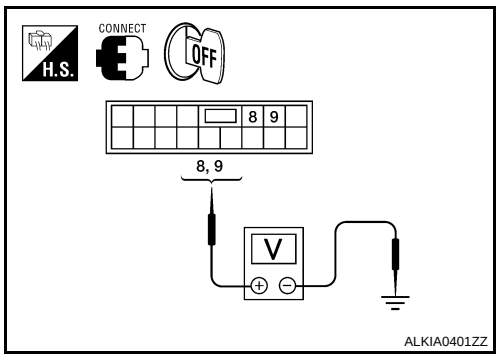
YES >> Door lock actuator is OK.
NO >> Refer to DLK-93, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001505018

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector M17 terminals 8, 9 and ground.



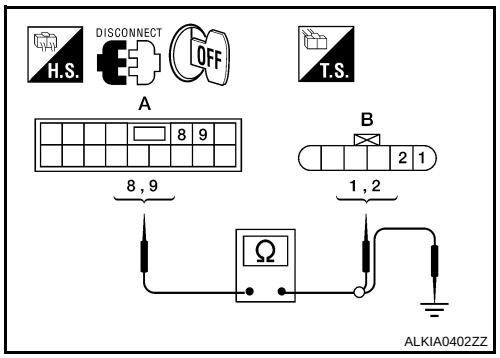
Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	8	Ground	Lock	0 → Battery voltage → 0
	9		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and front door lock actuator driver side connector.
3. Check continuity between BCM connector M17 (A) terminals 8, 9 and front door lock actuator driver side connector D10 (B) terminals 1, 2.



BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
A: M17	8	B: D10	1	Yes
	9		2	

4. Check continuity between BCM connector M17 (A) terminals 8, 9 and ground.

BCM connector	Terminal		Continuity
A: M17	8	Ground	No
	9		

Is the inspection result normal?

YES >> Replace front door lock actuator LH.
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001505019

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001505020

1.CHECK FUNCTION

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

Is the inspection result normal?

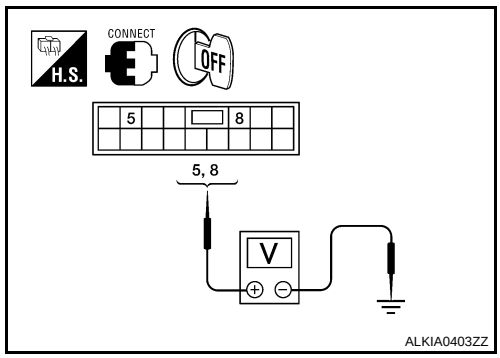
YES >> Door lock actuator is OK.
NO >> Refer to DLK-94, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001505021

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.



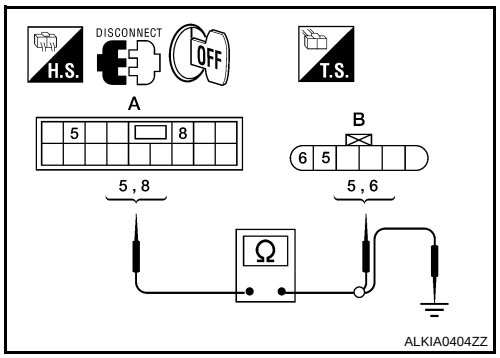
Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	8	Ground	Lock	0 → Battery voltage → 0
	5		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM and front door lock actuator RH connectors.
2. Check continuity between BCM connector M17 (A) terminals 5, 8 and front door lock actuator RH D108 (B) terminals 5, 6.



BCM connector	Terminal	Front door lock actuator RH connector	Terminal	Continuity
A: M17	8	B: D108	5	Yes
	5		6	

3. Check continuity between BCM connector M17 (A) terminals 5, 8 and ground.

BCM connector	Terminal		Continuity
A: M17	8	Ground	No
	5		

Is the inspection result normal?

YES >> Replace front door lock actuator RH.
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

REAR LH

REAR LH : Description

INFOID:0000000001505022

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001505023

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-95, "REAR LH : Diagnosis Procedure".

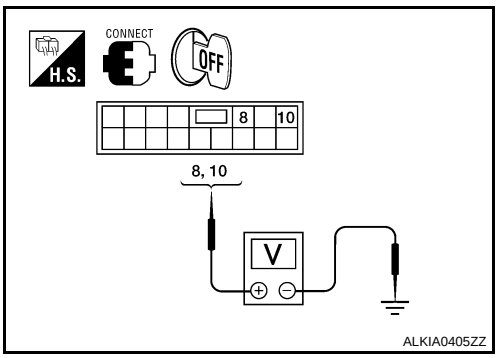
REAR LH : Diagnosis Procedure

INFOID:0000000001505024

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector M17 terminals 8, 10 and ground.

Check trunk lamp switch.



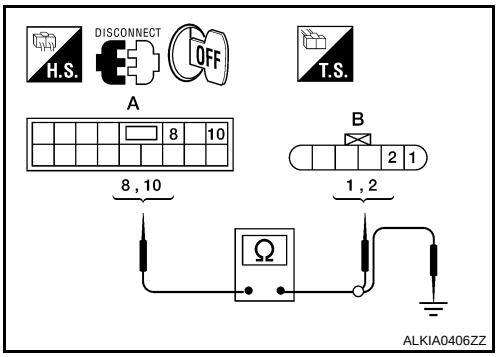
Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	8	Ground	Lock	0 → Battery voltage → 0
	10		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM and rear door lock actuator LH connectors.
2. Check continuity between BCM connector M17 (A) terminals 8, 10 and rear door lock actuator LH connectors D205 (B) terminals 1, 2.



BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
A: M17	8	B: D205	1	Yes
	10		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M17	8	Ground	No
	10		

Is the inspection result normal?

YES >> Replace rear door lock actuator LH.
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

REAR RH

REAR RH : Description

INFOID:0000000001505025

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001505026

1.CHECK FUNCTION

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

Is the inspection result normal?

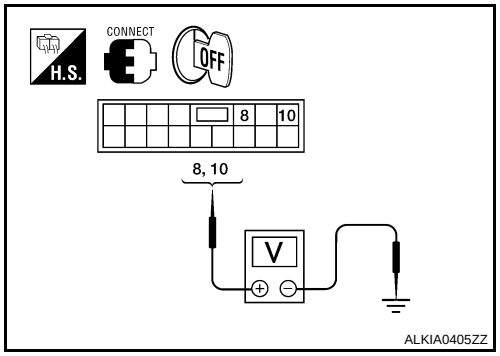
YES >> Door lock actuator is OK.
NO >> Refer to DLK-97, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000001505027

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector M17 terminals 8, 10 and ground.



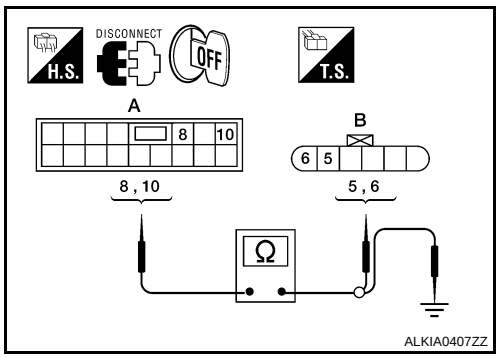
Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	8	Ground	Lock	0 → Battery voltage → 0
	10		Unlock	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM and rear door lock actuator RH connectors.
2. Check continuity between BCM connector M17 (A) terminals 8, 10 and rear door lock actuator RH connector D305 (B) terminals 5, 6.



BCM connector	Terminal	Door lock actuator connector	Terminal	Continuity
A: M17	8	B: D305	5	Yes
	10		6	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M17	8	Ground	No
	10		

Is the inspection result normal?

YES >> Replace rear door lock actuator RH.
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

TRUNK LID OPENER ACTUATOR

Description

INFOID:0000000001505028

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000001505029

1.CHECK TRUNK LID OPENER CANCEL SWITCH

Check trunk lid opener cancel switch position.

Is trunk lid opener cancel switch turned OFF (CANCEL)?

Yes >> Turn on trunk lid opener cancel switch.
No >> GO TO 2.

2.CHECK FUNCTION

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

Is the inspection result normal?

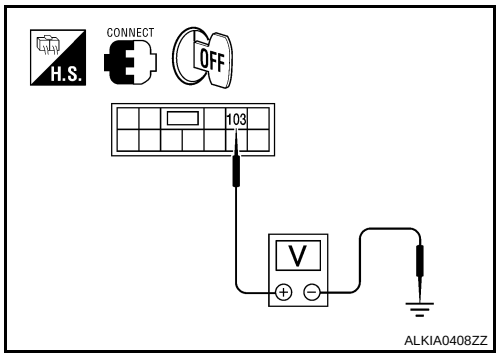
YES >> Trunk lid opener actuator is OK.
NO >> Refer to DLK-99, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001505030

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.



Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M20	103	Ground	ON	0 → Battery voltage → 0

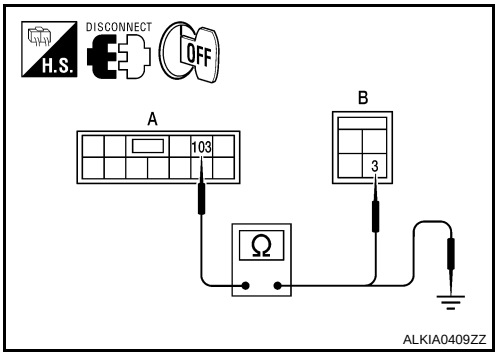
Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and trunk lamp switch and trunk release solenoid connector.

3. Check continuity between BCM connector M20 (A) terminal 103 and trunk lamp switch and trunk release solenoid connector B28 (B) terminal 3.



BCM connector	Terminal	trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
A: M20	103	B: B28	3	Yes

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M20	103	Ground	No

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

INTELLIGENT KEY WARNING BUZZER

Description

INFOID:0000000001505031

Answers back and warns for an inappropriate operation.

Component Function Check

INFOID:0000000001505032

1.CHECK FUNCTION

With CONSULT-III

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

Is the inspection result normal?

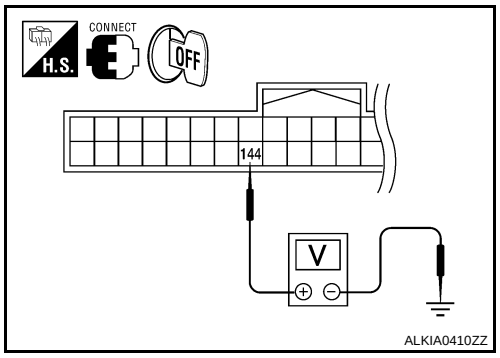
YES >> Intelligent Key warning buzzer (engine room) is OK.
NO >> Refer to DLK-101, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001505033

1.CHECK INTELLIGENT KEY WARNING BUZZER

Check voltage between BCM connector and ground.



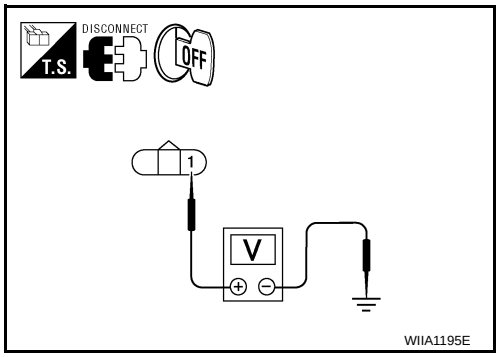
Terminals			Warning buzzer operation condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	144	Ground	Yes	0
			No	Battery voltage

Is the inspection result normal?

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

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

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



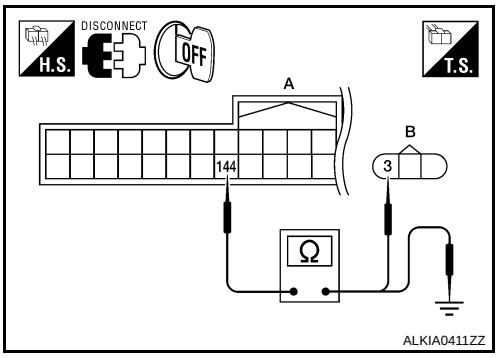
Terminals			Voltage (V) (Approx.)
(+)		(–)	
Intelligent Key warning buzzer connector	Terminal		
E73	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace Intelligent Key warning buzzer power supply circuit.

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector M21 (A) terminal 144 and Intelligent Key warning buzzer connector E73 (B) terminal 3.



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

3. Check continuity between BCM connector M21 (A) terminal 144 and ground.

BCM connector	Terminal	Ground	Continuity
A: M21	144		No

Is the inspection result normal?

OK >> GO TO 4.
NG >> Repair or replace harness between BCM and Intelligent Key warning buzzer.

4.CHECK INTELLIGENT KEY WARNING BUZZER

Check DLK-102, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace Intelligent Key warning buzzer.

5.CHECK INTERMITTENT INCIDENT

Check GI-42, "Intermittent Incident".

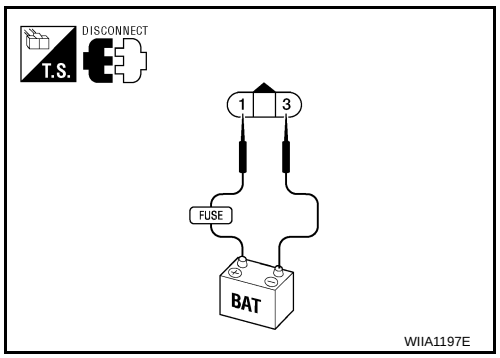
>> INSPECTION END.

Component Inspection

INFOID:0000000001505034

1.CHECK INTELLIGENT KEY WARNING BUZZER

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



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

Is the inspection result normal?

OK >> INSPECTION END.
NG >> Replace Intelligent Key warning buzzer.

OUTSIDE KEY ANTENNA

Description

INFOID:0000000001505035

Detects whether Intelligent Key is outside the vehicle.
Integrated in front outside handle (driver side, passenger side) and installed in rear bumper.

Component Function Check

INFOID:0000000001505036

1.CHECK DOOR REQUEST SWITCH

Check that door request switch operates normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Inspect door request switch. Refer to DLK-85, "Component Function Check".

2.CHECK FUNCTION

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

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

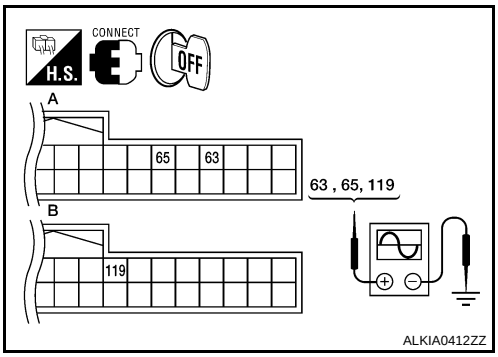
YES >> Outside key antenna is OK.
NO >> Refer to DLK-104, "Diagnosis Procedure".

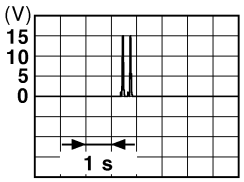
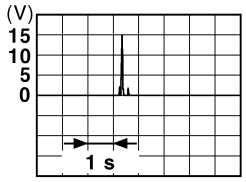
Diagnosis Procedure

INFOID:0000000001505037

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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



Terminals (+) BCM connector		Terminal	(–)	Condition		Signal (Reference value.)
A: M19	Driver side	65	Ground	Request switch is pushed	When Intelligent Key is in the antenna detection area.	 JMKIA0061GB
	Passenger side	63				
B: M21	Rear bumper	119			When Intelligent Key is not in the antenna detection area.	 JMKIA0060GB

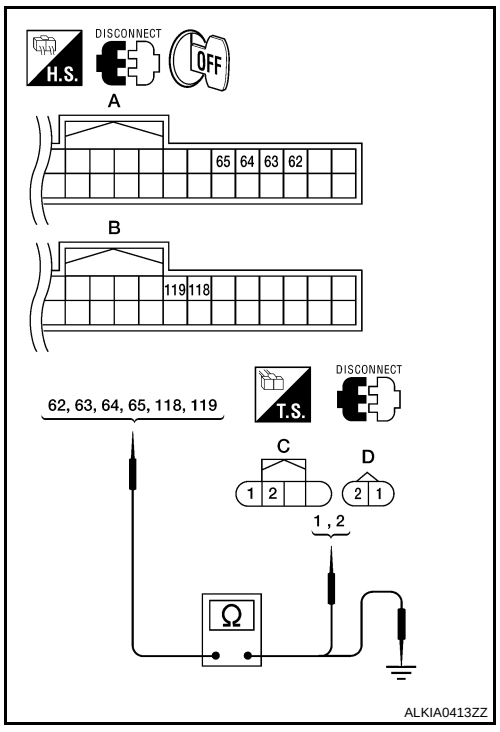
Is the inspection result normal?

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

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

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

BCM connector	Terminal	Outside key antenna connector	Terminal	Continuity
A: M19	65	C: D6 (driver side)	1	Yes
	64		2	
	63	C: D106 (passenger side)	1	
	62		2	
B: M21	119	D: B46 (rear bumper)	1	
	118		2	



ALKIA0413ZZ

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M19	62	Ground	No
	63		
	64		
	65		
B: M21	118		
	119		

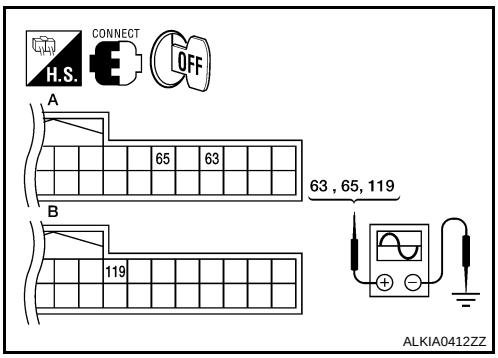
Is the inspection result normal?

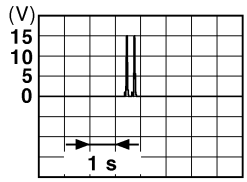
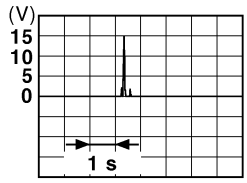
YES >> GO TO 3.
NO >> Repair or replace harness between BCM and outside key antenna.

3. CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna. (New antenna or other antenna)
2. Connect BCM and outside key antenna connector.

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



Terminals				Condition		Signal (Reference value.)
(+)			(–)			
BCM connector		Terminal				
A: M19	Driver side	65	Ground	Door request switch is pushed	When Intelligent Key is in the antenna detection area.	 JMKIA0061GB
	Passenger side	63				
B: M21	Rear bumper	119			When Intelligent Key is not in the antenna detection area.	 JMKIA0060GB

Is the inspection result normal?

YES >> Replace outside key antenna.
NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

REMOTE KEYLESS ENTRY RECEIVER

Description

INFOID:0000000001505038

Receives Intelligent Key operation and transmits to BCM.

Component Function Check

INFOID:0000000001505039

1.CHECK FUNCTION

With CONSULT-III

Check remote keyless entry receiver RKE OPE COUN1 in "DATA MONITOR" mode with CONSULT-III.

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

Is the inspection result normal?

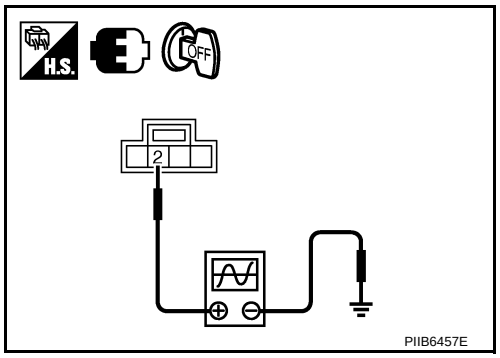
YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-107, "Diagnosis Procedure".

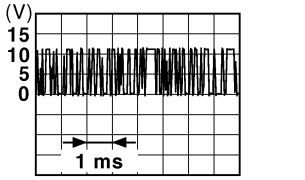
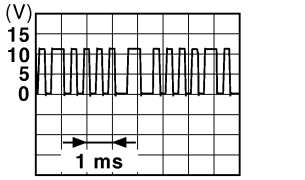
Diagnosis Procedure

INFOID:0000000001505040

1.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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



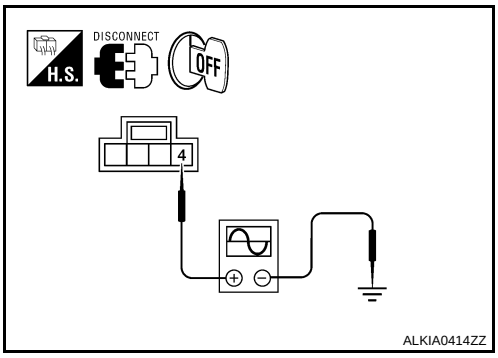
Terminals			Condition	Signal (Reference value)
(+)		(–)		
Remote keyless entry receiver connector	Terminal			
M27	2	Ground	Waiting (All doors closed)	 JMKIA0064GB
			When signal is received (All doors closed)	 JMKIA0065GB

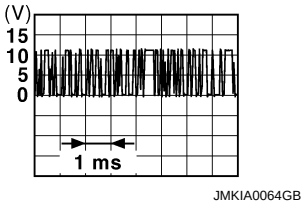
Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 2.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

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



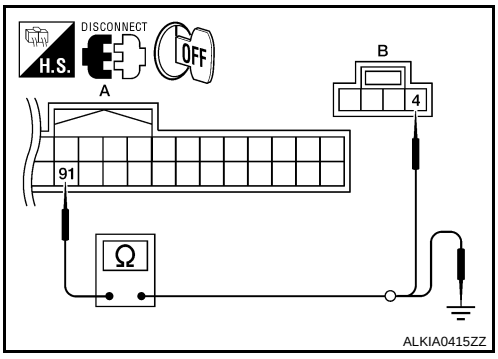
Terminals			Signal (Reference value)
(+)		(–)	
Remote keyless entry receiver connector	Terminal		
M27	4	Ground	

Is the inspection result normal?

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

3.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

1. Disconnect BCM connector.
2. Check continuity between BCM connector M19 (A) terminal 91 and remote keyless entry receiver connector M27 (B) terminal 4.



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

3. Check continuity between BCM connector and ground.

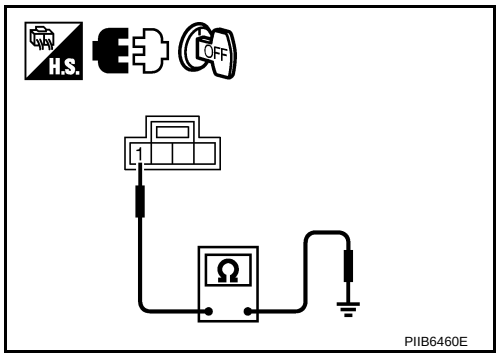
BCM connector	Terminal	Ground	Continuity
A: M19	91		No

Is the inspection result normal?

YES >> Reconnect BCM, GO TO 4.
NO >> Repair or replace harness between BCM and remote keyless entry receiver.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

Check continuity between remote keyless entry receiver connector and ground.



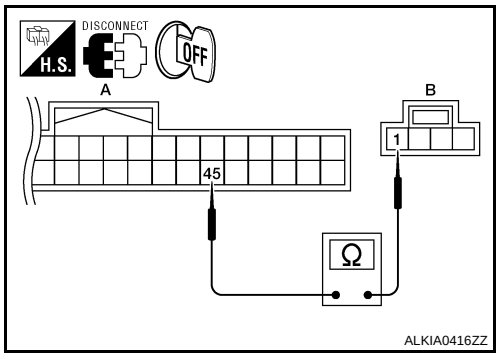
Remote keyless entry receiver connector	Terminal	Ground	Continuity
M27	1		Yes

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 5.

5. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 2

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



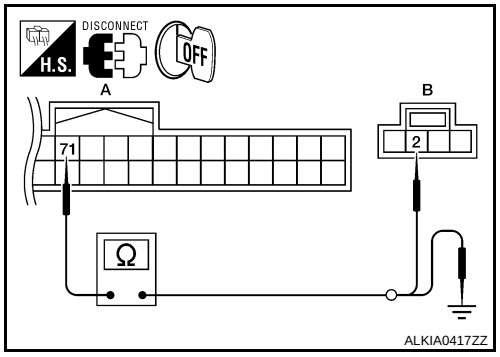
BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
A: M18	45	B: M27	1	Yes

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace harness between BCM and remote keyless entry receiver.

6. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 3

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



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

2. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M19	71		No

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace harness between BCM and remote keyless entry.

7. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

INTELLIGENT KEY

Description

INFOID:0000000001505041

The following functions are available when having and carrying electronic ID.
- Door lock/unlock
- Trunk open

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

Component Function Check

INFOID:0000000001505042

1.CHECK FUNCTION

With CONSULT-III

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

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

Is the inspection result normal?

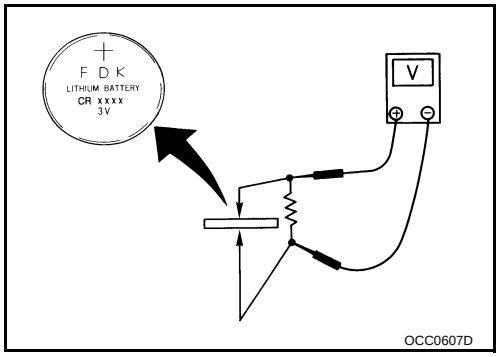
YES >> Intelligent Key is OK.
NO >> Refer to DLK-111, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001505043

1.CHECK INTELLIGENT KEY BATTERY

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



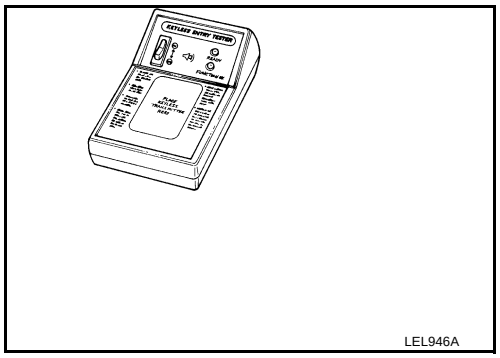
Standard : Approx. 2.5 - 3.0V

Is the measurement value within specification?

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

2.CHECK KEYFOB FUNCTION

Check keyfob function using Remote Keyless Entry Tester J-43241.



Does the test pass?

YES >> Keyfob is OK.
NO >> Replace keyfob. Refer to CONSULT-III Operation Manual.

Component Inspection

INFOID:0000000001505044

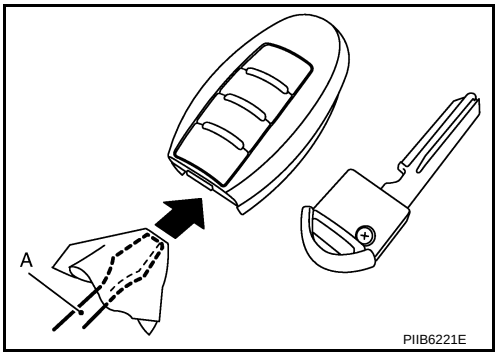
1. REPLACE INTELLIGENT KEY BATTERY

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

2. Insert a flat-blade screwdriver (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.

CAUTION:

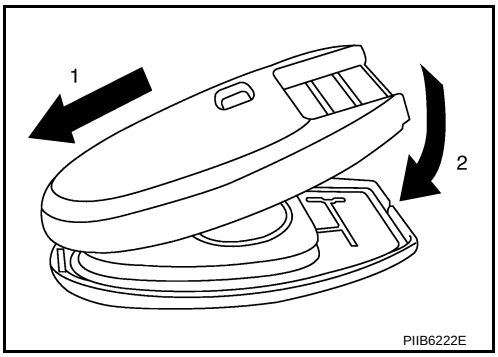
- **Do not touch the circuit board or battery terminal.**
- **The keyfob is water-resistant. However, if it does get wet, immediately wipe it dry.**



3. Replace the battery with new one.
4. Align the tips of the upper and lower parts, and then push them together until it is securely closed.

CAUTION:

- **When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.**
- **After replacing the battery, check that all Intelligent Key functions work normally.**



Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Check remote keyless entry receiver. Refer to DLK-107, "Component Function Check".

Special Repair Requirement

INFOID:0000000001505045

Refer to CONSULT-III Operation Manual.

KEY SLOT ILLUMINATION

Description

INFOID:0000000001505046

Blinks when Intelligent Key insertion is required.

Component Function Check

INFOID:0000000001505047

1.CHECK FUNCTION

With CONSULT-III

Check key slot illumination KEY SLOT ILLUMI in Active Test mode.

Is the inspection result normal?

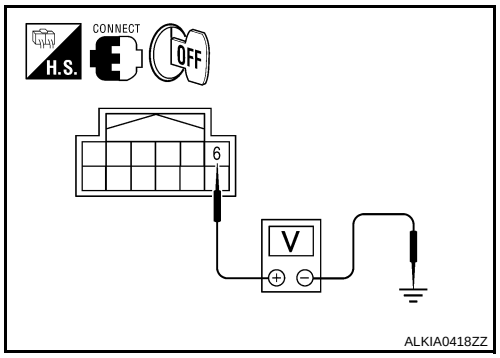
YES >> Key slot function is OK.
NO >> Refer to DLK-113, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001505048

1.CHECK KEY SLOT ILLUMINATION OUTPUT SIGNAL

Check voltage between key slot connector and ground.



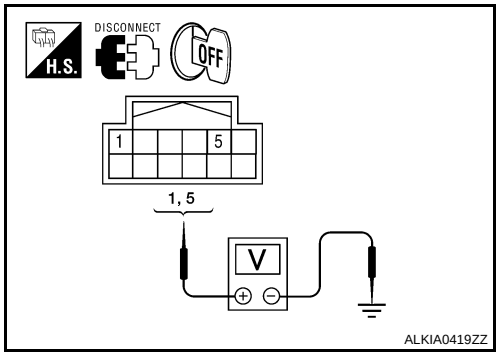
Terminals			Condition	Key slot illumination	Voltage (V) (Approx.)
(+)		(–)			
Key slot connector	Terminal				
M40	6	Ground	Intelligent Key inserted	OFF	Battery voltage
			Intelligent Key removed	ON	0

Is the inspection result normal?

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

2.CHECK KEY SLOT POWER SUPPLY CIRCUIT

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



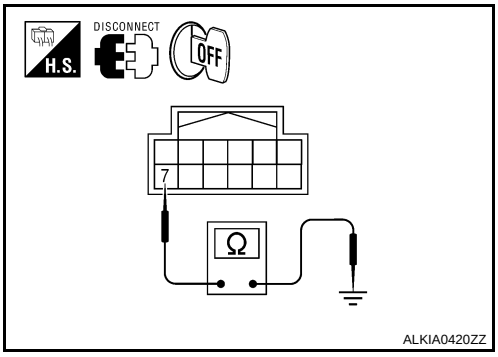
Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key slot connector	Terminal		
M40	1	Ground	Battery voltage
	5		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace key slot power supply circuit.

3.CHECK KEY SLOT GROUND CIRCUIT

Check continuity between key slot connector and ground.



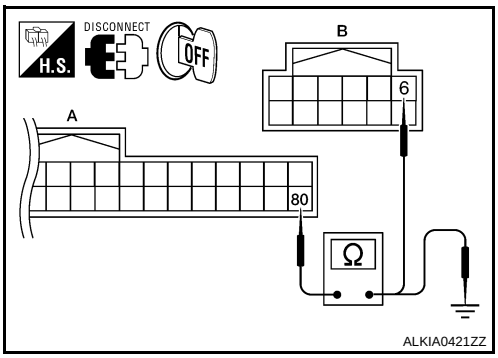
Key slot connector	Terminal	Ground	Continuity
M40	7		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace key slot ground circuit.

4.CHECK KEY SLOT CIRCUIT

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



BCM connector	Terminal	Key slot connector	Terminal	Continuity
A: M19	80	B: M40	6	Yes

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M19	80		No

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness between BCM and key slot.

5. CHECK KEY SLOT

Refer to DLK-67, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace key slot.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

HORN FUNCTION

Description

INFOID:0000000001505049

Perform answer-back for each operation with horn.

Component Function Check

INFOID:0000000001505050

1.CHECK FUNCTION

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

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

Is the operation normal?

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

Diagnosis Procedure

INFOID:0000000001505051

1.CHECK HORN FUNCTION

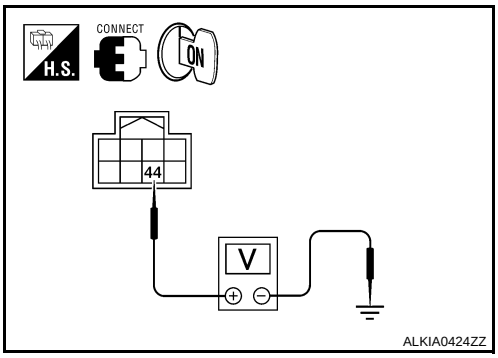
Check horn function with horn switch

Do the horns sound?

YES >> GO TO 2.
NO >> Refer to HRN-3, "Wiring Diagram".

2.CHECK HORN RELAY POWER SUPPLY

1. Turn ignition switch ON.
2. Perform “ACTIVE TEST” (“HORN”) with CONSULT-III.
3. Using an analog voltmeter or an oscilloscope, check voltage between IPDM E/R connector E17 terminal 44 and ground.



IPDM E/R		Ground	Test item		Voltage (V) (Approx.)
Connector	Terminal				
E17	44	Ground	HORN	ON	Battery voltage →0 → Battery voltage
				Other than above	Battery voltage

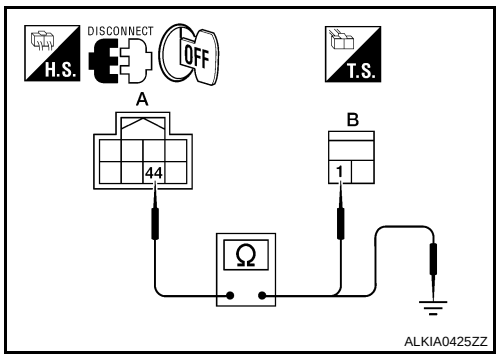
Is the inspection result normal?

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

3.CHECK HORN RELAY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R and horn relay connector.

3. Check continuity between IPDM E/R harness connector (A) and horn relay harness connector (B).



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

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
A: E17	44	Ground	No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace IPDM E/R.Refer to PCS-34, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

COMBINATION METER DISPLAY FUNCTION

Description

INFOID:0000000001505052

Displays each operation method guide and warning for system malfunction.

Component Function Check

INFOID:0000000001505053

1.CHECK FUNCTION

With CONSULT-III

Check the operation with (“LCD”) in the Active Test.

Is each warning displayed on meter display?

Is the inspection result normal?

YES >> Meter display is OK.
NO >> Refer to DLK-118, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001505054

1.CHECK COMBINATION METER

Refer to MWI-47, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check combination meter. Refer to MWI-15, "Diagnosis Description".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

WARNING CHIME FUNCTION

Description

INFOID:0000000001505055

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000001505056

1.CHECK FUNCTION

With CONSULT-III

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

Is the inspection result normal?

Yes >> Warning buzzer into combination meter is OK.
No >> Refer to DLK-119, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001505057

1.CHECK METER BUZZER CIRCUIT

Refer to WCS-12, "Component Function Check".

Is the inspection result normal?

Yes >> GO TO 2.
No >> Repair or replace meter buzzer circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

HAZARD FUNCTION

Description

INFOID:0000000001505058

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

Component Function Check

INFOID:0000000001505059

1.CHECK FUNCTION

Check hazard warning lamp (“FLASHER”) in Active Test.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-120, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001505060

1.CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-17, "System Description".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace hazard warning switch circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

HOMELINK UNIVERSAL TRANSCEIVER

Description

INFOID:0000000001505061

Homelink universal transceiver 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.
Homelink universal transceiver power supply uses vehicle battery, which enables it to maintain every program in case battery is discharged or removed.

Component Function Check

INFOID:0000000001505062

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> GO TO 2.
NO >> Receiver or hand-held transmitter is malfunctioning.

2.CHECK ILLUMINATE

1. Turn ignition switch “OFF”.
2. Press each of the transmitter buttons and watch for the red light to illuminate with each button.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-121, "Diagnosis Procedure".

3.CHECK TRANSMITTER

Check transmitter with Tool*.
*:For details, refer to Technical Service Bulletin.

Is the inspection result normal?

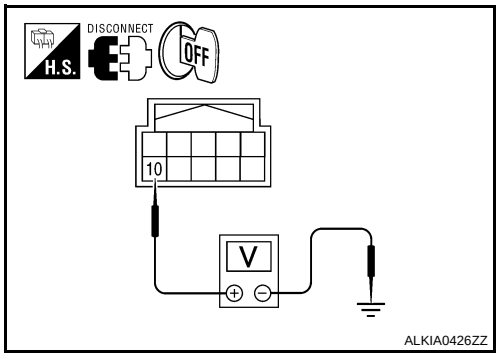
YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
NO >> Replace auto anti-dazzling inside mirror (homelink universal transceiver). Refer to MIR-15, "Removal and Installation".

Diagnosis Procedure

INFOID:0000000001505063

1.CHECK POWER SUPPLY

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



Auto anti-dazzling inside mirror (Homelink universal transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)
R4	10	Ground	Ignition switch position: LOCK	Battery voltage

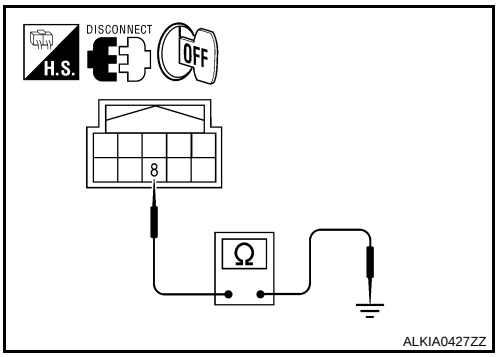
Is the inspection result normal?

YES >> GO TO 2.
NO >> Check the following.
- 10A fuse [No. 6 located in the fuse block (J/B)]

- Harness for open or short between fuse and auto anti-dazzling inside mirror (homelink universal transceiver).

2.CHECK GROUND CIRCUIT

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



Auto anti-dazzling inside mirror (Homelink universal transceiver) connector	Terminal	Ground	Continuity
R4	8		Yes

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END.

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000001505064

VALUES ON THE DIAGNOSIS TOOL

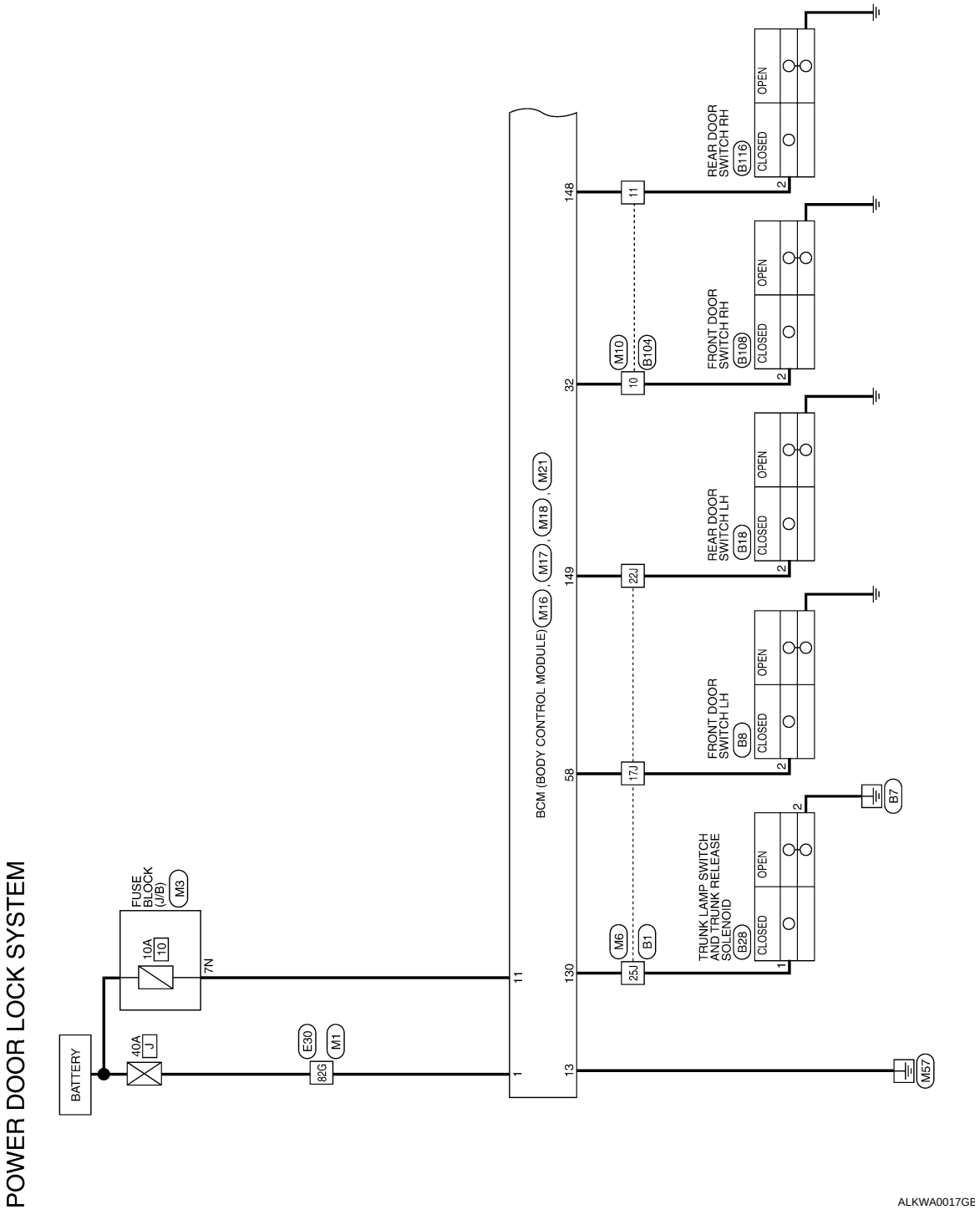
Refer to BCS-39, "Reference Value".

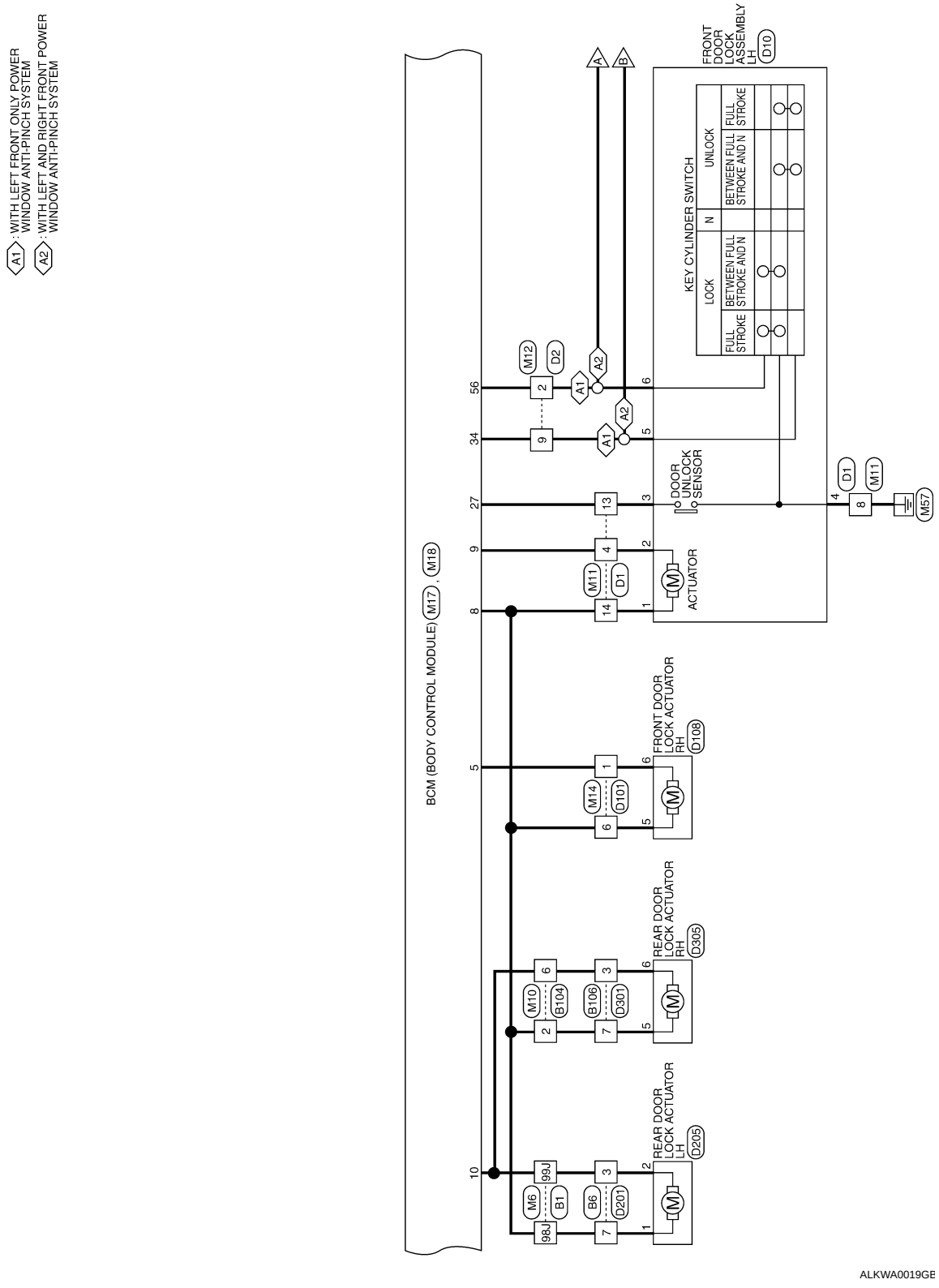
TERMINAL LAYOUT

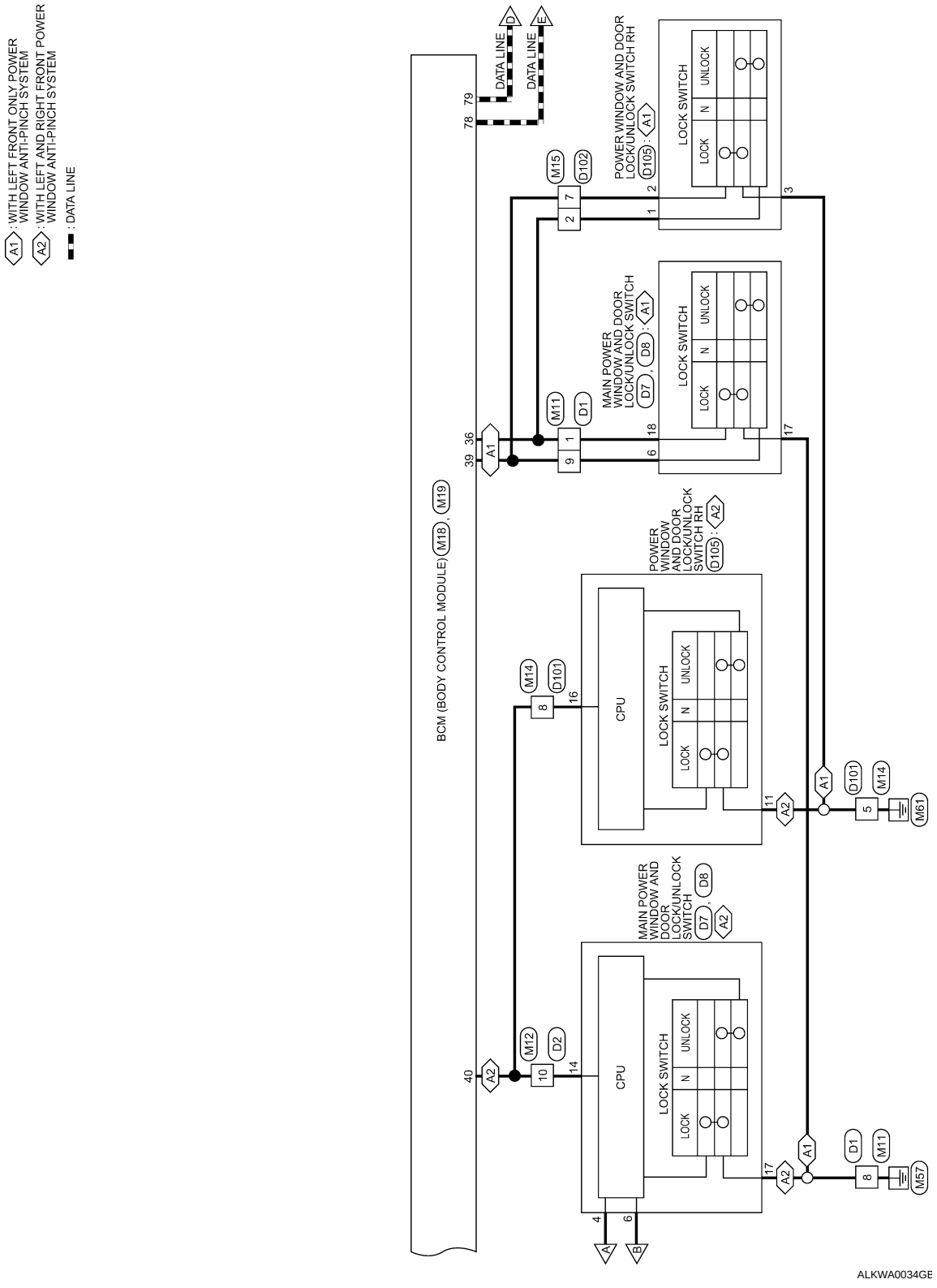
Refer to BCS-43, "Terminal Layout".

Wiring Diagram — POWER DOOR LOCK SYSTEM —

INFOID:0000000001505065

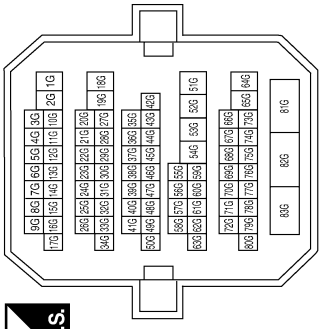



A1 : WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM
A2 : WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM
BCM (BODY CONTROL MODULE) (M17), (M18)
FRONT DOOR LOCK ASSEMBLY LH (D10)
KEY CYLINDER SWITCH
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
DOOR UNLOCK SENSOR
ACTUATOR
FRONT DOOR LOCK ACTUATOR RH (D108)
REAR DOOR LOCK ACTUATOR RH (D305)
REAR DOOR LOCK ACTUATOR LH (D205)
ALKWA0019GE


A1 : WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM
A2 : WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM
: DATA LINE
BCM (BODY CONTROL MODULE) M18, M19
DATA LINE
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH A1 D105
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH A1 D7, D8
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH A2 D105
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7, D8 A2
LOCK SWITCH
LOCK
N
UNLOCK
CPU
M15
D102
M11
D1
M14
D101
M12
D2
M61
M57
ALKWA0034GE

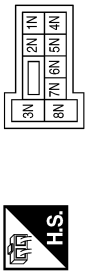
POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



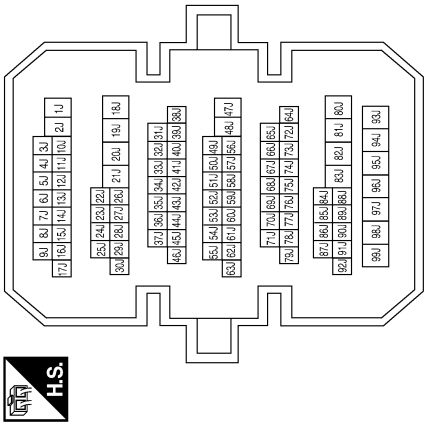
Terminal No.	Color of Wire	Signal Name
82G	W/B	—

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7N	Y/R	—

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
17J	SB	—
22J	R/B	—
25J	V/W	—
98J	V	—
99J	G/Y	—

Connector No.	M10
Connector Name	WIRE TO WIRE
Connector Color	BROWN

Terminal No.	Color of Wire	Signal Name
2	V	—
6	G/Y	—
10	R/B	—
11	R/W	—

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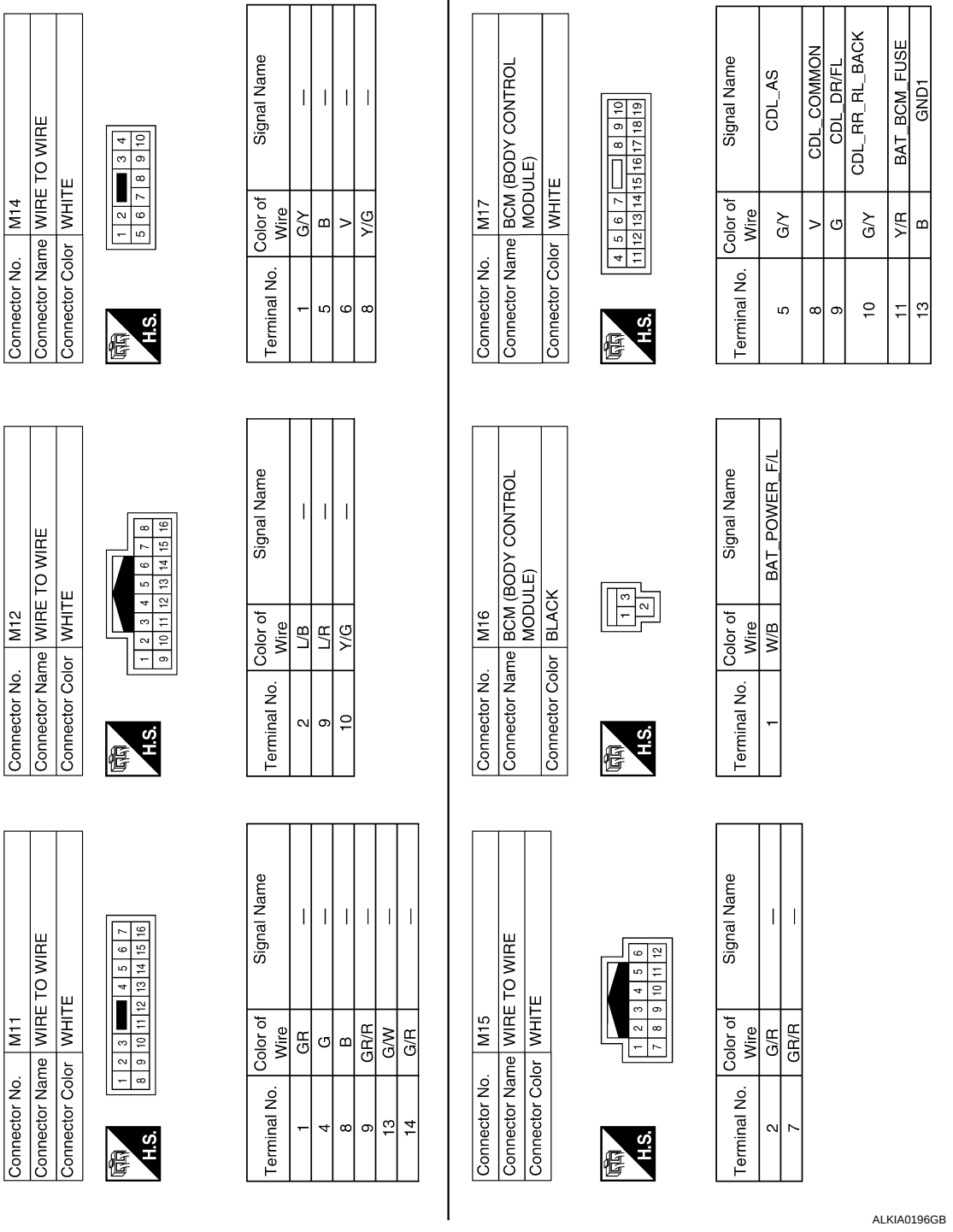

Connector No. M11
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4 5 6 7
8 9 10 11 12 13 14 15 16
Terminal No. Color of Wire Signal Name
1 GR —
4 G —
8 B —
9 GR/R —
13 G/W —
14 G/R —
Connector No. M12
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
Terminal No. Color of Wire Signal Name
2 L/B —
9 L/R —
10 Y/G —
Connector No. M14
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4
5 6 7 8 9 10
Terminal No. Color of Wire Signal Name
1 G/Y —
5 B —
6 V —
8 Y/G —
Connector No. M15
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1 2 3 4 5 6
7 8 9 10 11 12
Terminal No. Color of Wire Signal Name
2 G/R —
7 GR/R —
Connector No. M16
Connector Name BCM (BODY CONTROL MODULE)
Connector Color BLACK
H.S.
1 3
2
Terminal No. Color of Wire Signal Name
1 W/B BAT_POWER_F/L
Connector No. M17
Connector Name BCM (BODY CONTROL MODULE)
Connector Color WHITE
H.S.
4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19
Terminal No. Color of Wire Signal Name
5 G/Y CDL_AS
8 V CDL_COMMON
9 G CDL_DR/FL
10 G/Y CDL_RR_RL_BACK
11 Y/R BAT_BCM_FUSE
13 B GND1
ALKIA0196GB

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Terminal No.	Color of Wire	Signal Name
27	G/W	DOOR_LOCK_STATUS
32	R/B	AS_DOOR_SW
34	L/R	DOOR_KEY/C_UNLOCK_SW
36	GR	CENTRAL_LOCK_SW
39	GR/R	CENTRAL_UNLOCK_SW
40	Y/G	PW_K-LINE
56	L/B	DOOR_KEY/C_LOCK_SW
58	SB	DR_DOOR_SW

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80

Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY

H.S.

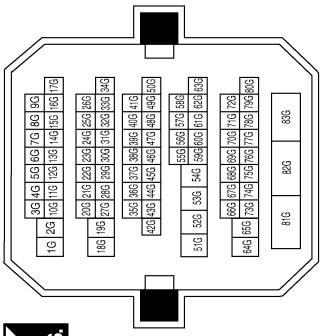
131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112
151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	135	134	133	132

Terminal No.	Color of Wire	Signal Name
130	Y/G	TRUNK_SW
148	R/W	RR_DOOR_SW
149	R/B	RL_DOOR_SW

Terminal No.	Color of Wire	Signal Name
82G	W/B	—

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



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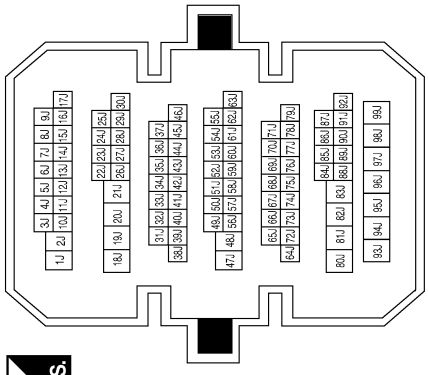
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

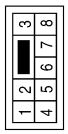
H.S.



Terminal No.	Color of Wire	Signal Name
17J	SB	—
22J	R/B	—
25J	V/W	—
98J	V	—
99J	G/Y	—

Connector No.	B6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	G/Y	—
7	V	—

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	SB	DOOR SW(DR)

Connector No.	B18
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	R/B	DOOR SW(RL)

Connector No.	B28
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y/G	—
2	B	—

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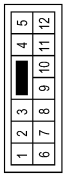
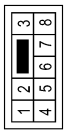
Connector No.	B104
Connector Name	WIRE TO WIRE
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
2	V	—
6	G/Y	—
10	R/G	—
11	R/W	—

Connector No.	B106
Connector Name	WIRE TO WIRE
Connector Color	WHITE

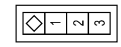


Terminal No.	Color of Wire	Signal Name
3	G/Y	—
7	V	—

Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

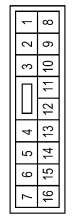
Terminal No.	Color of Wire	Signal Name
2	R/G	DOOR SW (AS)

Connector No.	B116
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



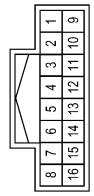
Terminal No.	Color of Wire	Signal Name
2	R/W	DOOR SW (RR)

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	GR	—
4	G	—
8	B	—
9	GR/R	—
13	G/W	—
14	V	—

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	L/B	—
9	L/R	—
10	Y/G	—

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Connector No.	D7 (WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM)
Connector Name	MAIN POWER WINDOW AND LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

1	2	3	4		5	6	7
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
6	L/R	UNLOCK

Connector No.	D7 (WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Name	MAIN POWER WINDOW AND LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

1	2	3	4		5	6	7
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
4	—	—
6	L/R	UNLOCK
14	—	—

Connector No.	D8 (WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Name	MAIN POWER WINDOW AND LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

17	18	19

Terminal No.	Color of Wire	Signal Name
17	B	GND

Connector No.	D8 (WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM)
Connector Name	MAIN POWER WINDOW AND LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

17	18	19

Terminal No.	Color of Wire	Signal Name
17	B	GND
18	GR	LOCK

Connector No.	D10
Connector Name	FRONT DOOR LOCK ASSEMBLY LH
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	V	
2	G	
3	G/W	
4	B	GND
5	L/R	DOOR_KEY/C_UNLOCK_SW
6	L/B	DOOR_KEY/C_LOCK_SW

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2		3	4
5	6	7	8	9	10

Terminal No.	Color of Wire	Signal Name
1	G/Y	—
5	B	—
6	V	—
8	Y/G	—

ALKIA0200GB

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

6	5	4	3	2	1
12	11	10	9	8	7

Terminal No.	Color of Wire	Signal Name
2	GR	—
7	GR/R	—

Connector No.	D105 (WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
11	B	GND
16	Y/G	COM

Connector No.	D105 (WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM)
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE

H.S.

1	2	3	4	5
6	7	8	9	10	11	12

Terminal No.	Color of Wire	Signal Name
1	GR	LOCK
2	GR/R	UNLOCK
3	B	GND

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

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
5	V	—
6	G/Y	—

Connector No.	D201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

3	2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name
3	G/Y	—
7	V	—

Connector No.	D205
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Color	GRAY

H.S.

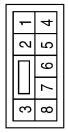
1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	V	—
2	G/Y	—

ALKIA0201GB

Connector No.	D301
Connector Name	WIRE TO WIRE
Connector Color	WHITE

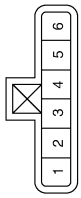
H.S.



Terminal No.	Color of Wire	Signal Name
3	G/Y	—
7	V	—

Connector No.	D305
Connector Name	REAR DOOR LOCK ACTUATOR
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
5	V	—
6	G/Y	—

ALKIA0202GB

Wiring Diagram — INTELLIGENT KEY SYSTEM —

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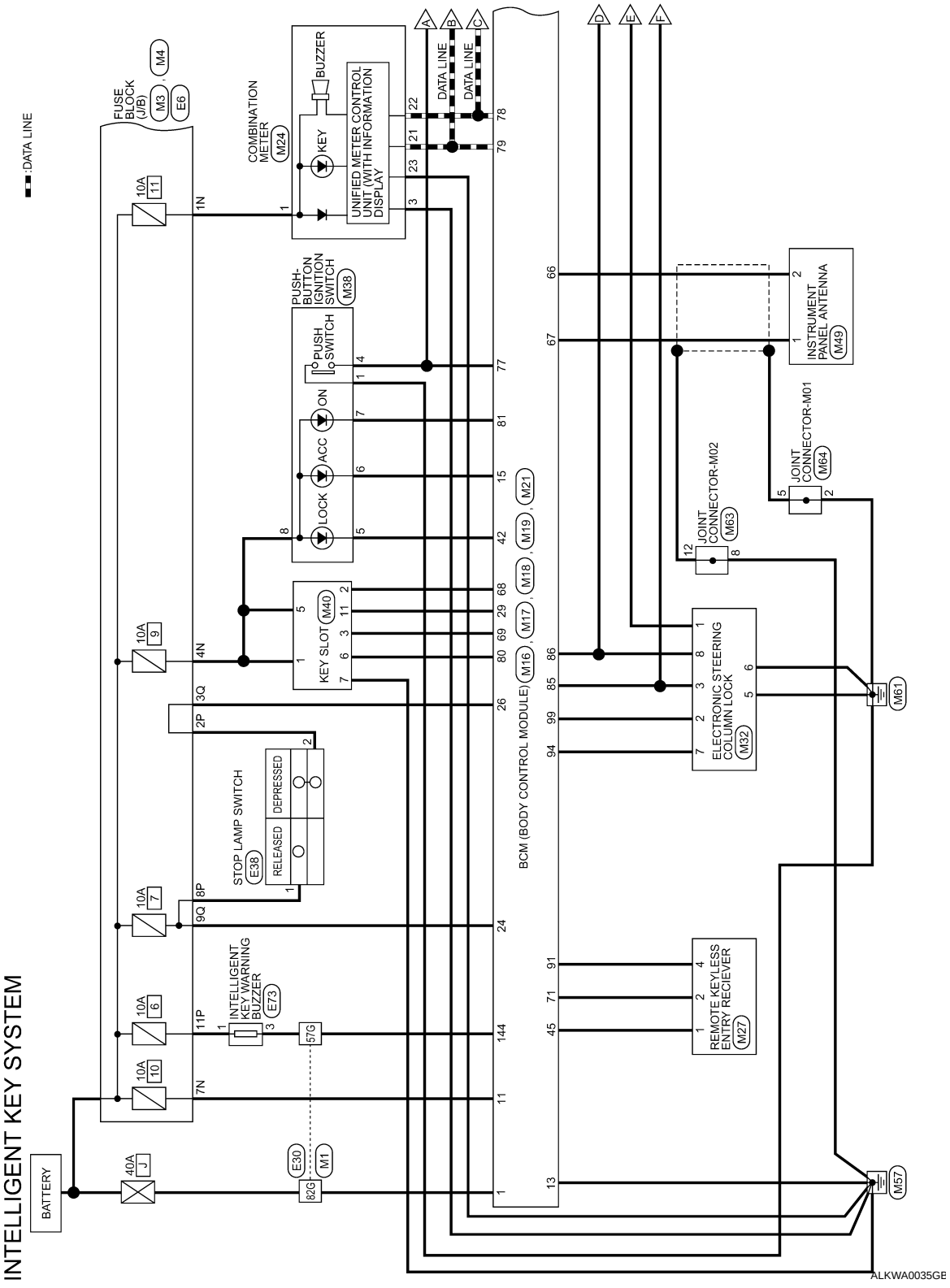
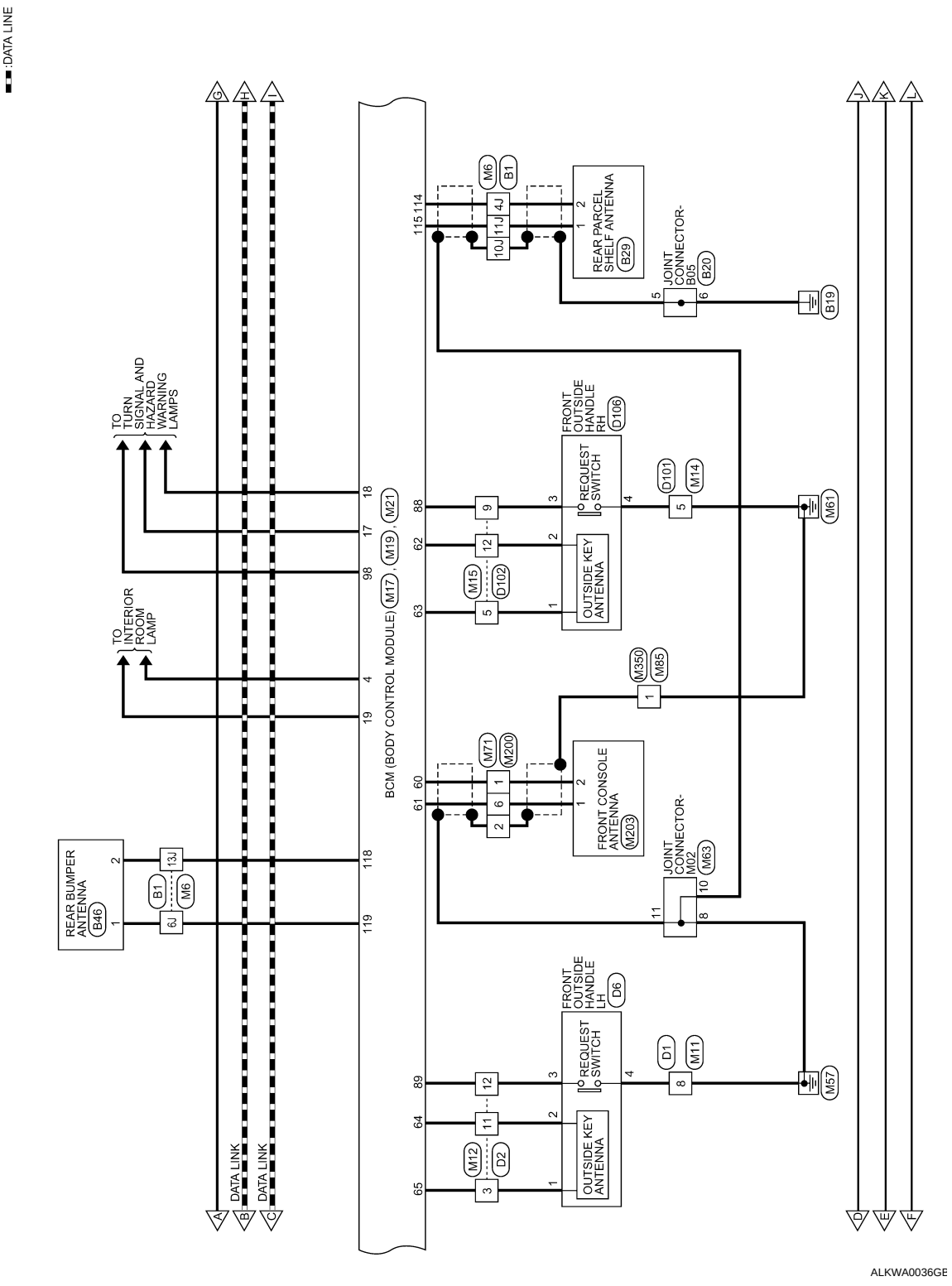
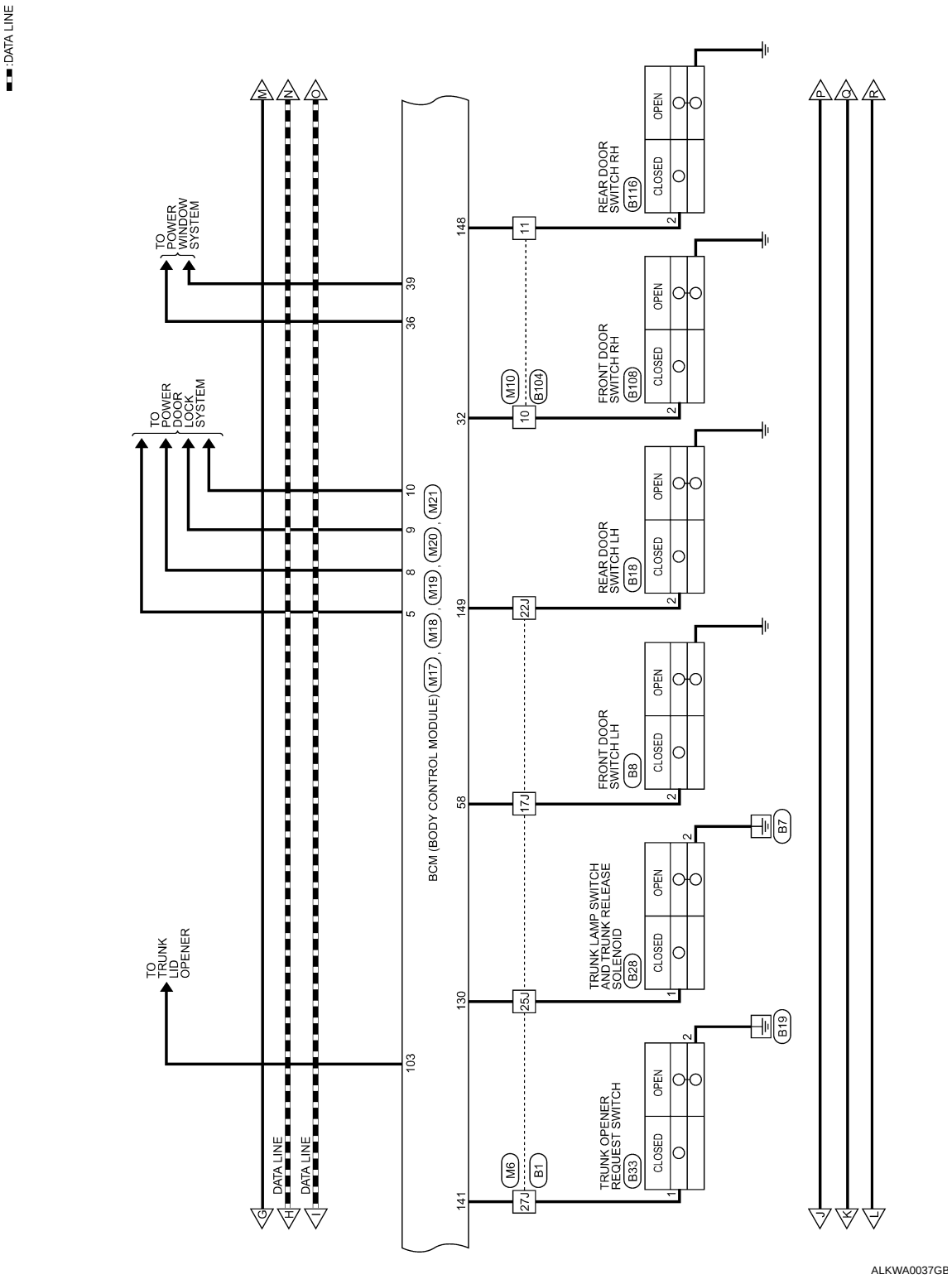
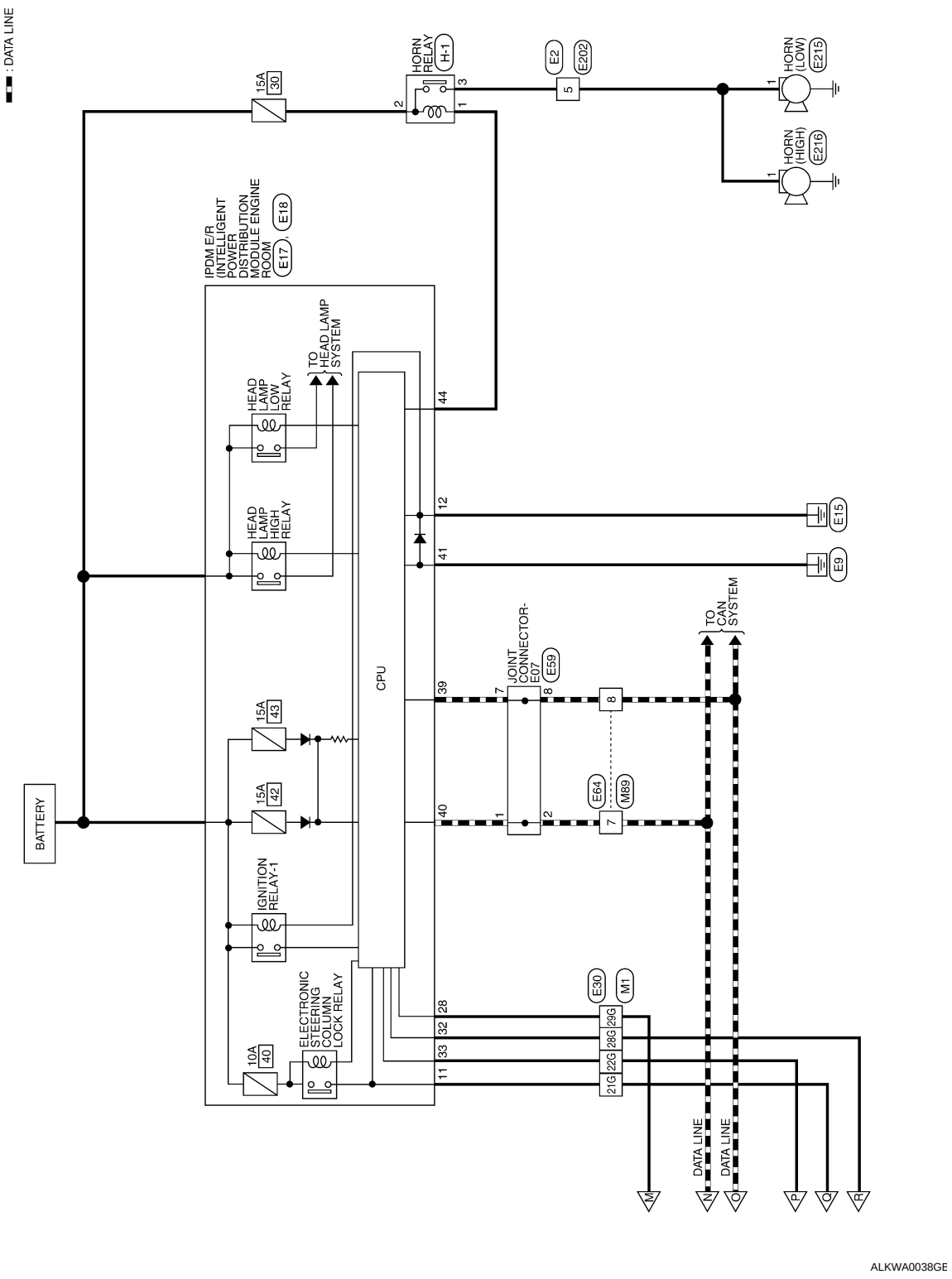



: DATA LINE
BCM (BODY CONTROL MODULE) M17, M19, M21
TO TURN SIGNAL AND HAZARD WARNING LAMPS
TO INTERIOR ROOM LAMP
DATA LINK
DATA LINK
REAR BUMPER ANTENNA B46
REAR PARCEL SHELF ANTENNA B29
JOINT CONNECTOR-B05 B20
FRONT OUTSIDE HANDLE RH D106
REQUEST SWITCH
OUTSIDE KEY ANTENNA
FRONT CONSOLE ANTENNA M203
JOINT CONNECTOR-M02 M63
FRONT OUTSIDE HANDLE LH D6
ALKWA0036GE

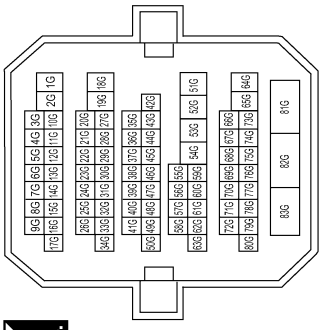

: DATA LINE
TO POWER WINDOW SYSTEM
TO POWER DOOR LOCK SYSTEM
TO TRUNK LID OPENER
BCM (BODY CONTROL MODULE)
M17, M18, M19, M20, M21
DATA LINE
DATA LINE
REAR DOOR SWITCH RH
B116
FRONT DOOR SWITCH RH
B108
REAR DOOR SWITCH LH
B18
FRONT DOOR SWITCH LH
B8
TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
B28
TRUNK OPENER REQUEST SWITCH
B33
CLOSED
OPEN
ALKWA0037GE


: DATA LINE
HORN RELAY H-1
15A 30
E2
E202
5
HORN (LOW) E215
HORN (HIGH) E216
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM E17) E18
TO HEAD LAMP SYSTEM
HEAD LAMP LOW RELAY
HEAD LAMP HIGH RELAY
CPU
44
12
41
E15
E9
JOINT CONNECTOR-E07 E59
TO CAN SYSTEM
39
40
15A 43
15A 42
BATTERY
IGNITION RELAY-1
ELECTRONIC STEERING COLUMN LOCK RELAY
10A 40
E64
M89
E30
M1
28
32
33
11
29G
28G
22G
21G
DATA LINE
DATA LINE
N
O
P
Q
R
ALKWA0038GE

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

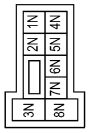
H.S.



Terminal No.	Color of Wire	Signal Name
21G	P/L	—
22G	G/R	—
28G	L/O	—
29G	BR	—
57G	GR	—
82G	W/B	—

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

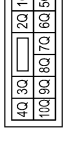
H.S.



Terminal No.	Color of Wire	Signal Name
1N	W/L	—
4N	G/Y	—
7N	Y/R	—

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

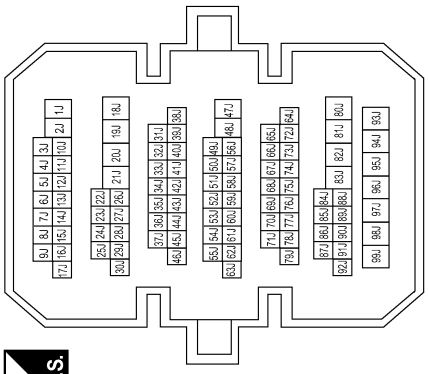
H.S.



Terminal No.	Color of Wire	Signal Name
3Q	O/L	—
9Q	R/W	—

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
4J	B	—
6J	BR/W	—
10J	SHIELD	—
11J	W	—
13J	L/O	—
17J	SB	—
22J	R/B	—
25J	V/W	—
27J	G/R	—

ALKIA0248GB

Connector No.	M10
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

5	4		3	2	1
12	11	10	9	8	7	6

Terminal No.	Color of Wire	Signal Name
10	R/B	—
11	R/W	—

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3		4	5	6	7
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
8	B	—

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name
3	P	—
11	V	—
12	B/W	—

Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2		3	4
5	6	7	8	9	10

Terminal No.	Color of Wire	Signal Name
5	B	—

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6
7	8	9	10	11	12

Terminal No.	Color of Wire	Signal Name
5	LG	—
9	P/L	—
12	B/Y	—

Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

1	3
2	

Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L

ALKIA0204GB

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

4	5	6	7		8	9	10
11	12	13	14	15	16	17	18	19

Terminal No.	Color of Wire	Signal Name
4	P/W	ROOM_LAMP_BAT_SAVER
5	G/Y	CDL_AS
8	V	CDL_COMMON
9	G	CDL_DR/FL
10	G/Y	CDL_RR_RL_BACK
11	Y/R	BAT_BCM_FUSE
13	B	GND1
15	Y/L	ACC_LED
17	G/B	FR_FLASHER
18	G/Y	FL_FLASHER
19	Y	ROOM_LAMP_OUTPUT

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Terminal No.	Color of Wire	Signal Name
24	R/W	STOP_LAMP_LOW_SW
26	O/L	STOP_LAMP_HIGH_SW
29	Y	FOB_IN_SW_1
32	R/B	AS_DOOR_SW
36	GR	CENTRAL_LOCK_SW
39	GR/R	CENTRAL_UNLOCK_SW
42	P	S/L_LOCK_LED
45	P	GND_RF2_A/L
58	SB	DR_DOOR_SW

Connector No.	M19
Connector Name	BCM (Body Control Module)
Connector Color	BLACK

H.S.

79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80

Terminal No.	Color of Wire	Signal Name
68	G/O	FOB_READER_CLOCK
69	O	FOB_READER_DATA
71	L/O	RF1_TUNER_SIGNAL
77	BR	ENG_START_SW
78	P	CAN-L
79	L	CAN-H
81	LG	IGN_ON_LED
85	L/O	S/L_CONDITION_1
86	G/R	S/L_CONDITION_2

Terminal No.	Color of Wire	Signal Name
60	B/R	ROOM_ANT_2_B
61	W/R	ROOM_ANT_2_A
62	B/Y	AS_DOOR_ANT_B
63	LG	AS_DOOR_ANT_A
64	V	DR_DOOR_ANT_B
65	P	DR_DOOR_ANT_A
66	R	ROOM_ANT_1_B
67	G	ROOM_ANT_1_A

Terminal No.	Color of Wire	Signal Name
80	R/L	FOB_SLOT_ILLUMINATION
88	P/L	AS_REQUEST SWITCH
91	L/R	RF1_POWER_SUPPLY
94	G/Y	S/L_POWER_SUPPLY_12V
99	L/Y	S/L_K-LINE

ALKIA0205GB

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

100	101		102	103	104
105	106	107	108	109	110	111

Terminal No.	Color of Wire	Signal Name
103	V	CDL_BACK_TRUNK

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY

H.S.

131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112
151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	135	134	133	132

Terminal No.	Color of Wire	Signal Name
114	B	TRUNK_ANT_1_B
115	W	TRUNK_ANT_1_A
118	L/O	BACK_DOOR_ANT_B
119	BR/W	BACK_DOOR_ANT_A
130	Y/G	TRUNK_SW
144	GR	BUZZER
148	R/W	RR_DOOR_SW
149	R/B	RL_DOOR_SW

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

1	2	3	4	5		6	7	8	9	10	11	12	13	14	15		16	17	18	19	20
21	22	23	24	25		26	27	28	29	30	31	32	33	34	35		36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
1	W/L	BATT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND

Connector No.	M27
Connector Name	REMOTE KEYLESS ENTRY RECIEVER
Connector Color	BLACK

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
1	P	GND
2	L/O	SIGNAL
4	L/R	12V

Connector No.	M32
Connector Name	ELECTRONIC STEERING COLUMN LOCK
Connector Color	WHITE

H.S.

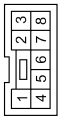
4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
1	P/L	S/L_12V_MECHANICAL (V1)
2	L/Y	S/L_COM
3	L/O	S/L_CONDITION_1
5	B	GND
6	B	GND
7	G/Y	S/L_12V_CPU (V2)
8	G/R	S/L_CONDITION_2

ALKIA0206GB

Connector No.	M38
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	BROWN

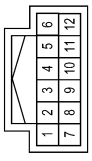
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	GND
4	BR	START_SW
5	R	LOCK
6	Y/L	ACC
7	LG	ON
8	G/Y	B+

Connector No.	M40
Connector Name	KEY SLOT
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	G/Y	B+
2	G/O	CLOCK
3	O	DATA
5	G/Y	LIGHT_BAT+
6	R/L	LIGHT_A
7	B	GND
11	Y	CARD_SW_1

Connector No.	M49
Connector Name	INSTRUMENT PANEL ANTENNA
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	ANT+
2	R	ANT-

Connector No.	M63
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

H.S.

Terminal No.	Color of Wire	Signal Name
8	B	—
10	GR	—
11	GR	—
12	GR	—

Connector No.	M64
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–
5	GR	–

Connector No.	M71
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B/R	—
2	SHIELD	—
6	W/R	—

ALKIA0249GB

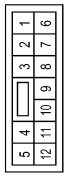
Connector No.	M85
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	—

Connector No.	M89
Connector Name	WIRE TO WIRE
Connector Color	WHITE

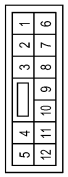
H.S.



Terminal No.	Color of Wire	Signal Name
7	L	—
8	P	—

Connector No.	M200
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	B/R	—
2	SHIELD	—
6	W/R	—

Connector No.	M203
Connector Name	FRONT CONSOLE ANTENNA
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	W/R	ANT+
2	B/R	ANT-

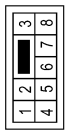
Connector No.	M350
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	—

Connector No.	E2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
5	G	—

ALKIA0250GB

Connector No.	E6
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
2P	R/G	—
8P	Y/R	—
11P	Y/B	—

Connector No.	E17
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
39	P	CAN-L
40	L	CAN-H
41	B	S-GND
44	G/W	HORN_RLY

Connector No.	E18
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
11	P/L	ESCL
12	B	P-GND
28	BR	PUSH_START_SW
32	L/O	SL_CONDITION_1
33	G/R	SL_CONDITION_2

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
21G	P/L	—
22G	G/R	—
28G	L/O	—
29G	BR	—
57G	GR	—
82G	W/B	—

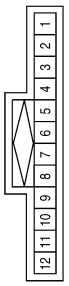
Connector No.	E38
Connector Name	STOP LAMP SWITCH (WITH CVT)
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	Y/R	—
2	R/G	—

ALKIA0251GB

Connector No.	E59
Connector Name	JOINT CONNECTOR-E07
Connector Color	BLUE

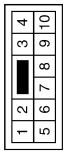
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	—
2	L	—
7	P	—
8	P	—

Connector No.	E64
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
7	L	—
8	P	—

Connector No.	E73
Connector Name	INTELLEGENT KEY WARINING BUZZER
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y/B	B+
3	GR	BUZZER_SIGNAL

Connector No.	E202
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
5	G	—

Connector No.	E215
Connector Name	HORN
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	—

Connector No.	E216
Connector Name	HORN
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	—

ALKIA0252GB

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
4J	B	—
6J	BR/W	—
10J	SHIELD	—
11J	W	—
13J	L/O	—
17J	SB	—
22J	R/B	—
25J	V/W	—
27J	G/R	—

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	SB	DOOR SW(DR)

Connector No.	B18
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	R/B	DOOR SW(RL)

Connector No.	B20
Connector Name	JOINT CONNECTOR-B05
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
5	GR	—
6	B	—

Connector No.	B28
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y/G	—
2	B	—

ALKIA0253GB

Connector No.	B29
Connector Name	REAR PARCEL SHELF ANTENNA
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	ANT+
2	B	ANT-

Connector No.	B33
Connector Name	TRUNK OPENER REQUEST SWITCH
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	G/R	TRUNK_ REQUEST_SW

Connector No.	B46
Connector Name	REAR BUMPER ANTENNA
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	BR/W	ANT+
2	L/O	ANT-

Connector No.	B104
Connector Name	WIRE TO WIRE
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
10	R/G	—
11	R/W	—

Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	R/G	DOOR SW (AS)

Connector No.	B116
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	R/W	DOOR SW (RR)

ALKIA0254GB

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

7	6	5	4		3	2	1
16	15	14	13	12	11	10	9	8

Terminal No.	Color of Wire	Signal Name
8	B	—

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1	9
16	15	14	13	12	11	10	9	

Terminal No.	Color of Wire	Signal Name
3	P	—
11	V	—
12	B/W	—

Connector No.	D6
Connector Name	FRONT OUTSIDE HANDLE LH
Connector Color	BLACK

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	P	ANT+
2	V	ANT-
3	B/W	SW+
4	B	SW-

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2		3	4
5	6	7	8	9	10

Terminal No.	Color of Wire	Signal Name
5	B	—

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

6	5	4	3	2	1
12	11	10	9	8	7

Terminal No.	Color of Wire	Signal Name
5	LG	—
9	P/L	—
12	B/Y	—

Connector No.	D106
Connector Name	FRONT OUTSIDE HANDLE RH
Connector Color	BLACK

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	LG	ANT+
2	B/Y	ANT-
3	P/L	SW+
4	B	SW-

ALKIA0255GB

Connector No.	H-1
Connector Name	HORN RELAY
Connector Color	BLACK

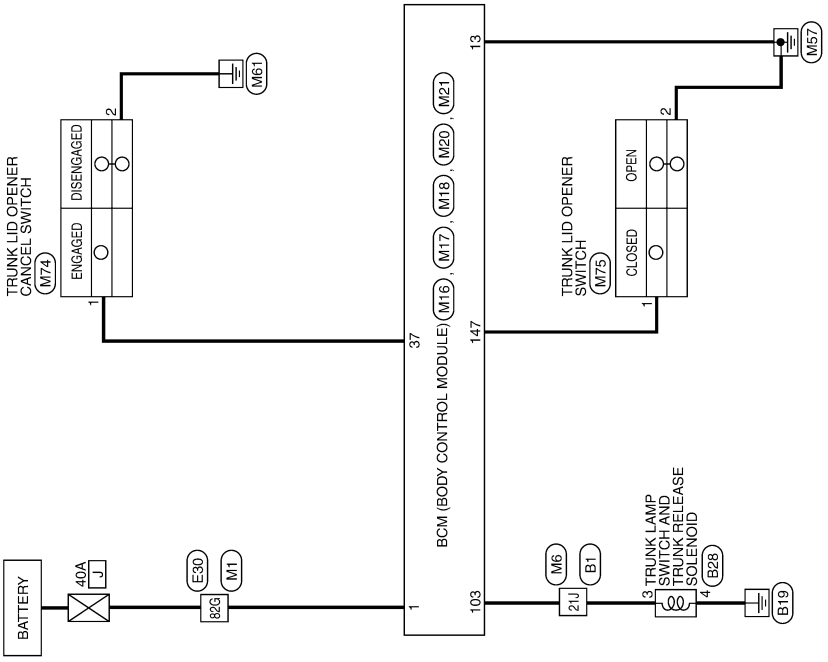
Terminal No.	Color of Wire	Signal Name
1	G/W	—
2	G/B	—
3	G	—

ALKIA0256GB

Wiring Diagram — TRUNK LID OPENER SYSTEM —

INFOID:0000000001505067

TRUNK LID OPENER



ALKWA0039GB

TRUNK LID OPENER CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
82G	W/B	—

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
21J	V	—

Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
13	B	GND1

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

H.S.

Terminal No.	Color of Wire	Signal Name
37	O	TRUNK_CANCEL_SW

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
103	V	CDL_BACK_TRUNK

ALKIA0215GB

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GRAY

Terminal No.	Color of Wire	Signal Name
147	L/R	BACK_TRUNK_OPENER

Connector No.	M74
Connector Name	TRUNK LID OPENER CANCEL SWITCH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	O	—
2	B	—

Connector No.	M75
Connector Name	TRUNK LID OPENER SWITCH
Connector Color	BLACK

Terminal No.	Color of Wire	Signal Name
1	L/R	—
2	B	—

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
21J	V	—

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
82G	W/B	—

ALKIA0216GB

Connector No.	B28
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
3	V	—
4	B	—

ALKIA0217GB

Fail Safe

INFOID:0000000001505068

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

Display contents of CONSULT	Fail-safe	Cancellation
B2553: IGNITION RELAY	Inhibit engine cranking	2 seconds after the BCM turns the ignition ON, voltage is detected on the ignition input line.
B2555: STOP LAMP	Inhibit engine cranking	500 ms after stop lamp switch engagement, output voltage is present
B2556: PUSH-BTN IGN SW	Inhibit engine cranking	500 ms after the BCM switches to sleep condition, detects that the engine start switch is turned from ON to OFF.
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Starter control relay signal • Starter relay status signal
B2562: LOW VOLTAGE	• Inhibit engine cranking • Inhibit steering lock	1.5 seconds after power supply voltage increases to above 8.8 V
B2563: HI VOLTAGE	• Inhibit engine cranking • Inhibit steering lock	500 ms after the power supply voltage decreases to less than 18 V
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 /h or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions is fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions is fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

Display contents of CONSULT	Fail-safe	Cancellation
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B2609: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When the following steering lock conditions agree • BCM steering lock control status • Steering lock condition No. 1 signal status • Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2611: ACC RELAY	• Inhibit engine cranking • Inhibit steering lock	When any of the following conditions is fulfilled: • Accessory input is commanded OFF and no votage is detected by the BCM on that terminal. • Accessory input is commanded ON and votage is detected by the BCM on that terminal.
B2612: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When any of the following conditions is fulfilled • Steering lock unit status signal (CAN) is received normally • The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2614: ACC RELAY CIRC	Inhibit engine cranking	The status of the accessory terminal detects voltage in ACC position and no voltage in OFF position.
B2615: BLOWER RELAY CIRC	Inhibit engine cranking	The status of the IGN2 terminal detects voltage in IGN2 position and no voltage in OFF position.
B2616: IGN RELAY CIRC	Inhibit engine cranking	The status of the IGN terminal detects voltage in IGN position and no voltage in OFF position.
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261A: PUSH-BTN IGN SW	Inhibit engine cranking	BCM initialization
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B2621: INSIDE ANTENNA 1	—	Inside antenna 1 (instrument panel) signal received
B2622: INSIDE ANTENNA 2	—	Inside antenna 2 (console) signal received
B2623: INSIDE ANTENNA 3	—	Inside antenna 3 (rear parcel shelf) signal received
B2624: INSIDE ANTENNA 4	—	Inside antenna 4 signal received
B2625: INSIDE ANTENNA 5	—	Inside antenna 5 signal received
B2626: RT DOOR ANT FAIL	—	Front outside handle RH (outside key antenna) signal received
B2627: LT DOOR ANT FAIL	—	Front outside handle LH (outside key antenna) signal received
B2628: TRUNK ANT FAIL	—	Rear bumper antenna signal received
B2629: VEHICLE SPEED	Inhibit engine cranking	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)

DTC Inspection Priority Chart

INFOID:0000000001505069

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

Priority	DTC
1	• B2562: LOW VOLTAGE • B2563: HI VOLTAGE
2	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	• B2190: NATS ANTTENA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM
4	• B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2611: ACC RELAY • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARETE RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E1: ENG STATE NO RECIV • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
5	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000001505070

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

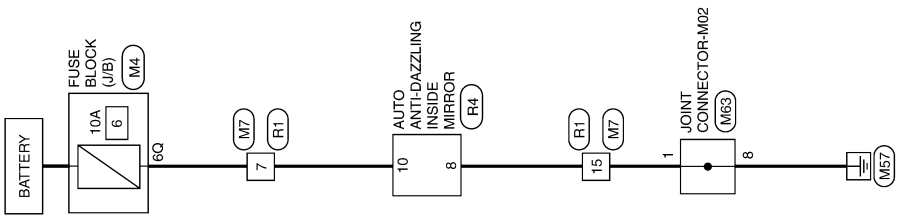
CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—
U1000: CAN COMM CIRCUIT	—	—	DLK-40
U1010: CONTROL UNIT (CAN)	—	—	DLK-41
U0415: VEHICLE SPEED SIG	—	—	BCS-31
B2013: ID DISCORD BCM-S/L	×	—	SEC-35
B2014: CHAIN OF S/L-BCM	×	—	SEC-36
B2190: NATS ANTTENA AMP	×	—	SEC-28
B2191: DIFFERENCE OF KEY	×	—	SEC-32
B2192: ID DISCORD BCM-ECM	×	—	SEC-33
B2193: CHAIN OF BCM-ECM	×	—	SEC-34
B2553: IGNITION RELAY	—	—	PCS-44
B2555: STOP LAMP	—	—	SEC-40
B2556: PUSH-BTN IGN SW	—	×	SEC-43
B2557: VEHICLE SPEED	×	×	SEC-45
B2560: STARTER CONT RELAY	×	×	SEC-46
B2562: LOW VOLTAGE	—	—	BCS-32
B2563: HI VOLTAGE	×	×	BCS-33
B2601: SHIFT POSITION	×	×	SEC-47
B2602: SHIFT POSITION	×	×	SEC-51
B2603: SHIFT POSI STATUS	×	×	SEC-54
B2604: PNP SW	×	×	SEC-58
B2607: S/L RELAY	×	×	SEC-60
B2608: STARTER RELAY	×	×	SEC-62
B2609: S/L STATUS	×	×	SEC-64
B260A: IGNITION RELAY	×	×	PCS-46
B260B: STEERING LOCK UNIT	—	×	SEC-69
B260C: STEERING LOCK UNIT	—	×	SEC-70
B260D: STEERING LOCK UNIT	—	×	SEC-71
B260F: ENG STATE SIG LOST	×	×	SEC-72
B2611: ACC RELAY	—	—	PCS-47
B2612: S/L STATUS	×	×	SEC-73
B2614: ACC RELAY CIRC	—	×	PCS-49
B2615: BLOWER RELAY CIRC	—	×	PCS-52
B2616: IGN RELAY CIRC	—	×	PCS-55
B2617: STARTER RELAY CIRC	×	×	SEC-78
B2618: BCM	×	×	PCS-58
B2619: BCM	×	×	SEC-80
B261A: PUSH-BTN IGN SW	—	×	SEC-81
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	SEC-84
B2621: INSIDE ANTENNA	—	—	DLK-42

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Reference page
B2622: INSIDE ANTENNA	—	—	DLK-45
B2623: INSIDE ANTENNA	—	—	DLK-48

HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram

INFOID:0000000001505071



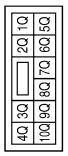
HOMELINK UNIVERSAL TRANSCEIVER

ALKWA0025GE

HOMELINK UNIVERSAL TRANSCEIVER CONNECTORS

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

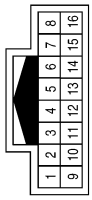
H.S.



Terminal No.	Color of Wire	Signal Name
6Q	Y/R	—

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

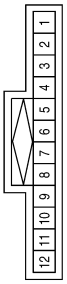
H.S.



Terminal No.	Color of Wire	Signal Name
7	Y/R	—
15	B	—

Connector No.	M63
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

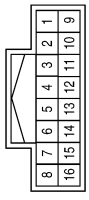
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	—
8	B	—

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

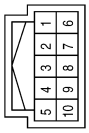
H.S.



Terminal No.	Color of Wire	Signal Name
7	B/Y	—
15	B	—

Connector No.	R4
Connector Name	AUTO ANTI-DAZZLING INSIDE MIRROR
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
8	B	GND
10	B/Y	BAT+

ALKIA0214GB

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000001505072

ALL FUNCTIONS OF INTELLIGENT KEY SYSTEM DO NOT OPERATE

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-5, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
All functions of Intelligent Key system do not operate.	1. Check BCM power supply and ground circuit.	DLK-51
	2. Check Intelligent Key function and battery inspection.	DLK-111
	3. Check remote keyless entry receiver.	DLK-107
	4. Check Intermittent Incident.	GI-42

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000001505073

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-5, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure		Reference page
Power door lock does not operate with door lock and unlock switch.	1. Check BCM Power supply and ground circuit.		DLK-51
	2. Check door lock and unlock switch.		DLK-56
	3. Check door lock actuator (driver side)		DLK-93
	4. Check Intermittent Incident.		GI-42
Power door lock does not operate with door key cylinder operation. (Power door lock operate properly with door lock and unlock switch.)	1. Check key cylinder switch.		DLK-68
	2. Replace power window main switch.		INT-11
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	DLK-93
		Passenger side	DLK-94
		Rear LH	DLK-95
		Rear RH	DLK-97
	2. Check Intermittent Incident.		GI-42

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:0000000001505074

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-5, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
Door lock/unlock do not operate by door request switch.	1. Check BCM power supply and ground circuit.	DLK-51
	2. Check door switch.	DLK-52
	3. Check key slot.	DLK-65
	4. Check Intermittent Incident.	GI-42
Door lock/unlock does not operate by request switch (driver side).	1. Check door request switch (driver side).	DLK-85
	2. Check outside key antenna (driver side).	DLK-104
	3. Check Intermittent Incident.	GI-42
Door lock/unlock does not operate by request switch (passenger side).	1. Check door request switch (passenger side).	DLK-85
	2. Check outside key antenna (passenger side).	DLK-104
	3. Check Intermittent Incident.	GI-42
Selective unlock function does not operate by door request switch (driver side) (other door lock function operate).	1. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.	DLK-34
	2. Check selective unlock function with a remote controller or door key cylinder.	DLK-11
	3. Check Intermittent Incident.	GI-42
Selective unlock function does not operate by door request switch (passenger side) (other door lock function operate).	1. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.	DLK-34
	2. Check Intermittent Incident.	GI-42
Auto lock function does not operate.	1. Check “AUTO LOCK SET” setting in “WORK SUPPORT”.	DLK-34
	2. Check door switch.	DLK-52
	3. Check key slot.	DLK-65
	4. Check Intermittent Incident.	GI-42

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000001505075

REMOTE KEYLESS ENTRY FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-5, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is out of key slot.
- Ignition switch is in OFF or ACC position.
- All doors are closed.
- Retaind power operation does not operate. Refer to DLK-16, "INTELLIGENT KEY : System Description".

Symptom	Diagnosis/service procedure	Reference page
All of the remote keyless entry functions do not operate.	1. Check Intelligent Key battery inspection.	DLK-111
	2. Check Intermittent Incident.	GI-42
Selective unlock function does not operate by Intelligent Key.	1. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.	DLK-34
	2. Check Intelligent Key battery inspection.	DLK-111
	3. Check Intermittent Incident.	GI-42

Symptom	Diagnosis/service procedure	Reference page
Auto lock function does not operate normally.	1. Check “AUTO LOCK SET” setting in “WORK SUPPORT”.	DLK-35
	2. Check door switch.	DLK-52
	3. Check key slot.	DLK-65
	4. Check Intermittent Incident.	GI-42
Power window down function does not operate.	1. Check “PW DOWN SET” setting in “WORK SUPPORT”.	DLK-111
	2. Check Intelligent Key battery inspection.	DLK-111

TRUNK OPEN FUNCTION SYMPTOMS

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : Symptom Table

INFOID:0000000001505076

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-5, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
Trunk open function does not operate by trunk opener switch.	1. Check trunk opener switch.	DLK-76
	2. Check trunk lid opener cancel switch.	DLK-79
	3. Check Intermittent Incident.	GI-42

TRUNK REQUEST SWITCH

TRUNK REQUEST SWITCH : Symptom Table

INFOID:0000000001505077

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-5, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following “symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
Trunk open function does not operate by trunk opener request switch.	1. Check trunk opener request switch.	DLK-89
	2. Check trunk lid opener cancel switch.	DLK-79
	3. Check outside key antenna (trunk room).	DLK-104
	4. Check Intermittent Incident.	GI-42

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000001505078

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-5, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
Trunk open function does not operate by Intelligent Key.	1. Check “TRUNK OPEN DELAY” setting in “WORK SUPPORT”.	DLK-35
	2. Check trunk open function.	DLK-25
	3. Check trunk room lamp switch.	DLK-82
	4. Check Intelligent Key battery inspection.	DLK-111
	5. Check Intermittent Incident.	GI-42

WARNING FUNCTION SYMPTOMS

Symptom Table

INFOID:0000000001505079

WARNING FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-5, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- If the following “symptoms are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom		Diagnosis/service procedure	Reference page
OFF position warning does not operate.	For internal	1. Check push button ignition switch position indicator.	SEC-43
		2. Check door switch.	DLK-52
		3. Check warning chime function.	DLK-119
		4. Check Intermittent Incident.	GI-42
	For external	1. Check push button ignition switch position indicator.	SEC-43
		2. Check door switch.	DLK-52
		3. Check Intelligent Key warning buzzer.	DLK-101
		4. Check Intermittent Incident.	GI-42
P position warning does not operate.		1. Check Park position switch.	SEC-58
		2. Check door switch.	DLK-52
		3. Check Intelligent Key warning buzzer.	DLK-101
		4. Check warning chime function.	DLK-119
		5. Check combination meter display function.	MWI-3
		6. Check Intermittent Incident.	GI-42
ACC warning does not operate		1. Check push button ignition switch position indicator.	SEC-43
		2. Check warning chime function.	DLK-119
		3. Check combination meter display function.	MWI-3
		4. Check Intermittent Incident.	GI-42

Symptom		Diagnosis/service procedure		Reference page
Take away warning does not operate.	Door open to close	1. Check door switch.		DLK-52
		2. Check inside key antenna.	Instrument center	DLK-42
			Console	DLK-45
			Trunk room	DLK-48
		3. Check Intelligent Key warning buzzer.		DLK-101
		4. Check warning chime function.		DLK-119
		5. Check key slot illumination.		DLK-113
		6. Check combination meter display function.		DLK-118
		7. Check Intermittent Incident.		GI-42
	Push-button ignition switch operation	1. Check push button ignition switch position indicator.		SEC-43
		2. Check inside key antenna.	Instrument center	DLK-42
			Console	DLK-45
			Trunk room	DLK-48
		3. Check warning chime function.		DLK-119
		4. Check key slot illumination.		DLK-113
		5. Check combination meter display function.		DLK-118
		6. Check Intermittent Incident.		GI-42
	Door is open	1. Check push button ignition switch position indicator.		SEC-43
		2. Check inside key antenna.	Instrument center	DLK-42
			Console	DLK-45
			Trunk room	DLK-48
		3. Check combination meter display function.		DLK-118
		4. Check Intermittent Incident.		GI-42
	Take away through window	1. Check “TAKE OUT FROM WIN WARN” setting in “WORK SUPPORT”.		DLK-35
		2. Check inside key antenna.	Instrument center	DLK-42
			Console	DLK-45
			Trunk room	DLK-48
		3. Check warning chime function.		DLK-119
		4. Check key slot illumination.		DLK-113
		5. Check combination meter display function.		DLK-118
		6. Check Intermittent Incident.		GI-42
Key warning chime does not operate.		1. Check key slot.		DLK-65
		2. Check door switch.		DLK-52
		3. Check warning chime function.		DLK-119
		4. Check key slot illumination.		DLK-113
		5. Check combination meter display function.		MWI-3
		6. Check Intermittent Incident.		GI-42

Symptom	Diagnosis/service procedure		Reference page
Door lock operation warning chime does not operate.	1. Check door switch.		DLK-52
	2. Check key slot illumination.		DLK-113
	3. Check Intelligent Key warning buzzer.		DLK-101
	4. Check inside key antenna.	Instrument center	DLK-42
		Console	DLK-45
		Trunk room	DLK-48
	5. Check Intermittent Incident.		GI-42

KEY REMINDER FUNCTION SYMPTOMS

Symptom Table

INFOID:0000000001505080

KEY REMINDER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-5, "Work Flow".
- If the following symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
Key reminder function does not operate.	1. Check “ANTI KEY LOCK IN FUNCTI”setting in “WORK SUPPORT”.	DLK-65
	2. Check door switch.	DLK-52
	3. Check inside key antenna.	DLK-119
	4. Check unlock sensor.	DLK-113
	5. Check Intelligent Key battery inspection.	DLK-118
	6. Check Intermittent Incident.	GI-42

HAZARD FUNCTION

Symptom Table

INFOID:0000000001505081

HAZARD AND BUZZER REMINDER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-5, "Work Flow".
- If the following symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
Hazard reminder does not operate by request switch. (Buzzer reminder operate.)	1. Check “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.	DLK-35
	2. Check hazard function.	DLK-120
	3. Check Intermittent incident.	GI-42
Hazard reminder does not operate by Intelligent Key. (Buzzer reminder operate.)	1. Check “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.	DLK-35
	2. Check hazard function.	DLK-120
	3. Check Intelligent Key battery inspection.	DLK-111
Buzzer reminder does not operate by request switch. (Hazard reminder operate.)	1. Check “ANS BACK I-KEY LOCK” or “ANS BACK I-KEY UNLOCK” setting in “WORK SUPPORT”.	DLK-35
	2. Check Intelligent Key warning buzzer.	DLK-101
	3. Check Intermittent incident.	GI-42
Buzzer reminder does not operate by trunk opener request switch.	1. Check “TRUNK OPEN DELAY” setting in “WORK SUPPORT”.	DLK-35
	2. Check Intelligent Key warning buzzer.	DLK-101
	3. Check trunk open function.	DLK-22
	4. Check Intermittent incident.	GI-42

HORN FUNCTION

Symptom Table

INFOID:0000000001505082

HAZARD AND HORN REMINDER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-5, "Work Flow".
- If the following symptoms” are detected, check systems shown in the “Diagnosis/service procedure” column in this order.

Conditions of Vehicle (Operating Conditions)

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

Symptom	Diagnosis/service procedure	Reference page
Hazard reminder does not operate by request switch. (Horn reminder operate.)	1. Check “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.	DLK-35
	2. Check hazard function.	DLK-120
	3. Check Intermittent Incident.	GI-42
Hazard reminder does not operate by Intelligent Key. (Horn reminder operate.)	1. Check “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.	DLK-35
	2. Check hazard function.	DLK-120
	3. Check Intelligent Key battery inspection.	
Horn reminder does not operate by request switch. (Hazard reminder operate.)	1. Check “ANSWER BACK WITH I-KEY LOCK” or “ANSWER BACK WITH I-KEY UNLOCK” setting in “WORK SUPPORT”.	DLK-35
	2. Check Intelligent Key warning buzzer.	DLK-101
	3. Check Intermittent Incident.	GI-42
Horn reminder does not operate by Intelligent Key. (Hazard reminder operate.)	1. Check “HORN WITH KEYLESS LOCK” setting in “WORK SUPPORT”.	DLK-35
	2. Check horn function.	DLK-116
	3. Check Intermittent Incident.	GI-42

INTEGRATED HOMELINK TRANSMITTER

Symptom Table

INFOID:0000000001505083

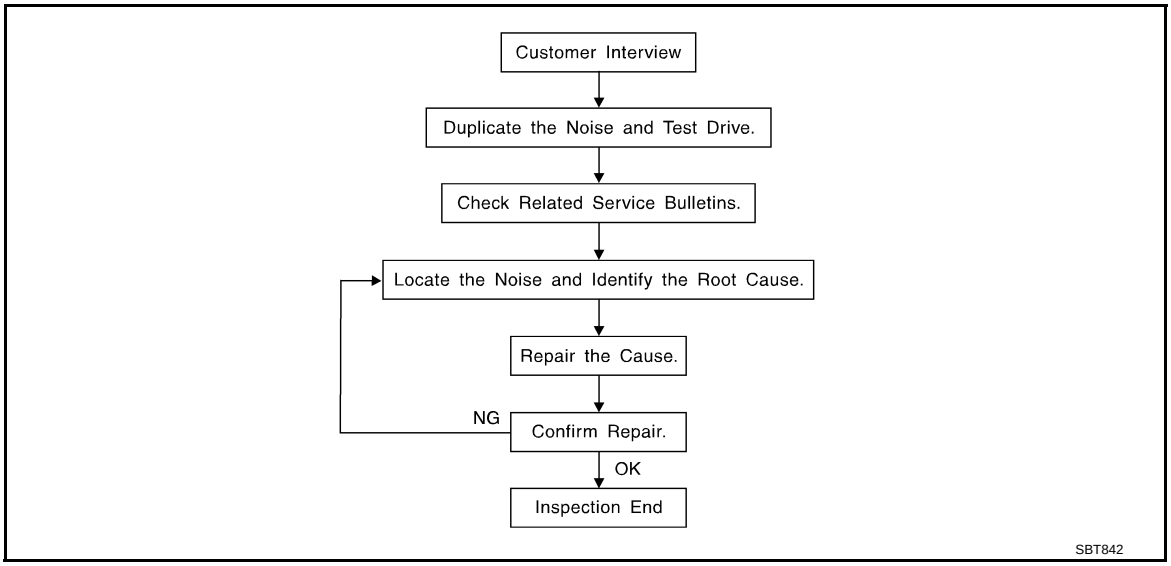
HOMELINK UNIVERSAL TRANSCEIVER MALFUNCTION

Symptom	Diagnosis/service procedure	Reference page
Homelink universal transceiver does not operate properly.	1. Check homelink universal transceiver function.	DLK-121
	2. Check Intermittent Incident.	GI-42

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001505084



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs.Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to DLK-179, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

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

DUPLICATE THE NOISE AND TEST DRIVE

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

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

1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on A/T model).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- removing the components in the area that you suspect the noise is coming from.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that you suspect is causing the noise.
  Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
- placing a piece of paper between components that you suspect are causing the noise.
- looking for loose components and contact marks.
  Refer to DLK-177, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:

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

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
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 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02: 15 × 25 mm (0.59 × 0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)
INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97 in)
FELT CLOTHTAPE
Used to insulate where movement does not occur. Ideal for instrument panel applications.
68370-4B000: 15 × 25 mm (0.59 × 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll
The following materials, not found in the kit, can also be used to repair squeaks and rattles.
UHMW (TEFLON) TAPE

Insulates where slight movement is present. Ideal for instrument panel applications.
SILICONE GREASE
Used in place of UHMW tape that will be visible or not fit. Will only last a few months.
SILICONE SPRAY
Use when grease cannot be applied.
DUCT TAPE
Use to eliminate movement.

CONFIRM THE REPAIR

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

Inspection Procedure

INFOID:0000000001505085

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. The cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

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

CENTER CONSOLE

Components to pay attention to include:

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

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

DOORS

Pay attention to the:

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

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.
In addition look for:

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

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 seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.
Cause of seat noise include:

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

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

UNDERHOOD

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

1. Any component 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.

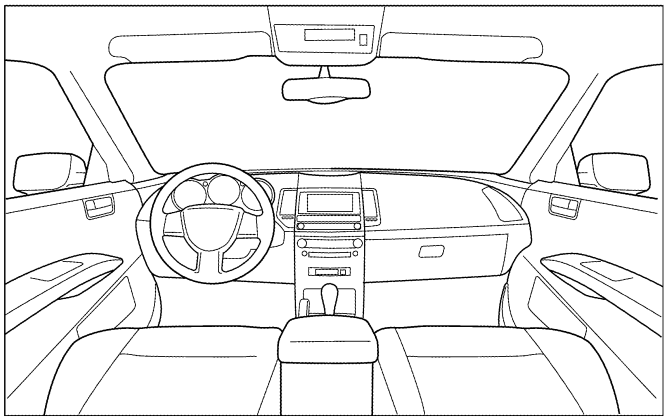
Diagnostic Worksheet

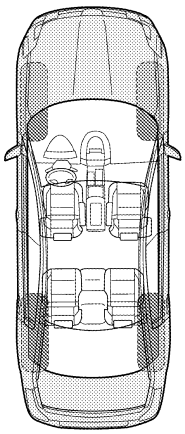
INFOID:0000000001505086

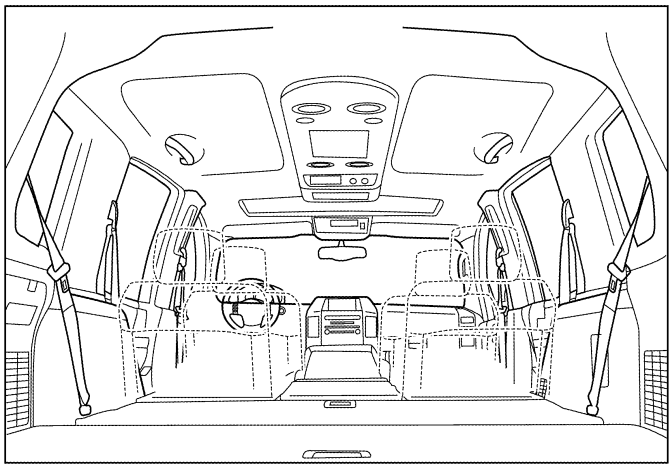
Dear Customer:
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions.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

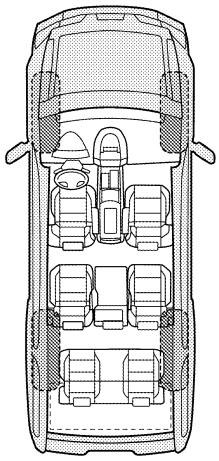
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.









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

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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:

- ☐ 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 _____ minutes

IV. WHAT TYPE OF NOISE

- ☐ 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	☐	☐	_____

VIN: _____ Customer Name _____

W.O.# _____ Date: _____

This form must be attached to Work Order

LAIA0071E

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001505087

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

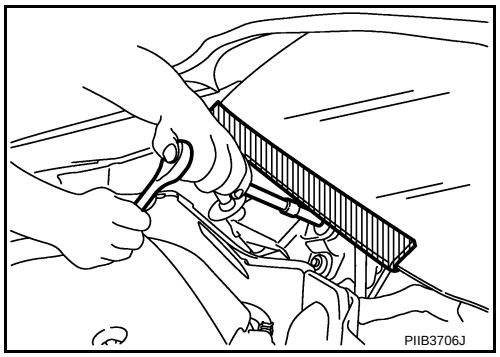
WARNING:

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

Procedure without Cowl Top Cover

INFOID:0000000001505088

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



Precaution for work

INFOID:0000000001505089

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

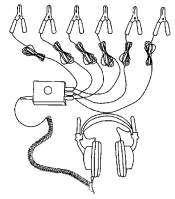
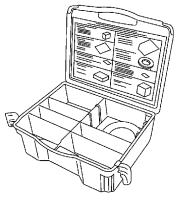
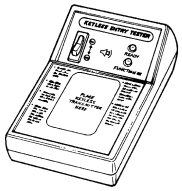
PREPARATION

PREPARATION

Special Service Tools

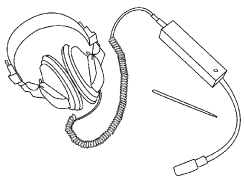
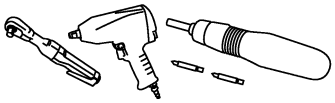
INFOID:0000000001505090

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

Tool number (Kent-Moore No.) Tool name	Description
(J-39570) Chassis ear  SIIA0993E	Locating the noise
(J-43980) NISSAN Squeak and Rattle Kit  SIIA0994E	Repairing the cause of noise
— (J-43241) Remote Keyless Entry Tester  LEL946A	Used to test keyfobs

Commercial Service Tools

INFOID:0000000001505091

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

ON-VEHICLE REPAIR

HOOD

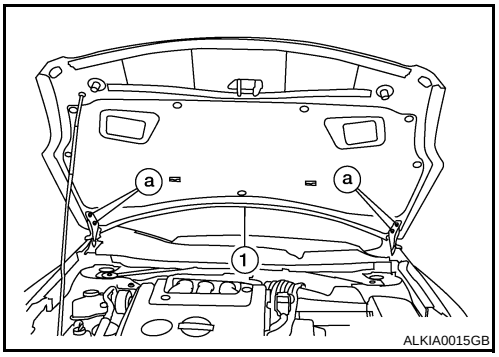
HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000001505092

REMOVAL

1. Remove the hinge nuts (a) and the hood assembly (1).
   CAUTION:
   Operate with two workers, because of its large size.



INSTALLATION

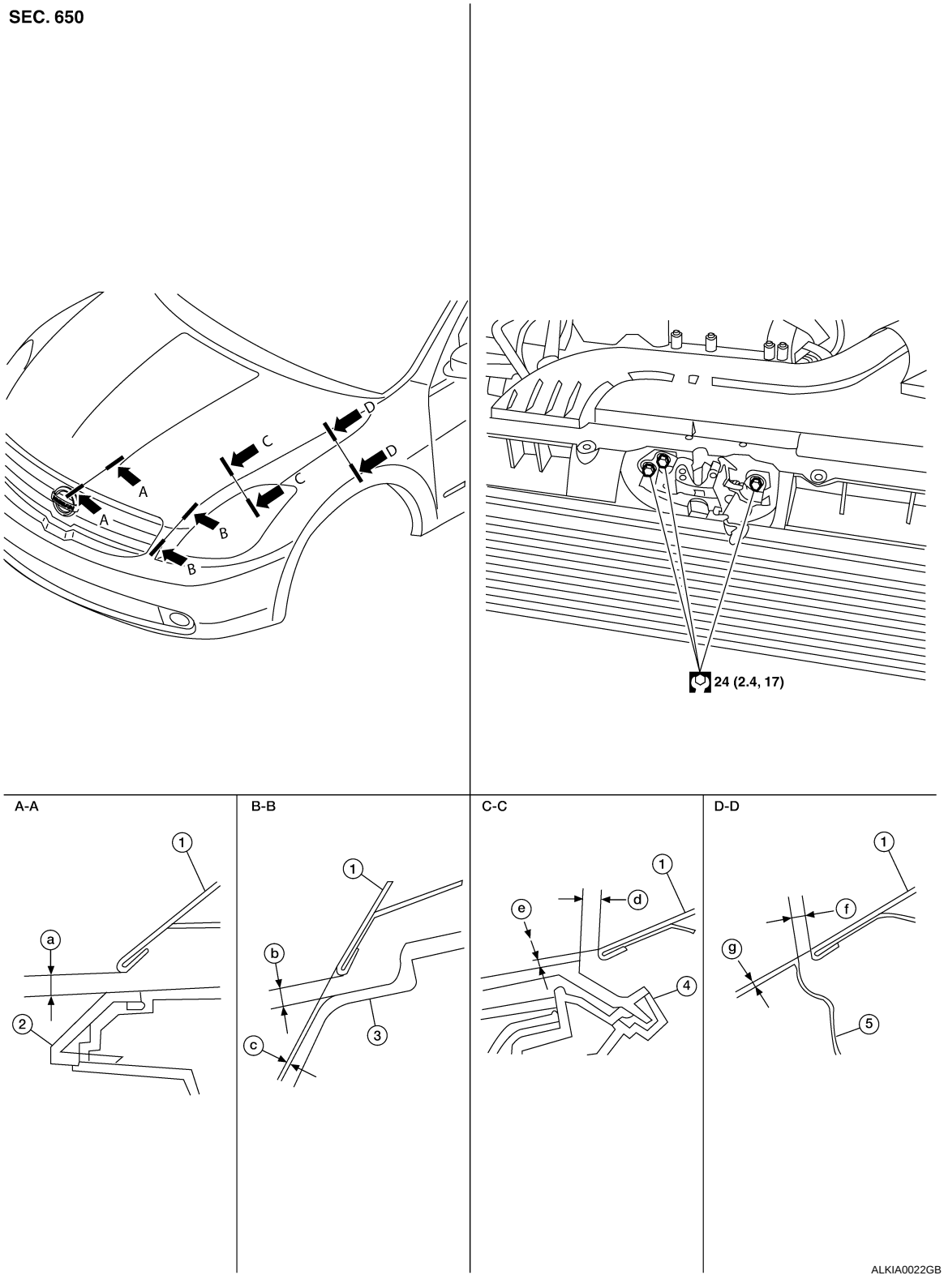
Installation is in the reverse order of removal.

NOTE:

After installing, perform hood fitting adjustment. Refer to DLK-184, "HOOD ASSEMBLY : Adjustment".

HOOD ASSEMBLY : Adjustment

INFOID:0000000001505093



1. Hood assembly
2. Front grille
3. Front fascia
4. Headlamp assembly
5. Front fender
6. Hood lock assembly

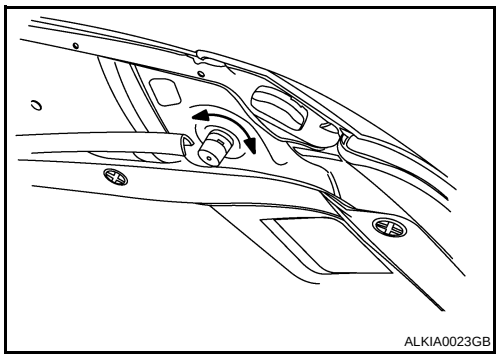
FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDUNAL CLEARANCE ADJUSTMENT

Section	Item	Measurement	Standard	Parallelism	Equality
A – A	a	Clearance	5.0 ± 2.0 (0.20 ± 0.079)	<= 2.0 (0.079)	—
B – B	b	Clearance	5.0 ± 2.0 (0.20 ± 0.079)	<= 2.0 (0.079)	<= 2.2 (0.087)
	c	Surface height	1.0 ± 2.0 (0.04 ±- 0.079)	<= 2.0 (0.079)	<= 2.0 (0.079)
C – C	d	Clearance	4.5 ± (0.18 ±- 0.079)	—	2.1 (0.083)
	e	Surface height	1.0 ± 2.1 (0.04 - 0.083)	—	< 2.0 (< 0.079)
D – D	f	Clearance	4.0 ± 1.0 (0.16 ± 0.04)	1.0 (0.04)	1.0 (0.04)
	g	Surface height	0.2 ± 1.0 (0.01 ± 0.04)	1.0 (0.04)	1.0 (0.04)

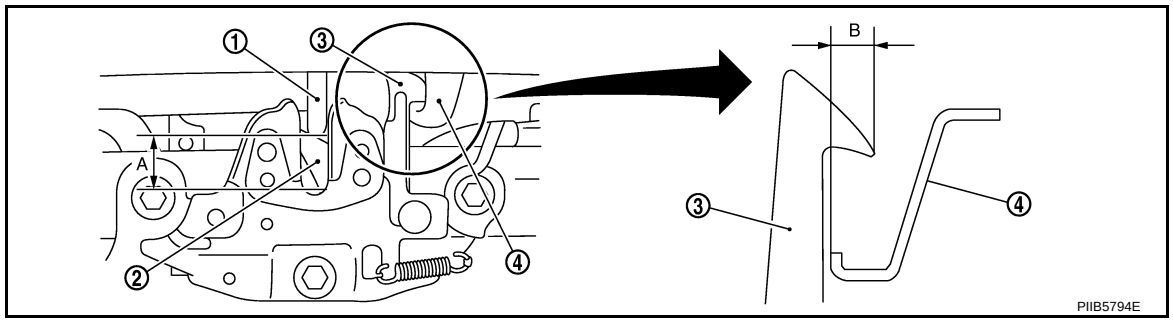
* Unit: mm (in)

FRONT END HEIGHT ADJUSTMENT

1. Check the surface height between the hood and each part by visual and tactile feeling.
2. Remove the front grille. Refer to EXT-16, "Removal and Installation".
3. Remove the hood lock.
4. Adjust the surface level difference of the hood, fender and head lamp by rotating the hood bumpers until the hood becomes 1 to 1.5 mm (0.04 to 0.059 in) lower than the fender.



5. Install and align the hood lock center with the center of the hood striker. Engage the lock with the striker and check for looseness.
6. Adjust A and B shown in the figure to the following value with hood's own weight by dropping it from approx. 200 mm (7.87 in) height or by pressing the hood closed lightly (approx. 29 N (3 kg)).



1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

A : 20 mm (0.79 in)
B : 6.8 mm (0.27 in)

7. After adjustment tighten the hood lock bolts to the specified torque.

LATERAL/LONGITUDUNAL CLEARANCE ADJUSTMENT

1. Check the clearance between the hood and each part by visual and tactile feeling.
2. Loosen the hood hinge bolts.
NOTE:

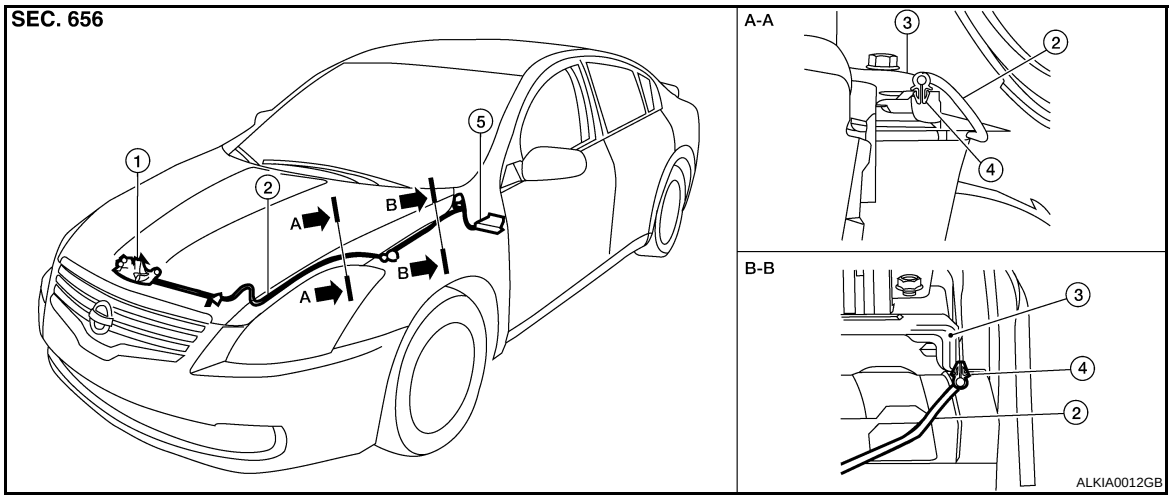
The anticorrosive agent applied between the hoodledge and the hood hinges also acts as an adhesive. This seal must be broken before the hinges will move.

3. Move the hood so that the clearance measurements are within specifications.
4. Tighten the hood hinge bolts.
   NOTE:
   After installation apply touch-up paint onto the hinge bolts and around the base of the hinge.
5. If the clearance measurements between the hood and fender cannot be corrected by moving the hood, the fender must be adjusted. Refer to DLK-190, "Removal and Installation".

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Component Parts Location

INFOID:0000000001505094



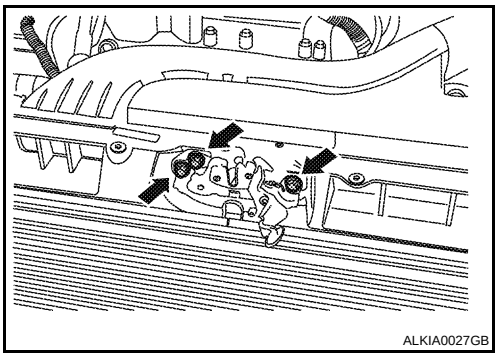
1. Hood lock assembly
2. Hood lock cable
3. Hoodledge reinforcement
4. Clip
5. Hood lock release handle

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000001505095

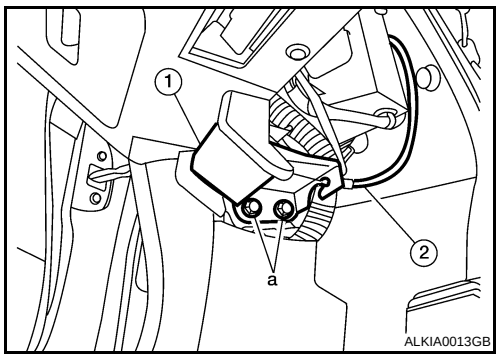
REMOVAL

1. Remove the front grill. Refer to EXT-16, "Removal and Installation".
2. Remove the LH fender protector. Refer to EXT-18, "Removal and Installation".
3. Remove the hood lock assembly bolts.



4. Disconnect the hood lock cable from the hood lock, and unclip it from the hoodledge.

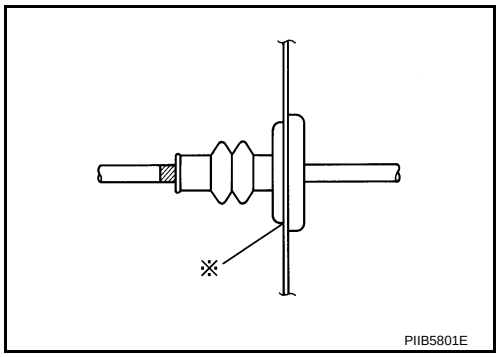
5. Remove the screws (A) with power tool, and separate the hood lock release handle (1) from the hood lock release cable (2).



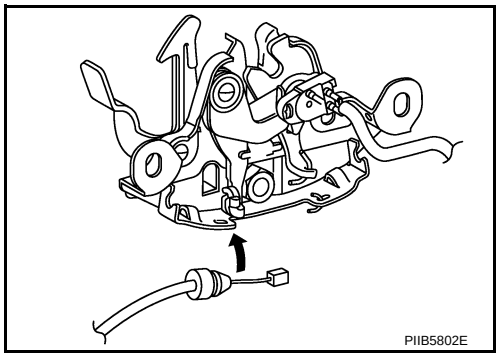
6. Remove the grommet from the upper dash, and pull the hood lock cable into the passenger compartment.
CAUTION:
While pulling, be careful not to damage (peel) the outside of the hood lock cable.

INSTALLATION

1. Pull the hood lock cable through the upper dash into the engine compartment.
CAUTION:
Be careful not to bend the cable too much, keep the radius 100 mm (3.94 in) or more.
2. Check that the cable is not offset from the center of the grommet, and seat the grommet into the upper dash hole.
3. Apply the sealant around the grommet at * mark.



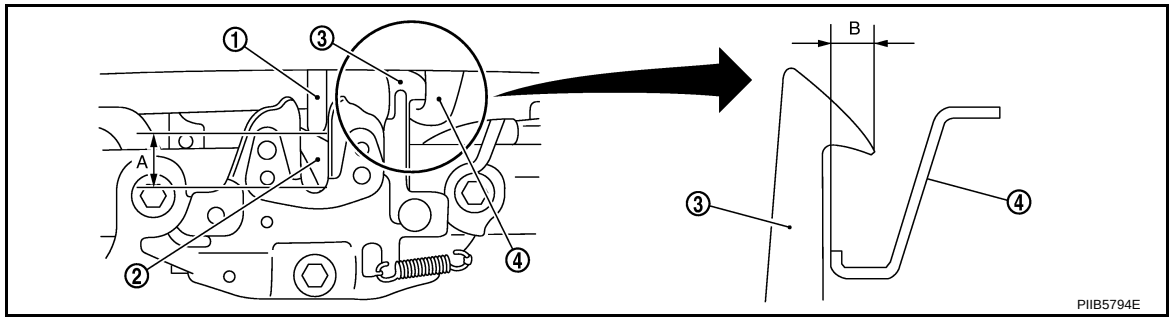
4. Position the hood lock cable and clip it into place.
5. Connect the hood lock cable to the hood lock assembly.
6. Loosely install the hood lock assembly.
7. Perform hood fitting adjustment. Refer to DLK-184, "HOOD ASSEMBLY : Adjustment".
8. Check the hood lock control operation.



INSPECTION

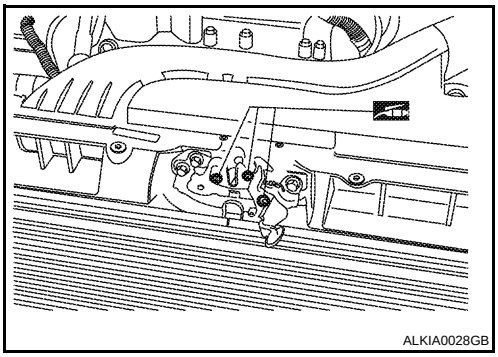
CAUTION:
If the hood lock cable is bent or deformed, replace it.

1. Check that the secondary latch is properly engaged with the secondary striker (B: 6.8 mm (0.268 in) shown in the figure) with hood's own weight.



1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

2. While operating the hood opener, carefully check that the front end of the hood is raised by approx. 20 mm (0.79 in). Also check that the hood opener returns to the original position.
3. Check that the hood opener operating is 294 N (30 kg) or below.
4. Install so the static closing force of the hood is 392 – 441 N·m (35– 44 kg-m).
5. Check the hood lock lubrication condition. If necessary, apply “body grease” as shown.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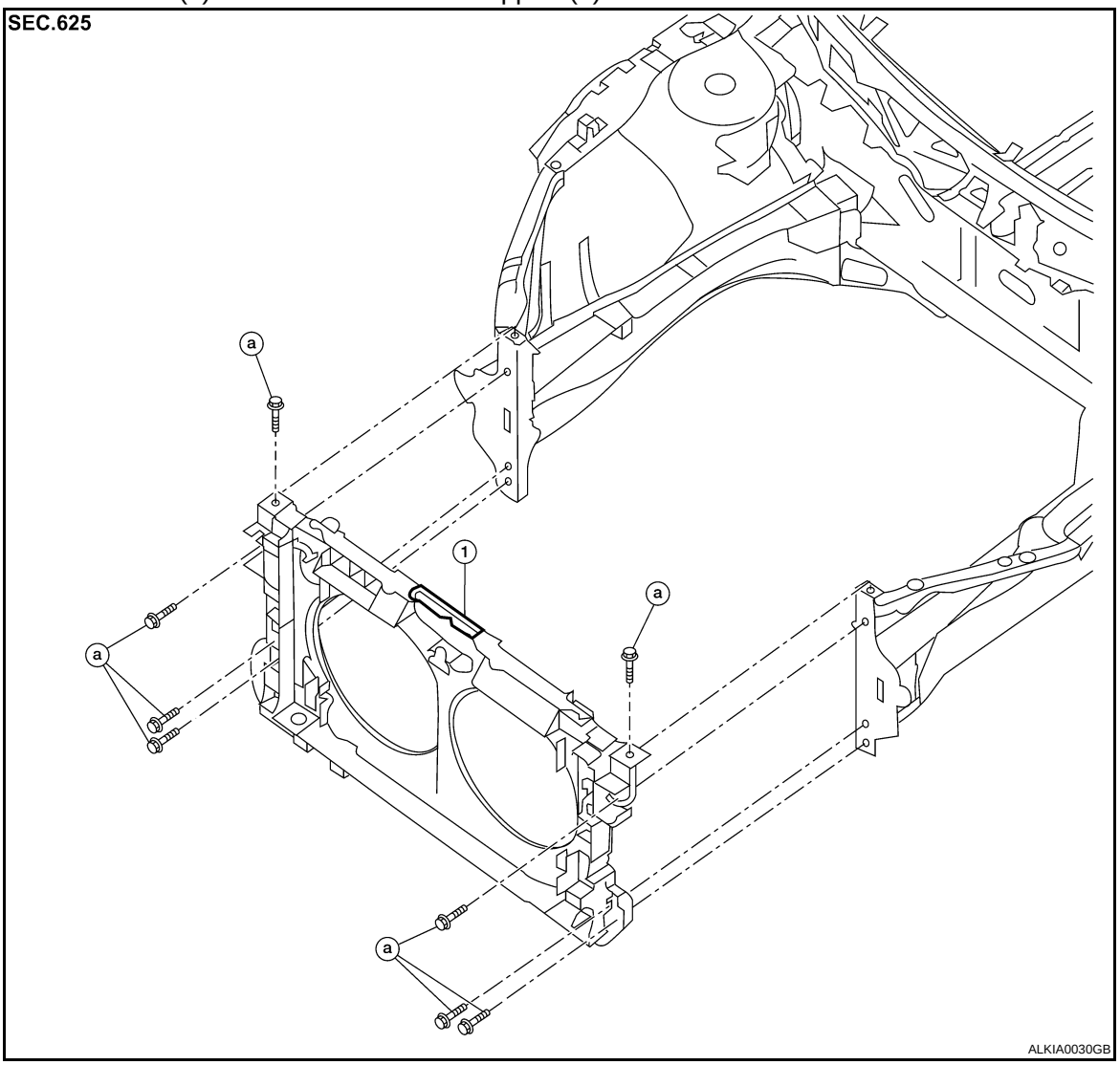
RADIATOR CORE SUPPORT

Removal and Installation

INFOID:0000000001505096

REMOVAL

1. Remove front bumper reinforcement. Refer to EXT-12, "Removal and Installation".
2. Remove head lamps (LH/RH). Refer to EXL-100, "Removal and Installation".
3. Remove washer tank. Refer to WW-39, "WASHER TANK : Removal and Installation".
4. Remove air duct. Refer to EM-23, "Removal and Installation".
5. Remove the radiator cooling fans. Refer to CO-16, "Removal and Installation".
6. Remove the radiator. Refer to CO-14, "Removal and Installation".
7. Remove the hood lock control. Refer to DLK-186, "HOOD LOCK CONTROL : Removal and Installation".
8. Remove ambient sensor. Refer to VTL-11, "Removal and Installation".
9. Remove crash zone sensor. Refer to SRS-12, "Removal and Installation".
10. Remove air guides (LH/RH).
11. Remove horn (High/Low). Refer to HRN-7, "Removal and Installation".
12. Remove the harness clips from the radiator core support assembly, the harness is separate.
13. Remove the bolts (a) and the radiator core support (1).



INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

Removal and Installation

INFOID:0000000001505097

REMOVAL

1. Remove the head lamp. Refer to EXL-100, "Removal and Installation".
2. Remove the front fender protector. Refer to EXT-18, "Removal and Installation".
3. Remove the inner fender bolt cover.
4. Remove the center mud guard. Refer to EXT-19, "Removal and Installation".
5. Remove the bolts and the front fender.

CAUTION:

- **While removing use a shop cloth to protect body from damaging.**
- **Use care when removing the front fender. The front fender baffle foam adheres the front fender to the body side outer. Carefully release the foam or damage to the fender may occur.**

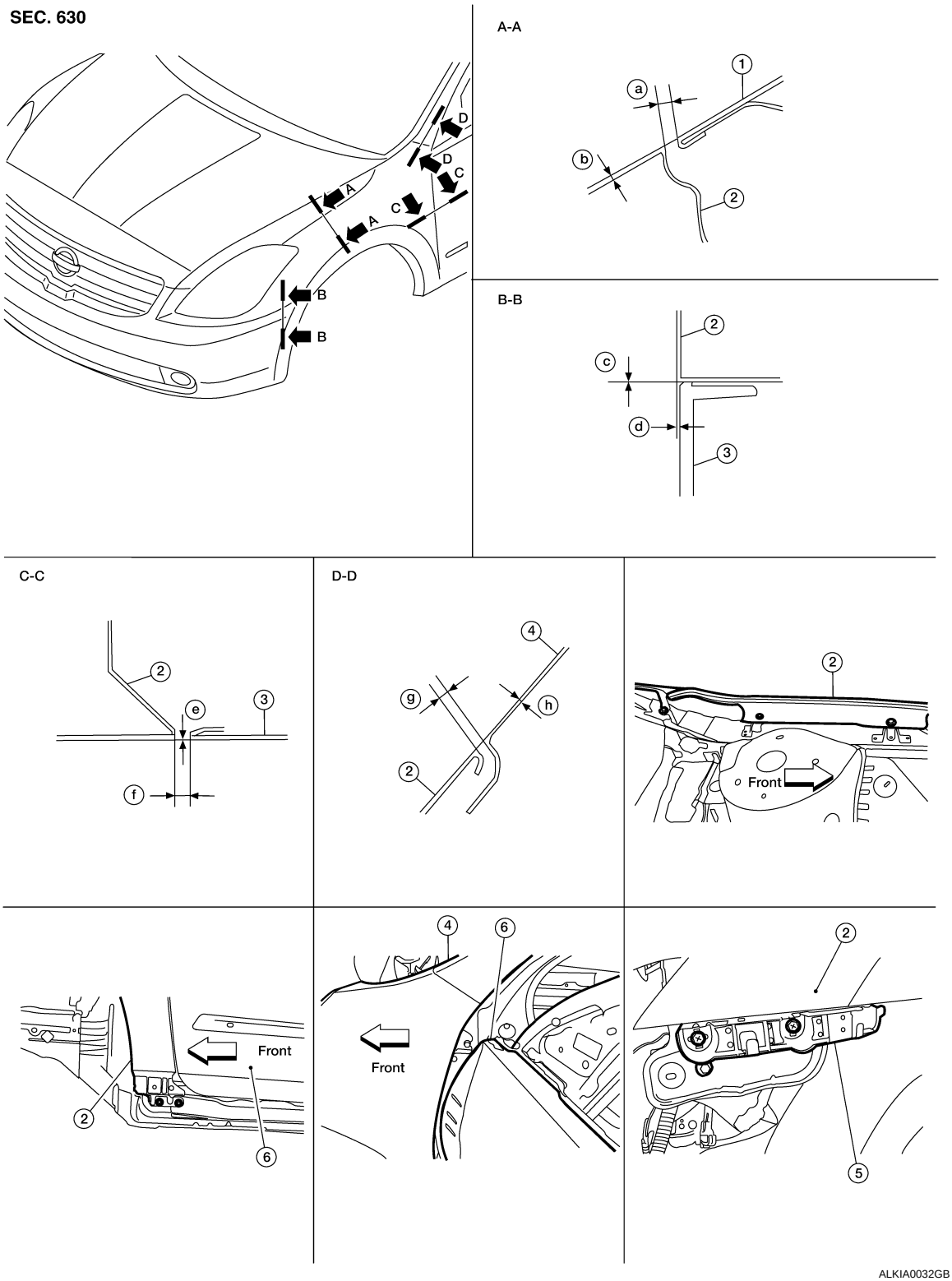
INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **After installing, apply touch-up paint (the body color) onto the head of the front fender bolts.**

ADJUSTMENT



1. Hood assembly
2. Front fender
3. Front fascia
4. Body side outer
5. Front fascia bracket
6. Front door assembly

Section	Item	Measurement	Standard	Parallelism	Equality
A-A	a	Clearance	4.0 ± 1.0 (0.16 ± 0.04)	1.0 (0.04)	1.0 (0.04)
	b	Surface height	0.2 ± 1.0 (0.01 ± 0.04)	1.0 (0.04)	1.0 (0.04)

Section	Item	Measurement	Standard	Parallelism	Equality
B-B	c	Clearance	0.0 + 0.8, -0.0 (0.0 +0.031, -0.0)	—	—
	d	Surface height	0.7 ± 1.0 (0.028 ± 0.04)	1.0 (0.04)	1.0 (0.04)
C-C	e	Clearance	3.6 ± 1.0 (0.14 ± 0.04)	1.0 (0.04)	—
	f	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	—	—
D-D	g	Clearance	2.3 ± 1.0 (0.09 ±±	1.0 (0.04)	—
	h	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	—	—

1. Remove the inner fender bolt cover.
2. Remove the front fender protector. Refer to EXT-18, "Removal and Installation".
3. Remove the center mud guard. Refer to EXT-19, "Removal and Installation".
4. Loosen the front fender bolts and screws.
5. Adjust the clearance (e) and surface height (f) between the front fender and the front door.
6. Tighten the rear upper and lower front fender bolts.
7. Adjust the clearance (a) and surface height (b) between the front fender and the hood.
8. Adjust the clearance (g) and surface height (h) between the front fender and the body side outer.
9. Tighten the inner front fender bolts.
10. Adjust the clearance (c) and the surface height (d) between the front fender and the front fascia.
11. Tighten the front fender to front fascia and bracket screws.
12. Apply touch-up paint (the body color) onto the head of the front fender bolts.
13. Install the center mud guard. Refer to EXT-19, "Removal and Installation".
14. Install the front fender protector. Refer to EXT-18, "Removal and Installation".
15. Install the inner fender bolt cover.

DOOR

FRONT DOOR

FRONT DOOR : Removal and Installation

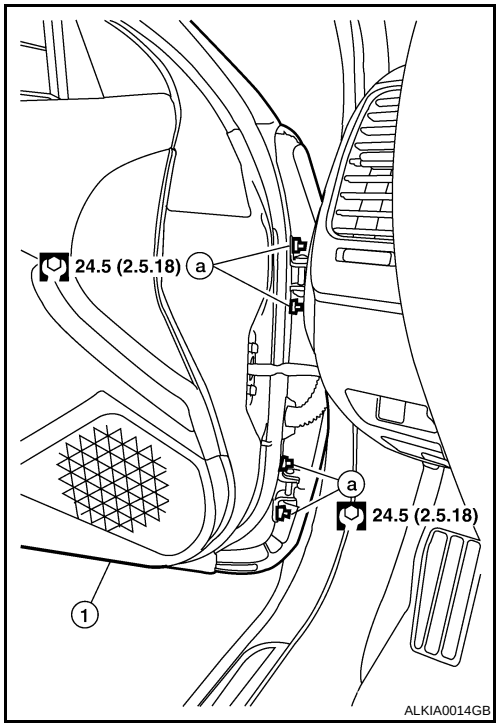
INFOID:0000000001505098

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, be sure to carry out the fitting adjustment. Refer to DLK-194, "FRONT DOOR : Adjustment".**
- **After installing, apply touch-up paint (the body color) onto the head of the hinge nuts.**
- **Check the hinge rotating parts for lubrication. If necessary, apply “body grease”.**
- **Operate with two workers, because of its heavy weight.**
- **Check front door open/close operation after installation.**

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



INSTALLATION

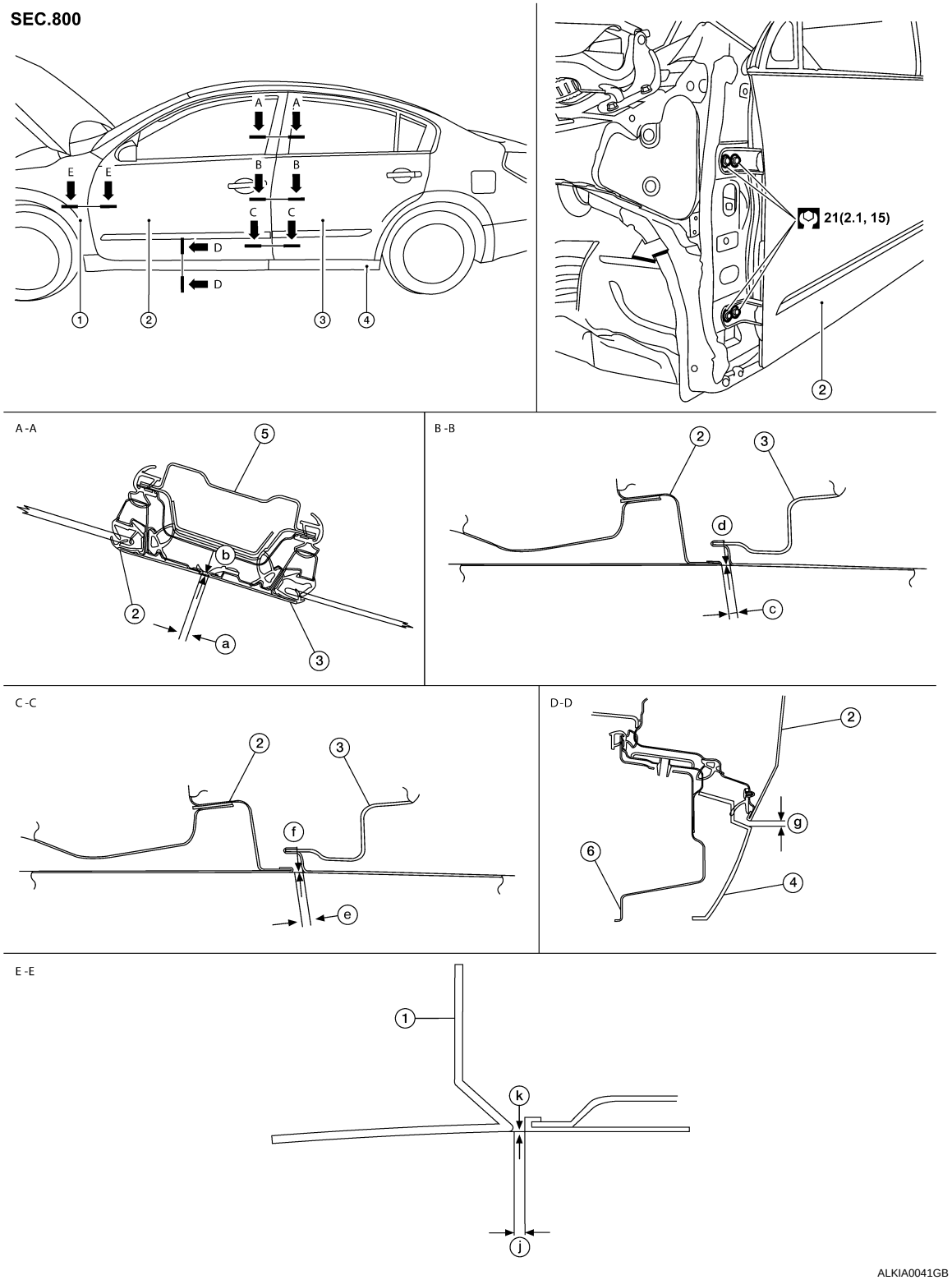
Installation is in the reverse order of removal.

NOTE:

Adjust the door. Refer to DLK-194, "FRONT DOOR : Adjustment".

FRONT DOOR : Adjustment

INFOID:0000000001505099



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1. Front fender
2. Front door assembly
3. Rear door assembly
4. Center mud guard
5. Center pillar
6. Outer sill

Section	Item	Measurement	Standard mm (in.)
A-A	a	Clearance	4.5 ± 1.5 (0.18 ± 0.06)
	b	Surface height	0.0 ± 1.5 (0.0 ± 0.06)
B-B	c	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	d	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C-C	e	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	f	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
D-D	g	Clearance	5.1 ± 1.7 (0.20 ± 0.07)
E-E	h	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	j	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

LONGITUDINAL CLEARANCE

1. Confirm the back door adjustments and adjust if necessary. Refer to DLK-195, "BACK DOOR : Removal and Installation".
2. Remove the front fender. Refer to DLK-190, "Removal and Installation".
3. Loosen the hinge bolts. Raise or lower the front door at rear edge to adjust.
4. Install the front fender. Refer to DLK-190, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

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

BACK DOOR

BACK DOOR : Removal and Installation

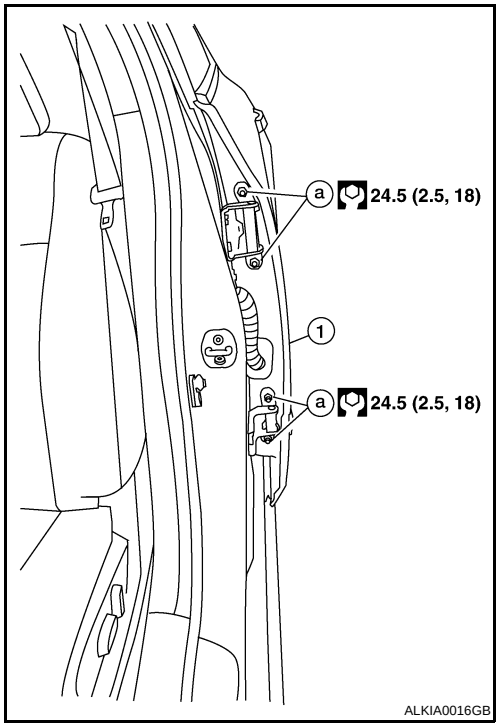
INFOID:0000000001505100

REMOVAL

1. Pull out grommet and disconnect rear door harness connector.
2. Remove the check link bolt from the center pillar.
3. Remove the door-side hinge nuts and the door assembly.

CAUTION:

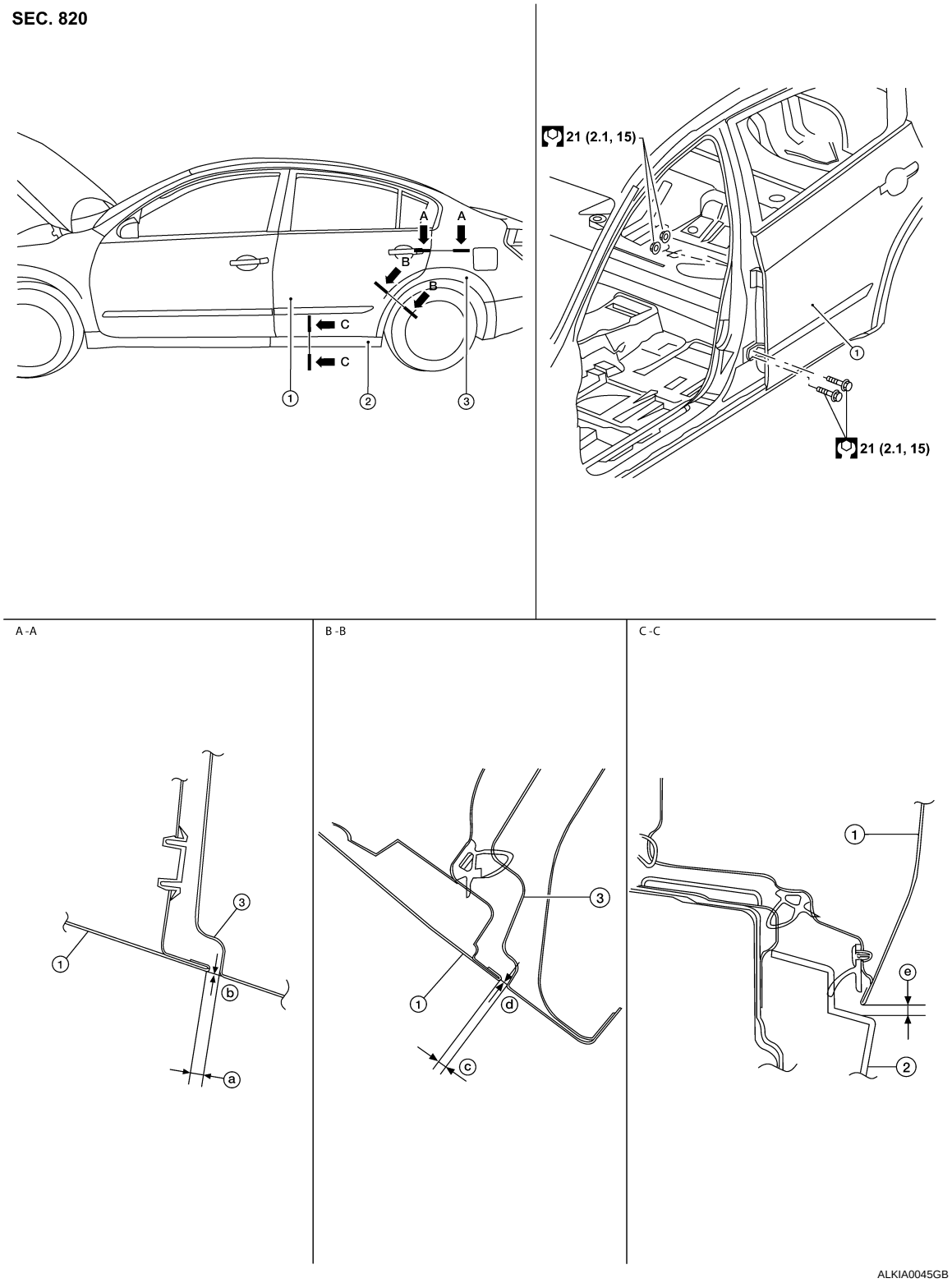
- **When removing and installing the rear door assembly, support the door with a jack and cloth to protect the door and body.**
- **When removing and installing rear door assembly, be sure to carry out the fitting adjustment.**
- **Check the hinge rotating parts for poor lubrication. If necessary, apply “body grease”.**
- **After installing, apply touch-up paint (the body color) onto the head of the hinge nuts.**
- **Operate with two workers, because of its heavy weight.**
- **Check rear door open/close operation after installation.**



INSTALLATION

Installation is in the reverse order of removal.

ADJUSTMENT



1. Rear door assembly
2. Center mud guard
3. Body side outer

Section	Item	Measurement	Standard mm (in.)
A-A	a	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	b	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
B-B	c	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	d	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C-C	e	Clearance	5.3 ± 1.7 (0.21 ± 0.07)

LONGITUDINAL CLEARANCE

1. Remove the center pillar upper and lower trim. Refer to INT-13, "Removal and Installation".
2. Loosen the upper pillar hinge nuts.
3. Loosen the lower pillar hinge bolts.
4. Raise or lower the door at the rear edge to adjust.
5. Tighten the lower pillar hinge bolts.
6. Tighten the upper pillar hinge nuts.
7. Install the center pillar upper and lower trim. Refer to INT-13, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

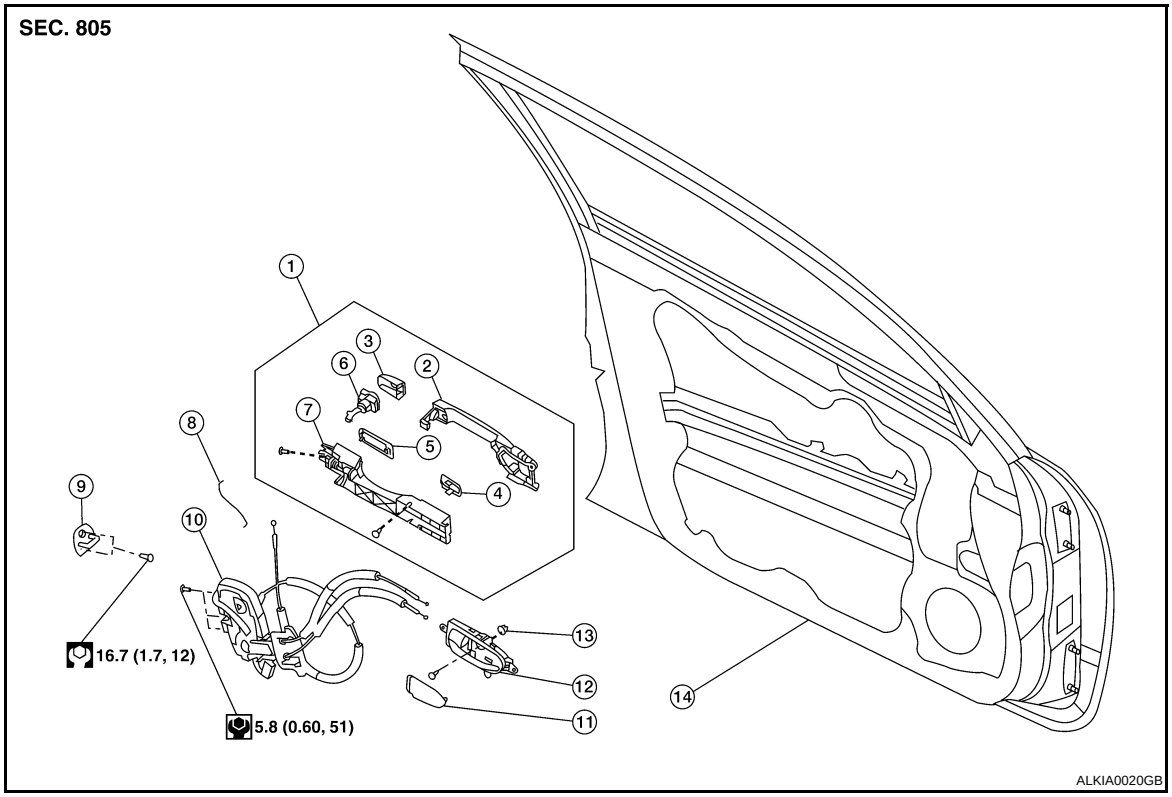
1. Loosen the hinge nuts.
2. Move the top and or the bottom in or out as necessary until it is within specification.
3. Tighten the hinge nuts to specification.

DOOR LOCK

FRONT DOOR LOCK

FRONT DOOR LOCK : Component Parts Location

INFOID:0000000001505101



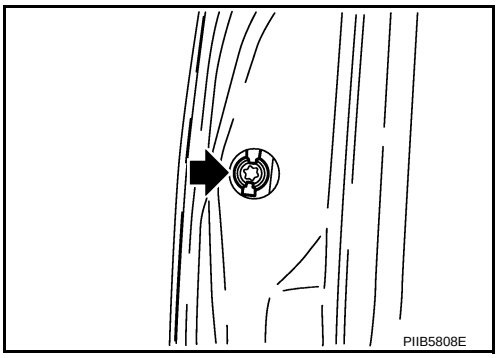
1. Outside handle assembly
2. Front gasket
3. Door key cylinder assembly (Driver side)
   Outside handle escutcheon (Passenger side)
4. Front gasket
5. Rear gasket
6. Key cylinder assembly (Driver side only)
7. Outside handle bracket
8. Key cylinder rod (Driver side only)
9. Front door striker
10. Door lock assembly
11. Cap
12. Inside door handle assembly
13. Grommet
14. Front door assembly

FRONT DOOR LOCK : Removal and Installation

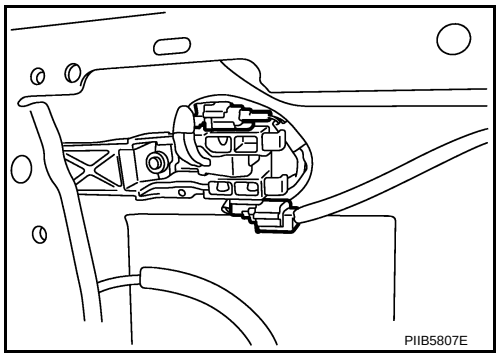
INFOID:0000000001505102

REMOVAL

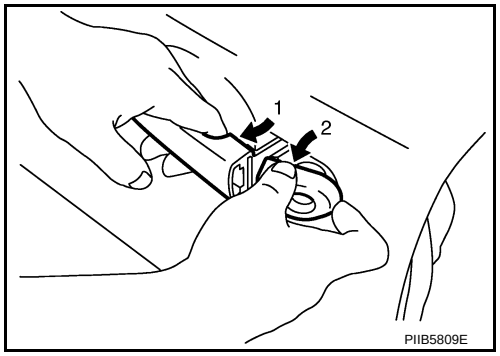
1. Remove the front door window and front door module assembly. Refer to GW-15, "Removal and Installation".
2. Remove door side grommet, and remove door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) bolts (TORX T30) from grommet hole.



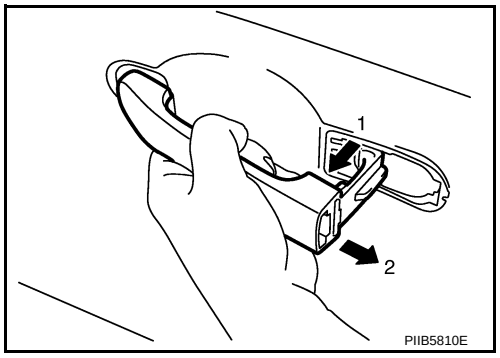
3. Disconnect door antenna and door request switch connector and remove harness clamp. (Models with intelligent Key system)



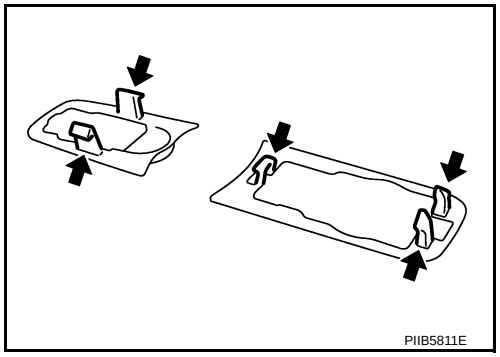
4. Disconnect the key cylinder rod.
5. Disconnect door key cylinder switch harness connector.
6. While pulling the outside handle, remove door key cylinder assembly.



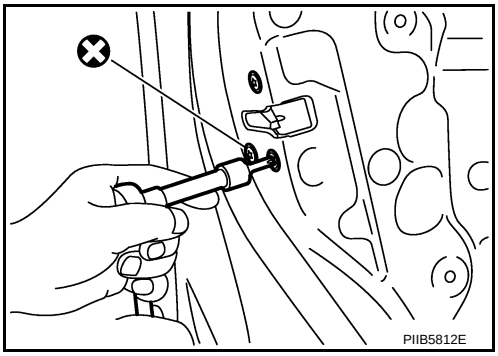
7. Disconnect front door request switch harness connector (with Intelligent Key system).
8. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



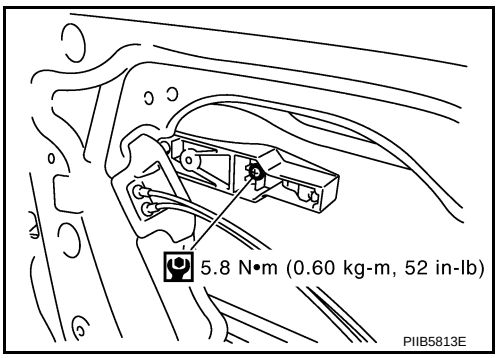
9. Remove the front gasket and rear gasket.



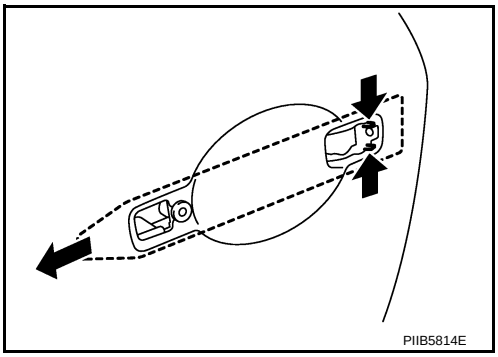
10. Remove the TORX bolts (T30), remove the door lock assembly.



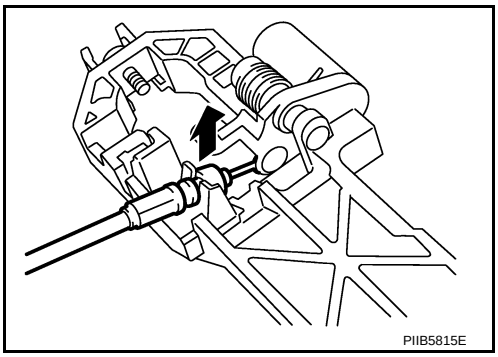
11. Remove the TORX bolt (T30) of the outside handle bracket.



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. Disconnect the outside handle cable from the outside handle bracket connection.



INSTALLATION

Installation is in the reverse order of removal.

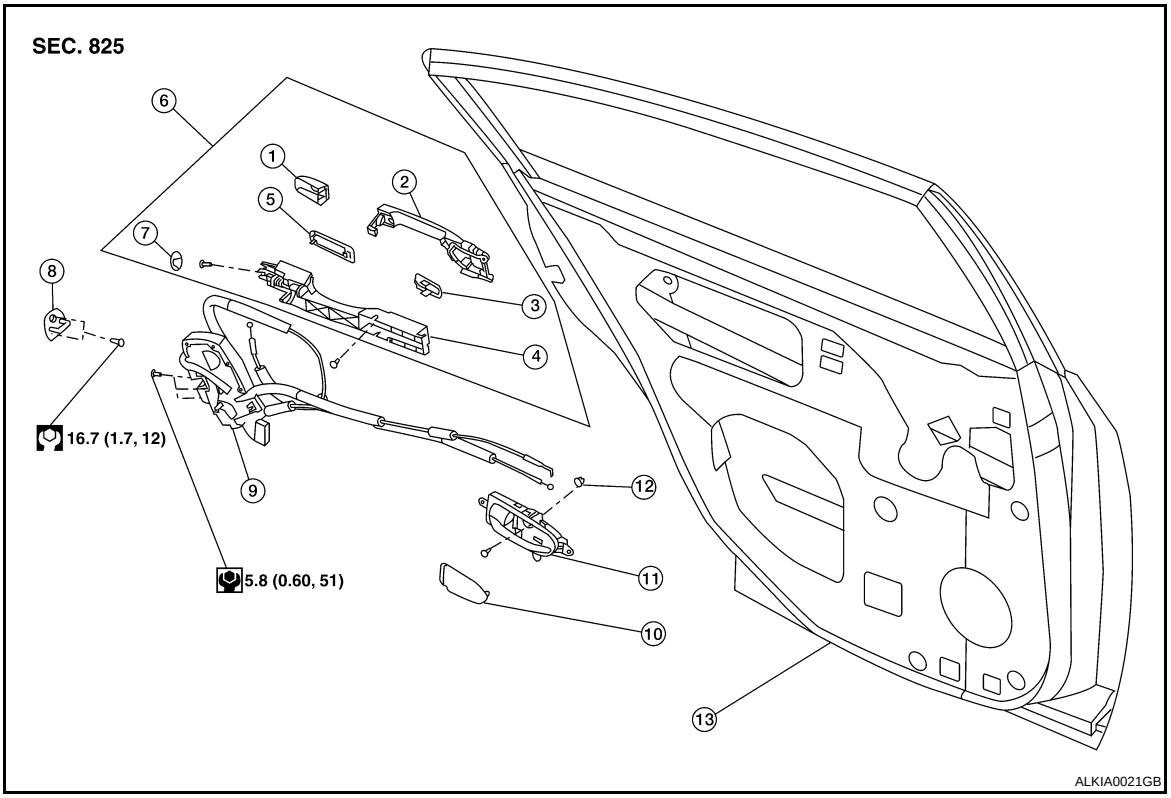
CAUTION:

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

BACK DOOR LOCK

BACK DOOR LOCK : Component Parts Location

INFOID:0000000001505103



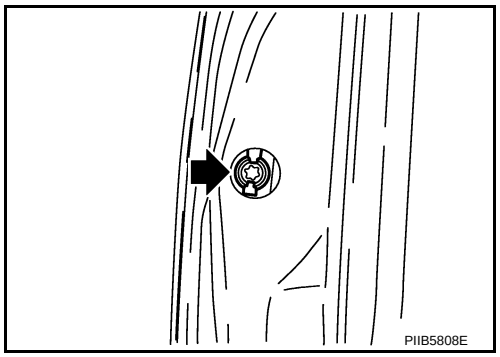
1. Outside handle escutcheon
2. Outside handle
3. Front gasket
4. Outside handle bracket
5. Rear gasket
6. Outside handle assembly
7. Hole plug
8. Rear door striker
9. Rear door lock assembly
10. Cap
11. Inside handle assembly
12. Grommet
13. Rear door assembly

BACK DOOR LOCK : Removal and Installation

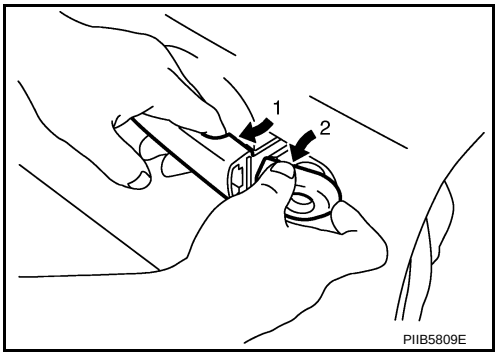
INFOID:0000000001505104

REMOVAL

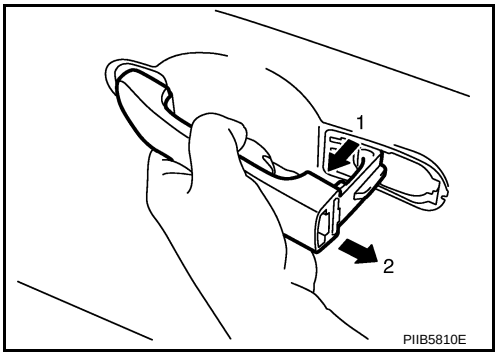
1. Remove the rear door window and rear door screen assembly. Refer to GW-22, "Removal and Installation".
2. Remove the rear door sash. Refer to EXT-21, "Removal and Installation".
3. Remove door side grommet, and remove outside handle escutcheon bolt (TORX T30) from grommet hole.



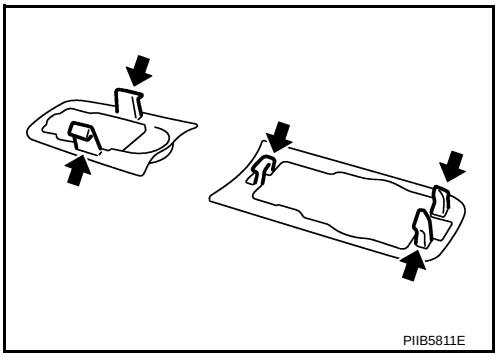
4. While pulling the outside handle, remove outside handle escutcheon.



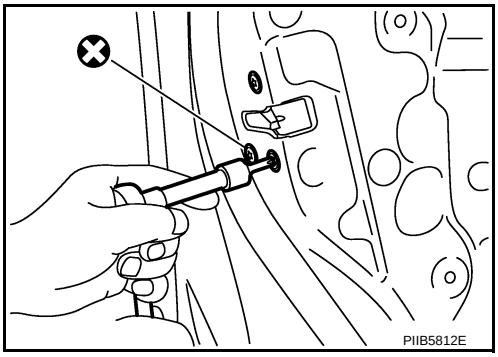
5. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



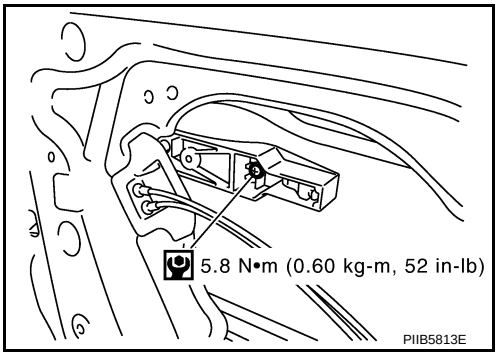
6. Remove the front gasket and rear gasket.



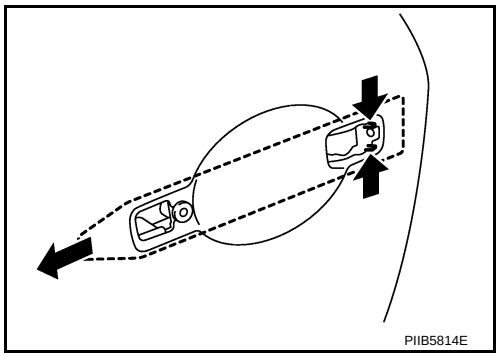
7. Remove the TORX bolts (T30), remove the door lock assembly.



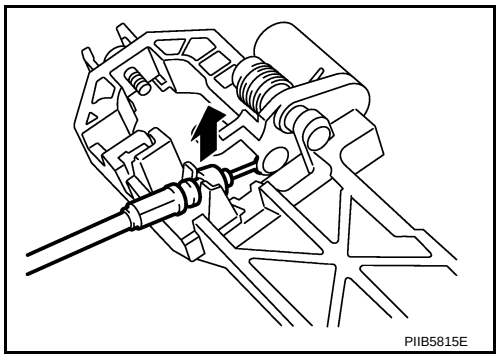
8. Remove the TORX bolt (T30), and remove the outside handle bracket.



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


PIIB5814E

10. Disconnect the door lock actuator connector and remove the door lock assembly.
11. Disconnect the outside handle cable from the outside handle bracket.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INSTALLATION

Installation is in the reverse order of removal.

TRUNK LID

TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY : Removal and Installation

INFOID:0000000001505105

REMOVAL

1. Remove trunk lid finisher. Refer to INT-21, "Exploded View".
2. Disconnect the connectors in the trunk lid, and remove the harness clips to pull the harness out of the trunk lid.
3. Remove the bolts, and remove the trunk lid assembly.

INSTALLATION

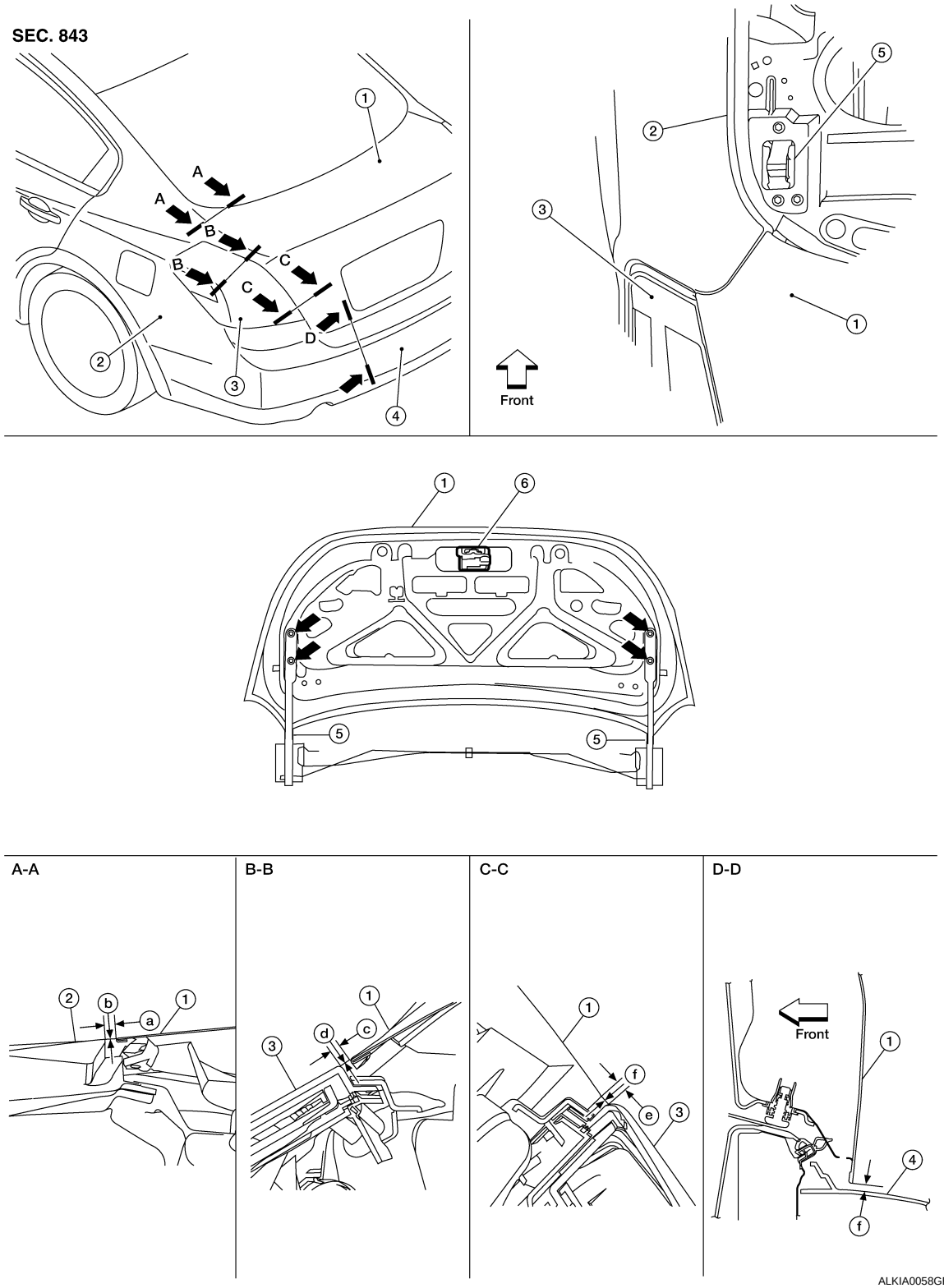
Installation is in the reverse order of removal.

CAUTION:

- **After installing, apply touch-up paint (the body color) onto the head of the hinge bolts.**
- **After installing, check operation.**
- **After installing, perform fitting adjustment. Refer to DLK-205, "TRUNK LID ASSEMBLY : Adjustment".**

TRUNK LID ASSEMBLY : Adjustment

INFOID:0000000001505106



1. Trunk lid assembly
2. Body side outer
3. Rear combination lamp
4. Rear bumper fascia
5. Trunk lid hinge assembly
6. Trunk lid latch assembly

Parts		Standard	Right/left clearance (MAX)
A – A	a	4.0 ± 1.0 (0.16 ± 0.04)	2.0 (0.08)
	b	-0.5 ± 1.0 (-0.02 ± 0.04)	2.0 (0.08)
B – B	c	4.0 ± 1.5 (0.16 ± 0.06)	2.0 (0.08)
	d	-0.5 ± 1.5 (-0.02 ± 0.06)	2.0 (0.08)
C – C	e	4.0 ± 2.0 (0.16 ± 0.08)	—
D-D	f	5.9 ± 2.0 (0.23 ± 0.08)	—

* Unit: mm (in)

LONGITUDINAL CLEARANCE

Trunk Lid Removed From Hinge

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

Trunk Lid Hinge Removed From Vehicle

1. Remove the parcel shelf trim. Refer to INT-15, "Removal and Installation".
2. Loosen the hinge to parcel shelf bolts.
3. Move the trunk lid so that the clearance measurements are within specifications.
4. Tighten the hinge to parcel shelf bolts.
5. Install the parcel shelf trim. Refer to INT-15, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

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

TRUNK LID LOCK

TRUNK LID LOCK : Removal and Installation

INFOID:0000000001505107

LOCK

Removal

1. Remove the trunk lid inner trim panel. Refer to INT-22, "Removal and Installation".
2. Remove the bolts, disconnect the electrical connector, separate the emergency release handle, and remove the trunk lid lock

Installation
Installation is in the reverse order of removal

Striker

Removal

1. Remove the trunk end finisher. Refer to INT-22, "Removal and Installation".
2. Remove the bolts and the striker.

Installation
Installation is in the reverse order of removal.
NOTE:
Align the trunk lid lock. Refer to DLK-205, "TRUNK LID ASSEMBLY : Adjustment".

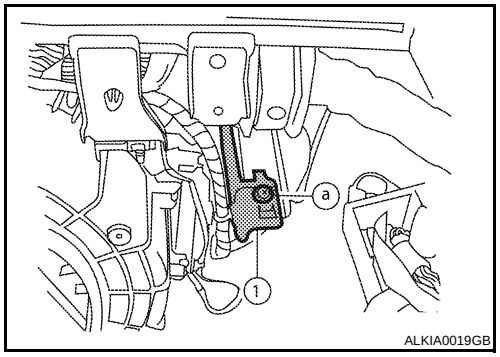
REMOTE KEYLESS ENTRY RECEIVER

Removal

INFOID:0000000001505108

REMOVAL

1. Remove glove compartment. Refer to IP-10, "Exploded View".
2. Remove the screw (a), lower the bracket and remote keyless entry receiver (1) disconnect the harness and remove.



Installation

INFOID:0000000001505109

Installation is in the reverse order of removal.