SECTION DLK

DOOR & LOCK

CONTENTS

SEDAN WITH INTELLIGENT KEY

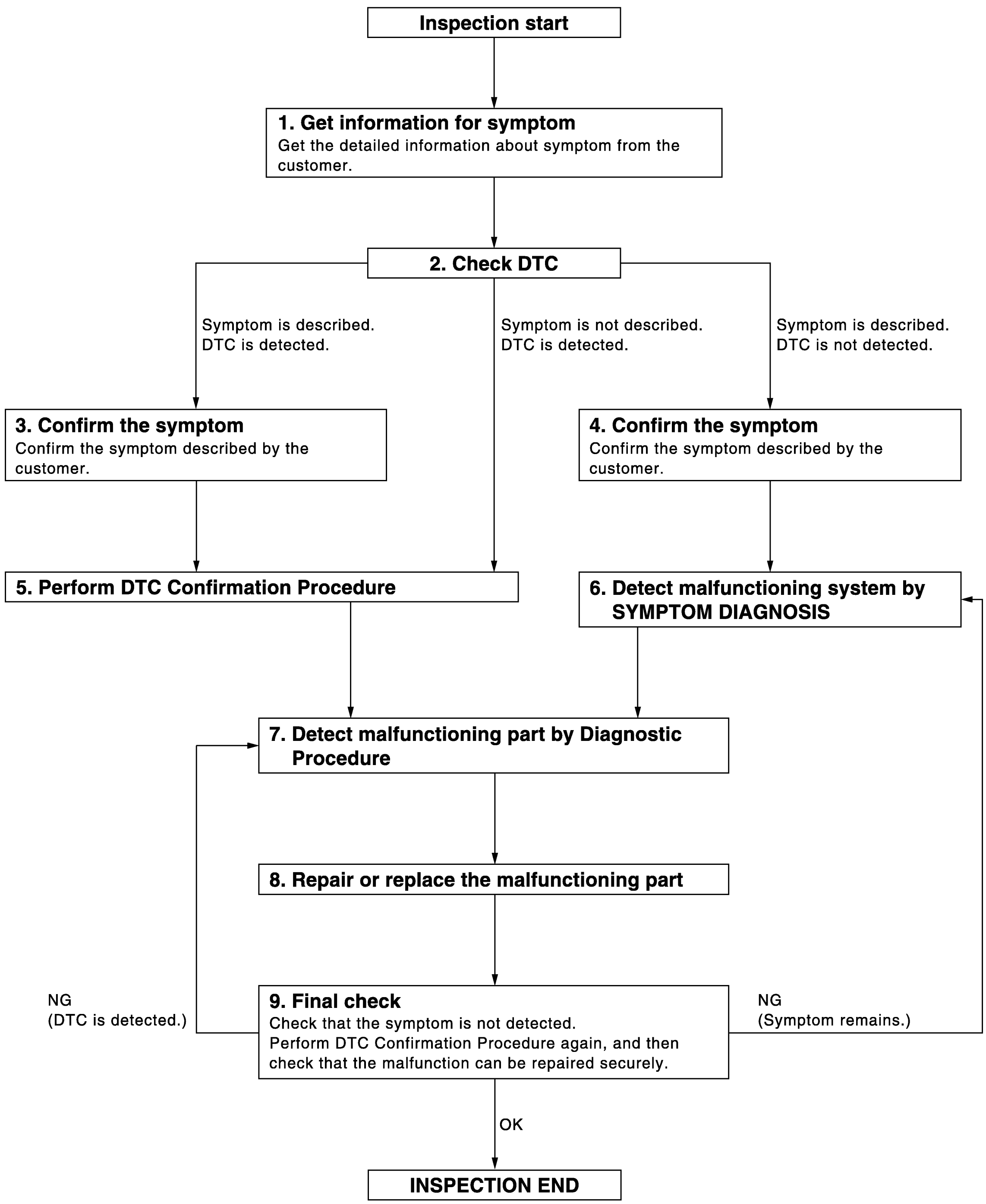
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000004204564

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-183, "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 7
NO >> Refer to GI-42, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

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

>> GO TO 7

7.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 8
NO >> Check voltage of related BCM terminals using CONSULT-III.

8.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 9

9.FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.
When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is the inspection result normal?

NO (DTC is detected)>>GO TO 7
NO (Symptom remains)>>GO TO 6
YES >> Inspection End.

A B C D E F G H I J DLK L M N O P

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000004204565

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:0000000004204566

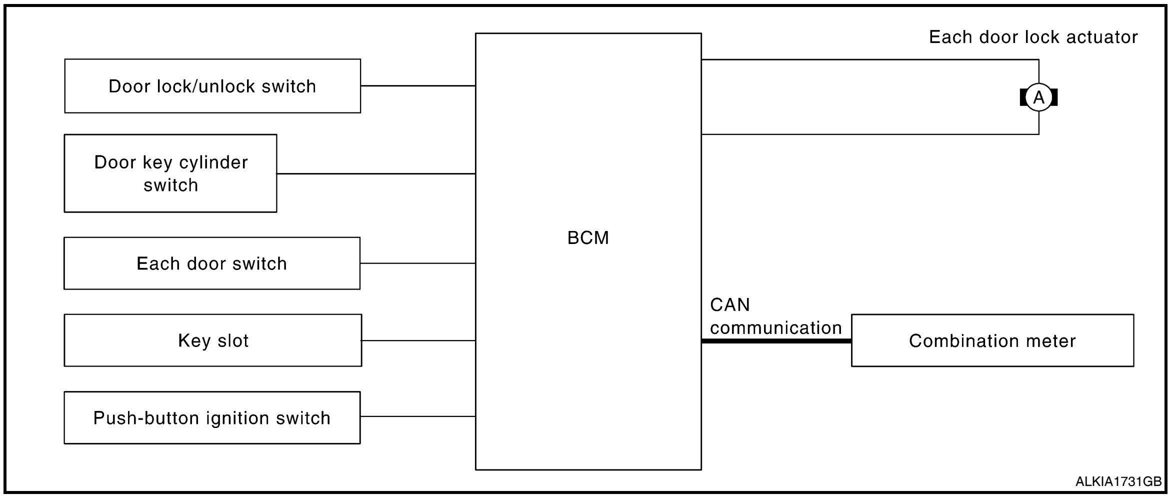
Refer to the CONSULT-III Operation Manual for the initialization procedure.

FUNCTION DIAGNOSIS

AUTOMATIC DOOR LOCKS

System Diagram

INFOID:0000000004466868



System Description

INFOID:0000000004466869

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

DOOR LOCK FUNCTION

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

Door Key Cylinder

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

Selective unlock operation mode can be changed using “DOOR LOCK-UNLOCK SET” mode in “WORK SUPPORT”. Refer to DLK-55, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

AUTOMATIC DOOR LOCKS (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock*1

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

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

Setting change of Automatic Door Locks (LOCK) Function

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

With CONSULT-III

The ON/OFF switching of the automatic door locks (LOCK) function and the type selection of the automatic door locks (LOCK) function can be performed at the WORK SUPPORT setting of CONSULT-III. Refer to DLK-55, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Without CONSULT- III

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

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

OFF → ON	: 2 blinks
ON → OFF	: 1 blink

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

AUTOMATIC DOOR LOCKS (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock*1

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

Setting change of Automatic Door Locks (UNLOCK) Function

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

With CONSULT- III

The ON/OFF switching of the automatic door locks (UNLOCK) function and the type selection of the automatic door locks (UNLOCK) function can be performed at the WORK SUPPORT setting of CONSULT-III. Refer to DLK-55, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Without CONSULT- III

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

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

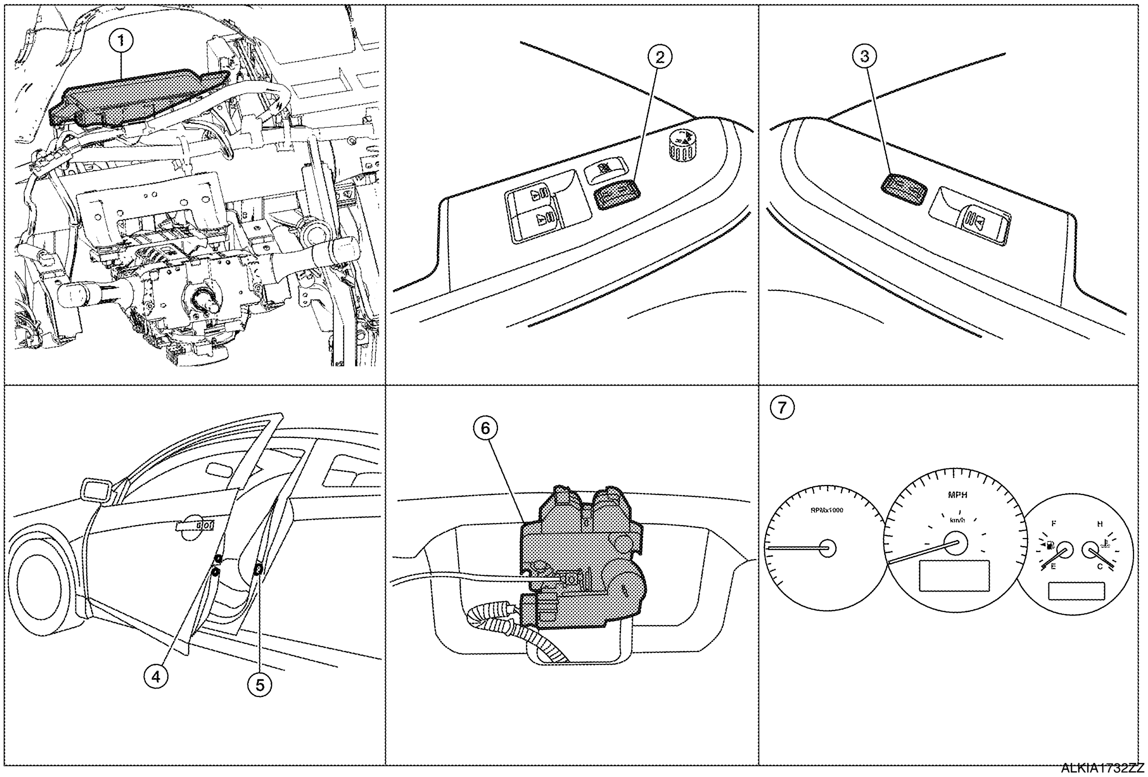
OFF → ON	: 2 blinks
ON → OFF	: 1 blink

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

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

Component Parts Location

INFOID:0000000004466870



1. BCM M16, M17, M18, M19, M21 (view with instrument panel removed)
2. Main power window and door lock/unlock switch D7
3. Power window and door lock/unlock switch RH D105
4. Front door lock assembly LH (actuator) (key cylinder switch) D10
   Front door lock actuator RH D108
5. Front door switch
   LH B8
   RH B108
6. Trunk lamp switch and trunk release solenoid T4
7. Combination meter M24

Component Description

INFOID:0000000004466871

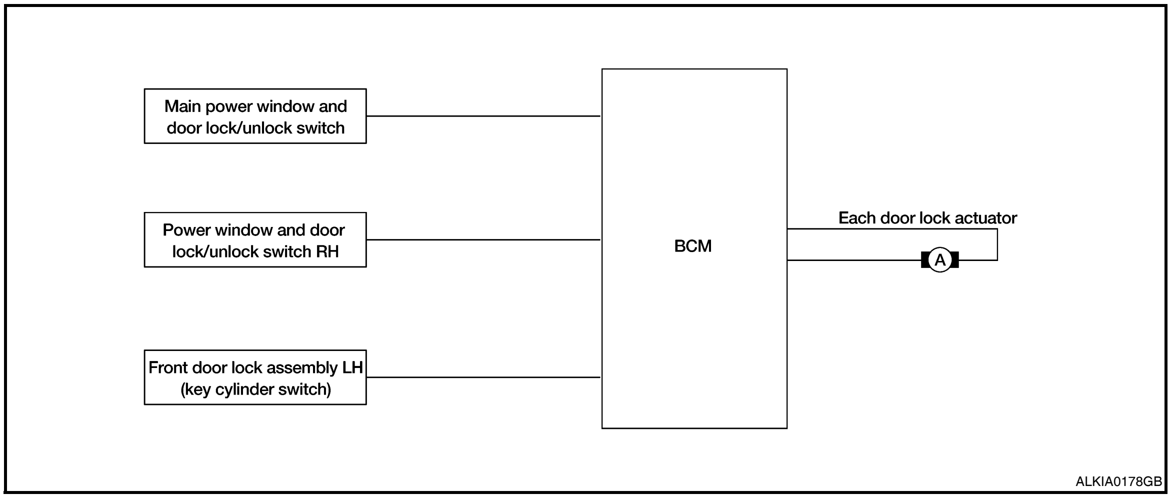
Item	Function
BCM	Controls the door lock function and fuel lid door lock actuator function.
Door lock and unlock switch	Input lock or unlock signal to BCM.
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.
Door switch	Input door open/close condition to BCM.
Door key cylinder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

DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000004204567



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000004204568

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.

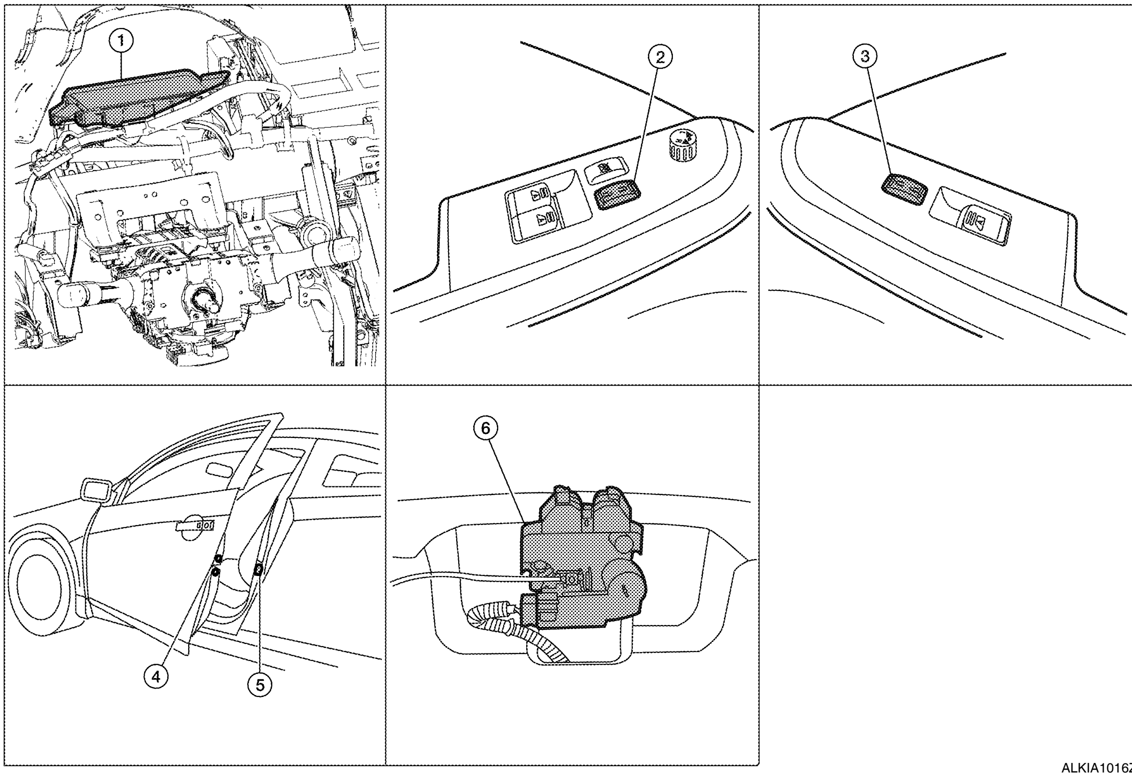
Select unlock operation mode can be changed using DOOR LOCK-UNLOCK SET mode in “WORK SUPPORT”. Refer to DLK-55, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Key Reminder System

Refer to DLK-50, "System Description".

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:0000000004204569



1. BCM M16, M17, M18, M19, M21 (view with instrument panel removed)
2. Main power window and door lock/unlock switch D7
3. Power window and door lock/unlock switch RH D105
4. Front door lock assembly LH (actuator) (key cylinder switch) D10
   Front door lock actuator RH D108
5. Front door switch
   LH B8
   RH B108
6. Trunk lamp switch and trunk release solenoid T4

DOOR LOCK AND UNLOCK SWITCH : Component Description

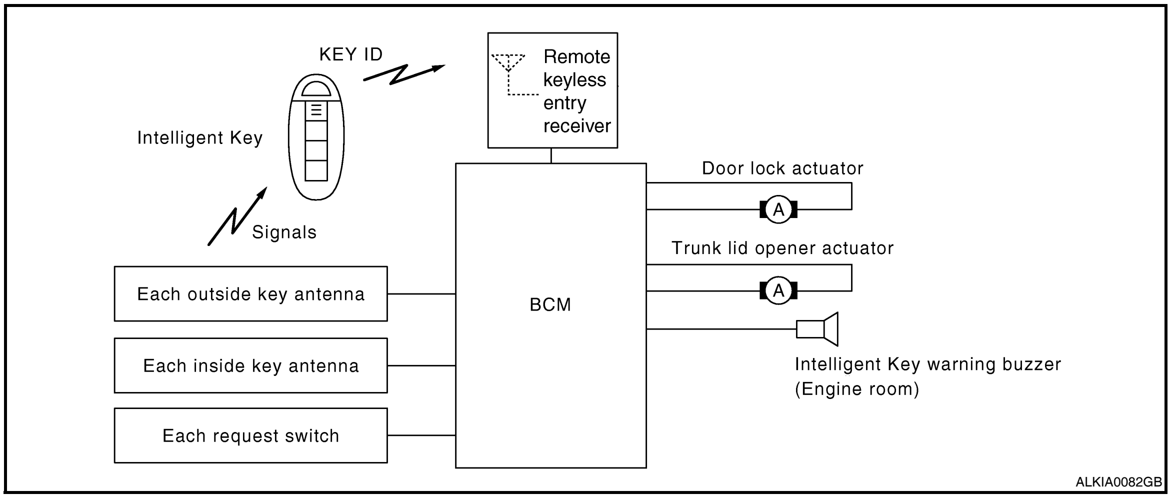
INFOID:0000000004204570

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:0000000004204571



DOOR REQUEST SWITCH : System Description

INFOID:0000000004204572

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

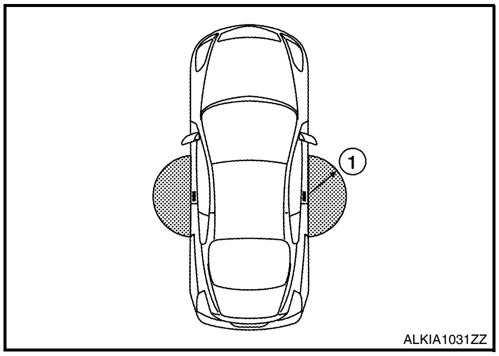
If the following conditions are not satisfied, door lock/unlock operation is not performed even if the request switch is operated.

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-55, "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-55, "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-18, "DOOR LOCK AND UNLOCK SWITCH : System Description".

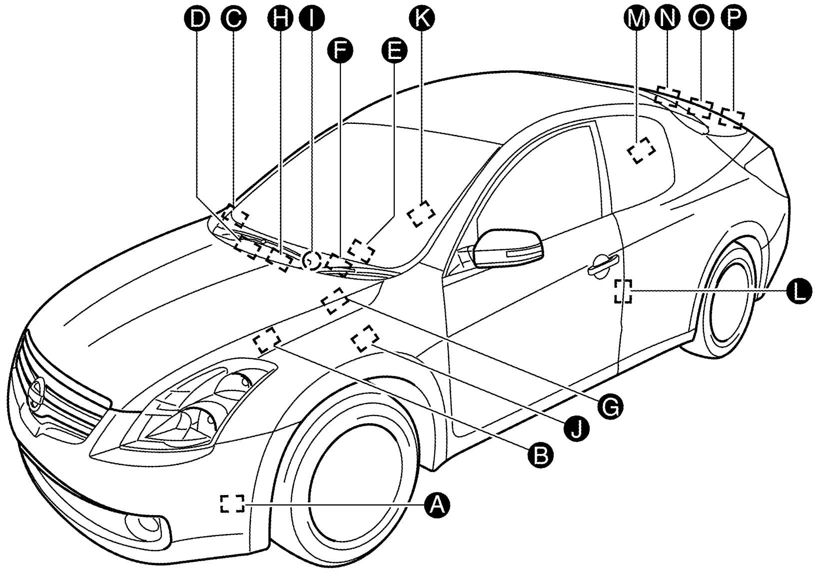
LIST OF OPERATION RELATED PARTS

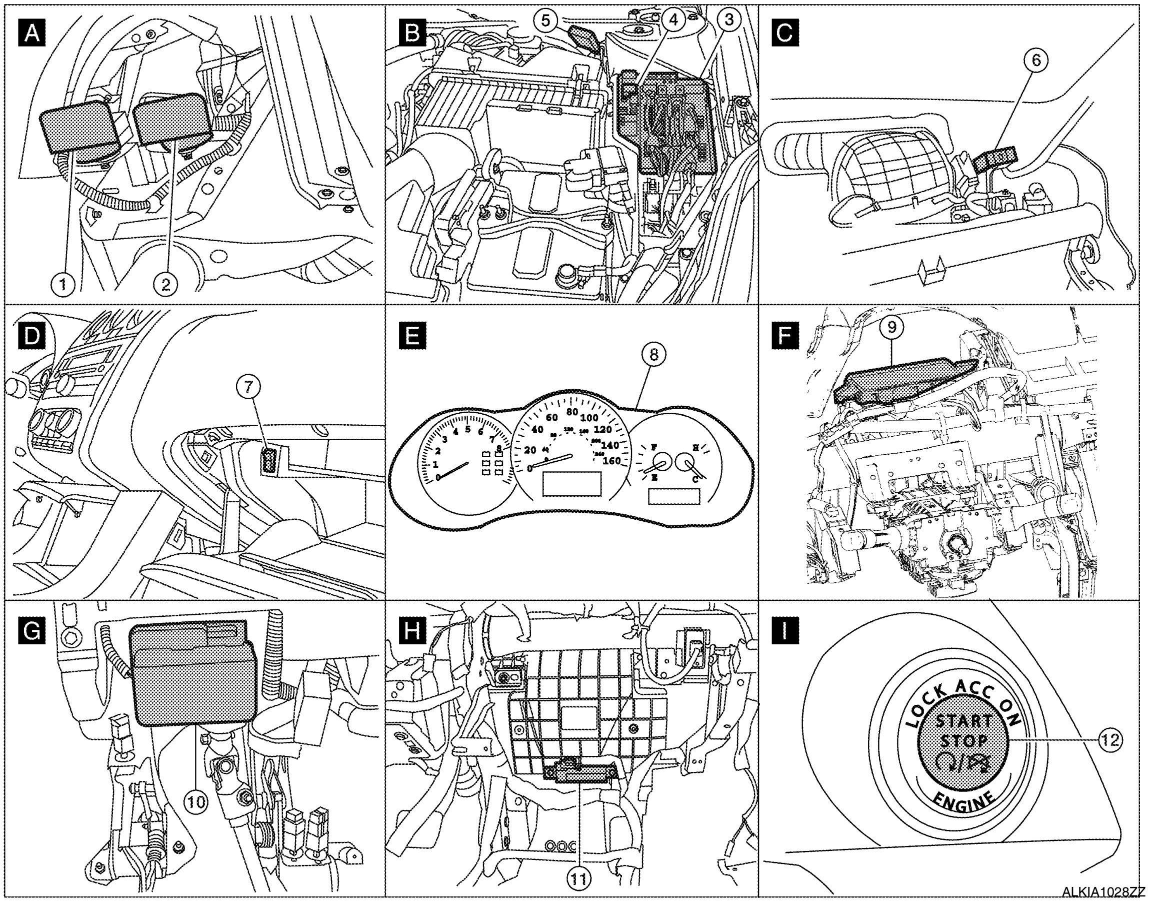
Parts marked with × are the parts related to operation.

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:0000000004204573





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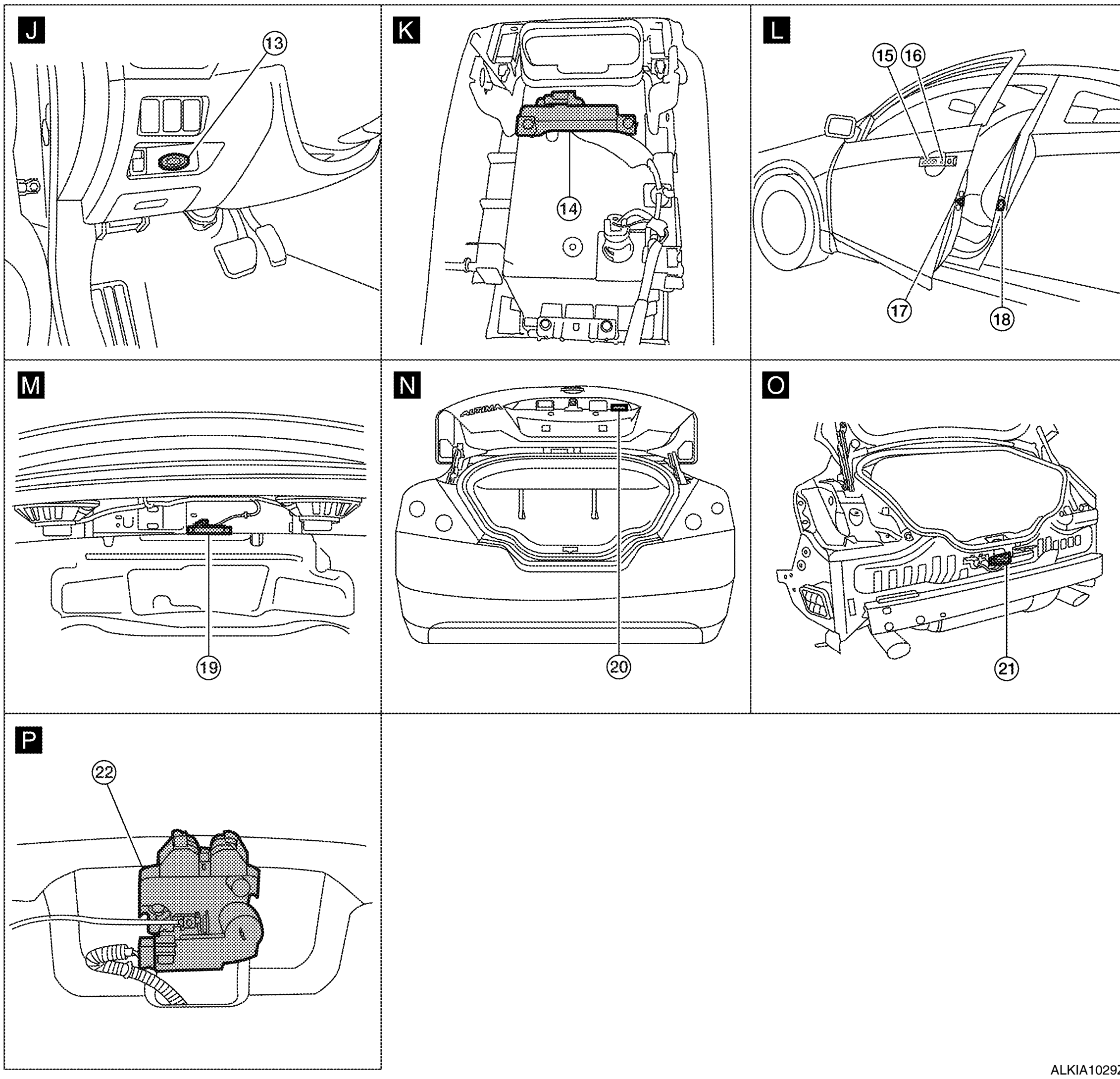


ALKIA1029ZZ

1. Horn (low) E215 (view with front fender protector LH removed)
2. Horn (high) E216
3. IPDM E/R E17, E18
4. Horn relay H-1
5. Intelligent Key warning buzzer E73
6. Remote keyless entry receiver M27 (view with instrument panel removed)
7. Trunk lid opener cancel switch M74
8. Combination meter M24
9. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
10. Electronic steering column lock M32 (view with instrument panel LH removed)
11. Instrument panel antenna M49 (view with center console assembly removed)
12. Push button ignition switch M38
13. Key slot M40
14. Front console antenna M203 (view with center console assembly removed)
15. Front outside handle LH (outside key antenna) D6
Front outside handle RH (outside key antenna) D106
16. Front outside handle LH (request switch) D6
Front outside handle RH (request switch) D106
17. Front door lock assembly LH D10
Front door lock actuator RH D108
18. Front door switch LH B8
RH B108
19. Rear parcel shelf antenna B29
20. Trunk opener request switch B33
21. Rear bumper antenna B46
22. Trunk lamp switch and trunk release solenoid B28

DOOR REQUEST SWITCH : Component Description

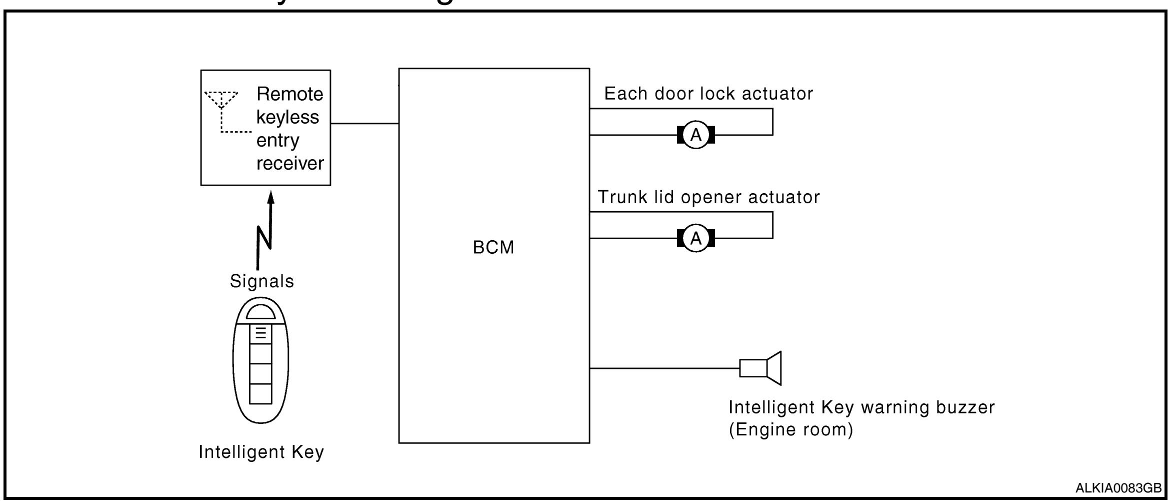
INFOID:0000000004204574

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:0000000004204575



INTELLIGENT KEY : System Description

INFOID:0000000004204576

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

OPERATION DESCRIPTION/DOOR LOCK/UNLOCK FUNCTION

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

OPERATION CONDITION

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

OPERATION AREA

- Operating Range

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

SELECTIVE UNLOCK FUNCTION

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

HAZARD AND HORN REMINDER FUNCTION

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

Operating function of hazard and horn reminder

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

Hazard and horn reminder 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-55, "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 60 seconds, all doors are locked.

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

Auto door lock mode can be changed by DOOR LOCK-UNLOCK SET mode in “WORK SUPPORT”. Refer to DLK-55, "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-55, "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-55, "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-25, "INTELLIGENT KEY : System Description".

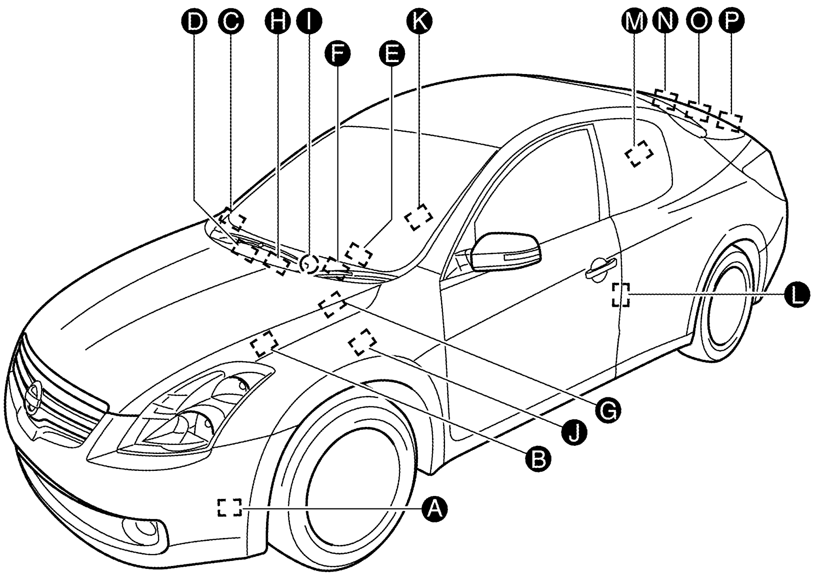
LIST OF OPERATION RELATED PARTS

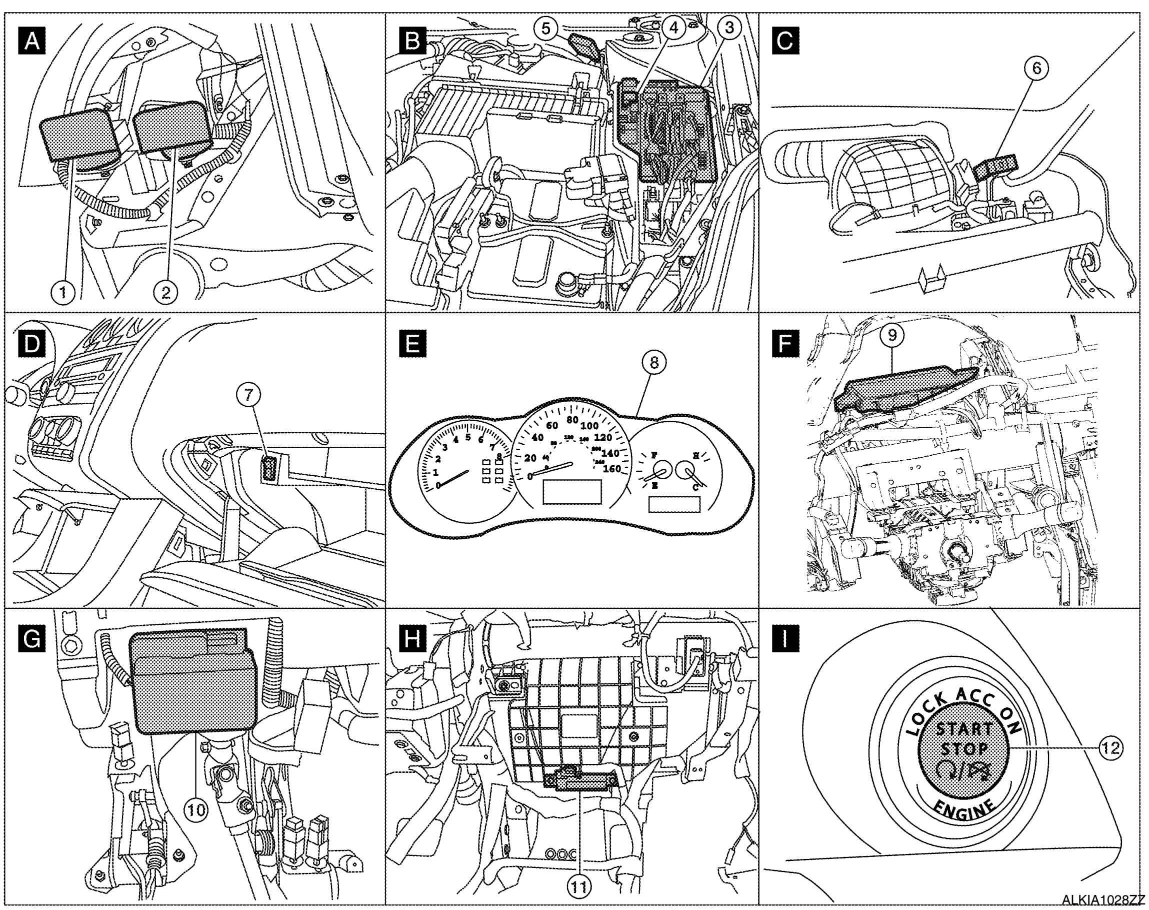
Parts marked with × are the parts related to operation.

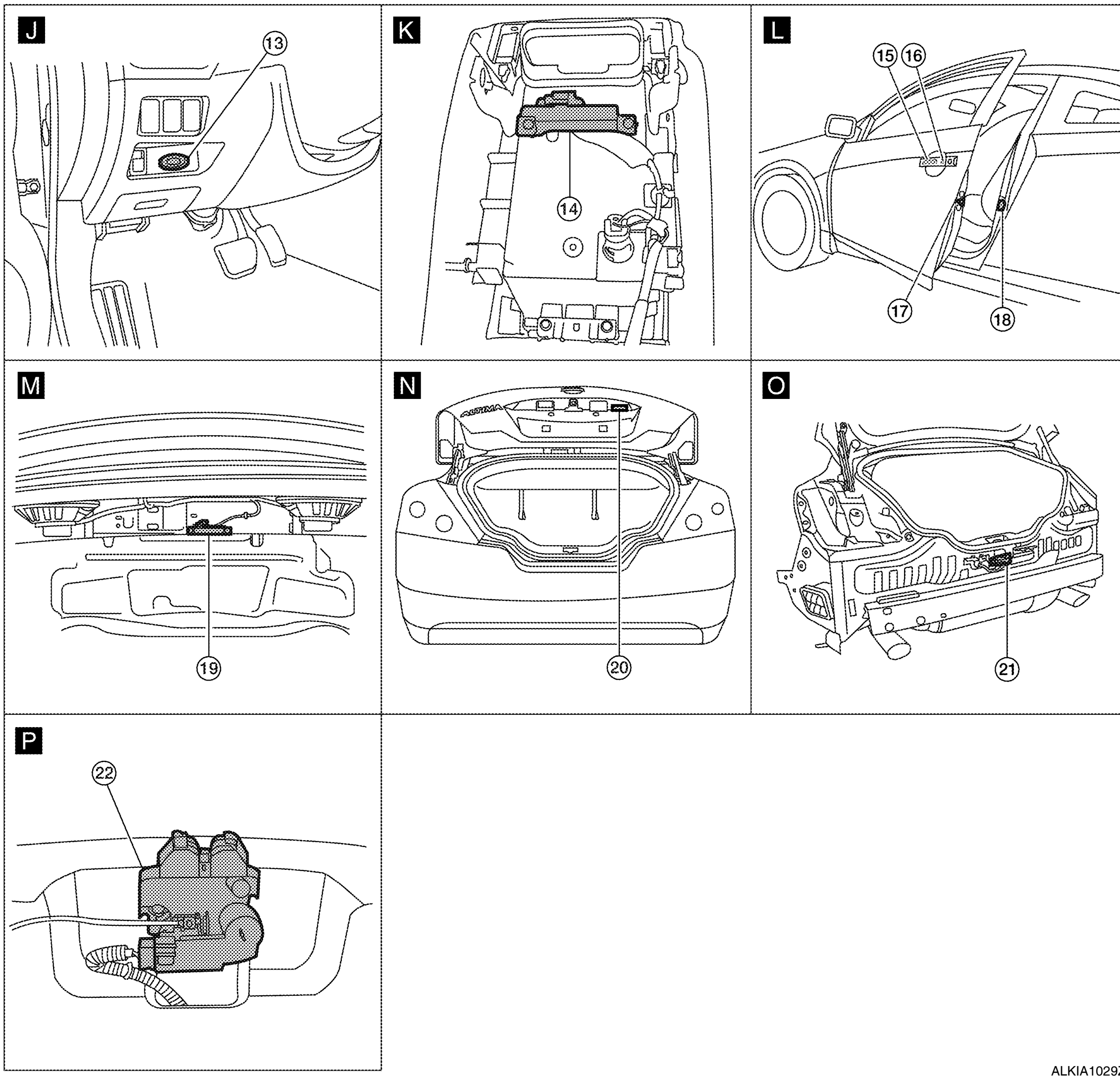
Remote keyless entry functions	Intelligent Key	Key slot	Door request switch (Driver, Passenger)	Door switch	Door lock actuator	Intelligent Key warning buzzer	CAN communication system	BCM	Combination meter	Hazard warning lamp	Horn	IPDM E/R	Head lamp
Door lock/unlock function by remote control button	×	×		×	×		×	×					
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:0000000004495181







ALKIA1029ZZ

1. Horn (low) E215
(view with front fender protector LH removed)
2. Horn (high) E216
3. IPDM E/R E17, E18
4. Horn relay H-1
5. Intelligent Key warning buzzer E73
6. Remote keyless entry receiver M27
(view with instrument panel removed)
7. Trunk lid opener cancel switch M74
8. Combination meter M24
9. BCM M16, M17, M18, M19, M20, M21
(view with instrument panel removed)
10. Electronic steering column lock M32
(view with instrument panel LH removed)
11. Instrument panel antenna M49
(view with center console assembly removed)
12. Push button ignition switch M38
13. Key slot M40
14. Front console antenna M203
(view with center console assembly removed)
15. Front outside handle LH (outside key antenna) D6
Front outside handle RH (outside key antenna) D106
16. Front outside handle LH (request switch) D6
Front outside handle RH (request switch) D106
17. Front door lock assembly LH D10
Front door lock actuator RH D108
18. Front door switch LH B8
RH B108
19. Rear parcel shelf antenna B29
20. Trunk opener request switch B33
21. Rear bumper antenna B46
22. Trunk lamp switch and trunk release solenoid B28

INTELLIGENT KEY : Component Description

INFOID:0000000004204578

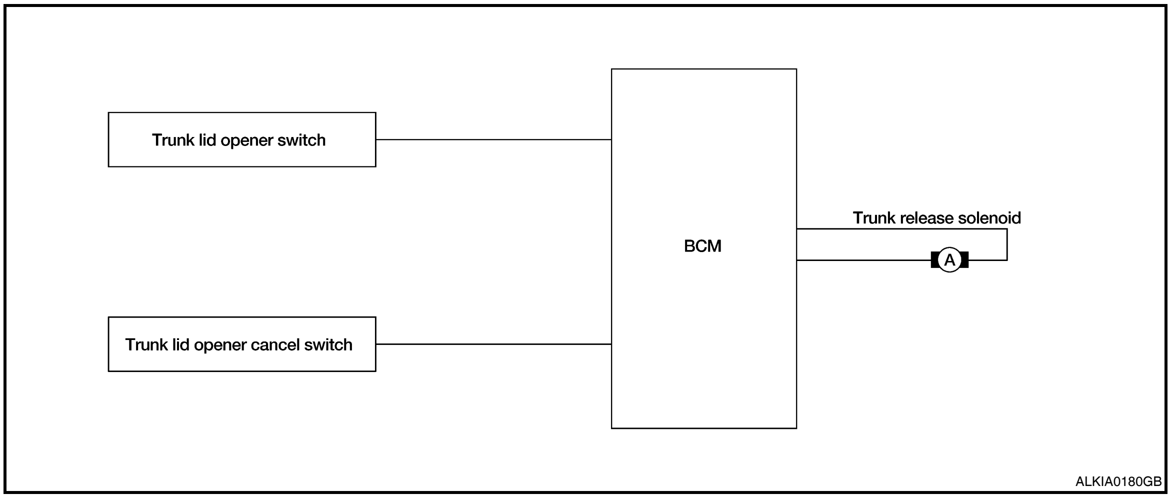
Item	Function
BCM	Controls the door lock function and room lamp function.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Intelligent Key	Transmits button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

TRUNK OPEN FUNCTION

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : System Diagram

INFOID:0000000004204579



TRUNK LID OPENER SWITCH : System Description

INFOID:0000000004204580

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

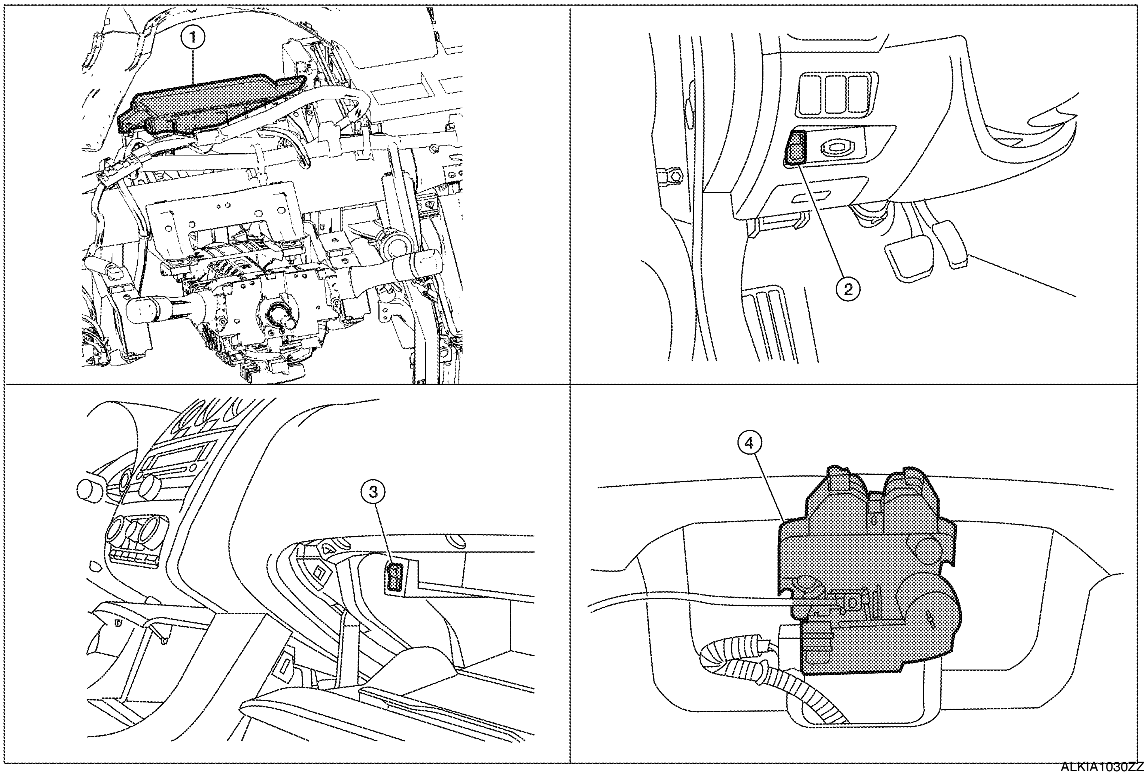
- vehicle speed is less than 5 km/h (3MPH)
- vehicle security system is disarmed or pre-armed phase

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

TRUNK LID OPENER SWITCH : Component Parts Location

INFOID:0000000004204581



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

TRUNK LID OPENER SWITCH : Component Description

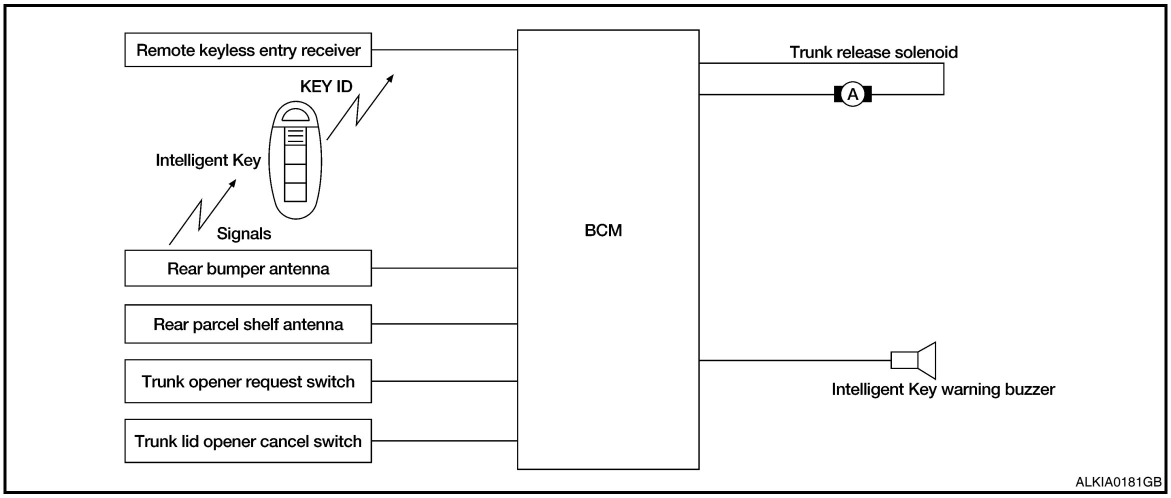
INFOID:0000000004204582

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:0000000004204583



TRUNK REQUEST SWITCH : System Description

INFOID:0000000004204584

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

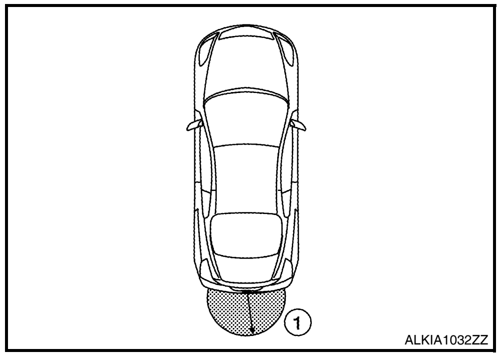
If the following conditions are not satisfied, trunk open operation is not performed even if the request switch is operated.

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-55, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

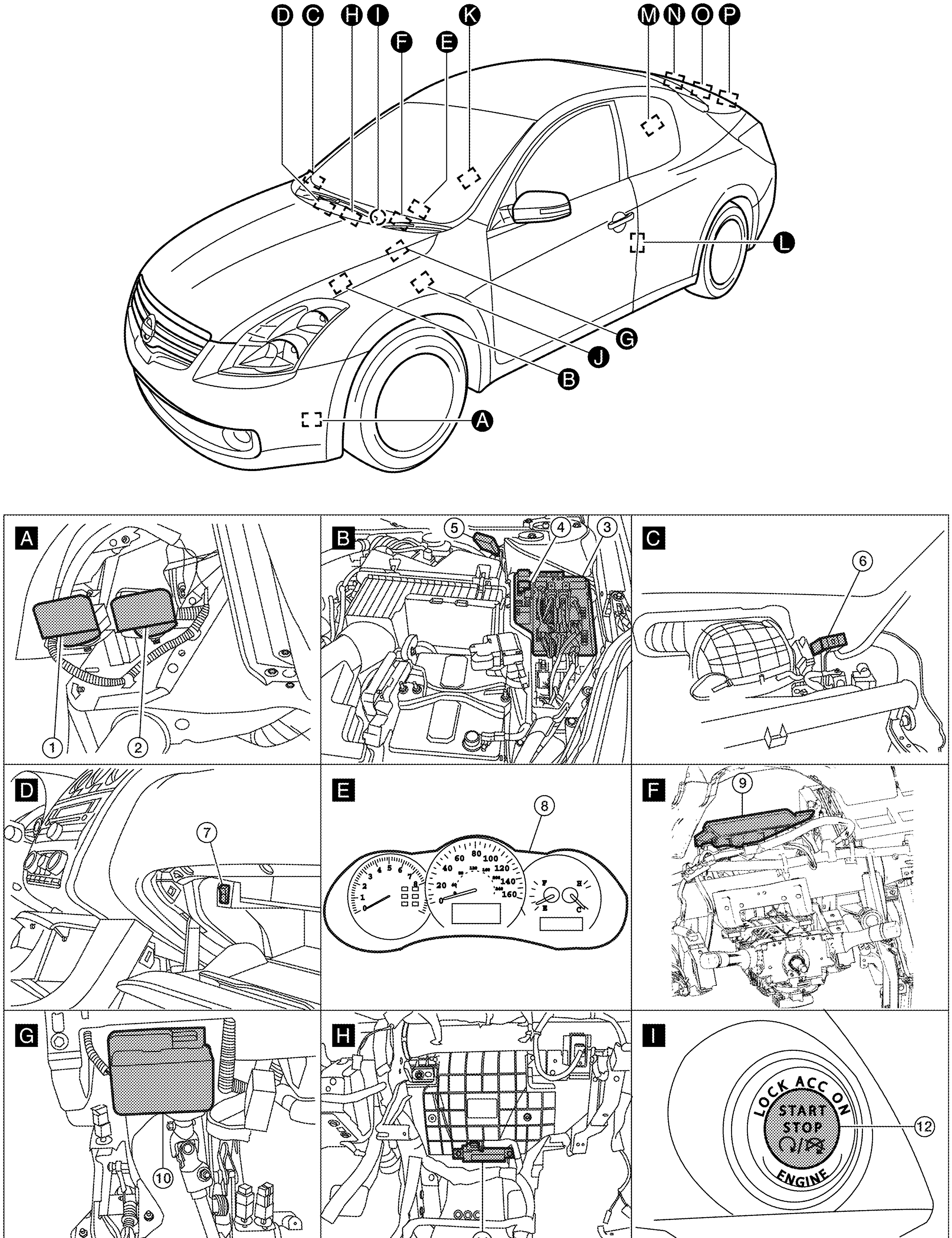
LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

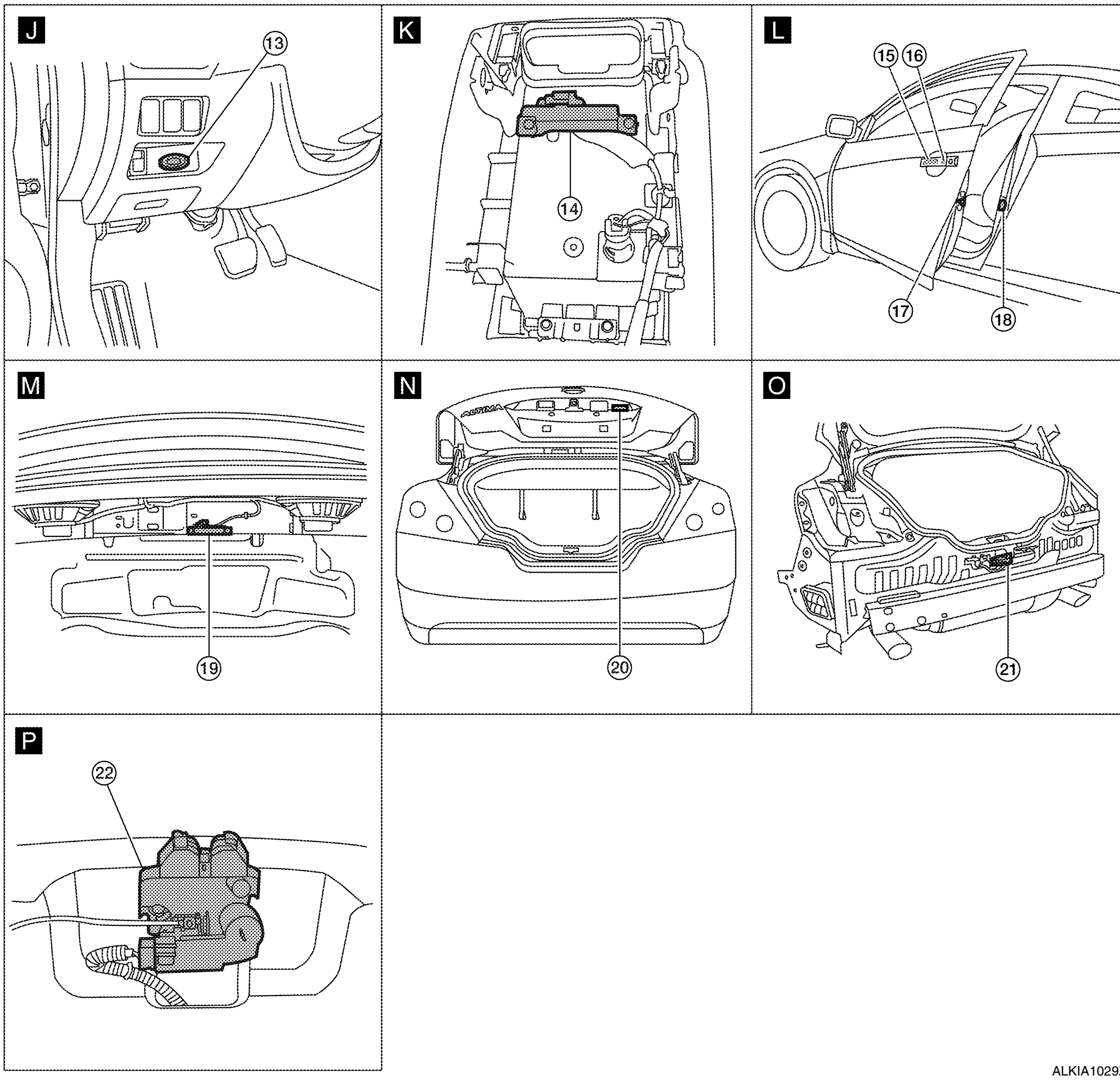
Trunk open function	Intelligent Key	Key slot	Remote keyless entry receiver	Door switch	Trunk room lamp switch	Trunk opener request switch	Trunk release solenoid	Inside key antenna	Outside key antenna (Trunk)	Intelligent Key warning buzzer	CAN communication system	BCM	Hazard warning lamps	Trunk lid opener 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:0000000004495182



ALKIA1028ZZ



1. Horn (low) E215 (view with front fender protector LH removed)
2. Horn (high) E216
3. IPDM E/R E17, E18
4. Horn relay H-1
5. Intelligent Key warning buzzer E73
6. Remote keyless entry receiver M27 (view with instrument panel removed)
7. Trunk lid opener cancel switch M74
8. Combination meter M24
9. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
10. Electronic steering column lock M32 (view with instrument panel LH removed)
11. Instrument panel antenna M49 (view with center console assembly removed)
12. Push button ignition switch M38
13. Key slot M40
14. Front console antenna M203 (view with center console assembly removed)
15. Front outside handle LH (outside key antenna) D6
    Front outside handle RH (outside key antenna) D106
16. Front outside handle LH (request switch) D6
    Front outside handle RH (request switch) D106
17. Front door lock assembly LH D10
    Front door lock actuator RH D108
18. Front door switch LH B8
    RH B108
19. Rear parcel shelf antenna B29
20. Trunk opener request switch B33
21. Rear bumper antenna B46
22. Trunk lamp switch and trunk release solenoid B28

TRUNK REQUEST SWITCH : Component Description

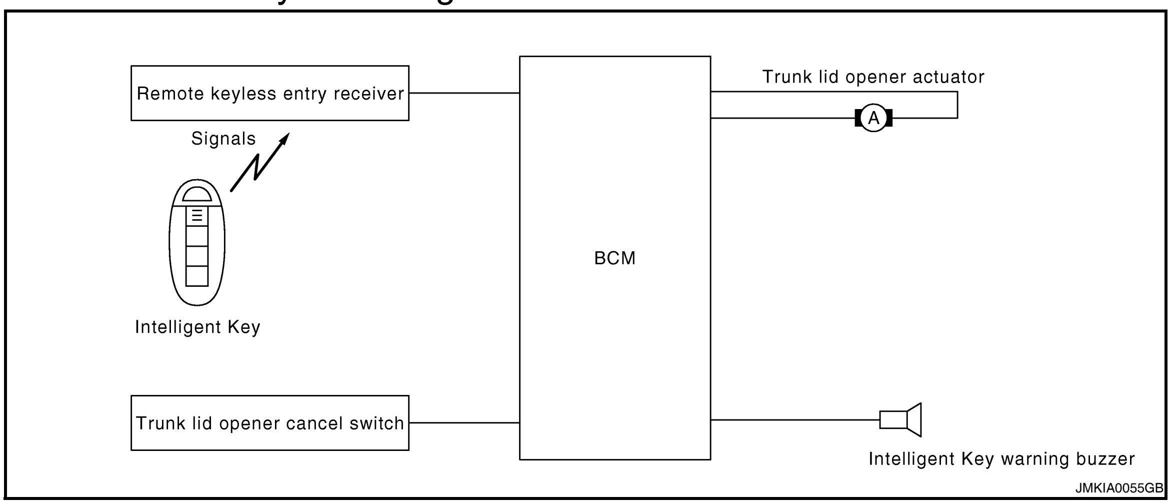
INFOID:0000000004204586

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:0000000004204587



INTELLIGENT KEY : System Description

INFOID:0000000004204588

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

OPERATION DESCRIPTION/TRUNK OPEN FUNCTION

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

OPERATION CONDITION

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

OPERATION AREA

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

HAZARD AND HORN REMINDER FUNCTION

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-55, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Without CONSULT-III

Refer to Owner's Manual for instructions.

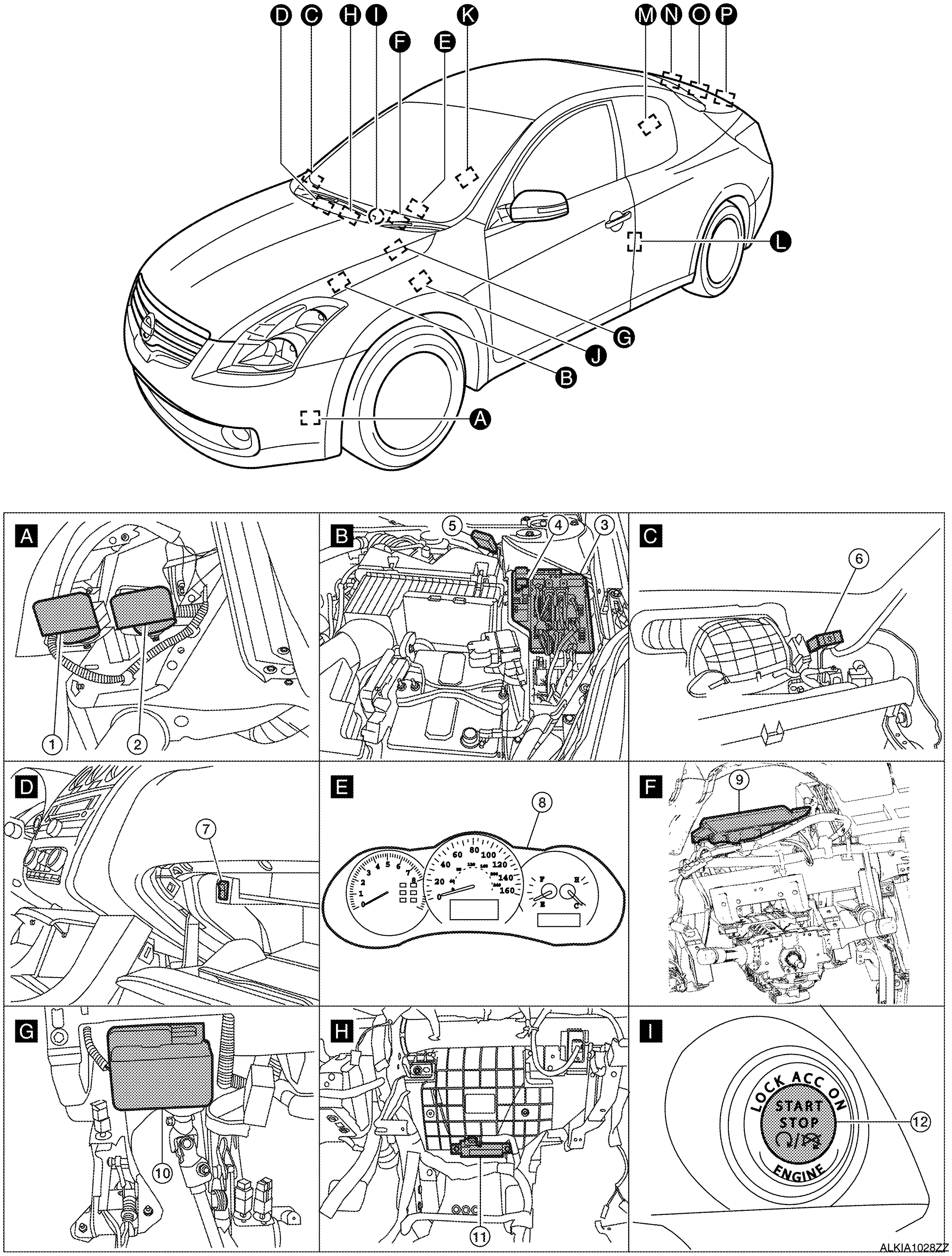
LIST OF OPERATION RELATED PARTS

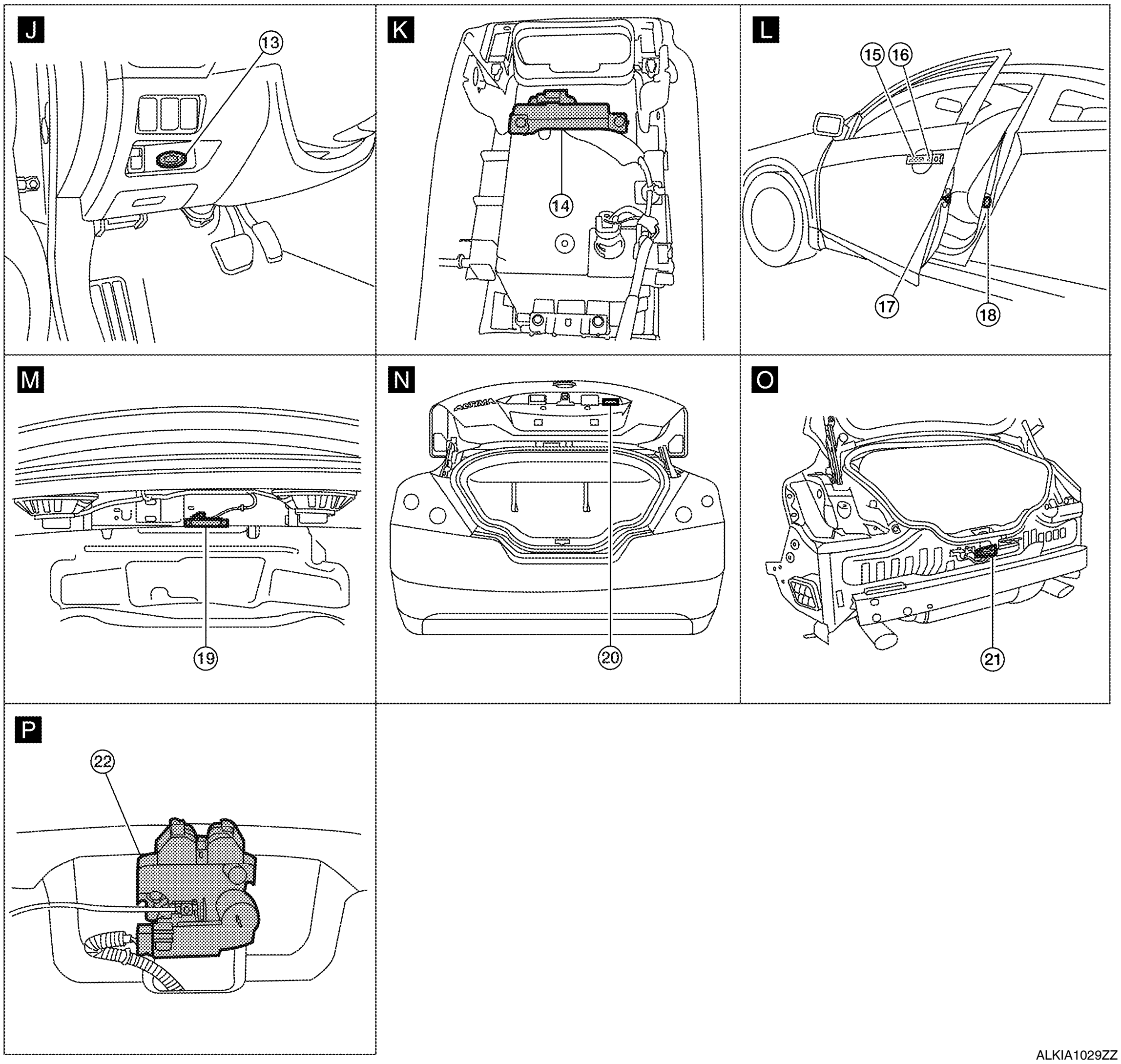
Parts marked with × are the parts related to operation.

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
Trunk open function by remote control button	×	×	×	×		×	×				
Hazard and horn reminder function	×				×	×	×	×	×	×	×

INTELLIGENT KEY : Component Parts Location

INFOID:0000000004495183





1. Horn (low) E215 (view with front fender protector LH removed)
2. Horn (high) E216
3. IPDM E/R E17, E18
4. Horn relay H-1
5. Intelligent Key warning buzzer E73
6. Remote keyless entry receiver M27 (view with instrument panel removed)
7. Trunk lid opener cancel switch M74
8. Combination meter M24
9. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
10. Electronic steering column lock M32 (view with instrument panel LH removed)
11. Instrument panel antenna M49 (view with center console assembly removed)
12. Push button ignition switch M38
13. Key slot M40
14. Front console antenna M203 (view with center console assembly removed)
15. Front outside handle LH (outside key antenna) D6
Front outside handle RH (outside key antenna) D106
16. Front outside handle LH (request switch) D6
Front outside handle RH (request switch) D106
17. Front door lock assembly LH D10
Front door lock actuator RH D108
18. Front door switch LH B8
RH B108
19. Rear parcel shelf antenna B29
20. Trunk opener request switch B33
21. Rear bumper antenna B46
22. Trunk lamp switch and trunk release solenoid B28

INTELLIGENT KEY : Component Description

INFOID:0000000004204590

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:0000000004204591

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

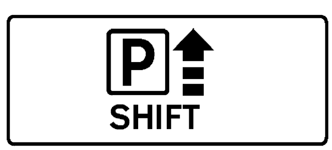
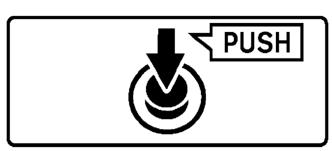
Once the following condition from below is established, alert or warning will be executed.

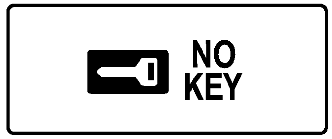
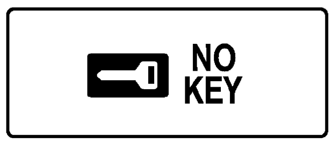
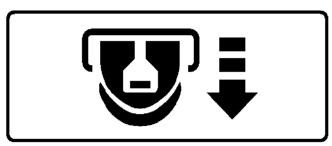
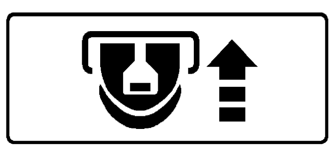
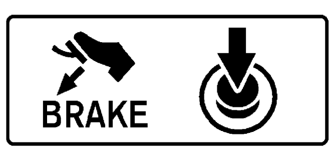
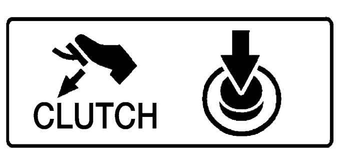
Warning/Information functions		Operation procedure
Intelligent Key system malfunction		When a malfunction is detected on BCM, “KEY” warning lamp will illuminate.
OFF position warning	For internal	• Ignition switch: ACC position. • Door switch (driver side): ON (Door is open).
	For external	OFF position 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.

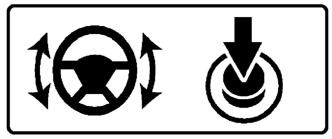
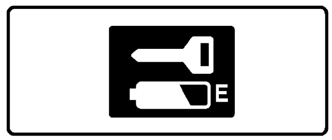
Warning/Information functions		Operation procedure
Door lock operation warning	Request switch operation	When request switch is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • Intelligent Key is inside vehicle.
	Intelligent Key button operation	When Intelligent 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	—

<table>
<tr><th colspan="2" rowspan="2">Warning/Information functions</th><th rowspan="2">“KEY” warning lamp</th><th rowspan="2">Combination meter display</th><th rowspan="2">Key slot illumination</th><th colspan="2">Warning chime</th></tr>
<tr><th>Combination meter buzzer</th><th>Intelligent Key warning buzzer</th></tr>
<tr><td rowspan="5">Take away warning</td><td>Door is open to close</td><td>—</td><td rowspan="5">
JMKIA0036GB</td><td>Flash</td><td>Activate</td><td>Activate</td></tr>
<tr><td>Door is open</td><td>—</td><td>Flash</td><td>—</td><td>—</td></tr>
<tr><td>Push-ignition switch operation</td><td>—</td><td>Flash</td><td>Activate</td><td>—</td></tr>
<tr><td>Take away through window</td><td>—</td><td>Flash</td><td>Activate</td><td>—</td></tr>
<tr><td>Intelligent Key is removed from key slot</td><td>—</td><td>Flash</td><td>—</td><td>—</td></tr>
<tr><td rowspan="2">Door lock operation warning</td><td>Request switch operation</td><td>—</td><td>—</td><td>—</td><td>—</td><td>Activate</td></tr>
<tr><td>Intelligent Key operation</td><td>—</td><td>—</td><td>—</td><td>—</td><td>Activate</td></tr>
<tr><td colspan="2">Key ID warning</td><td>—</td><td>
JMKIA0036GB</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td colspan="2">Key warning</td><td>—</td><td>
JMKIA0035GB</td><td>Flash</td><td>Activate</td><td>—</td></tr>
<tr><td colspan="2">Intelligent Key insert information</td><td>—</td><td>
JMKIA0034GB</td><td>Flash</td><td>—</td><td>—</td></tr>
<tr><td rowspan="2">Engine start information</td><td>Automatic transmission models</td><td>—</td><td>
JMKIA0032GB</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td>Manual transmission models</td><td>—</td><td>
ALKIA1326GB</td><td>—</td><td>—</td><td>—</td></tr>
</table>

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

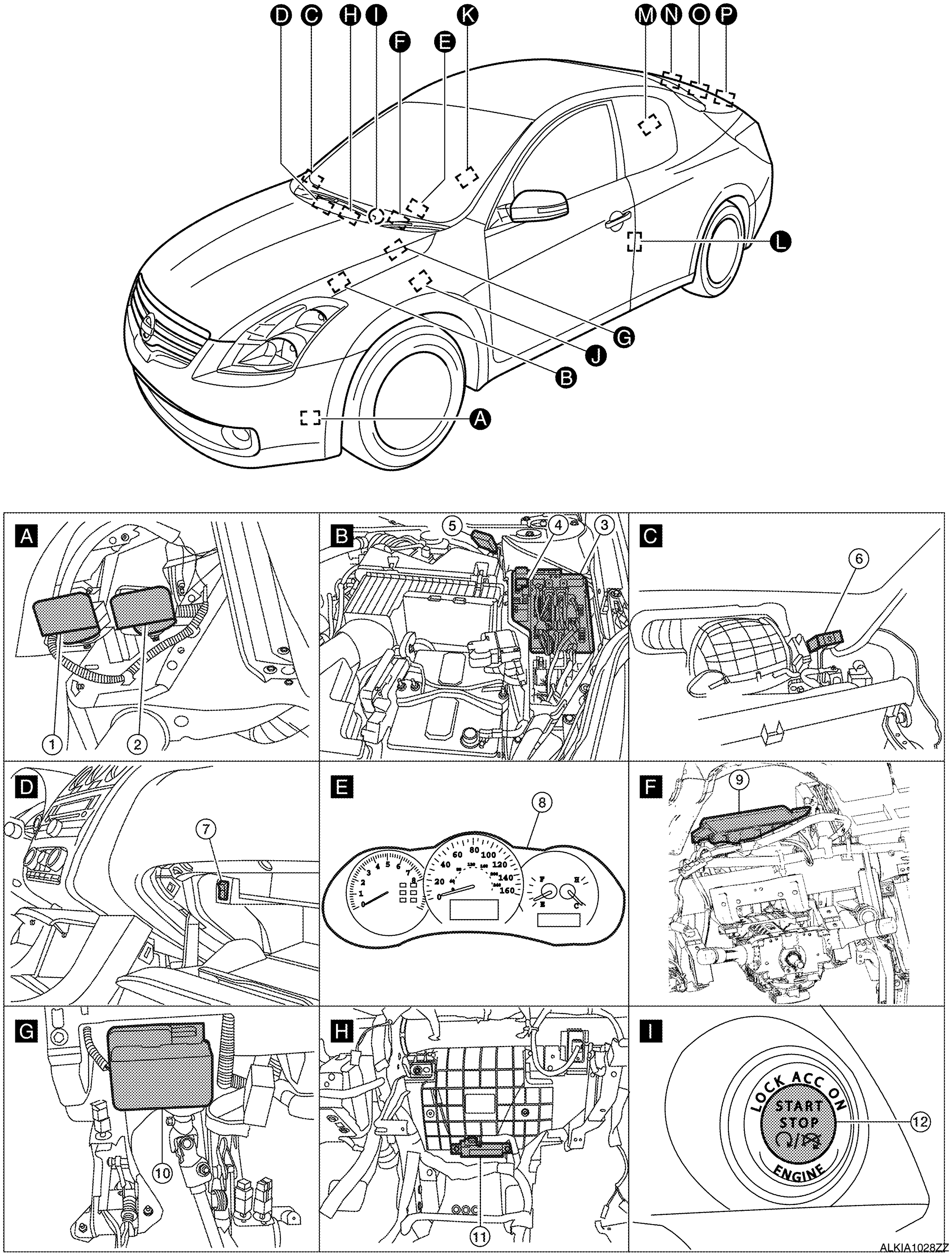
Parts marked with × are the parts related to operation.

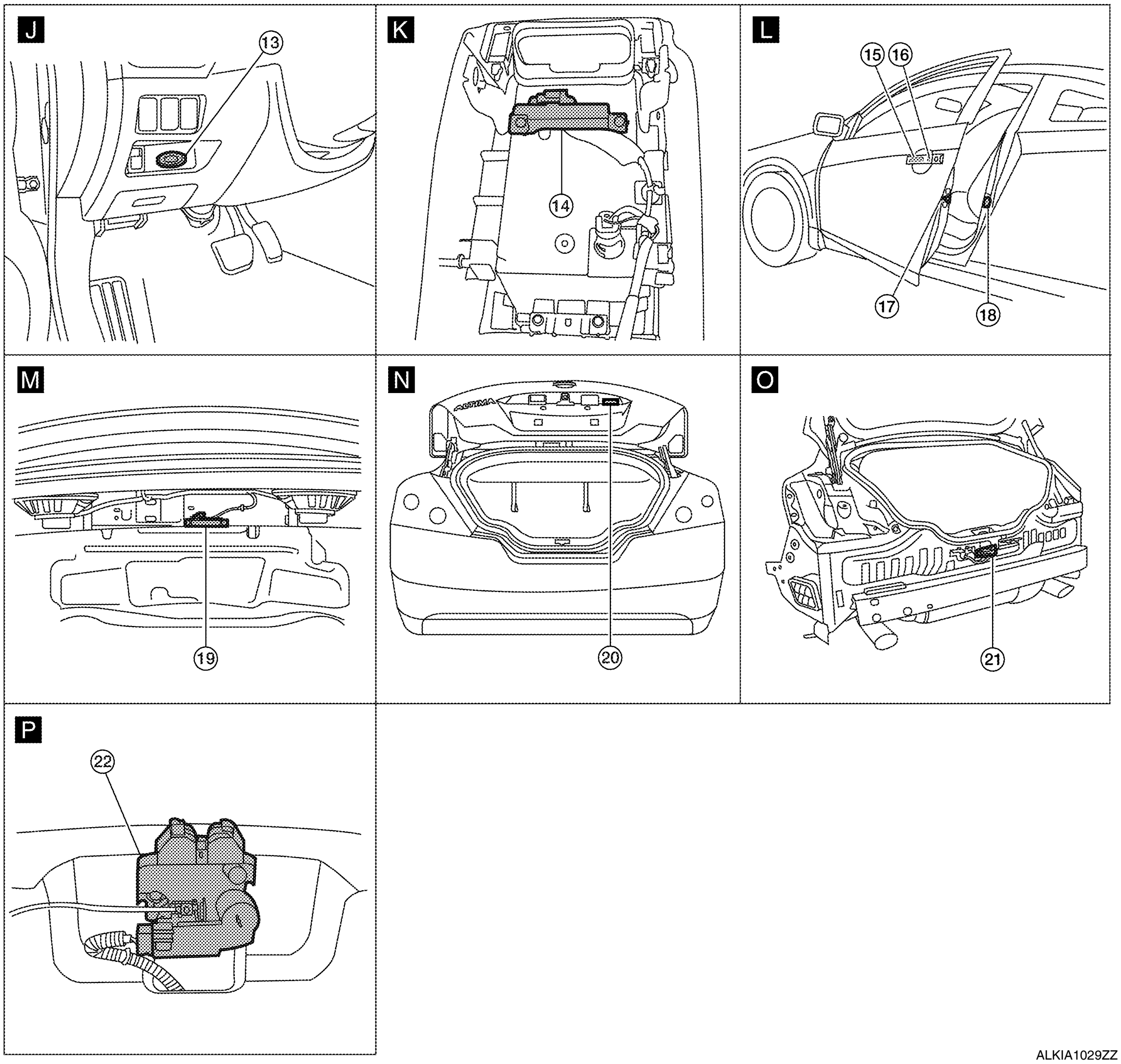
Warning function		Intelligent Key	Key slot	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Combination meter display	Key slot illumination	Park position switch	"KEY" warning 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:0000000004495184





ALKIA1029ZZ

1. Horn (low) E215 (view with front fender protector LH removed)
2. Horn (high) E216
3. IPDM E/R E17, E18
4. Horn relay H-1
5. Intelligent Key warning buzzer E73
6. Remote keyless entry receiver M27 (view with instrument panel removed)
7. Trunk lid opener cancel switch M74
8. Combination meter M24
9. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
10. Electronic steering column lock M32 (view with instrument panel LH removed)
11. Instrument panel antenna M49 (view with center console assembly removed)
12. Push button ignition switch M38
13. Key slot M40
14. Front console antenna M203 (view with center console assembly removed)
15. Front outside handle LH (outside key antenna) D6
Front outside handle RH (outside key antenna) D106
16. Front outside handle LH (request switch) D6
Front outside handle RH (request switch) D106
17. Front door lock assembly LH D10
Front door lock actuator RH D108
18. Front door switch LH B8
RH B108
19. Rear parcel shelf antenna B29
20. Trunk opener request switch B33
21. Rear bumper antenna B46
22. Trunk lamp switch and trunk release solenoid B28

KEY REMINDER FUNCTION

System Description

INFOID:0000000004204593

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

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

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

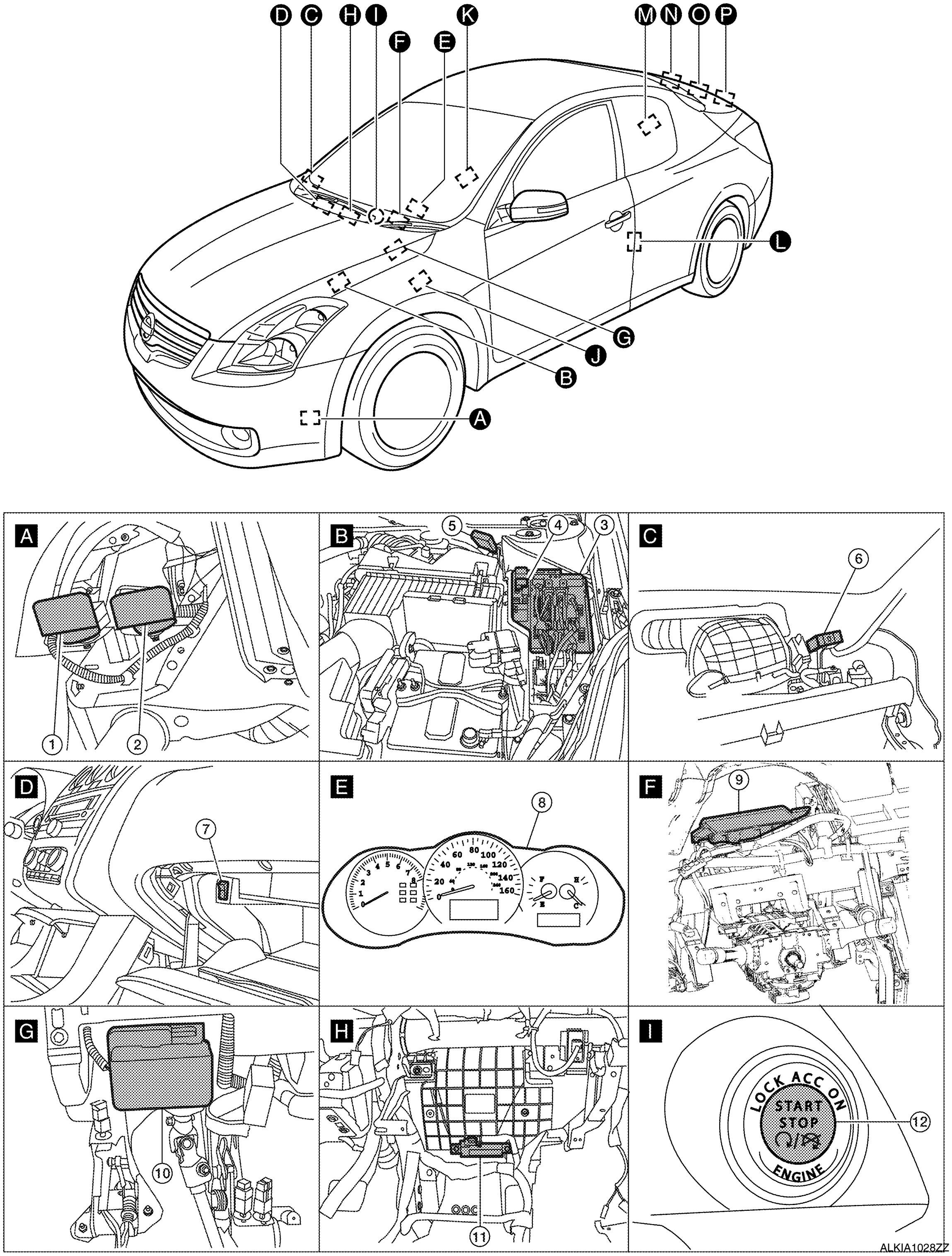
CAUTION:

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

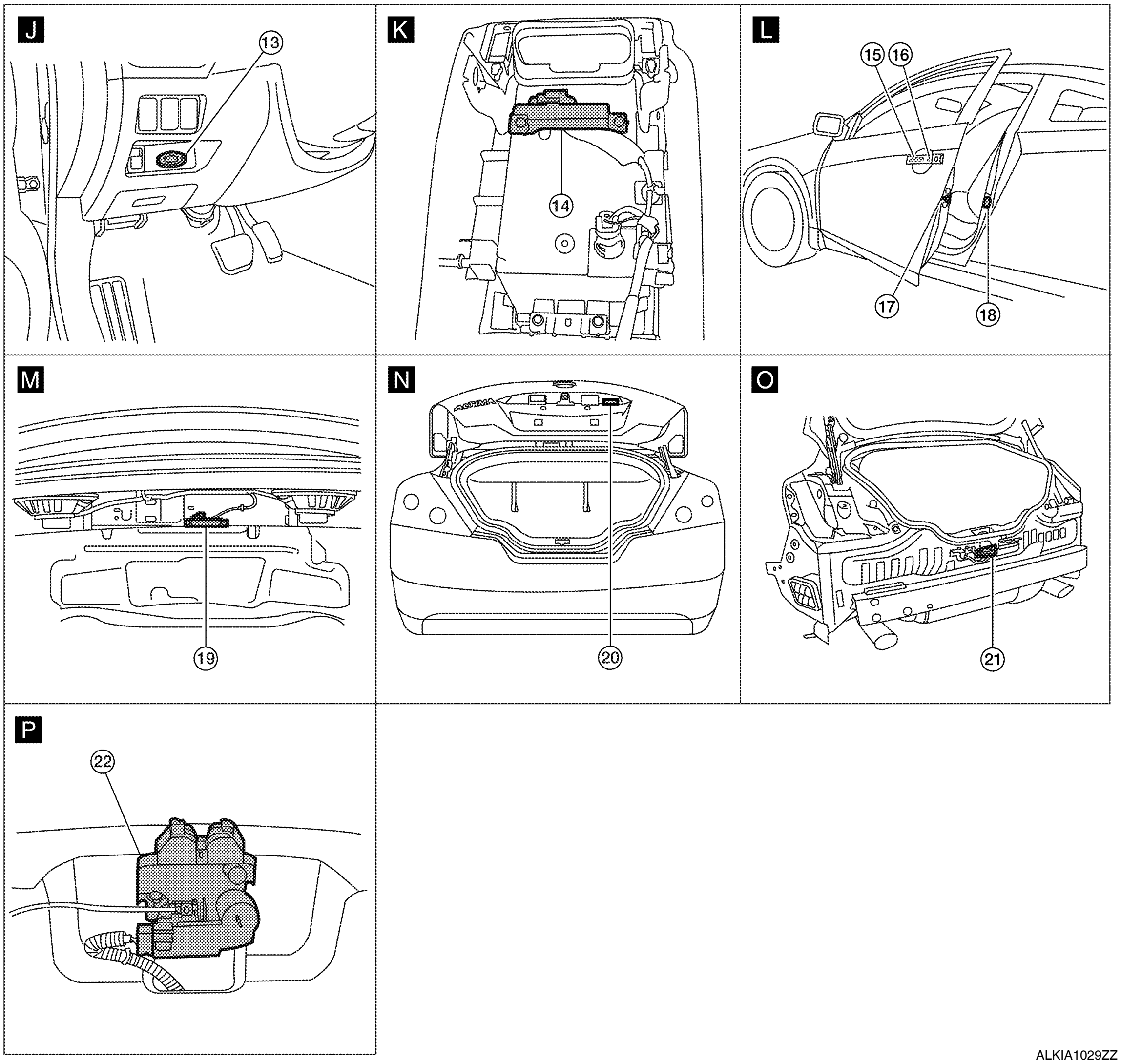
- Remote controller door lock button operation of Intelligent Key
- Remote controller door unlock button operation of Intelligent Key
- When the trunk is closed, the Intelligent Key is not inside the vehicle
- When any door is open

Component Parts Location

INFOID:0000000004495185



A B C D E F G H I J DLK L M N O P



1. Horn (low) E215 (view with front fender protector LH removed)
2. Horn (high) E216
3. IPDM E/R E17, E18
4. Horn relay H-1
5. Intelligent Key warning buzzer E73
6. Remote keyless entry receiver M27 (view with instrument panel removed)
7. Trunk lid opener cancel switch M74
8. Combination meter M24
9. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
10. Electronic steering column lock M32 (view with instrument panel LH removed)
11. Instrument panel antenna M49 (view with center console assembly removed)
12. Push button ignition switch M38
13. Key slot M40
14. Front console antenna M203 (view with center console assembly removed)
15. Front outside handle LH (outside key antenna) D6
    Front outside handle RH (outside key antenna) D106
16. Front outside handle LH (request switch) D6
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17. Front door lock assembly LH D10
    Front door lock actuator RH D108
18. Front door switch LH B8
    RH B108
19. Rear parcel shelf antenna B29
20. Trunk opener request switch B33
21. Rear bumper antenna B46
22. Trunk lamp switch and trunk release solenoid B28

HOMELINK UNIVERSAL TRANSCEIVER

Component Description

INFOID:0000000004204595

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 : Diagnosis Description

INFOID:0000000004495155

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MUTI REMOTE ENT	×	×	×
Exterior lamp	HEADLAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	

COMMON ITEM : CONSULT-III Function

INFOID:0000000004495156

ECU IDENTIFICATION

Displays the BCM part No.

SELF-DIAG RESULT

Refer to BCS-91, "DTC Index".

DOOR LOCK

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

INFOID:0000000004495157

WORK SUPPORT

Work Item	Description
DOOR LOCK-UNLOCK SET	• ON • OFF
ANTI-LOCK OUT SET	• ON • OFF

DATA MONITOR

Monitor Item [Unit}	Description
IGN ON SW [ON/OFF]	Indicates condition of ignition switch in ON position
KEY ON SW [ON/OFF]	Indicates condition of key switch
CDL LOCK SW [ON/OFF]	Indicates condition of door lock and unlock switch
CDL UNLOCK SW [ON/OFF]	Indicates condition of door lock and unlock switch
DOOR SW-DR [ON/OFF]	Indicates condition of front door switch LH
DOOR SW-AS [ON/OFF]	Indicates condition of front door switch RH
DOOR SW-RR [ON/OFF]	Indicates condition of rear door switch RH
DOOR SW-RL [ON/OFF]	Indicates condition of rear door switch LH
BACK DOOR SW [ON/OFF]	Indicates condition of back door switch
KEY CYL LK-SW [ON/OFF]	Indicates condition of lock signal from door key cylinder switch
KEY CYL UN-SW [ON/OFF]	Indicates condition of unlock signal from door key cylinder switch
I-KEY LOCK [ON/OFF]	Indicates condition of lock signal from Intelligent Key
I-KEY UNLOCK [ON/OFF]	Indicates condition of unlock signal from Intelligent Key

ACTIVE TEST

Test Item	Description
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].
TRUNK/BACK DOOR	This test is able to check trunk/back door lock operation [LOCK (SET)/UNLOCK (RE-LEASE)].

INTELLIGENT KEY

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

INFOID:0000000004495158

DATA MONITOR

Monitor Item [Unit]	Condition
PUSH SW [ON/OFF]	Indicates condition of ignition knob switch
I-KEY LOCK [ON/OFF]	Indicates condition of lock signal from Intelligent Key
I-KEY UNLOCK [ON/OFF]	Indicates [condition of unlock signal from Intelligent Key
I-KEY PW DWN [ON/OFF]	Indicates condition of all power window signal from Intelligent Key
I-KEY TRUNK [ON/OFF]	Indicates condition of trunk open signal from Intelligent Key
I-KEY PANIC [ON/OFF]	Indicates condition of panic signal from Intelligent Key

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000004495159

DATA MONITOR

Monitor Item	Contents
PUSH SW	Indicates [ON/OFF] condition of push button ignition switch.
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter.
KEY CYL SW-TR	**NOTE:** This item is displayed, but cannot be monitored.
TR CANCEL SW	Indicates [ON/OFF] condition of trunk cancel switch.
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk opener switch.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.
RKE-TR/BD	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.

ACTIVE TEST

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

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000004204600

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

DTC Logic

INFOID:0000000004204601

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:0000000004204602

1.PERFORM SELF DIAGNOSTIC

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

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to DLK-57, "Diagnosis Procedure".
NO >> Refer to GI-42, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000004204603

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:0000000004204604

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

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

Special Repair Requirement

INFOID:0000000004204605

1.REQUIRED WORK WHEN REPLACING BCM

Initialize NVIS by CONSULT-III. For the details of initialization refer to CONSULT-III Operation Manual.

>> Work End.

B2621 INSIDE KEY ANTENNA 1

Description

INFOID:0000000004204606

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

DTC Logic

INFOID:0000000004204607

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?

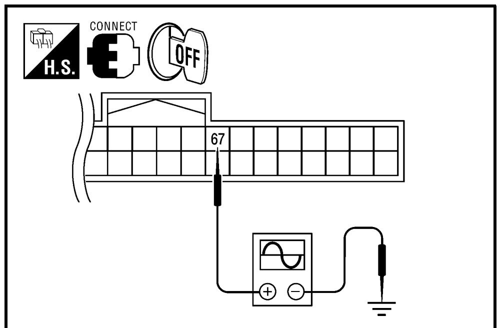
YES >> Refer to DLK-59, "Diagnosis Procedure".
NO >> Inside key antenna (instrument panel) is OK.

Diagnosis Procedure

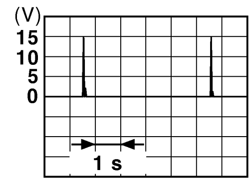
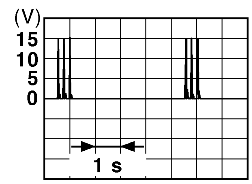
INFOID:0000000004204608

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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



ALKIA0325ZZ

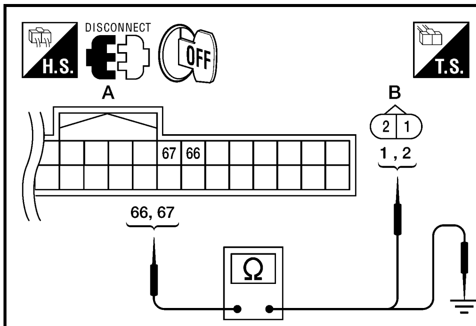
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M19	Instrument panel antenna	67	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

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.



ALKIA0326ZZ

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

3. Check continuity between BCM connector and ground.

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

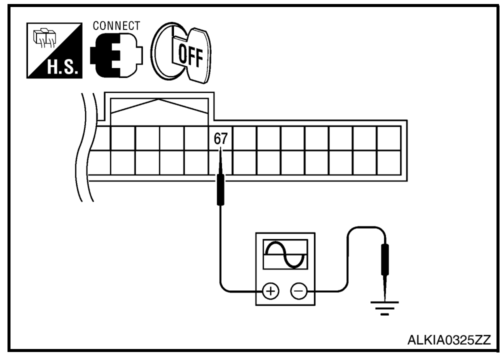
Is the inspection result normal?

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

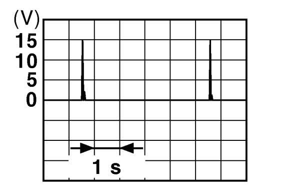
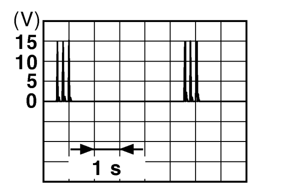
3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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.



ALKIA0325ZZ

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. Refer to IP-12, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

B2622 INSIDE KEY ANTENNA 2

Description

INFOID:0000000004204609

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

DTC Logic

INFOID:0000000004204610

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?

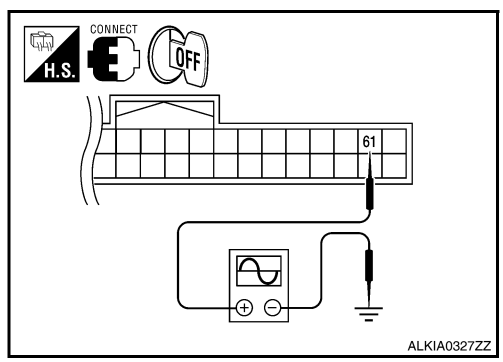
YES >> Refer to DLK-62, "Diagnosis Procedure".
NO >> Front console antenna is OK.

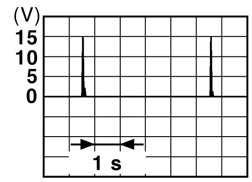
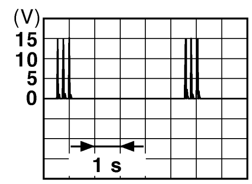
Diagnosis Procedure

INFOID:0000000004204611

1.CHECK FRONT CONSOLE ANTENNA INPUT SIGNAL 1

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



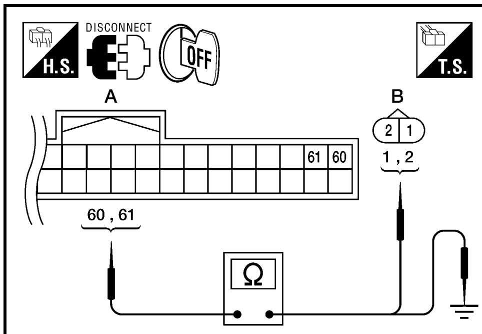
Terminals (+) BCM connector		Terminals (+) Terminal	Terminals (–)	Condition	Signal (Reference value.)
M19	Front console antenna	61	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

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.



ALKIA0328ZZ

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

3. Check continuity between BCM connector and ground.

BCM connector		Terminal		Continuity
A: M19	Console	60	Ground	No
		61		

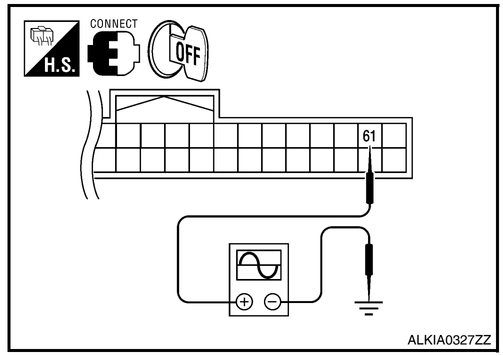
Is the inspection result normal?

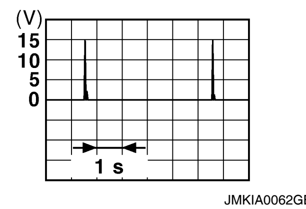
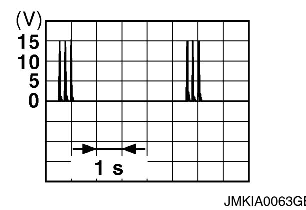
YES >> GO TO 3
NO >> Repair or replace harness between BCM and front console antenna.

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.	
				Place Intelligent Key outside the vehicle.	

Is the inspection result normal?

YES >> Replace front console antenna. Refer to IP-18, "Disassembly and Assembly".
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

B2623 INSIDE KEY ANTENNA 3

Description

INFOID:0000000004204612

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

DTC Logic

INFOID:0000000004204613

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?

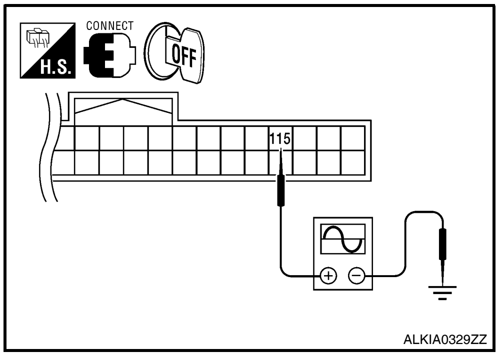
YES >> Refer to DLK-65, "Diagnosis Procedure".
NO >> rear parcel shelf antenna is OK.

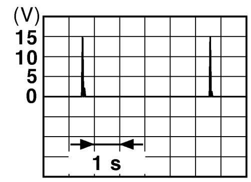
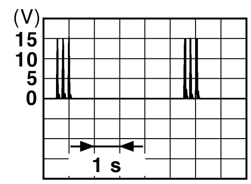
Diagnosis Procedure

INFOID:0000000004204614

1. CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 1

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



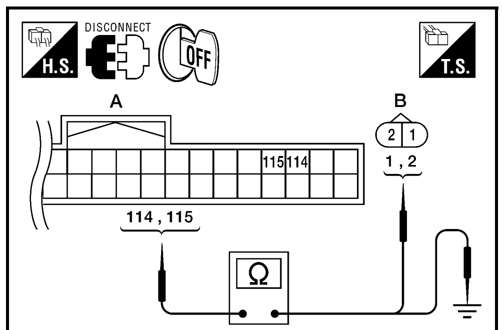
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M21	Rear parcel shelf antenna	115	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

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.



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

3. Check continuity between BCM connector and ground.

BCM connector		Terminal		Continuity
A: M21	Trunk room	114	Ground	No
		115		

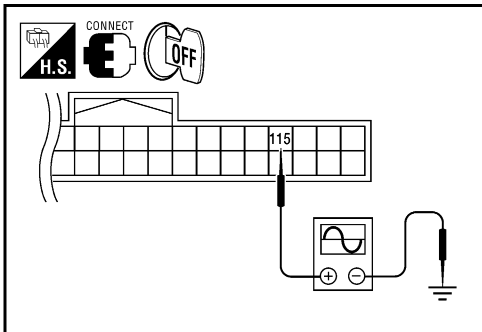
Is the inspection result normal?

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

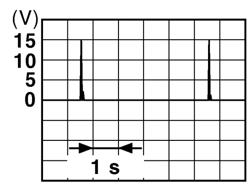
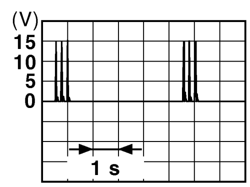
3.CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 2

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.



ALKIA0329ZZ

Terminals (+) BCM connector		Terminals (+) Terminal	Terminals (–)	Condition	Signal (Reference value.)
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. Refer to INT-17, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000004495931

1. CHECK FUSE AND FUSIBLE LINK

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

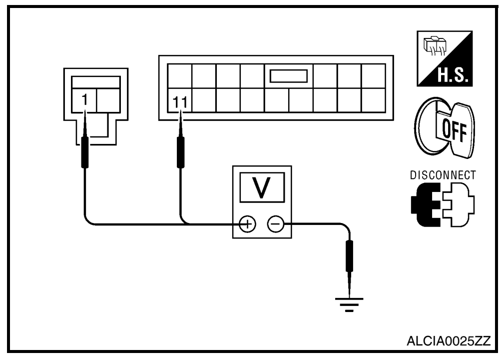
Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	H
11		10

Is the fuse or fusible link blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit.
NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

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



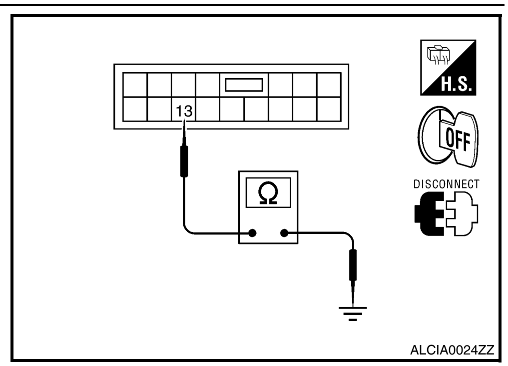
Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M16	1		Battery voltage
M17	11		

Is the measurement normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.



BCM		Ground	Continuity
Connector	Terminal		
M17	13		Yes

Does continuity exist?

YES >> Inspection End.
NO >> Repair or replace harness.

Special Repair Requirement

INFOID:0000000004495932

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to BCS-6, "CONFIGURATION (BCM) : Special Repair Requirement".

>> Work End.

DOOR SWITCH

Description

INFOID:0000000004204616

Detects door open/close condition.

Component Function Check

INFOID:0000000004204617

1.CHECK FUNCTION

With CONSULT-III

Check door switches DOOR SW-DR, DOOR SW-AS in Data Monitor mode with CONSULT-III.

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

Is the inspection result normal?

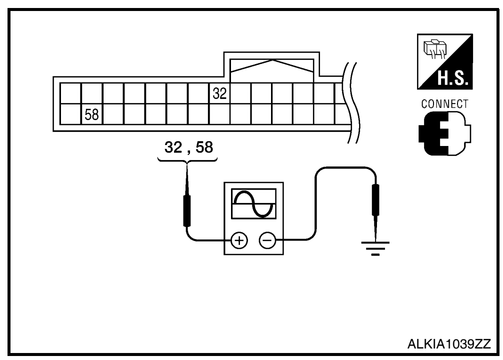
YES >> Door switch is OK.
NO >> Refer to DLK-69, "Diagnosis Procedure".

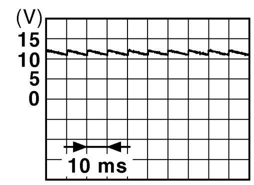
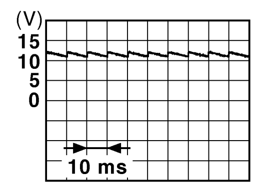
Diagnosis Procedure

INFOID:0000000004204618

1.CHECK DOOR SWITCH INPUT SIGNAL

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



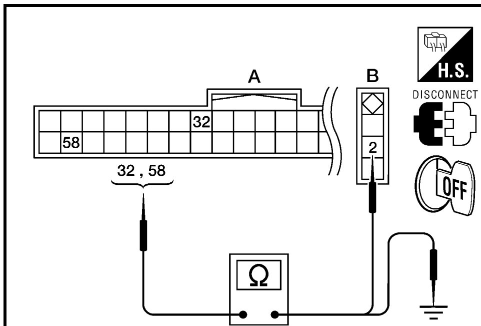
Terminals			Door condition		Voltage (V) (Approx.)
(+)		(–)			
BCM connector	Terminal				
M18	58	Ground	Driver side	OPEN	0
				CLOSE	 JPMIA0011GB
	32		Passenger side	OPEN	0
				CLOSE	 JPMIA0011GB

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.



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BCM connector	Terminal	Door switch connector	Terminal	Continuity
A: M18	58	B: B8 (Driver side)	2	Yes
	32	B: B108 (Passenger side)		

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M18	58	Ground	No
	32		

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-71, "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".

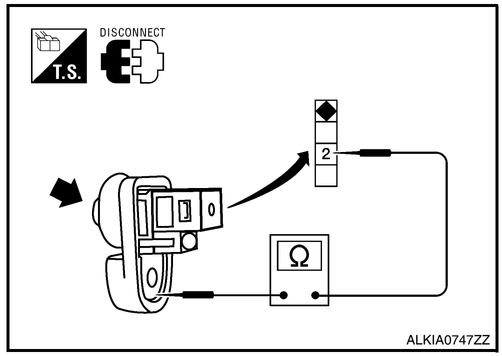
>> Inspection End.

Component Inspection

INFOID:0000000004204619

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 malfunctioning door switch.

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000004204620

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000004204621

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?

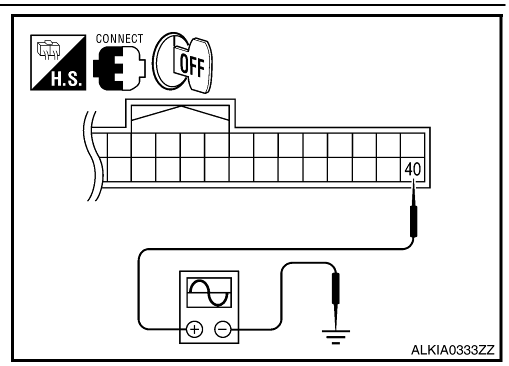
YES >> Door lock and unlock switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-72, "DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)".
NO >> With LH anti-pinch only, refer to DLK-73, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".

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

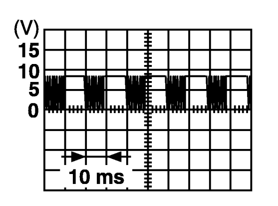
INFOID:0000000004204622

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

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



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

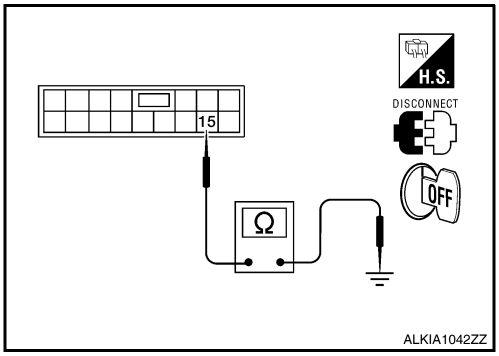
Terminal			Condition	Signal (Reference value)
(+)		(–)		
BCM connector	Terminal			
M18	40	Ground	Door is closed	

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.



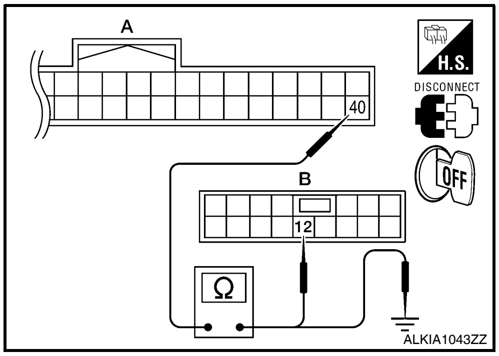
Main power window and door lock/unlock switch connector	Terminal		Continuity
D7	15	Ground	Yes

Is the inspection result normal?

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

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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



BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
A: M18	40	B: D7	12	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M18	40		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.

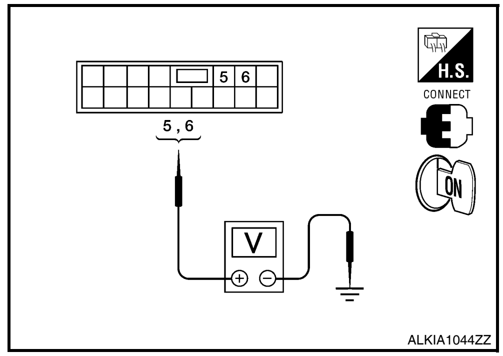
DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:0000000004204623

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”.



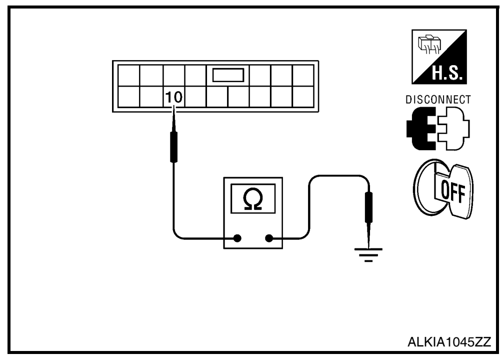
Connector	Main power window and door lock/unlock switch state	Terminal		Voltage
D7	Neutral → Lock	5	Ground	Battery voltage → 0
	Neutral → Unlock	6	Ground	Battery voltage → 0

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.



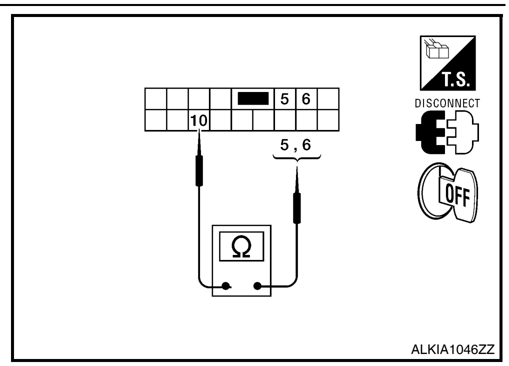
Main power window and door lock/unlock switch connector	Terminal		Continuity
D7	10	Ground	Yes

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.



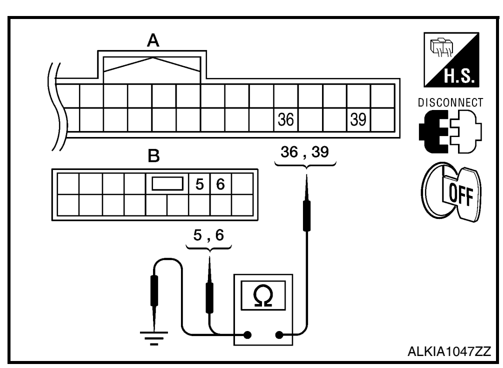
Main power window and door lock/unlock switch state	Terminals	Continuity
Lock	5 - 10	Yes
Unlock	6 - 10	Yes
Neutral/Unlock	5 - 10	No
Neutral/Lock	6 - 10	No

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace main power window and door lock/unlock switch. Refer to PWC-91, "Removal and Installation".

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: D7	5	Yes
	39		6	

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.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000004204625

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000004204626

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?

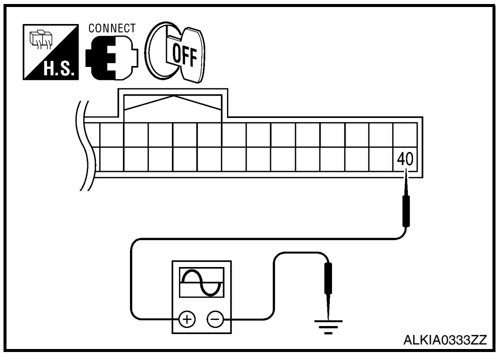
YES >> Door lock and unlock switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-75, "PASSENGER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)".
NO >> With LH anti-pinch only, refer to DLK-76, "PASSENGER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".

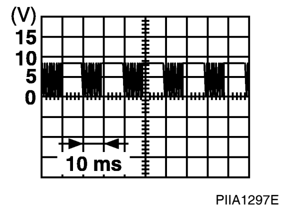
PASSENGER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)

INFOID:0000000004204627

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”.



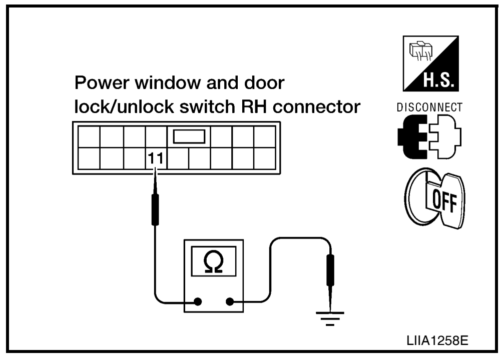
Terminal			Condition	Signal (Reference value)
(+)		(–)		
BCM connector	Terminal			
M18	40	Ground	Door is closed	 PIIA1297E

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

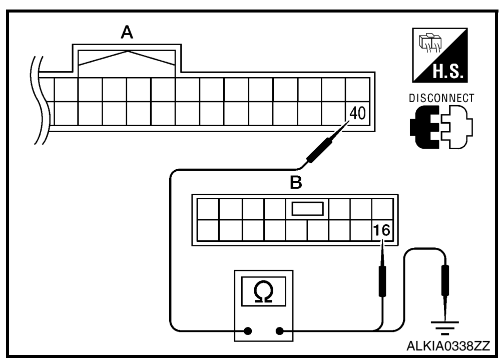
Power window and door lock/unlock switch RH connector	Terminal		Continuity
D105	11	Ground	Yes

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 and front power window switch (passenger side) connector.



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

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M18	40		No

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

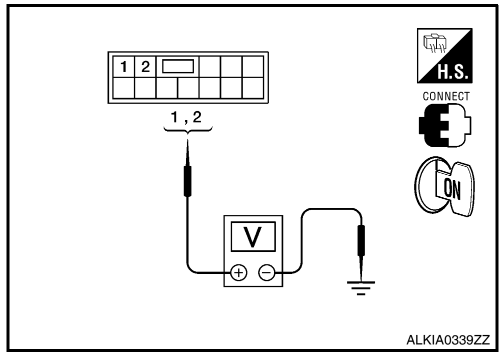
YES >> Inspection End.

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

INFOID:0000000004204628

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”.



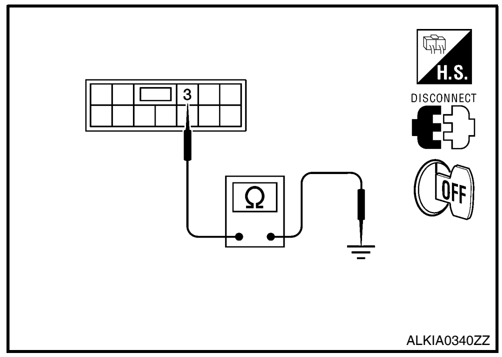
Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage
D105	Neutral → Lock	2	Ground	Battery voltage → 0
	Neutral → Unlock	1	Ground	Battery voltage → 0

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.



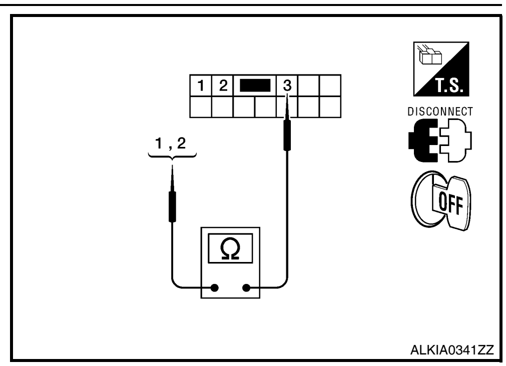
Power window and door lock/ unlock switch RH connector	Terminal		Continuity
D105	3	Ground	Yes

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.



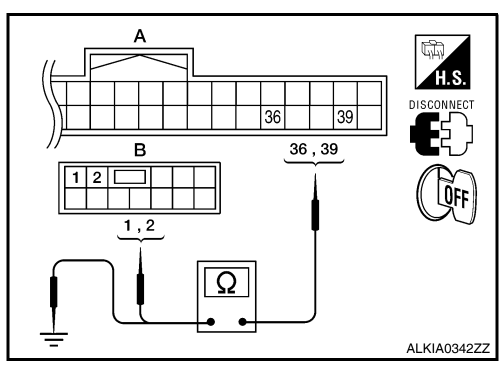
Power window and door lock/unlock switch RH state	Terminals	Continuity
Lock	2 - 3	Yes
Unlock	1 - 3	Yes
Neutral/Unlock	2 - 3	No
Neutral/Lock	1 - 3	No

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 and power window and door lock/unlock switch RH connector.



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

KEY SLOT

Description

INFOID:0000000004204630

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

Component Function Check

INFOID:0000000004204631

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?

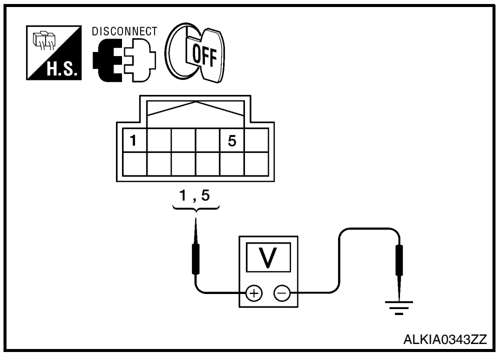
YES >> Key slot is OK.
NO >> Refer to DLK-79, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204632

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.



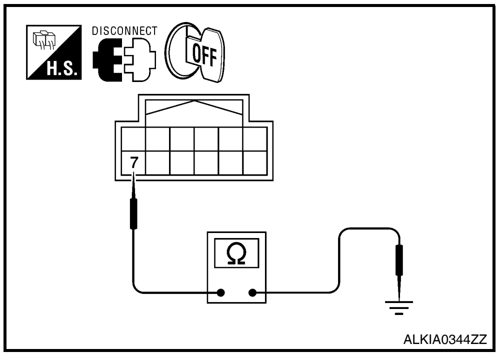
Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key slot connector	Terminal		
M40	1	Ground	Battery voltage
	5		

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

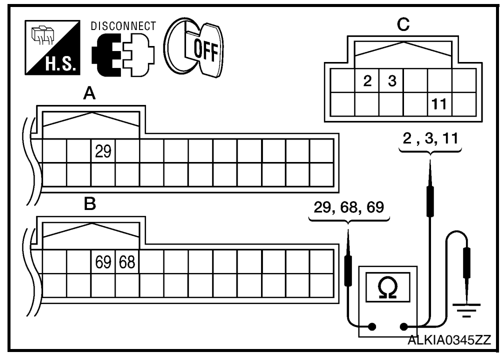
Is the inspection result normal?

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 and key slot connector.



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 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-80, "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".

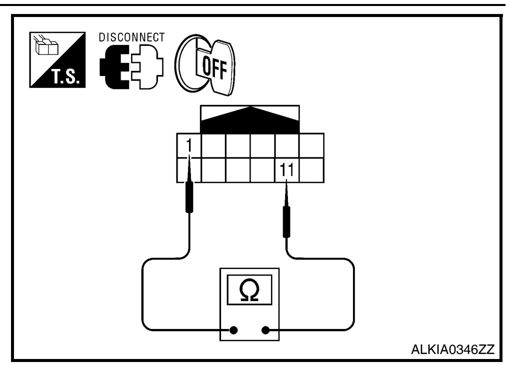
>> Inspection End.

Component Inspection

INFOID:0000000004204633

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?

YES >> Inspection End.
NO >> Replace key slot. Refer to SEC-207, "Removal and Installation".

KEY CYLINDER SWITCH

Description

INFOID:0000000004204634

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

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

Component Function Check

INFOID:0000000004204635

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check KEY CYL UN-SW, KEY CYL UN-SW in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT-III. Refer to DLK-11, "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?

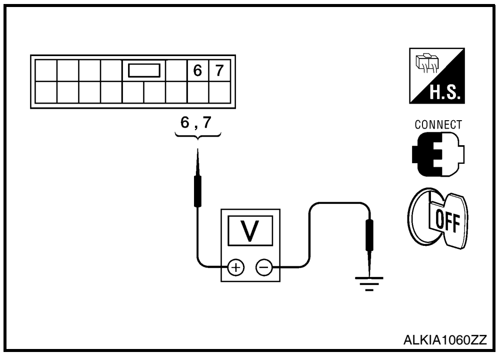
YES >> Key cylinder switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-81, "Diagnosis Procedure (With LH and RH Anti-Pinch)".
NO >> With LH anti-pinch only, refer to DLK-82, "Diagnosis Procedure (With LH Anti-Pinch Only)".

Diagnosis Procedure (With LH and RH Anti-Pinch)

INFOID:0000000004204636

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.



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Terminals			Key position	Voltage (V) (Approx.)
(+)		(–)		
Main power window and door lock/unlock switch connector	Terminal			
D7	6	Ground	Lock	0
			Neutral / Unlock	5
	7		Unlock	0
			Neutral / Lock	5

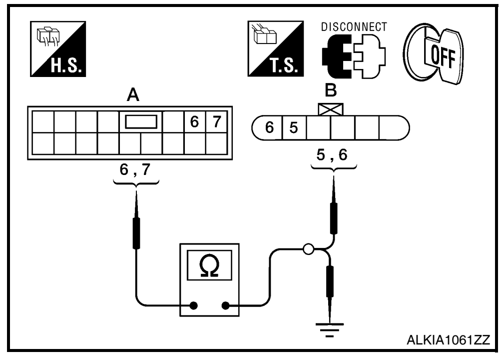
Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to DLK-222, "FRONT DOOR LOCK : Removal and Installation".
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 door lock assembly LH (key cylinder switch) connector.

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



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

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

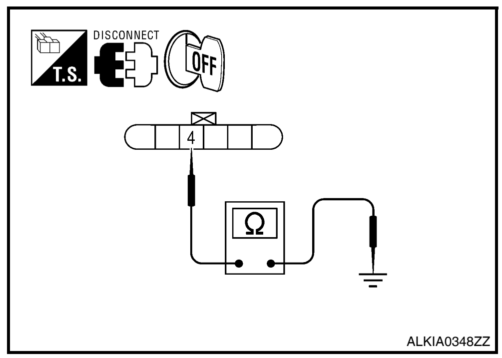
Power window main switch connector	Terminal		Continuity
A: D7	6	Ground	No
	7		

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 door lock assembly LH connector and ground.



Door lock assembly LH connector	Terminal		Continuity
D10	4	Ground	Yes

Is the inspection result normal?

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

4.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-83, "Component Inspection".

Is the inspection result normal?

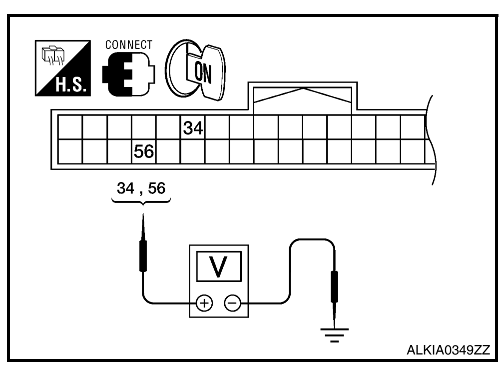
YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace door lock assembly LH (key cylinder switch). Refer to DLK-222, "FRONT DOOR LOCK : Removal and Installation".

Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:0000000004204637

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	5
	34		Unlock	0
			Neutral / Lock	5

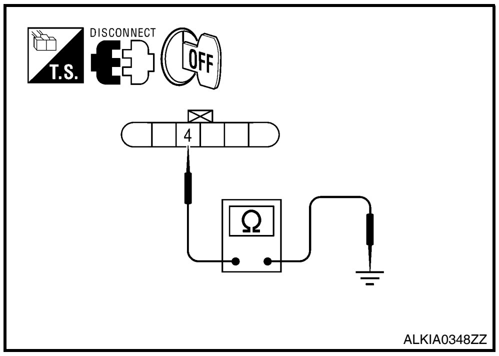
Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-91, "Removal and Installation".
NO >> GO TO 2

2.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

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

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.

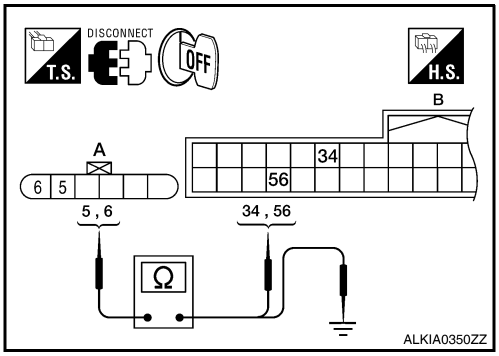
3.CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Disconnect BCM connector M18.
2. Check continuity between door lock assembly LH (key cylinder switch) connector and BCM connector M18.

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

3. Check continuity between door lock assembly LH (key cylinder switch) connector and ground.

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-83, "Component Inspection".

Is the inspection result normal?

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

Component Inspection

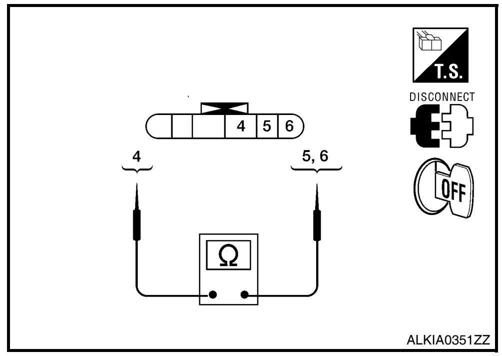
INFOID:0000000004204638

COMPONENT INSPECTION

1.CHECK DOOR KEY CYLINDER SWITCH

Check door lock assembly LH (key cylinder switch).

Terminal		Key position	Continuity
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 door lock assembly LH (key cylinder switch). Refer to DLK-222, "FRONT DOOR LOCK : Removal and Installation".

UNLOCK SENSOR

Description

INFOID:0000000004204640

Detects door lock condition of driver door.

Component Function Check

INFOID:0000000004204641

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)	Door lock (driver side) LOCK : OFF
	Door lock (driver side) UNLOCK : ON

Is the inspection result normal?

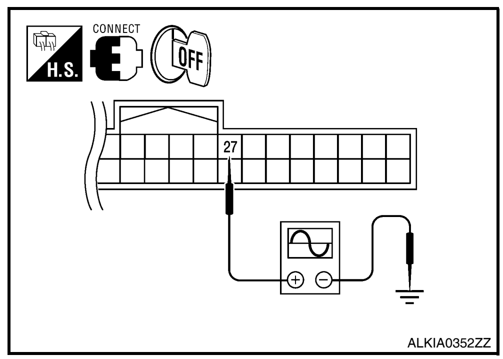
YES >> Unlock sensor is OK.
NO >> Refer to DLK-85, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204642

1.CHECK UNLOCK SENSOR POWER SUPPLY

Check signal between BCM connector and ground with oscilloscope.



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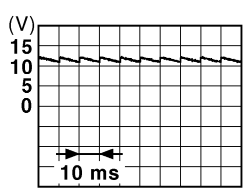
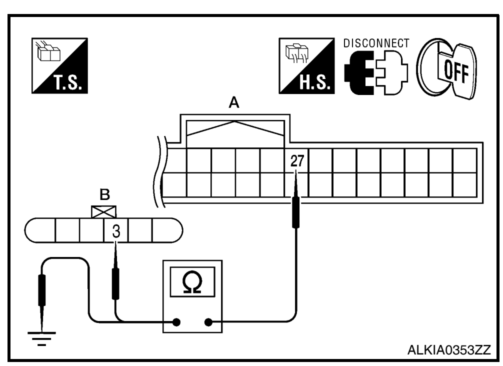
Terminals			Door lock assembly LH condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	27	Ground	Locked	 JPMIA0011GB
			Unlocked	0

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 door lock assembly LH connector.
3. Check continuity between BCM connector and door lock assembly LH connector.



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

4. Check continuity between BCM connector and ground.

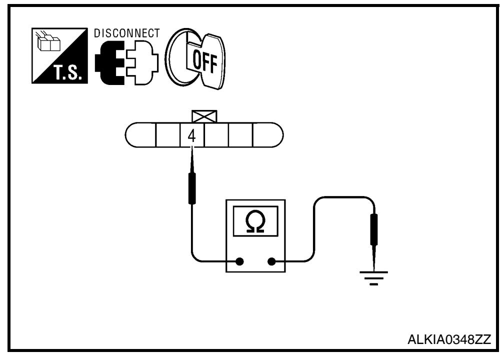
BCM connector	Terminal	Ground	Continuity
A: M18	27		No

Is the inspection result normal?

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

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

Check continuity between door lock assembly LH connector and ground.



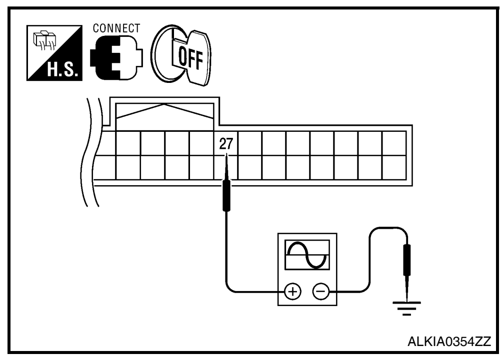
Door lock assembly LH connector	Terminal	Ground	Continuity
D10	4		Yes

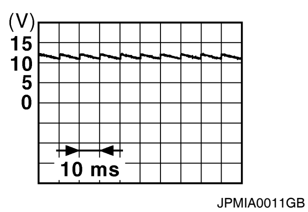
Is the inspection result normal?

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	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

5.CHECK UNLOCK SENSOR

Refer to DLK-86, "Component Inspection".

Is the inspection result normal?

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

6.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

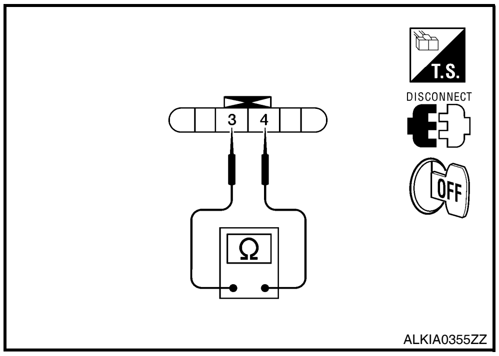
Component Inspection

INFOID:0000000004204643

1.CHECK UNLOCK SENSOR

Check unlock sensor.

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



Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door lock assembly LH. Refer to DLK-222, "FRONT DOOR LOCK : Removal and Installation".

TRUNK LID OPENER SWITCH

Description

INFOID:0000000004204644

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000004204645

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?

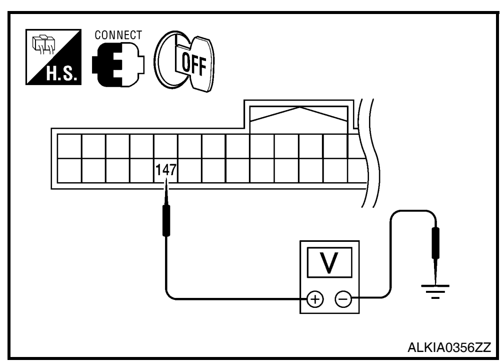
YES >> Trunk lid opener switch is OK.
NO >> Refer to DLK-88, "Diagnosis Procedure".

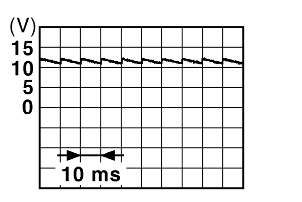
Diagnosis Procedure

INFOID:0000000004204646

1.CHECK TRUNK LID OPEN INPUT SIGNAL

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



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

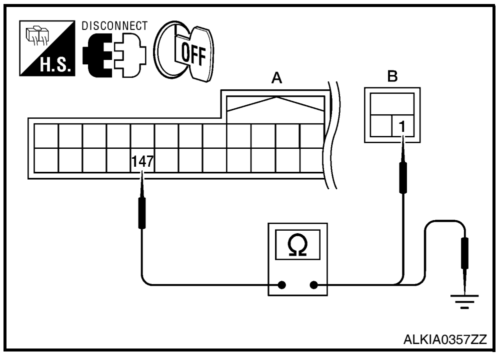
Is the inspection result normal?

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 and trunk lid opener switch connector.



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

3. Check continuity between BCM connector and ground.

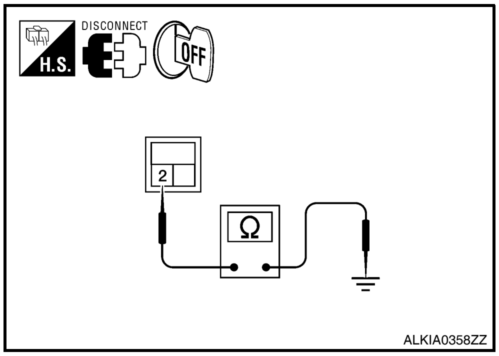
BCM connector	Terminal	Ground	Continuity
A: M21	147		No

Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch connector and ground.



Trunk lid opener switch	Terminal	Ground	Continuity
M75	2		Yes

Is the inspection result normal?

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

4.CHECK TRUNK LID OPENER SWITCH

Refer to DLK-89, "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".

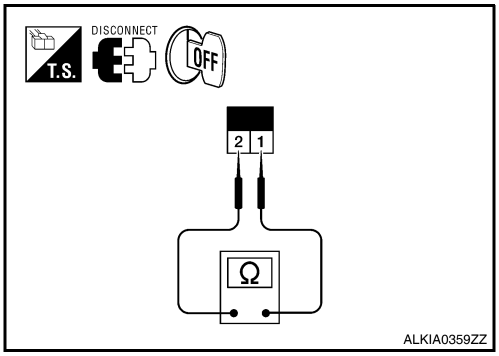
>> Inspection End.

Component Inspection

INFOID:0000000004204647

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:0000000004204648

Cancels trunk lid open operation.

Component Function Check

INFOID:0000000004204649

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?

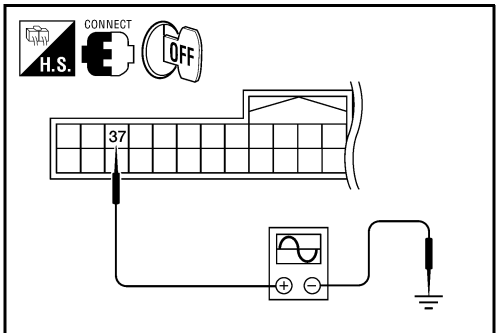
YES >> Trunk lid opener cancel switch is OK.
NO >> Refer to DLK-91, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204650

1.CHECK TRUNK LID OPENER CANCEL SIGNAL

Check voltage between BCM connector and ground.



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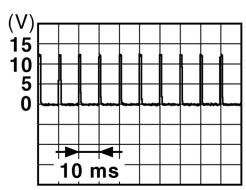
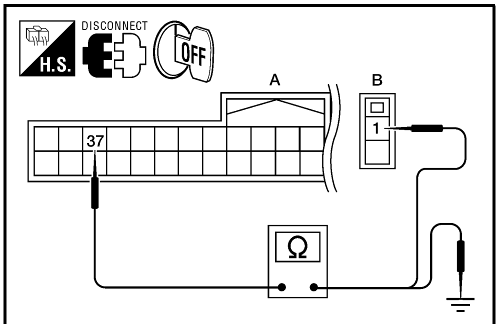
Terminals (+) BCM connector	Terminals (+) Terminal	Terminals (–)	Condition of trunk lid opener cancel switch	Voltage (V) (Approx.)
M18	37	Ground	ON (press and hold)	0
			OFF (cancel)	 JPMIA0012GB

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 and trunk lid opener cancel switch connector.



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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.

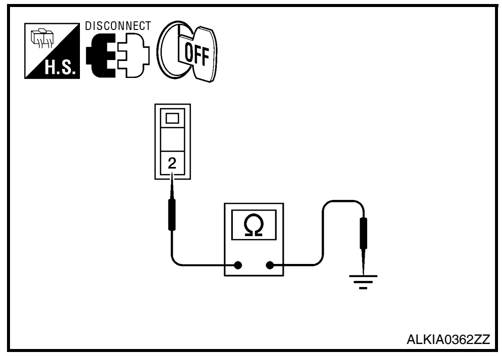
BCM connector	Terminal	Ground	Continuity
A: M18	37		No

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-92, "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".

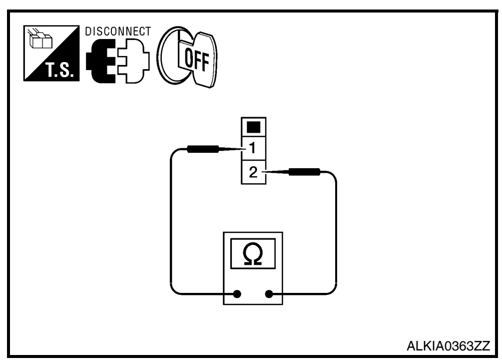
>> Inspection End.

Component Inspection

INFOID:0000000004204651

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:0000000004204652

Detects trunk open/close condition.

Component Function Check

INFOID:0000000004204653

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?

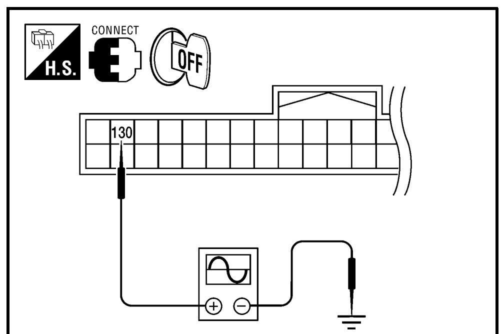
YES >> Trunk room lamp switch is OK.
NO >> Refer to DLK-93, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204654

1.CHECK TRUNK LAMP SWITCH INPUT SIGNAL

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



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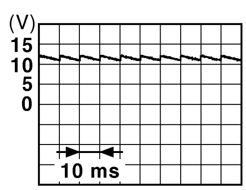
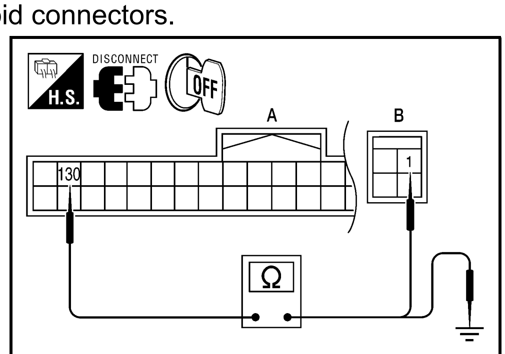
Terminals (+) BCM connector	Terminals (+) Terminal	Terminals (–)	Trunk condition	Voltage (V) (Approx.)
M21	130	Ground	OPEN	0
			CLOSE	 JPMIA0011GB

Is the inspection result normal?

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

2.CHECK TRUNK LAMP SWITCH CIRCUIT

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



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

3. Check continuity between BCM connector and ground.

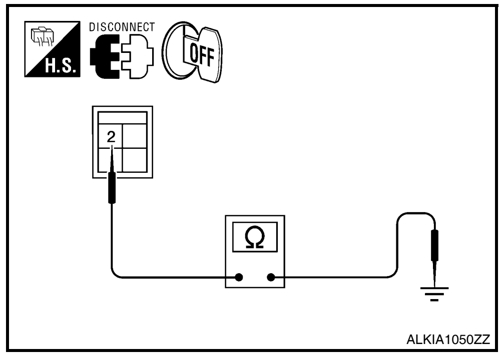
BCM connector	Terminal	Ground	Continuity
A: M21	130		No

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.



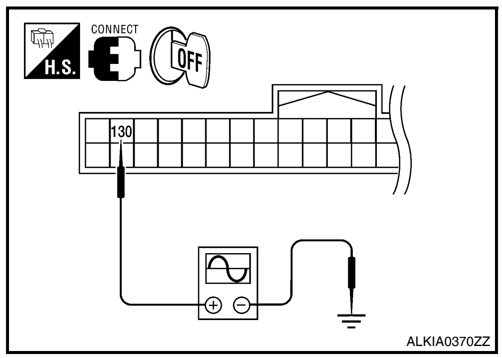
Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
T4	2		Yes

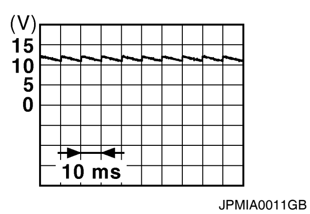
Is the inspection result normal?

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	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

5.CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-94, "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

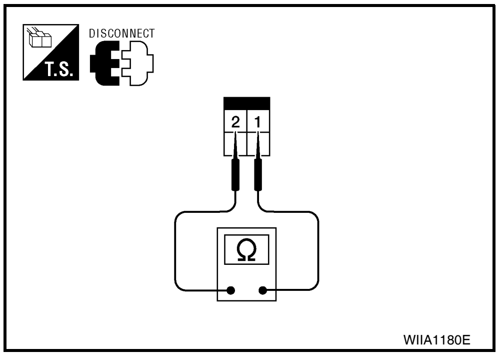
INFOID:0000000004204655

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.

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:0000000004204656

Transmits lock/unlock operation to BCM.

Component Function Check

INFOID:0000000004204657

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?

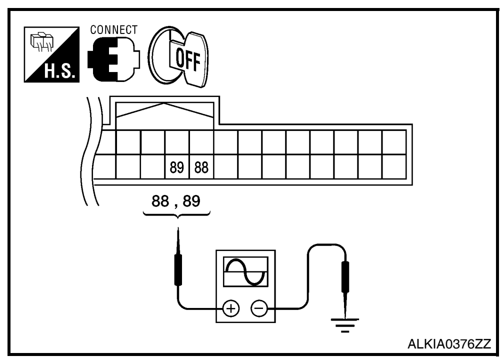
YES >> Door request switch is OK.
NO >> Refer to DLK-96, "Diagnosis Procedure".

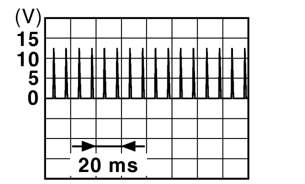
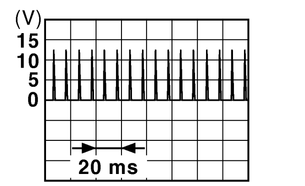
Diagnosis Procedure

INFOID:0000000004204658

1.CHECK DOOR REQUEST SWITCH OUTPUT SIGNAL

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



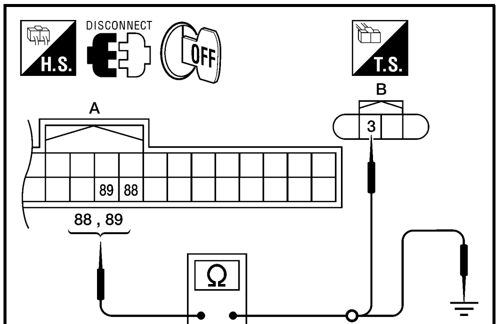
Terminals				Door request switch Condition	Voltage (V) (Approx.)
(+)			(–)		
BCM connector		Terminal			
M19	Door request switch (driver side)	89	Ground	Pressed	0
				Released	 JMKIA0059GB
	Door request switch (passenger side)	88		Pressed	0
				Released	 JMKIA0059GB

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 and front outside handle connector.



ALKIA1364ZZ

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 and ground.

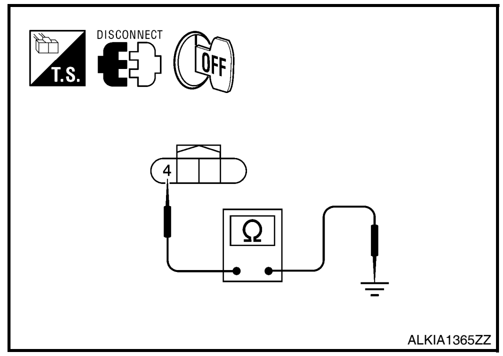
BCM connector	Terminal		Continuity
A: M19	89	Ground	No
	88		

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		Continuity
D6 (driver side)	4	Ground	Yes
D106 (passenger side)			

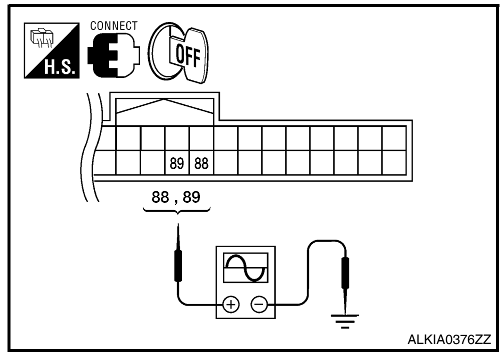
Is the inspection result normal?

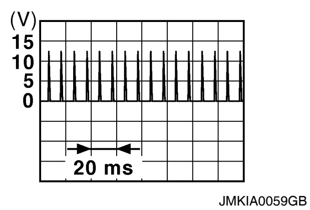
YES >> GO TO 4

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		

Is the inspection result normal?

YES >> GO TO 5

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

5.CHECK DOOR REQUEST SWITCH

Refer to DLK-98, "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".

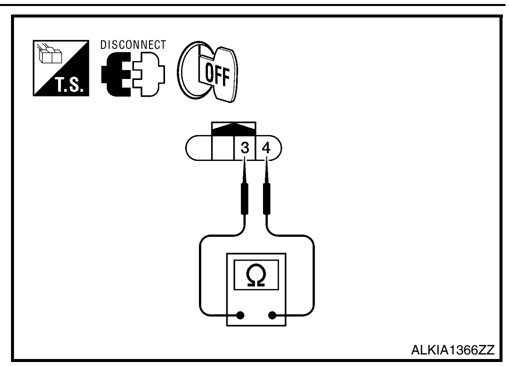
>> Inspection End.

Component Inspection

INFOID:0000000004204659

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 malfunction front outside handle.

TRUNK OPENER REQUEST SWITCH

Description

INFOID:0000000004204660

Performs trunk lid open request when it is pressed.

Component Function Check

INFOID:0000000004204661

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.

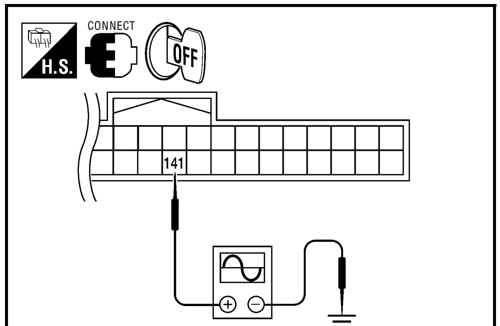
NO >> Refer to DLK-100, "Diagnosis Procedure".

Diagnosis Procedure

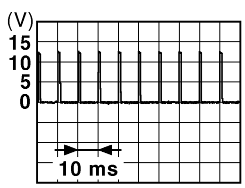
INFOID:0000000004204662

1.CHECK TRUNK OPENER REQUEST SWITCH OUTPUT SIGNAL

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



ALKIA0397ZZ

Terminals			Trunk lid opener request switch condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	141	Ground	Pressed	0
			Released	 JPMIA0016GB

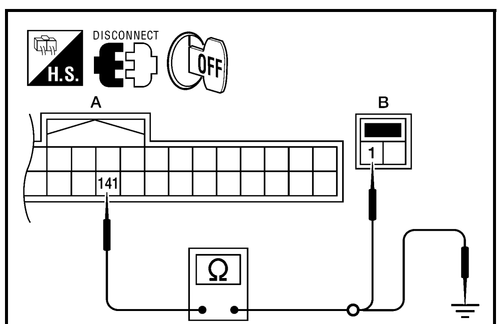
Is the inspection result normal?

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 and trunk opener request switch connector.



ALKIA0398ZZ

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

3. Check continuity between BCM connector and ground.

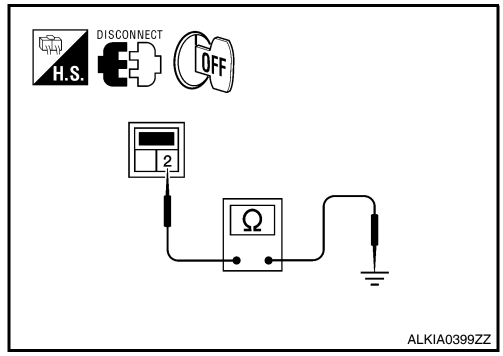
BCM connector	Terminal	Ground	Continuity
A: M21	141		No

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.



ALKIA0399ZZ

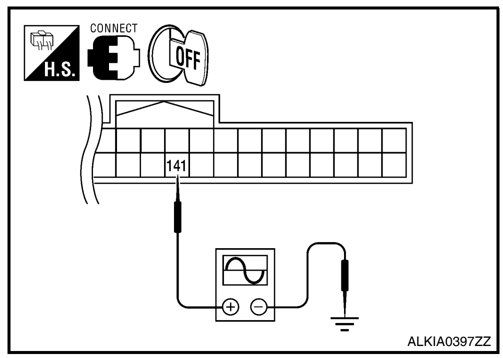
Trunk opener request switch connector	Terminal	Ground	Continuity
T2	2		Yes

Is the inspection result normal?

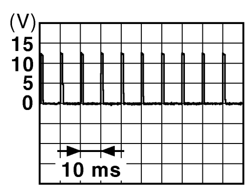
YES >> GO TO 4
NO >> Repair or replace trunk opener request switch ground circuit.

4.CHECK BCM OUTPUT SIGNAL

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



ALKIA0397ZZ

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-96, "Removal and Installation".

5.CHECK TRUNK OPENER REQUEST SWITCH

Refer to DLK-101, "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".

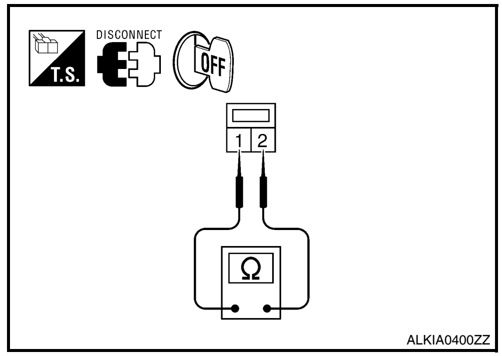
>> Inspection End.

Component Inspection

INFOID:0000000004204663

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:0000000004204664

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000004204665

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?

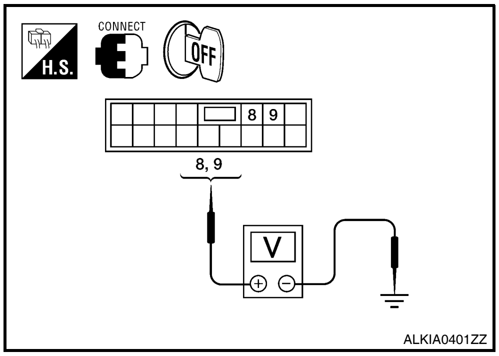
YES >> Door lock actuator is OK.
NO >> Refer to DLK-103, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000004204666

1.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.



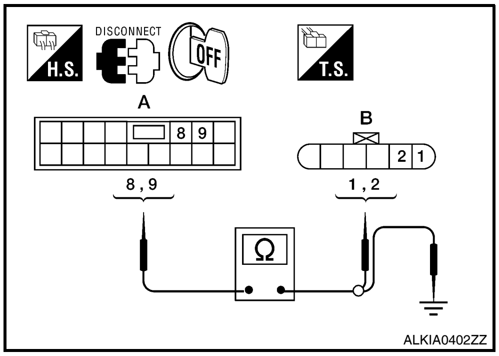
Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	8	Ground	Lock	0 → Battery voltage → 0
	9		Unlock	0 → Battery voltage → 0

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



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

4. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M17	8	Ground	No
	9		

Is the inspection result normal?

YES >> Replace 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:0000000004204667

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000004204668

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-104, "PASSENGER SIDE : Diagnosis Procedure".

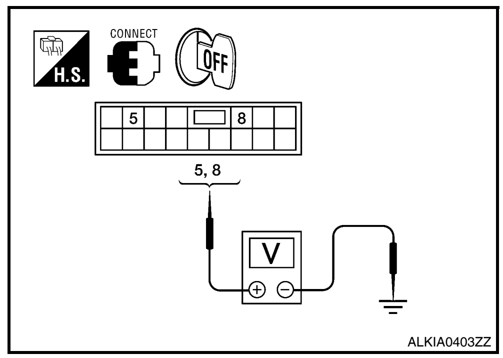
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000004204669

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



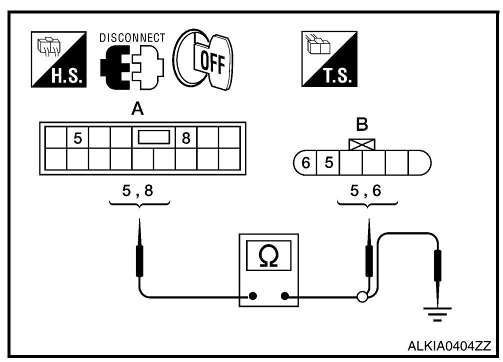
Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

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

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



3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M17	8	Ground	No
	5		

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

TRUNK LID OPENER ACTUATOR

Description

INFOID:0000000004204670

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000004204671

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-105, "Diagnosis Procedure".

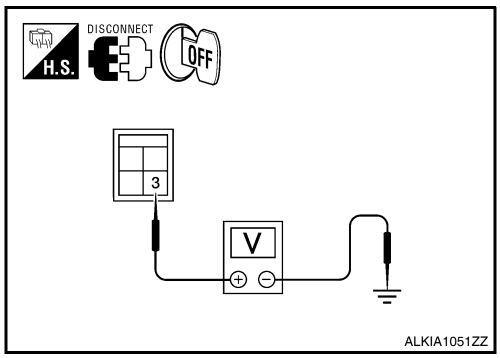
Diagnosis Procedure

INFOID:0000000004204672

1.CHECK OUTPUT CIRCUIT

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

Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
Trunk lamp switch and trunk release solenoid connector	Terminal			
B28	3	Ground	OFF → ON	0 → Battery voltage → 0



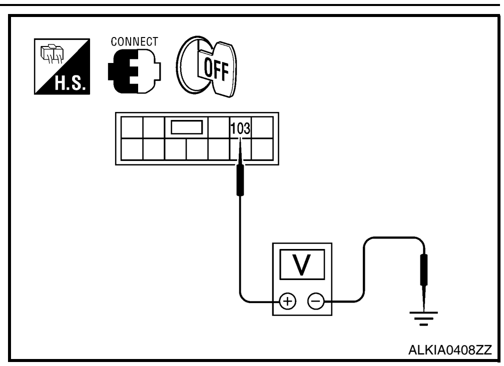
Is the inspection result normal?

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

2.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	OFF → ON	0 → Battery voltage → 0



Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

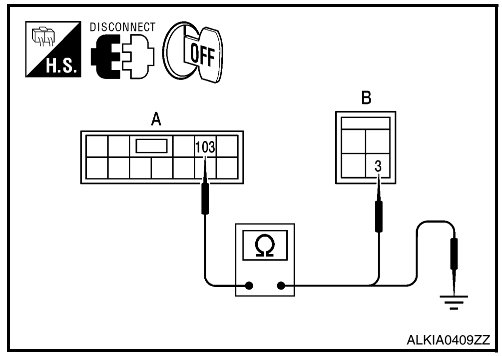
1. Disconnect BCM.

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

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

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
A: M20	103	Ground	No



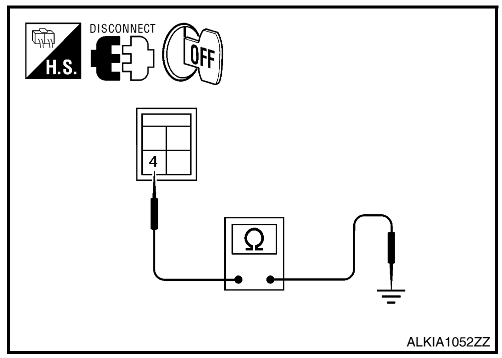
Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK TRUNK LID OPENER GROUND CIRCUIT

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

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



Is the inspection result normal?

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

INTELLIGENT KEY WARNING BUZZER

Description

INFOID:0000000004204673

Answers back and warns for an inappropriate operation.

Component Function Check

INFOID:0000000004204674

1.CHECK FUNCTION

With CONSULT-III
Check Intelligent Key warning buzzer OUTSIDE BUZZER in Active Test mode.

Is the inspection result normal?

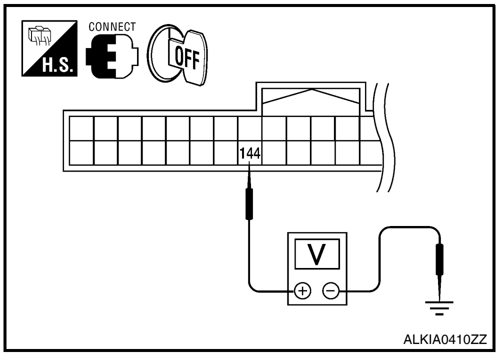
YES >> Intelligent Key warning buzzer (engine room) is OK.
NO >> Refer to DLK-107, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204675

1.CHECK INTELLIGENT KEY WARNING BUZZER

Check voltage between BCM connector and ground.



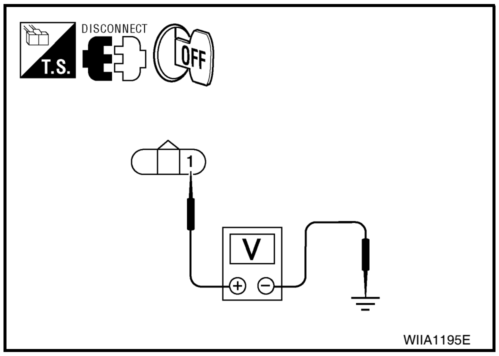
Terminals			Warning buzzer operation condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	144	Ground	ON	0
			OFF	Battery voltage

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

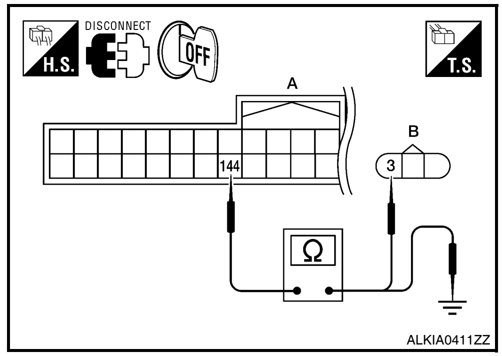
Is the inspection result normal?

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 and Intelligent Key warning buzzer connector.



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

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
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-108, "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".

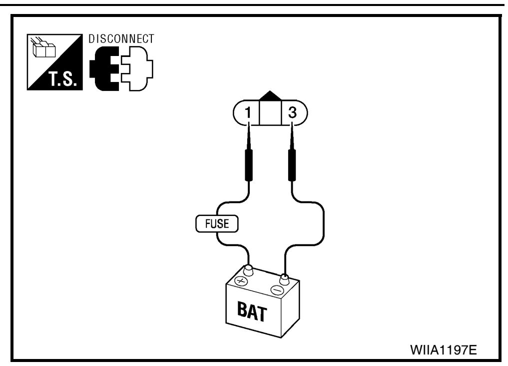
>> Inspection End.

Component Inspection

INFOID:0000000004204676

1.CHECK INTELLIGENT KEY WARNING BUZZER

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



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

Is the inspection result normal?

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

OUTSIDE KEY ANTENNA

Description

INFOID:0000000004204677

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:0000000004204678

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-96, "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?

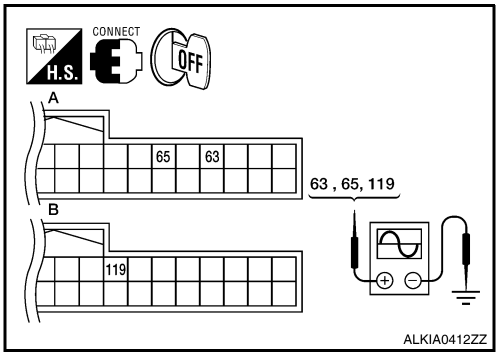
YES >> Outside key antenna is OK.
NO >> Refer to DLK-109, "Diagnosis Procedure".

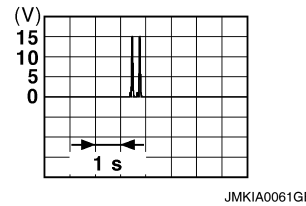
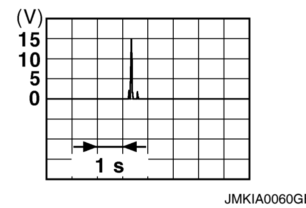
Diagnosis Procedure

INFOID:0000000004204679

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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



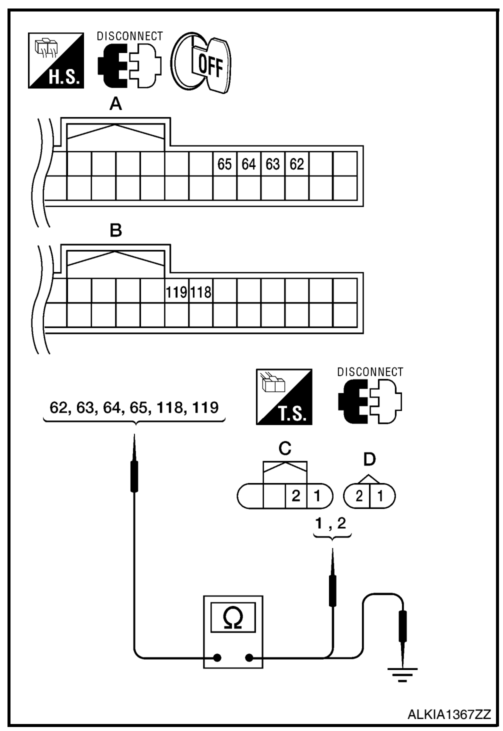
Terminals (+) BCM connector		Terminals (+) Terminal	Terminals (–)	Condition		Signal (Reference value.)
A: M19	Driver side	65	Ground	Request switch is pushed	When Intelligent Key is in the antenna detection area.	
A: M19	Passenger side	63	Ground	Request switch is pushed	When Intelligent Key is in the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

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	D6 (driver side)	1	Yes
	64		2	
	63	D106 (passenger side)	1	
	62		2	
B: M21	119	B46 (rear bumper)	1	
	118		2	

3. Check continuity between BCM connector and ground.

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

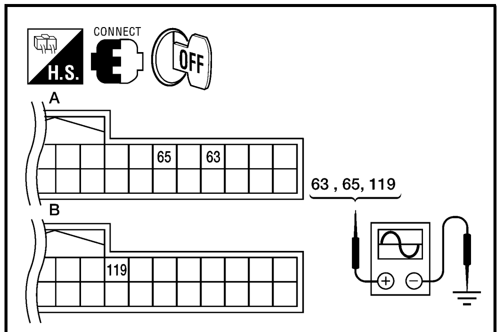
Is the inspection result normal?

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

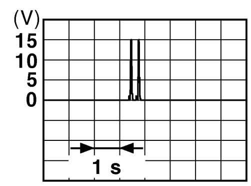
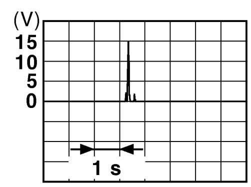
3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

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.



ALKIA0412ZZ

<table>
<tr><th colspan="3">Terminals</th><th rowspan="3" colspan="2">Condition</th><th rowspan="3">Signal
(Reference value.)</th></tr>
<tr><th colspan="2">(+)</th><th rowspan="2">(–)</th></tr>
<tr><th>BCM connector</th><th>Terminal</th></tr>
<tr><td rowspan="2">A: M19</td><td>Driver side</td><td>65</td><td rowspan="3">Ground</td><td rowspan="3">Door request switch is pushed</td><td rowspan="2">When Intelligent Key is in the antenna detection area.</td><td rowspan="2">JMKIA0061GB</td></tr>
<tr><td>Passenger side</td><td>63</td></tr>
<tr><td>B: M21</td><td>Rear bumper</td><td>119</td><td>When Intelligent Key is not in the antenna detection area.</td><td>JMKIA0060GB</td></tr>
</table>

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:0000000004204680

Receives Intelligent Key operation and transmits to BCM.

Component Function Check

INFOID:0000000004204681

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?

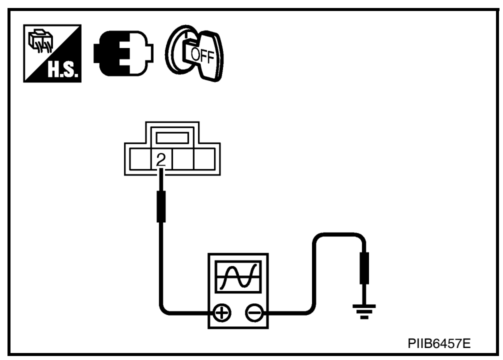
YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-112, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204682

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.



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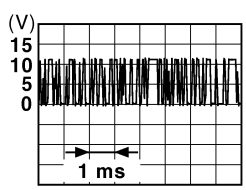
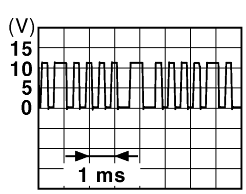
Terminals			Condition	Signal (Reference value)
(+)		(–)		
Remote keyless entry receiver connector	Terminal			
M27	2	Ground	Waiting (All doors closed)	 JMKIA0064GB
			When signal is received (All doors closed)	 JMKIA0065GB

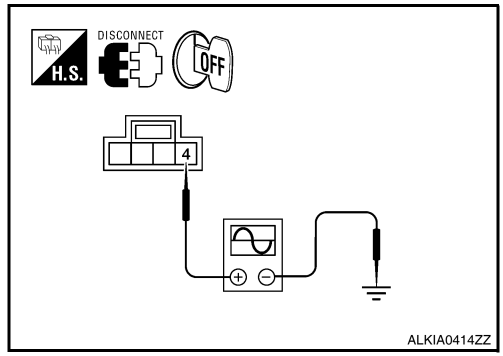
Is the inspection result normal?

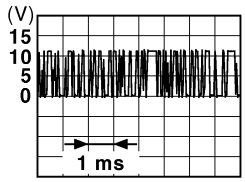
YES >> GO TO 7
NO >> GO TO 2

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.



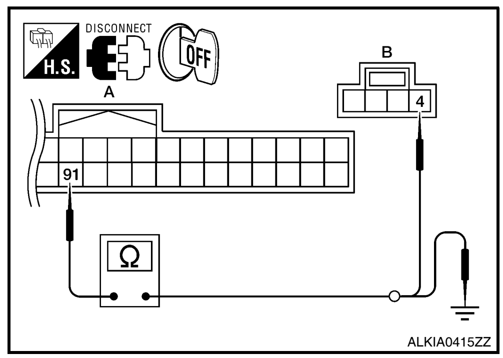
Terminals			Signal (Reference value)
(+)		(–)	
Remote keyless entry receiver connector	Terminal		
M27	4	Ground	 JMKIA0064GB

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 and remote keyless entry receiver connector.



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

3. Check continuity between BCM connector and ground.

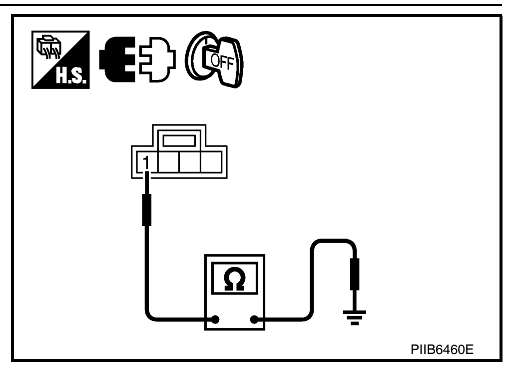
BCM connector	Terminal	Ground	Continuity
A: M19	91		No

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.



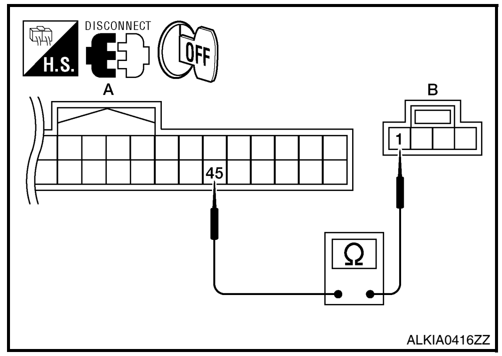
Remote keyless entry receiver connector	Terminal	Ground	Continuity
M27	1		Yes

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.



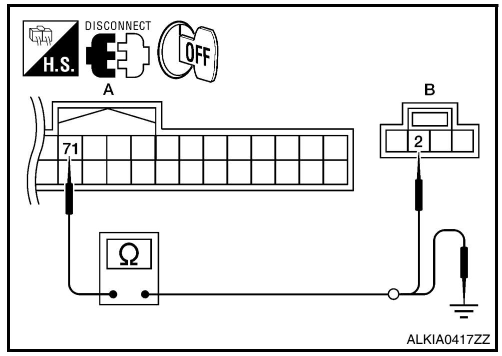
BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
A: M18	45	B: M27	1	Yes

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 BATTERY AND FUNCTION

Description

INFOID:0000000004204683

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:0000000004204684

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-115, "Diagnosis Procedure".

Diagnosis Procedure

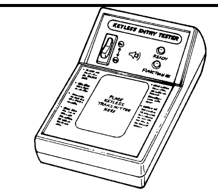
INFOID:0000000004495968

1.CHECK INTELLIGENT KEY FUNCTION

Check Intelligent Key function using Remote Keyless Entry Tester J-43241.

Does the test pass?

YES >> Intelligent Key is OK.
NO >> GO TO 2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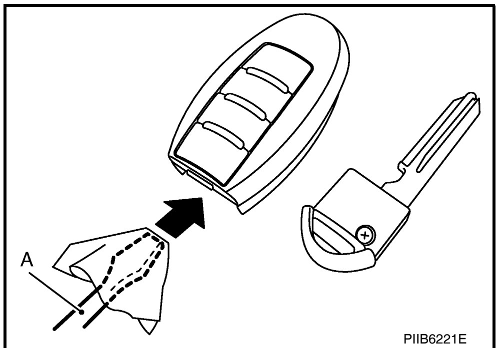
2. CHECK INTELLIGENT KEY COMPONENTS

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 Intelligent Key is water-resistant. However, if it does get wet, immediately wipe it dry.**
3. Remove the Intelligent Key battery.
   CAUTION:
   • **Keep dirt, grease, and other foreign materials off the electrode contact area.**
4. Visually inspect Intelligent Key internal components.



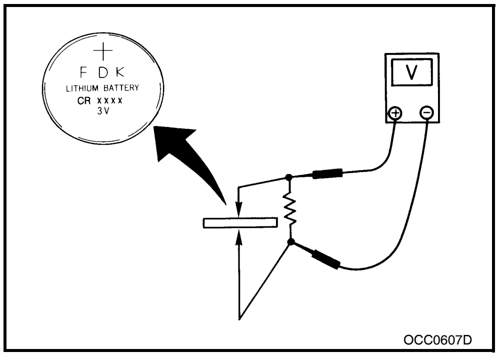
PIIB6221E

Is the inspection result normal?

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

3.CHECK INTELLIGENT KEY BATTERY

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



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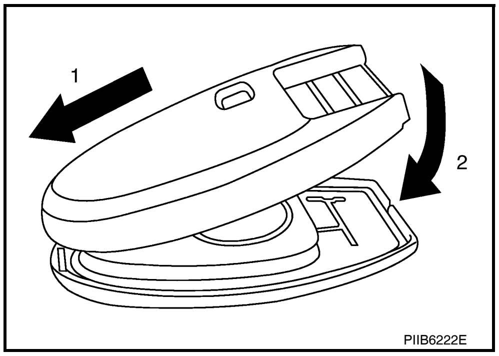
Standard : Approx. 2.5 - 3.0V

Is the measurement value within specification?

YES >> Intelligent Key battery is OK. Check remote keyless entry receiver. Refer to DLK-112, "Component Function Check".

NO >> GO TO 4

4. REPLACE INTELLIGENT KEY BATTERY



PIIB6222E

1. Replace the Intelligent Key battery.
2. 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.**
3. After replacing the battery, check that all Intelligent Key functions work properly.

Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Check remote keyless entry receiver. Refer to DLK-112, "Component Function Check".

KEY SLOT ILLUMINATION

Description

INFOID:0000000004204688

Blinks when Intelligent Key insertion is required.

Component Function Check

INFOID:0000000004204689

1.CHECK FUNCTION

With CONSULT-III
Check key slot illumination KEY SLOT ILLUMI in Active Test mode.

Is the inspection result normal?

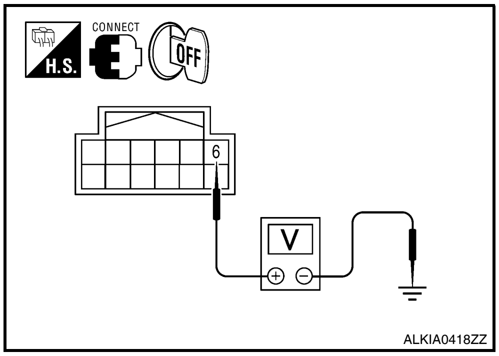
YES >> Key slot function is OK.
NO >> Refer to DLK-117, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204690

1.CHECK KEY SLOT ILLUMINATION OUTPUT SIGNAL

Check voltage between key slot connector and ground.



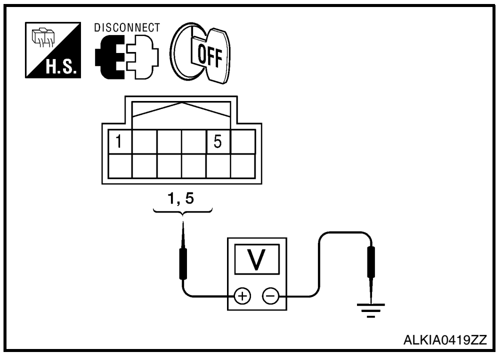
Terminals			Condition	Key slot illumination	Voltage (V) (Approx.)
(+)		(–)			
Key slot connector	Terminal				
M40	6	Ground	Intelligent Key inserted	OFF	Battery voltage
			Intelligent Key removed	ON	0

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.



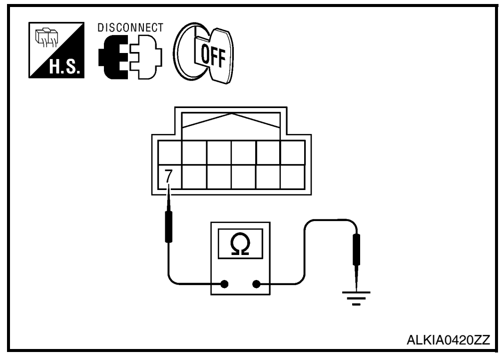
Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key slot connector	Terminal		
M40	1	Ground	Battery voltage
	5		

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

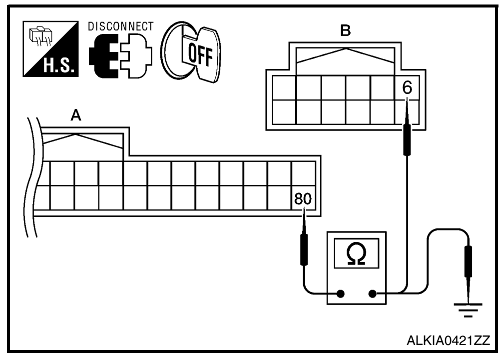
Is the inspection result normal?

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-80, "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:0000000004204691

Perform answer-back for each operation with horn.

Component Function Check

INFOID:0000000004204692

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-119, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204693

1.CHECK HORN FUNCTION

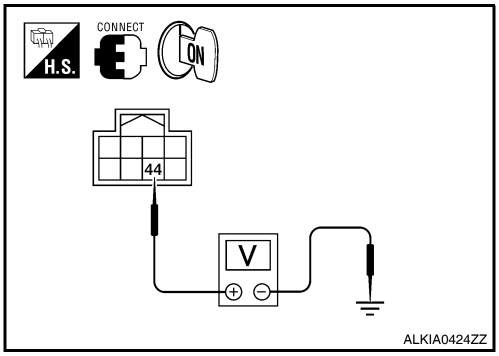
Check horn function with horn switch

Do the horns sound?

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

2.CHECK HORN RELAY POWER SUPPLY

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



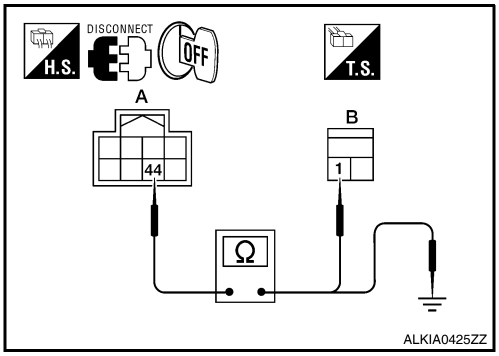
IPDM E/R		Ground	Test item		Voltage (V) (Approx.)
Connector	Terminal				
E17	44	Ground	HORN	ON	Battery voltage → 0 → Battery voltage
				Other than above	Battery voltage

Is the inspection result normal?

YES >> Repair or replace open harness between IPDM E/R and horn relay.
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 and horn relay harness connector.



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-48, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

COMBINATION METER DISPLAY FUNCTION

Description

INFOID:0000000004204694

Displays each operation method guide and warning for system malfunction.

Component Function Check

INFOID:0000000004204695

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-121, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204696

1.CHECK COMBINATION METER

Refer to MWI-95, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2
NO >> Check combination meter. Refer to MWI-38, "Diagnosis Description".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

WARNING CHIME FUNCTION

Description

INFOID:0000000004204697

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000004204698

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-122, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204699

1.CHECK METER BUZZER CIRCUIT

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

Is the inspection result normal?

YES >> GO TO 2
NO >> Replace combination meter. Refer to MWI-176, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

HAZARD FUNCTION

Description

INFOID:0000000004204700

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

Component Function Check

INFOID:0000000004204701

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-123, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204702

1.CHECK HAZARD SWITCH CIRCUIT

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

Is the inspection result normal?

YES >> GO TO 2
NO >> Repair or replace hazard warning switch circuit. Refer to EXL-4, "Work Flow".

2.CHECK INTERMITTENT INCIDENT

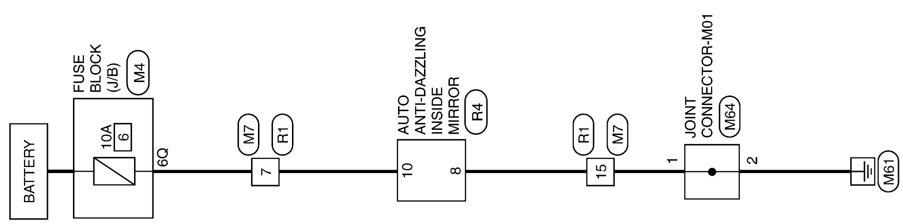
Refer to GI-42, "Intermittent Incident".

>> Inspection End.

HOMELINK UNIVERSAL TRANSCEIVER

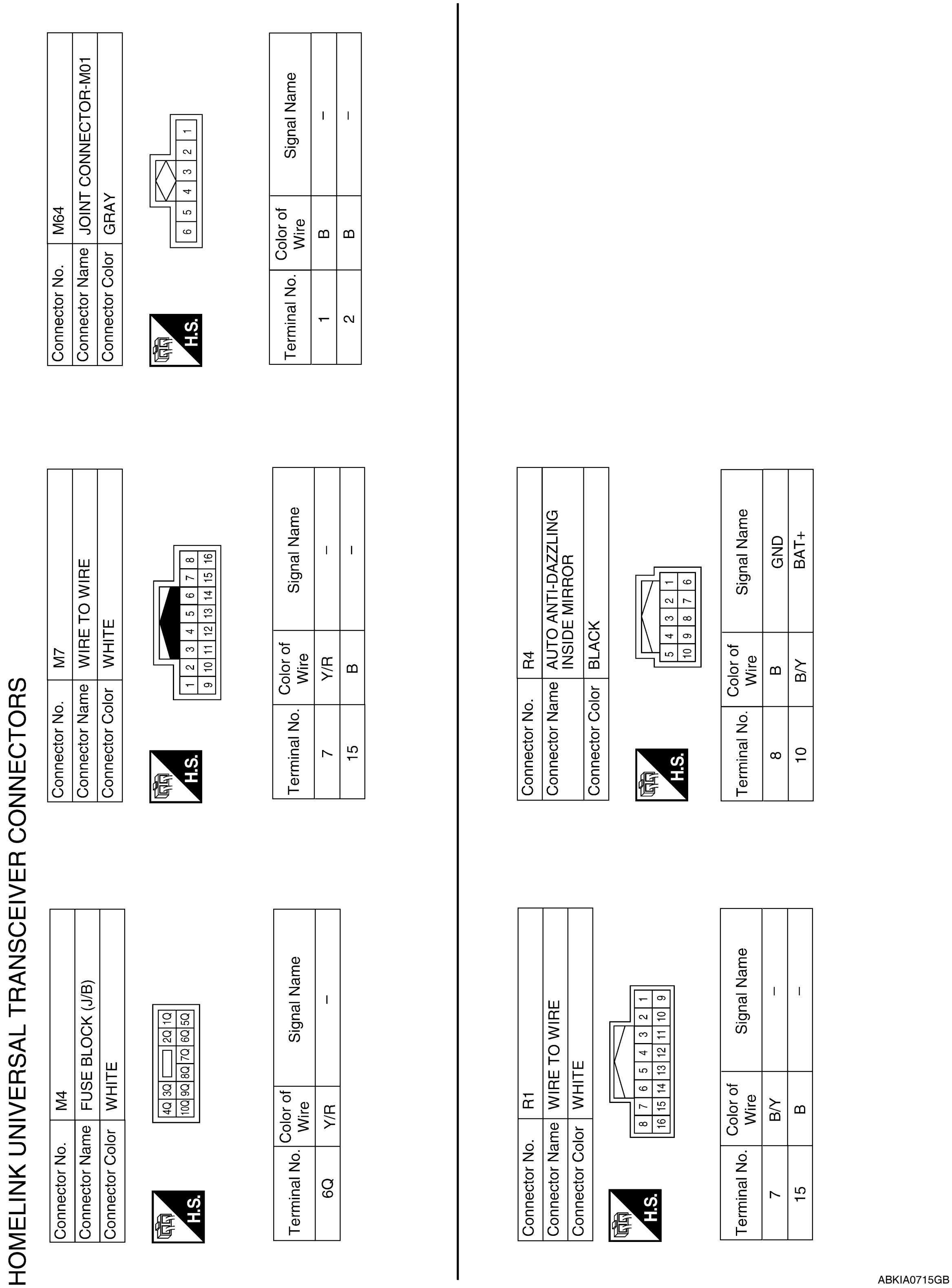
Wiring Diagram

INFOID:0000000004204703



HOMELINK UNIVERSAL TRANSCEIVER

ABKWA0219GB



Description

INFOID:0000000004204704

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:0000000004204705

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-126, "Diagnosis Procedure".

3.CHECK TRANSMITTER

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

Is the inspection result normal?

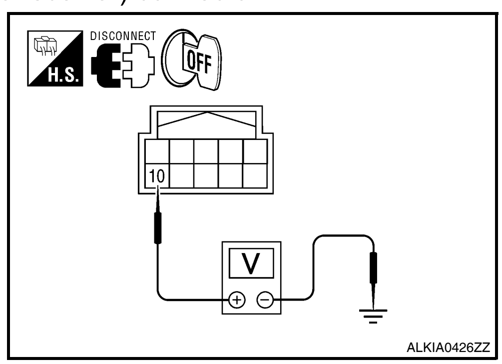
YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
NO >> Replace auto anti-dazzling inside mirror (homelink universal transceiver). Refer to MIR-18, "Removal and Installation".

Diagnosis Procedure

INFOID:0000000004204706

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.



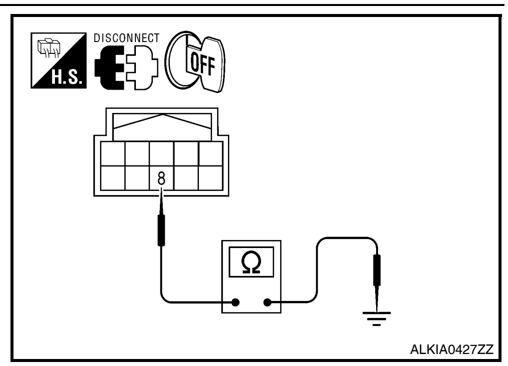
Auto anti-dazzling inside mirror (homelink universal transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)
R4	10	Ground	Ignition switch position: LOCK	Battery voltage

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:0000000004495969

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	OFF
	Front wiper switch HI	ON
FR WIPER LOW	Other than front wiper switch LO	OFF
	Front wiper switch LO	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER INT	Other than front wiper switch INT	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Front wiper is not in STOP position	OFF
	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TURN SIGNAL R	Other than turn signal switch RH	OFF
	Turn signal switch RH	ON
TURN SIGNAL L	Other than turn signal switch LH	OFF
	Turn signal switch LH	ON
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	OFF
	Lighting switch 1ST or 2ND	ON
HI BEAM SW	Other than lighting switch HI	OFF
	Lighting switch HI	ON
HEAD LAMP SW 1	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
AUTO LIGHT SW	Other than lighting switch AUTO	OFF
	Lighting switch AUTO	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
DOOR SW-DR	Driver door closed	OFF
	Driver door opened	ON
DOOR SW-AS	Passenger door closed	OFF
	Passenger door opened	ON
DOOR SW-RR	Rear door RH closed	OFF
	Rear door RH opened	ON
DOOR SW-RL	Rear door LH closed	OFF
	Rear door LH opened	ON

Monitor Item	Condition	Value/Status
DOOR SW-BK	**NOTE:** This item is displayed, but cannot be monitored.	OFF
CDL LOCK SW	Other than power door lock switch LOCK	OFF
	Power door lock switch LOCK	ON
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF
	Power door lock switch UNLOCK	ON
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF
	Driver door key cylinder LOCK position	ON
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF
	Driver door key cylinder UNLOCK position	ON
KEY CYL SW-TR	**NOTE:** This item is displayed, but cannot be monitored.	OFF
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF
	Trunk lid opener cancel switch ON	ON
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF
	While the trunk lid opener switch is turned ON	ON
TRNK/HAT MNTR	Trunk lid closed	OFF
	Trunk lid opened	ON
RKE-LOCK	When LOCK button of Intelligent Key is not pressed	OFF
	When LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF
	When UNLOCK button of Intelligent Key is pressed	ON
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
	When TRUNK OPEN button of Intelligent Key is pressed	ON
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF
	When PANIC button of Intelligent Key is pressed	ON
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF
	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V
	When outside of the vehicle is dark	Close to 0 V
REQ SW-DR	When driver door request switch is not pressed	OFF
	When driver door request switch is pressed	ON
REQ SW-AS	When passenger door request switch is not pressed	OFF
	When passenger door request switch is pressed	ON
REQ SW-BD/TR	When trunk request switch is not pressed	OFF
	When trunk request switch is pressed	ON
PUSH SW	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON

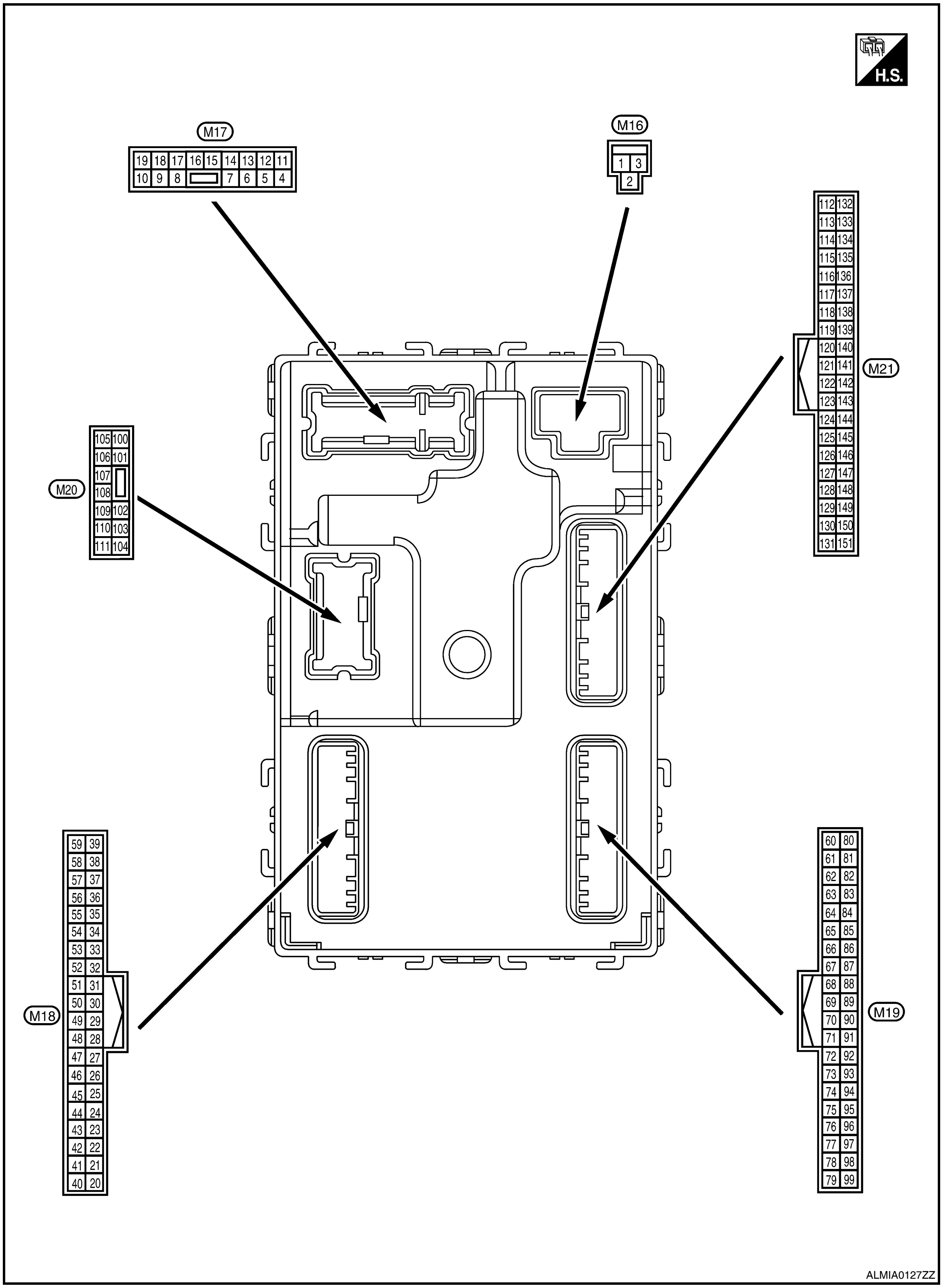
Monitor Item	Condition	Value/Status
IGN RLY2-F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
ACC RLY-F/B	Ignition switch OFF	OFF
	Ignition switch ACC or ON	ON
CLUTCH SW	When the clutch pedal is not depressed	OFF
	When the clutch pedal is depressed	ON
BRAKE SW 1	When the brake pedal is not depressed	ON
	When the brake pedal is depressed	OFF
DETE/CANCL SW	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN/N SW	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
S/L-LOCK	Electronic steering column lock LOCK status	OFF
	Electronic steering column lock UNLOCK status	ON
S/L-UNLOCK	Electronic steering column lock UNLOCK status	OFF
	Electronic steering column lock LOCK status	ON
S/L RELAY-F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
UNLK SEN-DR	Driver door UNLOCK status	OFF
	Driver door LOCK status	ON
PUSH SW-IPDM	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON
IGN RLY1 F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
DETE SW -IPDM	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN -IPDM	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
SFT P-MET	When selector lever is in any position other than P	OFF
	When selector lever is in P position	ON
SFT N-MET	When selector lever is in any position other than N	OFF
	When selector lever is in N position	ON
ENGINE STATE	Engine stopped	STOP
	While the engine stalls	STALL
	At engine cranking	CRANK
	Engine running	RUN
S/L LOCK-IPDM	Electronic steering column lock LOCK status	OFF
	Electronic steering column lock UNLOCK status	ON
S/L UNLCK-IPDM	Electronic steering column lock UNLOCK status	OFF
	Electronic steering column lock LOCK status	ON
S/L RELAY-REQ	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading

Monitor Item	Condition	Value/Status
DOOR STAT-DR	Driver door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
DOOR STAT-AS	Passenger door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
ID OK FLAG	Ignition switch ACC or ON	RESET
	Ignition switch OFF	SET
PRMT ENG STAT	When the engine start is prohibited	RESET
	When the engine start is permitted	SET
PRMT RKE STAT	**NOTE:** This item is displayed, but cannot be monitored.	RESET
KEY SW -SLOT	When Intelligent Key is not inserted into key slot	OFF
	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	**NOTE:** This item is displayed, but cannot be monitored.	Operation frequency of Intelligent Key
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE
TP 4	The ID of fourth key is not registered to BCM	YET
	The ID of fourth key is registered to BCM	DONE
TP 3	The ID of third key is not registered to BCM	YET
	The ID of third key is registered to BCM	DONE
TP 2	The ID of second key is not registered to BCM	YET
	The ID of second key is registered to BCM	DONE
TP 1	The ID of first key is not registered to BCM	YET
	The ID of first key is registered to BCM	DONE
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire

Monitor Item	Condition	Value/Status
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	When ID of front LH tire transmitter is registered	DONE
	When ID of front LH tire transmitter is not registered	YET
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE
	When ID of front RH tire transmitter is not registered	YET
ID REGST RR1	When ID of rear RH tire transmitter is registered	DONE
	When ID of rear RH tire transmitter is not registered	YET
ID REGST RL1	When ID of rear LH tire transmitter is registered	DONE
	When ID of rear LH tire transmitter is not registered	YET
WARNING LAMP	Tire pressure indicator OFF	OFF
	Tire pressure indicator ON	ON
BUZZER	Tire pressure warning alarm is not sounding	OFF
	Tire pressure warning alarm is sounding	ON

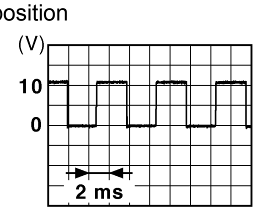
Terminal Layout

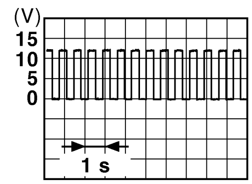
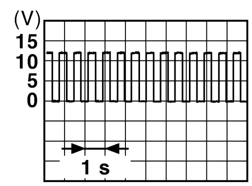
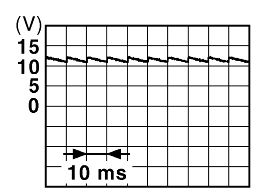
INFOID:0000000004495970

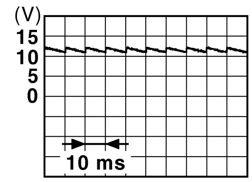
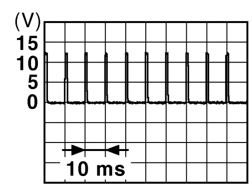
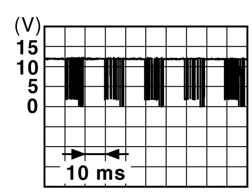


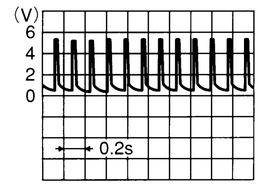
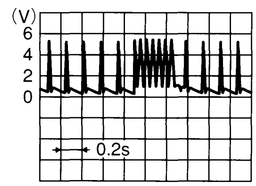
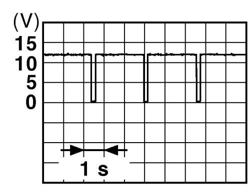
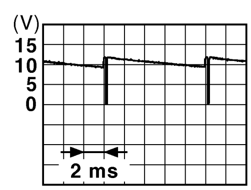
Physical Values

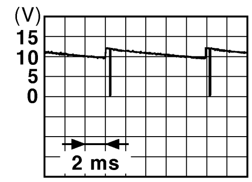
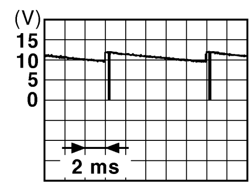
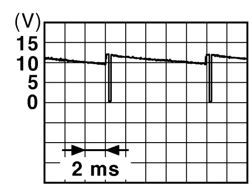
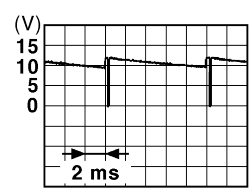
INFOID:0000000004495971

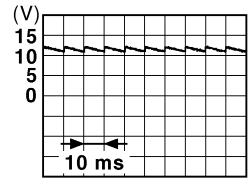
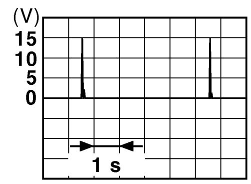
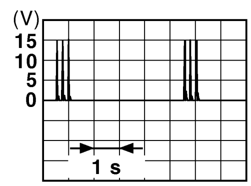
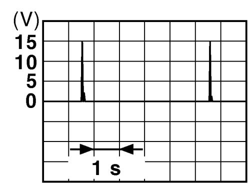
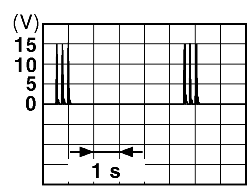
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OFF		Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4 (P/W)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
5 (G/Y)	Ground	Front door RH UNLOCK	Output	Front door RH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
7 (R/W)	Ground	Step lamp	Output	Step lamp	ON	0V
					OFF	Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (actuator is activated)	Battery voltage
					Other than LOCK (actuator is not activated)	0V
9 (G)	Ground	Front door LH UNLOCK	Output	Front door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
10[1] (G/Y)	Ground	Rear door RH and rear door LH UNLOCK	Output	Rear door RH and rear door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0V
14 (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	0V
					ON	**NOTE:** When the illumination brightening/dimming level is in the neutral position  JSNIA0010GB
15 (Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC or ON	0V

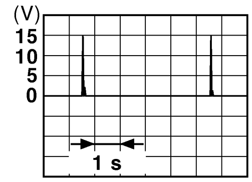
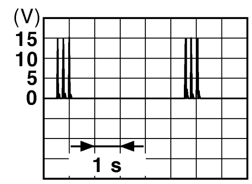
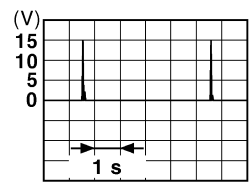
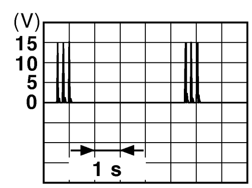
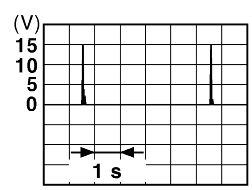
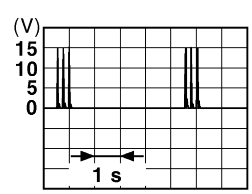
Terminal No. (Wire color) (+)	(-)	Description: Signal name	Input/ Output	Condition		Value (Approx.)
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0V
21 (P/B)	Ground	Optical sensor signal	Input	Ignition switch ON	When outside of the vehicle is bright	Close to 5V
					When outside of the vehicle is dark	Close to 0V
22 (R/Y)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (clutch pedal is not depressed)	0V
					ON (clutch pedal is depressed)	Battery voltage
24 (R/W)	Ground	Stop lamp switch 1	Input	—		Battery voltage
26 (O/L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	0V
					ON (brake pedal is depressed)	Battery voltage
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	 JPMIA0011GB 11.8V
					UNLOCK status	0V
29 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0V
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	OFF	0
					ACC or ON	Battery voltage

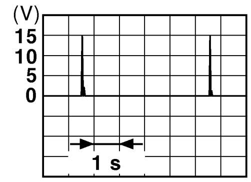
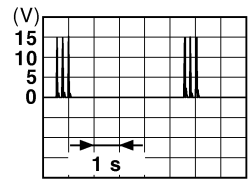
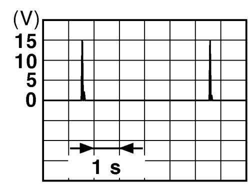
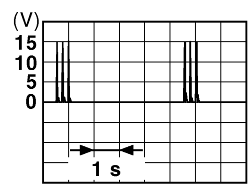
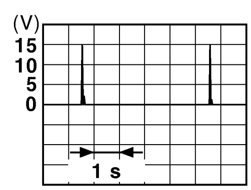
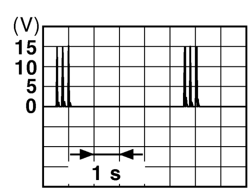
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
31 (G)	Ground	Rear window defogger feedback signal	Input	Rear window defogger switch	OFF	0V
					ON	Battery voltage
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	 JPMIA0011GB 11.8 V
					ON (when front door RH opens)	0V
33 (SB)	Ground	Compressor ON signal	Input	A/C switch	OFF	5V
					ON	0V
34[2] (L/R)	Ground	Front door lock assembly LH (key cylinder switch) (unlock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
					ON (unlock)	0V
36[2] (GR)	Ground	Lock switch signal	Input	Door lock/unlock switch	Lock	Battery voltage
					Unlock	0V
37 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1V
					ON	0V
38 (GR/ W)	Ground	Rear window defogger ON signal	Input	Rear window defogger switch	OFF	5V
					ON	0V
39[2] (GR/ R)	Ground	Unlock switch signal	Input	Door lock/unlock switch	Unlock	Battery voltage
					Lock	0V
40[3] (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2V
				Ignition switch OFF or ACC		0V
41 (W)	Ground	Engine switch (push switch) illumination	Output	Engine switch (push switch) illumination	ON	5.5V
					OFF	0V
42 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0V
					OFF	Battery voltage

Terminal No. (Wire color) (+)	(-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	OFF	0V
					ACC or ON	5.0V
47 (G/O)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
48 (R/G)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position	12.0V
					Except P and N positions	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	ON	0V
					Blinking	 JPMIA0014GB 11.3V
					OFF	Battery voltage
50 (LG/B)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Lighting switch 1ST	 JPMIA0031GB 10.7V
					Lighting switch high-beam	
					Lighting switch 2ND	
					Turn signal switch RH	

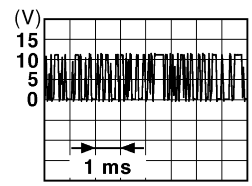
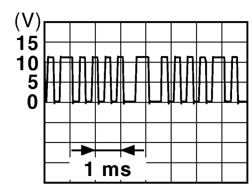
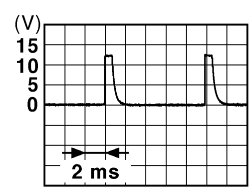
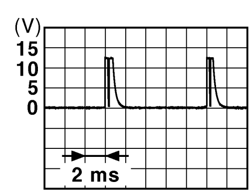
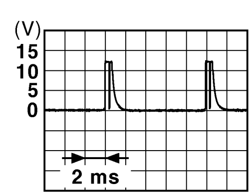
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
52 (G/B)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 5 • Wiper intermittent dial 6	
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front wiper switch INT	 JPMIA0034GB 10.7V
					Front wiper switch LO	
					Lighting switch AUTO	
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front fog lamp switch ON	 JPMIA0035GB 10.7V
					Lighting switch 2ND	
					Lighting switch flash-to-pass	
					Turn signal switch LH	
55 (BR/ W)	Ground	Front blower monitor	Input	Front blower motor switch	ON	Battery voltage
					OFF	0V
56[2] (L/B)	Ground	Front door lock assembly LH (key cylinder switch) (lock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
					ON (lock)	0V
57 (W)	Ground	Tire pressure warning check switch	Input	—		5V

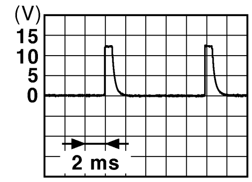
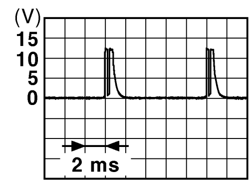
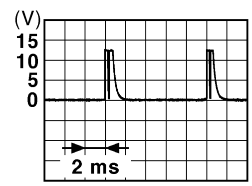
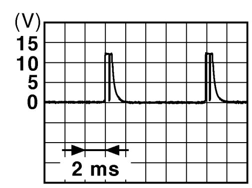
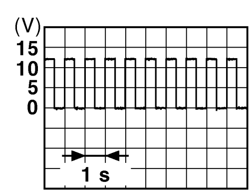
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	 JPMIA0011GB 11.8V
					ON (front door LH OPEN)	0V
59 (G/R)	Ground	Rear window defog- ger relay	Output	Rear window de- fogger	Active	Battery voltage
					Not activated	0V
60 (B/R)	Ground	Front console anten- na 2 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB
61 (W/R)	Ground	Center console an- tenna 2 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB

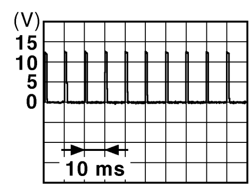
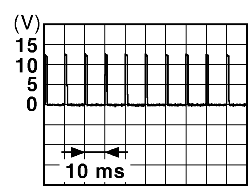
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/Output	Condition		Value (Approx.)
62[4] (B/Y)	Ground	Front outside handle RH antenna (-)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
63[4] (LG)	Ground	Front outside handle RH antenna (+)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
64[4] (V)	Ground	Front outside handle LH antenna (-)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

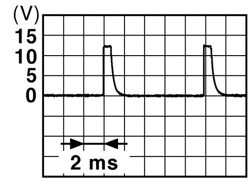
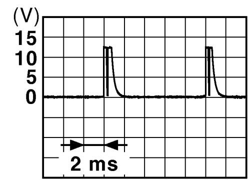
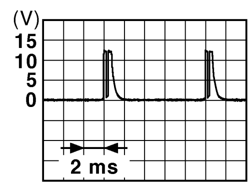
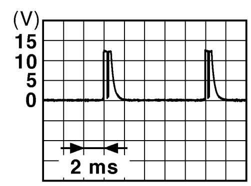
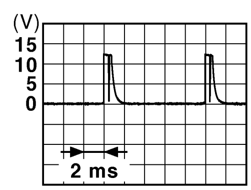
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
65[4] (P)	Ground	Front outside handle LH antenna (+)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
66 (R)	Ground	Instrument panel antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
67 (G)	Ground	Instrument panel antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

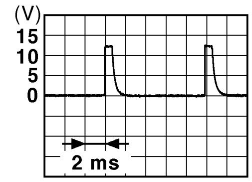
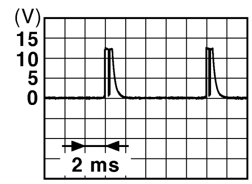
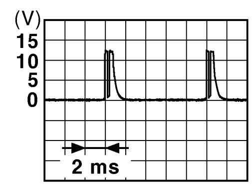
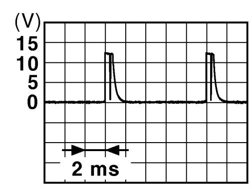
A B C D E F G H I J DLK L M N O P

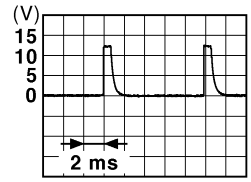
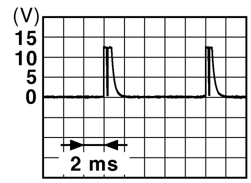
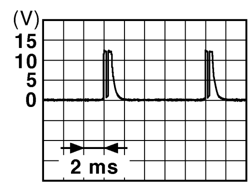
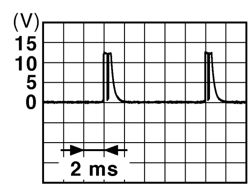
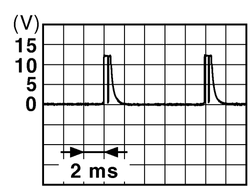
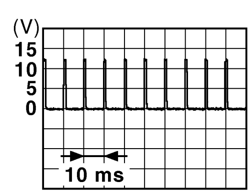
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
70 (R/B)	Ground	Ignition relay-2 control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
71 (L/O)	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB
75 (R/Y)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3V

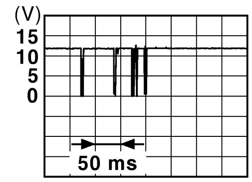
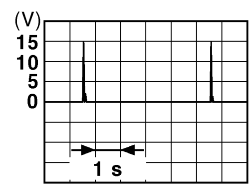
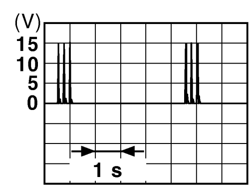
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
76 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch high-beam (Wiper intermittent dial 4)	 JPMIA0036GB 1.3V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3V
77 (BR)	Ground	Engine switch (push switch)	Input	Engine switch (push switch)	Pressed	0V
					Not pressed	Battery voltage
78 (P)	Ground	CAN-L	Input/ Output	—		—
79 (L)	Ground	CAN-H	Input/ Output	—		—
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0V
					Blinking	 JPMIA0015GB 6.5V
					ON	Battery voltage

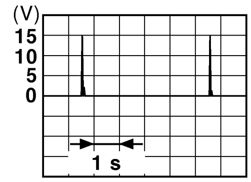
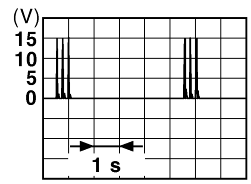
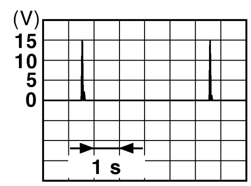
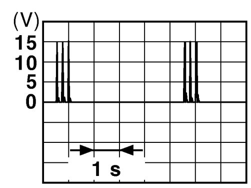
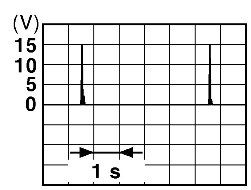
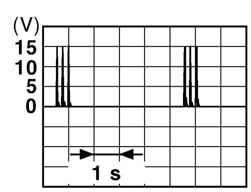
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
81 (LG)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
83 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0V
					ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT device	Output	—		Battery voltage
85 (L/O)	Ground	Electronic steering column lock condition No. 1	Input	Electronic steering column lock	Lock status	0V
					Unlock status	Battery voltage
86 (G/R)	Ground	Electronic steering column lock condition No. 2	Input	Electronic steering column lock	Lock status	Battery voltage
					Unlock status	0V
87 (G/B)	Ground	Selector lever P position switch	Input	Selector lever	P position	0V
					Any position other than P	Battery voltage
88[4] (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
89[4] (B/W)	Ground	Front door LH request switch	Input	Front door LH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
90 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage
94 (G/Y)	Ground	Steering wheel lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V

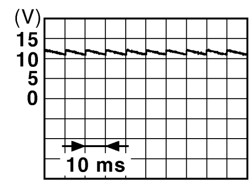
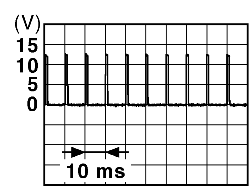
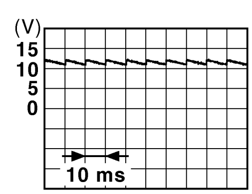
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
95 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Turn signal switch LH	 JPMIA0037GB 1.3V
					Turn signal switch RH	 JPMIA0036GB 1.3V
					Front wiper switch LO	 JPMIA0038GB 1.3V
					Front washer switch ON	 JPMIA0039GB 1.3V

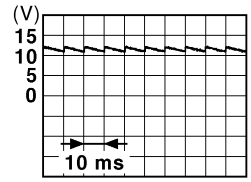
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
96 (P/B)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch AUTO (Wiper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

Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/Output	Condition		Value (Approx.)
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Lighting switch flash-to-pass	 JPMIA0037GB 1.3V
					Lighting switch 2ND	 JPMIA0036GB 1.3V
					Front wiper switch INT	 JPMIA0038GB 1.3V
					Front wiper switch HI	 JPMIA0040GB 1.3V
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Pressed	0 V
					Not pressed	 JPMIA0012GB 1.1V

Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/Output	Condition		Value (Approx.)
99 (L/Y)	Ground	Electronic steering column lock unit communication	Input/Output	Electronic steering column lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UNLOCK	Battery voltage
					15 seconds or later after UNLOCK	0V
103 (V)	Ground	Trunk lid opening	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage
					Close (trunk lid opener actuator is not activated)	0V
110 (V/W)	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V
					OFF	Battery voltage
114 (B)	Ground	Rear parcel shelf antenna 1 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
115 (W)	Ground	Rear parcel shelf antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
118[4] (L/O)	Ground	Rear bumper antenna (-)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
119[4] (BR/W)	Ground	Rear bumper antenna (+)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
127 (BR/ W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	 JPMIA0011GB 11.8V
					ON (trunk is open)	0V
132 (R)	Ground	Starter motor relay control	Output	Ignition switch OFF (M/T vehicle)	When the clutch pedal is depressed	Battery voltage
					When the clutch pedal is not depressed	0V
				Ignition switch ON (other than M/T vehicle)	When selector lever is in P or N position and the brake is depressed	Battery voltage
					When selector lever is in P or N position and the brake is not depressed	0V
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
144[4] (GR)	Ground	Intelligent Key warning buzzer	Output	Request switch buzzer	Sounding	0V
					Not sounding	Battery voltage
144[5] (GR)	Ground	Outside warning buzzer	Output	Outside warning buzzer	Sounding	0V
					Not sounding	Battery voltage
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0V
					Not pressed	Battery voltage
148[1] (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	 JPMIA0011GB 11.8V
					ON (when rear door RH opens)	0V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
149[1] (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	 JPMIA0011GB 11.8V
					ON (when rear door LH opens)	0V

1: Sedan only

2: With LH front window anti-pinch

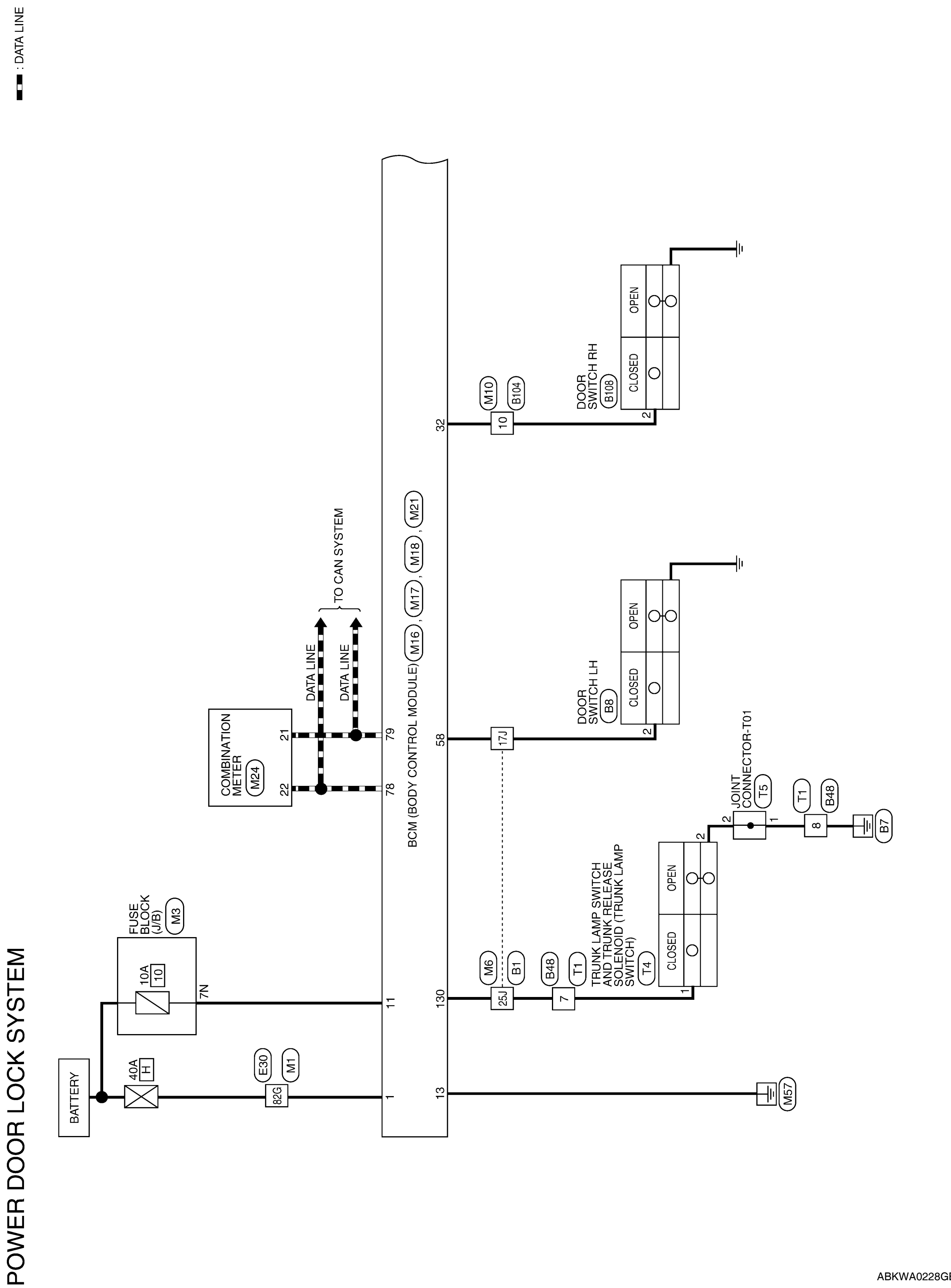
3: With LH and RH front window anti-pinch

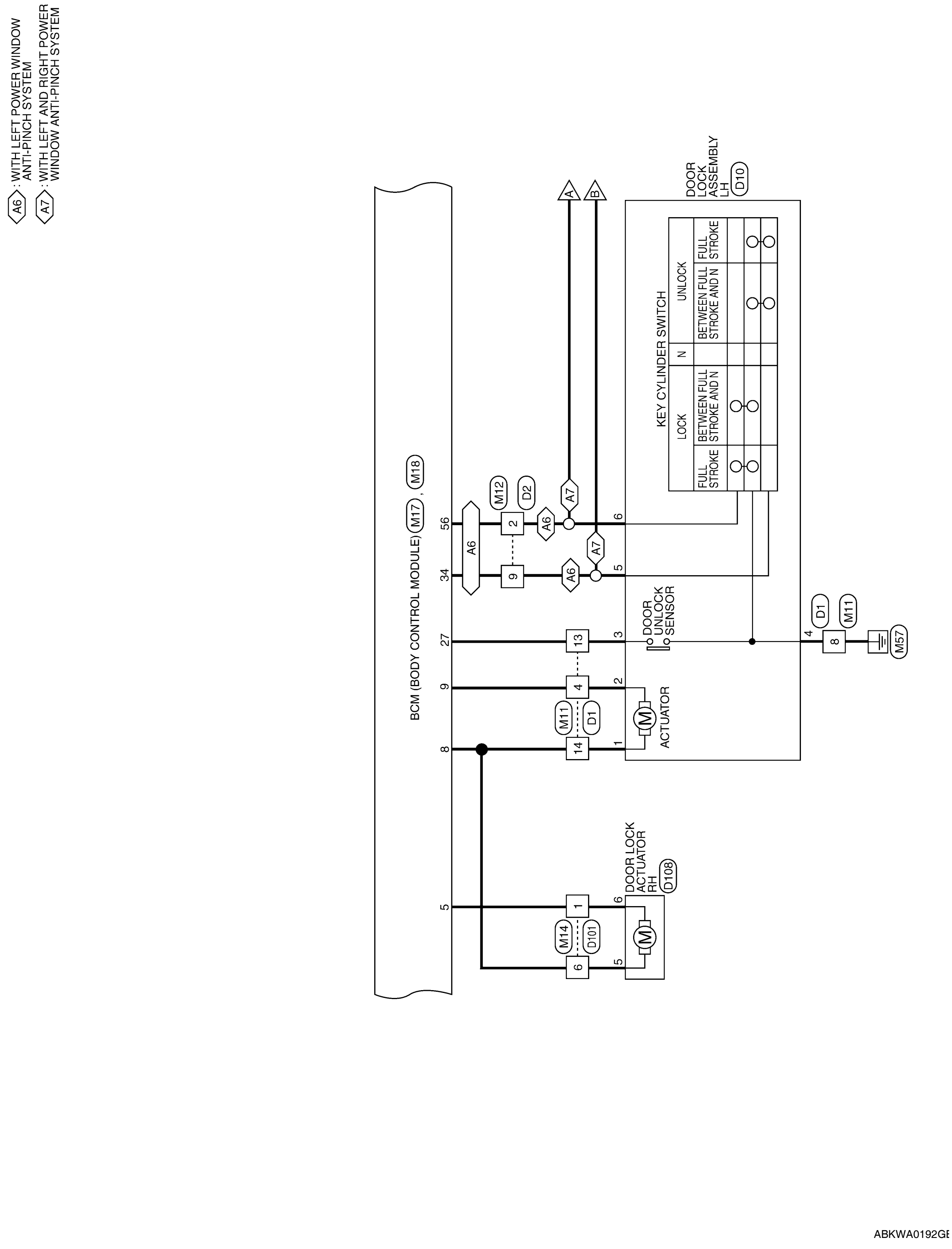
4: With Intelligent Key

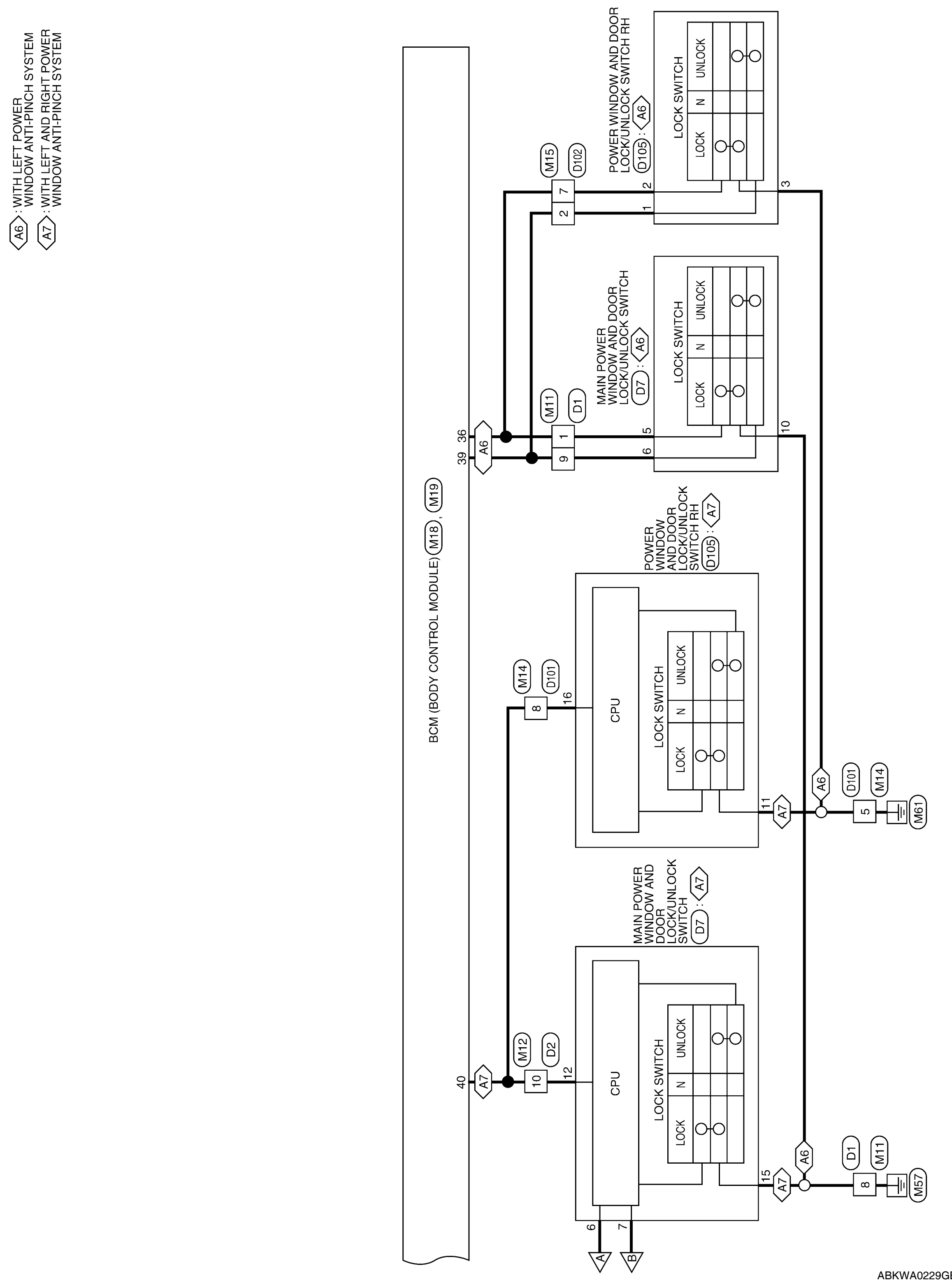
5: Without Intelligent Key

Wiring Diagram — POWER DOOR LOCK SYSTEM —

INFOID:0000000004204708

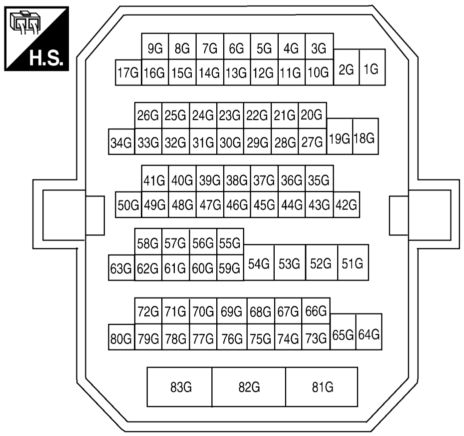



A6 : WITH LEFT POWER WINDOW ANTI-PINCH SYSTEM
A7 : WITH LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM
BCM (BODY CONTROL MODULE) M17 , M18
DOOR LOCK ASSEMBLY LH D10
KEY CYLINDER SWITCH
LOCK
N
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
DOOR UNLOCK SENSOR
ACTUATOR
DOOR LOCK ACTUATOR RH D108
M12
D2
M11
D1
M14
D101
M57
ABKWA0192GB


A6 : WITH LEFT POWER WINDOW ANTI-PINCH SYSTEM
A7 : WITH LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM
BCM (BODY CONTROL MODULE) M18 , M19
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH D105 : A6
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7 : A6
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH D105 : A7
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7 : A7
LOCK SWITCH
LOCK
N
UNLOCK
CPU
M15
D102
M11
D1
M14
D101
M12
D2
M61
M57
ABKWA0229GB

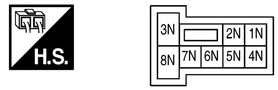
POWER DOOR LOCK SYSTEM CONNECTORS

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



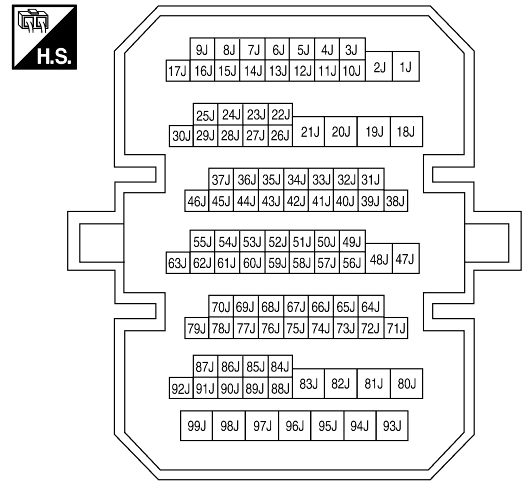
Terminal No.	Color of Wire	Signal Name
82G	W/B	–

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



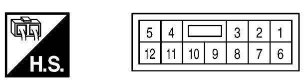
Terminal No.	Color of Wire	Signal Name
7N	Y/R	–

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



Terminal No.	Color of Wire	Signal Name
17J	SB	–
25J	V/W	–

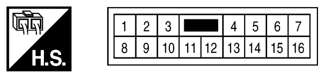
Connector No.	M10
Connector Name	WIRE TO WIRE
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
10	R/B	–

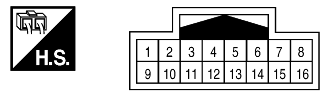
ABKIA0768GB

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



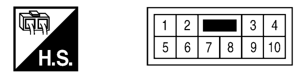
Terminal No.	Color of Wire	Signal Name
1	GR	—
4	G	—
8	B	—
9	GR/R	—
13	G/W	—
14	V	—

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



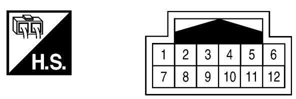
Terminal No.	Color of Wire	Signal Name
2	L/B	—
9	L/R	—
10	Y/G	—

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



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

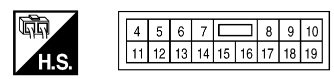


Terminal No.	Color of Wire	Signal Name
2	GR	—
7	GR/R	—

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

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

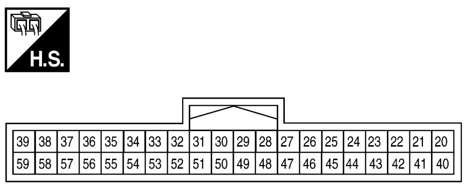
Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	G/Y	CDL_AS
8	V	CDL_COMMON
9	G	CDL_DR/FL
11	Y/R	BAT_BCM_FUSE
13	B	GND1

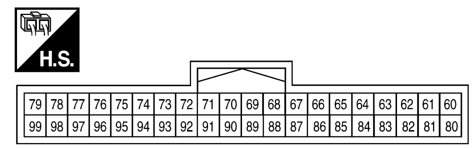
ALKIA0902GB

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



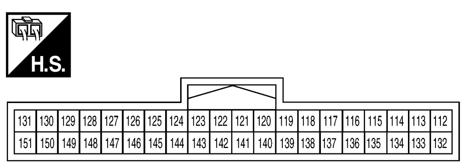
Terminal No.	Color of Wire	Signal Name
27	G/W	DOOR_LOCK_STATUS
32	R/B	AS_DOOR_SW
34	L/R	DOOR_KEY/C_UNLOCK_SW
36	GR	CENTRAL_LOCK_SW
39	GR/R	CENTRAL_UNLOCK_SW
40	Y/G	PW_K-LINE
56	L/B	DOOR_KEY/C_LOCK_SW
58	SB	DR_DOOR_SW

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



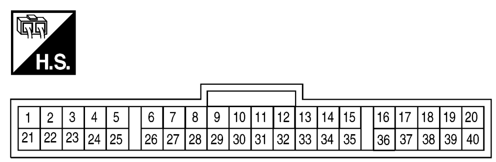
Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H

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



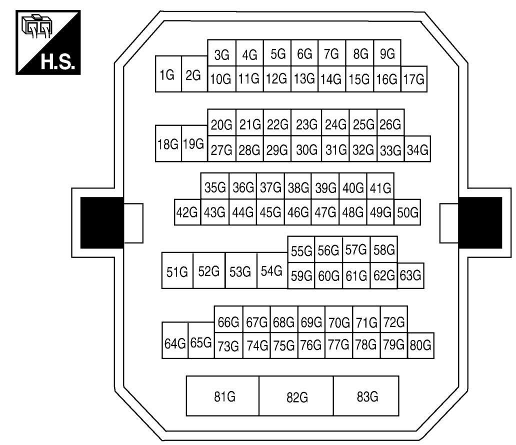
Terminal No.	Color of Wire	Signal Name
130	Y/G	TRUNK_SW

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
21	L	CAN-H
22	P	CAN-L

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

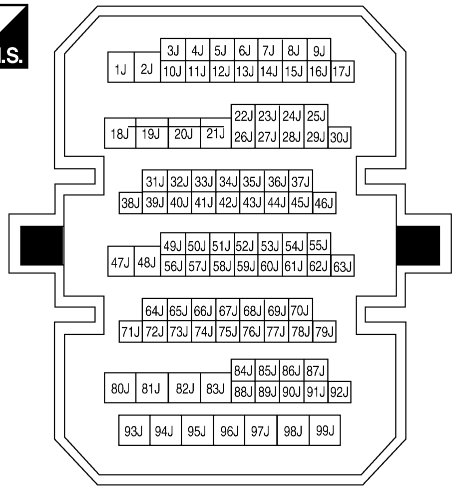


Terminal No.	Color of Wire	Signal Name
82G	LG	–

ABKIA0770GB

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

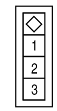
H.S.



Terminal No.	Color of Wire	Signal Name
17J	SB	–
25J	Y/G	–

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

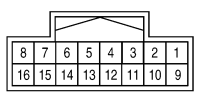
H.S.



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

Connector No.	B48
Connector Name	WIRE TO WIRE
Connector Color	WHITE

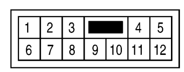
H.S.



Terminal No.	Color of Wire	Signal Name
7	Y/G	–
8	SB	–

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

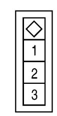
H.S.



Terminal No.	Color of Wire	Signal Name
10	R/G	–

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

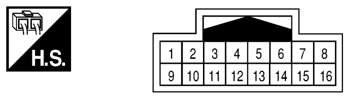
H.S.



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

ABKIA0769GB

Connector No.	T1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

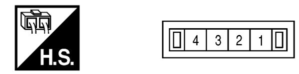


Terminal No.	Color of Wire	Signal Name
7	Y/G	—
8	B	—

Connector No.	T4
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

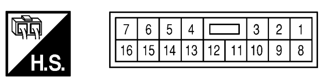
Terminal No.	Color of Wire	Signal Name
1	Y/G	—
2	B	—

Connector No.	T5
Connector Name	JOINT CONNECTOR-T01
Connector Color	WHITE



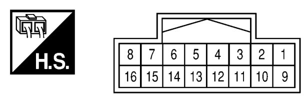
Terminal No.	Color of Wire	Signal Name
1	B	—
2	B	—

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



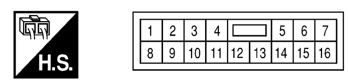
Terminal No.	Color of Wire	Signal Name
1	GR	—
4	G	—
8	B	—
9	GR/R	—
13	G/W	—
14	V	—

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	—

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

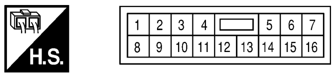


Terminal No.	Color of Wire	Signal Name
5	GR	LOCK
6	GR/R	UNLOCK
10	B	GND

ALKIA0905GB

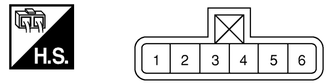
A B C D E F G H I J DLK L M N O P

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



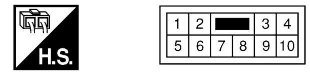
Terminal No.	Color of Wire	Signal Name
6	L/B	LOCK
7	L/R	UNLOCK
12	Y/G	COM
15	B	GND

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



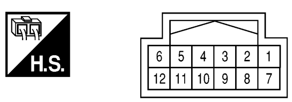
Terminal No.	Color of Wire	Signal Name
1	V	
2	G	
3	G/W	
4	B	GND
5	L/R	DOOR_KEY/C_UNLOCK_SW
6	L/B	DOOR_KEY/C_LOCK_SW

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



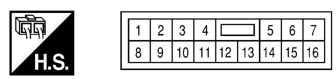
Terminal No.	Color of Wire	Signal Name
1	G/Y	—
5	B	—
6	V	—
8	Y/G	—

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



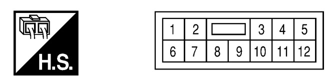
Terminal No.	Color of Wire	Signal Name
2	GR	—
7	GR/R	—

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



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

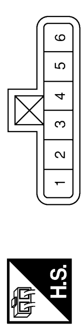
Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH (WITH LEFT POWER WINDOW ANTI-PINCH SYSTEM)
Connector Color	WHITE



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

ALKIA0906GB

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

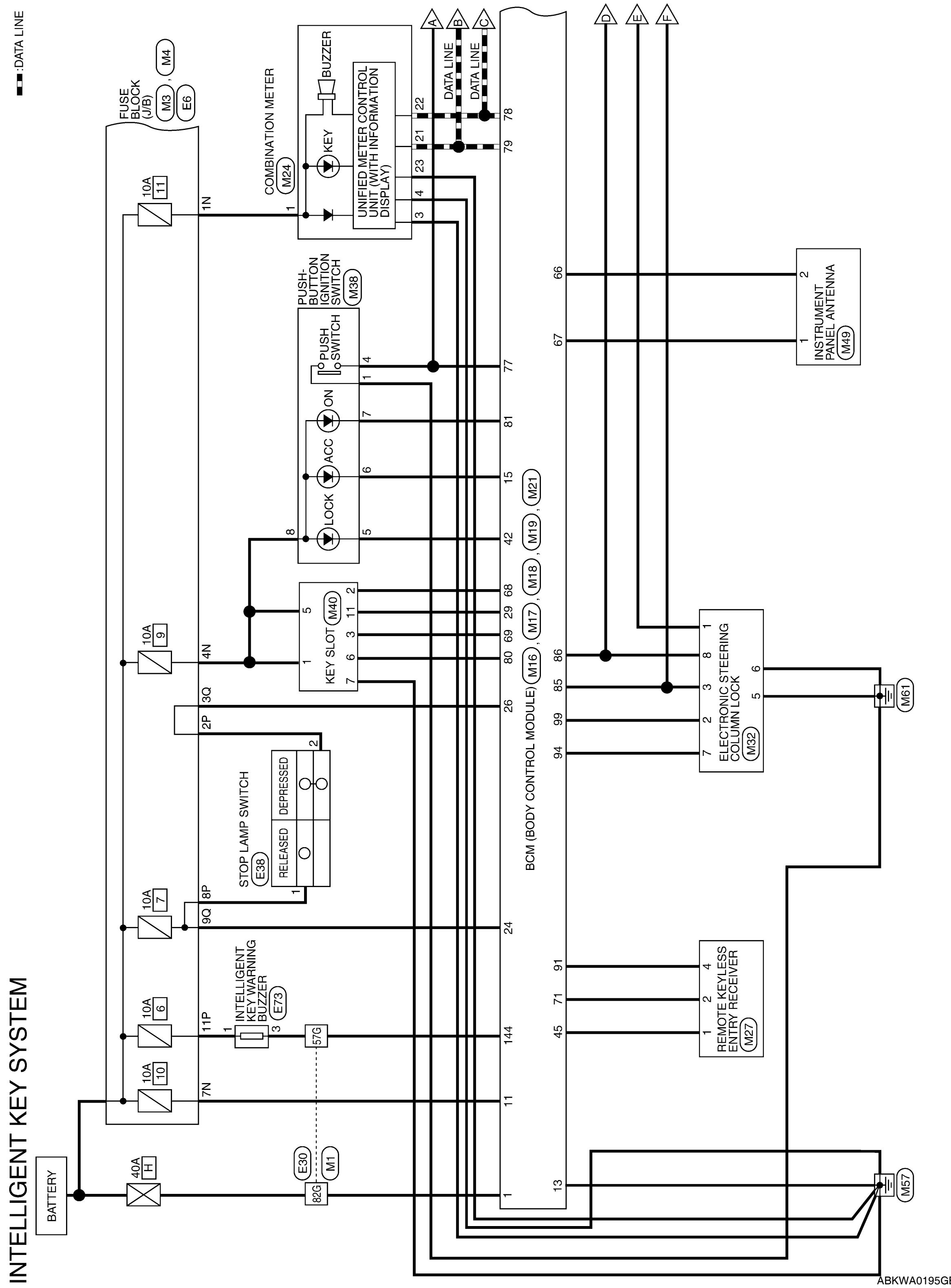


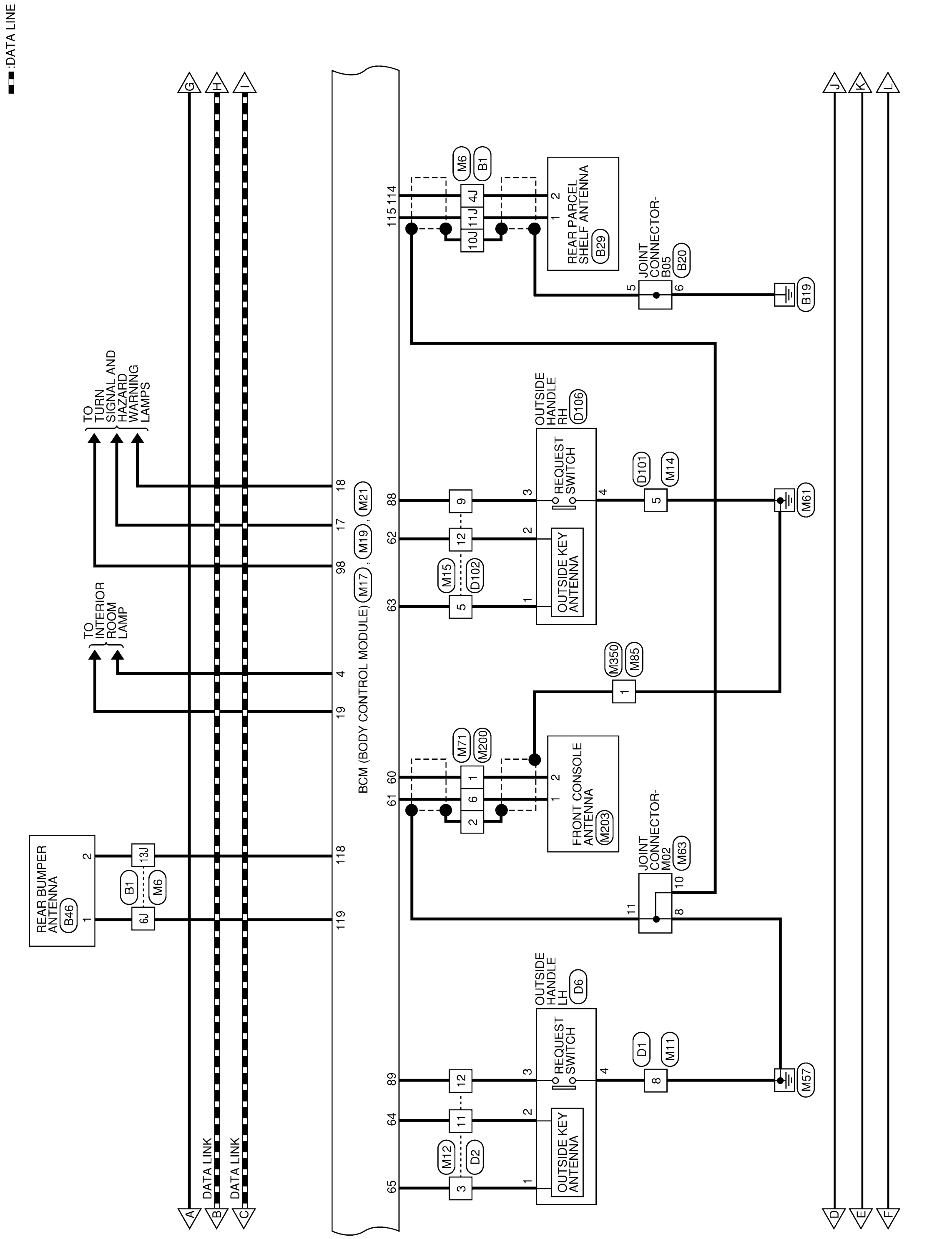
Terminal No.	Color of Wire	Signal Name
5	V	—
6	G/Y	—

ALKIA0907GB

Wiring Diagram — INTELLIGENT KEY SYSTEM —

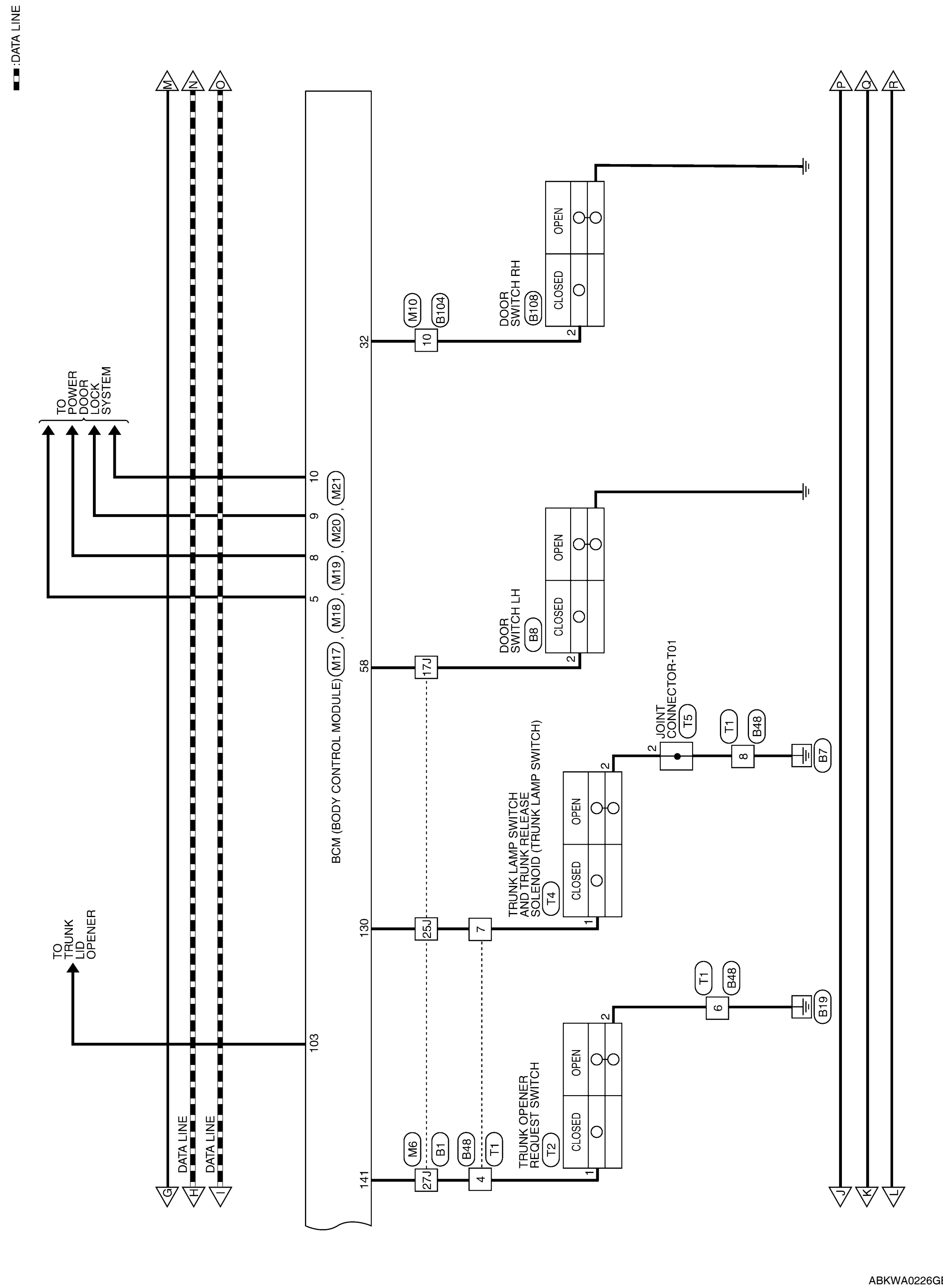
INFOID:0000000004204709



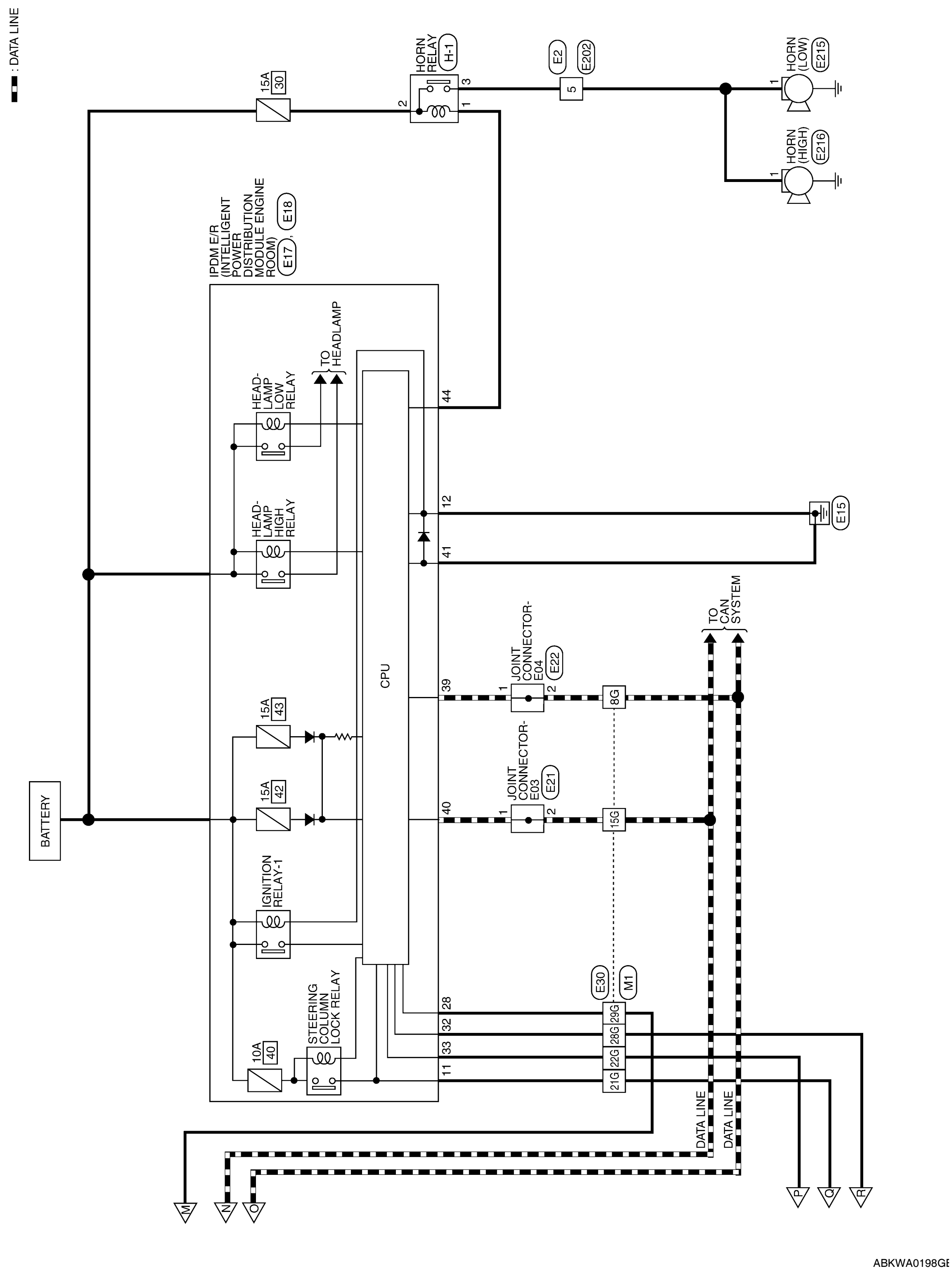


ALKWA0128GE

A B C D E F G H I J DLK L M N O P



: DATA LINE
M
N
O
P
Q
R
G
H
I
J
K
L
DATA LINE
DATA LINE
TO POWER DOOR LOCK SYSTEM
TO TRUNK LID OPENER
BCM (BODY CONTROL MODULE) M17 , M18 , M19 , M20 , M21
5
8
9
10
103
32
58
130
141
M10
B104
M6
B1
B48
T1
10
17J
25J
27J
7
4
DOOR SWITCH RH B108
DOOR SWITCH LH B8
CLOSED
OPEN
2
TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID (TRUNK LAMP SWITCH) T4
1
JOINT CONNECTOR-T01 T5
T1
B48
8
B7
TRUNK OPENER REQUEST SWITCH T2
6
B19
ABKWA0226GB

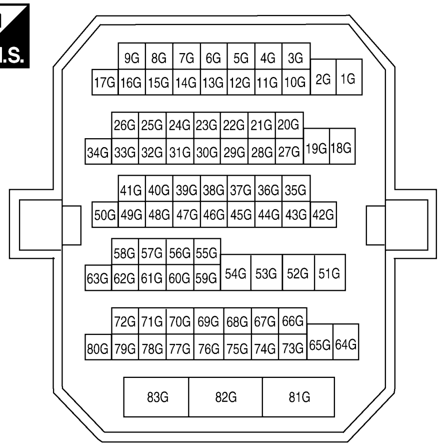


: DATA LINE
HORN RELAY H-1
E2
E202
HORN (LOW) E215
HORN (HIGH) E216
15A 30
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E17, E18
TO HEADLAMP
HEAD-LAMP LOW RELAY
HEAD-LAMP HIGH RELAY
E15
TO CAN SYSTEM
JOINT CONNECTOR-E04 E22
JOINT CONNECTOR-E03 E21
CPU
15A 43
15A 42
BATTERY
IGNITION RELAY-1
STEERING COLUMN LOCK RELAY
10A 40
E30
M1
DATA LINE
DATA LINE
ABKWA0198GB

INTELLIGENT KEY SYSTEM CONNECTORS

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

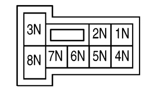
H.S.



Terminal No.	Color of Wire	Signal Name
8G	P	–
15G	L	–
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

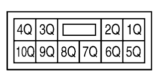
H.S.



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.

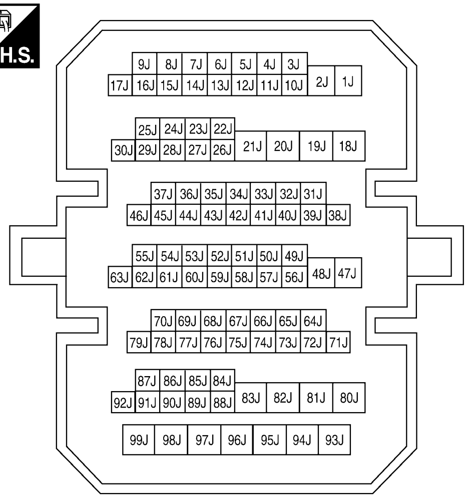


Terminal No.	Color of Wire	Signal Name
3Q	O/L	–
9Q	R/W	–

ABKIA0754GB

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

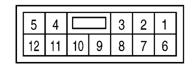
H.S.



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

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

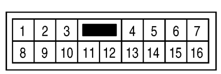
H.S.



Terminal No.	Color of Wire	Signal Name
10	R/B	–

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

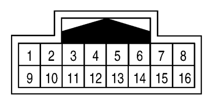
H.S.



Terminal No.	Color of Wire	Signal Name
8	B	–

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

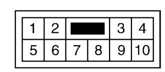
H.S.



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

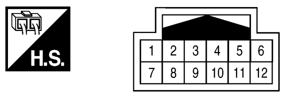
H.S.



Terminal No.	Color of Wire	Signal Name
5	B	–

ABKIA0755GB

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

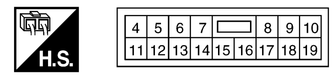


Terminal No.	Color of Wire	Signal Name
5	LG	–
9	P/L	–
12	B/Y	–

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

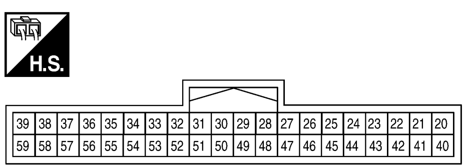
Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L

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



Terminal No.	Color of Wire	Signal Name
4	P/W	ROOM_LAMP_BAT_AVER
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	ACD_LED
17	G/B	FR_FLASHER
18	G/Y	FL_FLASHER
19	Y	ROOM_LAMP_OUTPUT

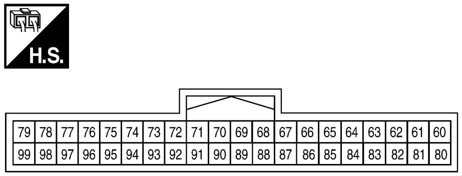
Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



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
42	R	S/L_LOCK_LED
45	P	GND_RF2_A/L
58	SB	DR_DOOR_SW

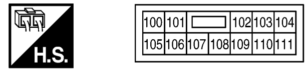
ABKIA0756GB

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



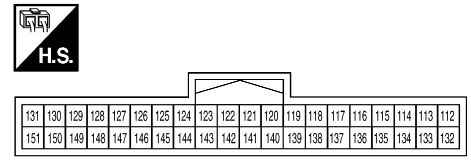
Terminal No.	Color of Wire	Signal Name
60	B/R	ROOM_ANT_2_B
61	W/R	ROOM_ANT_2_A
62	B/Y	AS_DOOR_ANT_B
63	LG	AS_DOOR_ANT_A
64	V	DR_DOOR_ANT_B
65	P	DR_DOOR_ANT_A
66	R	ROOM_ANT_1_B
67	G	ROOM_ANT_1_A
68	G/O	FOB_READER_CLOCK
69	O	FOB_READER_DATA
71	L/O	RF1_TUNER_SIGNAL
77	BR	ENG START SW
78	P	CAN-L
79	L	CAN-N
80	R/L	FOB_SLOT_ILLUMINATION
81	LG	IGN_ON_LED
85	L/O	S/L_CONDITION_1
86	G/R	S/L_CONDITION_2
88	P/L	AS_REQUEST SWITCH
91	L/R	RF1_POWER_SUPPLY
94	G/Y	S/L_POWER_SUPPLY_12V
98	G/O	HAZARD_SW
99	L/Y	S/L_K-LINE

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



Terminal No.	Color of Wire	Signal Name
103	V	CDL_BACK_TRUNK

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

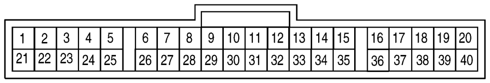


Terminal No.	Color of Wire	Signal Name
114	B	TRUNK_ANT_1_B
115	W	TRUNK_ANT_1_A
118	L/O	BACK_DOOR_ANT_B
119	BR/W	BACK_DOOR_ANT_A
130	Y/G	TRUNK_SW
144	GR	BUZZER

ABKIA0757GB

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

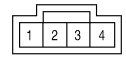
H.S.



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

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

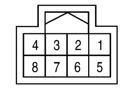
H.S.



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

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

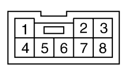
H.S.



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

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

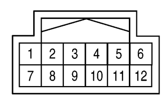
H.S.



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

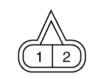
H.S.



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	CARE_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-

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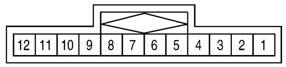
Connector No.	M63
Connector Name	JOINT CONNECTOR-M02
Connector Color	BLUE

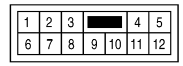
H.S.



Terminal No.	Color of Wire	Signal Name
10	GR	–
11	GR	–

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

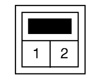
H.S.



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

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

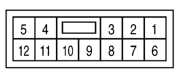
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	–

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

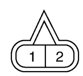
H.S.



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

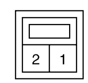
H.S.



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	–

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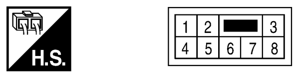
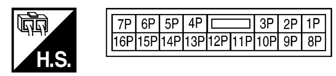
Connector No.	E2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



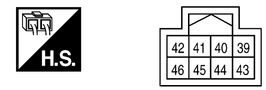
Terminal No.	Color of Wire	Signal Name
5	O	–

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



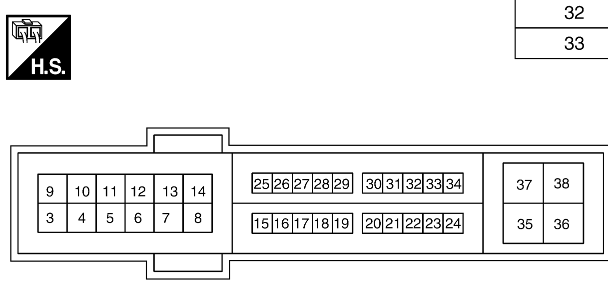
Terminal No.	Color of Wire	Signal Name
2P	R/G	–
8P	Y/R	–
11P	Y/B	–

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



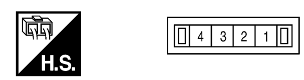
Terminal No.	Color of Wire	Signal Name
39	P	CAN-L
40	L	CAN-H
41	B	GND (SIGNAL)
44	G/W	HORN_RLY

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	GND (POWER)
28	BR	PUSH_START_SW
32	L/O	SL_CONDITION_1
33	G/R	SL_CONDITION_2

Connector No.	E21
Connector Name	JOINT CONNECTOR-E03
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–

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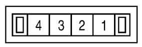
Connector No.	E22
Connector Name	JOINT CONNECTOR-E03
Connector Color	WHITE

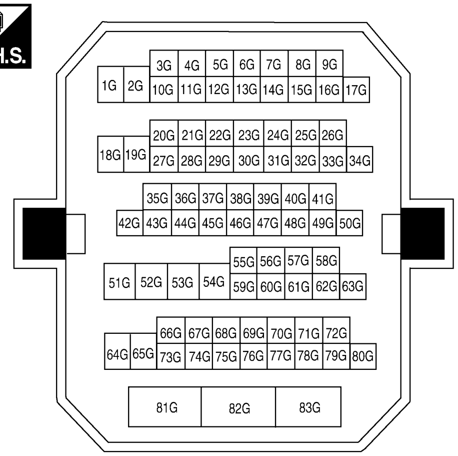
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–

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

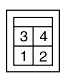
H.S.



Terminal No.	Color of Wire	Signal Name
8G	P	–
15G	L	–
21G	O	–
22G	G	–
28G	P	–
29G	SB	–
57G	R	–
82G	LG	–

Connector No.	E38
Connector Name	STOP LAMP SWITCH
Connector Color	WHITE

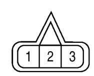
H.S.



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

Connector No.	E73
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Color	BROWN

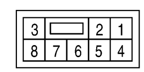
H.S.



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	–

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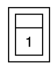
A B C D E F G H I J DLK L M N O P

Connector No.	E215
Connector Name	HORN (LOW)
Connector Color	BLACK

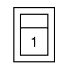
H.S.



Terminal No.	Color of Wire	Signal Name
1	G	–

Connector No.	E216
Connector Name	HORN (HIGH)
Connector Color	BLACK

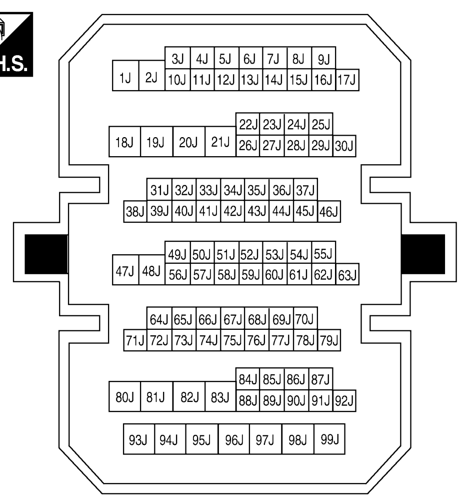
H.S.



Terminal No.	Color of Wire	Signal Name
1	G	–

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

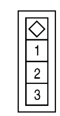
H.S.



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

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

H.S.

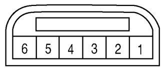


Terminal No.	Color of Wire	Signal Name
2	SB	DOOR SW(DR)

ABKIA0762GB

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

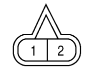
H.S.



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

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

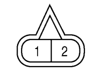
H.S.



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

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

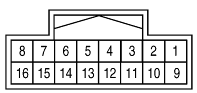
H.S.



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

Connector No.	B48
Connector Name	WIRE TO WIRE
Connector Color	WHITE

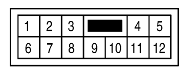
H.S.



Terminal No.	Color of Wire	Signal Name
7	Y/G	–
8	B	–

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

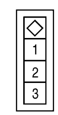
H.S.



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

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

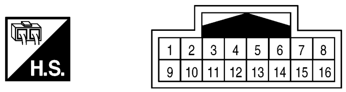
H.S.



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

ABKIA0763GB

Connector No.	T1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	Y/G	–
8	B	–

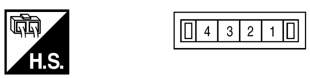
Connector No.	T2
Connector Name	TRUNK OPENER REQUEST SWITCH
Connector Color	BROWN

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

Connector No.	T4
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

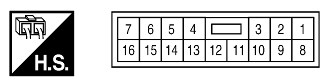
Terminal No.	Color of Wire	Signal Name
1	Y/G	–
2	B	–

Connector No.	T5
Connector Name	JOINT CONNECTOR-T01
Connector Color	WHITE



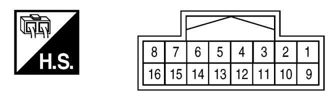
Terminal No.	Color of Wire	Signal Name
1	B	–
2	B	–

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



Terminal No.	Color of Wire	Signal Name
8	B	–

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

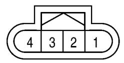


Terminal No.	Color of Wire	Signal Name
3	P	–
11	V	–
12	B/W	–

ABKIA0764GB

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

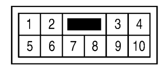
H.S.



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

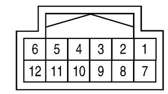
H.S.



Terminal No.	Color of Wire	Signal Name
5	B	–

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

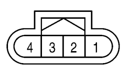
H.S.



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

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

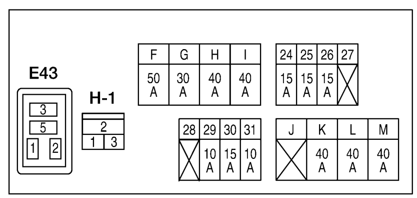
H.S.



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

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

T.S.

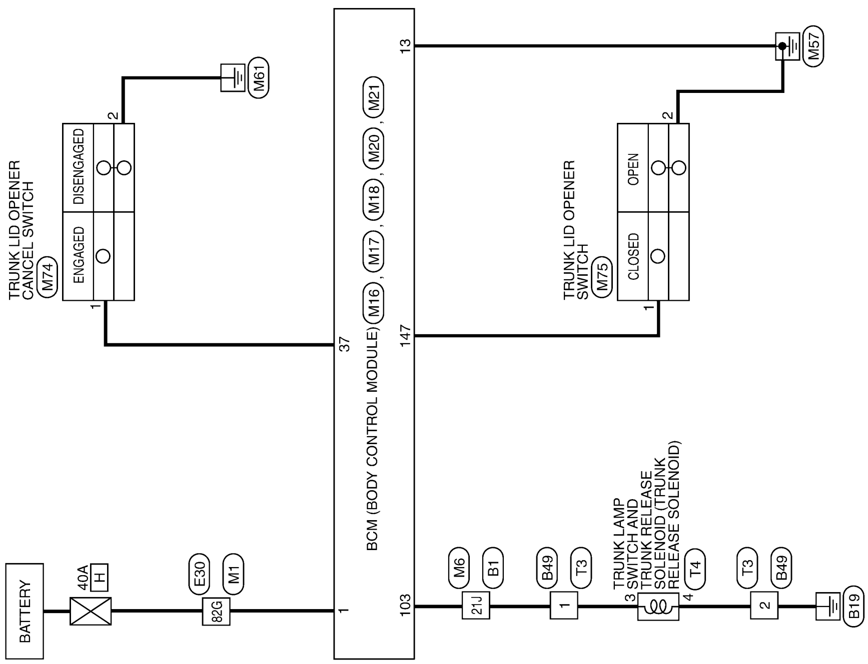


Terminal No.	Color of Wire	Signal Name
1	G/W	–
2	SB	–
3	G	–

ABKIA0765GB

Wiring Diagram — TRUNK LID OPENER SYSTEM —

INFOID:0000000004204710

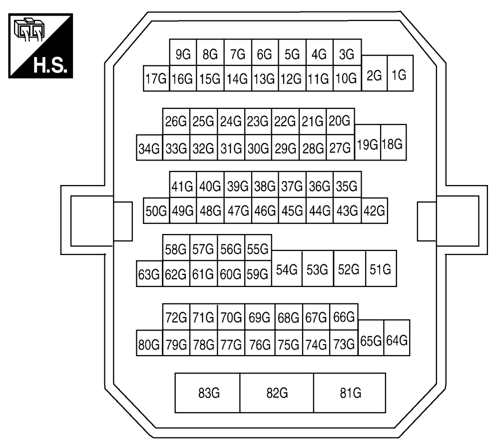


TRUNK LID OPENER

ABKWA0227GB

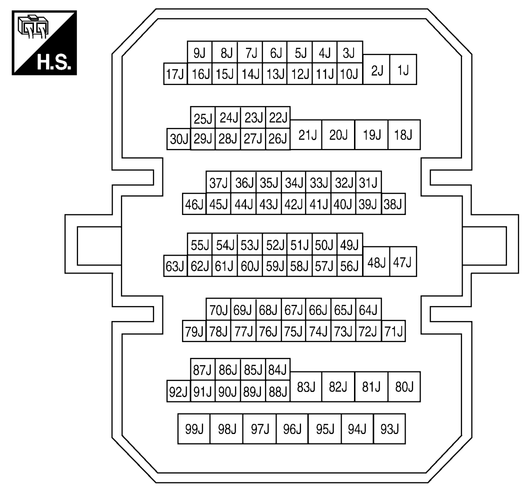
TRUNK LID OPENER CONNECTORS

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



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

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

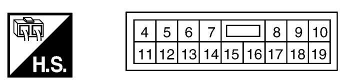


Terminal No.	Color of Wire	Signal Name
21J	V	–

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

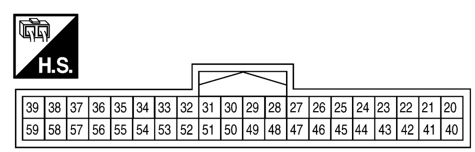
Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L

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



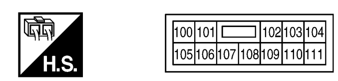
Terminal No.	Color of Wire	Signal Name
13	B	GND1

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



Terminal No.	Color of Wire	Signal Name
37	O	TRUNK_CANCEL_SW

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

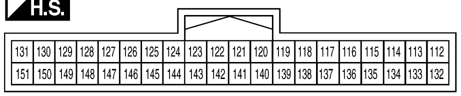


Terminal No.	Color of Wire	Signal Name
103	V	CDL_BACK_TRUNK

ABKIA0771GB

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

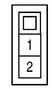
H.S.



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

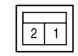
H.S.



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

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

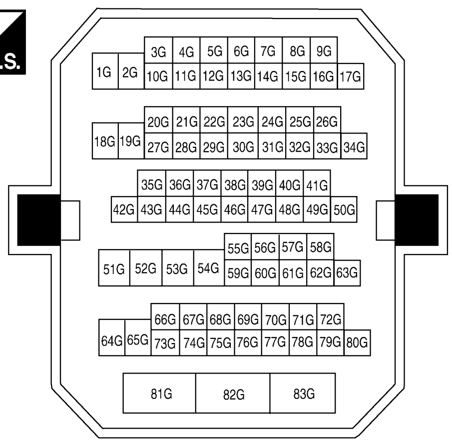
H.S.



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

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

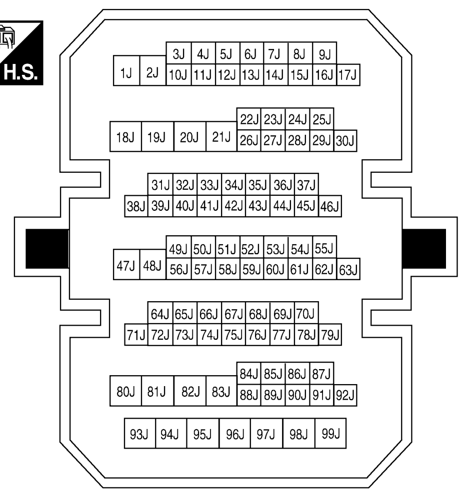
H.S.



Terminal No.	Color of Wire	Signal Name
82G	LG	–

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

H.S.

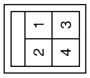


Terminal No.	Color of Wire	Signal Name
21J	V	–

ABKIA0766GB

Connector No.	T4
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

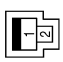
H.S.



Terminal No.	Color of Wire	Signal Name
3	V	–
4	B	–

Connector No.	T3
Connector Name	WIRE TO WIRE
Connector Color	WHITE

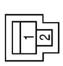
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	–
2	B	–

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	V	–
2	B	–

ABKIA0767GB

Fail Safe

INFOID:0000000004495972

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC

Display contents of CONSULT	Fail-safe	Cancellation
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Erase DTC
B2557: VEHICLE SPEED	Inhibit electronic steering column lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
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: LO VOLTAGE	• Inhibit engine cranking • Inhibit electronic steering column lock	100 ms after the power supply voltage increases to more than 8.8 V
B2601: SHIFT POSITION	Inhibit electronic steering column lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit electronic steering column lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 /h or more
B2603: SHIFT POSI STATUS	Inhibit electronic steering column lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/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
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Electronic steering column lock relay signal (Request signal) • Electronic steering column lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Electronic steering column lock relay signal (Request signal) • Electronic steering column lock relay signal (Condition signal)

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 electronic steering column lock	When the following electronic steering column lock conditions agree • BCM electronic steering column lock control status • Electronic steering column lock condition No. 1 signal status • Electronic steering column lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	• Inhibit engine cranking • Inhibit electronic steering column lock	When any of the following conditions is fulfilled • Electronic steering column lock unit status signal (CAN) is received normally • The BCM electronic steering column lock control status matches the electronic steering column lock status recognized by the electronic steering column lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
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 electronic steering column lock unit power supply output control inside BCM becomes normal
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:0000000004495973

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

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

Priority	DTC
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 • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B26E1: ENG STATE NO RECIV • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
5	• C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1712: [CHECKSUM ERR] FL • C1713: [CHECKSUM ERR] FR • C1714: [CHECKSUM ERR] RR • C1715: [CHECKSUM ERR] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1720: [CODE ERR] FL • C1721: [CODE ERR] FR • C1722: [CODE ERR] RR • C1723: [CODE ERR] RL • C1724: [BATT VOLT LOW] FL • C1725: [BATT VOLT LOW] FR • C1726: [BATT VOLT LOW] RR • C1727: [BATT VOLT LOW] RL • C1734: CONTROL UNIT
6	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000004495974

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	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	BCS-38
U1010: CONTROL UNIT (CAN)	—	—	—	BCS-39
U0415: VEHICLE SPEED SIG	—	—	—	BCS-40
B2013: ID DISCORD BCM-S/L	×	—	—	SEC-38
B2014: CHAIN OF S/L-BCM	×	—	—	SEC-39
B2190: NATS ANTENNA AMP	×	—	—	SEC-64
B2191: DIFFERENCE OF KEY	×	—	—	SEC-67
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-68
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-69
B2553: IGNITION RELAY	—	—	—	PCS-60
B2555: STOP LAMP	—	—	—	SEC-70
B2556: PUSH-BTN IGN SW	—	×	—	SEC-72
B2557: VEHICLE SPEED	×	×	—	SEC-74
B2560: STARTER CONT RELAY	×	×	—	SEC-75
B2562: LOW VOLTAGE	—	—	—	BCS-41
B2601: SHIFT POSITION	×	×	—	SEC-76
B2602: SHIFT POSITION	×	×	—	SEC-79
B2603: SHIFT POSI STATUS	×	×	—	SEC-81
B2604: PNP SW	×	×	—	SEC-84
B2605: PNP SW	×	×	—	SEC-86
B2606: S/L RELAY	×	×	—	SEC-88
B2607: S/L RELAY	×	×	—	SEC-89
B2608: STARTER RELAY	×	×	—	SEC-91
B2609: S/L STATUS	×	×	—	SEC-93
B260A: IGNITION RELAY	×	×	—	PCS-62
B260B: STEERING LOCK UNIT	—	×	—	SEC-97
B260C: STEERING LOCK UNIT	—	×	—	SEC-98
B260D: STEERING LOCK UNIT	—	×	—	SEC-99
B260F: ENG STATE SIG LOST	×	×	—	SEC-100
B2612: S/L STATUS	×	×	—	SEC-101
B2614: ACC RELAY CIRC	—	×	—	PCS-65
B2615: BLOWER RELAY CIRC	—	×	—	PCS-68
B2616: IGN RELAY CIRC	—	×	—	PCS-71
B2617: STARTER RELAY CIRC	×	×	—	SEC-105
B2618: BCM	×	×	—	PCS-74

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2619: BCM	×	×	—	SEC-107
B261A: PUSH-BTN IGN SW	—	×	—	SEC-108
B2621: INSIDE ANTENNA	—	—	—	DLK-59
B2622: INSIDE ANTENNA	—	—	—	DLK-62
B2623: INSIDE ANTENNA	—	—	—	DLK-65
B26E1: ENG STATE NO RES	×	×	—	SEC-110
C1704: LOW PRESSURE FL	—	—	×	WT-52
C1705: LOW PRESSURE FR	—	—	×	WT-52
C1706: LOW PRESSURE RR	—	—	×	WT-52
C1707: LOW PRESSURE RL	—	—	×	WT-52
C1708: [NO DATA] FL	—	—	×	WT-14
C1709: [NO DATA] FR	—	—	×	WT-14
C1710: [NO DATA] RR	—	—	×	WT-14
C1711: [NO DATA] RL	—	—	×	WT-14
C1712: [CHECKSUM ERR] FL	—	—	×	WT-16
C1713: [CHECKSUM ERR] FR	—	—	×	WT-16
C1714: [CHECKSUM ERR] RR	—	—	×	WT-16
C1715: [CHECKSUM ERR] RL	—	—	×	WT-16
C1716: [PRESSDATA ERR] FL	—	—	×	WT-18
C1717: [PRESSDATA ERR] FR	—	—	×	WT-18
C1718: [PRESSDATA ERR] RR	—	—	×	WT-18
C1719: [PRESSDATA ERR] RL	—	—	×	WT-18
C1720: [CODE ERR] FL	—	—	×	WT-16
C1721: [CODE ERR] FR	—	—	×	WT-16
C1722: [CODE ERR] RR	—	—	×	WT-16
C1723: [CODE ERR] RL	—	—	×	WT-16
C1724: [BATT VOLT LOW] FL	—	—	×	WT-16
C1725: [BATT VOLT LOW] FR	—	—	×	WT-16
C1726: [BATT VOLT LOW] RR	—	—	×	WT-16
C1727: [BATT VOLT LOW] RL	—	—	×	WT-16
C1729: VHCL SPEED SIG ERR	—	—	×	WT-19
C1734: CONTROL UNIT	—	—	×	WT-20

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000004204714

ALL FUNCTIONS OF INTELLIGENT KEY SYSTEM DO NOT OPERATE

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-11, "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-68
	2. Check Intelligent Key function and battery inspection.	DLK-115
	3. Check remote keyless entry receiver.	DLK-112
	4. Check Intermittent Incident.	GI-42

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000004204715

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-11, "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-68
	2. Check door lock and unlock switch.		DLK-72
	3. Check door lock actuator (driver side)		DLK-103
	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-81
	2. Replace power window main switch.		INT-12
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	DLK-103
		Passenger side	DLK-104
	2. Check Intermittent Incident.		GI-42
Vehicle speed sensing auto door LOCK operation does not operate.	1. Ensure automatic door lock/unlock function (lock operation) is enabled.		DLK-55
	2. Check combination meter vehicle speed signal.		MWI-42
	3. Check intermittent incident.		GI-42
Ignition OFF interlock auto door UNLOCK function does not operate.	1. Ensure automatic door lock/unlock function (unlock operation) is enabled.		DLK-55
	2. Check BCM for DTCs.		DLK-184
	3. Check intermittent incident.		GI-42

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:0000000004204716

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-11, "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-68
	2.	Check door switch.	DLK-69
	3.	Check key slot.	DLK-79
	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-96
	2.	Check outside key antenna (driver side).	DLK-109
	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-96
	2.	Check outside key antenna (passenger side).	DLK-109
	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-55
	2.	Check selective unlock function with a remote controller or door key cylinder.	DLK-20
	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-55
	2.	Check Intermittent Incident.	GI-42
Auto lock function does not operate.	1.	Check “AUTO LOCK SET” setting in “WORK SUPPORT”.	DLK-55
	2.	Check door switch.	DLK-69
	3.	Check key slot.	DLK-79
	4.	Check Intermittent Incident.	GI-42

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000004204717

REMOTE KEYLESS ENTRY FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-11, "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-25, "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-115
	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-55
	2.	Check Intelligent Key battery inspection.	DLK-115
	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-55
	2. Check door switch.	DLK-69
	3. Check key slot.	DLK-79
	4. Check Intermittent Incident.	GI-42
Power window down function does not operate.	1. Check “PW DOWN SET” setting in “WORK SUPPORT”.	DLK-55
	2. Check Intelligent Key battery inspection.	DLK-115

TRUNK OPEN FUNCTION SYMPTOMS

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : Symptom Table

INFOID:0000000004204718

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-11, "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-88
	2. Check trunk lid opener cancel switch.	DLK-91
	3. Check Intermittent Incident.	GI-42

TRUNK REQUEST SWITCH

TRUNK REQUEST SWITCH : Symptom Table

INFOID:0000000004204719

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-11, "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-100
	2. Check trunk lid opener cancel switch.	DLK-91
	3. Check outside key antenna (trunk room).	DLK-109
	4. Check Intermittent Incident.	GI-42

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000004204720

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-11, "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-55
	2. Check trunk open function.	DLK-38
	3. Check trunk room lamp switch.	DLK-93
	4. Check Intelligent Key battery inspection.	DLK-115
	5. Check Intermittent Incident.	GI-42

WARNING FUNCTION SYMPTOMS

Symptom Table

INFOID:0000000004204721

WARNING FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-11, "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-72
		2. Check door switch.	DLK-69
		3. Check warning chime function.	DLK-122
		4. Check Intermittent Incident.	GI-42
	For external	1. Check push button ignition switch position indicator.	SEC-72
		2. Check door switch.	DLK-69
		3. Check Intelligent Key warning buzzer.	DLK-107
		4. Check Intermittent Incident.	GI-42
P position warning does not operate.		1. Check Park position switch.	SEC-84
		2. Check door switch.	DLK-69
		3. Check Intelligent Key warning buzzer.	DLK-107
		4. Check warning chime function.	DLK-122
		5. Check combination meter display function.	DLK-121
		6. Check Intermittent Incident.	GI-42
ACC warning does not operate		1. Check push button ignition switch position indicator.	SEC-72
		2. Check warning chime function.	DLK-122
		3. Check combination meter display function.	DLK-121
		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-69
		2. Check inside key antenna.	Instrument center	DLK-59
			Console	DLK-62
			Trunk room	DLK-65
		3. Check Intelligent Key warning buzzer.		DLK-107
		4. Check warning chime function.		DLK-122
		5. Check key slot illumination.		DLK-117
		6. Check combination meter display function.		DLK-121
		7. Check Intermittent Incident.		GI-42
	Push-button ignition switch operation	1. Check push button ignition switch position indicator.		SEC-72
		2. Check inside key antenna.	Instrument center	DLK-59
			Console	DLK-62
			Trunk room	DLK-65
		3. Check warning chime function.		DLK-122
		4. Check key slot illumination.		DLK-117
		5. Check combination meter display function.		DLK-121
		6. Check Intermittent Incident.		GI-42
	Door is open	1. Check push button ignition switch position indicator.		SEC-72
		2. Check inside key antenna.	Instrument center	DLK-59
			Console	DLK-62
			Trunk room	DLK-65
		3. Check combination meter display function.		DLK-121
		4. Check Intermittent Incident.		GI-42
	Take away through window	1. Check “TAKE OUT FROM WIN WARN” setting in “WORK SUPPORT”.		DLK-55
		2. Check inside key antenna.	Instrument center	DLK-59
			Console	DLK-62
			Trunk room	DLK-65
		3. Check warning chime function.		DLK-122
		4. Check key slot illumination.		DLK-117
		5. Check combination meter display function.		DLK-121
		6. Check Intermittent Incident.		GI-42
Key warning chime does not operate.		1. Check key slot.		DLK-79
		2. Check door switch.		DLK-69
		3. Check warning chime function.		DLK-122
		4. Check key slot illumination.		DLK-117
		5. Check combination meter display function.		DLK-121
		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-69
	2. Check key slot illumination.		DLK-117
	3. Check Intelligent Key warning buzzer.		DLK-107
	4. Check inside key antenna.	Instrument center	DLK-59
		Console	DLK-62
		Trunk room	DLK-65
	5. Check Intermittent Incident.		GI-42

KEY REMINDER FUNCTION SYMPTOMS

Symptom Table

INFOID:0000000004204722

KEY REMINDER FUNCTION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-11, "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-79
	2.	Check door switch.	DLK-69
	3.	Check inside key antenna.	DLK-122
	4.	Check unlock sensor.	DLK-117
	5.	Check Intelligent Key battery inspection.	DLK-115
	6.	Check Intermittent Incident.	GI-42

HAZARD FUNCTION

Symptom Table

INFOID:0000000004204723

HAZARD AND BUZZER REMINDER FUNCTION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-11, "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-55
	2. Check hazard function.	DLK-123
	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-55
	2. Check hazard function.	DLK-123
	3. Check Intelligent Key battery inspection.	DLK-115
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-55
	2. Check Intelligent Key warning buzzer.	DLK-107
	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-55
	2. Check Intelligent Key warning buzzer.	DLK-107
	3. Check trunk open function.	DLK-33
	4. Check Intermittent incident.	GI-42

HORN FUNCTION

Symptom Table

INFOID:0000000004204724

HAZARD AND HORN REMINDER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-11, "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-55
	2.	Check hazard function.	DLK-123
	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-55
	2.	Check hazard function.	DLK-123
	3.	Check Intelligent Key battery inspection.	DLK-115
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-55
	2.	Check Intelligent Key warning buzzer.	DLK-107
	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-55
	2.	Check horn function.	DLK-119
	3.	Check Intermittent Incident.	GI-42

INTEGRATED HOMELINK TRANSMITTER

Symptom Table

INFOID:0000000004204725

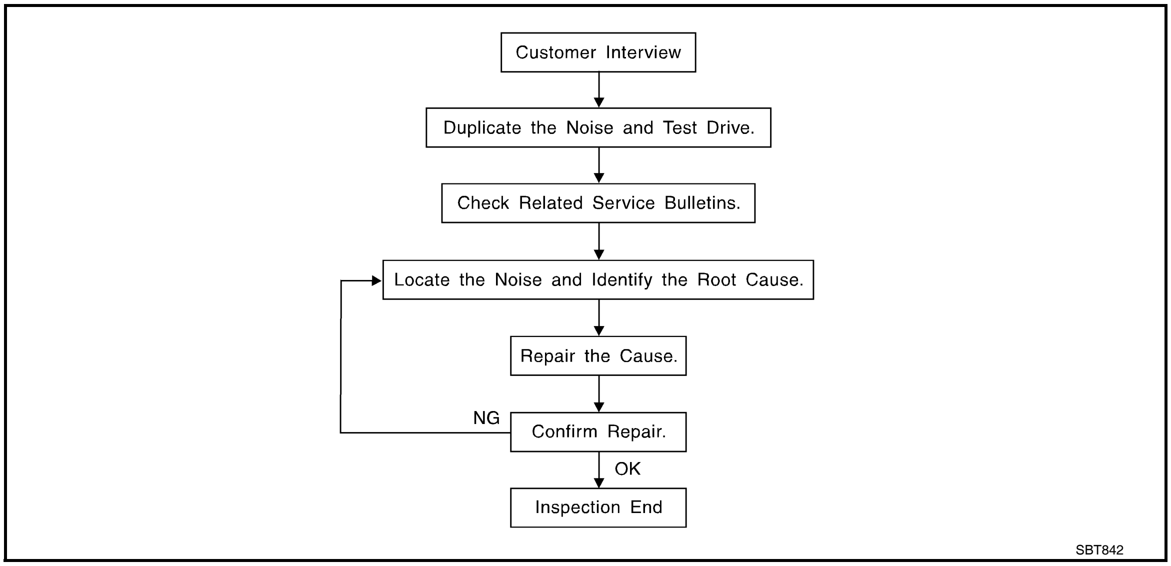
HOMELINK UNIVERSAL TRANSCEIVER MALFUNCTION

Symptom	Diagnosis/service procedure	Reference page
Homelink universal transceiver does not operate properly.	1. Check homelink universal transceiver function.	DLK-126
	2. Check Intermittent Incident.	GI-42

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000004204726



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-204, "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-202, "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:0000000004204727

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 bumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

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:0000000004204728

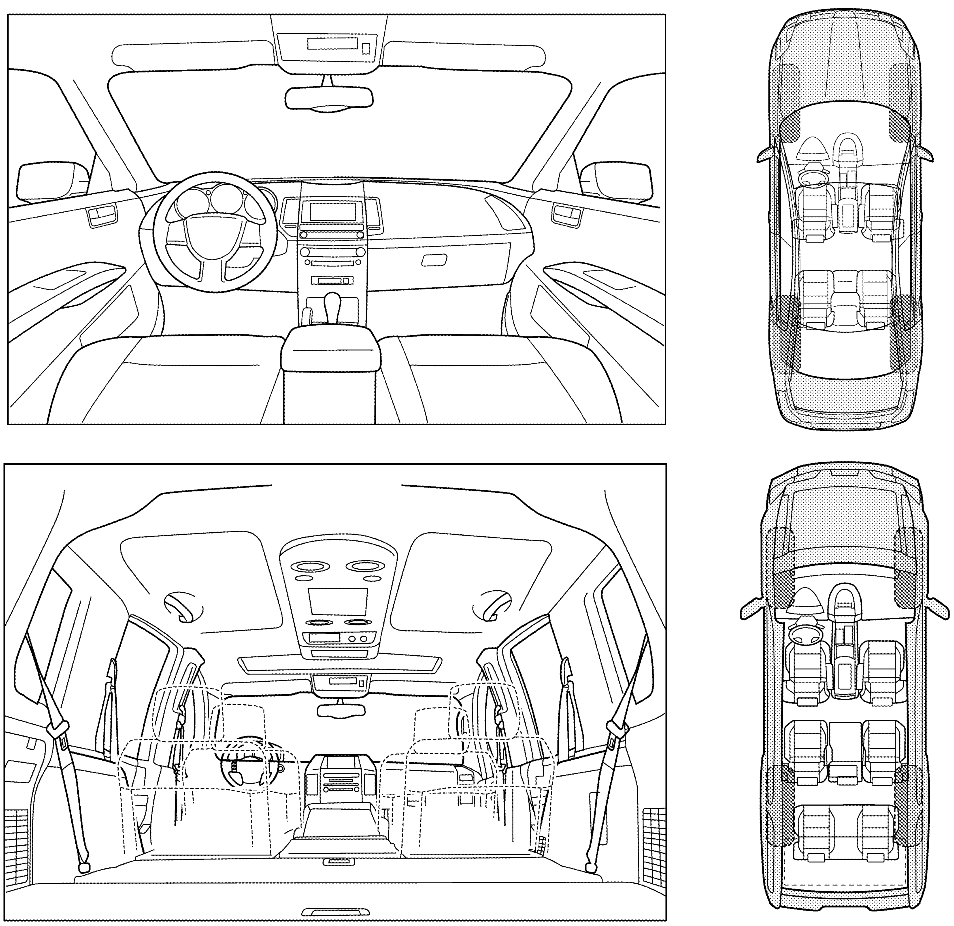
Dear Customer:

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.

-1-

LAIA0072E

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:0000000004204729

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

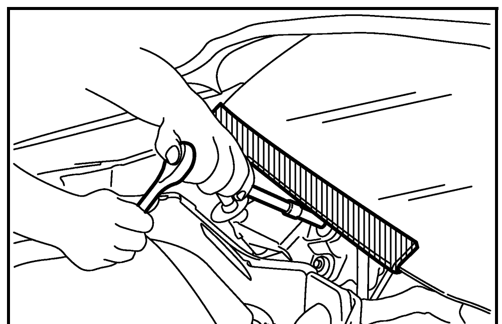
WARNING:

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

Procedure without Cowl Top Cover

INFOID:0000000004204730

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



PIIB3706J

Precaution for work

INFOID:0000000004204731

- 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.

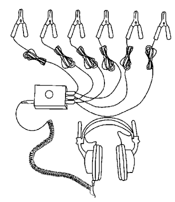
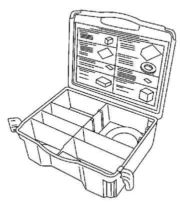
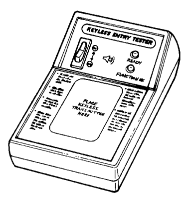
PREPARATION

PREPARATION

Special Service Tools

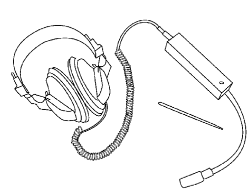
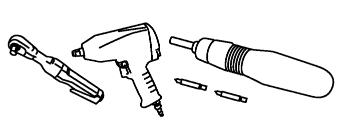
INFOID:0000000004204732

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:0000000004204733

Tool name		Description
Engine ear	 SIIA0995E	Locating the noise
Power tool	 PIIB1407E	

ON-VEHICLE REPAIR

HOOD

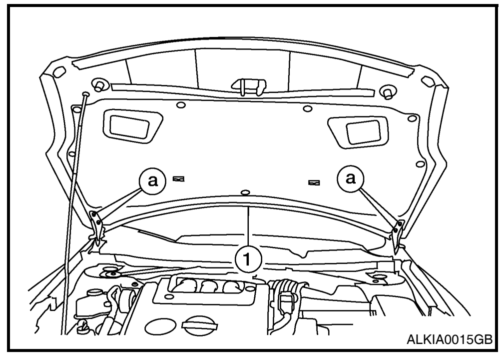
HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000004204734

REMOVAL

1. Remove the hinge nuts (a) and the hood assembly (1).
   CAUTION:
   Remove using two workers, to avoid damaging the hood assembly.



INSTALLATION

Installation is in the reverse order of removal.

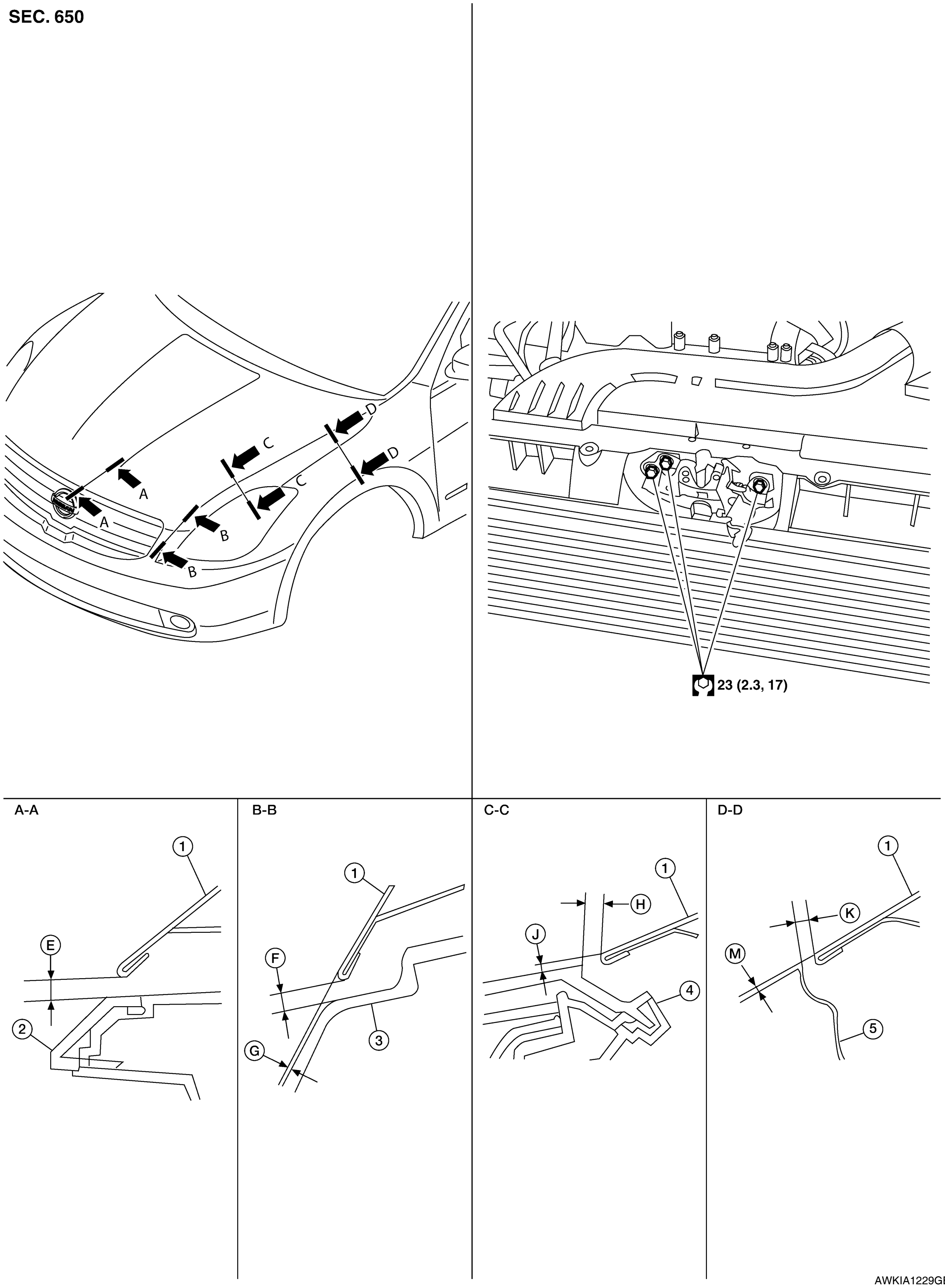
Hood hinge nuts : 14 N·m (1.4 kg·m, 10 ft-lb)

NOTE:

After installing, perform hood fitting adjustment. Refer to DLK-209, "HOOD ASSEMBLY : Adjustment".

HOOD ASSEMBLY : Adjustment

INFOID:0000000004204735



1. Hood assembly	2. Front grille	3. Front fascia
4. Headlamp assembly	5. Front fender	

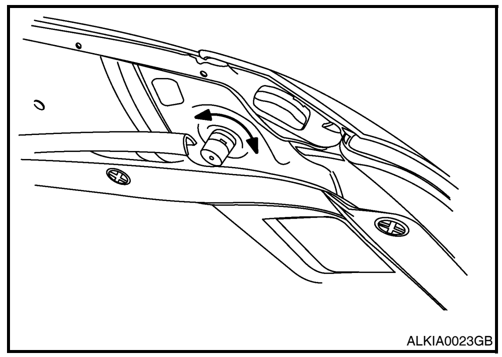
FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDUNAL CLEARANCE ADJUSTMENT

Unit: mm (in)

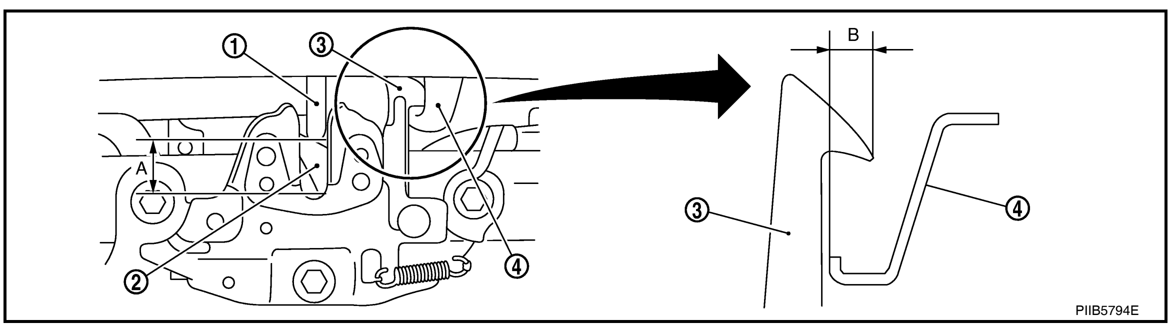
Section	Item	Measurement	Standard	Parallelism	Equality
A – A	E	Clearance	5.0 ± 2.5 (0.20 ± 0.10)	≤ 2.0 (0.079)	—
B – B	F	Clearance	5.0 ± 2.0 (0.20 ± 0.079)	≤ 2.0 (0.079)	≤ 2.0 (0.079)
	G	Surface height	0.8 ± 2.0 (0.03 ± 0.079)	≤ 2.0 (0.079)	≤ 2.0 (0.079)
C – C	H	Clearance	5.0 ± 2.0 (0.20 ± 0.079)	≤ 2.0 (0.079)	2.0 (0.079)
	J	Surface height	1.0 ± 2.0 (0.04 ± 0.079)	—	< 2.0 (0.079)
D – D	K	Clearance	4.0 ± 1.0 (0.16 ± 0.04)	1.0 (0.04)	1.0 (0.04)
	M	Surface height	0.2 ± 1.0 (0.01 ± 0.04)	1.0 (0.04)	1.0 (0.04)

Front End Height Adjustment

1. Check the surface height between the hood and each part by visual and tactile feeling.
2. Remove the front grille. Refer to EXT-17, "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 as shown 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/Longitudinal 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.

Hood hinge bolts : 14 N·m (1.4 kg·m, 10 ft-lb)

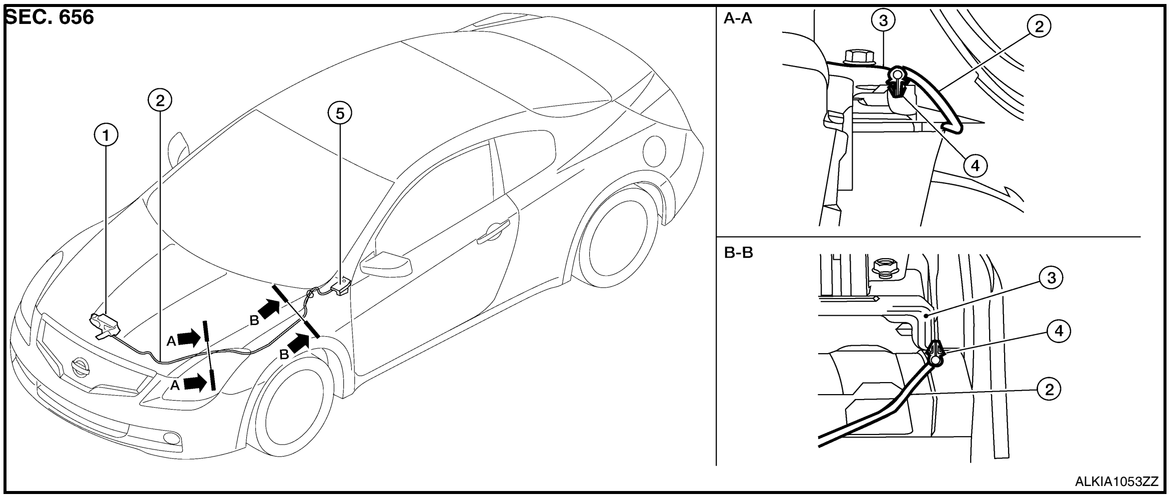
NOTE:
After installation apply touch-up paint onto the hinge bolts and around the base of the hinge.

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

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Component Parts Location

INFOID:0000000004204736



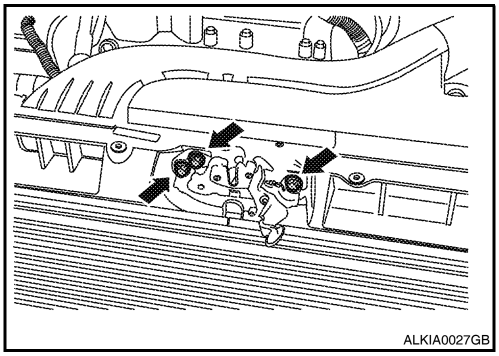
1. Hood lock assembly
2. Hood lock cable
3. Hoodledge reinforcement
4. Clip
5. Hood lock release handle

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000004204737

REMOVAL

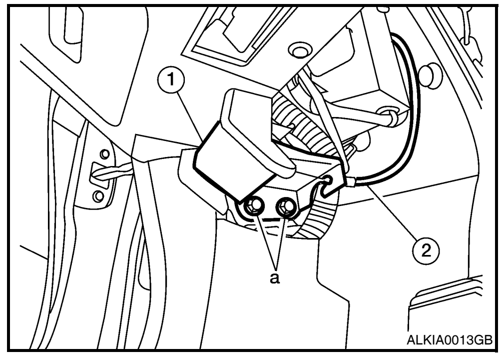
1. Remove the front grill. Refer to EXT-17, "Removal and Installation".
2. Remove the LH fender protector. Refer to EXT-19, "Removal and Installation".
3. Remove the hood lock assembly bolts.



4. Disconnect the hood lock cable from the hood lock, and unclip it from the hoodledge.

A B C D E F G H I J DLK L M N O P

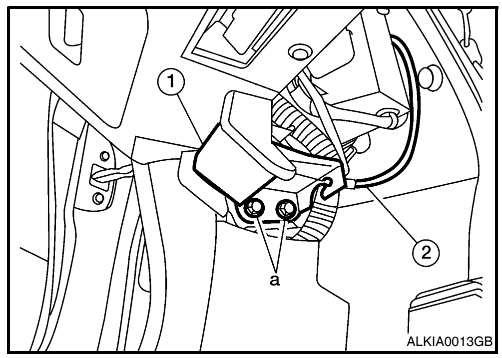
5. Remove the screws (a) with power tool, and separate the hood lock release handle (1) from the hood lock release cable (2).



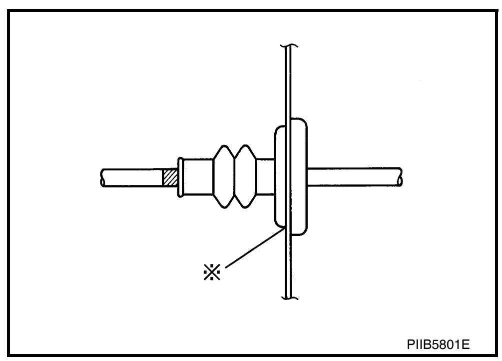
6. Remove the grommet from the upper dash, and pull the hood lock cable into the passenger compartment.
   CAUTION:
   While pulling, be careful not to damage (peel) the outside of the hood lock cable.

INSTALLATION

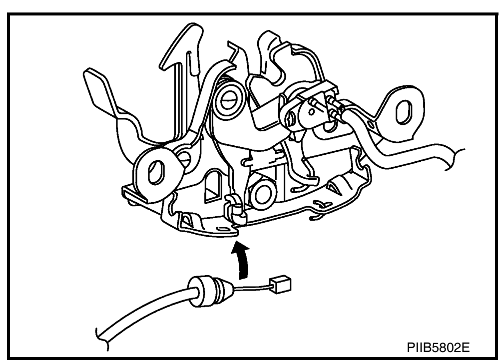
1. Pull the hood lock cable through the upper dash into the engine compartment.
   CAUTION:
   Be careful not to bend the cable too much, keep the radius 100 mm (3.94 in) or more.
2. Attach the hood lock cable (2) to the hood lock release handle (1) and install the hood lock release handle screws (a).



3. Check that the cable is not offset from the center of the grommet, and seat the grommet into the upper dash hole.
4. Apply the sealant around the grommet at * mark.



5. Position the hood lock cable and clip it into place.
6. Connect the hood lock cable to the hood lock assembly.
7. Loosely install the hood lock assembly.
8. Perform hood fitting adjustment. Refer to DLK-209, "HOOD ASSEMBLY : Adjustment".
9. Check the hood lock control operation.

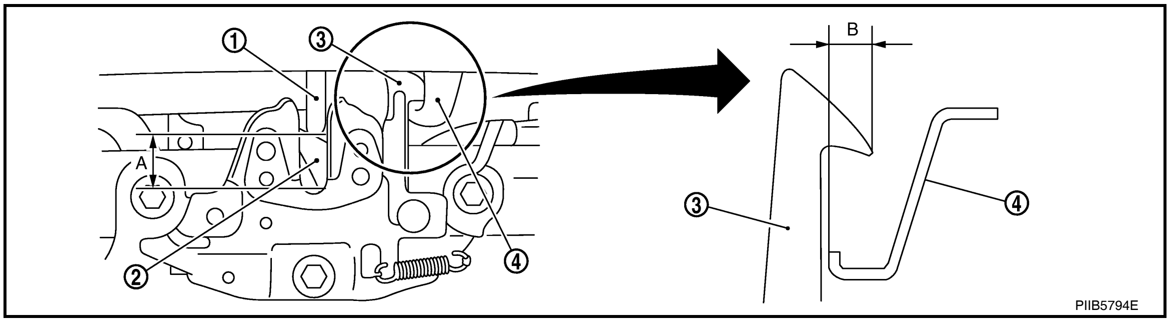


INSPECTION

CAUTION:

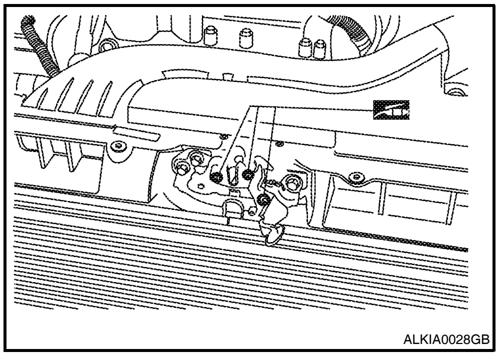
If the hood lock cable is bent or deformed, replace it.

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

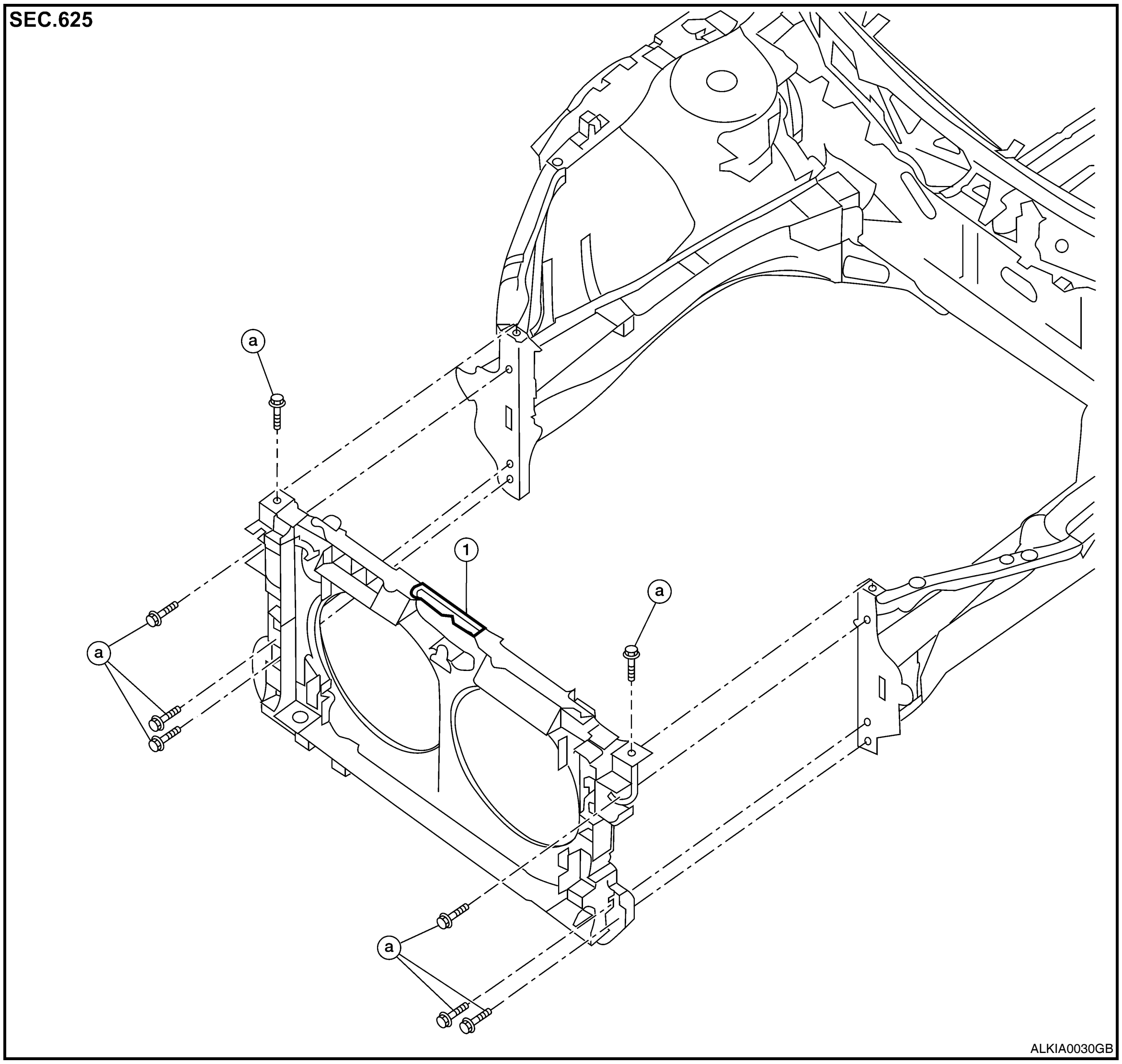
2. While operating the hood opener, carefully check that the front end of the hood is raised by approx. 20 mm (0.79 in). Also check that the hood opener returns to the original position.
3. Check that the hood lock release handle operating force is 49 N (5.0 kg, 11 lb).
4. Install so the static closing force of the hood is 343 – 490 N (35 – 44 kg-f, 77.1 - 110.2 lb-f).
5. Check the hood lock lubrication condition. If necessary, apply “body grease” as shown.



RADIATOR CORE SUPPORT

Removal and Installation

INFOID:0000000004204738



1. Radiator core support a. Bolts

REMOVAL

1. Remove front bumper reinforcement. Refer to EXT-13, "Removal and Installation".
2. Remove head lamps (LH/RH). Refer to EXL-264, "Headlamp".
3. Remove washer tank. Refer to WW-119, "WASHER TANK : Removal and Installation".
4. Remove air duct. Refer to QR25DE, EM-25, "Removal and Installation" VQ35DE EM-129, "Removal and Installation".
5. Remove the radiator cooling fans. Refer to QR25DE CO-17, "Removal and Installation", VQ35DE CO-40, "Removal and Installation".
6. Remove the radiator. Refer to QR25DE CO-15, "Removal and Installation", VQ35DE CO-38, "Removal and Installation".
7. Remove the hood lock control. Refer to DLK-211, "HOOD LOCK CONTROL : Removal and Installation".
8. Remove ambient sensor. Refer to HA-43, "Removal and Installation".
9. Remove crash zone sensor. Refer to SR-14, "Removal and Installation".
10. Remove air guides (LH/RH).

11. Remove power steering tube assembly. Refer to QR25DE ST-22, "QR25DE : Removal and Installation", VQ35DE ST-22, "VQ35DE : With 17 Inch Tire" or ST-24, "VQ35DE : With 18 Inch Tire".
12. Remove horn (High/Low). Refer to HRN-11, "Removal and Installation".
13. Remove the harness clips from the radiator core support assembly and position the harness aside.
14. Remove the bolts and the radiator core support.

INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

Removal and Installation

INFOID:0000000004204739

REMOVAL

1. Remove the head lamp. Refer to EXL-253, "Removal and Installation".
2. Remove the front fender protector. Refer to EXT-19, "Removal and Installation".
3. Remove the inner fender bolt cover.
4. Remove the center mud guard. Refer to EXT-20, "Removal and Installation".
5. Remove the bolts and the front fender.

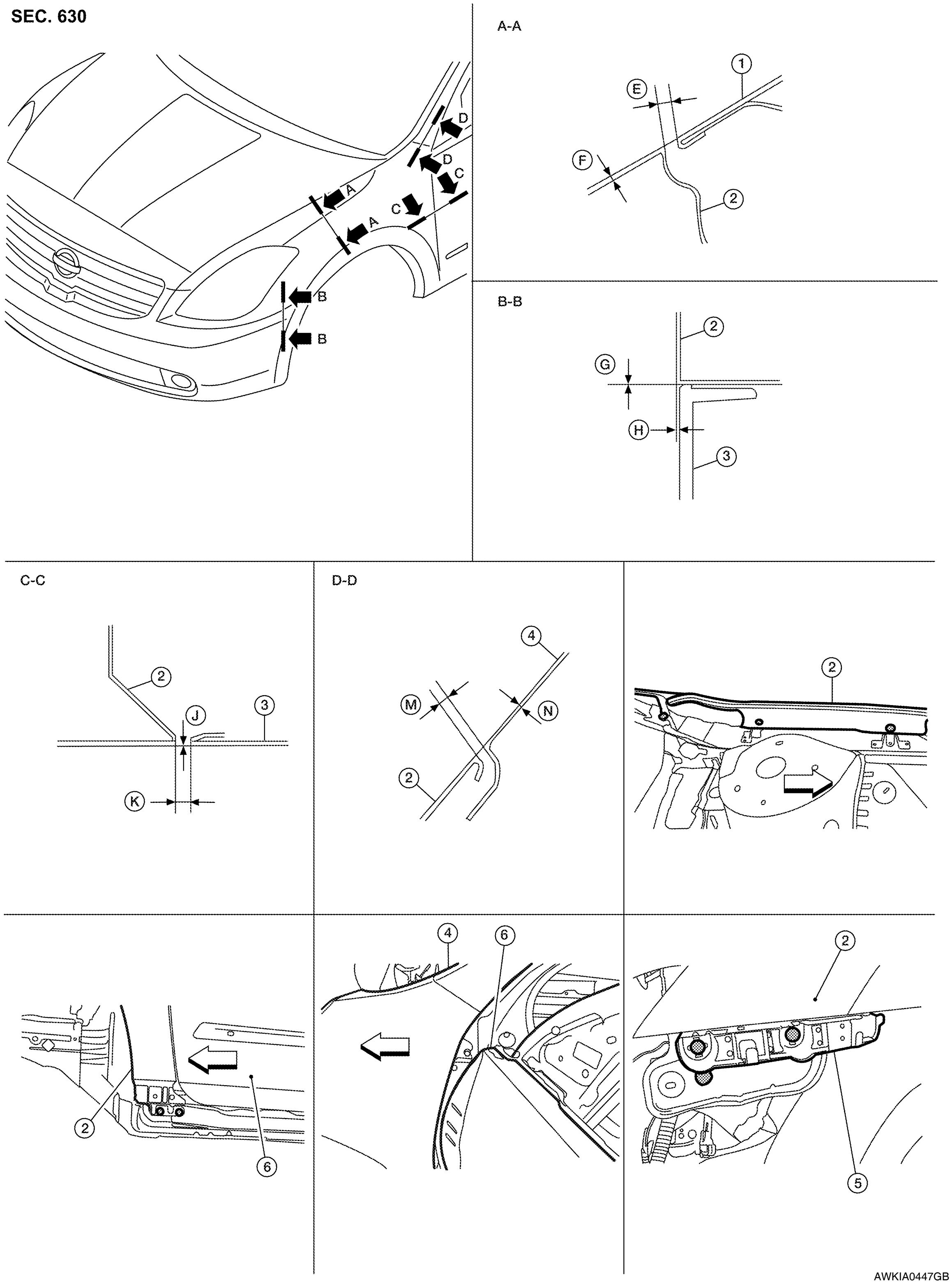
   CAUTION:
   - **While removing, use a shop cloth to protect the body from damage.**
   - **Use care when removing the front fender. The front fender baffle foam adheres the front fender to the body side outer. Carefully release the foam or damage to the fender may occur.**

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
- **After installing, 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
⇐	Front				

Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism	Equality
A-A	E	Clearance	4.0 ± 1.0 (0.16 ± 0.04)	1.0 (0.04)	1.0 (0.04)
	F	Surface height	0.2 ± 1.0 (0.01 ± 0.04)	1.0 (0.04)	1.0 (0.04)
B-B	G	Clearance	0.0 + 0.8 (0.0 + 0.031)	—	—
	H	Surface height	0.7 ± 1.0 (0.028 ± 0.04)	1.0 (0.04)	1.0 (0.04)
C-C	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	—	—
	K	Clearance	3.6 ± 1.0 (0.14 ± 0.04)	1.0 (0.04)	—
D-D	M	Clearance	2.3 ± 1.0 (0.09 ± 0.04)	1.0 (0.04)	—
	N	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-19, "Removal and Installation".
3. Remove the center mudguard. Refer to EXT-20, "Removal and Installation".
4. Loosen the front fender bolts and screws.
5. Adjust the clearance (J) and surface height (K) between the front fender and the front door.
6. Tighten the rear upper and lower front fender bolts.
7. Adjust the clearance (E) and surface height (F) between the front fender and the hood.
8. Adjust the clearance (M) and surface height (N) between the front fender and the body side outer.
9. Tighten the inner front fender bolts.
10. Adjust the clearance (G) and the surface height (H) between the front fender and the front fascia.
11. Tighten the front fender to front fascia and bracket screws.
12. Apply touch-up paint (the body color) onto the head of the front fender bolts.
13. Install the center mudguard. Refer to EXT-20, "Removal and Installation".
14. Install the front fender protector. Refer to EXT-19, "Removal and Installation".
15. Install the inner fender bolt cover.

DOOR

FRONT DOOR

FRONT DOOR : Removal and Installation

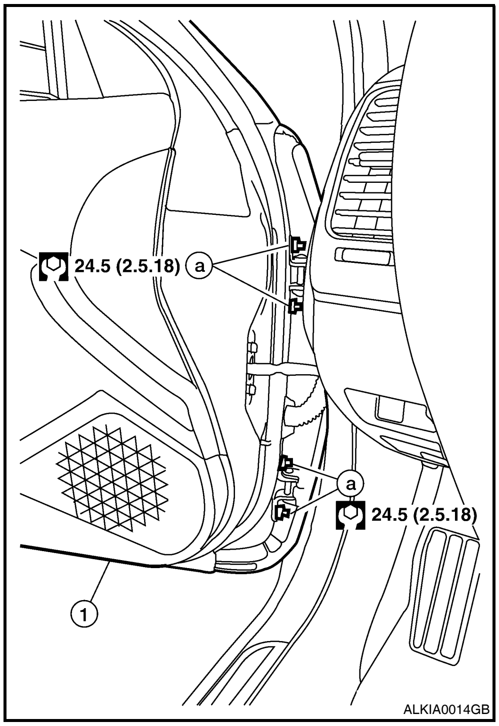
INFOID:0000000004204740

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-220, "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.**

REMOVAL

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



INSTALLATION

Installation is in the reverse order of removal.

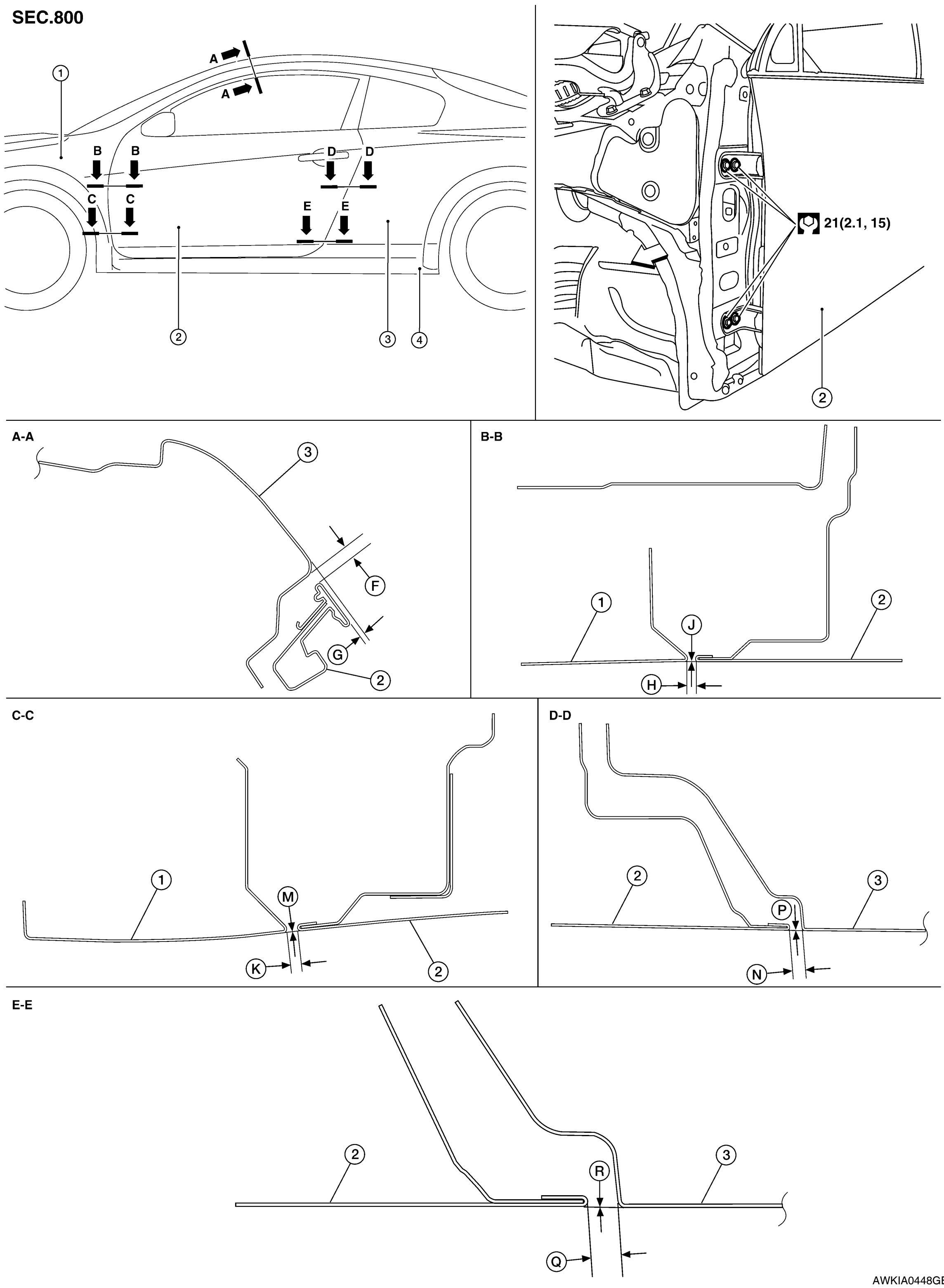
NOTE:

Adjust the door. Refer to DLK-220, "FRONT DOOR : Adjustment".

A B C D E F G H I J DLK L M N O P

FRONT DOOR : Adjustment

INFOID:0000000004204741



1. Front fender
2. Front door assembly
3. Body side outer
4. Center mudguard

Unit: mm (in)

Section	Item	Measurement	Standard
A-A	F	Clearance	6.1 ± 1.5 (0.24 ± 0.06)
	G	Surface height	2.9 ± 1.5 (0.11 ± 0.06)
B-B	H	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C-C	K	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	M	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
D-D	N	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	P	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
E-E	Q	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	R	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

LONGITUDINAL CLEARANCE

1. Remove the front fender. Refer to DLK-216, "Removal and Installation".
2. Loosen the hinge bolts. Raise or lower the front door at rear edge to adjust.
3. Install the front fender. Refer to DLK-216, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

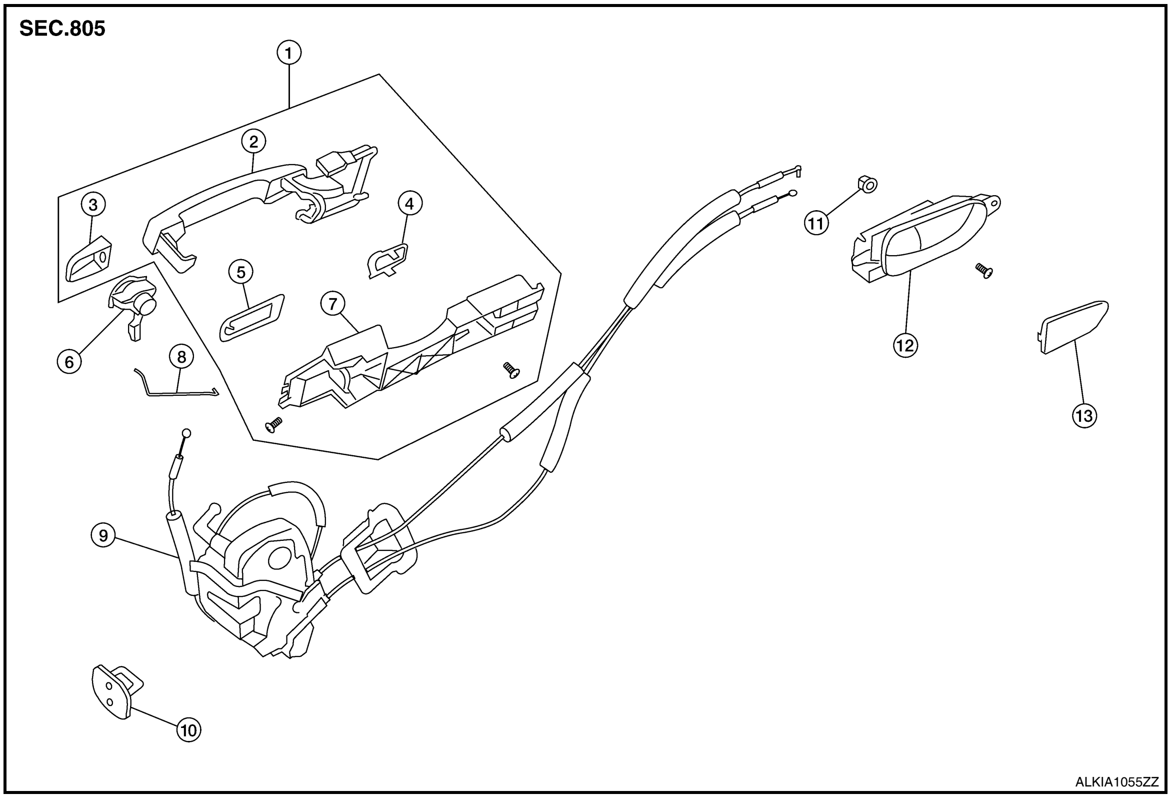
1. Loosen the front door hinge nuts.
2. Move the top and or bottom in or out as necessary until it is within specifications.
3. Tighten the hinge nuts to specifications.

DOOR LOCK

FRONT DOOR LOCK

FRONT DOOR LOCK : Component Parts Location

INFOID:0000000004204742



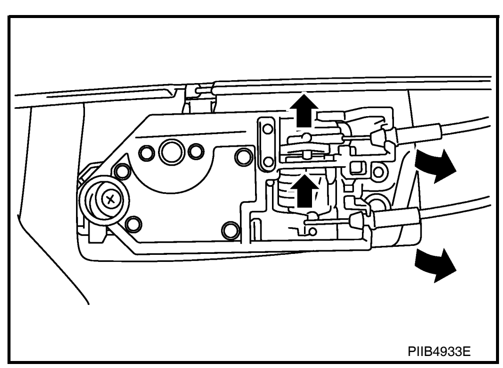
1. Outside handle assembly
2. Outside handle grip
3. Door key cylinder escutcheon (Driver side)
   Outside handle escutcheon (Passenger side)
4. Front gasket
5. Rear gasket
6. Key cylinder assembly (Driver side only)
7. Outside handle bracket
8. Key cylinder rod (Driver side only)
9. Door lock assembly
10. Front door striker
11. Grommet
12. Inside door handle assembly
13. Cap

FRONT DOOR LOCK : Removal and Installation

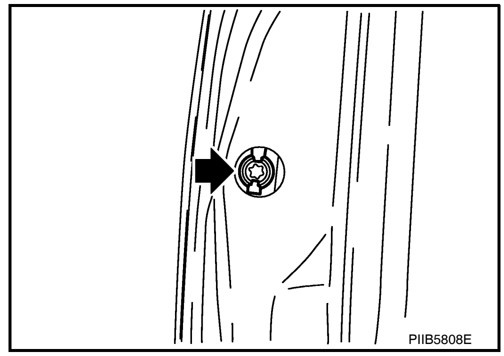
INFOID:0000000004204743

REMOVAL

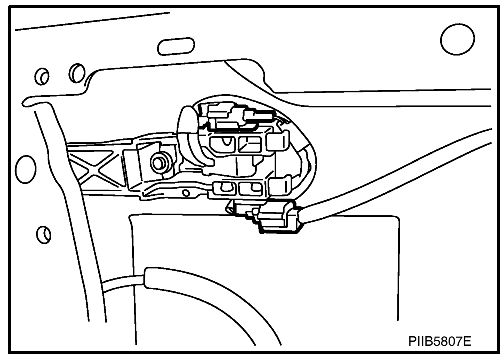
1. Remove the front door finisher. Refer to INT-12, "Removal and Installation".
2. Disconnect the inside handle knob cable and lock knob cable from the back side of the front door finisher.



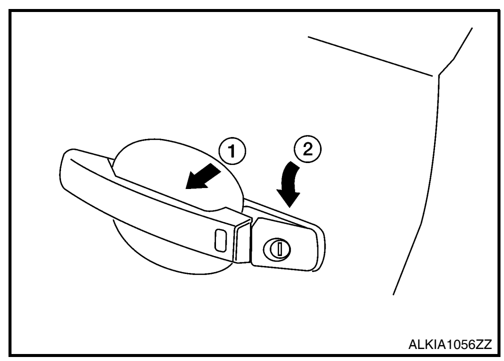
3. Remove the front door window and front door module assembly. Refer to GW-16, "Removal and Installation".
4. Remove door side grommet, and remove door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) bolts (TORX T30) from grommet hole.



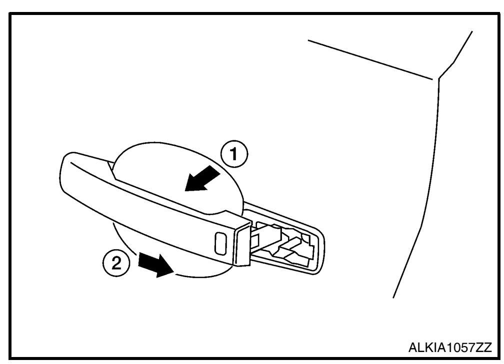
5. Disconnect door antenna and door request switch connector and remove harness clamp.



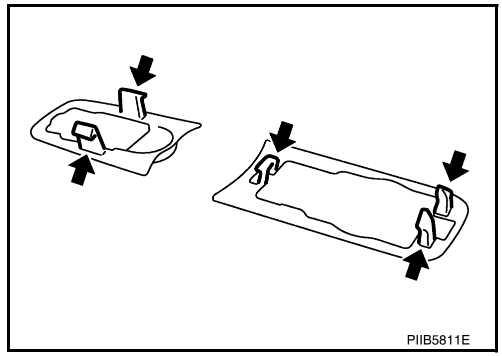
6. Disconnect the key cylinder rod.
7. Disconnect door key cylinder switch harness connector.
8. While pulling the outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).



9. Disconnect front door request switch harness connector.
10. While pulling outside handle, slide toward rear of vehicle to remove outside handle.

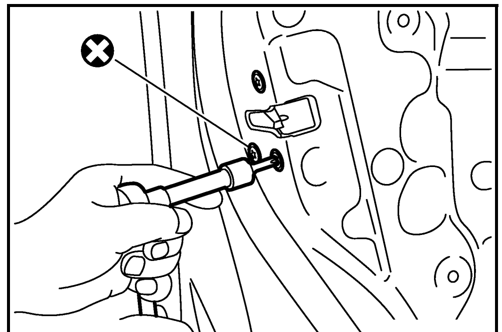


11. Remove the front gasket and rear gasket.



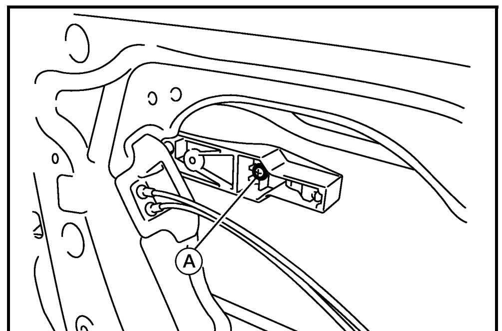
PIIB5811E

12. Remove the TORX bolts (T30), remove the door lock assembly.



PIIB5812E

13. Remove the TORX bolt (T30) (A) from the outside handle bracket.



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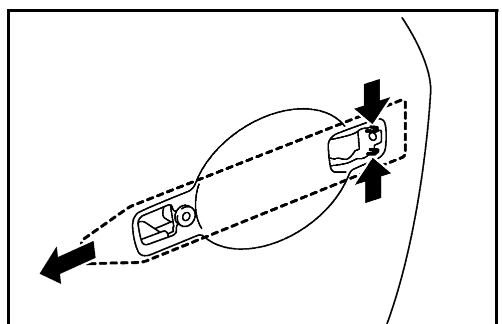
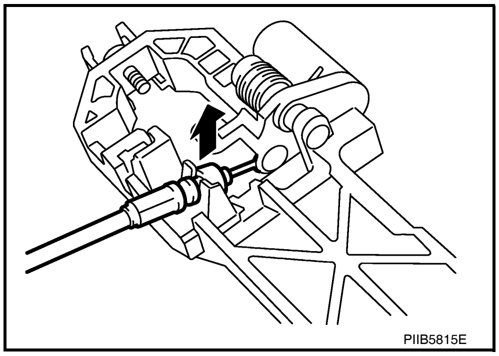
14. While pulling outside handle bracket, slide toward rear of vehicle to remove outside handle bracket.



PIIB5814E

15. Disconnect the door lock actuator connector and remove the door lock assembly.

16. 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 key cylinder rod holder until a click is felt.

TRUNK LID

TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY : Removal and Installation

INFOID:0000000004204744

REMOVAL

1. Remove the trunk lid lock. Refer to DLK-228, "TRUNK LID LOCK : Removal and Installation".
2. Disconnect the harness clips and pull the harness out of the trunk lid.
3. Remove the bolts and the trunk lid assembly.

INSTALLATION

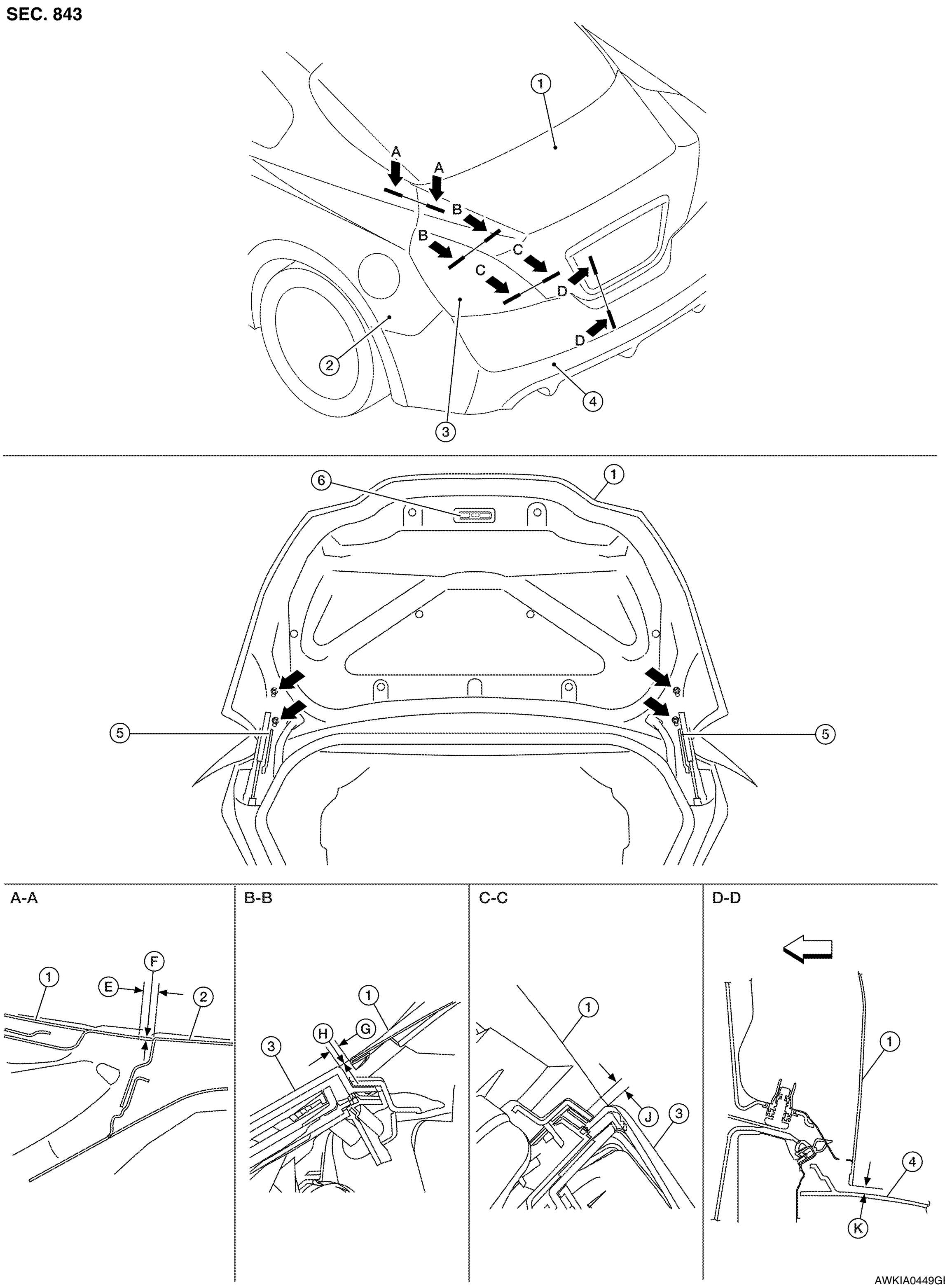
Installation is in the reverse order of removal.

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-227, "TRUNK LID ASSEMBLY : Adjustment".**

TRUNK LID ASSEMBLY : Adjustment

INFOID:0000000004204745



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
⇐	Front				

Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism	Right/Left Difference
A – A	E	Clearance	4.0 ± 1.6 (0.16 ± 0.06)	1.5 (0.06) MAX	2.0 (0.08) MAX
	F	Surface height	-0.5 ± 1.5 (-0.02 ± 0.06)	1.5 (0.06) MAX	2.0 (0.08) MAX
B – B	G	Clearance	4.0 ± 1.5 (0.16 ± 0.06)	1.5 (0.06) MAX	2.0 (0.08) MAX
	H	Surface height	-0.5 ± 1.5 (-0.02 ± 0.06)	1.5 (0.06) MAX	2.0 (0.08) MAX
C – C	J	Clearance	4.0 ± 2.0 (0.16 ± 0.08)	1.5 (0.06) MAX	2.0 (0.08) MAX
D – D	K	Clearance	7.5 ± 2.3 (0.30 ± 0.09)	2.3 (0.09) MAX	—

LONGITUDINAL CLEARANCE

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.

SURFACE HEIGHT ADJUSTMENT

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

TRUNK LID LOCK

TRUNK LID LOCK : Removal and Installation

INFOID:0000000004204746

LOCK

Removal

1. Remove the trunk lid inner trim panel (if equipped). Refer to INT-23, "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-23, "Removal and Installation".
2. Remove the bolts and the striker.

Installation

Installation is in the reverse order of removal.

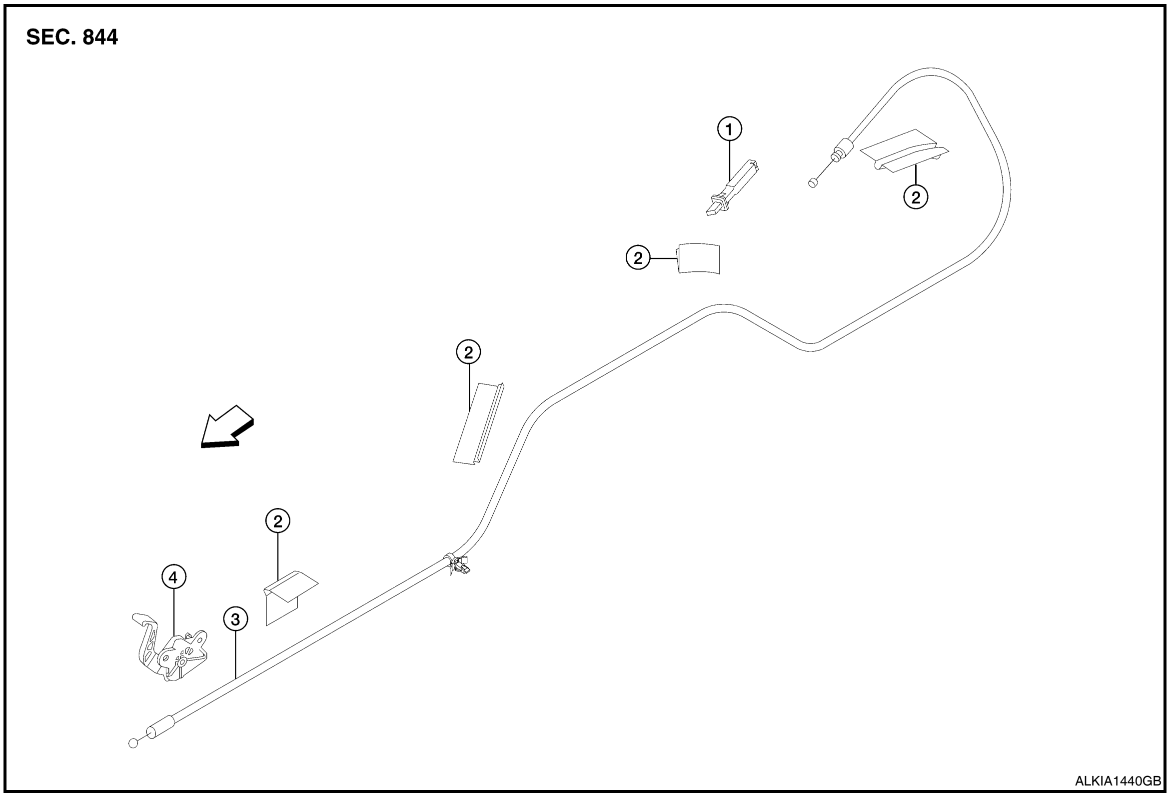
NOTE:

Align the trunk lid lock. Refer to DLK-227, "TRUNK LID ASSEMBLY : Adjustment".

FUEL FILLER LID

Exploded View

INFOID:0000000004458430



1.	Fuel door latch	2.	Cable protector	3.	Fuel door opener cable
4.	Fuel door opener handle	⇐	Front		

Removal and Installation

INFOID:0000000004458431

REMOVAL

1. Remove the front LH kicking plate. Refer to INT-14, "Exploded View".
2. Remove the rear seat. Refer to SE-25, "Removal and Installation".
3. Remove the LH front seat belt anchor. Refer to SB-7, "Exploded View".
4. Remove the LH rear lower finisher. Refer to INT-14, "Exploded View".
5. Position the carpet aside.
6. Remove the LH trunk side finisher. Refer to INT-22, "Exploded View".
7. Remove the fuel door opener handle and disconnect the fuel door opener cable.
8. Remove the fuel door latch and disconnect the fuel door opener cable.
9. Remove the fuel door opener cable.

INSTALLATION

Installation is in the reverse order of removal.

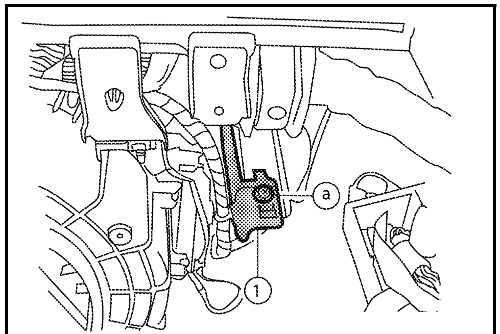
REMOTE KEYLESS ENTRY RECEIVER

Removal

INFOID:0000000004204747

REMOVAL

1. Remove glove compartment. Refer to IP-12, "Removal and Installation".
2. Remove the screw (a), lower the bracket and remote keyless entry receiver (1), then disconnect the harness and remove the reciever.



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Installation

INFOID:0000000004204748

Installation is in the reverse order of removal.

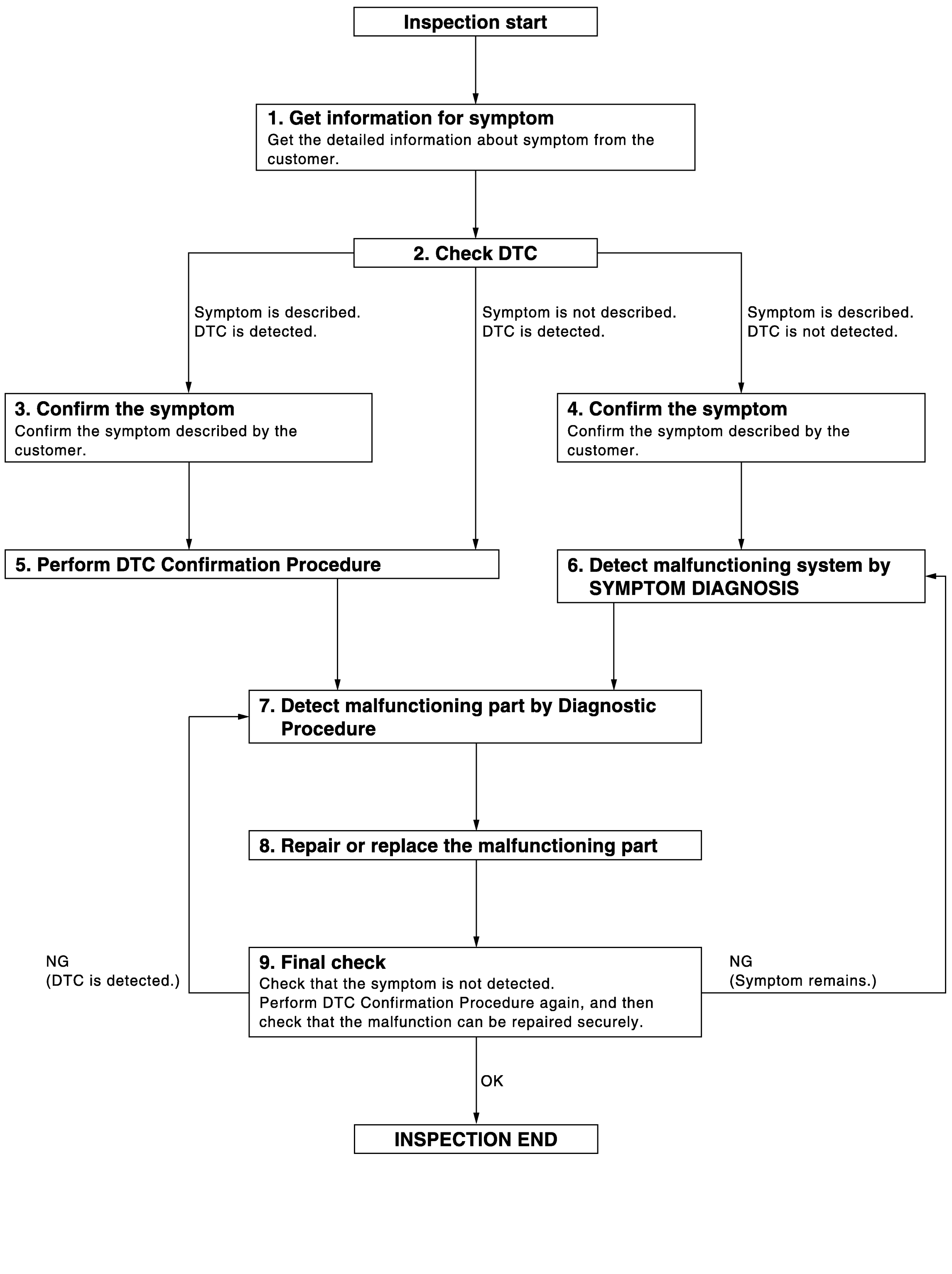
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000004204749

OVERALL SEQUENCE



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-409, "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 7
No >> Refer to GI-42, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

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

>> GO TO 7

7.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 8
NO >> Check voltage of related BCM terminals using CONSULT-III.

8.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 9

9.FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.
When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is the inspection result normal?

NO (DTC is detected)>>GO TO 7
NO (Symptom remains)>>GO TO 6
YES >> Inspection End.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000004204750

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:0000000004204751

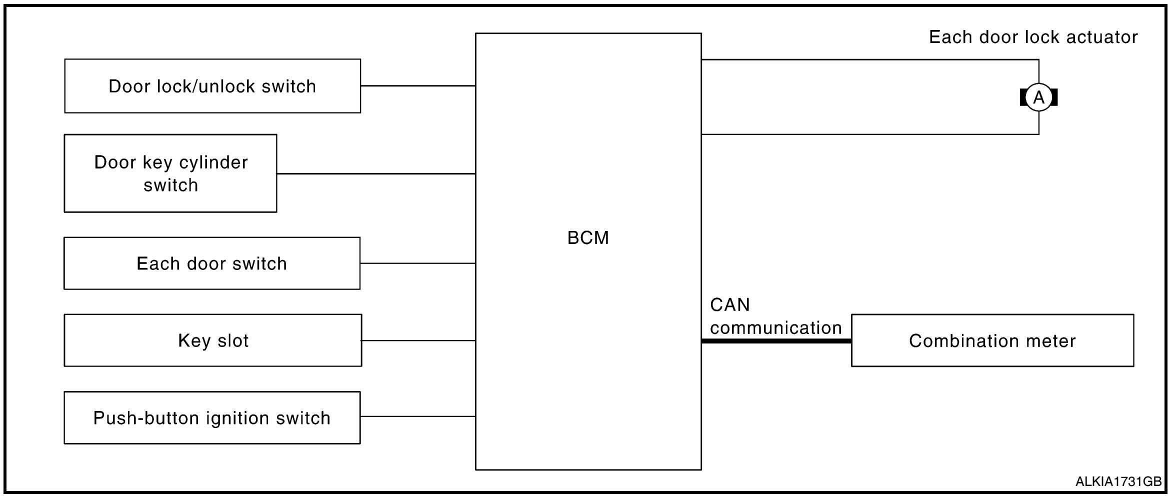
Refer to the CONSULT-III Operation Manual for the initialization procedure.

FUNCTION DIAGNOSIS

AUTOMATIC DOOR LOCKS

System Diagram

INFOID:0000000004466872



System Description

INFOID:0000000004466873

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

DOOR LOCK FUNCTION

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

Door Key Cylinder

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

Selective unlock operation mode can be changed using “DOOR LOCK-UNLOCK SET” mode in “WORK SUPPORT”. Refer to DLK-276, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

AUTOMATIC DOOR LOCKS (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock*1

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

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

Setting change of Automatic Door Locks (LOCK) Function

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

With CONSULT-III

The ON/OFF switching of the automatic door locks (LOCK) function and the type selection of the automatic door locks (LOCK) function can be performed at the WORK SUPPORT setting of CONSULT-III. Refer to DLK-276, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Without CONSULT- III

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

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

OFF → ON	: 2 blinks
ON → OFF	: 1 blink

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

AUTOMATIC DOOR LOCKS (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock*1

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

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

Setting change of Automatic Door Locks (UNLOCK) Function

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

With CONSULT- III

The ON/OFF switching of the automatic door locks (UNLOCK) function and the type selection of the automatic door locks (UNLOCK) function can be performed at the WORK SUPPORT setting of CONSULT-III. Refer to DLK-276, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Without CONSULT- III

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

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

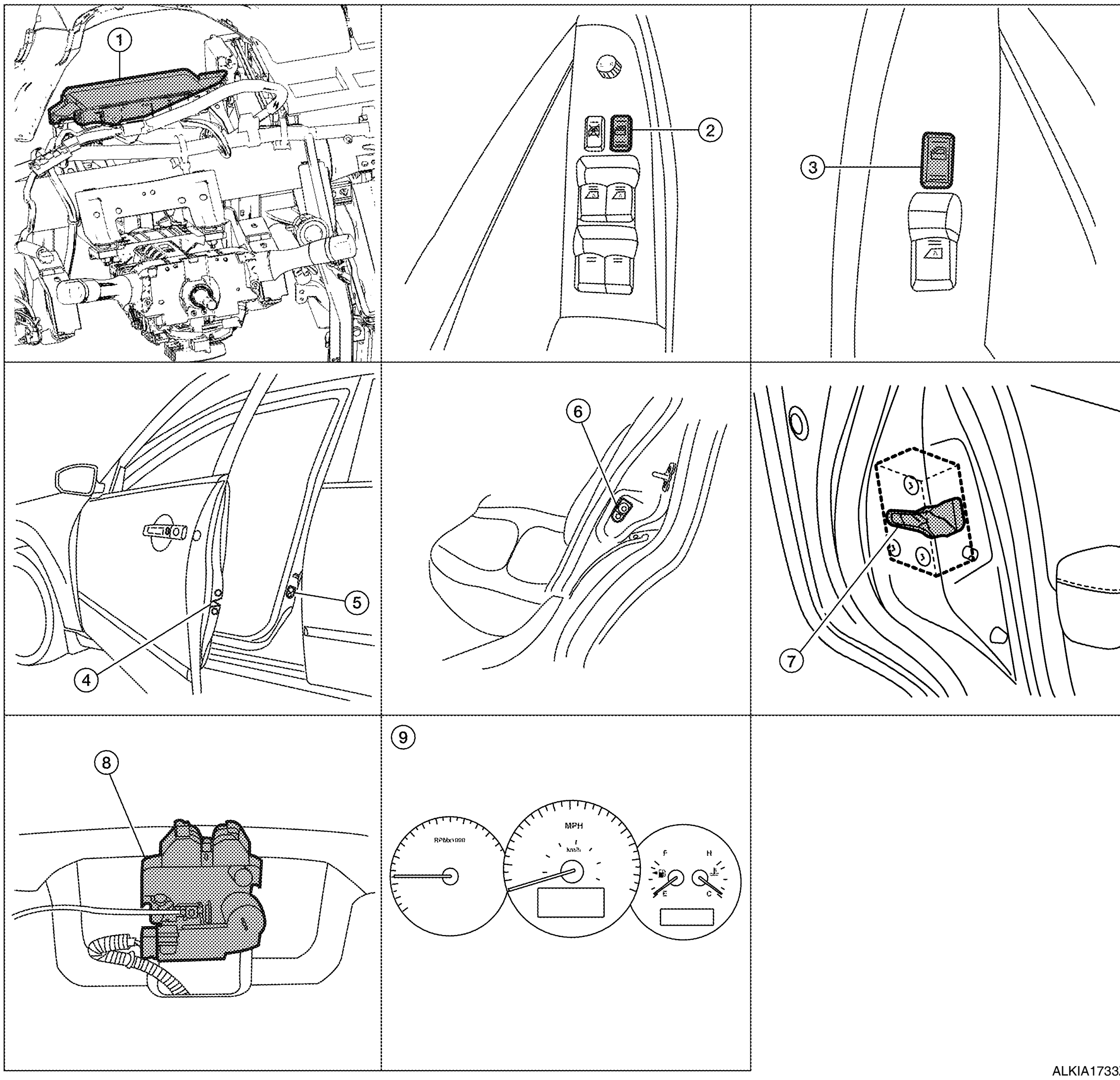
OFF → ON	: 2 blinks
ON → OFF	: 1 blink

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

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

Component Parts Location

INFOID:0000000004466874



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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
9. Combination meter M24

Component Description

INFOID:0000000004466875

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

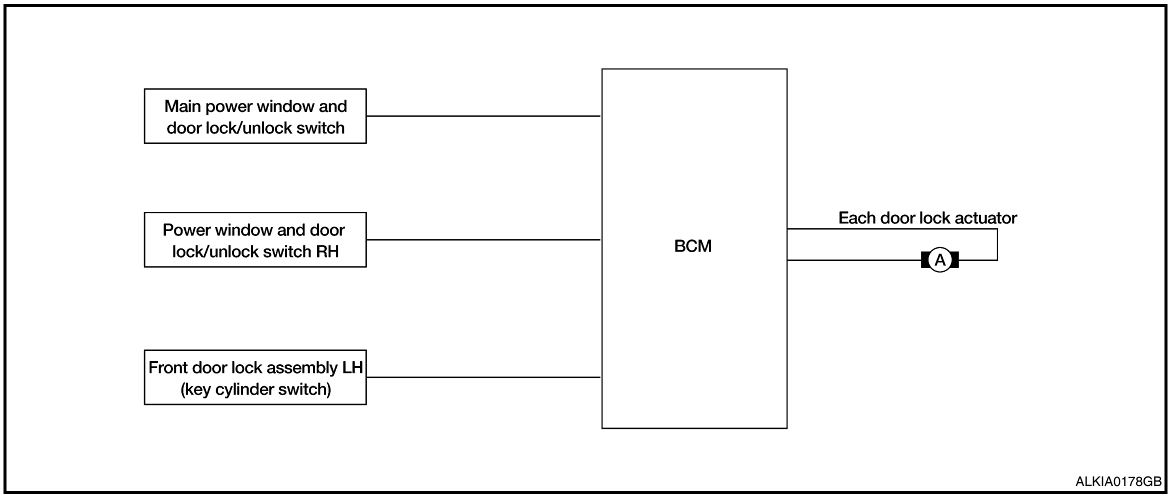
Item	Function
Key slot	Input key insert/remove signal to BCM.
Combination meter	• Receive buzzer signal from BCM via CAN communication line, and sounds the buzzer. • Transmits vehicle speed signal to CAN communication line.
Push-button ignition switch	Input push-button ignition switch ON/OFF condition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

DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000004204752



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000004204753

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.

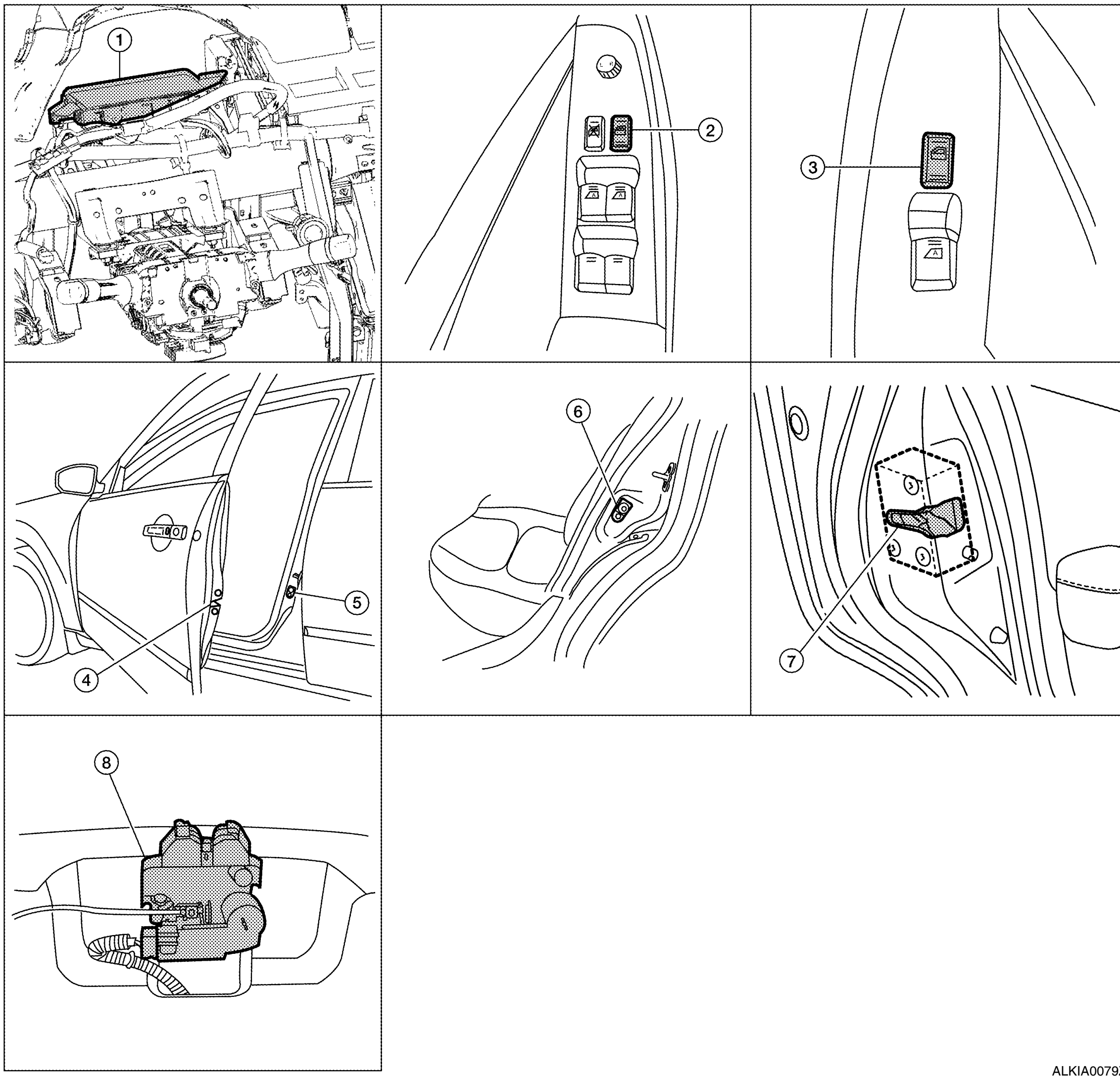
Select unlock operation mode can be changed using DOOR LOCK-UNLOCK SET mode in “WORK SUPPORT”. Refer to DLK-276, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Key Reminder System

Refer to DLK-271, "System Description".

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:0000000004204754



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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

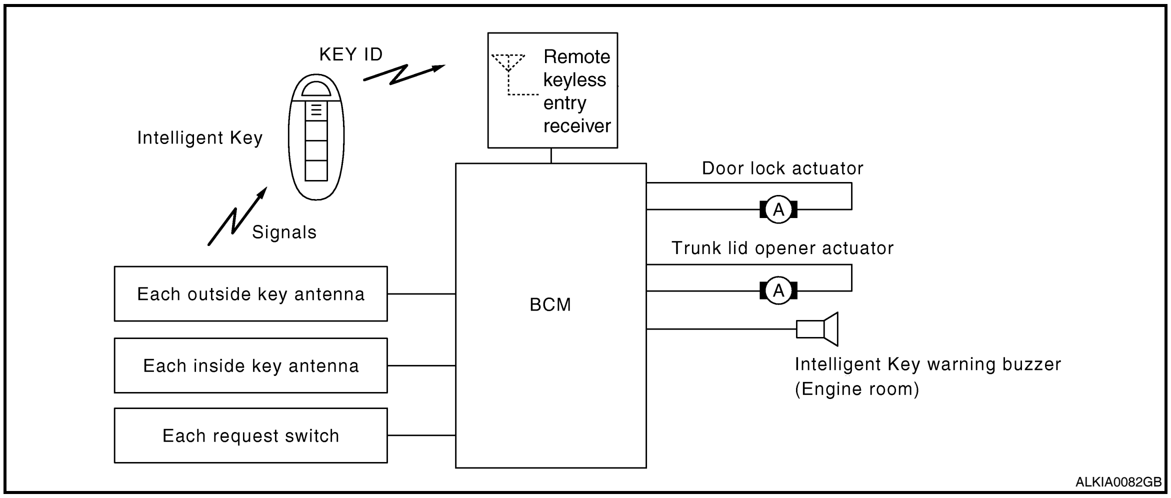
INFOID:0000000004204755

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:0000000004204756



DOOR REQUEST SWITCH : System Description

INFOID:0000000004204757

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

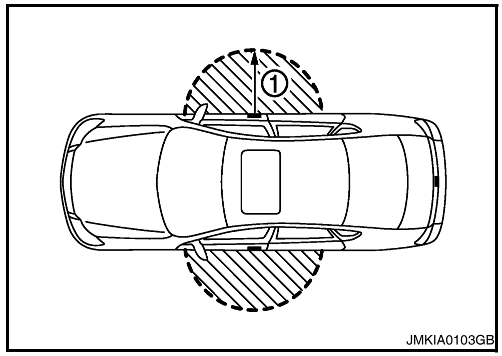
If the following conditions are not satisfied, door lock/unlock operation is not performed even if the request switch is operated.

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-276, "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-276, "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-239, "DOOR LOCK AND UNLOCK SWITCH : System Description".

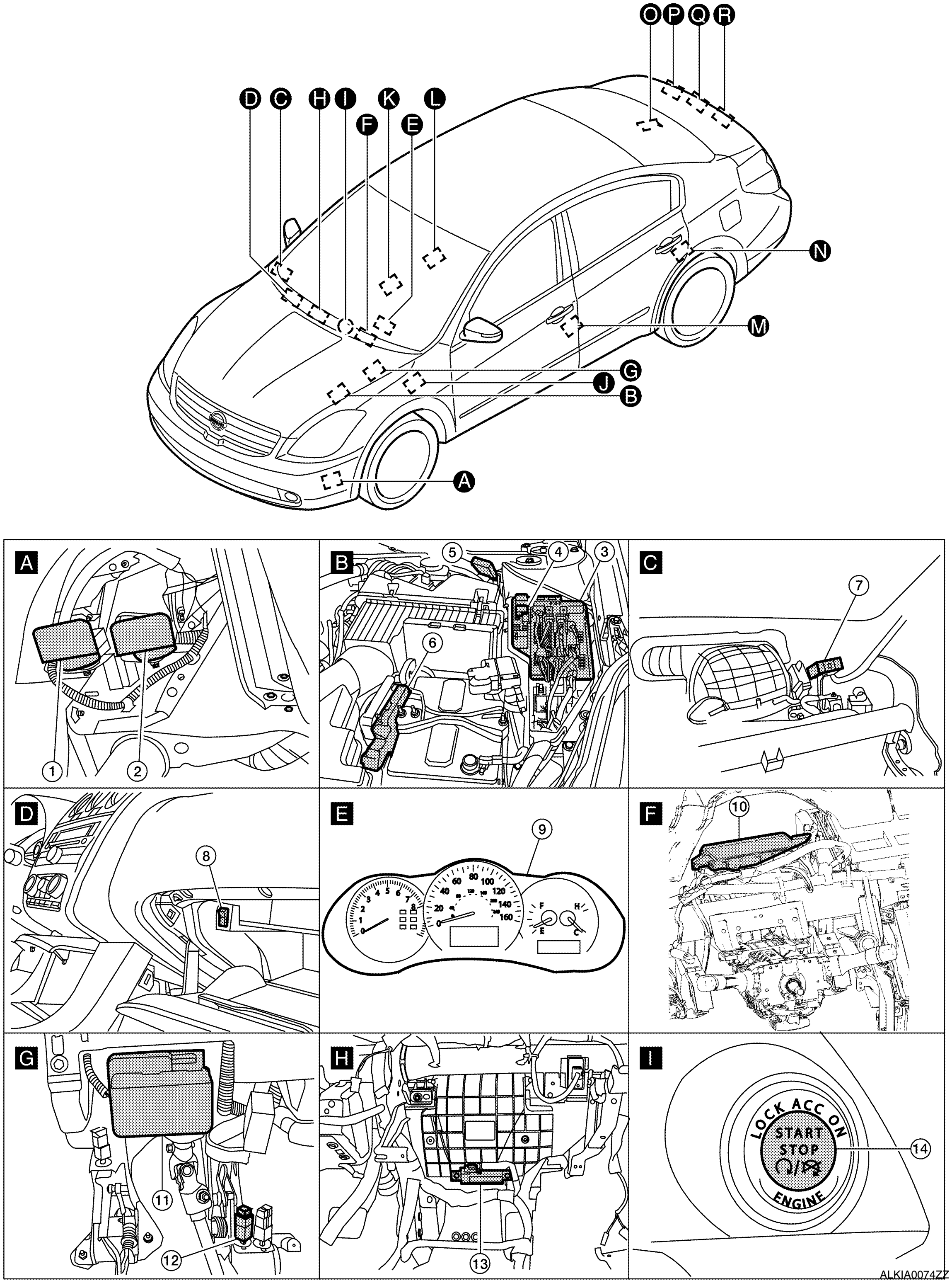
LIST OF OPERATION RELATED PARTS

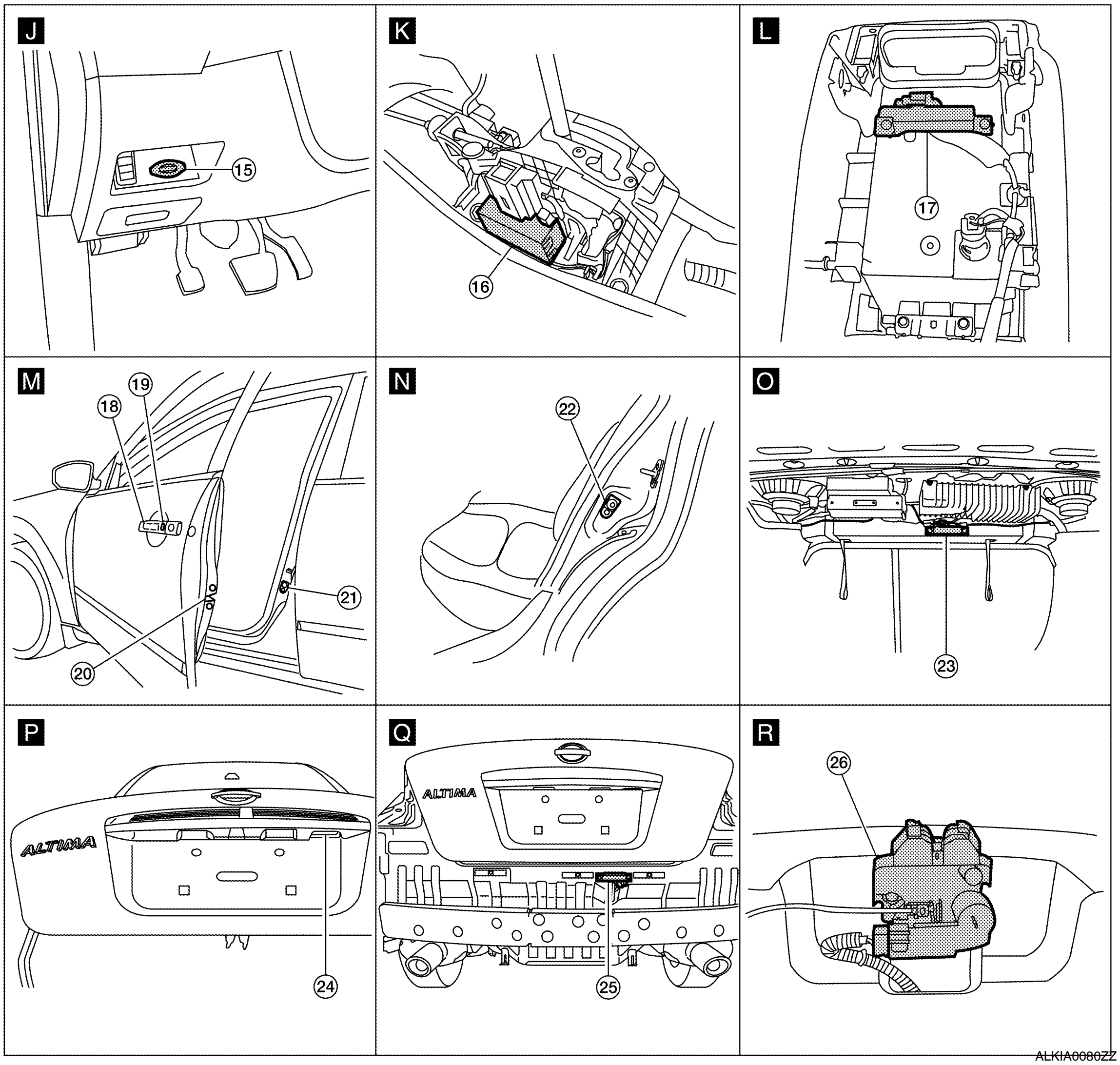
Parts marked with × are the parts related to operation.

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:0000000004204758





1.	Horn (low) E215 (view with front fender protector LH removed)	2.	Horn (high) E216	3.	IPDM E/R E17, E18
4.	Horn relay H-1	5.	Intelligent Key warning buzzer E73	6.	ECM
7.	Remote keyless entry receiver M27 (view with instrument panel removed)	8.	Trunk lid opener cancel switch M74	9.	Combination meter M24
10.	BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)	11.	Electronic steering column lock M32 (view with instrument panel LH removed)	12.	Stop lamp switch E38
13.	Instrument panel antenna M49 (view with center console assembly removed)	14.	Push button ignition switch M38	15.	Key slot M40
16.	CVT device (detent switch)	17.	Front console antenna M203 (view with center console assembly removed)	18.	Front outside handle LH (outside key antenna) D6 Front outside handle RH (outside key antenna) D106
19.	Front outside handle LH (request switch) D6 Front outside handle RH (request switch) D106	20.	Front door lock assembly LH D10 Front door lock actuator RH D108	21.	Front door switch LH B8 RH B108
22.	Rear door switch LH B18 RH B116	23.	Rear parcel shelf antenna B29	24.	Trunk opener request switch B33
25.	Rear bumper antenna B46	26.	Trunk lamp switch and trunk release solenoid B28		

DOOR REQUEST SWITCH : Component Description

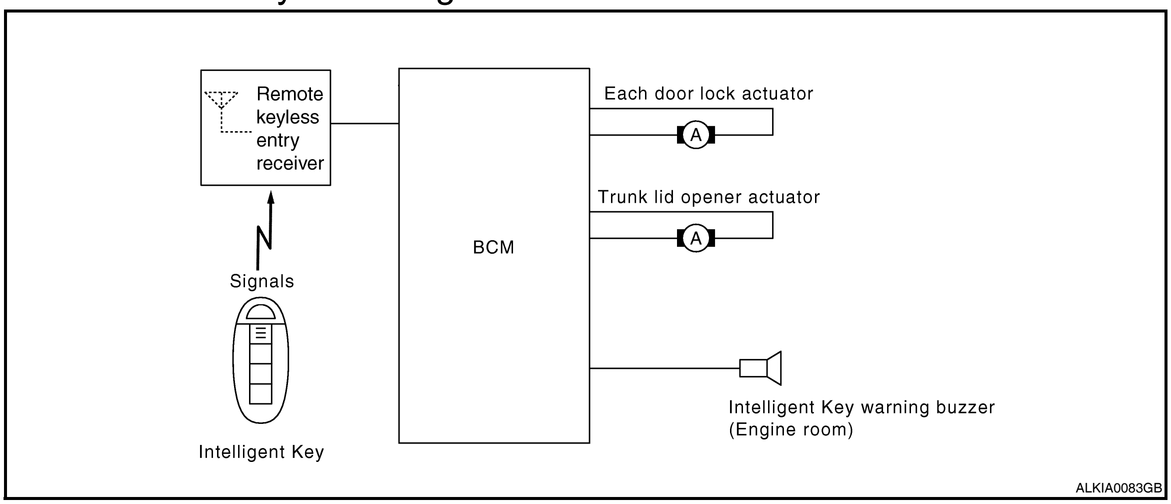
INFOID:0000000004204759

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:0000000004204760



INTELLIGENT KEY : System Description

INFOID:0000000004204761

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: 1 time) as a reminder

OPERATION CONDITION

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

OPERATION AREA

- Operating Range

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

SELECTIVE UNLOCK FUNCTION

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

HAZARD AND HORN REMINDER FUNCTION

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

Operating function of hazard and horn reminder

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

Hazard and horn reminder 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-276, "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 60 seconds, all doors are locked.

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

Auto door lock mode can be changed by DOOR LOCK-UNLOCK SET mode in “WORK SUPPORT”. Refer to DLK-276, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

PANIC ALARM FUNCTION

When ignition switch is OFF (ignition switch is not pressed) and key switch is OFF (Intelligent Key is not inserted in key slot), BCM receives PANIC ALARM signal from Intelligent Key.
BCM turns on and off headlamp intermittently and transmits theft warning horn signal to IPDM E/R. Then, 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-276, "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-276, "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-246, "INTELLIGENT KEY : System Description".

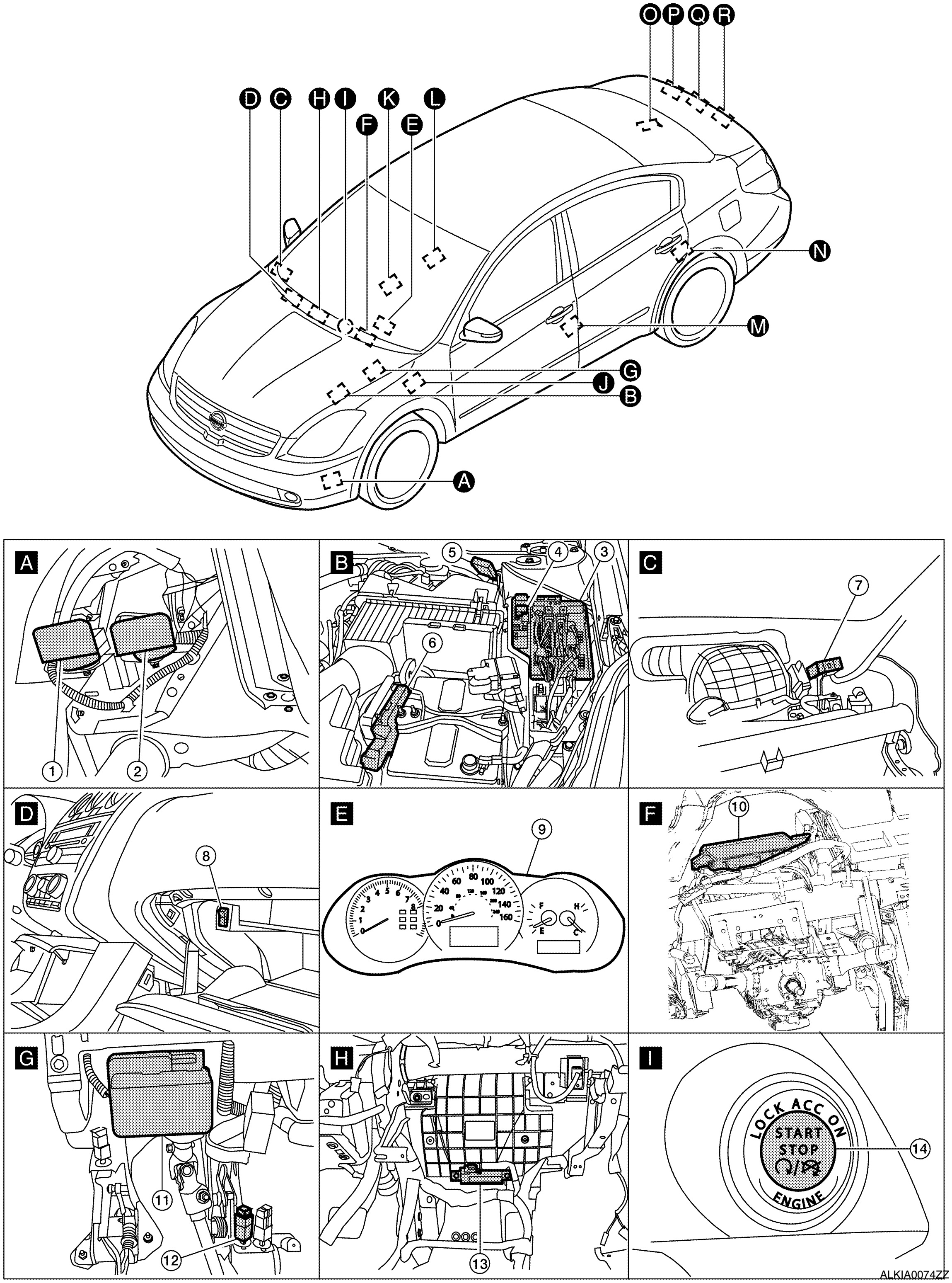
LIST OF OPERATION RELATED PARTS

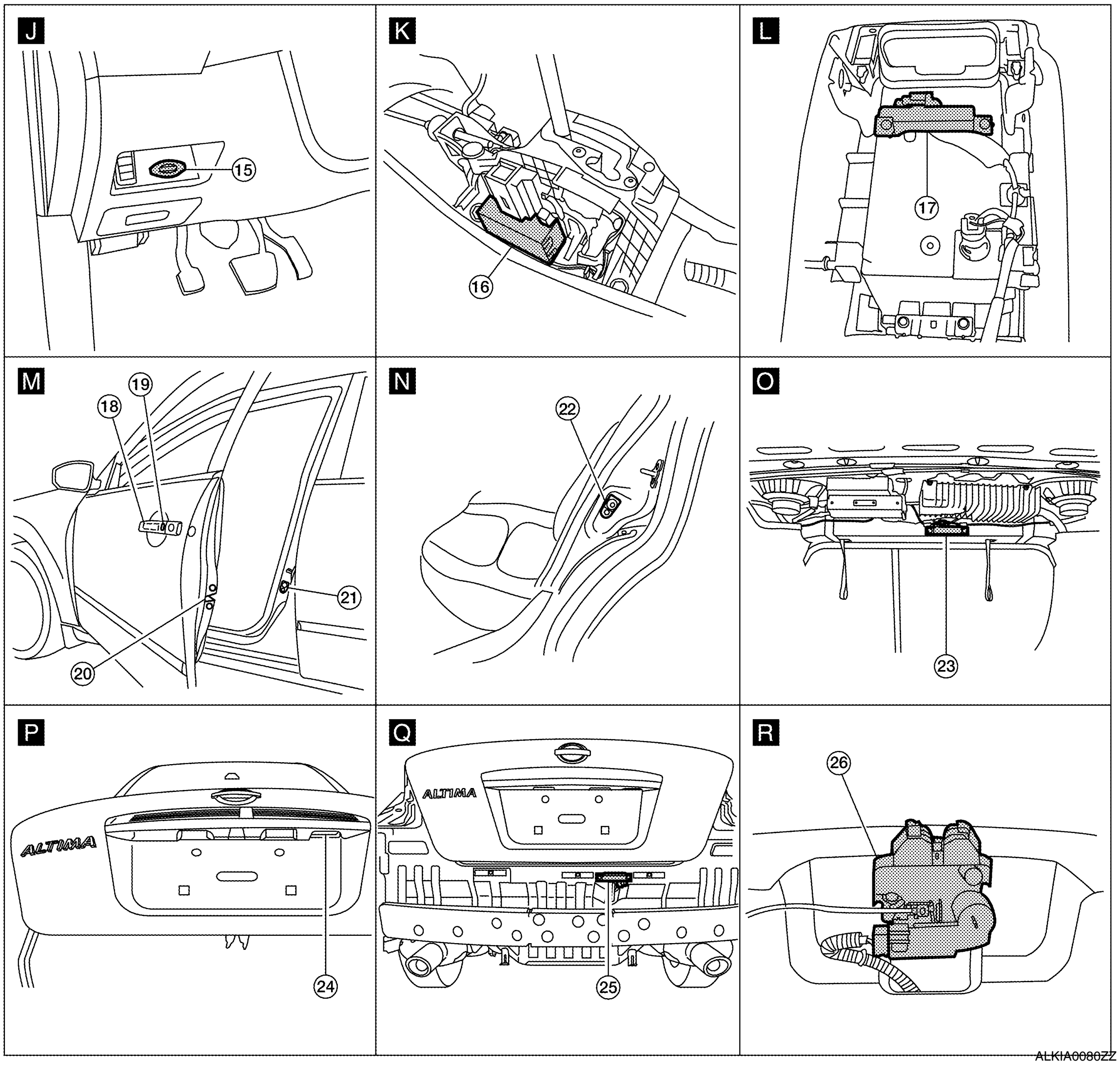
Parts marked with × are the parts related to operation.

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:0000000004496036





1. Horn (low) E215 (view with front fender protector LH removed)
2. Horn (high) E216
3. IPDM E/R E17, E18
4. Horn relay H-1
5. Intelligent Key warning buzzer E73
6. ECM
7. Remote keyless entry receiver M27 (view with instrument panel removed)
8. Trunk lid opener cancel switch M74
9. Combination meter M24
10. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
11. Electronic steering column lock M32 (view with instrument panel LH removed)
12. Stop lamp switch E38
13. Instrument panel antenna M49 (view with center console assembly removed)
14. Push button ignition switch M38
15. Key slot M40
16. CVT device (detent switch)
17. Front console antenna M203 (view with center console assembly removed)
18. Front outside handle LH (outside key antenna) D6
    Front outside handle RH (outside key antenna) D106
19. Front outside handle LH (request switch) D6
    Front outside handle RH (request switch) D106
20. Front door lock assembly LH D10
    Front door lock actuator RH D108
21. Front door switch LH B8
    RH B108
22. Rear door switch LH B18
    RH B116
23. Rear parcel shelf antenna B29
24. Trunk opener request switch B33
25. Rear bumper antenna B46
26. Trunk lamp switch and trunk release solenoid B28

INTELLIGENT KEY : Component Description

INFOID:0000000004204763

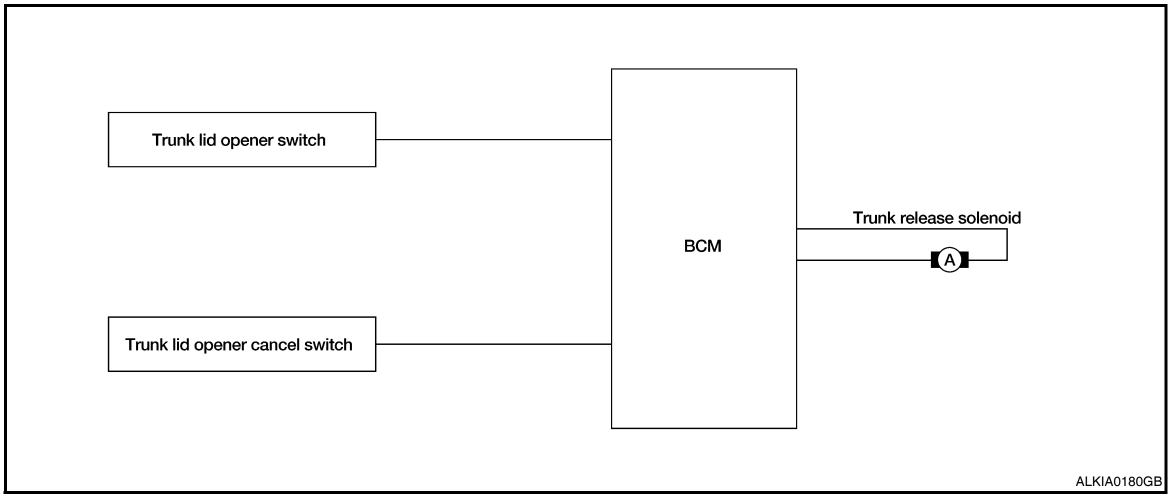
Item	Function
BCM	Controls the door lock function and room lamp function.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.
Remote keyless entry receiver	Receives lock/unlock signal from the Intelligent Key, and then transmits to BCM.
Intelligent Key	Transmits button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

TRUNK OPEN FUNCTION

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : System Diagram

INFOID:0000000004204764



TRUNK LID OPENER SWITCH : System Description

INFOID:0000000004204765

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

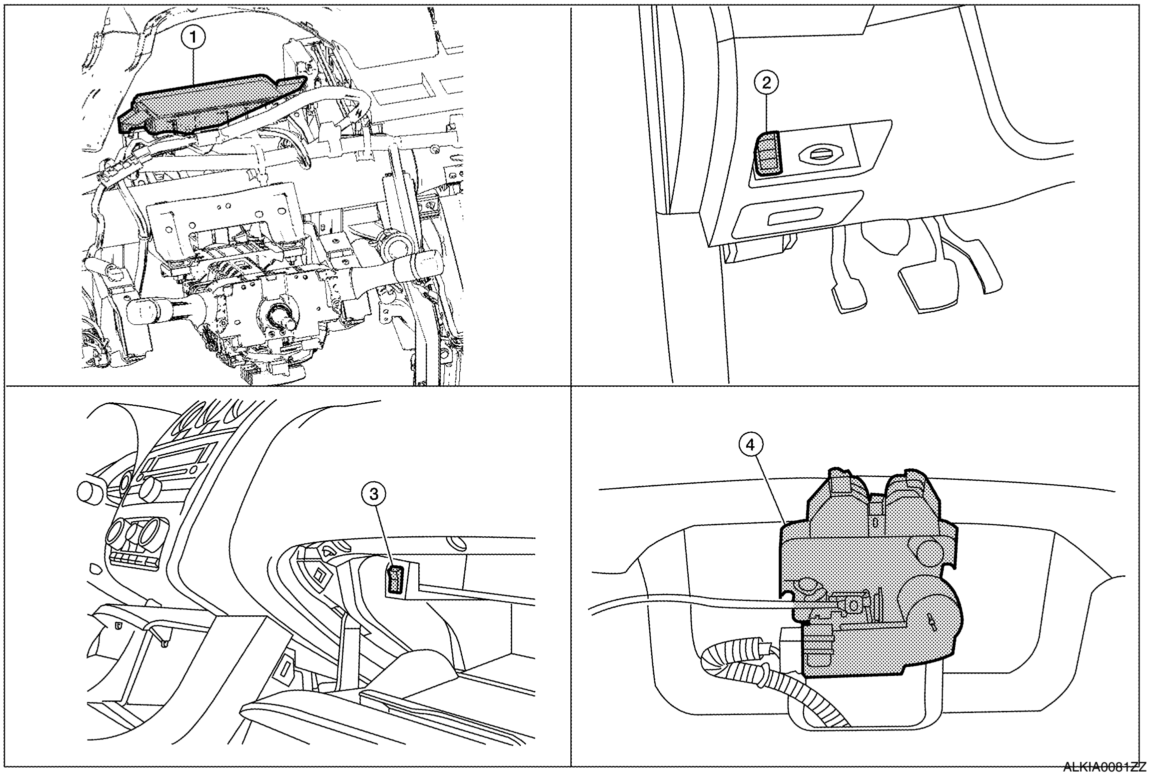
- vehicle speed is less than 5 km/h (3MPH)
- vehicle security system is disarmed or pre-armed phase

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

TRUNK LID OPENER SWITCH : Component Parts Location

INFOID:0000000004204766



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

TRUNK LID OPENER SWITCH : Component Description

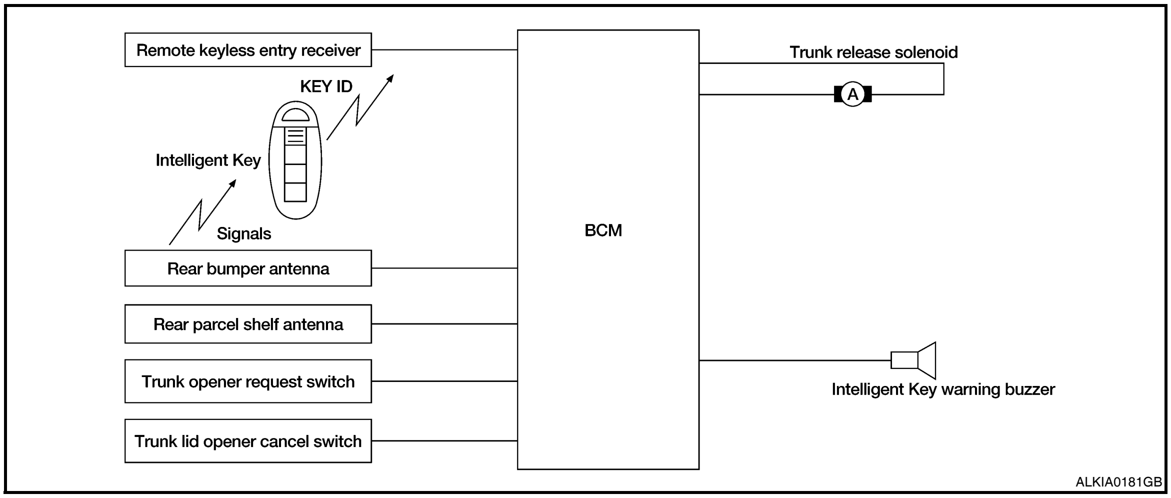
INFOID:0000000004204767

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:0000000004204768



TRUNK REQUEST SWITCH : System Description

INFOID:0000000004204769

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 trunk is opened 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

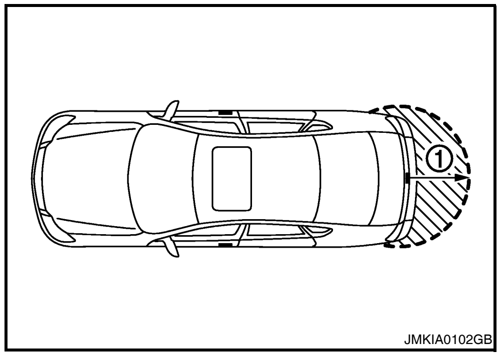
If the following conditions are not satisfied, trunk open operation is not performed even if the request switch is operated.

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 • Sound Intelligent Key warning buzzer

*:If the door closing impact shocks the door lock knob, or contacts against baggage with the door lock knob, it 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.**
- **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 sound as a reminder.
When trunk open by each request switch, IPDM E/R sounds 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 sounds
Trunk open	—	Four times

How to change hazard and buzzer reminder mode

With CONSULT-III

Refer to DLK-276, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

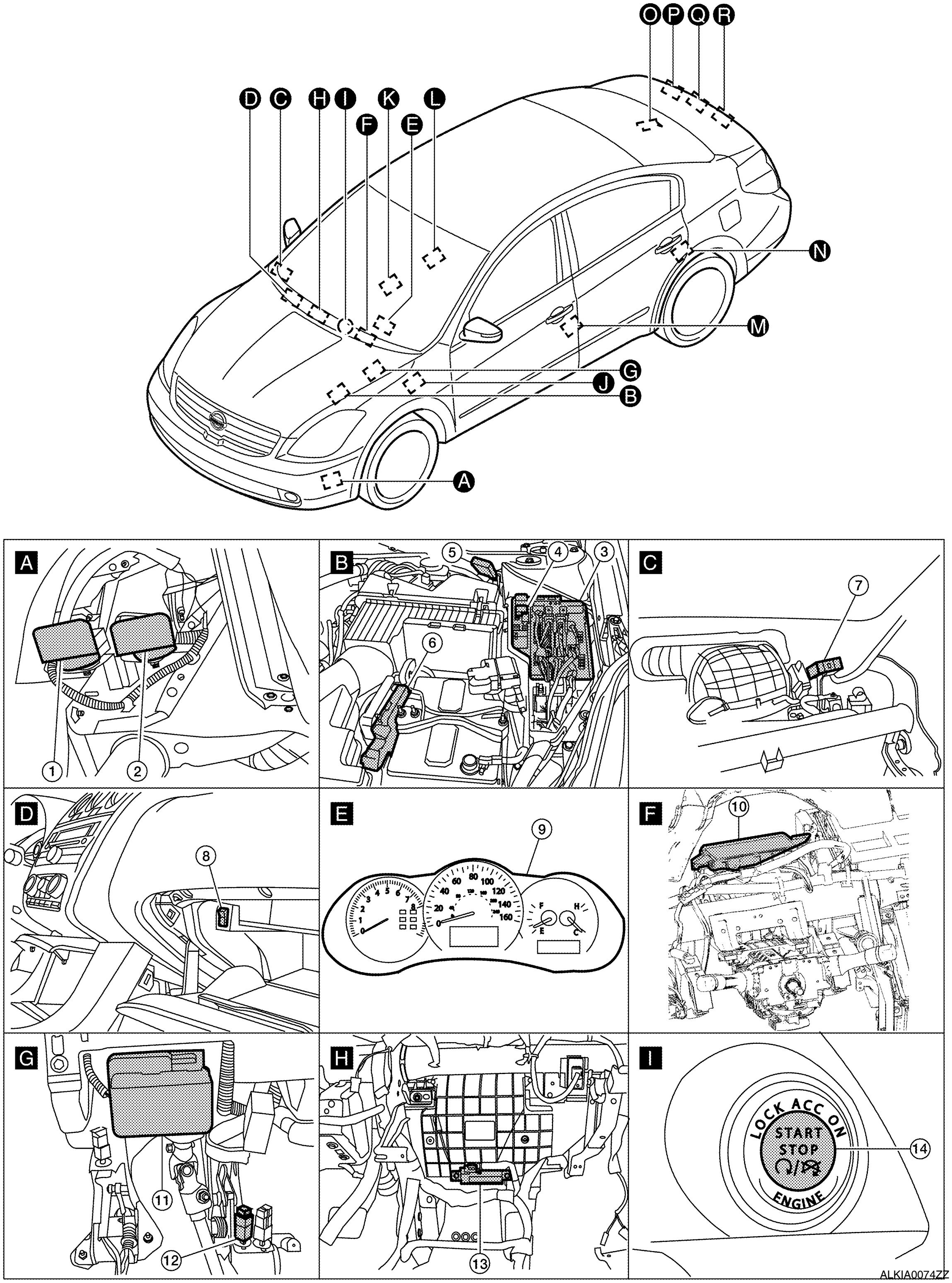
LIST OF OPERATION RELATED PARTS

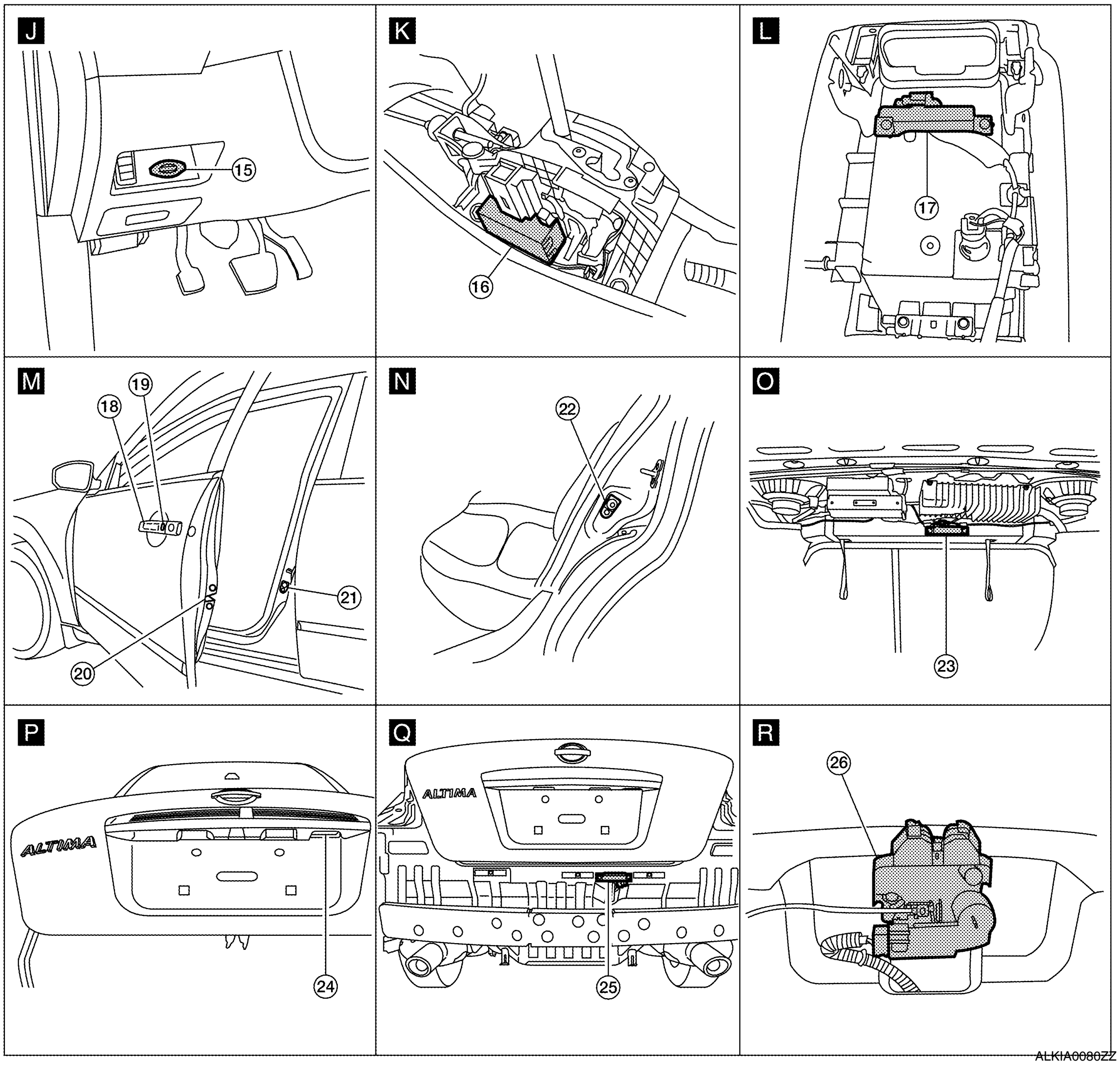
Parts marked with × are the parts related to operation.

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:0000000004496037





1. Horn (low) E215 (view with front fender protector LH removed)
2. Horn (high) E216
3. IPDM E/R E17, E18
4. Horn relay H-1
5. Intelligent Key warning buzzer E73
6. ECM
7. Remote keyless entry receiver M27 (view with instrument panel removed)
8. Trunk lid opener cancel switch M74
9. Combination meter M24
10. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
11. Electronic steering column lock M32 (view with instrument panel LH removed)
12. Stop lamp switch E38
13. Instrument panel antenna M49 (view with center console assembly removed)
14. Push button ignition switch M38
15. Key slot M40
16. CVT device (detent switch)
17. Front console antenna M203 (view with center console assembly removed)
18. Front outside handle LH (outside key antenna) D6
    Front outside handle RH (outside key antenna) D106
19. Front outside handle LH (request switch) D6
    Front outside handle RH (request switch) D106
20. Front door lock assembly LH D10
    Front door lock actuator RH D108
21. Front door switch LH B8
    RH B108
22. Rear door switch LH B18
    RH B116
23. Rear parcel shelf antenna B29
24. Trunk opener request switch B33
25. Rear bumper antenna B46
26. Trunk lamp switch and trunk release solenoid B28

TRUNK REQUEST SWITCH : Component Description

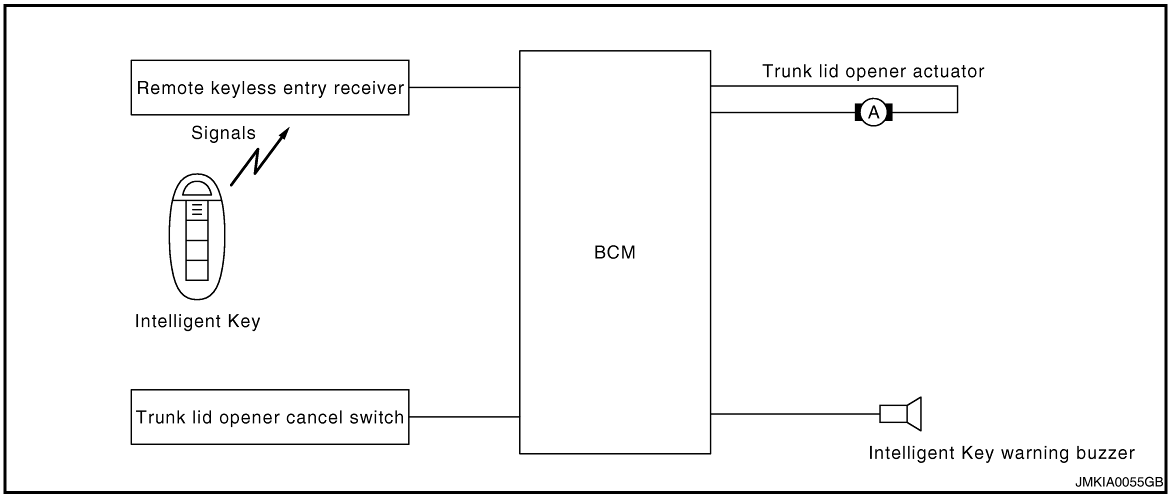
INFOID:0000000004204771

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:0000000004204772



INTELLIGENT KEY : System Description

INFOID:0000000004204773

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

OPERATION DESCRIPTION/TRUNK OPEN FUNCTION

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

OPERATION CONDITION

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

OPERATION AREA

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

HAZARD AND HORN REMINDER FUNCTION

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-276, "INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)".

Without CONSULT-III

Refer to Owner's Manual for instructions.

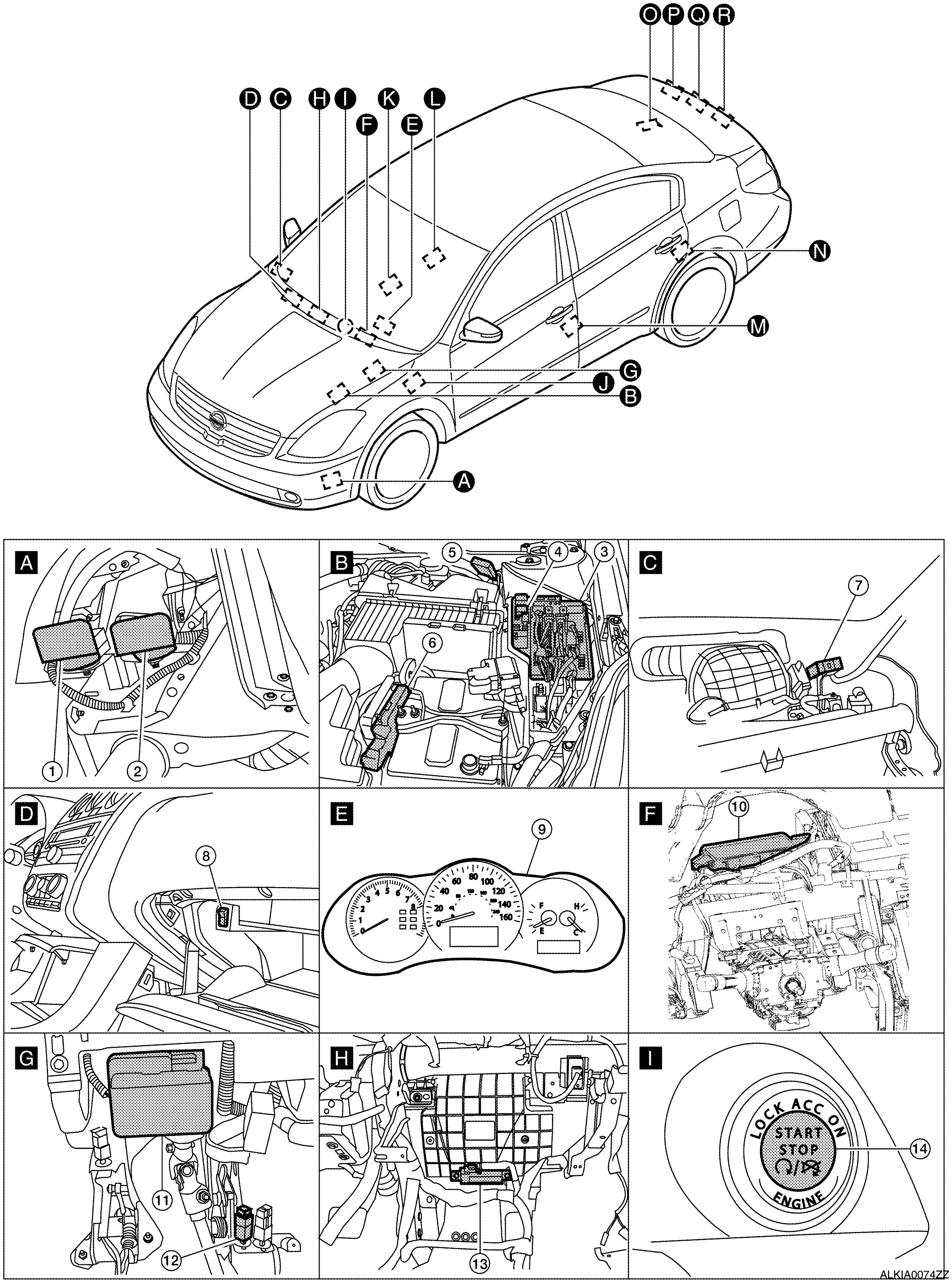
LIST OF OPERATION RELATED PARTS

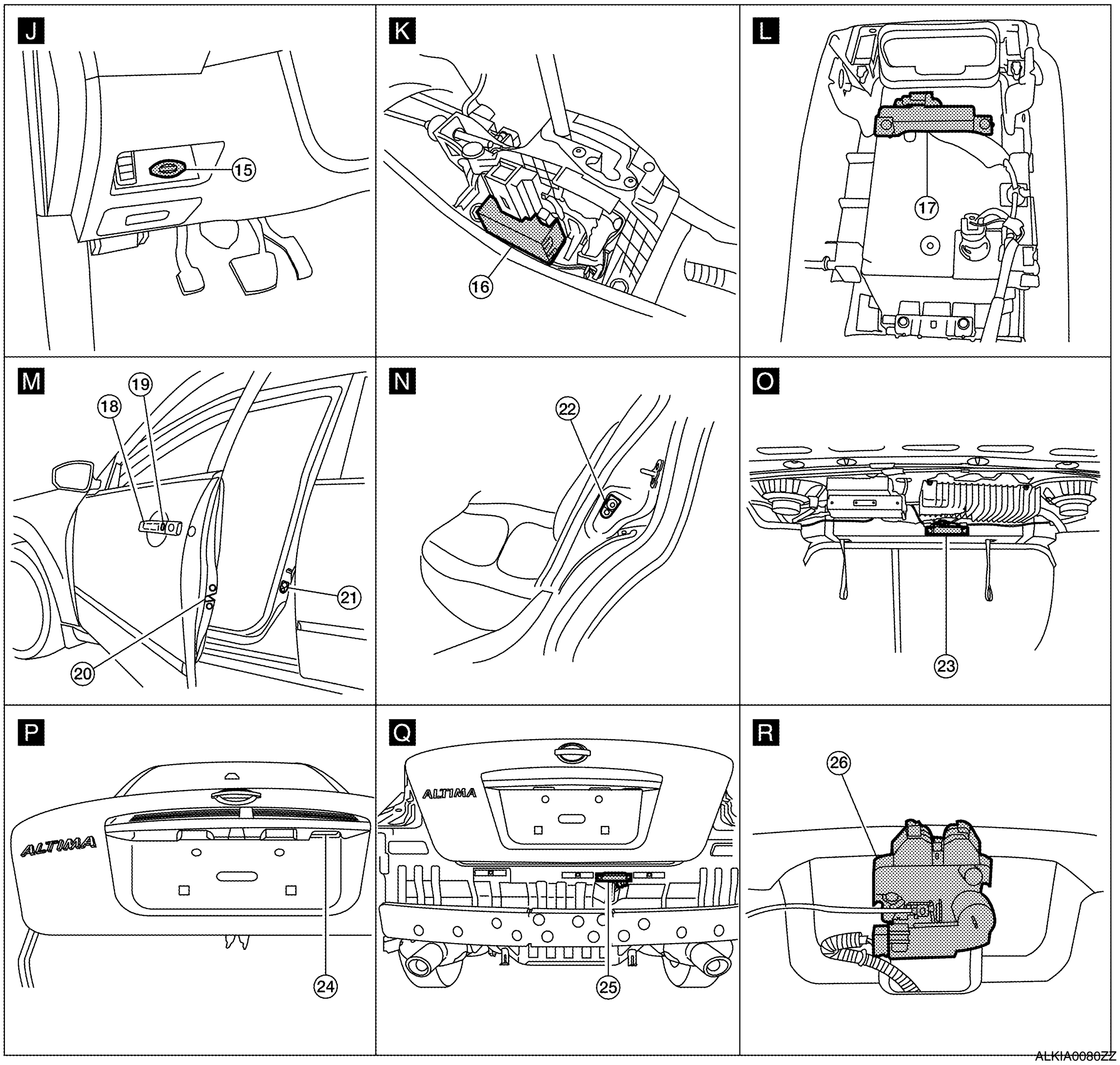
Parts marked with × are the parts related to operation.

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
Trunk open function by remote control button	×	×	×	×		×	×				
Hazard and horn reminder function	×				×	×	×	×	×	×	×

INTELLIGENT KEY : Component Parts Location

INFOID:0000000004496038





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   (view with front fender protector LH removed)
2. Horn (high) E216
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4. Horn relay H-1
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    RH B108
22. Rear door switch LH B18
    RH B116
23. Rear parcel shelf antenna B29
24. Trunk opener request switch B33
25. Rear bumper antenna B46
26. Trunk lamp switch and trunk release solenoid B28

INTELLIGENT KEY : Component Description

INFOID:0000000004204775

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:0000000004204776

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

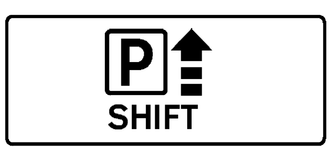
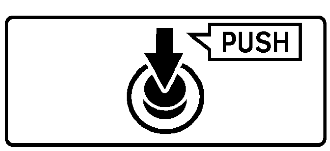
Once the following condition from below is established, alert or warning will be executed.

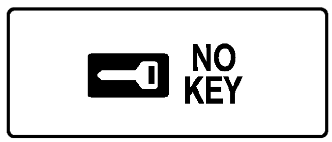
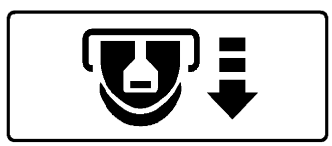
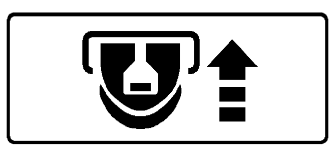
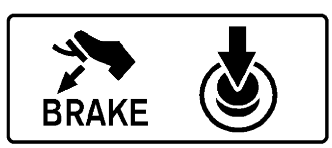
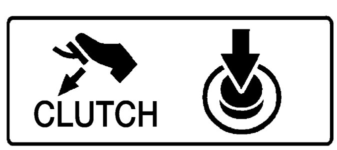
Warning/Information functions		Operation procedure
Intelligent Key system malfunction		When a malfunction is detected on BCM, “KEY” warning lamp will illuminate.
OFF position warning	For internal	• Ignition switch: ACC position. • Door switch (driver side): ON (Door is open).
	For external	OFF position 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.

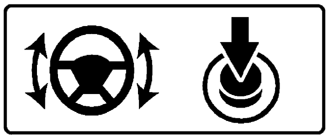
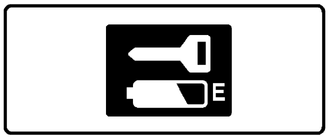
Warning/Information functions		Operation procedure
Door lock operation warning	Request switch operation	When request switch is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • Intelligent Key is inside vehicle.
	Intelligent Key button operation	When Intelligent 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	—

<table>
<tr><th colspan="2" rowspan="2">Warning/Information functions</th><th rowspan="2">“KEY” warning lamp</th><th rowspan="2">Combination meter display</th><th rowspan="2">Key slot illumination</th><th colspan="2">Warning chime</th></tr>
<tr><th>Combination meter buzzer</th><th>Intelligent Key warning buzzer</th></tr>
<tr><td rowspan="5">Take away warning</td><td>Door is open to close</td><td>—</td><td rowspan="5">JMKIA0036GB</td><td>Flash</td><td>Activate</td><td>Activate</td></tr>
<tr><td>Door is open</td><td>—</td><td>Flash</td><td>—</td><td>—</td></tr>
<tr><td>Push-ignition switch operation</td><td>—</td><td>Flash</td><td>Activate</td><td>—</td></tr>
<tr><td>Take away through window</td><td>—</td><td>Flash</td><td>Activate</td><td>—</td></tr>
<tr><td>Intelligent Key is removed from key slot</td><td>—</td><td>Flash</td><td>—</td><td>—</td></tr>
<tr><td rowspan="2">Door lock operation warning</td><td>Request switch operation</td><td>—</td><td>—</td><td>—</td><td>—</td><td>Activate</td></tr>
<tr><td>Intelligent Key operation</td><td>—</td><td>—</td><td>—</td><td>—</td><td>Activate</td></tr>
<tr><td colspan="2">Key ID warning</td><td>—</td><td>JMKIA0036GB</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td colspan="2">Key warning</td><td>—</td><td>JMKIA0035GB</td><td>Flash</td><td>Activate</td><td>—</td></tr>
<tr><td colspan="2">Intelligent Key insert information</td><td>—</td><td>JMKIA0034GB</td><td>Flash</td><td>—</td><td>—</td></tr>
<tr><td rowspan="2">Engine start information</td><td>Automatic transmission models</td><td>—</td><td>JMKIA0032GB</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td>Manual transmission models</td><td>—</td><td>ALKIA1326GB</td><td>—</td><td>—</td><td>—</td></tr>
</table>

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

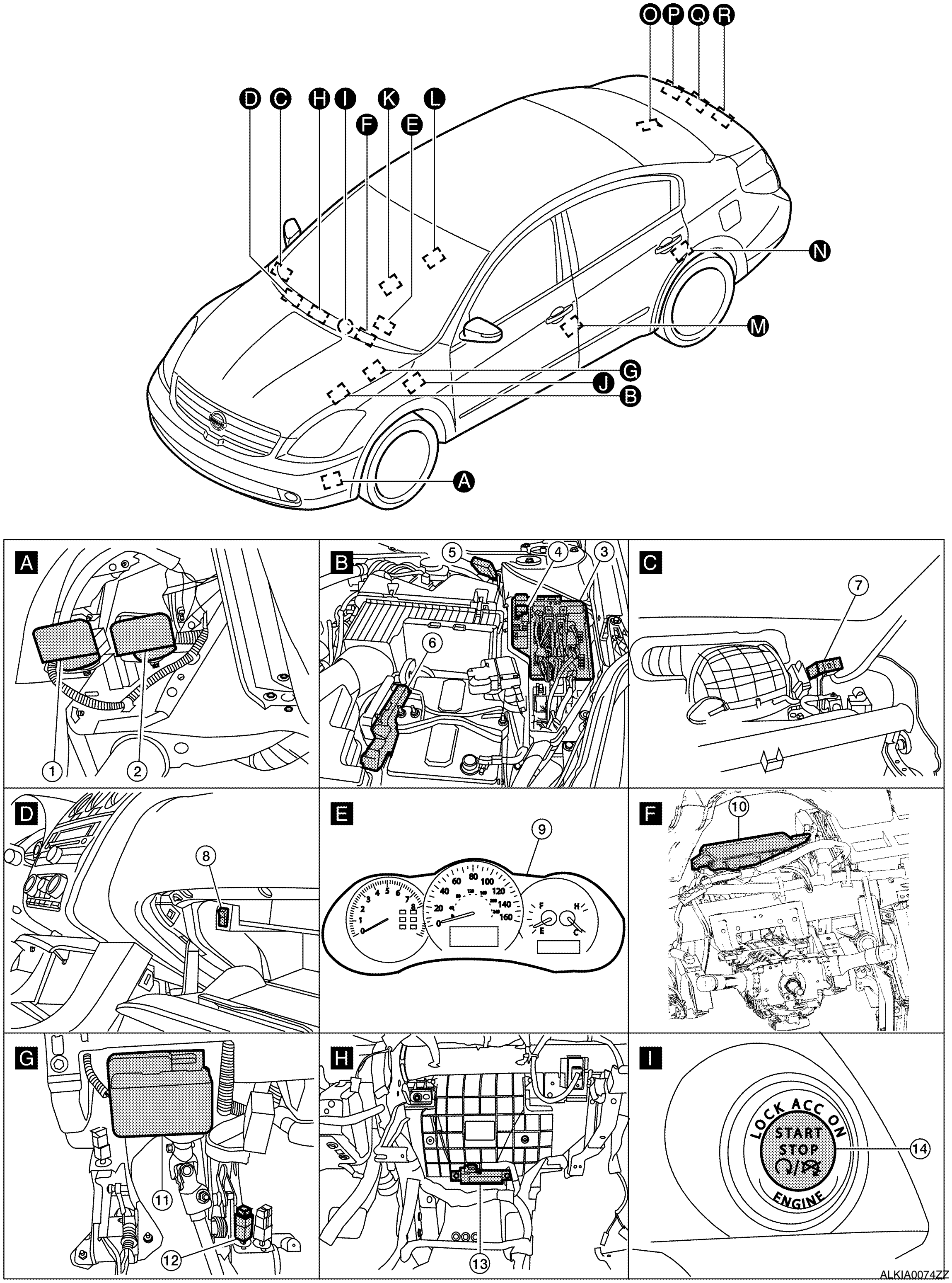
Parts marked with × are the parts related to operation.

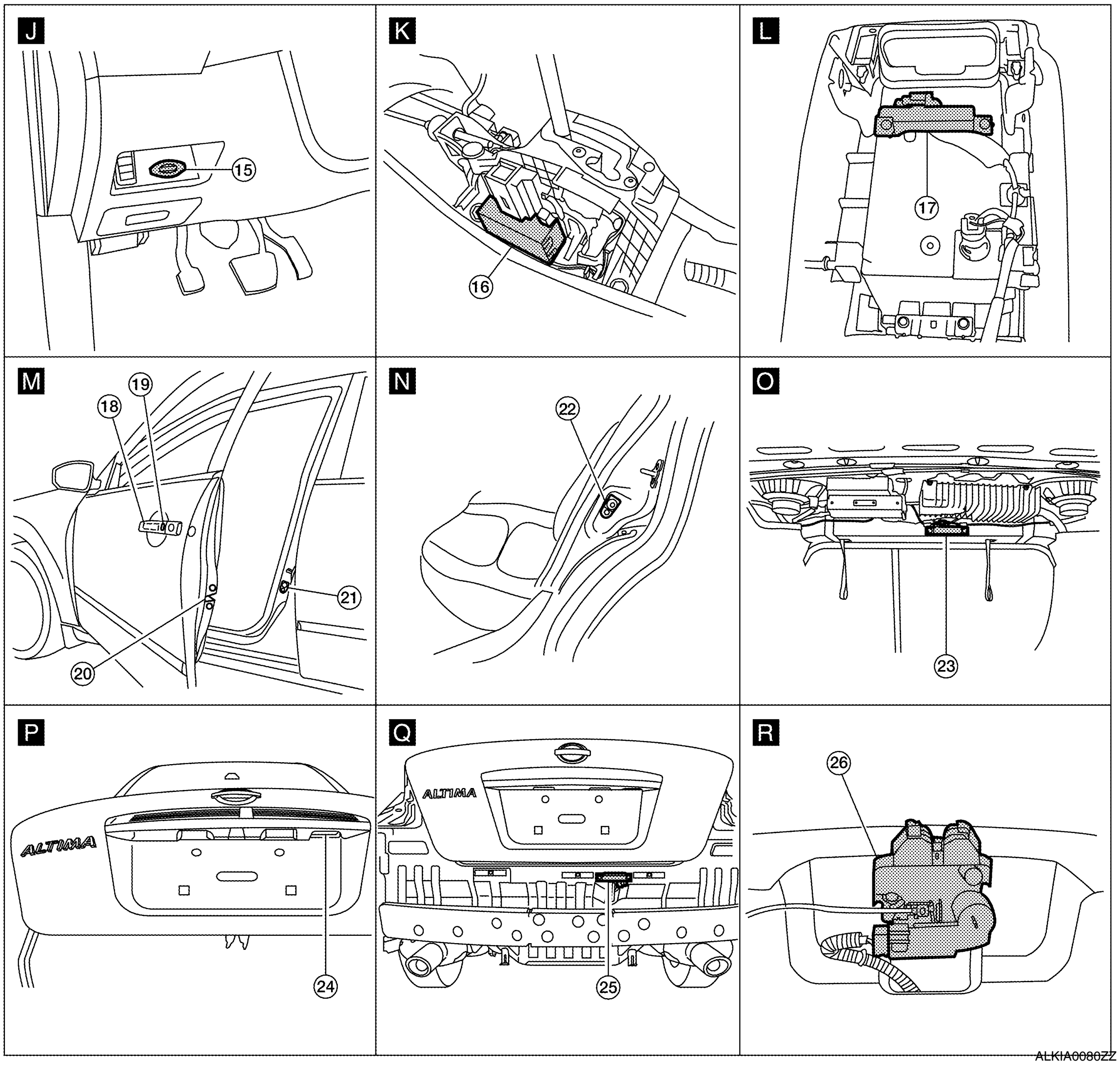
Warning function		Intelligent Key	Key slot	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter warning buzzer	CAN communication system	BCM	Combination meter display	Key slot illumination	Park position switch	"KEY" warning 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:0000000004496039





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RH B108
22. Rear door switch LH B18
RH B116
23. Rear parcel shelf antenna B29
24. Trunk opener request switch B33
25. Rear bumper antenna B46
26. Trunk lamp switch and trunk release solenoid B28

KEY REMINDER FUNCTION

System Description

INFOID:0000000004204778

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, it might activate the door locks accidentally but unlock operation will be performed in these cases.

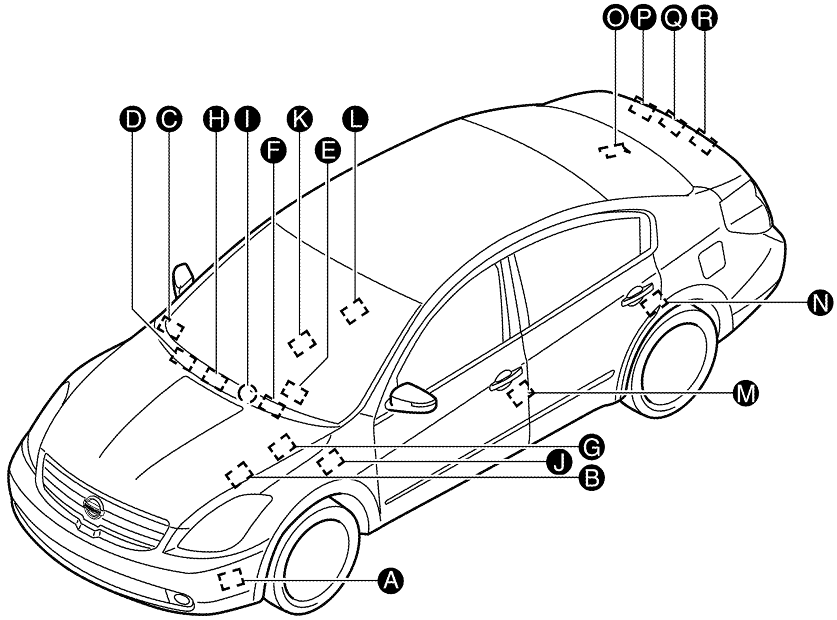
CAUTION:

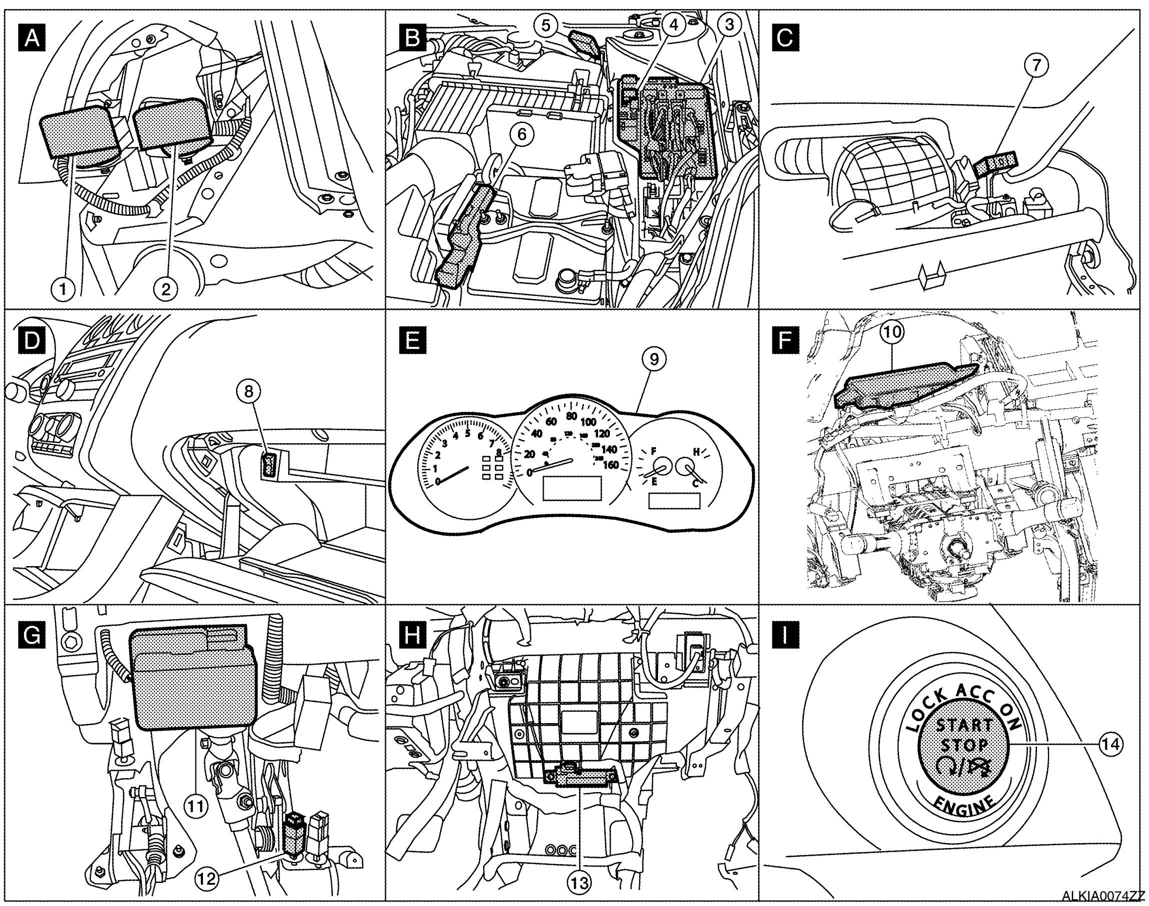
- **The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key cannot be detected, and this function will not operate when the Intelligent Key is on the instrument panel, rear parcel shelf, or in the glove box. Also, this system sometimes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

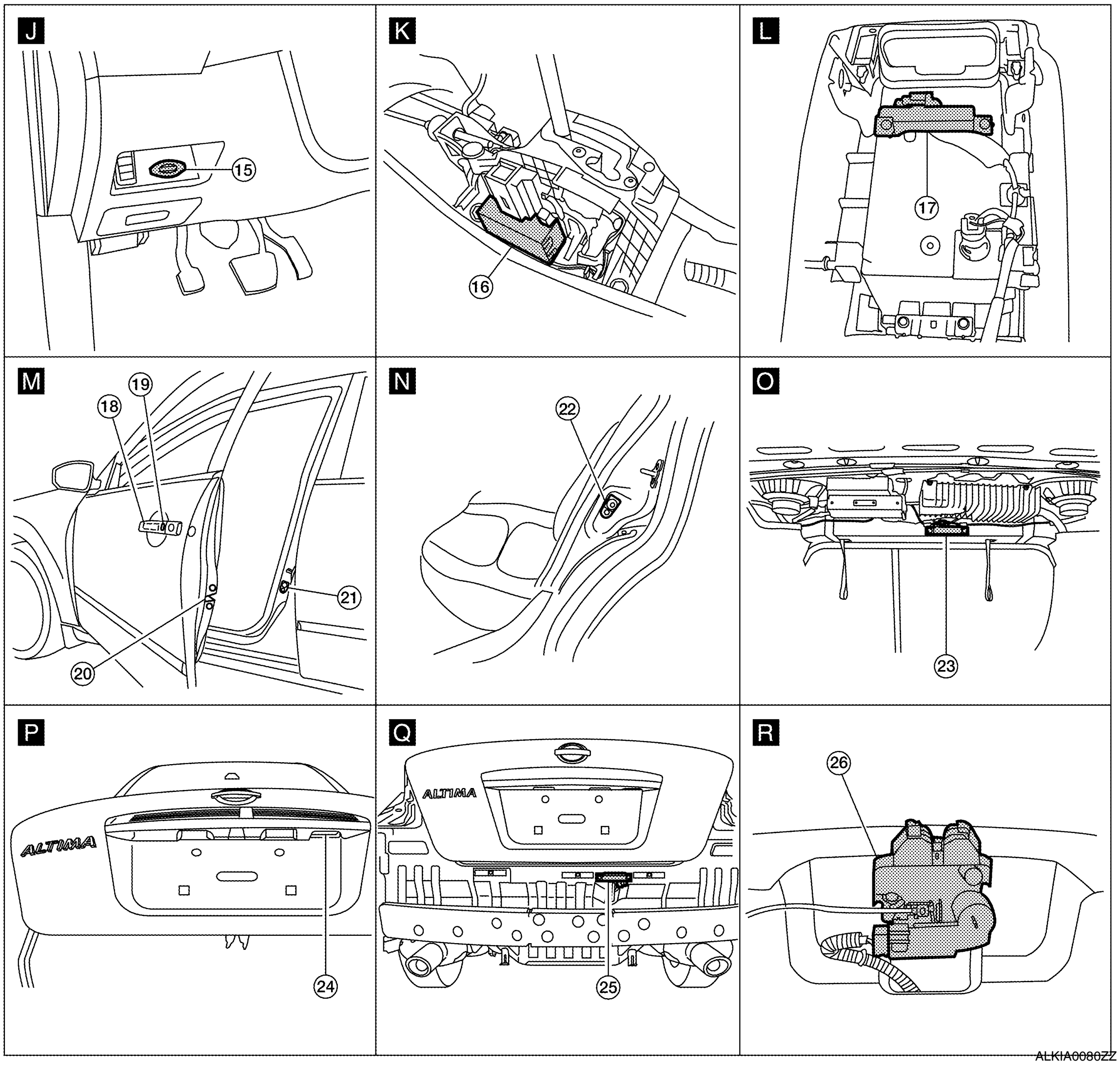
- **Remote controller door lock button operation of Intelligent Key**
- **Remote controller door unlock button operation of Intelligent Key**
- **When the trunk is closed, and the Intelligent Key is not inside the vehicle**
- **When any door is open**

Component Parts Location

INFOID:0000000004496040







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26. Trunk lamp switch and trunk release solenoid B28

HOMELINK UNIVERSAL TRANSCEIVER

Component Description

INFOID:0000000004204780

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 : Diagnosis Description

INFOID:0000000004496031

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MUTI REMOTE ENT	×	×	×
Exterior lamp	HEADLAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	

COMMON ITEM : CONSULT-III Function

INFOID:0000000004496032

ECU IDENTIFICATION

Displays the BCM part No.

SELF-DIAG RESULT

Refer to BCS-91, "DTC Index".

DOOR LOCK

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

INFOID:0000000004496033

WORK SUPPORT

Work Item	Description
DOOR LOCK-UNLOCK SET	• ON • OFF
AUTOMATIC DOOR LOCK SELECT	• SHIFT OUT OF P • VH SPD
AUTOMATIC DOOR UNLOCK SE-LECT	• MODE1 • MODE2 • MODE3 • MODE4 • MODE5 • MODE6
AUTOMATIC LOCK/UNLOCK SE-LECT	• ON • OFF

DATA MONITOR

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

ACTIVE TEST

Test Item	Description
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].

INTELLIGENT KEY

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

INFOID:0000000004496034

WORK SUPPORT

Monitor item	Description
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode.
AUTO LOCK SET	Auto door lock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch (driver side, 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.
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.
SHORT CRANKING OUTPUT	Starter motor can operate during the times below. • 70 msec • 100 msec • 200 msec
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis.

SELF-DIAG RESULT

Refer to BCS-91, "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.
IGN RLY2-F/B	Indicates [ON/OFF] condition of ignition relay 2.
ACC RLY1-F/B	Indicates [ON/OFF] condition of accessory relay.
CLUTCH SW	**NOTE:** This item is displayed, but cannot be monitored.
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 from IPDM E/R via CAN.
IGN RLY1-F/B	Indicates [ON/OFF] condition of ignition relay 1 from IPDM E/R via CAN.
DETE SW -IPDM	Indicates [ON/OFF] condition of P position from TCM via CAN.
SFT PN -IPDM	Indicates [ON/OFF] condition of P or N position from TCM via CAN.
SFT P -MET	Indicates [ON/OFF] condition of P position from TCM via CAN.
SFT N -MET	Indicates [ON/OFF] condition of N position from IPDM E/R via CAN.
ENGINE STATE	Indicates [STOP/START/CRANK/RUN] condition of engine states from ECM via CAN.
S/L LOCK-IPDM	Indicates [ON/OFF] condition of steering lock (LOCK) request from IPDM E/R via CAN.
S/L UNLOCK-IPDM	Indicates [ON/OFF] condition of steering lock (UNLOCK) request from IPDM E/R via CAN.
S/L RELAY-REQ	Indicates [ON/OFF] condition of steering lock relay from IPDM E/R via CAN.
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [Km/h].
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or CVT by numerical value [Km/h].
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver side door status.
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger side door status.
ID OK FLAG	Indicates [SET/RESET] condition of key ID.
PRMT ENG STRT	Indicates [SET/RESET] condition of engine start possibility.
PRMT RKE STRT	**NOTE:** This item is displayed, but cannot be monitored.
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.
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.
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:0000000004496035

DATA MONITOR

Monitor Item	Contents
PUSH SW	Indicates [ON/OFF] condition of push button ignition switch.
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter.
KEY CYL SW-TR	**NOTE:** This item is displayed, but cannot be monitored.
TR CANCEL SW	Indicates [ON/OFF] condition of trunk cancel switch.
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk opener switch.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.
RKE-TR/BD	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.

ACTIVE TEST

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

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000004204785

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 vehicles are equipped with many electronic control units, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-25, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000004204786

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:0000000004204787

1.PERFORM SELF DIAGNOSTIC

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

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-8, "CAN Communication Control Circuit".
NO >> Refer to GI-42, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000004204788

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:0000000004204789

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

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

Special Repair Requirement

INFOID:0000000004204790

1.REQUIRED WORK WHEN REPLACING BCM

Initialize NVIS by CONSULT-III. For the details of initialization refer to CONSULT-III Operation Manual.

>> Work End.

B2621 INSIDE KEY ANTENNA 1

Description

INFOID:0000000004204791

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

DTC Logic

INFOID:0000000004204792

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?

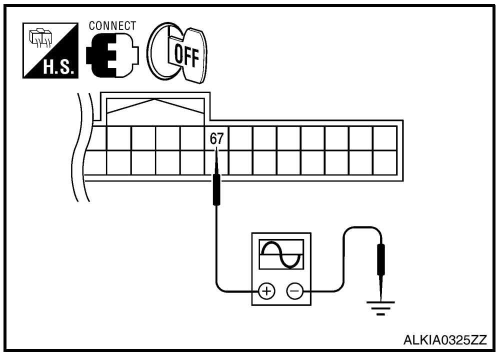
YES >> Refer to DLK-283, "Diagnosis Procedure".
NO >> Inside key antenna (instrument panel) is OK.

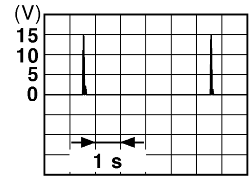
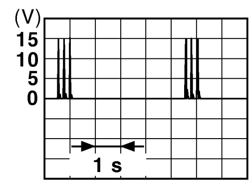
Diagnosis Procedure

INFOID:0000000004204793

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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



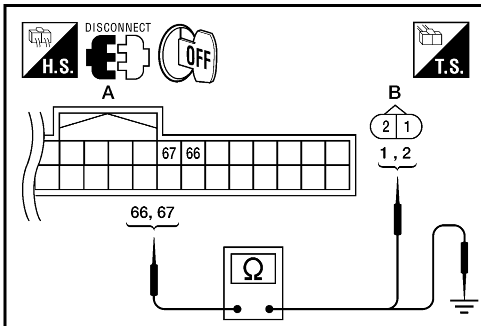
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M19	Instrument panel antenna	67	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

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.



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

3. Check continuity between BCM connector and ground.

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

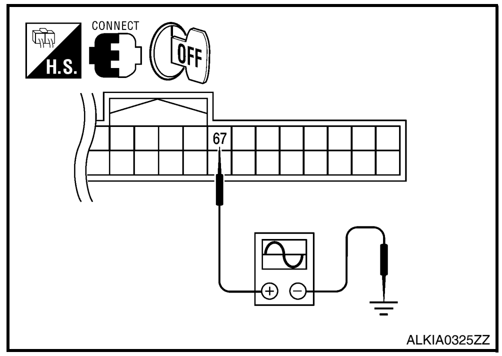
Is the inspection result normal?

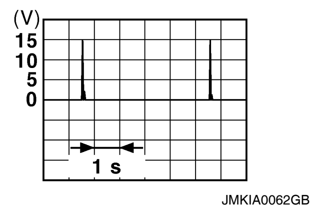
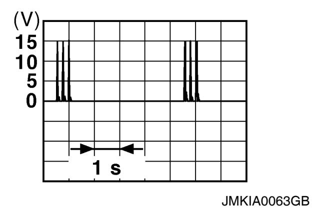
YES >> GO TO 3
NO >> Repair or replace harness between BCM and instrument panel antenna.

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.	
				Place Intelligent Key outside the vehicle.	

Is the inspection result normal?

YES >> Replace instrument panel antenna. Refer to IP-12, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

B2622 INSIDE KEY ANTENNA 2

Description

INFOID:0000000004204794

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

DTC Logic

INFOID:0000000004204795

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?

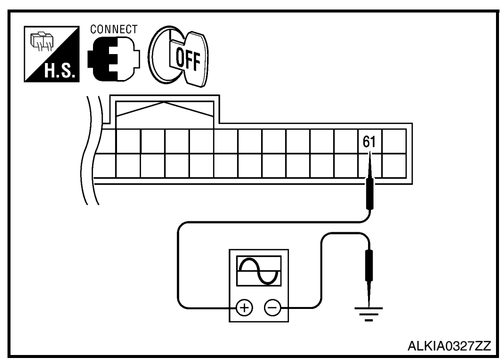
YES >> Refer to DLK-286, "Diagnosis Procedure".
NO >> Front console antenna is OK.

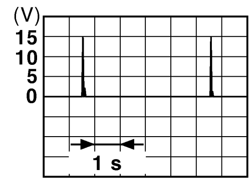
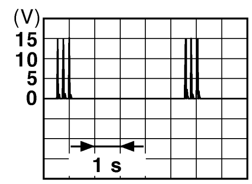
Diagnosis Procedure

INFOID:0000000004204796

1.CHECK FRONT CONSOLE ANTENNA INPUT SIGNAL 1

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



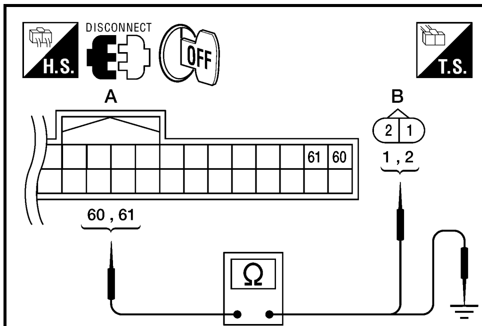
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M19	Front console antenna	61	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

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.



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BCM connector	Terminal	Front console antenna connector		Terminal	Continuity
A: M19	60	B: M41	Console	2	Yes
	61			1	

3. Check continuity between BCM connector and ground.

BCM connector		Terminal		Continuity
A: M19	Console	60	Ground	No
		61		

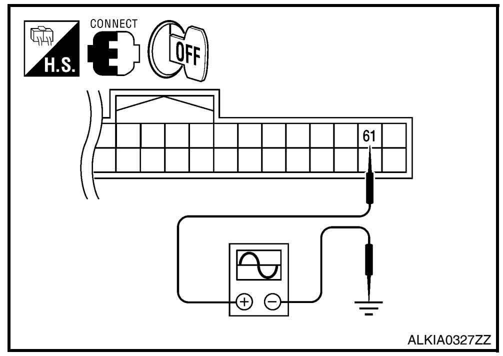
Is the inspection result normal?

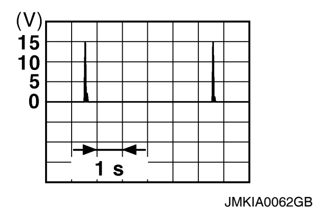
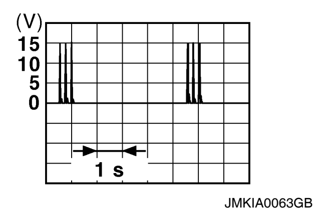
YES >> GO TO 3
NO >> Repair or replace harness between BCM and front console antenna.

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.



<table>
<tr><th colspan="3">Terminals</th><th rowspan="3">Condition</th><th rowspan="3">Signal
(Reference value.)</th></tr>
<tr><th colspan="2">(+)</th><th rowspan="2">(–)</th></tr>
<tr><th>BCM connector</th><th>Terminal</th></tr>
<tr><td rowspan="2">M19   Front console antenna</td><td rowspan="2">61</td><td rowspan="2">Ground</td><td>Place Intelligent Key inside the vehicle.</td><td></td></tr>
<tr><td>Place Intelligent Key outside the vehicle.</td><td></td></tr>
</table>

Is the inspection result normal?

YES >> Replace front console antenna. Refer to IP-18, "Disassembly and Assembly".
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

B2623 INSIDE KEY ANTENNA 3

Description

INFOID:0000000004204797

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

DTC Logic

INFOID:0000000004204798

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?

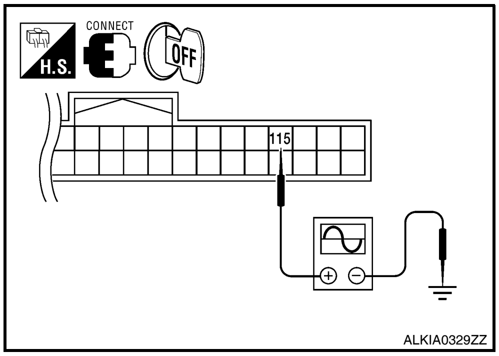
YES >> Refer to DLK-289, "Diagnosis Procedure".
NO >> Rear parcel shelf antenna is OK.

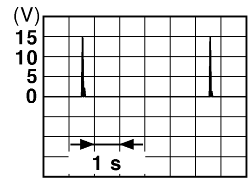
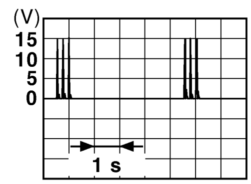
Diagnosis Procedure

INFOID:0000000004204799

1.CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 1

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



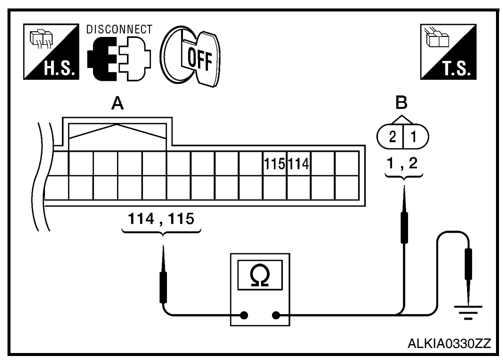
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M21	Rear parcel shelf antenna	115	Ground	Place Intelligent Key inside the vehicle.	 JMKIA0062GB
				Place Intelligent Key outside the vehicle.	 JMKIA0063GB

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.



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

3. Check continuity between BCM connector and ground.

BCM connector		Terminal		Continuity
A: M21	Trunk room	114	Ground	No
		115		

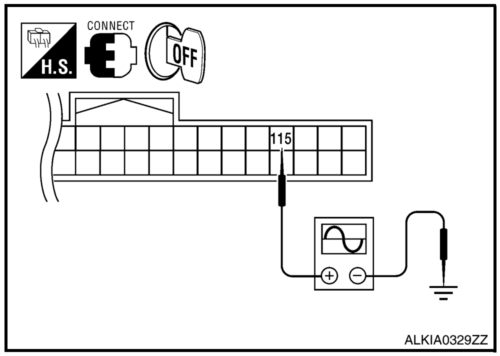
Is the inspection result normal?

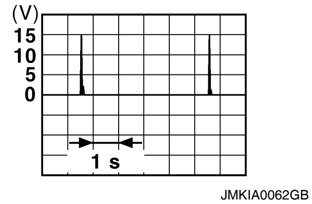
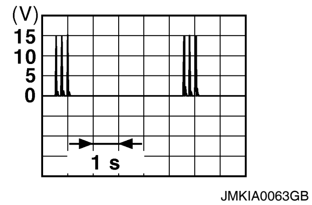
YES >> GO TO 3
NO >> Repair or replace harness between BCM and rear parcel shelf antenna.

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.	
				Place Intelligent Key outside the vehicle.	

Is the inspection result normal?

YES >> Replace rear parcel shelf antenna. Refer to INT-38, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000004496029

1. CHECK FUSE AND FUSIBLE LINK

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

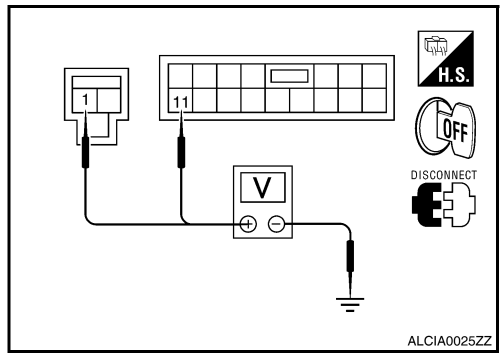
Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	H
11		10

Is the fuse or fusible link blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit.
NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

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



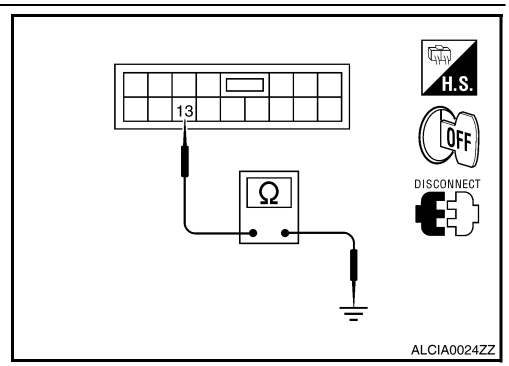
Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M16	1		Battery voltage
M17	11		

Is the measurement normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.



BCM		Ground	Continuity
Connector	Terminal		
M17	13		Yes

Does continuity exist?

YES >> Inspection End.
NO >> Repair or replace harness.

Special Repair Requirement

INFOID:0000000004496030

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to BCS-6, "CONFIGURATION (BCM) : Special Repair Requirement".

>> Work End.

DOOR SWITCH

Description

INFOID:0000000004204801

Detects door open/close condition.

Component Function Check

INFOID:0000000004204802

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?

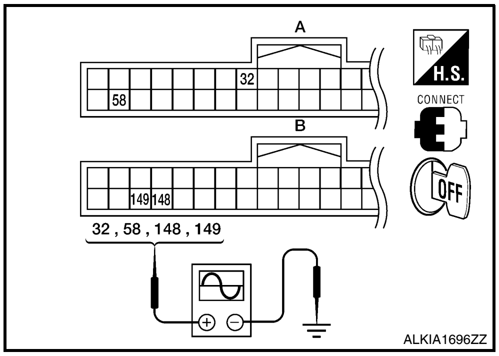
YES >> Door switch is OK.
NO >> Refer to DLK-293, "Diagnosis Procedure".

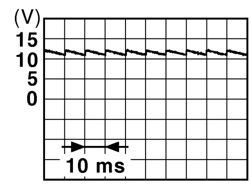
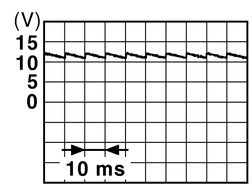
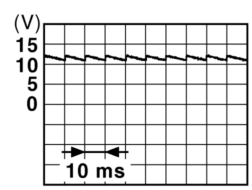
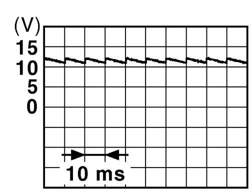
Diagnosis Procedure

INFOID:0000000004204803

1.CHECK DOOR SWITCH INPUT SIGNAL

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



Terminals			Door condition		Voltage (V) (Approx.)
(+)		(–)			
BCM connector	Terminal				
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

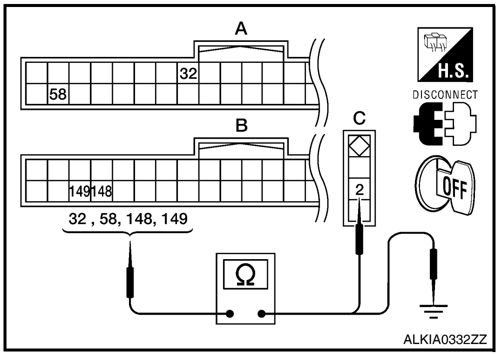
Is the inspection result normal?

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-295, "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".

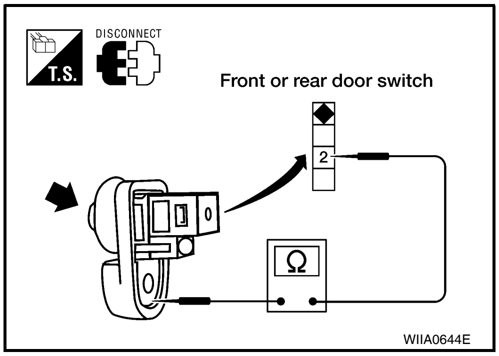
>> Inspection End.

Component Inspection

INFOID:0000000004204804

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 malfunctioning door switch.

A B C D E F G H I J DLK L M N O P

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000004204805

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000004204806

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-296, "DRIVER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)".

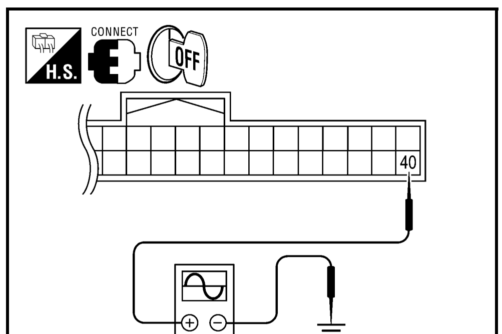
NO >> With LH anti-pinch only, refer to DLK-297, "DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".

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

INFOID:0000000004204807

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".



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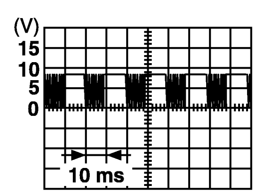
2. Check that signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (driver side) is turned "LOCK" or "UNLOCK".

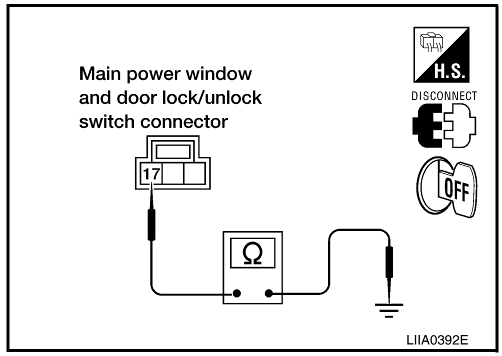
Terminal			Condition	Signal (Reference value)
(+)		(–)		
BCM connector	Terminal			
M18	40	Ground	Door is closed	 PIIA1297E

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



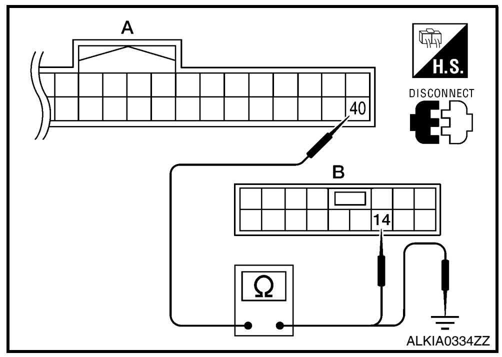
Main power window and door lock/unlock switch connector	Terminal		Continuity
D8	17	Ground	Yes

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 and main power window and door lock/unlock switch connector.



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

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
A: M18	40	Ground	No

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

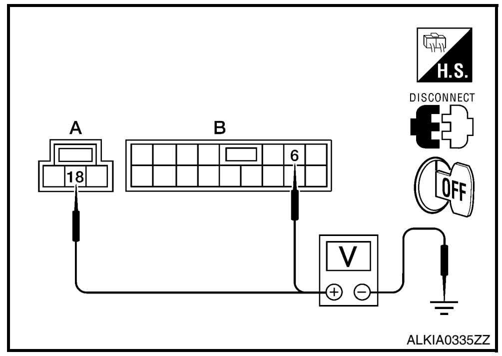
DRIVER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:0000000004204808

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".



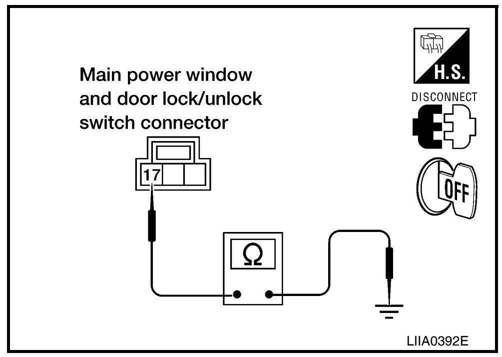
Connector	Main power window and door lock/unlock switch state	Terminal		Voltage
D8	Neutral → Lock	18	Ground	Battery voltage → 0
D7	Neutral → Unlock	6		

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.



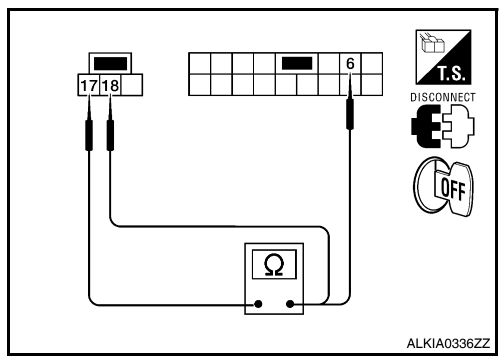
Main power window and door lock/unlock switch connector	Terminal		Continuity
D8	17	Ground	Yes

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.



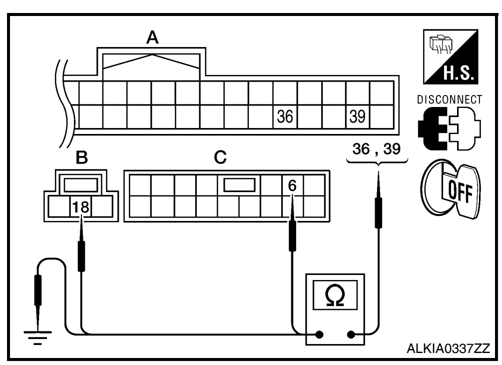
Main power window and door lock/unlock switch state	Terminals	Continuity
Lock	17 - 18	Yes
Unlock	6 - 17	
Neutral/Lock	6 - 17	No
Neutral/Unlock	17 - 18	

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace main power window and door lock/unlock switch. Refer to PWC-91, "Removal and Installation".

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	

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.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000004204810

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000004204811

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?

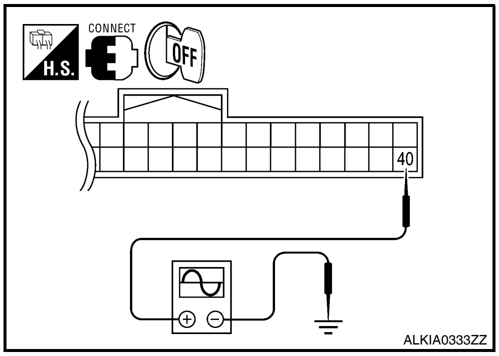
YES >> Door lock and unlock switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-299, "PASSENGER SIDE : Diagnosis Procedure (With LH and RH Anti-Pinch)".
NO >> With LH anti-pinch only, refer to DLK-301, "PASSENGER SIDE : Diagnosis Procedure (With LH Anti-Pinch Only)".

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

INFOID:0000000004204812

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”.



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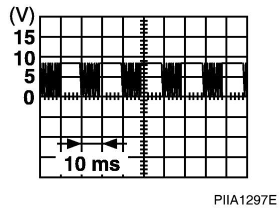
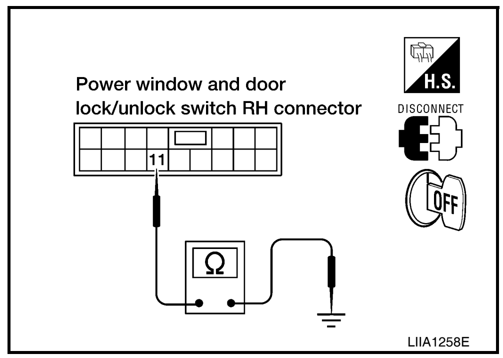
Terminal			Condition	Signal (Reference value)
(+)		(–)		
BCM connector	Terminal			
M18	40	Ground	Door is closed	

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 power window and door lock/unlock switch RH connector.
3. Check continuity between front power window switch (passenger side) connector and ground.



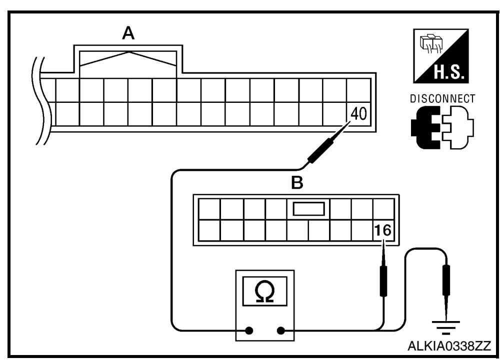
Power window and door lock/ unlock switch RH connector	Terminal		Continuity
D105	11	Ground	Yes

Is the inspection result normal?

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

3.CHECK POWER WINDOW SERIAL LINK CIRCUIT

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



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

3. Check continuity between BCM connector and ground.

BCM connector	Terminals		Continuity
A: M18	40	Ground	No

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

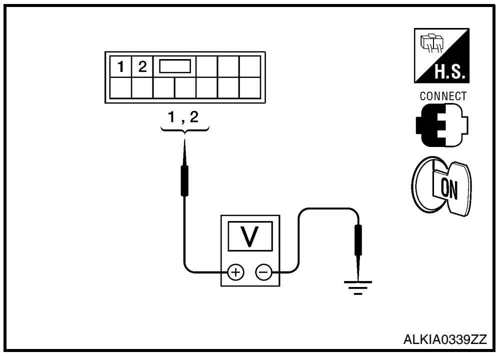
YES >> Inspection End.

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

INFOID:0000000004204813

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".



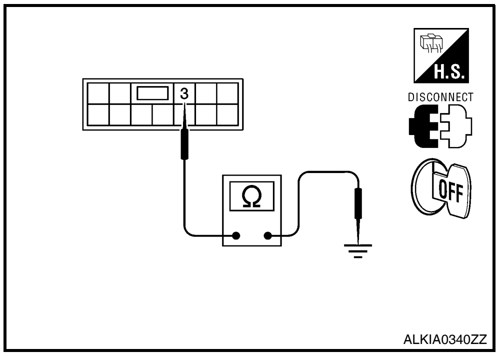
Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage
D105	Neutral → Lock	2	Ground	Battery voltage → 0
	Neutral → Unlock	1		

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.



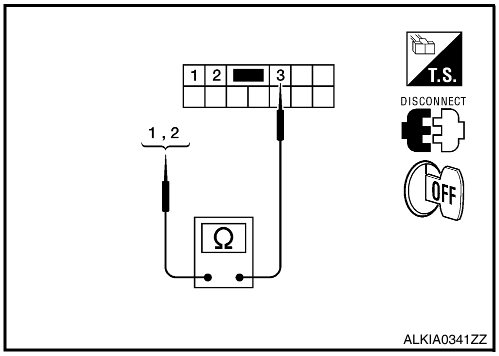
Power window and door lock/ unlock switch RH connector	Terminal		Continuity
D105	3	Ground	Yes

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	
Neutral/Unlock	2 - 3	No
Neutral/Lock	1 - 3	

Is the inspection result normal?

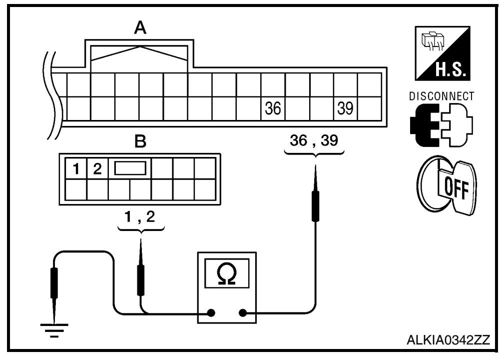
YES >> GO TO 4
NO >> Replace power window and door lock/unlock switch RH.

4.CHECK POWER WINDOW SWITCH CIRCUITS

1. Disconnect BCM connector.

2. Check continuity between BCM connector and power window and door lock/unlock switch RH connector.

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



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.

KEY SLOT

Description

INFOID:0000000004204815

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

Component Function Check

INFOID:0000000004204816

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?

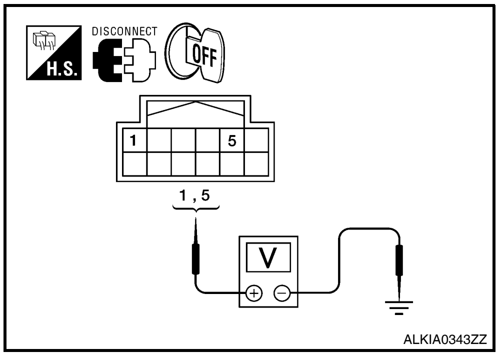
YES >> Key slot is OK.
NO >> Refer to DLK-303, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204817

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.



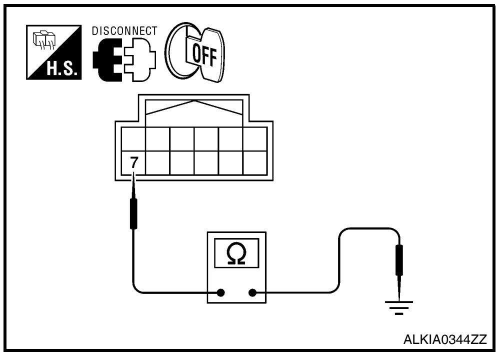
Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key slot connector	Terminal		
M40	1	Ground	Battery voltage
	5		

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

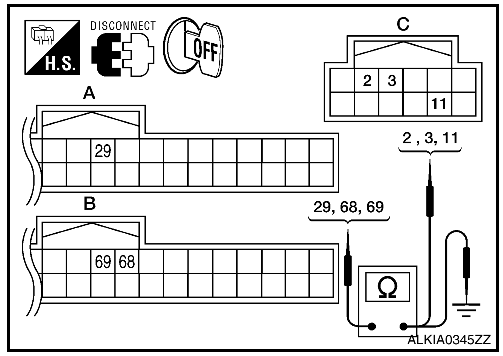
Is the inspection result normal?

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 and key slot connector.



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

3. Check continuity between BCM connector 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-304, "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".

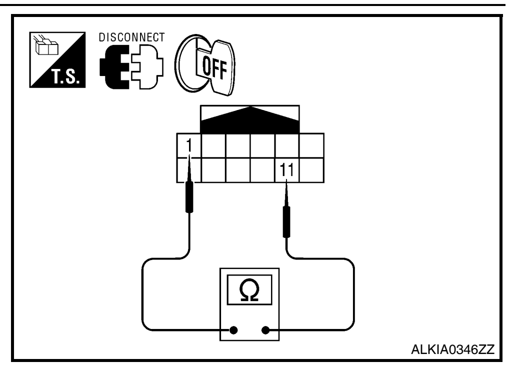
>> Inspection End.

Component Inspection

INFOID:0000000004204818

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?

YES >> Inspection End.
NO >> Replace key slot. Refer to SEC-409, "Removal and Installation".

KEY CYLINDER SWITCH

Description

INFOID:0000000004204819

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:0000000004204820

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check KEY CYL UN-SW, KEY CYL UN-SW in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT-III. Refer to DLK-231, "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?

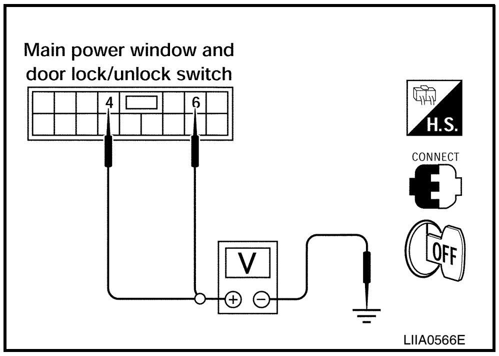
YES >> Key cylinder switch is OK.
NO >> With LH and RH anti-pinch, refer to DLK-305, "Diagnosis Procedure (With LH and RH Anti-Pinch)".
NO >> With LH anti-pinch only, refer to DLK-306, "Diagnosis Procedure (With LH Anti-Pinch Only)".

Diagnosis Procedure (With LH and RH Anti-Pinch)

INFOID:0000000004204821

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	5
	6		Unlock	0
			Neutral / Lock	5

Is the inspection result normal?

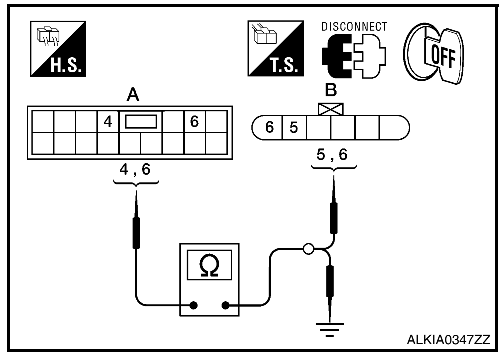
YES >> Replace main power window and door lock/unlock switch. Refer to DLK-451, "FRONT DOOR LOCK : Removal and Installation".
NO >> GO TO 2

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 and front door lock assembly LH (key cylinder switch) connector.

Main power window and door lock/unlock switch connector	Terminal	Front door lock assembly LH (key cylinder switch) connector	Terminal	Continuity
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?

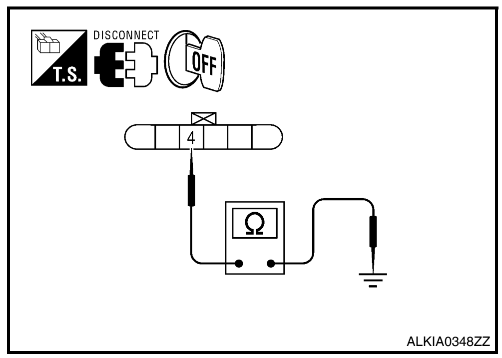
YES >> GO TO 3

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-307, "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-451, "FRONT DOOR LOCK : Removal and Installation".

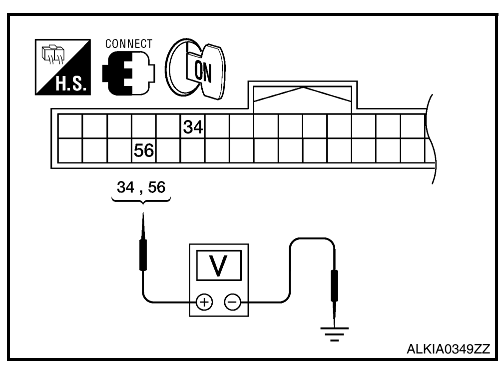
Diagnosis Procedure (With LH Anti-Pinch Only)

INFOID:0000000004204822

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

Terminals (+) BCM connector	Terminals (+) Terminal	Terminals (–)	Key position	Voltage (V) (Approx.)
M18	56	Ground	Lock	0
			Neutral / Unlock	5
	34		Unlock	0
			Neutral / Lock	5

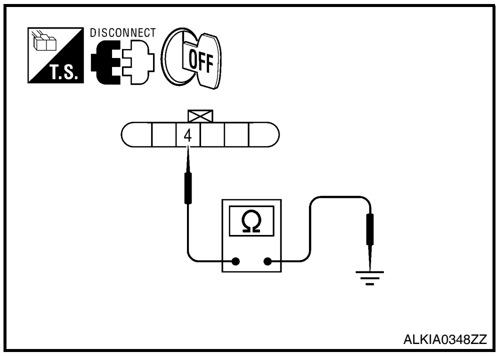


Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to DLK-451, "FRONT DOOR LOCK : Removal and Installation".
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.



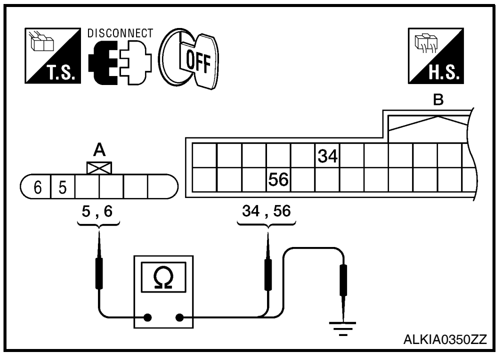
Front door lock assembly LH connector	Terminal		Continuity
D10	4	Ground	Yes

Is the inspection result normal?

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

3. CHECK DOOR KEY CYLINDER SIGNAL CIRCUIT

1. Disconnect BCM connector M18.
2. Check continuity between front door lock assembly LH (key cylinder switch) connector and BCM connector M18.



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

3. Check continuity between front door lock assembly LH (key cylinder switch) connector and ground.

Front door lock assembly LH connector	Terminal		Continuity
A: D10	5	Ground	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-307, "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-451, "FRONT DOOR LOCK : Removal and Installation".

Component Inspection

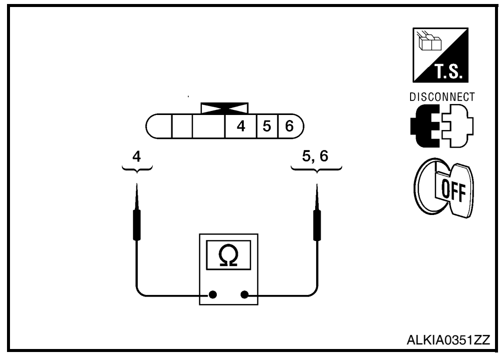
INFOID:0000000004204823

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) connector			
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-451, "FRONT DOOR LOCK : Removal and Installation".

UNLOCK SENSOR

Description

INFOID:0000000004204825

Detects door lock condition of driver door.

Component Function Check

INFOID:0000000004204826

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?

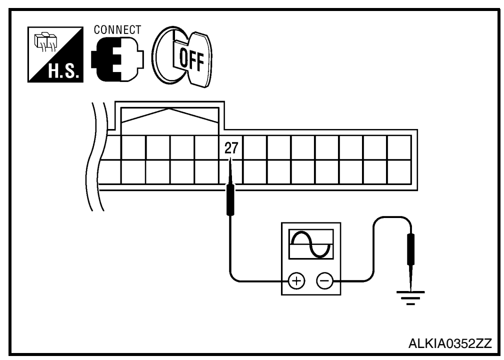
YES >> Unlock sensor is OK.
NO >> Refer to DLK-309, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204827

1.CHECK UNLOCK SENSOR POWER SUPPLY

Check signal between BCM connector and ground with oscilloscope.



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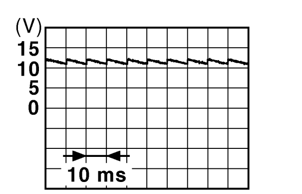
Terminals			Front door lock assembly LH condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	27	Ground	Locked	 JPMIA0011GB
			Unlocked	0

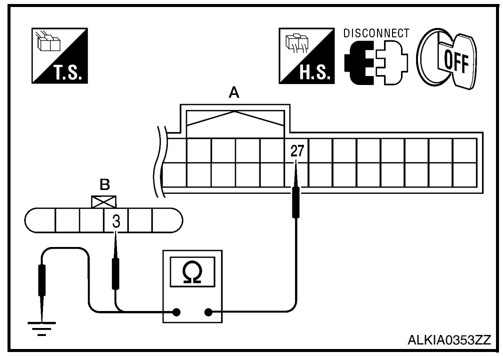
Is the inspection result normal?

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 and front door lock assembly LH connector.



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

4. Check continuity between BCM connector and ground.

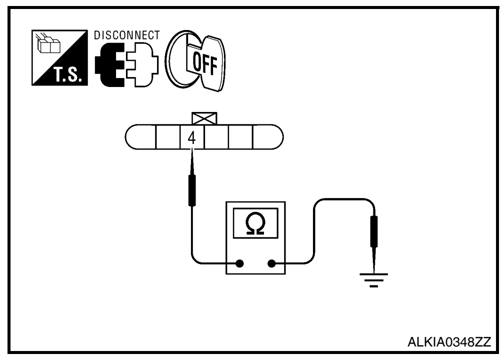
BCM connector	Terminal	Ground	Continuity
A: M18	27	Ground	No

Is the inspection result normal?

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

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

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



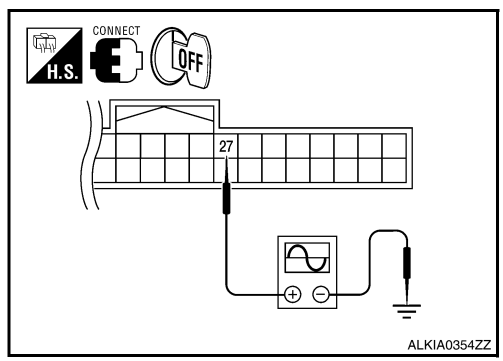
Front door lock assembly LH connector	Terminal	Ground	Continuity
D10	4	Ground	Yes

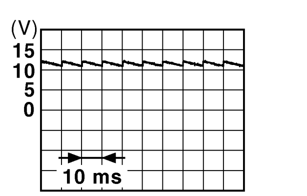
Is the inspection result normal?

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	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation"

5.CHECK UNLOCK SENSOR

Refer to DLK-311, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6
NO >> Replace front door lock assembly LH. Refer to DLK-451, "FRONT DOOR LOCK : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

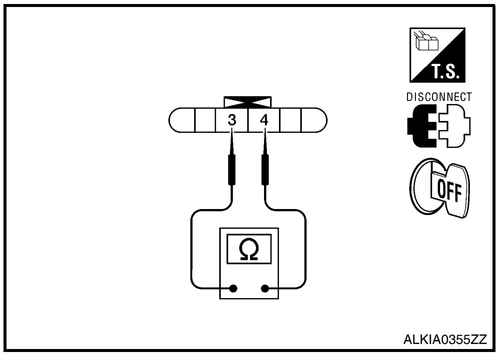
>> Inspection End.

Component Inspection

INFOID:0000000004204828

1.CHECK UNLOCK SENSOR

Check unlock sensor.



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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-451, "FRONT DOOR LOCK : Removal and Installation".

TRUNK LID OPENER SWITCH

Description

INFOID:0000000004204829

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000004204830

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?

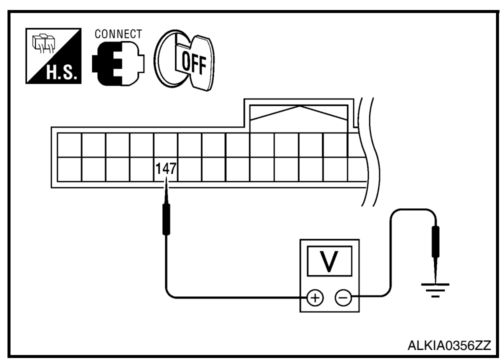
YES >> Trunk lid opener switch is OK.
NO >> Refer to DLK-312, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204831

1.CHECK TRUNK LID OPEN INPUT SIGNAL

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



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

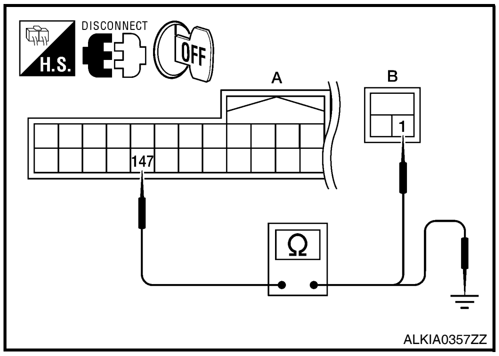
Is the inspection result normal?

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 and trunk lid opener switch connector.



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

3. Check continuity between BCM connector and ground.

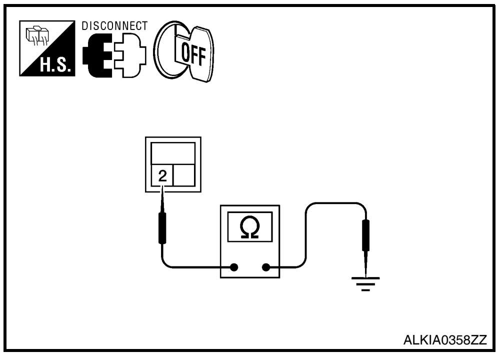
BCM connector	Terminal	Ground	Continuity
A: M21	147		No

Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch connector and ground.



Trunk lid opener switch	Terminal	Ground	Continuity
M75	2		Yes

Is the inspection result normal?

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

4.CHECK TRUNK LID OPENER SWITCH

Refer to DLK-313, "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".

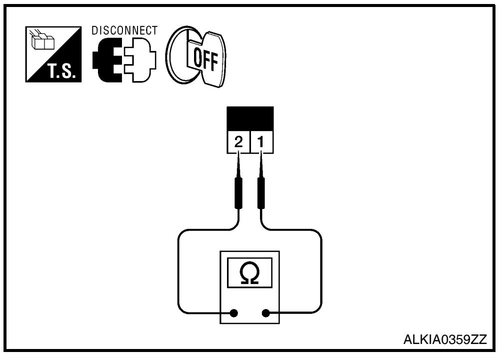
>> Inspection End.

Component Inspection

INFOID:0000000004204832

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:0000000004204833

Cancels trunk lid open operation.

Component Function Check

INFOID:0000000004204834

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?

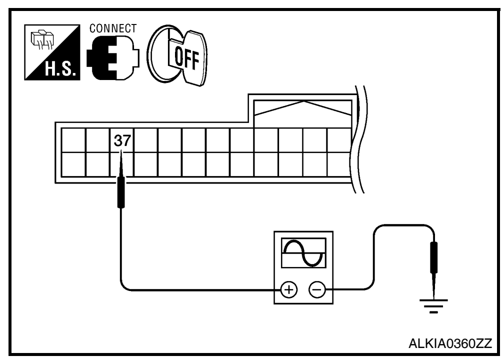
YES >> Trunk lid opener cancel switch is OK.
NO >> Refer to DLK-314, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204835

1.CHECK TRUNK LID OPENER CANCEL SIGNAL

Check voltage between BCM connector and ground.



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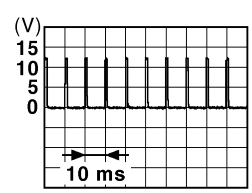
Terminals			Condition of trunk lid opener cancel switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	37	Ground	ON (press and hold)	0
			OFF (cancel)	 JPMIA0012GB

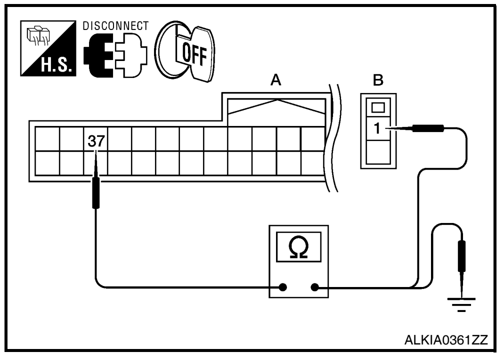
Is the inspection result normal?

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 and trunk lid opener cancel switch connector.



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

3. Check continuity between BCM connector and ground.

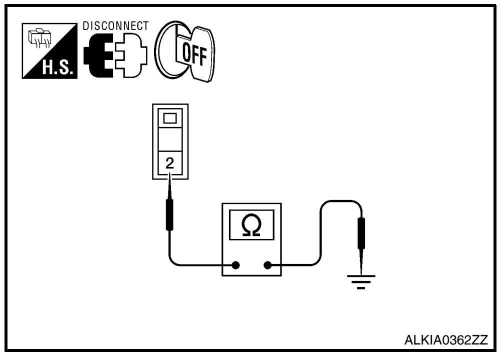
BCM connector	Terminal	Ground	Continuity
A: M18	37		No

Is the inspection result normal?

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

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-315, "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".

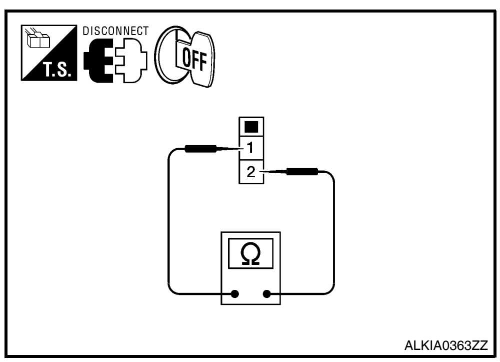
>> Inspection End.

Component Inspection

INFOID:0000000004204836

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:0000000004204837

Detects trunk open/close condition.

Component Function Check

INFOID:0000000004204838

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?

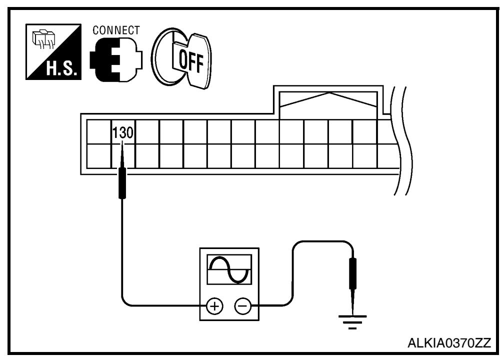
YES >> Trunk room lamp switch is OK.
NO >> Refer to DLK-316, "Diagnosis Procedure".

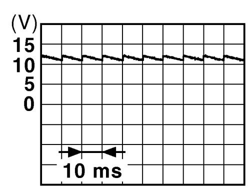
Diagnosis Procedure

INFOID:0000000004204839

1.CHECK TRUNK LAMP SWITCH INPUT SIGNAL

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



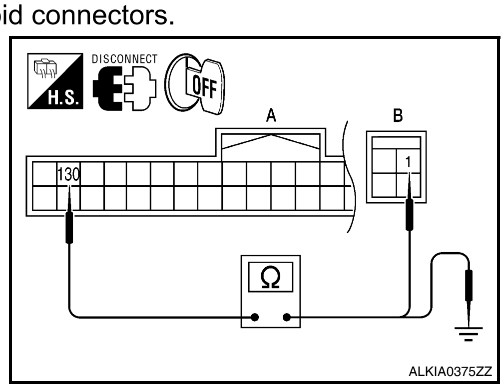
Terminals			Trunk condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	130	Ground	OPEN	0
			CLOSE	

Is the inspection result normal?

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

2.CHECK TRUNK LAMP SWITCH CIRCUIT

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



BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
A: M21	130	B: T7	2	Yes

3. Check continuity between BCM connector and ground.

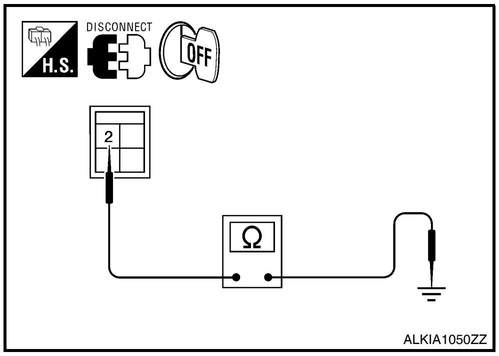
BCM connector	Terminal	Ground	Continuity
A: M21	130		No

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.



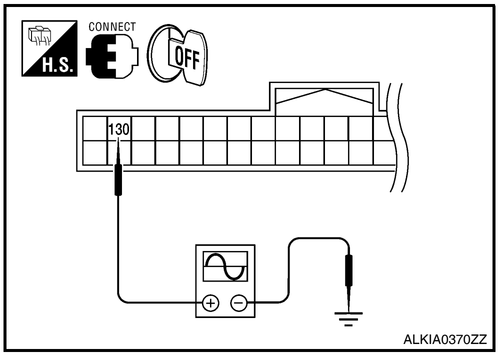
Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
T7	3		Yes

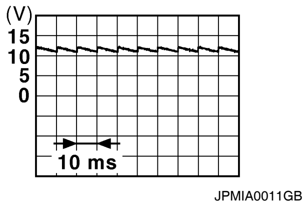
Is the inspection result normal?

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	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

5.CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-318, "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".

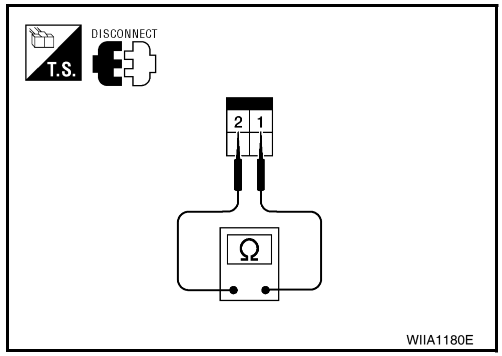
>> Inspection End.

Component Inspection

INFOID:0000000004204840

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.



Terminal		Trunk condition	Continuity
Trunk lamp switch and trunk release solenoid			
2	3	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:0000000004204841

Transmits door lock/unlock operation to BCM.

Component Function Check

INFOID:0000000004204842

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?

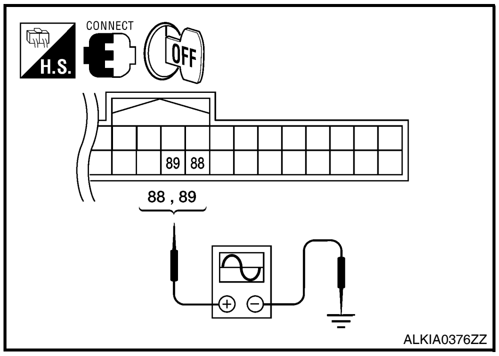
YES >> Door request switch is OK.
NO >> Refer to DLK-319, "Diagnosis Procedure".

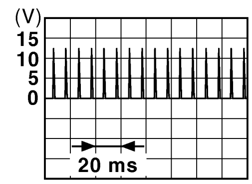
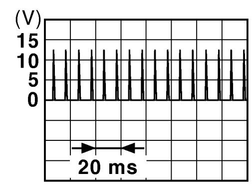
Diagnosis Procedure

INFOID:0000000004204843

1.CHECK DOOR REQUEST SWITCH OUTPUT SIGNAL

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



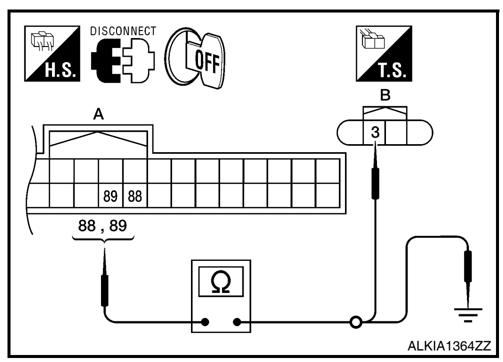
Terminals				Door request switch Condition	Voltage (V) (Approx.)
(+)			(–)		
BCM connector		Terminal			
M19	Door request switch (driver side)	89	Ground	Pressed	0
				Released	 JMKIA0059GB
	Door request switch (passenger side)	88		Pressed	0
				Released	 JMKIA0059GB

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 and front outside handle connector.



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 and ground.

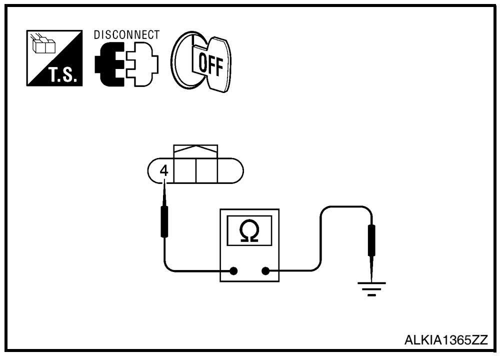
BCM connector	Terminal		Continuity
A: M19	89	Ground	No
	88		

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.



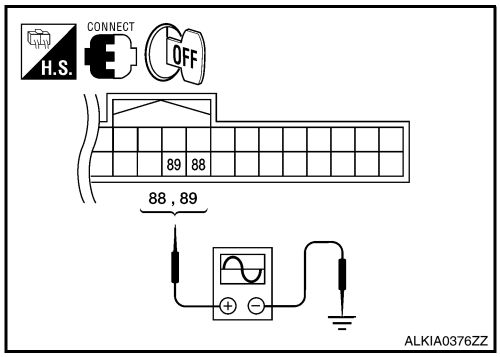
Front outside handle connector	Terminal		Continuity
D6 (driver side)	4	Ground	Yes
D106 (passenger side)	4	Ground	Yes

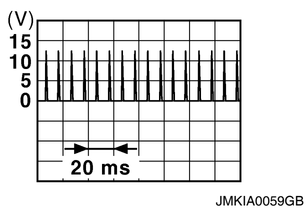
Is the inspection result normal?

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	
M19	88	Ground	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

5.CHECK DOOR REQUEST SWITCH

Refer to DLK-321, "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".

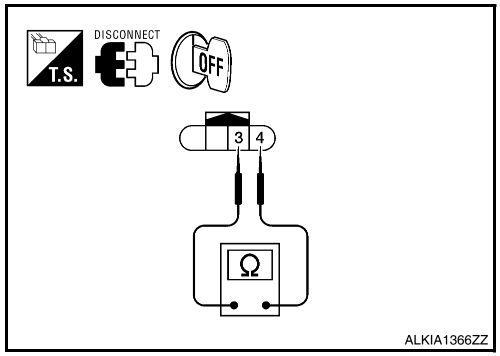
>> Inspection End.

Component Inspection

INFOID:0000000004204844

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 malfunction front outside handle.

TRUNK OPENER REQUEST SWITCH

Description

INFOID:0000000004204845

Performs trunk lid open request when it is pressed.

Component Function Check

INFOID:0000000004204846

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?

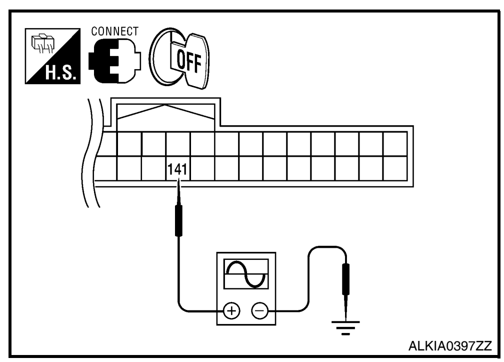
YES >> Trunk opener request switch is OK.
NO >> Refer to DLK-323, "Diagnosis Procedure".

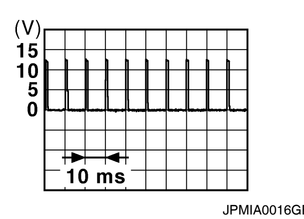
Diagnosis Procedure

INFOID:0000000004204847

1.CHECK TRUNK OPENER REQUEST SWITCH OUTPUT SIGNAL

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



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

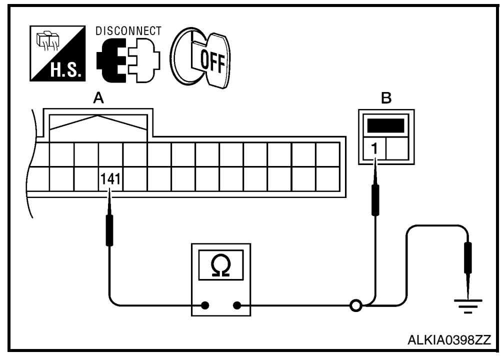
Is the inspection result normal?

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 and trunk opener request switch connector.



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

3. Check continuity between BCM connector and ground.

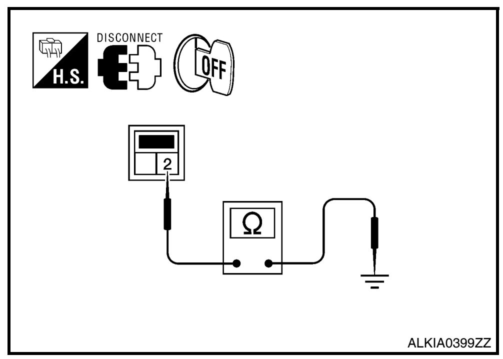
BCM connector	Terminal	Ground	Continuity
A: M21	141		No

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.



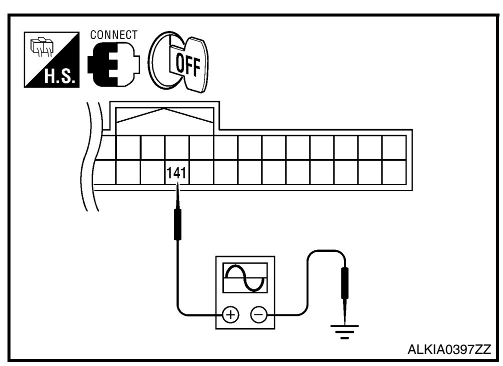
Trunk opener request switch connector	Terminal	Ground	Continuity
B33	2		Yes

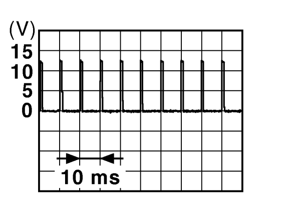
Is the inspection result normal?

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	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

5.CHECK TRUNK OPENER REQUEST SWITCH

Refer to DLK-325, "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.

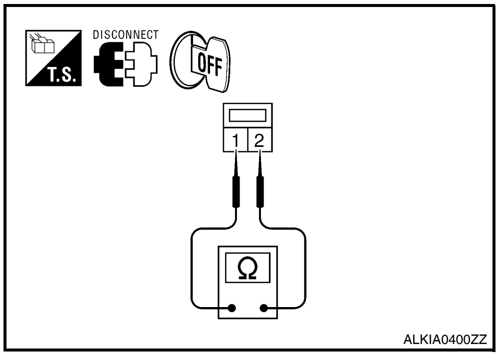
Component Inspection

INFOID:0000000004204848

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



ALKIA0400ZZ

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace trunk opener request switch.

DOOR LOCK ACTUATOR

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000004204849

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000004204850

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?

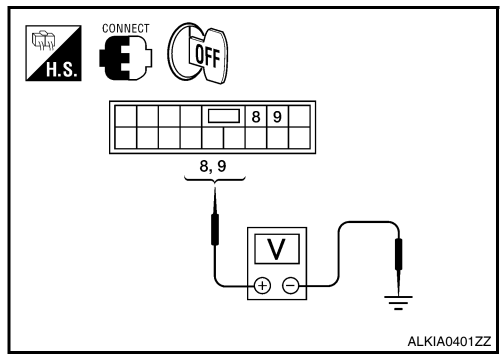
YES >> Door lock actuator is OK.
NO >> Refer to DLK-326, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000004204851

1. CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.



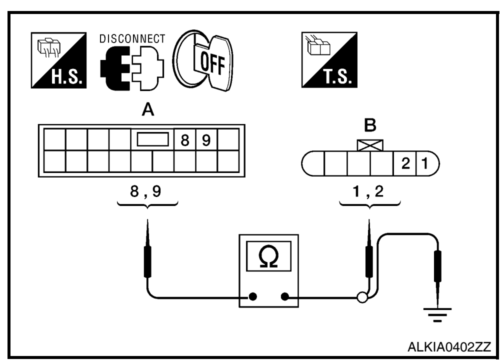
Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	8	Ground	Lock	0 → Battery voltage → 0
	9		Unlock	0 → Battery voltage → 0

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 and front door lock actuator driver side connector.



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

4. Check continuity between BCM connector 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:0000000004204852

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000004204853

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?

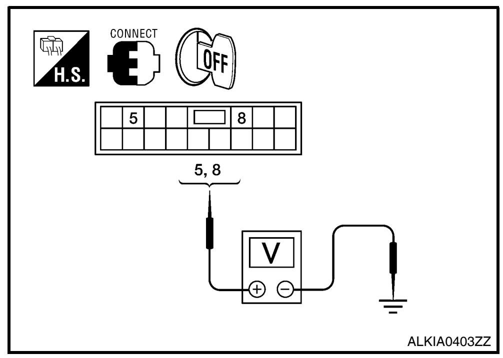
YES >> Door lock actuator is OK.
NO >> Refer to DLK-327, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000004204854

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.



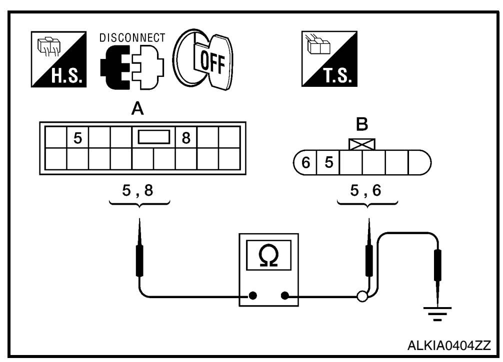
Terminals (+) BCM connector	Terminals (+) Terminal	Terminals (–)	Condition of door lock and unlock switch	Voltage (V) (Approx.)
M17	8	Ground	Lock	0 → Battery voltage → 0
	5		Unlock	0 → Battery voltage → 0

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 and front door lock actuator RH.



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 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:0000000004204855

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000004204856

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?

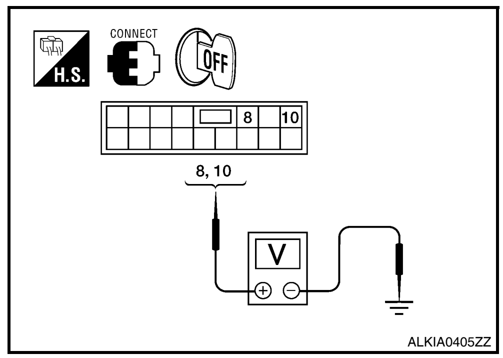
YES >> Door lock actuator is OK.
NO >> Refer to DLK-328, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000004204857

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.



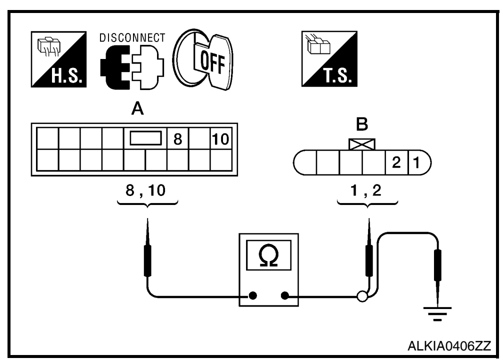
Terminals (+) BCM connector	Terminals (+) Terminal	Terminals (–)	Condition of door lock and unlock switch	Voltage (V) (Approx.)
M17	8	Ground	Lock	0 → Battery voltage → 0
	10		Unlock	0 → Battery voltage → 0

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 and rear door lock actuator LH connectors.



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:0000000004204858

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000004204859

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?

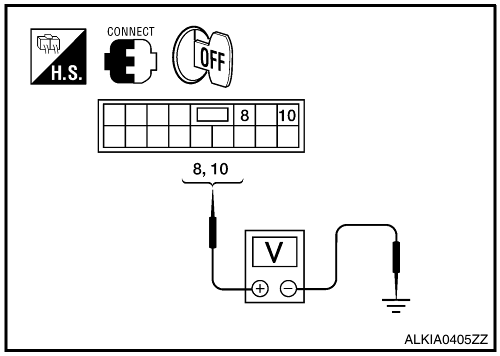
YES >> Door lock actuator is OK.
NO >> Refer to DLK-329, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000004204860

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.



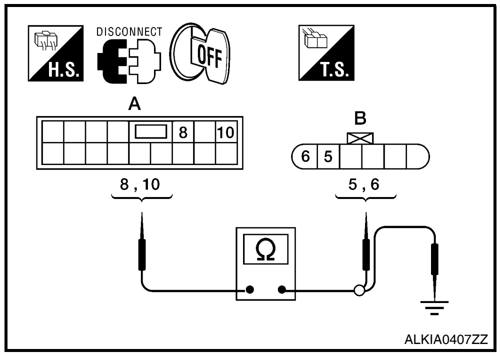
Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	8	Ground	Lock	0 → Battery voltage → 0
	10		Unlock	0 → Battery voltage → 0

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 and rear door lock actuator RH connectors.



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:0000000004204861

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000004204862

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?

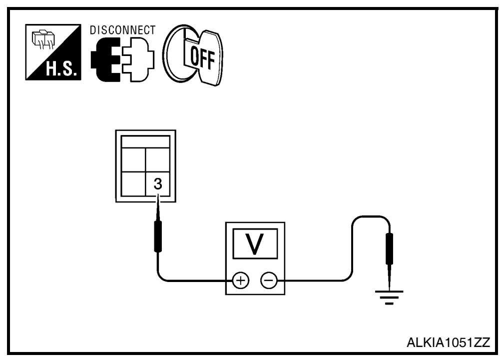
YES >> Trunk lid opener actuator is OK.
NO >> Refer to DLK-330, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204863

1.CHECK OUTPUT CIRCUIT

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



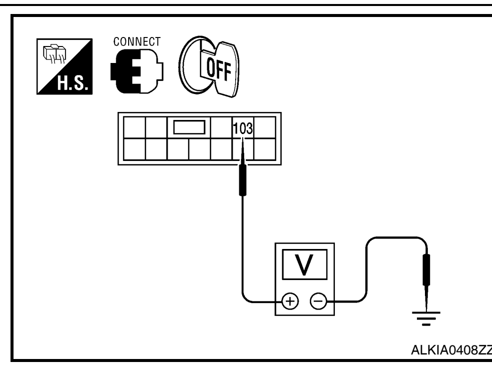
Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
Trunk lamp switch and trunk release solenoid connector	Terminal			
T4	3	Ground	OFF → ON	0 → Battery voltage → 0

Is the inspection result normal?

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

2.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	OFF → ON	0 → Battery voltage → 0

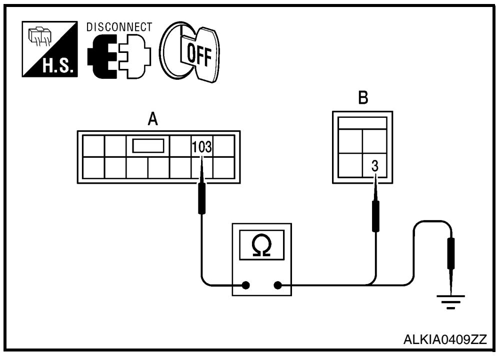
Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM.

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



BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
A: M20	103	B: T4	3	Yes

3. Check continuity between BCM connector and ground.

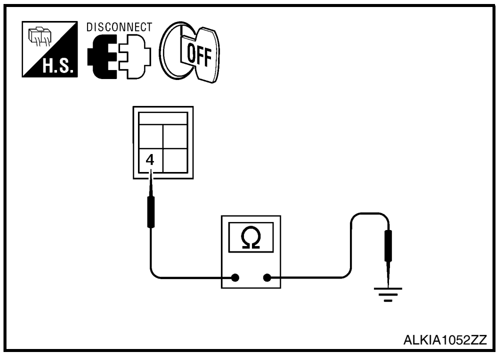
BCM connector	Terminal		Continuity
A: M20	103	Ground	No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK TRUNK LID OPENER GROUND CIRCUIT

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



Trunk lamp switch and trunk release solenoid connector	Terminal		Continuity
T4	4	Ground	Yes

Is the inspection result normal?

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

INTELLIGENT KEY WARNING BUZZER

Description

INFOID:0000000004204864

Answers back and warns for an inappropriate operation.

Component Function Check

INFOID:0000000004204865

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-332, "Diagnosis Procedure".

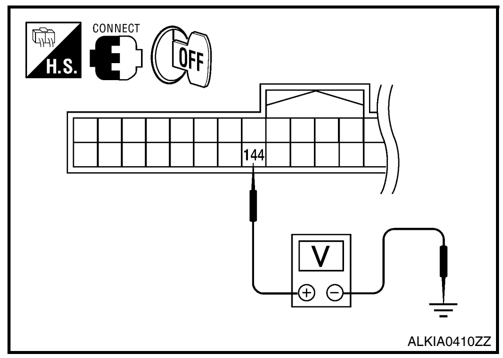
Diagnosis Procedure

INFOID:0000000004204866

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	ON	0
			OFF	Battery voltage



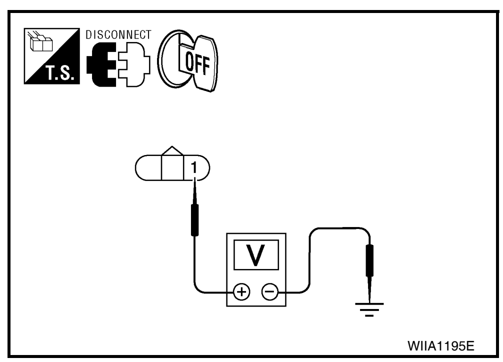
Is the inspection result normal?

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



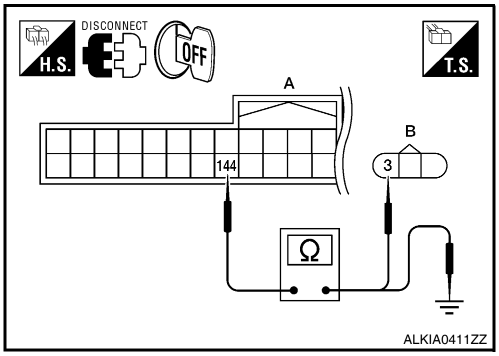
Is the inspection result normal?

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 and Intelligent Key warning buzzer connector.



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

3. Check continuity between BCM connector 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-333, "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".

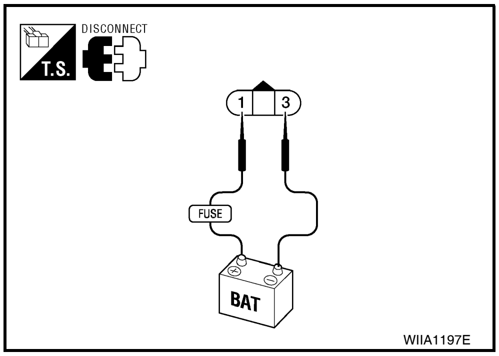
>> Inspection End.

Component Inspection

INFOID:0000000004204867

1.CHECK INTELLIGENT KEY WARNING BUZZER

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



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

Is the inspection result normal?

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

OUTSIDE KEY ANTENNA

Description

INFOID:0000000004204868

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:0000000004204869

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-319, "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?

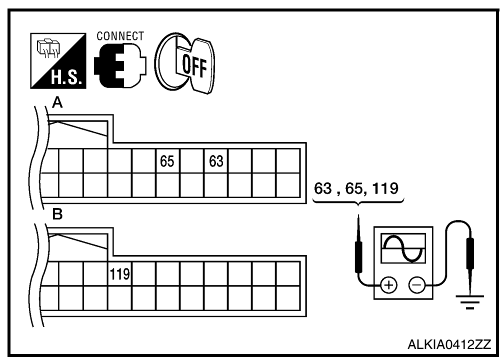
YES >> Outside key antenna is OK.
NO >> Refer to DLK-334, "Diagnosis Procedure".

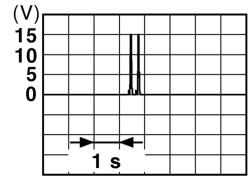
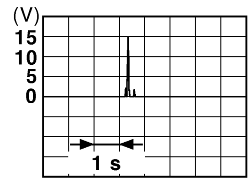
Diagnosis Procedure

INFOID:0000000004204870

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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



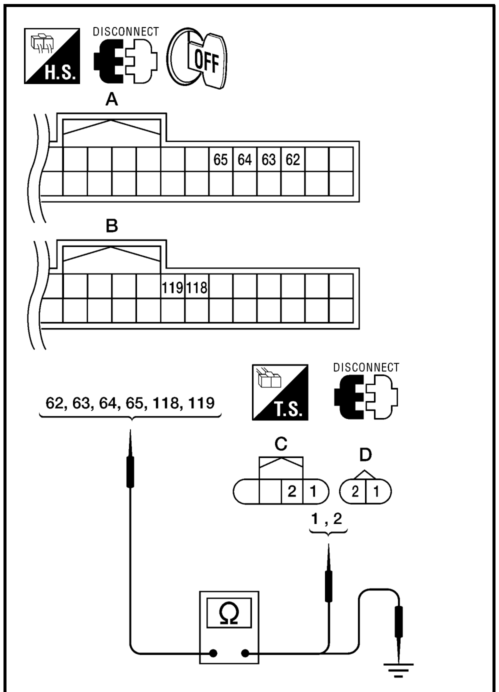
Terminals				Condition		Signal (Reference value.)
(+)			(–)			
BCM connector		Terminal				
A: M19	Driver side	65	Ground	Request switch is pushed	When Intelligent Key is in the antenna detection area.	 JMKIA0061GB
	Passenger side	63				
B: M21	Rear bumper	119			When Intelligent Key is not in the antenna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



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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	

3. Check continuity between BCM connector and ground.

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

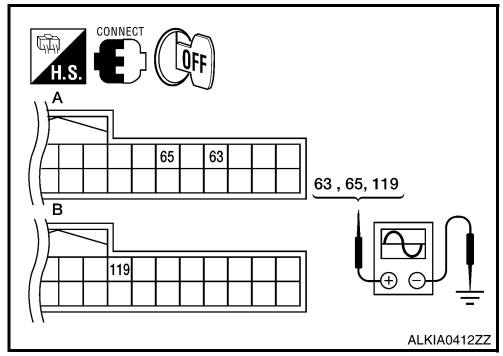
Is the inspection result normal?

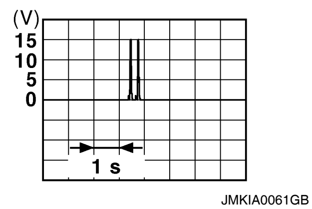
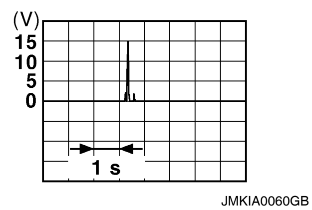
YES >> GO TO 3
NO >> Repair or replace harness between BCM and outside key antenna.

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

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:0000000004204871

Receives Intelligent Key operation and transmits to BCM.

Component Function Check

INFOID:0000000004204872

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?

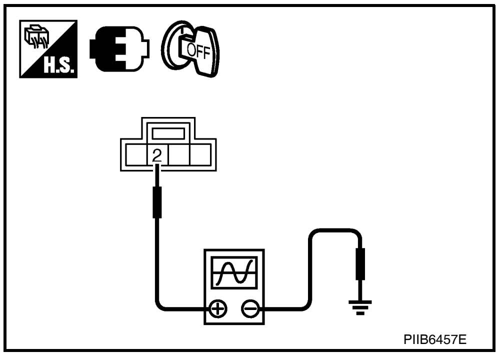
YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-337, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204873

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.



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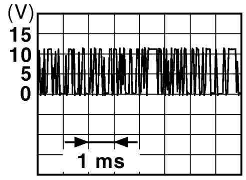
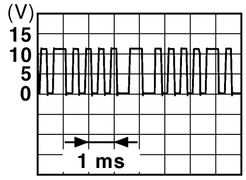
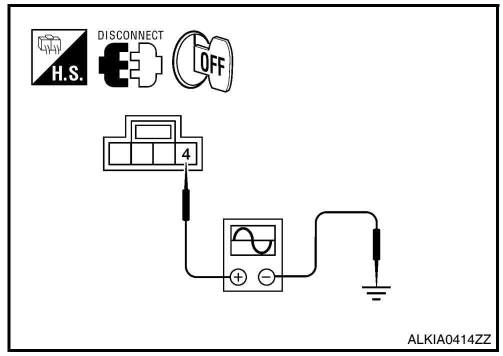
Terminals			Condition	Signal (Reference value)
(+)		(−)		
Remote keyless entry receiver connector	Terminal			
M27	2	Ground	Waiting (All doors closed)	 JMKIA0064GB
			When signal is received (All doors closed)	 JMKIA0065GB

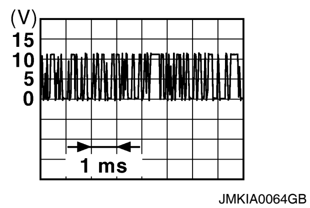
Is the inspection result normal?

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.



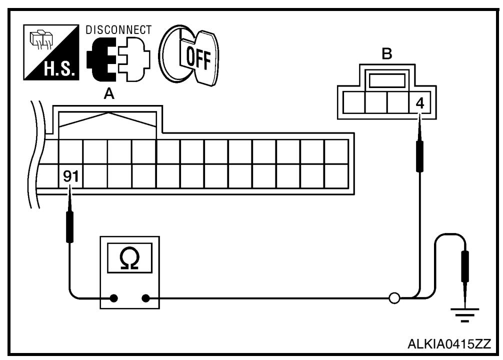
Terminals			Signal (Reference value)
(+)		(–)	
Remote keyless entry receiver connector	Terminal		
M27	4	Ground	

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 and remote keyless entry receiver connector.



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

3. Check continuity between BCM connector and ground.

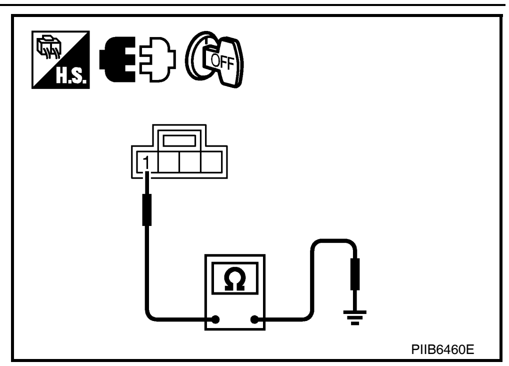
BCM connector	Terminal	Ground	Continuity
A: M19	91		No

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.



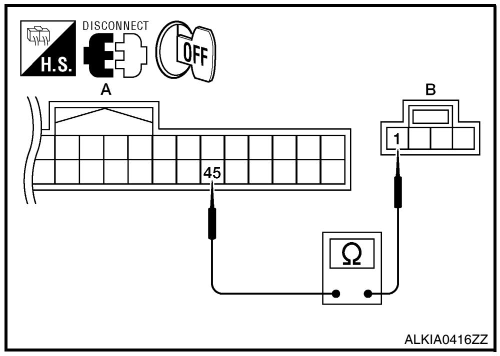
Remote keyless entry receiver connector	Terminal	Ground	Continuity
M27	1		Yes

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

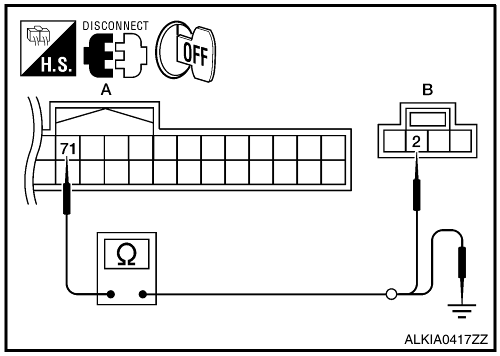
Is the inspection result normal?

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		Continuity
A: M19	71	Ground	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 BATTERY AND FUNCTION

Description

INFOID:0000000004204874

The following functions are available when having and carrying the Intelligent Key.
- Door lock/unlock
- Trunk open

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

Component Function Check

INFOID:0000000004204875

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 with the Intelligent Key.

Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Refer to DLK-340, "Diagnosis Procedure".

Diagnosis Procedure

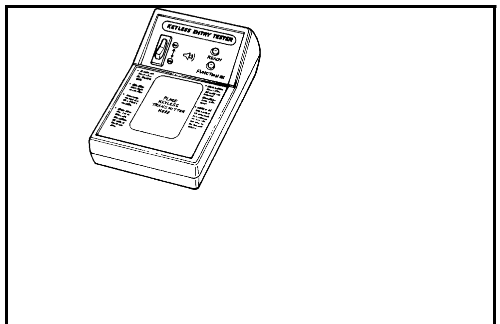
INFOID:0000000004496028

1.CHECK INTELLIGENT KEY FUNCTION

Check Intelligent Key function using Remote Keyless Entry Tester J-43241.

Does the test pass?

YES >> Intelligent Key is OK.
NO >> GO TO 2



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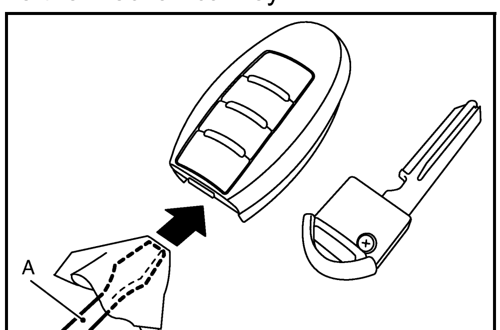
2. CHECK INTELLIGENT KEY COMPONENTS

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 Intelligent Key is water-resistant. However, if it does get wet, immediately wipe it dry.**
3. Remove the Intelligent Key battery.
   CAUTION:
   - **Keep dirt, grease, and other foreign materials off the electrode contact area.**
4. Visually inspect Intelligent Key internal components.



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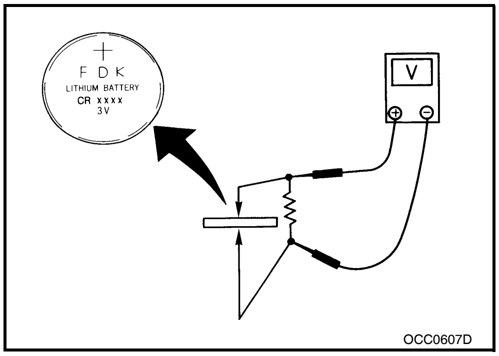
Is the inspection result normal?

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

3.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

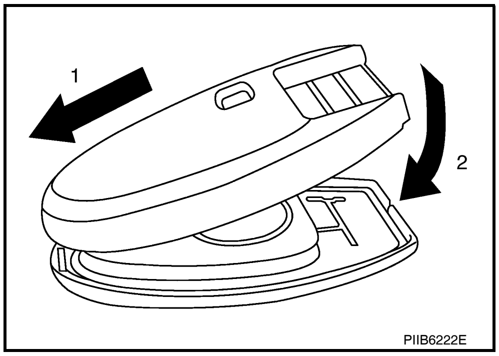
Is the measurement value within specification?

YES >> Intelligent Key battery is OK. Check remote keyless entry receiver. Refer to DLK-112, "Component Function Check".

NO >> GO TO 4

4. REPLACE INTELLIGENT KEY BATTERY

1. Replace the Intelligent Key battery.
2. 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.**
3. After replacing the battery, check that all Intelligent Key functions work properly.



Is the inspection result normal?

YES >> Intelligent Key is OK.

NO >> Check remote keyless entry receiver. Refer to DLK-112, "Component Function Check".

KEY SLOT ILLUMINATION

Description

INFOID:0000000004204879

Blinks when Intelligent Key insertion is required.

Component Function Check

INFOID:0000000004204880

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-342, "Diagnosis Procedure".

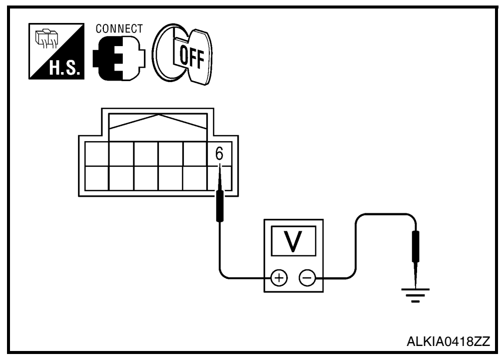
Diagnosis Procedure

INFOID:0000000004204881

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



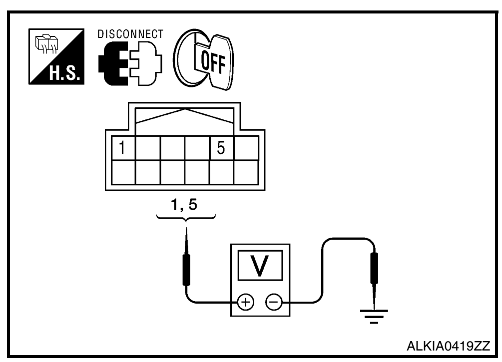
Is the inspection result normal?

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		

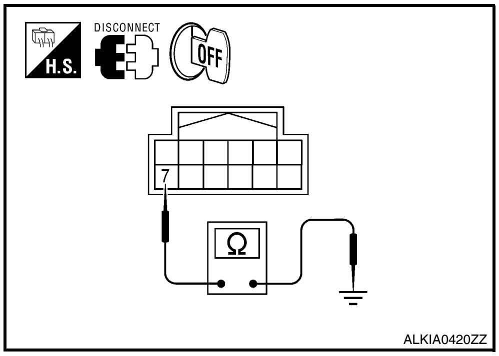


Is the inspection result normal?

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.



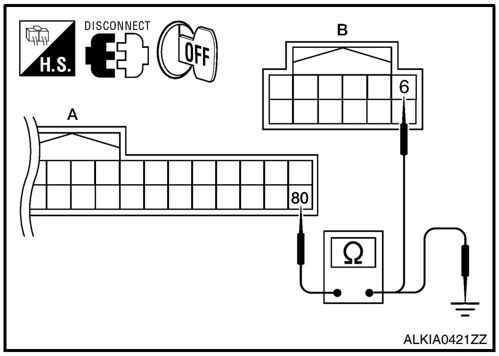
Key slot connector	Terminal	Ground	Continuity
M40	7		Yes

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-304, "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:0000000004204882

Perform answer-back for each operation with horn.

Component Function Check

INFOID:0000000004204883

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-344, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204884

1.CHECK HORN FUNCTION

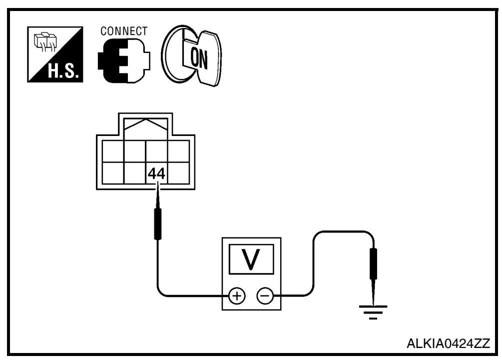
Check horn function with horn switch

Does the horn sound?

YES >> GO TO 2
NO >> Refer to HRN-7, "Wiring Diagram - Sedan".

2.CHECK HORN RELAY POWER SUPPLY

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

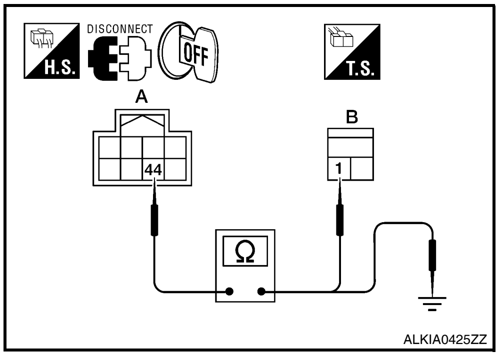
Is the inspection result normal?

YES >> Repair or replace open harness between IPDM E/R and horn relay.
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 and horn relay harness connector.



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-48, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

COMBINATION METER DISPLAY FUNCTION

Description

INFOID:0000000004204885

Displays each operation method guide and warning for system malfunction.

Component Function Check

INFOID:0000000004204886

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-346, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204887

1.CHECK COMBINATION METER

Refer to MWI-95, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2
NO >> Check combination meter. Refer to MWI-38, "Diagnosis Description".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

WARNING CHIME FUNCTION

Description

INFOID:0000000004204888

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000004204889

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-347, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004204890

1.CHECK METER BUZZER CIRCUIT

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

Is the inspection result normal?

YES >> GO TO 2
NO >> Replace combination meter. Refer to MWI-176, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

HAZARD FUNCTION

Description

INFOID:0000000004204891

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

Component Function Check

INFOID:0000000004204892

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 EXL-132, "Wiring Diagram - Sedan".

Diagnosis Procedure

INFOID:0000000004204893

1.CHECK HAZARD SWITCH CIRCUIT

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

Is the inspection result normal?

YES >> GO TO 2
NO >> Repair or replace hazard warning switch circuit. Refer to EXL-4, "Work Flow".

2.CHECK INTERMITTENT INCIDENT

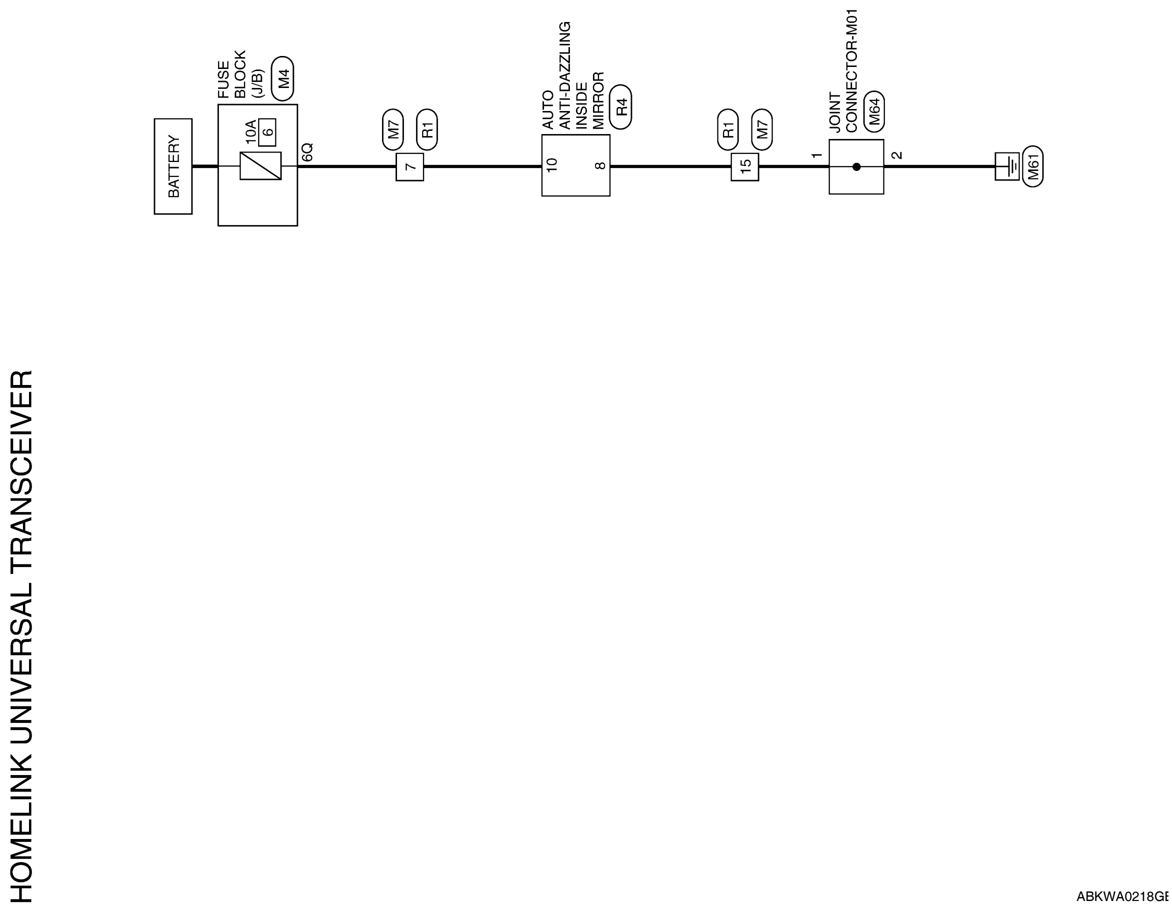
Refer to GI-42, "Intermittent Incident".

>> Inspection End.

HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram

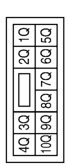
INFOID:0000000004204894



HOMELINK UNIVERSAL TRANSCEIVER CONNECTORS

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

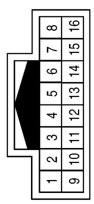
H.S.



Terminal No.	Color of Wire	Signal Name
6Q	Y/R	–

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

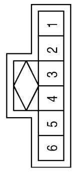
H.S.



Terminal No.	Color of Wire	Signal Name
7	Y/R	–
15	B	–

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

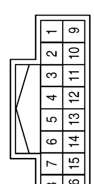
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	–
2	B	–

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

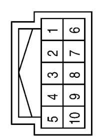
H.S.



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+

ABKIA0714GB

Description

INFOID:0000000004204895

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:0000000004204896

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-351, "Diagnosis Procedure".

3.CHECK TRANSMITTER

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

Is the inspection result normal?

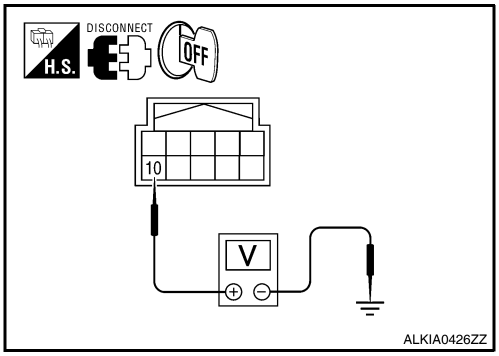
YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
NO >> Replace auto anti-dazzling inside mirror (homelink universal transceiver). Refer to MIR-18, "Removal and Installation".

Diagnosis Procedure

INFOID:0000000004204897

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.



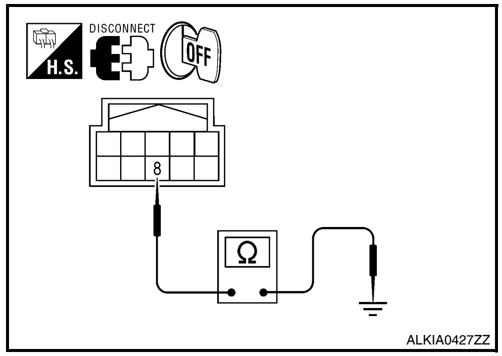
Auto anti-dazzling inside mirror (Homelink universal transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)
R4	10	Ground	Ignition switch position: LOCK	Battery voltage

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:0000000004496022

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	OFF
	Front wiper switch HI	ON
FR WIPER LOW	Other than front wiper switch LO	OFF
	Front wiper switch LO	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER INT	Other than front wiper switch INT	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Front wiper is not in STOP position	OFF
	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TURN SIGNAL R	Other than turn signal switch RH	OFF
	Turn signal switch RH	ON
TURN SIGNAL L	Other than turn signal switch LH	OFF
	Turn signal switch LH	ON
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	OFF
	Lighting switch 1ST or 2ND	ON
HI BEAM SW	Other than lighting switch HI	OFF
	Lighting switch HI	ON
HEAD LAMP SW 1	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
AUTO LIGHT SW	Other than lighting switch AUTO	OFF
	Lighting switch AUTO	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
DOOR SW-DR	Driver door closed	OFF
	Driver door opened	ON
DOOR SW-AS	Passenger door closed	OFF
	Passenger door opened	ON
DOOR SW-RR	Rear door RH closed	OFF
	Rear door RH opened	ON
DOOR SW-RL	Rear door LH closed	OFF
	Rear door LH opened	ON

Monitor Item	Condition	Value/Status
DOOR SW-BK	**NOTE:** This item is displayed, but cannot be monitored.	OFF
CDL LOCK SW	Other than power door lock switch LOCK	OFF
	Power door lock switch LOCK	ON
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF
	Power door lock switch UNLOCK	ON
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF
	Driver door key cylinder LOCK position	ON
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF
	Driver door key cylinder UNLOCK position	ON
KEY CYL SW-TR	**NOTE:** This item is displayed, but cannot be monitored.	OFF
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF
	Trunk lid opener cancel switch ON	ON
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF
	While the trunk lid opener switch is turned ON	ON
TRNK/HAT MNTR	Trunk lid closed	OFF
	Trunk lid opened	ON
RKE-LOCK	When LOCK button of Intelligent Key is not pressed	OFF
	When LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF
	When UNLOCK button of Intelligent Key is pressed	ON
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
	When TRUNK OPEN button of Intelligent Key is pressed	ON
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF
	When PANIC button of Intelligent Key is pressed	ON
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF
	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V
	When outside of the vehicle is dark	Close to 0 V
REQ SW-DR	When driver door request switch is not pressed	OFF
	When driver door request switch is pressed	ON
REQ SW-AS	When passenger door request switch is not pressed	OFF
	When passenger door request switch is pressed	ON
REQ SW-BD/TR	When trunk request switch is not pressed	OFF
	When trunk request switch is pressed	ON
PUSH SW	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON

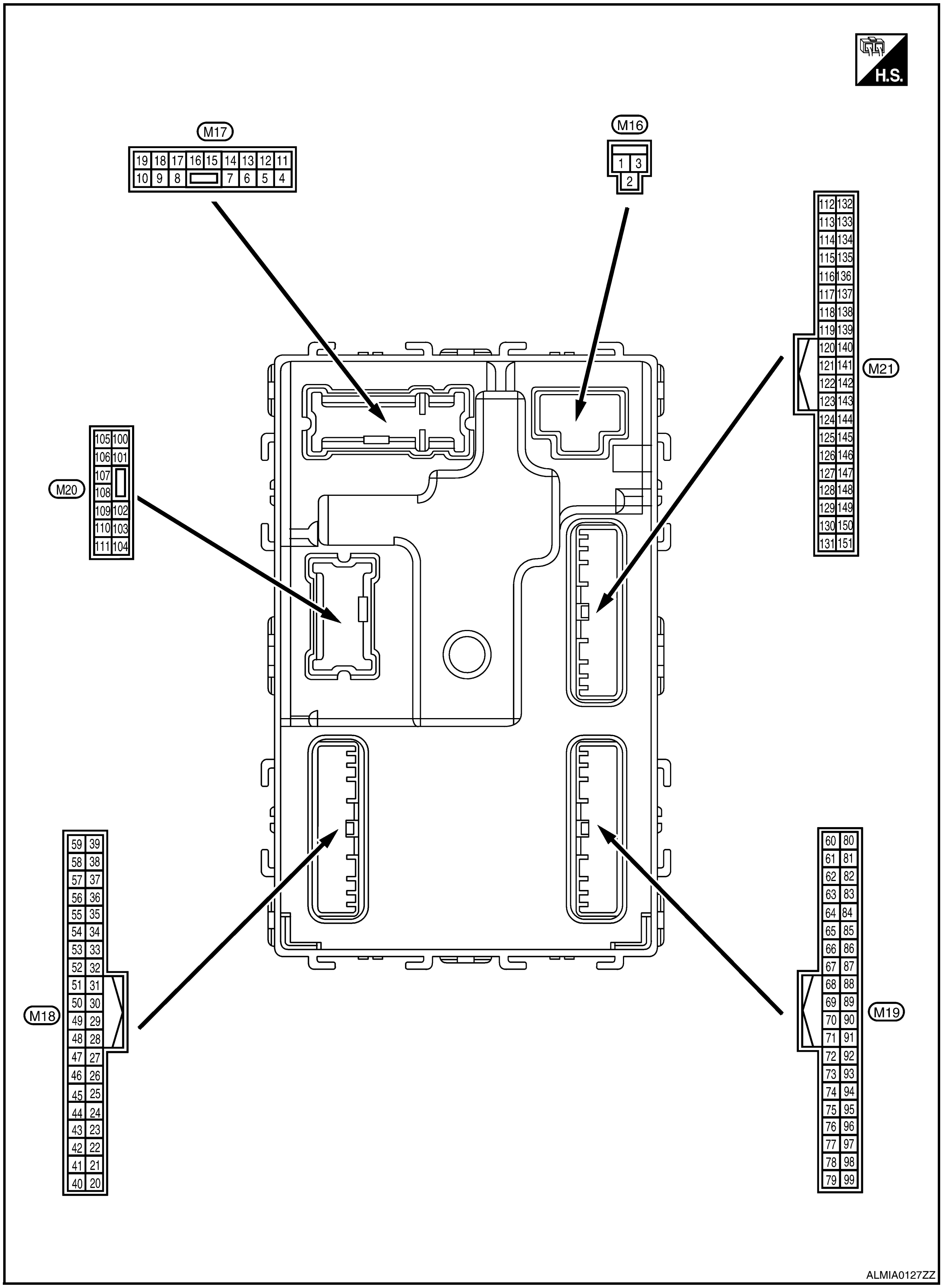
Monitor Item	Condition	Value/Status
IGN RLY2-F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
ACC RLY-F/B	Ignition switch OFF	OFF
	Ignition switch ACC or ON	ON
CLUTCH SW	When the clutch pedal is not depressed	OFF
	When the clutch pedal is depressed	ON
BRAKE SW 1	When the brake pedal is not depressed	ON
	When the brake pedal is depressed	OFF
DETE/CANCL SW	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN/N SW	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
S/L-LOCK	Electronic steering column lock LOCK status	OFF
	Electronic steering column lock UNLOCK status	ON
S/L-UNLOCK	Electronic steering column lock UNLOCK status	OFF
	Electronic steering column lock LOCK status	ON
S/L RELAY-F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
UNLK SEN-DR	Driver door UNLOCK status	OFF
	Driver door LOCK status	ON
PUSH SW-IPDM	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON
IGN RLY1 F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
DETE SW -IPDM	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN -IPDM	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
SFT P-MET	When selector lever is in any position other than P	OFF
	When selector lever is in P position	ON
SFT N-MET	When selector lever is in any position other than N	OFF
	When selector lever is in N position	ON
ENGINE STATE	Engine stopped	STOP
	While the engine stalls	STALL
	At engine cranking	CRANK
	Engine running	RUN
S/L LOCK-IPDM	Electronic steering column lock LOCK status	OFF
	Electronic steering column lock UNLOCK status	ON
S/L UNLCK-IPDM	Electronic steering column lock UNLOCK status	OFF
	Electronic steering column lock LOCK status	ON
S/L RELAY-REQ	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading

Monitor Item	Condition	Value/Status
DOOR STAT-DR	Driver door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
DOOR STAT-AS	Passenger door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
ID OK FLAG	Ignition switch ACC or ON	RESET
	Ignition switch OFF	SET
PRMT ENG STAT	When the engine start is prohibited	RESET
	When the engine start is permitted	SET
PRMT RKE STAT	**NOTE:** This item is displayed, but cannot be monitored.	RESET
KEY SW -SLOT	When Intelligent Key is not inserted into key slot	OFF
	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	**NOTE:** This item is displayed, but cannot be monitored.	Operation frequency of Intelligent Key
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE
TP 4	The ID of fourth key is not registered to BCM	YET
	The ID of fourth key is registered to BCM	DONE
TP 3	The ID of third key is not registered to BCM	YET
	The ID of third key is registered to BCM	DONE
TP 2	The ID of second key is not registered to BCM	YET
	The ID of second key is registered to BCM	DONE
TP 1	The ID of first key is not registered to BCM	YET
	The ID of first key is registered to BCM	DONE
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire

Monitor Item	Condition	Value/Status
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	When ID of front LH tire transmitter is registered	DONE
	When ID of front LH tire transmitter is not registered	YET
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE
	When ID of front RH tire transmitter is not registered	YET
ID REGST RR1	When ID of rear RH tire transmitter is registered	DONE
	When ID of rear RH tire transmitter is not registered	YET
ID REGST RL1	When ID of rear LH tire transmitter is registered	DONE
	When ID of rear LH tire transmitter is not registered	YET
WARNING LAMP	Tire pressure indicator OFF	OFF
	Tire pressure indicator ON	ON
BUZZER	Tire pressure warning alarm is not sounding	OFF
	Tire pressure warning alarm is sounding	ON

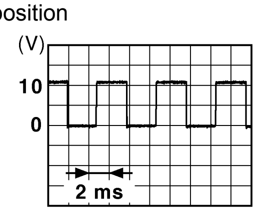
Terminal Layout

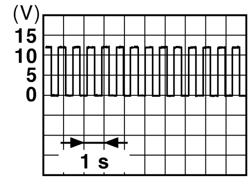
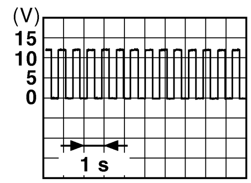
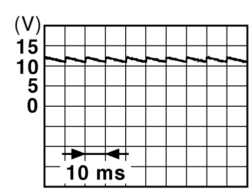
INFOID:0000000004496023

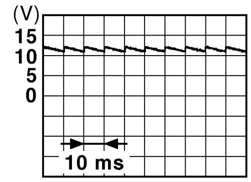
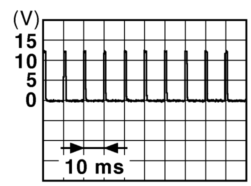
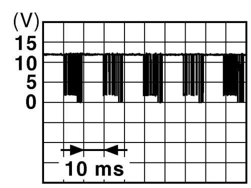


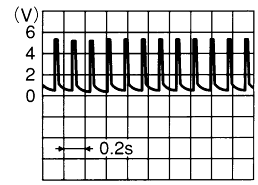
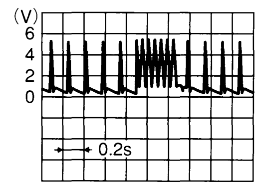
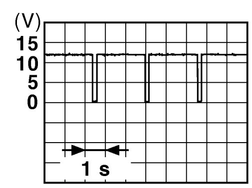
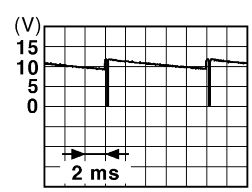
Physical Values

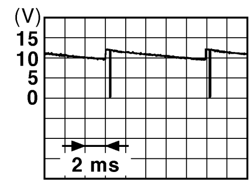
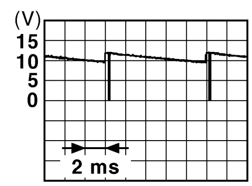
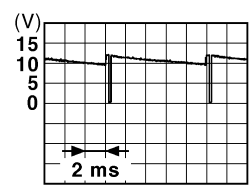
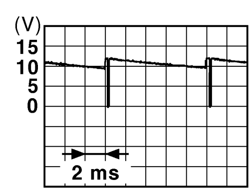
INFOID:0000000004496024

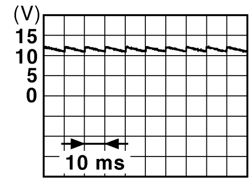
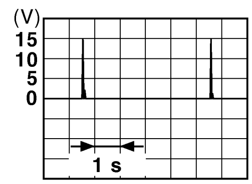
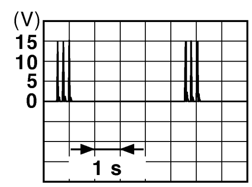
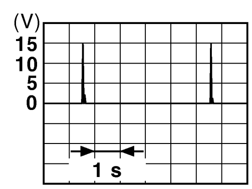
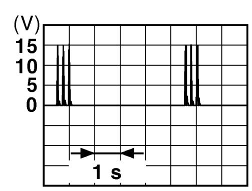
Terminal No. (Wire color) (+)	(-)	Description: Signal name	Input/ Output	Condition		Value (Approx.)
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OFF		Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4 (P/W)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
5 (G/Y)	Ground	Front door RH UNLOCK	Output	Front door RH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
7 (R/W)	Ground	Step lamp	Output	Step lamp	ON	0V
					OFF	Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (actuator is activated)	Battery voltage
					Other than LOCK (actuator is not activated)	0V
9 (G)	Ground	Front door LH UNLOCK	Output	Front door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
10[1] (G/Y)	Ground	Rear door RH and rear door LH UNLOCK	Output	Rear door RH and rear door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0V
14 (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	0V
					ON	**NOTE:** When the illumination brightening/dimming level is in the neutral position  JSNIA0010GB
15 (Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC or ON	0V

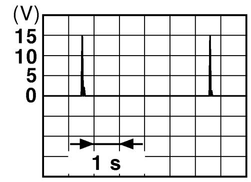
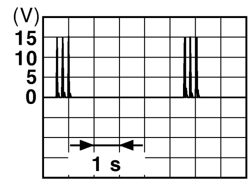
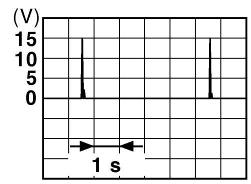
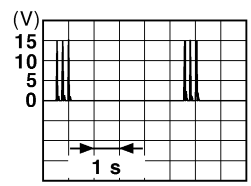
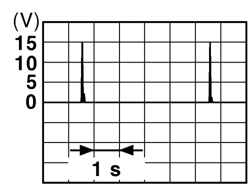
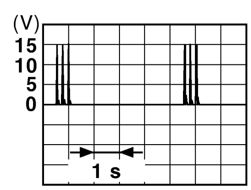
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0V
21 (P/B)	Ground	Optical sensor signal	Input	Ignition switch ON	When outside of the vehicle is bright	Close to 5V
					When outside of the vehicle is dark	Close to 0V
22 (R/Y)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (clutch pedal is not depressed)	0V
					ON (clutch pedal is depressed)	Battery voltage
24 (R/W)	Ground	Stop lamp switch 1	Input	—		Battery voltage
26 (O/L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	0V
					ON (brake pedal is depressed)	Battery voltage
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	 JPMIA0011GB 11.8V
					UNLOCK status	0V
29 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0V
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	OFF	0
					ACC or ON	Battery voltage

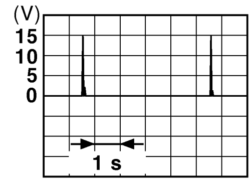
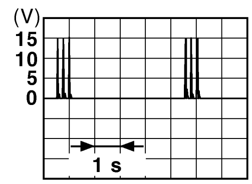
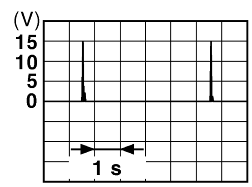
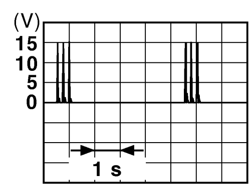
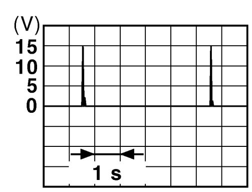
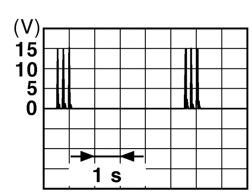
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
31 (G)	Ground	Rear window defogger feedback signal	Input	Rear window defogger switch	OFF	0V
					ON	Battery voltage
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	 JPMIA0011GB 11.8 V
					ON (when front door RH opens)	0V
33 (SB)	Ground	Compressor ON signal	Input	A/C switch	OFF	5V
					ON	0V
34[2] (L/R)	Ground	Front door lock assembly LH (key cylinder switch) (unlock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
					ON (unlock)	0V
36[2] (GR)	Ground	Lock switch signal	Input	Door lock/unlock switch	Lock	Battery voltage
					Unlock	0V
37 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1V
					ON	0V
38 (GR/W)	Ground	Rear window defogger ON signal	Input	Rear window defogger switch	OFF	5V
					ON	0V
39[2] (GR/R)	Ground	Unlock switch signal	Input	Door lock/unlock switch	Unlock	Battery voltage
					Lock	0V
40[3] (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2V
				Ignition switch OFF or ACC		0V
41 (W)	Ground	Engine switch (push switch) illumination	Output	Engine switch (push switch) illumination	ON	5.5V
					OFF	0V
42 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0V
					OFF	Battery voltage

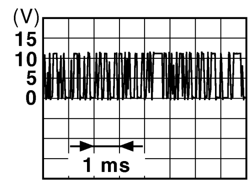
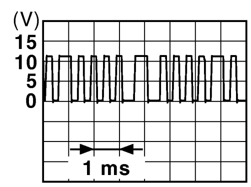
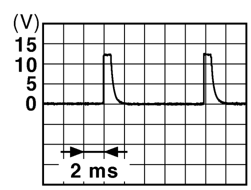
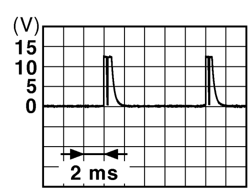
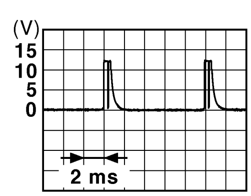
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	OFF	0V
					ACC or ON	5.0V
47 (G/O)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
48 (R/G)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position	12.0V
					Except P and N positions	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	ON	0V
					Blinking	 JPMIA0014GB 11.3V
					OFF	Battery voltage
50 (LG/B)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Lighting switch 1ST	 JPMIA0031GB 10.7V
					Lighting switch high-beam	
					Lighting switch 2ND	
					Turn signal switch RH	

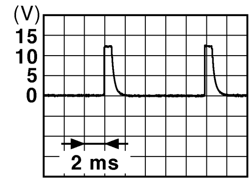
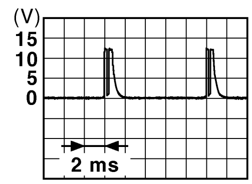
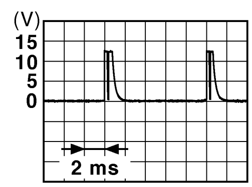
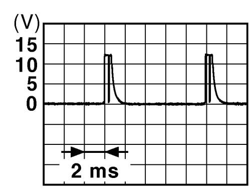
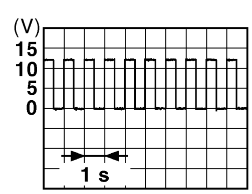
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
52 (G/B)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 5 • Wiper intermittent dial 6	
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front wiper switch INT	 JPMIA0034GB 10.7V
					Front wiper switch LO	
					Lighting switch AUTO	
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front fog lamp switch ON	 JPMIA0035GB 10.7V
					Lighting switch 2ND	
					Lighting switch flash-to-pass	
					Turn signal switch LH	
55 (BR/ W)	Ground	Front blower monitor	Input	Front blower motor switch	ON	Battery voltage
					OFF	0V
56[2] (L/B)	Ground	Front door lock assembly LH (key cylinder switch) (lock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
					ON (lock)	0V
57 (W)	Ground	Tire pressure warning check switch	Input	—		5V

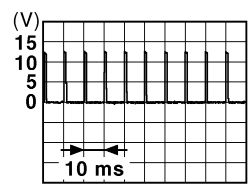
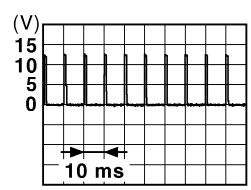
<table>
<tr><th colspan="2">Terminal No. (Wire color)</th><th colspan="2">Description</th><th colspan="2" rowspan="2">Condition</th><th rowspan="2">Value (Approx.)</th></tr>
<tr><th>(+)</th><th>(-)</th><th>Signal name</th><th>Input/ Output</th></tr>
<tr><td rowspan="2">58 (SB)</td><td rowspan="2">Ground</td><td rowspan="2">Front door LH switch</td><td rowspan="2">Input</td><td rowspan="2">Front door LH switch</td><td>OFF (front door LH CLOSE)</td><td>
JPMIA0011GB
11.8V</td></tr>
<tr><td>ON (front door LH OPEN)</td><td>0V</td></tr>
<tr><td rowspan="2">59 (G/R)</td><td rowspan="2">Ground</td><td rowspan="2">Rear window defogger relay</td><td rowspan="2">Output</td><td rowspan="2">Rear window defogger</td><td>Active</td><td>Battery voltage</td></tr>
<tr><td>Not activated</td><td>0V</td></tr>
<tr><td rowspan="2">60 (B/R)</td><td rowspan="2">Ground</td><td rowspan="2">Front console antenna 2 (-)</td><td rowspan="2">Output</td><td rowspan="2">Ignition switch OFF</td><td>When Intelligent Key is in the passenger compartment</td><td>
JMKIA0062GB</td></tr>
<tr><td>When Intelligent Key is not in the passenger compartment</td><td>
JMKIA0063GB</td></tr>
<tr><td rowspan="2">61 (W/R)</td><td rowspan="2">Ground</td><td rowspan="2">Center console antenna 2 (+)</td><td rowspan="2">Output</td><td rowspan="2">Ignition switch OFF</td><td>When Intelligent Key is in the passenger compartment</td><td>
JMKIA0062GB</td></tr>
<tr><td>When Intelligent Key is not in the passenger compartment</td><td>
JMKIA0063GB</td></tr>
</table>

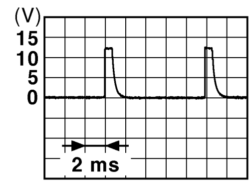
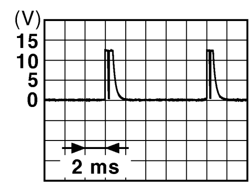
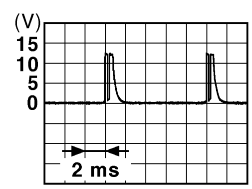
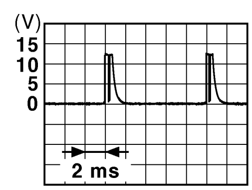
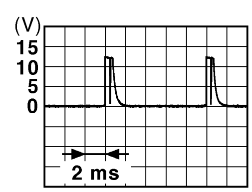
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
62[4] (B/Y)	Ground	Front outside handle RH antenna (-)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
63[4] (LG)	Ground	Front outside handle RH antenna (+)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
64[4] (V)	Ground	Front outside handle LH antenna (-)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

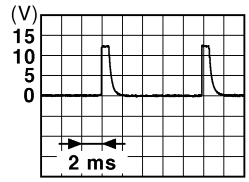
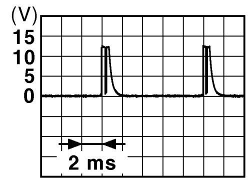
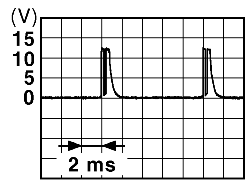
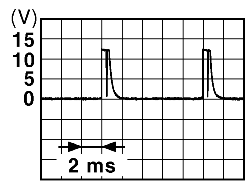
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
65[4] (P)	Ground	Front outside handle LH antenna (+)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
66 (R)	Ground	Instrument panel antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
67 (G)	Ground	Instrument panel antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

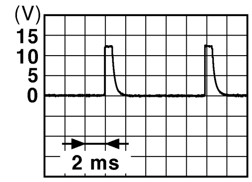
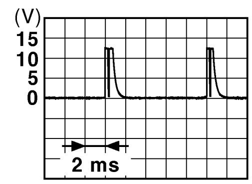
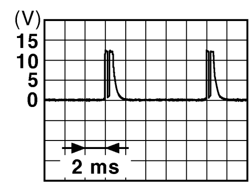
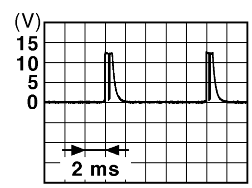
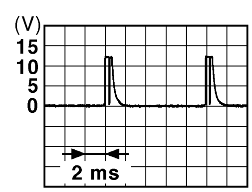
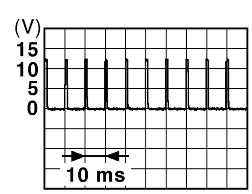
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
70 (R/B)	Ground	Ignition relay-2 control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
71 (L/O)	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB
75 (R/Y)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3V

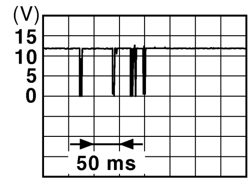
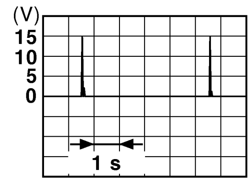
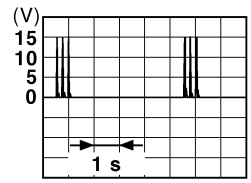
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
76 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch high-beam (Wiper intermittent dial 4)	 JPMIA0036GB 1.3V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3V
77 (BR)	Ground	Engine switch (push switch)	Input	Engine switch (push switch)	Pressed	0V
					Not pressed	Battery voltage
78 (P)	Ground	CAN-L	Input/ Output	—		—
79 (L)	Ground	CAN-H	Input/ Output	—		—
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0V
					Blinking	 JPMIA0015GB 6.5V
					ON	Battery voltage

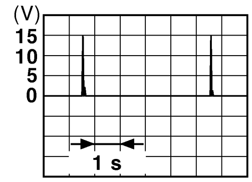
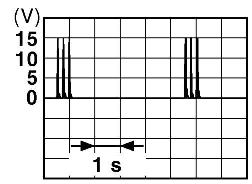
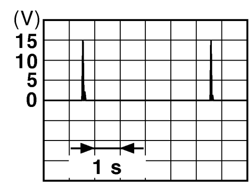
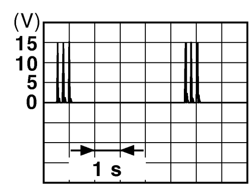
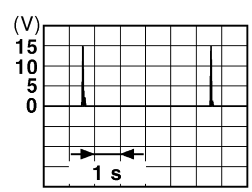
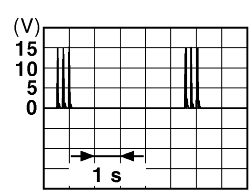
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/Output	Condition		Value (Approx.)
81 (LG)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
83 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0V
					ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT device	Output	—		Battery voltage
85 (L/O)	Ground	Electronic steering column lock condition No. 1	Input	Electronic steering column lock	Lock status	0V
					Unlock status	Battery voltage
86 (G/R)	Ground	Electronic steering column lock condition No. 2	Input	Electronic steering column lock	Lock status	Battery voltage
					Unlock status	0V
87 (G/B)	Ground	Selector lever P position switch	Input	Selector lever	P position	0V
					Any position other than P	Battery voltage
88[4] (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
89[4] (B/W)	Ground	Front door LH request switch	Input	Front door LH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
90 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage
94 (G/Y)	Ground	Steering wheel lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V

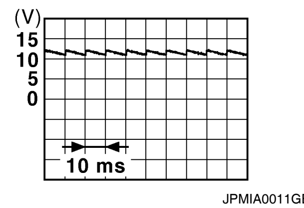
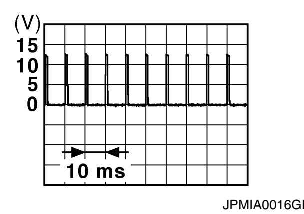
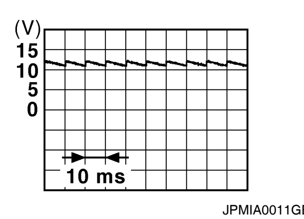
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/Output	Condition		Value (Approx.)
95 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Turn signal switch LH	 JPMIA0037GB 1.3V
					Turn signal switch RH	 JPMIA0036GB 1.3V
					Front wiper switch LO	 JPMIA0038GB 1.3V
					Front washer switch ON	 JPMIA0039GB 1.3V

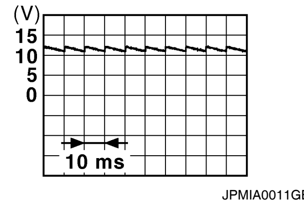
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
96 (P/B)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3V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

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Lighting switch flash-to-pass	 JPMIA0037GB 1.3V
					Lighting switch 2ND	 JPMIA0036GB 1.3V
					Front wiper switch INT	 JPMIA0038GB 1.3V
					Front wiper switch HI	 JPMIA0040GB 1.3V
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Pressed	0 V
					Not pressed	 JPMIA0012GB 1.1V

Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/Output	Condition		Value (Approx.)
99 (L/Y)	Ground	Electronic steering column lock unit communication	Input/Output	Electronic steering column lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UNLOCK	Battery voltage
					15 seconds or later after UNLOCK	0V
103 (V)	Ground	Trunk lid opening	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage
					Close (trunk lid opener actuator is not activated)	0V
110 (V/W)	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V
					OFF	Battery voltage
114 (B)	Ground	Rear parcel shelf antenna 1 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
115 (W)	Ground	Rear parcel shelf antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
118[4] (L/O)	Ground	Rear bumper antenna (-)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
119[4] (BR/ W)	Ground	Rear bumper antenna (+)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
127 (BR/W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	 11.8V
					ON (trunk is open)	0V
132 (R)	Ground	Starter motor relay control	Output	Ignition switch OFF (M/T vehicle)	When the clutch pedal is depressed	Battery voltage
					When the clutch pedal is not depressed	0V
				Ignition switch ON (other than M/T vehicle)	When selector lever is in P or N position and the brake is depressed	Battery voltage
					When selector lever is in P or N position and the brake is not depressed	0V
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	ON (pressed)	0V
					OFF (not pressed)	 1.0V
144[4] (GR)	Ground	Intelligent Key warning buzzer	Output	Request switch buzzer	Sounding	0V
					Not sounding	Battery voltage
144[5] (GR)	Ground	Outside warning buzzer	Output	Outside warning buzzer	Sounding	0V
					Not sounding	Battery voltage
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0V
					Not pressed	Battery voltage
148[1] (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	 11.8V
					ON (when rear door RH opens)	0V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
149[1] (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	 11.8V
					ON (when rear door LH opens)	0V

1: Sedan only

2: With LH front window anti-pinch

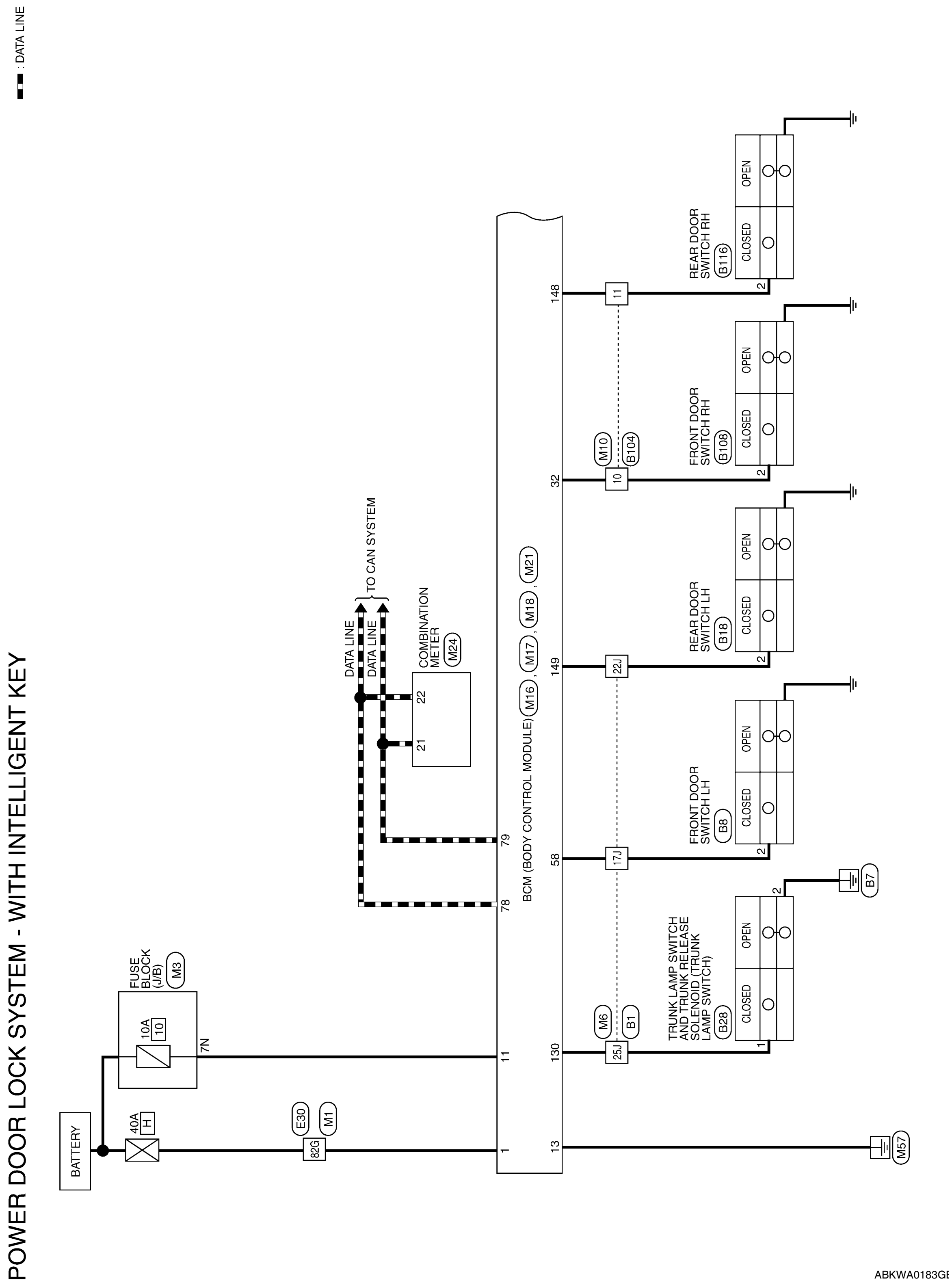
3: With LH and RH front window anti-pinch

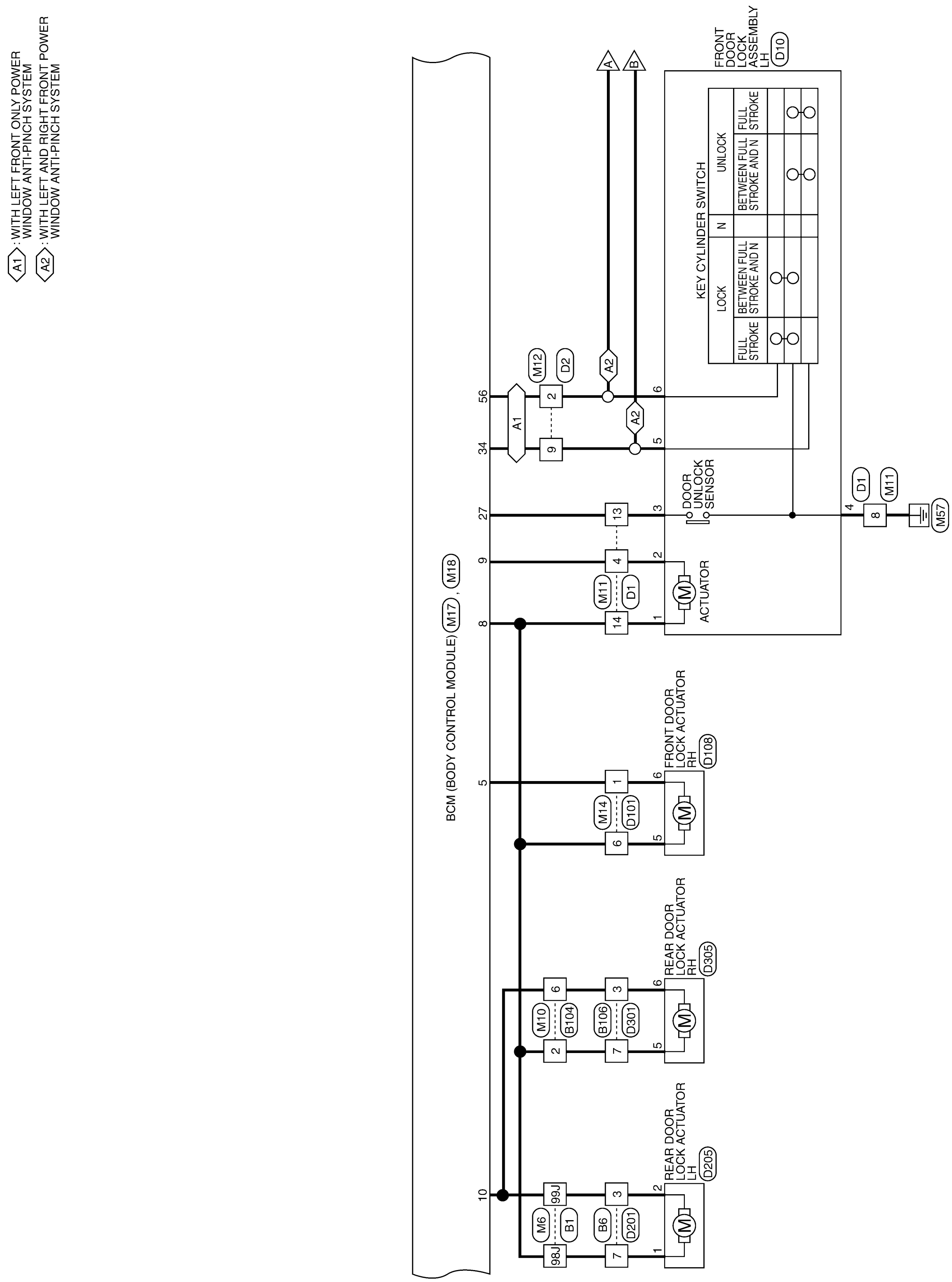
4: With Intelligent Key

5: Without Intelligent Key

Wiring Diagram—POWER DOOR LOCK SYSTEM— WITH INTELLIGENT KEY

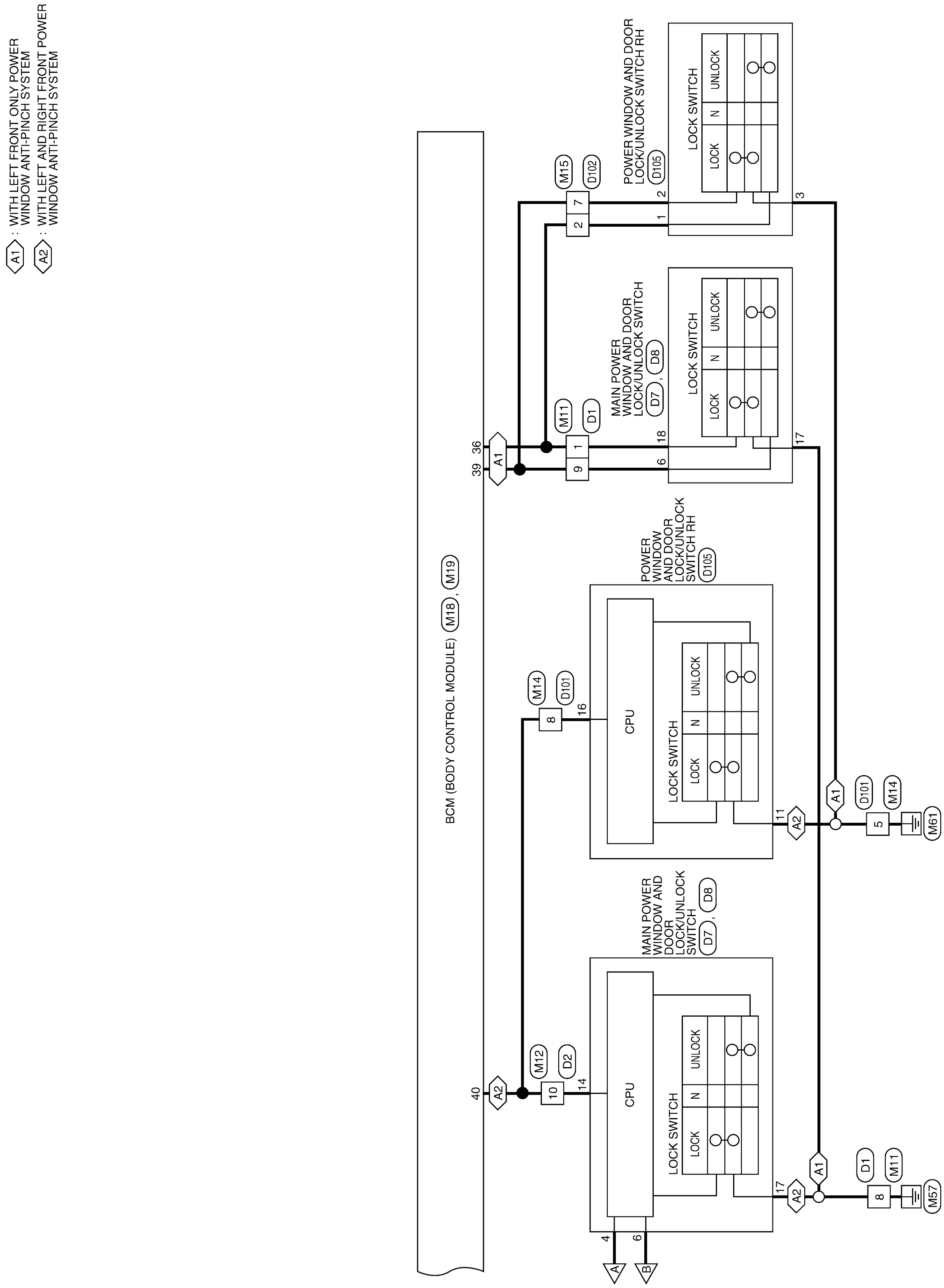
INFOID:0000000004204899





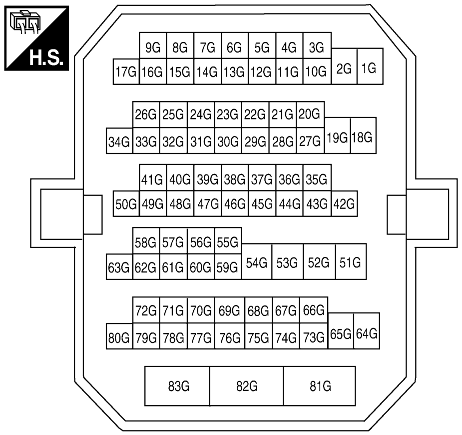
ABKWA0184GE

A B C D E F G H I J DLK L M N O P



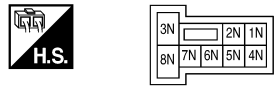
POWER DOOR LOCK SYSTEM CONNECTORS - WITH INTELLIGENT KEY

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



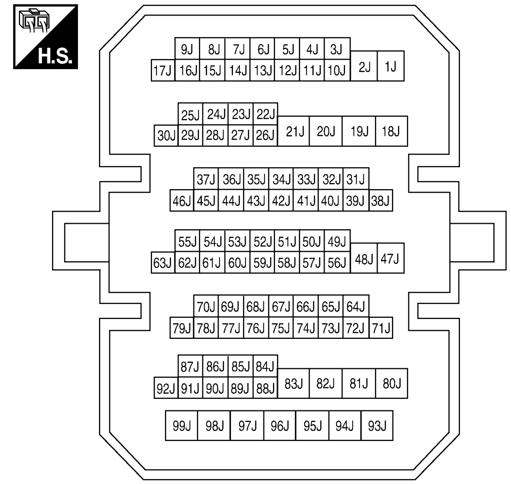
Terminal No.	Color of Wire	Signal Name
82G	W/B	–

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



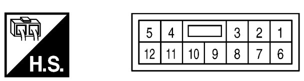
Terminal No.	Color of Wire	Signal Name
7N	Y/R	–

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



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

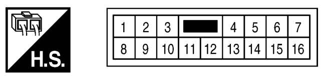
Connector No.	M10
Connector Name	WIRE TO WIRE
Connector Color	BROWN



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

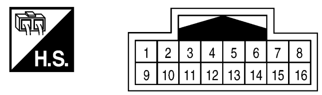
ABKIA0608GB

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



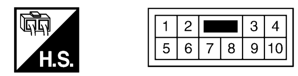
Terminal No.	Color of Wire	Signal Name
1	GR	—
4	G	—
8	B	—
9	GR/R	—
13	G/W	—
14	V	—

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



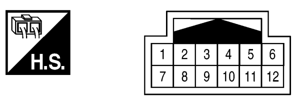
Terminal No.	Color of Wire	Signal Name
2	L/B	—
9	L/R	—
10	Y/G	—

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



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

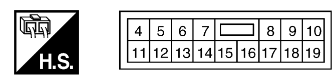


Terminal No.	Color of Wire	Signal Name
2	G/R	—
7	GR/R	—

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

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

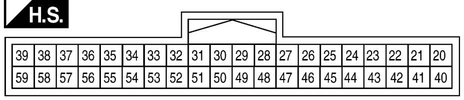


Terminal No.	Color of Wire	Signal Name
5	G/Y	CDL_AS
8	V	CDL_COMMON
9	G	CDL_DR/FL
10	G/Y	CDL_RR_RL_BACK
11	Y/R	BAT_BCM_FUSE
13	B	GND1

AWKIA0397GB

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

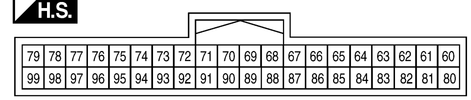
H.S.



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

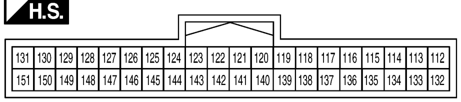
H.S.



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

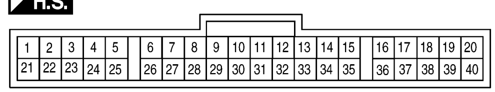
H.S.



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

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

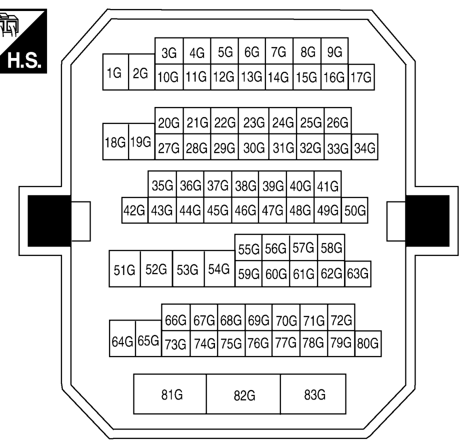
H.S.



Terminal No.	Color of Wire	Signal Name
21	L	CAN-H
22	P	CAN-L

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

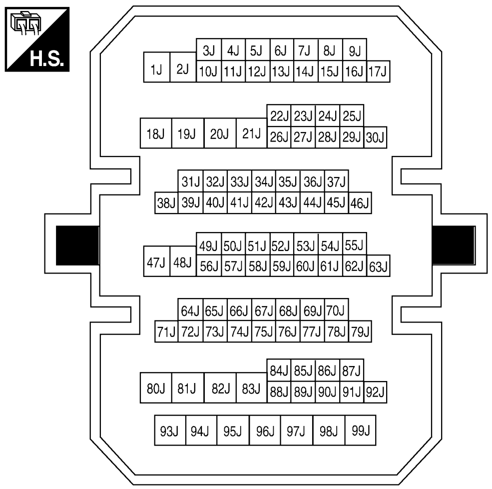
H.S.



Terminal No.	Color of Wire	Signal Name
82G	LG	–

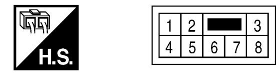
ABKIA0609GB

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



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

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



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

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

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

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

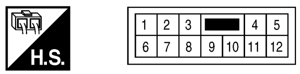
Terminal No.	Color of Wire	Signal Name
2	R/B	DOOR SW (RL)

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

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

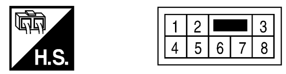
ABKIA0610GB

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/B	—
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	—

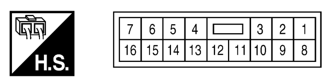
Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

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

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

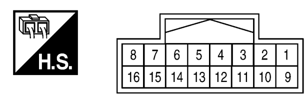
Terminal No.	Color of Wire	Signal Name
2	R/W	DOOR SW (RR)

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

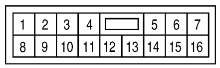


Terminal No.	Color of Wire	Signal Name
2	L/B	—
9	L/R	—
10	Y/G	—

ALKIA0199GB

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

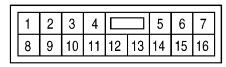
H.S.



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

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

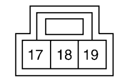
H.S.



Terminal No.	Color of Wire	Signal Name
4	L/B	LOCK
6	L/R	UNLOCK
14	Y/G	COM

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

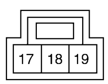
H.S.



Terminal No.	Color of Wire	Signal Name
17	B	GND

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

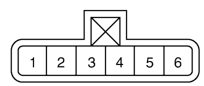
H.S.



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

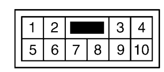
H.S.



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

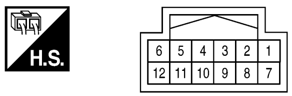
H.S.



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

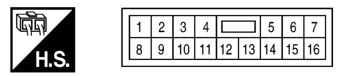
ABKIA0611GB

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



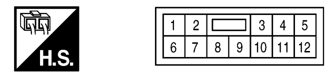
Terminal No.	Color of Wire	Signal Name
2	GR	—
7	GR/R	—

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



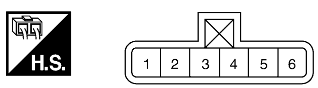
Terminal No.	Color of Wire	Signal Name
11	B	GND
16	Y/G	COM

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



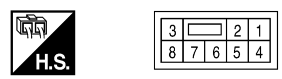
Terminal No.	Color of Wire	Signal Name
1	GR	LOCK
2	GR/R	UNLOCK
3	B	GND

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



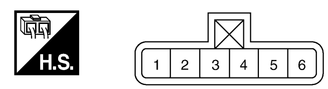
Terminal No.	Color of Wire	Signal Name
5	V	—
6	G/Y	—

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



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

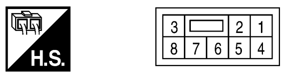
Connector No.	D205
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Color	GRAY



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

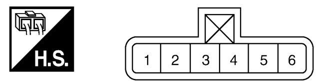
AWKIA0400GB

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



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

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

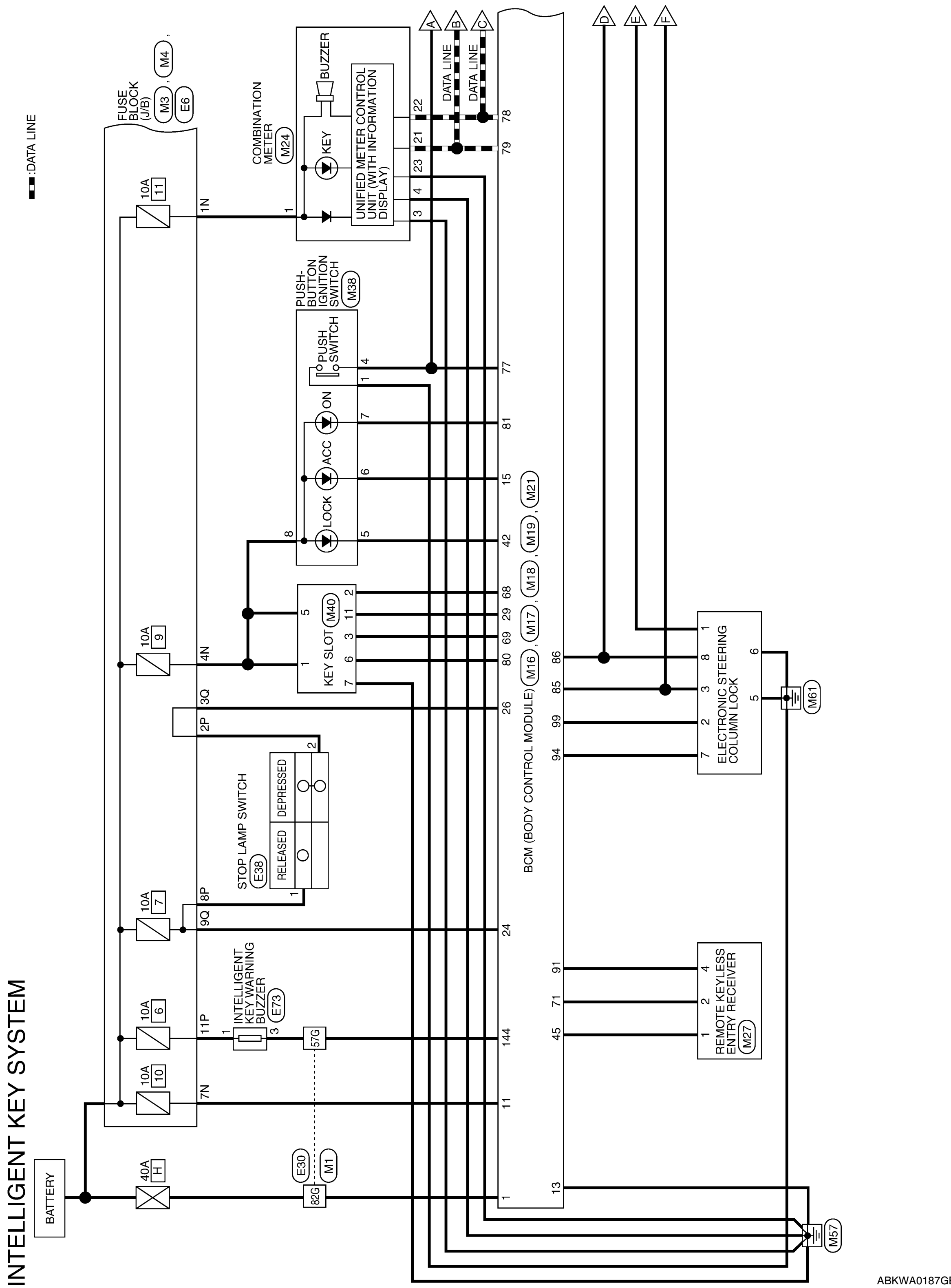


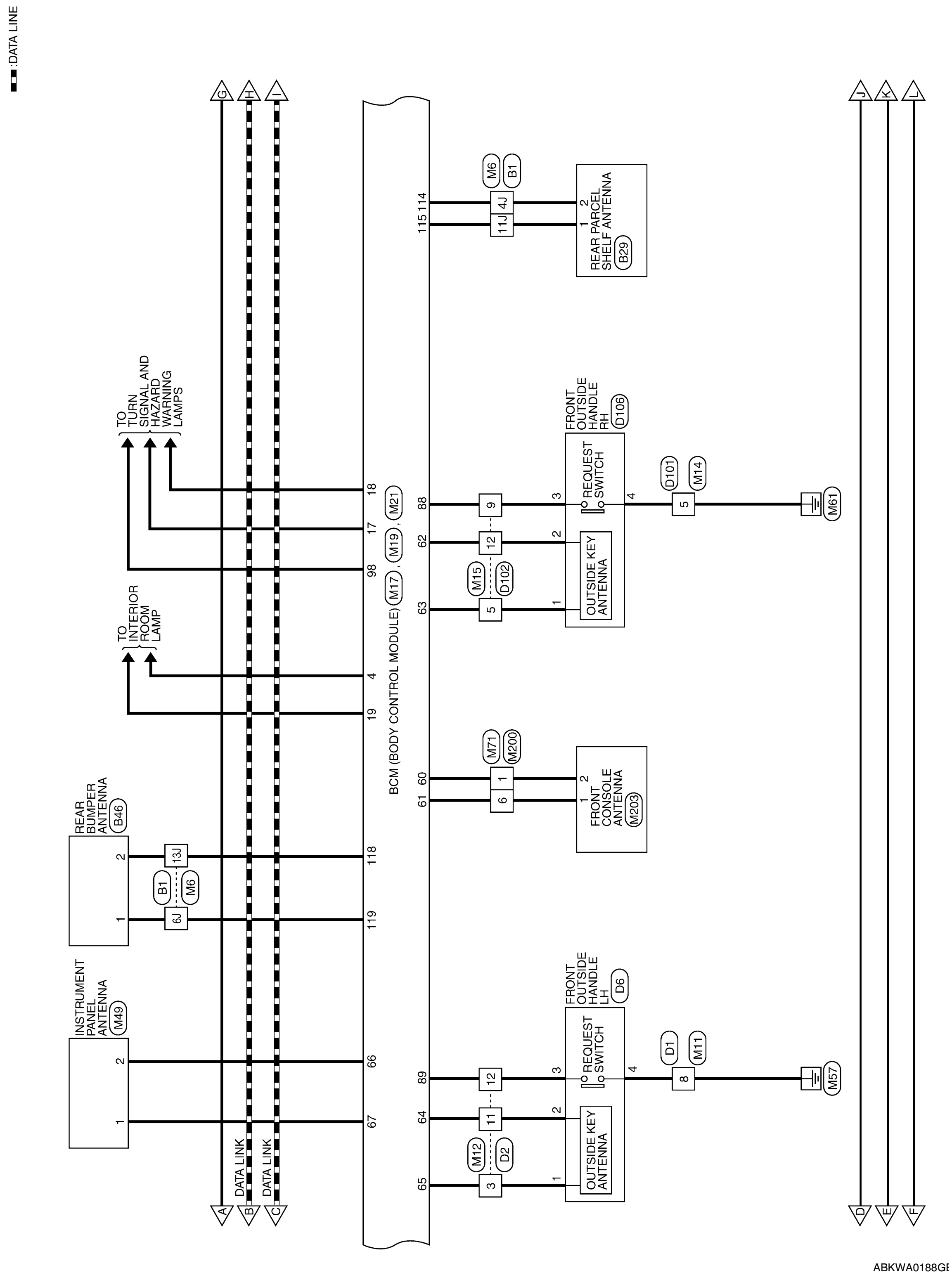
Terminal No.	Color of Wire	Signal Name
5	V	—
6	G/Y	—

AWKIA0401GB

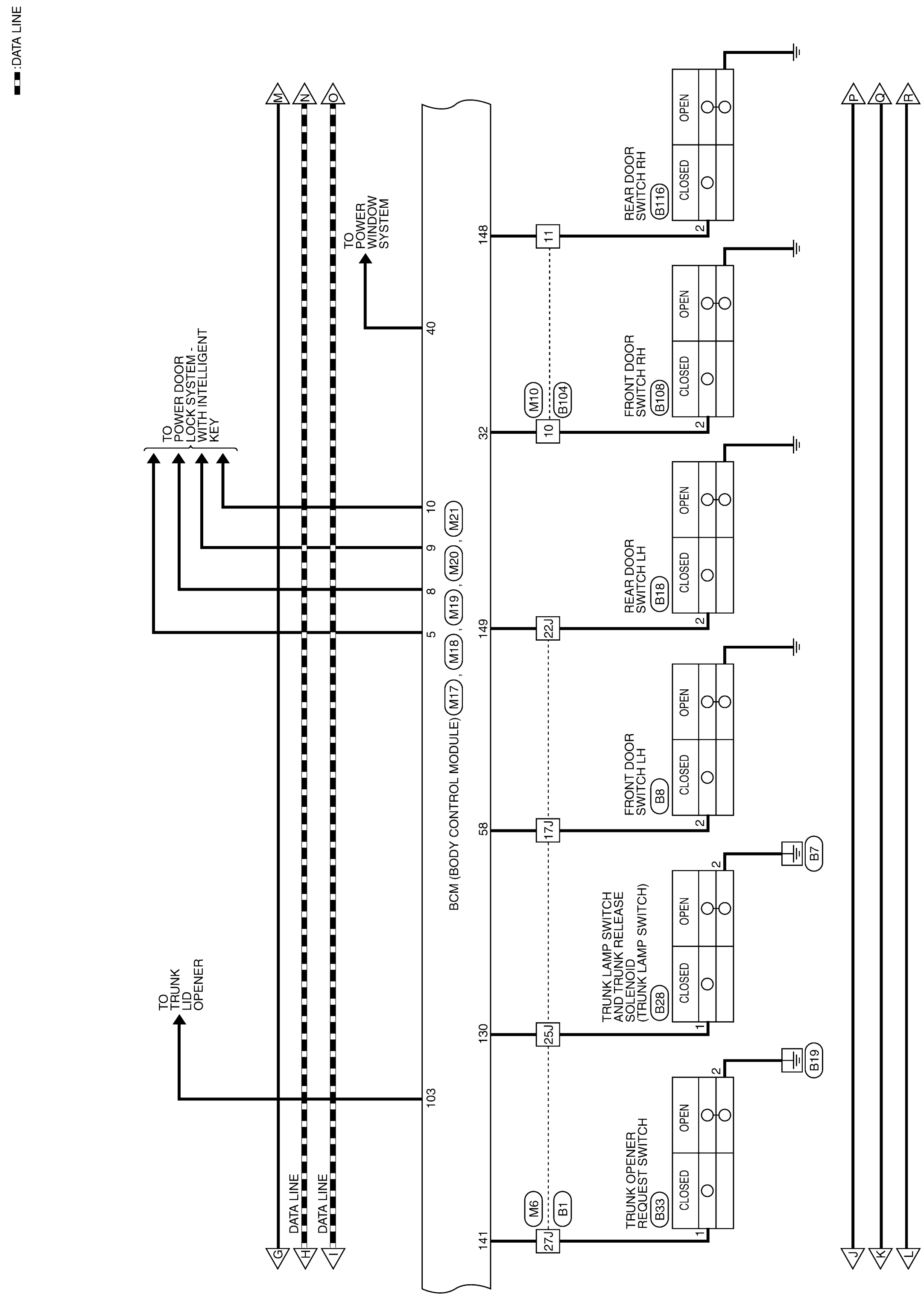
Wiring Diagram — INTELLIGENT KEY SYSTEM —

INFOID:0000000004204900

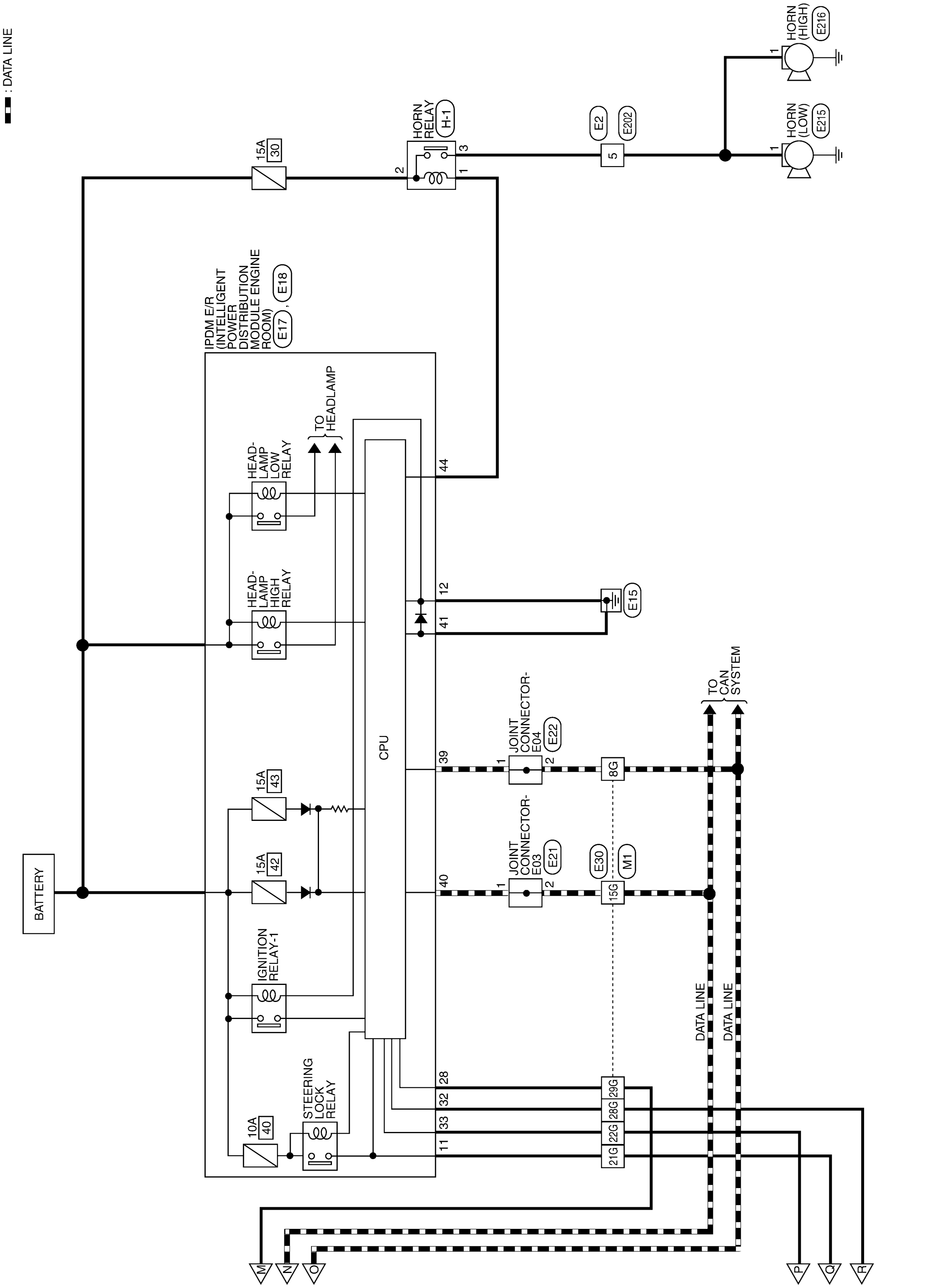




:DATA LINE
BCM (BODY CONTROL MODULE)
M17, M19, M21
TO TURN SIGNAL AND HAZARD WARNING LAMPS
TO INTERIOR ROOM LAMP
REAR PARCEL SHELF ANTENNA
B29
FRONT OUTSIDE HANDLE RH
D106
REQUEST SWITCH
OUTSIDE KEY ANTENNA
FRONT CONSOLE ANTENNA
M203
REAR BUMPER ANTENNA
B46
INSTRUMENT PANEL ANTENNA
M49
FRONT OUTSIDE HANDLE LH
D6
DATA LINK
DATA LINK
M6
B1
M15
D102
D101
M14
M61
M71
M200
M12
D2
D1
M11
M57
ABKWA0188GB

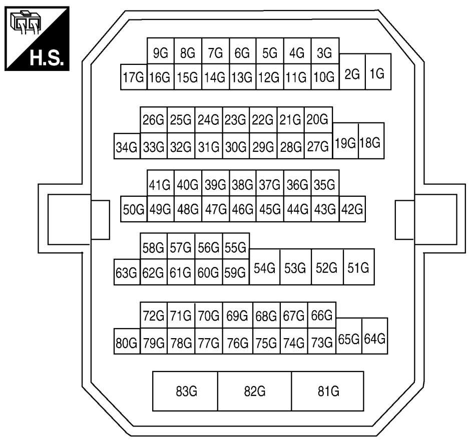


ABKWA0189GE


: DATA LINE
BATTERY
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E17
E18
HORN RELAY
H-1
HORN (HIGH)
E216
HORN (LOW)
E215
E2
E202
15A
30
HEAD-LAMP LOW RELAY
HEAD-LAMP HIGH RELAY
TO HEADLAMP
E15
TO CAN SYSTEM
JOINT CONNECTOR-E04
E22
JOINT CONNECTOR-E03
E21
E30
M1
CPU
15A
43
15A
42
IGNITION RELAY-1
STEERING LOCK RELAY
10A
40
DATA LINE
DATA LINE
8G
15G
29G
28G
22G
21G
ABKWA0190GB

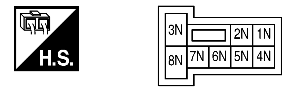
INTELLIGENT KEY SYSTEM CONNECTORS

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



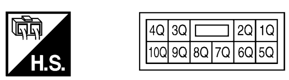
Terminal No.	Color of Wire	Signal Name
8G	P	–
15G	L	–
21G	P/L	–
22G	G/R	–
28G	L/O	–
29G	BR	–
57G	GR	–
82G	W/B	–

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



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

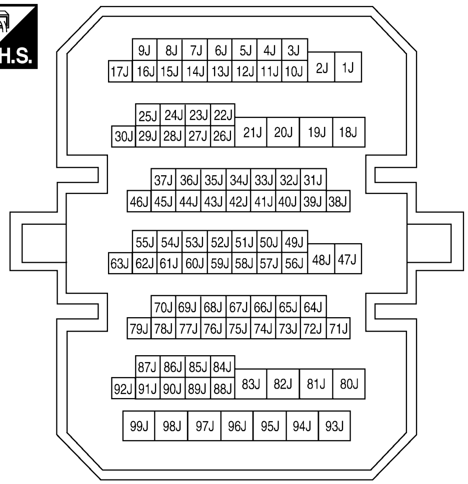
Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



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

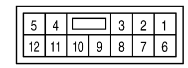
ABKIA0614GB

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



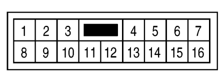
Terminal No.	Color of Wire	Signal Name
4J	B	–
6J	BR/W	–
11J	W	–
13J	L/O	–
17J	SB	–
22J	R/B	–
25J	Y/G	–
27J	G/R	–

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



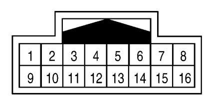
Terminal No.	Color of Wire	Signal Name
10	R/B	–
11	R/W	–

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



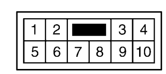
Terminal No.	Color of Wire	Signal Name
8	B	–

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



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

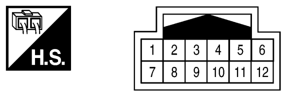
Connector No.	M14
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5	B	–

ABKIA0831GB

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

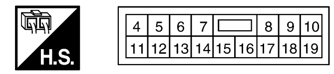


Terminal No.	Color of Wire	Signal Name
5	LG	–
9	P/L	–
12	B/Y	–

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

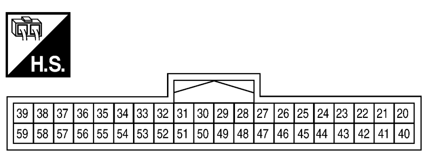
Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L

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



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

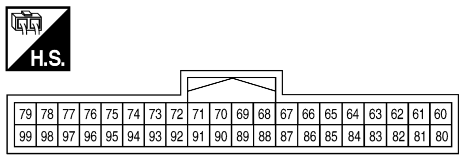
Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



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
40	Y/G	PW K-LINE
42	R	S/L_LOCK_LED
45	P	GND_RF2_A/L
58	SB	DR_DOOR_SW

ABKIA0615GB

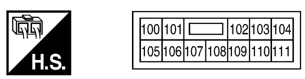
Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



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
68	G/O	FOB_READER_CLOCK
69	O	FOB_READER_DATA
71	L/O	RF1_TUNER_SIGNAL
77	BR	ENG_START_SW

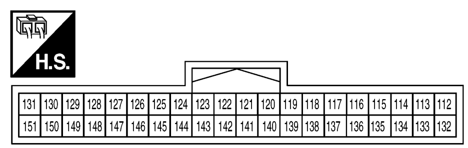
Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H
80	R/L	FOB_SLOT_ILLUMINATION
81	LG	IGN_ON_LED
85	L/O	S/L_CONDITION_1
86	G/R	S/L_CONDITION_2
88	P/L	AS_REQUEST SWITCH
89	B/W	DR REQUEST SWITCH
91	L/R	RF1_POWER_SUPPLY
94	G/Y	S/L_POWER_SUPPLY_12V
98	G/O	HAZARD SW
99	L/Y	S/L_K-LINE

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



Terminal No.	Color of Wire	Signal Name
103	V	CDL_BACK_TRUNK

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

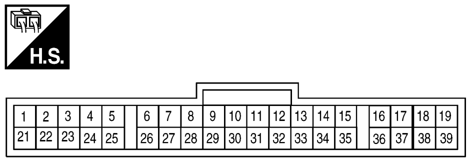


Terminal No.	Color of Wire	Signal Name
114	B	TRUNK_ANT_1_B
115	W	TRUNK_ANT_1_A
118	L/O	BACK_DOOR_ANT_B
119	BR/W	BACK_DOOR_ANT_A
130	Y/G	TRUNK_SW
141	G/R	TRUNK REQUEST SW
144	GR	BUZZER
148	R/W	RR_DOOR_SW
149	R/B	RL_DOOR_SW

ABKIA0616GB

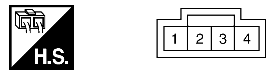
A B C D E F G H I J DLK L M N O P

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



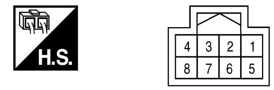
Terminal No.	Color of Wire	Signal Name
1	W/L	BATT
3	B	GND
4	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND

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



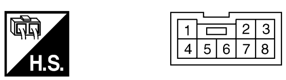
Terminal No.	Color of Wire	Signal Name
1	P	GND
2	L/O	SIGNAL
4	L/R	12V

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



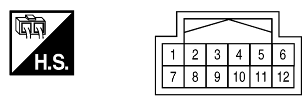
Terminal No.	Color of Wire	Signal Name
1	P/L	S/L 12V MECHANICAL (V1)
2	L/Y	S/L_COM
3	L/O	S/L_CONDITION_1
5	B	GND
6	B	GND
7	G/Y	S/L_12V_CPU (V2)
8	G/R	S/L_CONDITION_2

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



Terminal No.	Color of Wire	Signal Name
1	B	GND
4	BR	SSTART_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



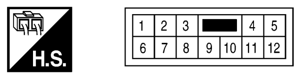
Terminal No.	Color of Wire	Signal Name
1	G/Y	B+
2	G/O	CLOCK
3	O	DATA
5	G/Y	LIGHT _BAT+
6	R/L	LIGHT_A
7	B	GND
11	Y	CARD_SW_1

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

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

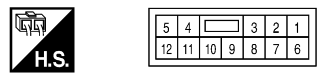
ABKIA0617GB

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



Terminal No.	Color of Wire	Signal Name
1	B/R	–
6	W/R	–

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

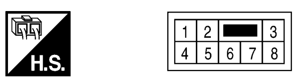


Terminal No.	Color of Wire	Signal Name
1	B/R	–
6	W/R	–

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

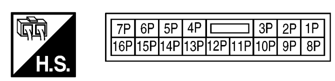
Terminal No.	Color of Wire	Signal Name
1	W/R	ANT+
2	B/R	ANT-

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



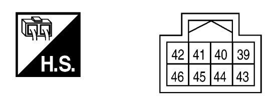
Terminal No.	Color of Wire	Signal Name
5	O	–

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

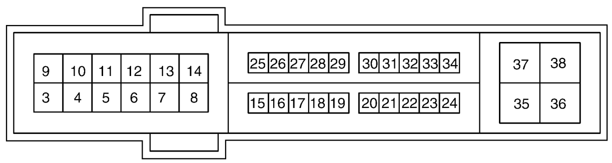


Terminal No.	Color of Wire	Signal Name
39	P	CAN-L
40	L	CAN-H
41	B	GND (SIGNAL)
44	G/W	HORN RLY

ABKIA0618GB

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

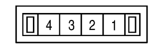
H.S.



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

Connector No.	E21
Connector Name	JOINT CONNECTOR-E03
Connector Color	WHITE

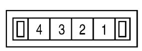
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–

Connector No.	E22
Connector Name	JOINT CONNECTOR-E04
Connector Color	WHITE

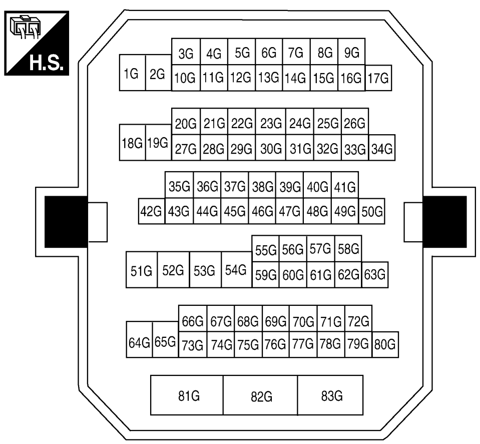
H.S.



Terminal No.	Color of Wire	Signal Name
1	P	–
2	P	–

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

H.S.

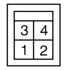


Terminal No.	Color of Wire	Signal Name
8G	P	–
15G	L	–
21G	O	–
22G	G	–
28G	P	–
29G	SB	–
57G	R	–
82G	LG	–

ABKIA0619GB

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

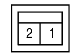
H.S.



Terminal No.	Color of Wire	Signal Name
1	R	–
2	LG	–

Connector No.	E38
Connector Name	STOP LAMP SWITCH (WITH M/T)
Connector Color	BLACK

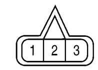
H.S.



Terminal No.	Color of Wire	Signal Name
1	R	–
2	LG	–

Connector No.	E73
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Color	BROWN

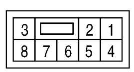
H.S.



Terminal No.	Color of Wire	Signal Name
1	G	–
3	R	–

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

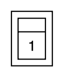
H.S.



Terminal No.	Color of Wire	Signal Name
5	G	–

Connector No.	E215
Connector Name	HORN (LOW)
Connector Color	BLACK

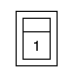
H.S.



Terminal No.	Color of Wire	Signal Name
1	G	–

Connector No.	E216
Connector Name	HORN (HIGH)
Connector Color	BLACK

H.S.

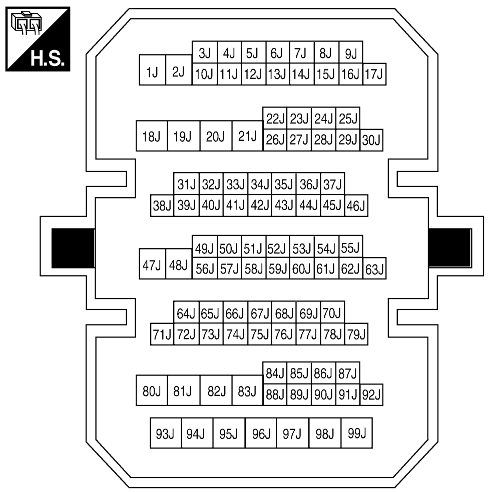


Terminal No.	Color of Wire	Signal Name
1	G	–

ABKIA0620GB

A B C D E F G H I J DLK L M N O P

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



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

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

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

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

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

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

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

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

ABKIA0621GB

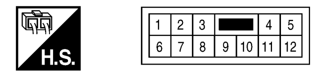
Connector No.	B33
Connector Name	TRUNK OPENER REQUEST SWITCH
Connector Color	BROWN

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

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

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



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

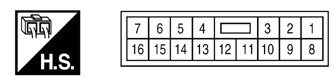
Connector No.	B108
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	Q	–

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

Terminal No.	Color of Wire	Signal Name
1	Q	–

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

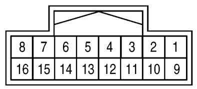


Terminal No.	Color of Wire	Signal Name
8	B	–

ABKIA0622GB

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

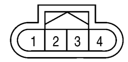
H.S.



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

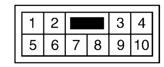
H.S.



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

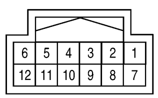
H.S.



Terminal No.	Color of Wire	Signal Name
5	B	–

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

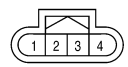
H.S.



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.



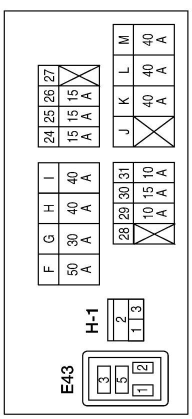
Terminal No.	Color of Wire	Signal Name
1	LG	ANT+
2	B/Y	ANT-
3	P/L	SW+
4	B	SW-

ABKIA0623GB

A B C D E F G H I J DLK L M N O P

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

T.S.

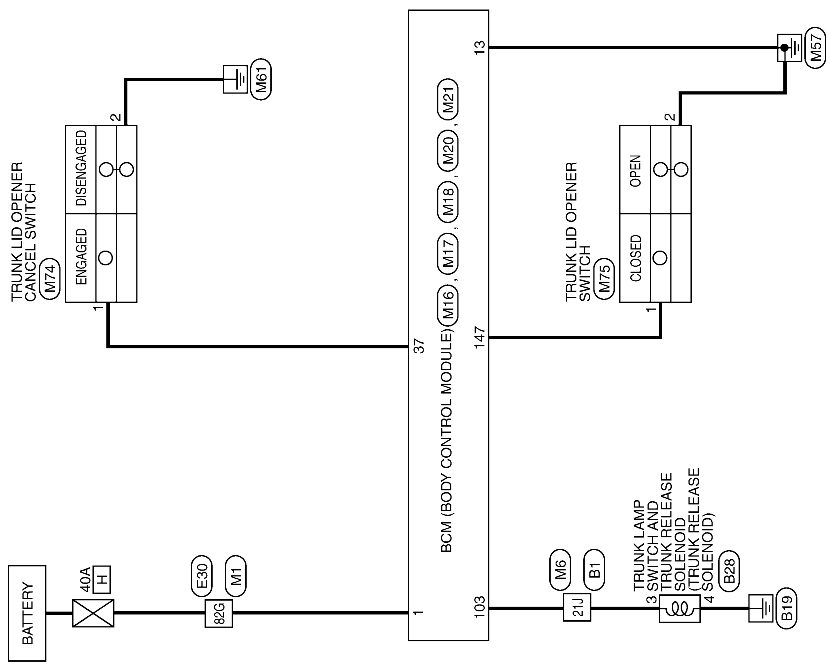


Terminal No.	Color of Wire	Signal Name
1	W	–
2	SB	–
3	O	–

ABKIA0624GB

Wiring Diagram — TRUNK LID OPENER SYSTEM —

INFOID:0000000004204901



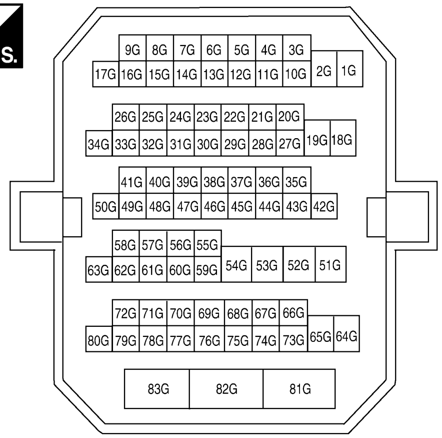
TRUNK LID OPENER

ABKWA0186GB

TRUNK LID OPENER CONNECTORS

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

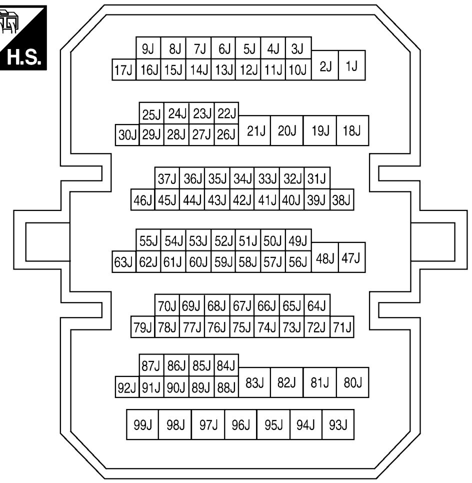
H.S.



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

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

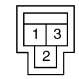
H.S.



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

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

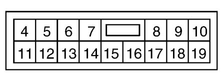
H.S.



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

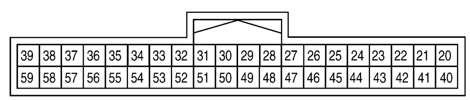
H.S.



Terminal No.	Color of Wire	Signal Name
13	B	GND1

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

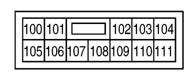
H.S.



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.



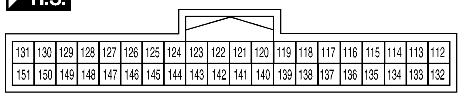
Terminal No.	Color of Wire	Signal Name
103	V	CDL_BACK_TRUNK

ABKIA0612GB

A B C D E F G H I J DLK L M N O P

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

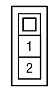
H.S.



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

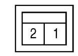
H.S.



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

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

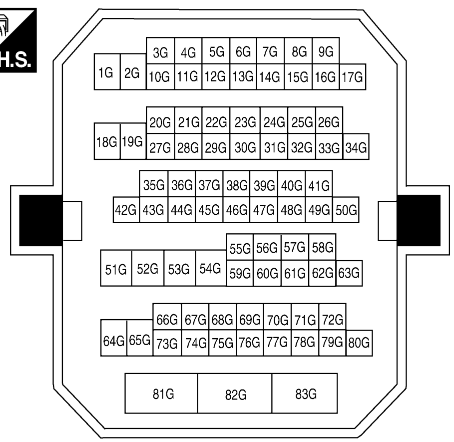
H.S.



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

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

H.S.



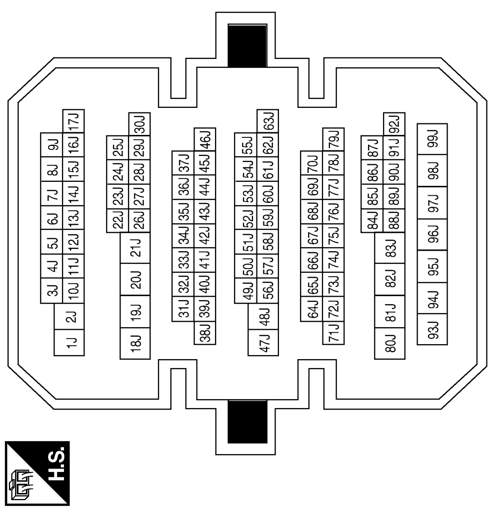
Terminal No.	Color of Wire	Signal Name
82G	LG	–

ABKIA0613GB

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	–

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



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

AAKIA0154GB

Fail Safe

INFOID:0000000004496025

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC

Display contents of CONSULT	Fail-safe	Cancellation
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Erase DTC
B2557: VEHICLE SPEED	Inhibit electronic steering column lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
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: LO VOLTAGE	• Inhibit engine cranking • Inhibit electronic steering column lock	100 ms after the power supply voltage increases to more than 8.8 V
B2601: SHIFT POSITION	Inhibit electronic steering column lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit electronic steering column lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 /h or more
B2603: SHIFT POSI STATUS	Inhibit electronic steering column lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/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
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Electronic steering column lock relay signal (Request signal) • Electronic steering column lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Electronic steering column lock relay signal (Request signal) • Electronic steering column lock relay signal (Condition signal)

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 electronic steering column lock	When the following electronic steering column lock conditions agree • BCM electronic steering column lock control status • Electronic steering column lock condition No. 1 signal status • Electronic steering column lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	• Inhibit engine cranking • Inhibit electronic steering column lock	When any of the following conditions is fulfilled • Electronic steering column lock unit status signal (CAN) is received normally • The BCM electronic steering column lock control status matches the electronic steering column lock status recognized by the electronic steering column lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
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 electronic steering column lock unit power supply output control inside BCM becomes normal
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:0000000004496026

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

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

Priority	DTC
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 • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B26E1: ENG STATE NO RECIV • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
5	• C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1712: [CHECKSUM ERR] FL • C1713: [CHECKSUM ERR] FR • C1714: [CHECKSUM ERR] RR • C1715: [CHECKSUM ERR] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1720: [CODE ERR] FL • C1721: [CODE ERR] FR • C1722: [CODE ERR] RR • C1723: [CODE ERR] RL • C1724: [BATT VOLT LOW] FL • C1725: [BATT VOLT LOW] FR • C1726: [BATT VOLT LOW] RR • C1727: [BATT VOLT LOW] RL • C1734: CONTROL UNIT
6	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000004496027

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	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	BCS-38
U1010: CONTROL UNIT (CAN)	—	—	—	BCS-39
U0415: VEHICLE SPEED SIG	—	—	—	BCS-40
B2013: ID DISCORD BCM-S/L	×	—	—	SEC-38
B2014: CHAIN OF S/L-BCM	×	—	—	SEC-39
B2190: NATS ANTENNA AMP	×	—	—	SEC-64
B2191: DIFFERENCE OF KEY	×	—	—	SEC-67
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-68
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-69
B2553: IGNITION RELAY	—	—	—	PCS-60
B2555: STOP LAMP	—	—	—	SEC-70
B2556: PUSH-BTN IGN SW	—	×	—	SEC-72
B2557: VEHICLE SPEED	×	×	—	SEC-74
B2560: STARTER CONT RELAY	×	×	—	SEC-75
B2562: LOW VOLTAGE	—	—	—	BCS-41
B2601: SHIFT POSITION	×	×	—	SEC-76
B2602: SHIFT POSITION	×	×	—	SEC-79
B2603: SHIFT POSI STATUS	×	×	—	SEC-81
B2604: PNP SW	×	×	—	SEC-84
B2605: PNP SW	×	×	—	SEC-86
B2606: S/L RELAY	×	×	—	SEC-88
B2607: S/L RELAY	×	×	—	SEC-89
B2608: STARTER RELAY	×	×	—	SEC-91
B2609: S/L STATUS	×	×	—	SEC-93
B260A: IGNITION RELAY	×	×	—	PCS-62
B260B: STEERING LOCK UNIT	—	×	—	SEC-97
B260C: STEERING LOCK UNIT	—	×	—	SEC-98
B260D: STEERING LOCK UNIT	—	×	—	SEC-99
B260F: ENG STATE SIG LOST	×	×	—	SEC-100
B2612: S/L STATUS	×	×	—	SEC-101
B2614: ACC RELAY CIRC	—	×	—	PCS-65
B2615: BLOWER RELAY CIRC	—	×	—	PCS-68
B2616: IGN RELAY CIRC	—	×	—	PCS-71
B2617: STARTER RELAY CIRC	×	×	—	SEC-105
B2618: BCM	×	×	—	PCS-74

A B C D E F G H I J DLK L M N O P

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2619: BCM	×	×	—	SEC-107
B261A: PUSH-BTN IGN SW	—	×	—	SEC-108
B2621: INSIDE ANTENNA	—	—	—	DLK-59
B2622: INSIDE ANTENNA	—	—	—	DLK-62
B2623: INSIDE ANTENNA	—	—	—	DLK-65
B26E1: ENG STATE NO RES	×	×	—	SEC-110
C1704: LOW PRESSURE FL	—	—	×	WT-52
C1705: LOW PRESSURE FR	—	—	×	WT-52
C1706: LOW PRESSURE RR	—	—	×	WT-52
C1707: LOW PRESSURE RL	—	—	×	WT-52
C1708: [NO DATA] FL	—	—	×	WT-14
C1709: [NO DATA] FR	—	—	×	WT-14
C1710: [NO DATA] RR	—	—	×	WT-14
C1711: [NO DATA] RL	—	—	×	WT-14
C1712: [CHECKSUM ERR] FL	—	—	×	WT-16
C1713: [CHECKSUM ERR] FR	—	—	×	WT-16
C1714: [CHECKSUM ERR] RR	—	—	×	WT-16
C1715: [CHECKSUM ERR] RL	—	—	×	WT-16
C1716: [PRESSDATA ERR] FL	—	—	×	WT-18
C1717: [PRESSDATA ERR] FR	—	—	×	WT-18
C1718: [PRESSDATA ERR] RR	—	—	×	WT-18
C1719: [PRESSDATA ERR] RL	—	—	×	WT-18
C1720: [CODE ERR] FL	—	—	×	WT-16
C1721: [CODE ERR] FR	—	—	×	WT-16
C1722: [CODE ERR] RR	—	—	×	WT-16
C1723: [CODE ERR] RL	—	—	×	WT-16
C1724: [BATT VOLT LOW] FL	—	—	×	WT-16
C1725: [BATT VOLT LOW] FR	—	—	×	WT-16
C1726: [BATT VOLT LOW] RR	—	—	×	WT-16
C1727: [BATT VOLT LOW] RL	—	—	×	WT-16
C1729: VHCL SPEED SIG ERR	—	—	×	WT-19
C1734: CONTROL UNIT	—	—	×	WT-20

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000004204905

ALL FUNCTIONS OF INTELLIGENT KEY SYSTEM DO NOT OPERATE

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-231, "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-292
	2. Check Intelligent Key function and battery inspection.	DLK-340
	3. Check remote keyless entry receiver.	DLK-337
	4. Check Intermittent Incident.	GI-42

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000004204906

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-231, "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 locks do not operate with door lock and unlock switch.	1. Check BCM Power supply and ground circuit.		DLK-292
	2. Check door lock and unlock switch.		DLK-296
	3. Check door lock actuator (driver side)		DLK-326
	4. Check Intermittent Incident.		GI-42
Power door locks do not operate with door key cylinder operation. (Power door locks operate properly with door lock and unlock switch.)	1. Check key cylinder switch.		DLK-305
	2. Replace power window main switch.		PWC-91
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	DLK-326
		Passenger side	DLK-327
		Rear LH	DLK-328
		Rear RH	DLK-329
	2. Check Intermittent Incident.		GI-42
Vehicle speed sensing auto door LOCK operation does not operate.	1. Ensure automatic door lock/unlock function (lock operation) is enabled.		DLK-276
	2. Check combination meter vehicle speed signal.		MWI-42
	3. Check intermittent incident.		GI-42
Ignition OFF interlock auto door UNLOCK function does not operate.	1. Ensure automatic door lock/unlock function (unlock operation) is enabled.		DLK-276
	2. Check BCM for DTCs.		DLK-410
	3. Check intermittent incident.		GI-42

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:0000000004204907

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-231, "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 system does not operate by door request switch.	1. Check BCM power supply and ground circuit.	DLK-292
	2. Check door switch.	DLK-293
	3. Check key slot.	DLK-303
	4. Check Intermittent Incident.	GI-42
Door lock/unlock system does not operate by request switch (driver side).	1. Check door request switch (driver side).	DLK-319
	2. Check outside key antenna (driver side).	DLK-334
	3. Check Intermittent Incident.	GI-42
Door lock/unlock system does not operate by request switch (passenger side).	1. Check door request switch (passenger side).	DLK-319
	2. Check outside key antenna (passenger side).	DLK-334
	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-276
	2. Check selective unlock function with a remote controller or door key cylinder.	DLK-241
	3. Check Intermittent Incident.	GI-42
Selective unlock function does not operate by door request switch (passenger side) (other door lock functions operate).	1. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.	DLK-276
	2. Check Intermittent Incident.	GI-42
Auto lock function does not operate.	1. Check “AUTO LOCK SET” setting in “WORK SUP-PORT”.	DLK-276
	2. Check door switch.	DLK-293
	3. Check key slot.	DLK-303
	4. Check Intermittent Incident.	GI-42

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000004204908

REMOTE KEYLESS ENTRY FUNCTION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-231, "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.
- Retained power operation does not operate. Refer to DLK-246, "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-340
	2. Check Intermittent Incident.	GI-42

Symptom	Diagnosis/service procedure	Reference page
Selective unlock function does not operate by Intelligent Key.	1. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.	DLK-276
	2. Check Intelligent Key battery inspection.	DLK-340
	3. Check Intermittent Incident.	GI-42
Auto lock function does not operate normally.	1. Check “AUTO LOCK SET” setting in “WORK SUPPORT”.	DLK-276
	2. Check door switch.	DLK-293
	3. Check key slot.	DLK-303
	4. Check Intermittent Incident.	GI-42
Power window down function does not operate.	1. Check “PW DOWN SET” setting in “WORK SUPPORT”.	DLK-276
	2. Check Intelligent Key battery inspection.	DLK-340

TRUNK OPEN FUNCTION SYMPTOMS

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : Symptom Table

INFOID:0000000004204909

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-231, "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-312
	2. Check trunk lid opener cancel switch.	DLK-314
	3. Check Intermittent Incident.	GI-42

TRUNK REQUEST SWITCH

TRUNK REQUEST SWITCH : Symptom Table

INFOID:0000000004204910

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-231, "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-323
	2. Check trunk lid opener cancel switch.	DLK-314
	3. Check outside key antenna (trunk room).	DLK-334
	4. Check Intermittent Incident.	GI-42

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000004204911

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-231, "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-276
	2. Check trunk open function.	DLK-259
	3. Check trunk room lamp switch.	DLK-316
	4. Check Intelligent Key battery inspection.	DLK-340
	5. Check Intermittent Incident.	GI-42

WARNING FUNCTION SYMPTOMS

Symptom Table

INFOID:0000000004204912

WARNING FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-231, "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-307
		2. Check door switch.	DLK-293
		3. Check warning chime function.	DLK-347
		4. Check Intermittent Incident.	GI-42
	For external	1. Check push-button ignition switch position indicator.	SEC-307
		2. Check door switch.	DLK-293
		3. Check Intelligent Key warning buzzer.	DLK-332
		4. Check Intermittent Incident.	GI-42
P position warning does not operate.		1. Check Park position switch.	SEC-283
		2. Check door switch.	DLK-293
		3. Check Intelligent Key warning buzzer.	DLK-332
		4. Check warning chime function.	DLK-347
		5. Check combination meter display function.	DLK-346
		6. Check Intermittent Incident.	GI-42
ACC warning does not operate		1. Check push-button ignition switch position indicator.	SEC-307
		2. Check warning chime function.	DLK-347
		3. Check combination meter display function.	DLK-346
		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-293
		2. Check inside key antenna.	Instrument center	DLK-283
			Console	DLK-286
			Trunk room	DLK-289
		3. Check Intelligent Key warning buzzer.		DLK-332
		4. Check warning chime function.		DLK-347
		5. Check key slot illumination.		DLK-342
		6. Check combination meter display function.		DLK-346
		7. Check Intermittent Incident.		GI-42
	Push-button ignition switch operation	1. Check push-button ignition switch position indicator.		SEC-307
		2. Check inside key antenna.	Instrument center	DLK-283
			Console	DLK-286
			Trunk room	DLK-289
		3. Check warning chime function.		DLK-347
		4. Check key slot illumination.		DLK-342
		5. Check combination meter display function.		DLK-346
		6. Check Intermittent Incident.		GI-42
	Door is open	1. Check push-button ignition switch position indicator.		SEC-307
		2. Check inside key antenna.	Instrument center	DLK-283
			Console	DLK-286
			Trunk room	DLK-289
		3. Check combination meter display function.		DLK-346
		4. Check Intermittent Incident.		GI-42
	Take away through window	1. Check “TAKE OUT FROM WIN WARN” setting in “WORK SUPPORT”.		DLK-276
		2. Check inside key antenna.	Instrument center	DLK-283
			Console	DLK-286
			Trunk room	DLK-289
		3. Check warning chime function.		DLK-347
		4. Check key slot illumination.		DLK-342
		5. Check combination meter display function.		DLK-346
		6. Check Intermittent Incident.		GI-42
Key warning chime does not operate.		1. Check key slot.		DLK-303
		2. Check door switch.		DLK-293
		3. Check warning chime function.		DLK-347
		4. Check key slot illumination.		DLK-342
		5. Check combination meter display function.		DLK-346
		6. Check Intermittent Incident.		GI-42

<table>
<tr><th>Symptom</th><th colspan="2">Diagnosis/service procedure</th><th>Reference page</th></tr>
<tr><td rowspan="7">Door lock operation warning chime does not operate.</td><td colspan="2">1. Check door switch.</td><td>DLK-293</td></tr>
<tr><td colspan="2">2. Check key slot illumination.</td><td>DLK-342</td></tr>
<tr><td colspan="2">3. Check Intelligent Key warning buzzer.</td><td>DLK-332</td></tr>
<tr><td rowspan="3">4. Check inside key antenna.</td><td>Instrument center</td><td>DLK-283</td></tr>
<tr><td>Console</td><td>DLK-286</td></tr>
<tr><td>Trunk room</td><td>DLK-289</td></tr>
<tr><td colspan="2">5. Check Intermittent Incident.</td><td>GI-42</td></tr>
</table>

KEY REMINDER FUNCTION SYMPTOMS

Symptom Table

INFOID:0000000004204913

KEY REMINDER FUNCTION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check "Work flow". Refer to DLK-231, "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-276
	2.	Check door switch.	DLK-293
	3.	Check inside key antenna.	DLK-347
	4.	Check unlock sensor.	DLK-342
	5.	Check Intelligent Key battery inspection.	DLK-340
	6.	Check Intermittent Incident.	GI-42

HAZARD FUNCTION

Symptom Table

INFOID:0000000004204914

HAZARD AND BUZZER REMINDER FUNCTION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-231, "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-276
	2.	Check hazard function.	DLK-348
	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-276
	2.	Check hazard function.	DLK-348
	3.	Check Intelligent Key battery inspection.	DLK-340
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-276
	2.	Check Intelligent Key warning buzzer.	DLK-332
	3.	Check Intermittent incident.	GI-42
Buzzer reminder does not operate by trunk opener request switch.	1.	Check “TRUNK OPEN DELAY” setting in “WORK SUP-PORT”.	DLK-279
	2.	Check Intelligent Key warning buzzer.	DLK-332
	3.	Check trunk open function.	DLK-254
	4.	Check Intermittent incident.	GI-42

HORN FUNCTION

Symptom Table

INFOID:0000000004204915

HAZARD AND HORN REMINDER FUNCTION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “Work flow”. Refer to DLK-231, "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-276
	2. Check hazard function.	DLK-348
	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-276
	2. Check hazard function.	DLK-348
	3. Check Intelligent Key battery inspection.	DLK-340
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-276
	2. Check Intelligent Key warning buzzer.	DLK-332
	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-276
	2. Check horn function.	DLK-344
	3. Check Intermittent Incident.	GI-42

INTEGRATED HOMELINK TRANSMITTER

Symptom Table

INFOID:0000000004204916

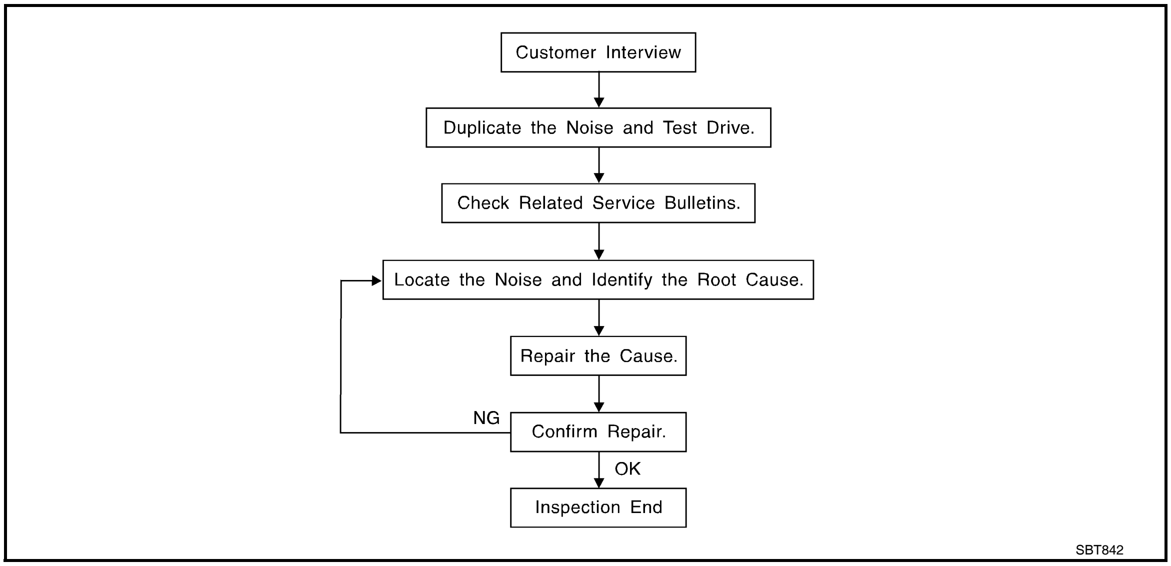
HOMELINK UNIVERSAL TRANSCEIVER MALFUNCTION

Symptom	Diagnosis/service procedure	Reference page
Homelink universal transceiver does not operate properly.	1. Check homelink universal transceiver function.	DLK-351
	2. Check Intermittent Incident.	GI-42

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000004204917



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-430, "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-428, "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:0000000004204918

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 bumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

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.

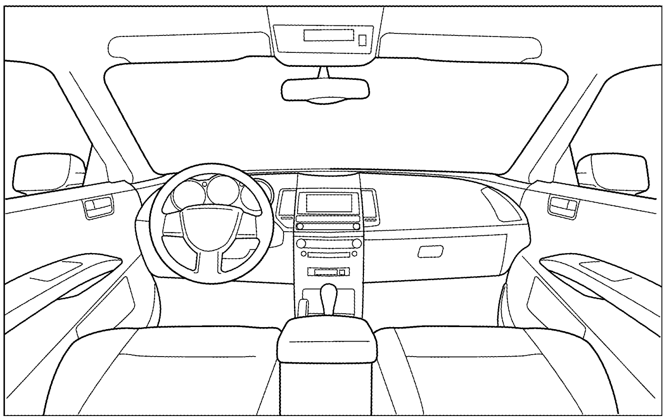
Diagnostic Worksheet

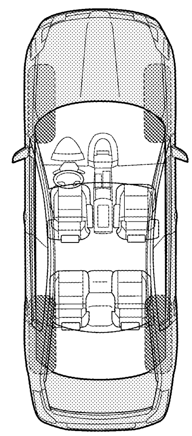
INFOID:0000000004204919

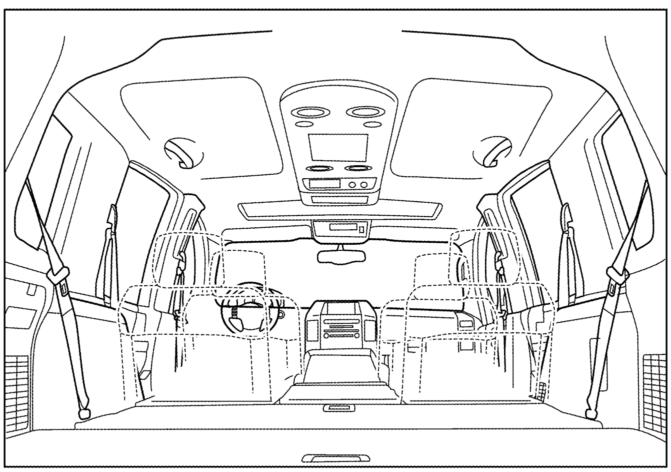
Dear Customer:
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions.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

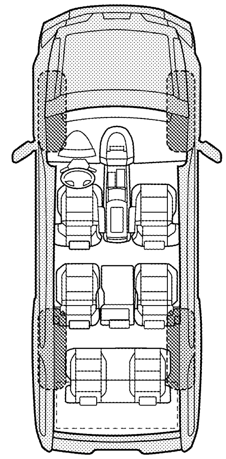
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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.

-1-

LAIA0072E

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:0000000004204920

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

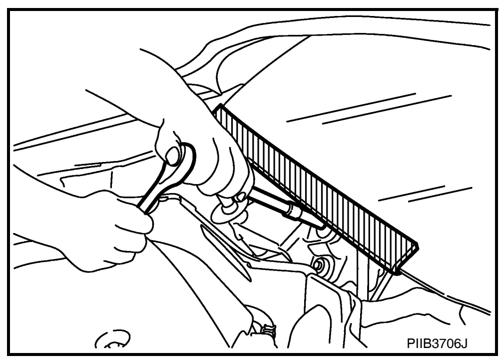
WARNING:

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

Procedure without Cowl Top Cover

INFOID:0000000004204921

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



Precaution for work

INFOID:0000000004204922

- 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.

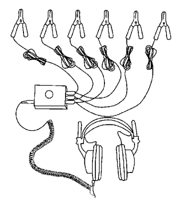
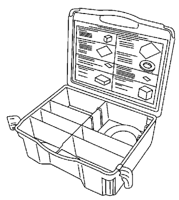
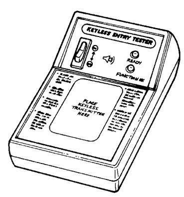
PREPARATION

PREPARATION

Special Service Tools

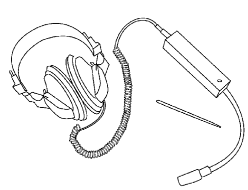
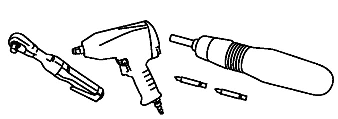
INFOID:0000000004204923

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:0000000004204924

Tool name		Description
Engine ear	 SIIA0995E	Locating the noise
Power tool	 PIIB1407E	

ON-VEHICLE REPAIR

HOOD

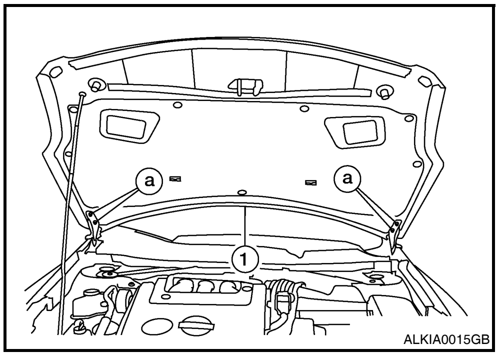
HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000004204925

REMOVAL

1. Remove the hinge nuts (a) and the hood assembly (1).
   CAUTION:
   Operate with two workers, because of its large size.



INSTALLATION

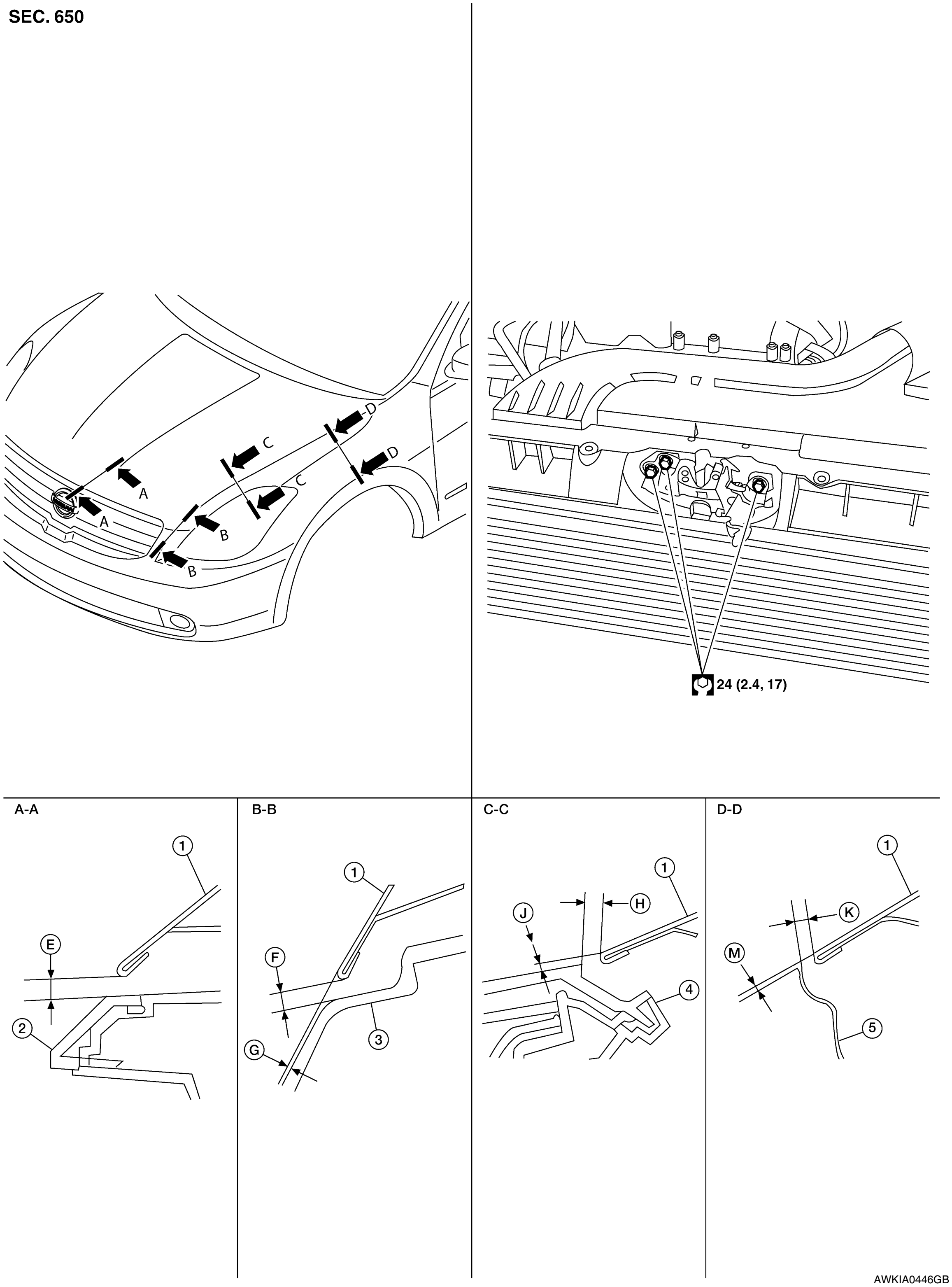
Installation is in the reverse order of removal.

NOTE:

After installing, perform hood fitting adjustment. Refer to DLK-435, "HOOD ASSEMBLY : Adjustment".

HOOD ASSEMBLY : Adjustment

INFOID:0000000004204926



1.	Hood assembly	2.	Front grille	3.	Front fascia
4.	Headlamp assembly	5.	Front fender		

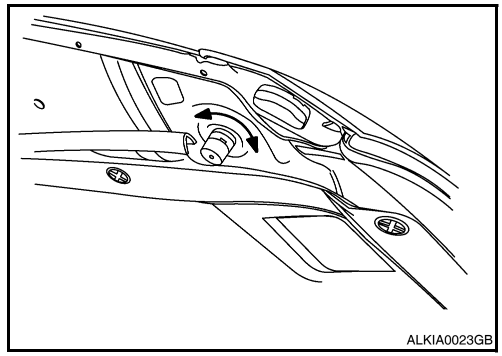
FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDUNAL CLEARANCE ADJUSTMENT

Unit: mm (in)

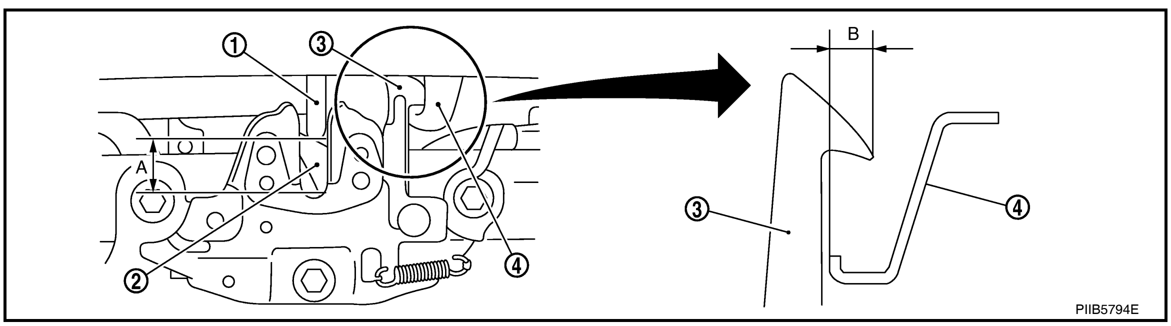
Section	Item	Measurement	Standard	Parallelism	Equality
A – A	E	Clearance	5.0 ± 2.0 (0.20 ± 0.079)	≤ 2.0 (0.079)	—
B – B	F	Clearance	5.0 ± 2.0 (0.20 ± 0.079)	≤ 2.0 (0.079)	≤ 2.2 (0.087)
	G	Surface height	1.0 ± 2.0 (0.04 ± 0.079)	≤ 2.0 (0.079)	≤ 2.0 (0.079)
C – C	H	Clearance	4.5 ± 2.0 (0.18 ± 0.079)	—	2.1 (0.083)
	J	Surface height	1.0 ± 2.1 (0.04 ± 0.083)	—	< 2.0 (0.079)
D – D	K	Clearance	4.0 ± 1.0 (0.16 ± 0.04)	1.0 (0.04)	1.0 (0.04)
	M	Surface height	0.2 ± 1.0 (0.01 ± 0.04)	1.0 (0.04)	1.0 (0.04)

FRONT END HEIGHT ADJUSTMENT

1. Check the surface height between the hood and each part by visual and tactile feeling.
2. Remove the front grille. Refer to EXT-38, "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.

Hood hinge bolts : 14 N·m (1.4 kg·m, 10 ft-lb)

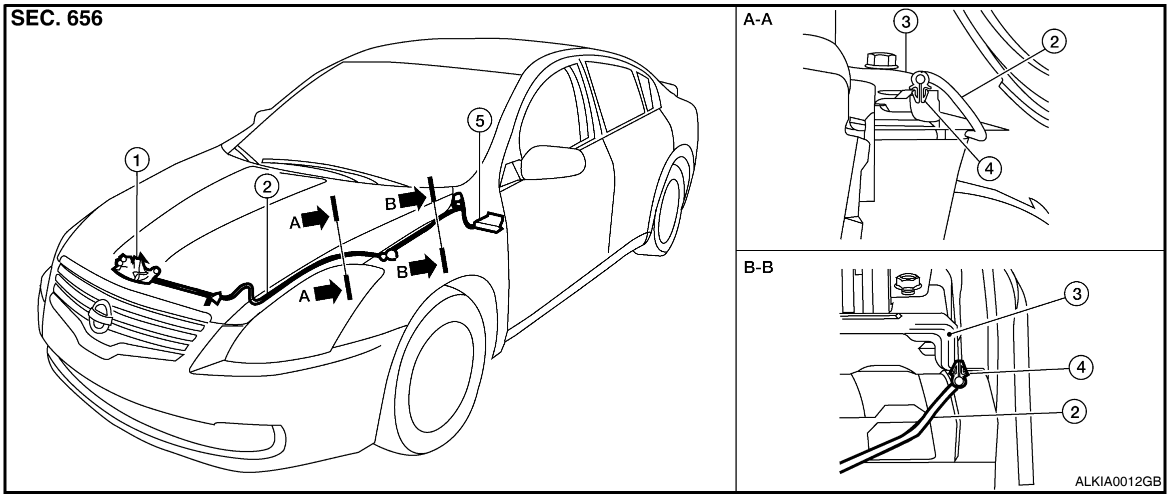
NOTE:
After installation apply touch-up paint onto the hinge bolts and around the base of the hinge.

5. If the clearance measurements between the hood and fender cannot be corrected by moving the hood, the fender must be adjusted. Refer to DLK-442, "Removal and Installation".

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Component Parts Location

INFOID:0000000004204927



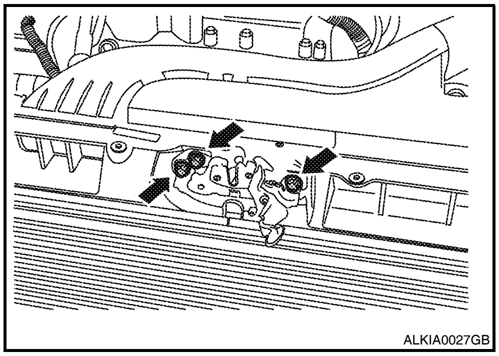
1. Hood lock assembly	2. Hood lock cable	3. Hoodledge reinforcement
4. Clip	5. Hood lock release handle	

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000004204928

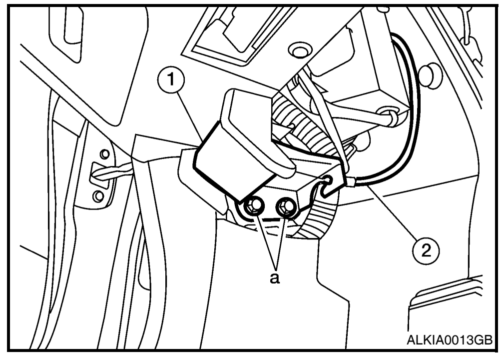
REMOVAL

1. Remove the front grill. Refer to EXT-38, "Removal and Installation".
2. Remove the LH fender protector. Refer to EXT-40, "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.

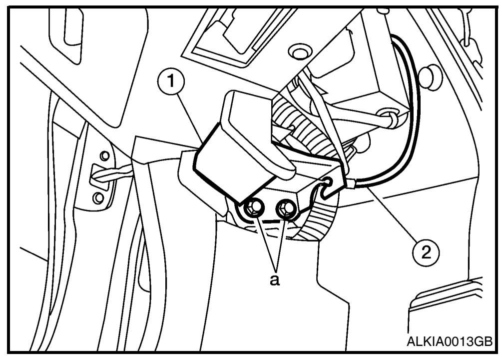
5. Remove the screws (a) with power tool, and separate the hood lock release handle (1) from the hood lock release cable (2).



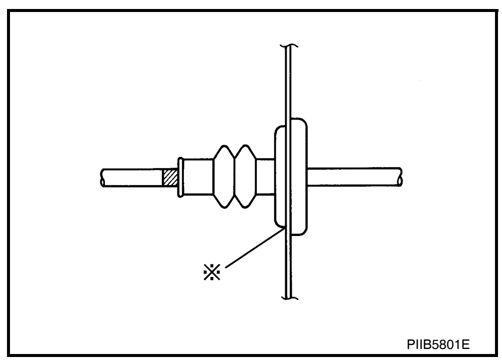
6. Remove the grommet from the upper dash, and pull the hood lock cable into the passenger compartment.
   CAUTION:
   While pulling, be careful not to damage (peel) the outside of the hood lock cable.

INSTALLATION

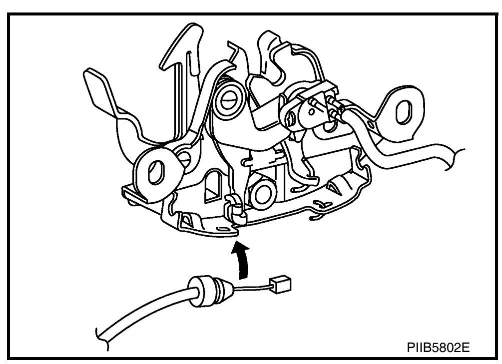
1. Pull the hood lock cable through the upper dash into the engine compartment.
   CAUTION:
   Be careful not to bend the cable too much, keep the radius 100 mm (3.94 in) or more.
2. Attach the hood lock release cable (2) to the hood lock release handle (1) and install the hood lock release handle screws (a).



3. Check that the cable is not offset from the center of the grommet, and seat the grommet into the upper dash hole.
4. Apply the sealant around the grommet at * mark.



5. Position the hood lock cable and clip it into place.
6. Connect the hood lock cable to the hood lock assembly.
7. Loosely install the hood lock assembly.
8. Perform hood fitting adjustment. Refer to DLK-435, "HOOD ASSEMBLY : Adjustment".
9. Check the hood lock control operation.

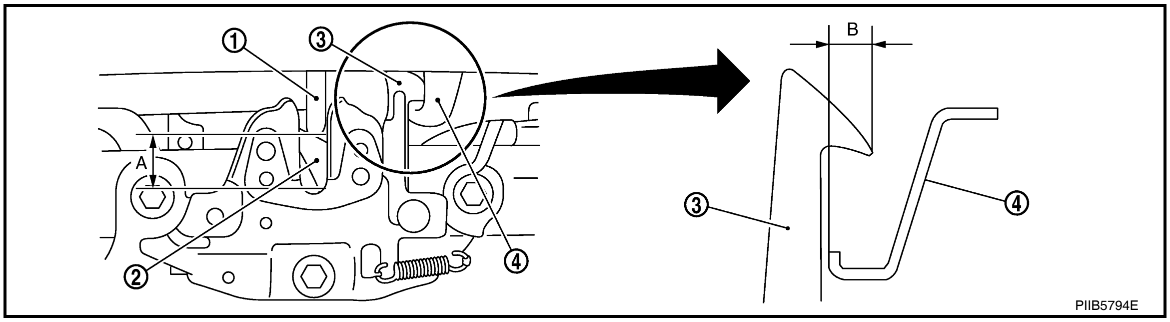


INSPECTION

CAUTION:

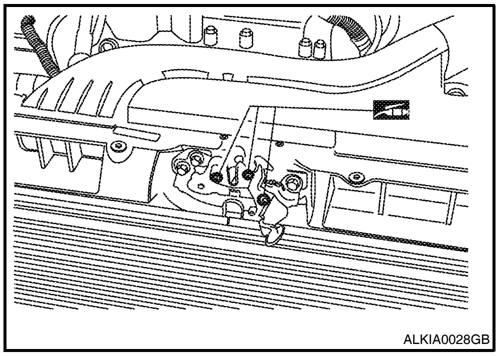
If the hood lock cable is bent or deformed, replace it.

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				

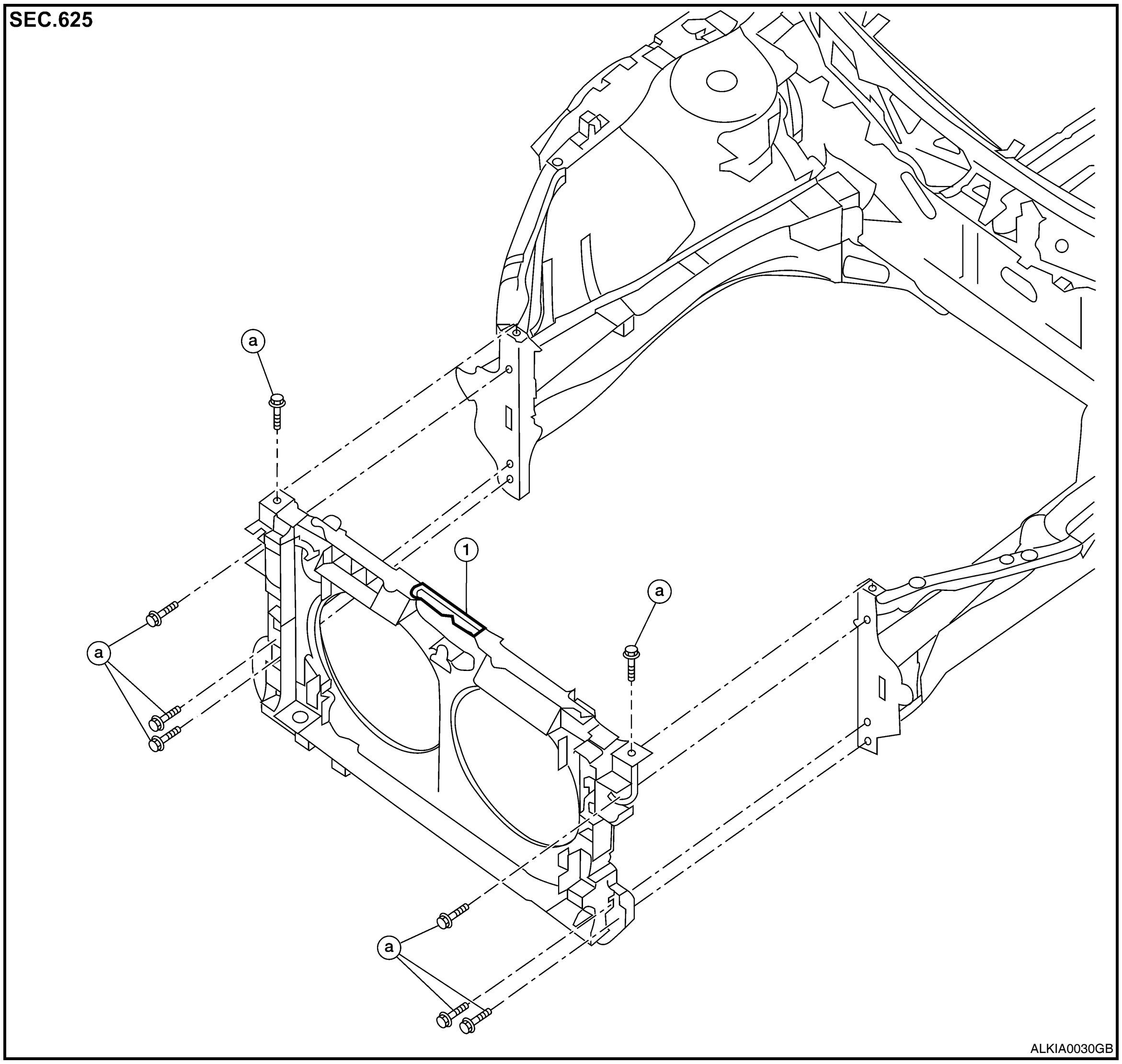
2. While operating the hood opener, carefully check that the front end of the hood is raised by approx. 20 mm (0.79 in). Also check that the hood opener returns to the original position.
3. Check that the hood lock release handle operating force is 49 N (5.0 kg-f, 11 ft-lb) or less.
4. Install so the static closing force of the hood is 343 – 490 N (35– 44 kg-f, 77.1 - 110.2 lb-f).
5. Check the hood lock lubrication condition. If necessary, apply “body grease” as shown.



RADIATOR CORE SUPPORT

Removal and Installation

INFOID:0000000004204929



1. Radiator core support   a. Bolts

REMOVAL

1. Remove front bumper reinforcement. Refer to EXT-34, "Removal and Installation".
2. Remove head lamps (LH/RH). Refer to EXL-253, "Removal and Installation".
3. Remove washer tank. Refer to WW-119, "WASHER TANK : Removal and Installation".
4. Remove air duct. Refer to EM-19, "Removal and Installation" QR25DE, EM-123, "Removal and Installation" VQ35DE.
5. Remove the radiator cooling fans. Refer to CO-17, "Removal and Installation" QR25DE, CO-40, "Removal and Installation" VQ35DE.
6. Remove the radiator. Refer to CO-15, "Removal and Installation" QR25DE, CO-38, "Removal and Installation" VQ35DE.
7. Remove the hood lock control. Refer to DLK-437, "HOOD LOCK CONTROL : Removal and Installation".
8. Remove ambient sensor. Refer to HA-43, "Removal and Installation".
9. Remove crash zone sensor. Refer to SR-14, "Removal and Installation".
10. Remove air guides (LH/RH).

11. Remove power steering tube assembly. Refer to ST-22, "QR25DE : Removal and Installation" QR25DE, ST-22, "VQ35DE : With 17 Inch Tire" or ST-24, "VQ35DE : With 18 Inch Tire" VQ35DE.
12. Remove horn (High/Low). Refer to HRN-11, "Removal and Installation".
13. Remove the harness clips from the radiator core support assembly, the harness is separate.
14. Remove the bolts and the radiator core support.

INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

Removal and Installation

INFOID:0000000004204930

REMOVAL

1. Remove the head lamp. Refer to EXL-253, "Removal and Installation".
2. Remove the front fender protector. Refer to EXT-40, "Removal and Installation".
3. Remove the inner fender bolt cover.
4. Remove the center mud guard. Refer to EXT-41, "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.**

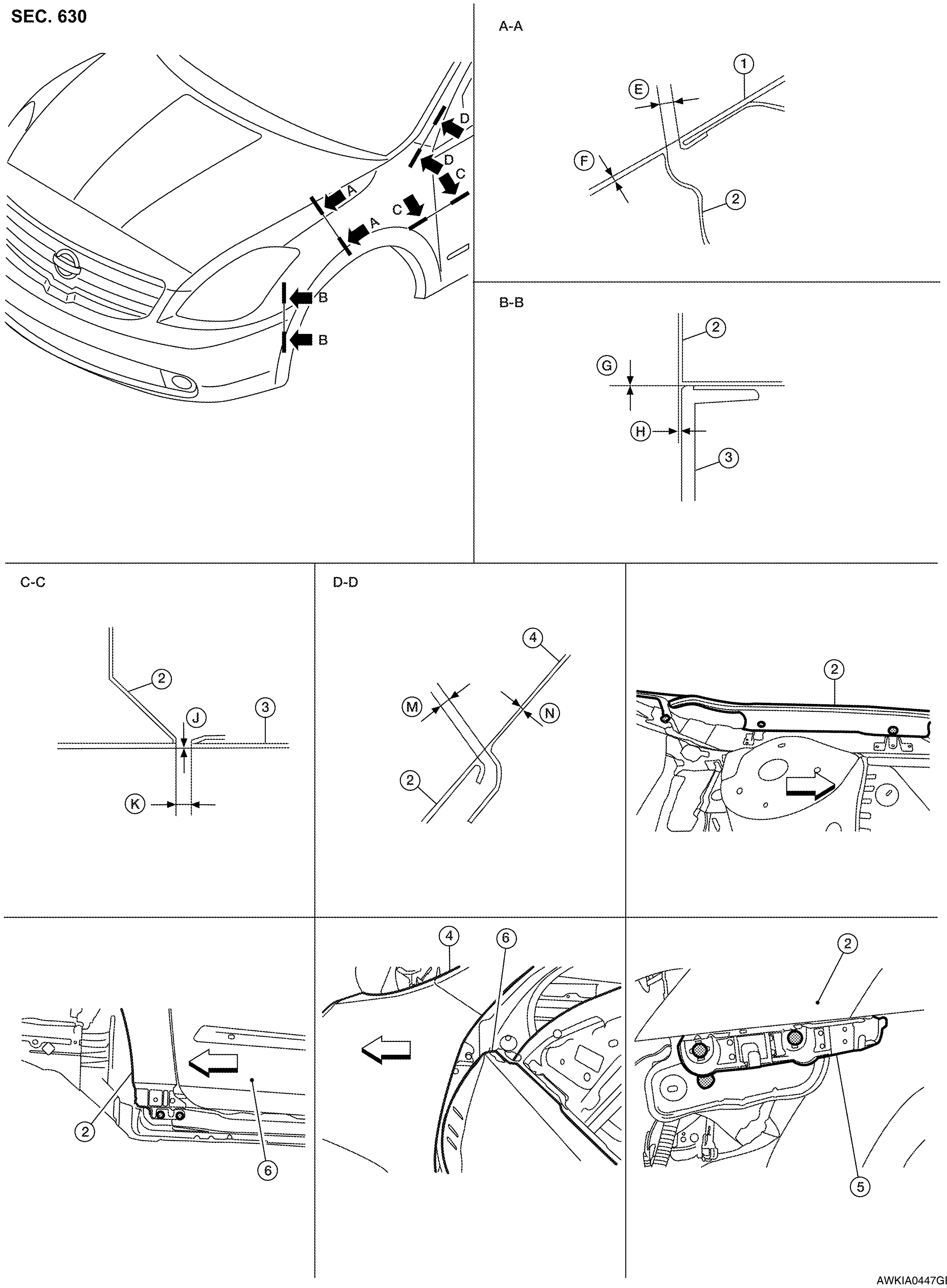
INSTALLATION

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
⇐	Front				

Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism	Equality
A-A	E	Clearance	4.0 ± 1.0 (0.16 ± 0.04)	1.0 (0.04)	1.0 (0.04)
	F	Surface height	0.2 ± 1.0 (0.01 ± 0.04)	1.0 (0.04)	1.0 (0.04)
B-B	G	Clearance	0.0 + 0.8 (0.0 +0.031)	—	—
	H	Surface height	0.7 ± 1.0 (0.028 ± 0.04)	1.0 (0.04)	1.0 (0.04)
C-C	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	—	—
	K	Clearance	3.6 ± 1.0 (0.14 ± 0.04)	1.0 (0.04)	—
D-D	M	Clearance	2.3 ± 1.0 (0.09 ± 0.04)	1.0 (0.04)	—
	N	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-40, "Removal and Installation".
3. Remove the center mud guard. Refer to EXT-41, "Removal and Installation".
4. Loosen the front fender bolts and screws.
5. Adjust the clearance (J) and surface height (K) between the front fender and the front door.
6. Tighten the rear upper and lower front fender bolts.
7. Adjust the clearance (E) and surface height (F) between the front fender and the hood.
8. Adjust the clearance (M) and surface height (N) between the front fender and the body side outer.
9. Tighten the inner front fender bolts.
10. Adjust the clearance (G) and the surface height (H) between the front fender and the front fascia.
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-41, "Removal and Installation".
14. Install the front fender protector. Refer to EXT-40, "Removal and Installation".
15. Install the inner fender bolt cover.

DOOR

FRONT DOOR

FRONT DOOR : Removal and Installation

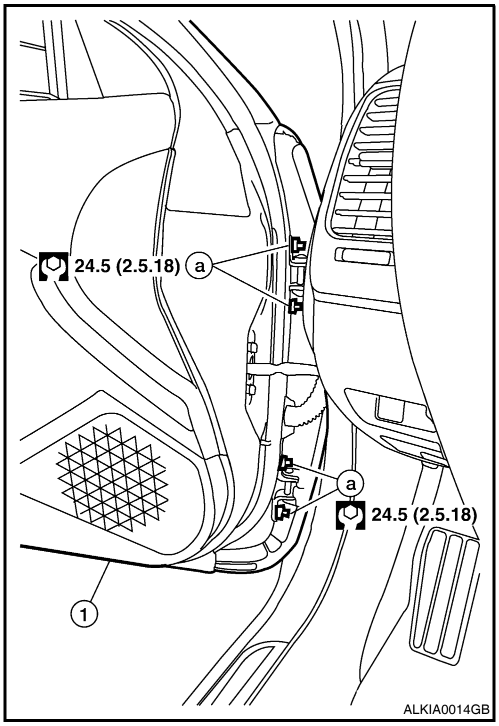
INFOID:0000000004204931

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-446, "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.**

REMOVAL

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



INSTALLATION

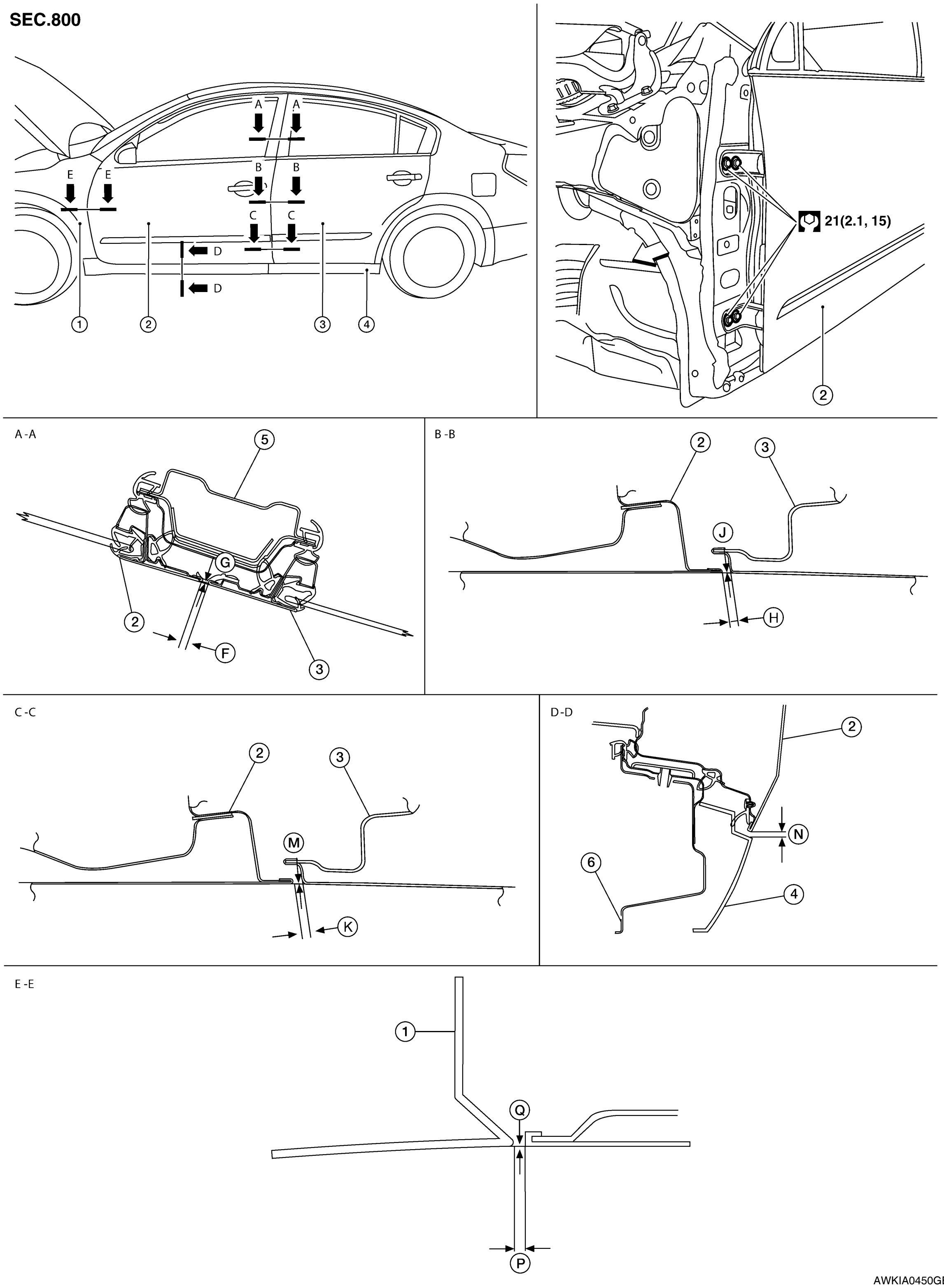
Installation is in the reverse order of removal.

NOTE:

Adjust the door. Refer to DLK-446, "FRONT DOOR : Adjustment".

FRONT DOOR : Adjustment

INFOID:0000000004204932



1.	Front fender	2.	Front door assembly	3.	Rear door assembly
4.	Center mud guard	5.	Center pillar	6.	Outer sill

Unit: mm (in)

Section	Item	Measurement	Standard
A-A	F	Clearance	4.5 ± 1.5 (0.18 ± 0.06)
	G	Surface height	0.0 ± 1.5 (0.0 ± 0.06)
B-B	H	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C-C	K	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	M	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
D-D	N	Clearance	5.1 ± 1.7 (0.20 ± 0.07)
E-E	P	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	Q	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

LONGITUDINAL CLEARANCE

1. Confirm the back door adjustments and adjust if necessary. Refer to DLK-447, "BACK DOOR : Removal and Installation".
2. Remove the front fender. Refer to DLK-442, "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-442, "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:0000000004204933

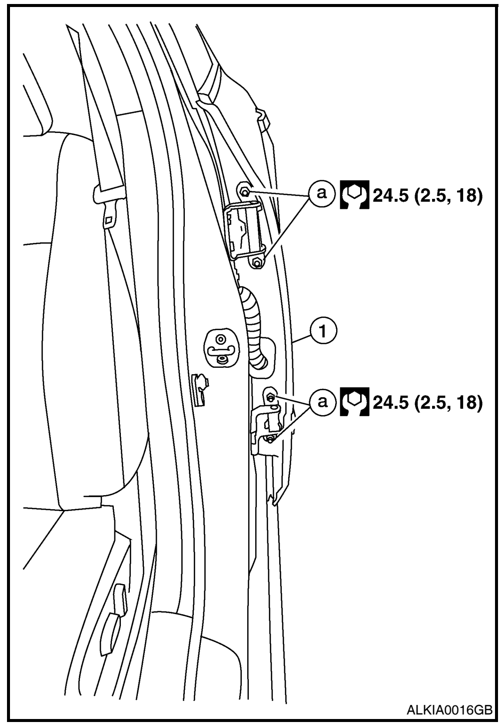
CAUTION:

- **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.**

REMOVAL

1. Pull out grommet and disconnect rear door harness connector.
2. Remove the check link bolt from the center pillar.

3. Remove the door-side hinge nuts (a) and the door assembly (1).



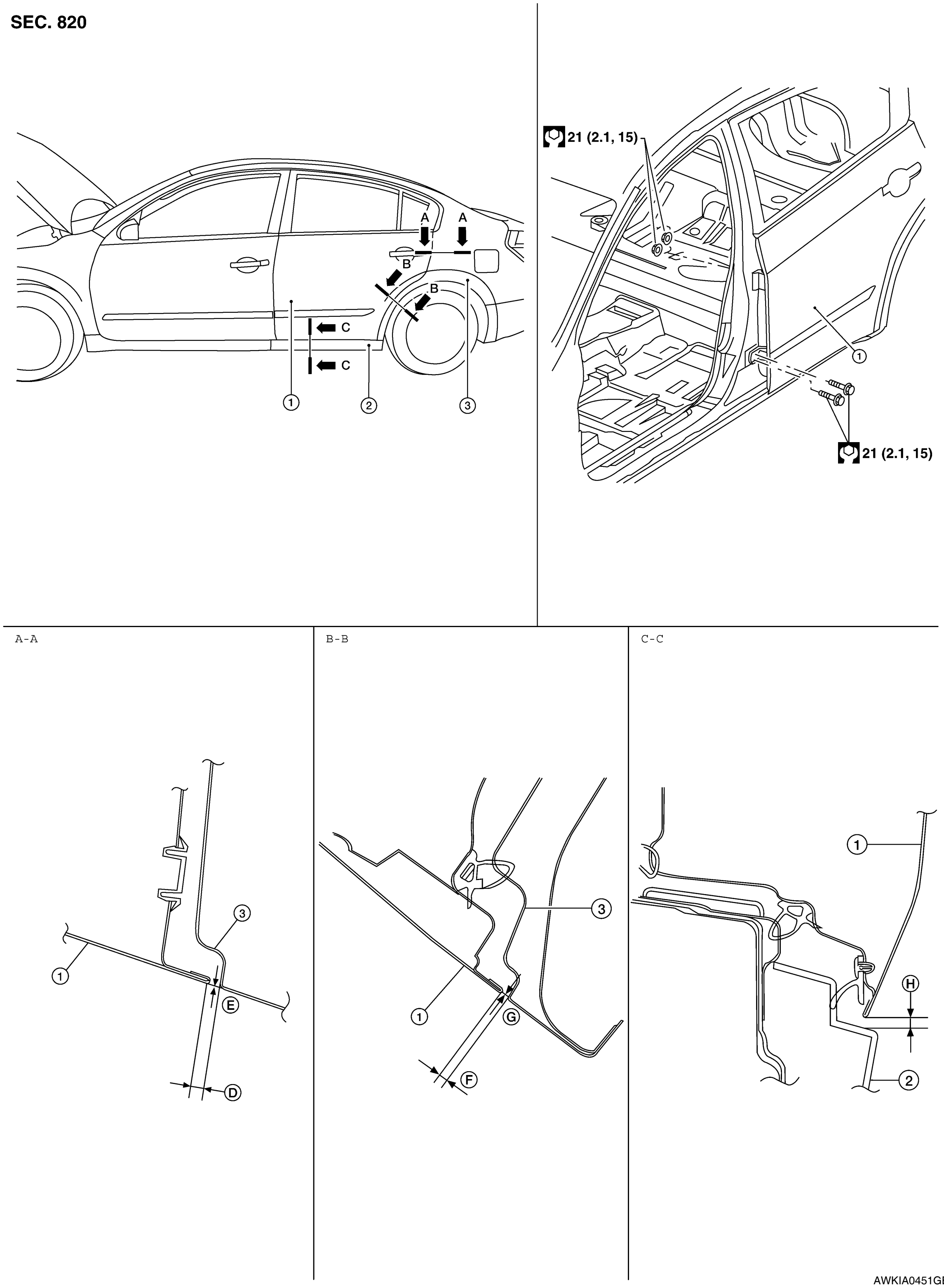
INSTALLATION

Installation is in the reverse order of removal.

BACK DOOR : Adjustment

INFOID:0000000004458410

ADJUSTMENT



1. Rear door assembly
2. Center mud guard
3. Body side outer

Unit: mm (in)

Section	Item	Measurement	Standard
A-A	D	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	E	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

Section	Item	Measurement	Standard
B-B	F	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	G	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C-C	H	Clearance	5.3 ± 1.7 (0.21 ± 0.07)

LONGITUDINAL CLEARANCE

1. Remove the center pillar upper and lower trim. Refer to INT-36, "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-36, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

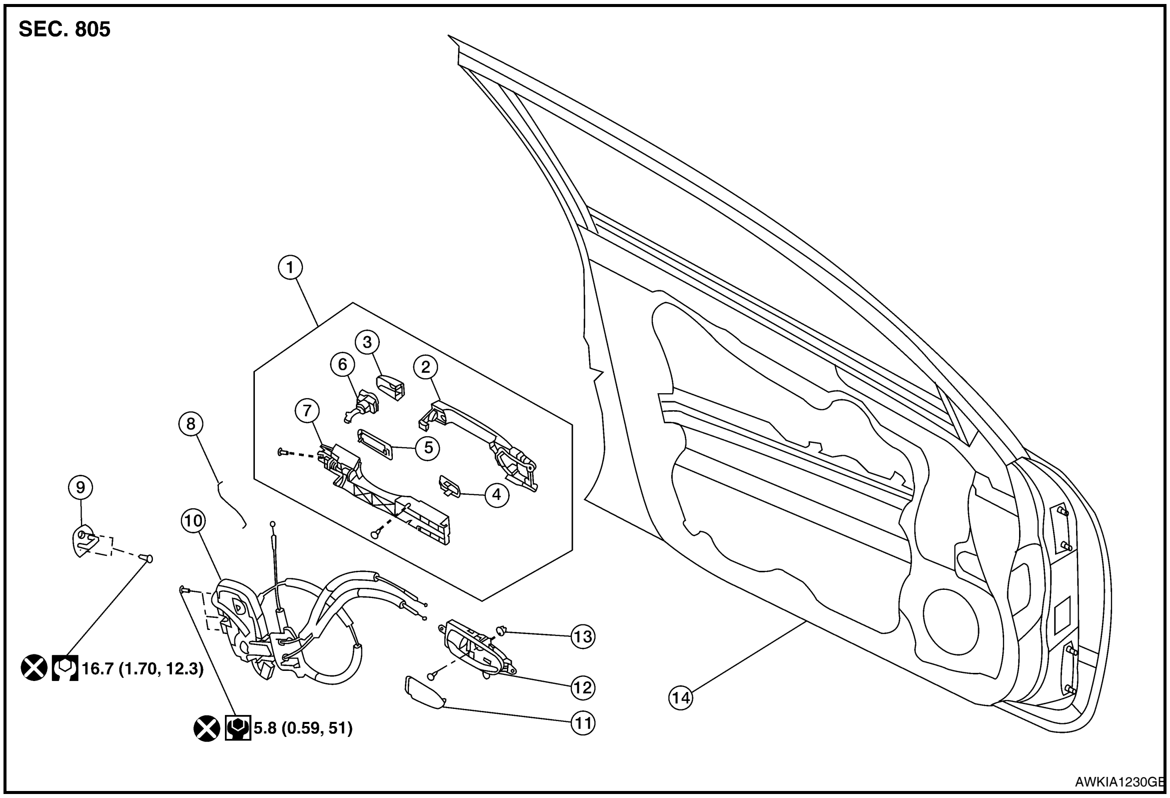
1. Loosen the hinge nuts.
2. Move the top and or the bottom in or out as necessary until it is within specification.
3. Tighten the hinge nuts to specification.

DOOR LOCK

FRONT DOOR LOCK

FRONT DOOR LOCK : Component Parts Location

INFOID:0000000004204934



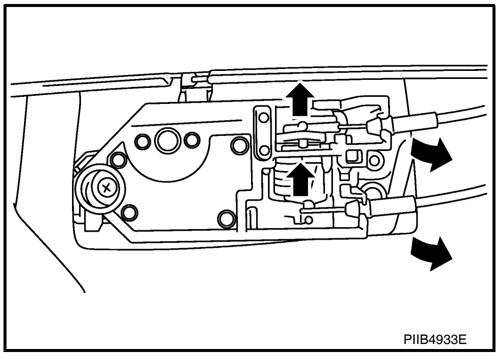
1. Outside handle assembly
2. Front gasket
3. Door key cylinder escutcheon (Driver side)
   Outside handle escutcheon (Passenger side)
4. Front gasket
5. Rear gasket
6. Key cylinder assembly (Driver side only)
7. Outside handle bracket
8. Key cylinder rod (Driver side only)
9. Front door striker
10. Door lock assembly
11. Cap
12. Inside door handle assembly
13. Grommet
14. Front door assembly

FRONT DOOR LOCK : Removal and Installation

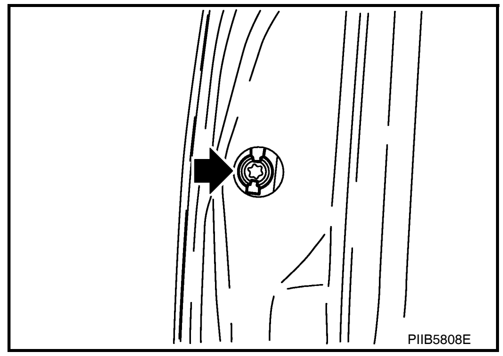
INFOID:0000000004204935

REMOVAL

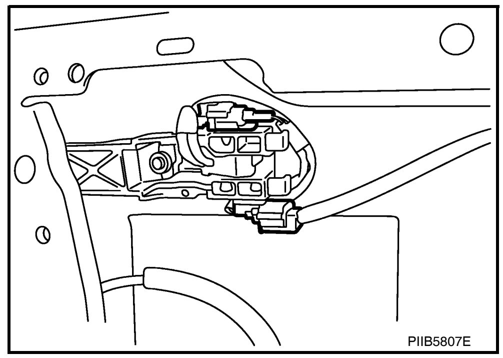
1. Remove the front door finisher. Refer to INT-34, "Removal and Installation".
2. Disconnect the inside handle knob cable and lock knob cable from the back side of the front door finisher.



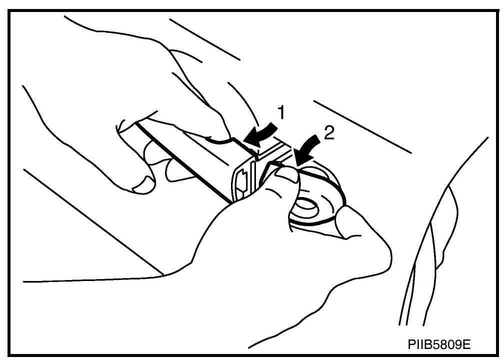
3. Remove the front door window and front door module assembly. Refer to GW-16, "Removal and Installation".
4. Remove door side grommet, and remove door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) bolts (TORX T30) from grommet hole.



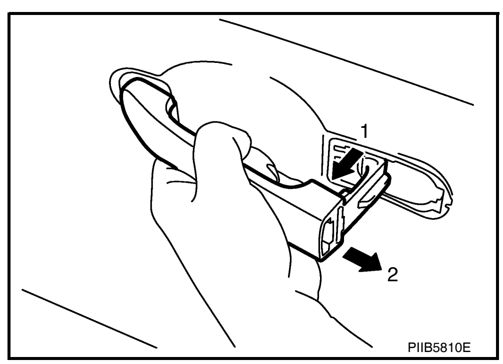
5. Disconnect door antenna and door request switch connector and remove harness clamp.



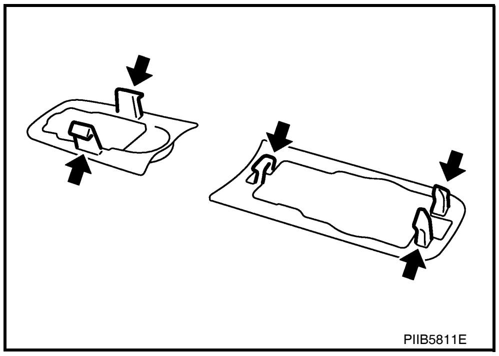
6. Disconnect the key cylinder rod.
7. Disconnect door key cylinder switch harness connector.
8. While pulling the outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).



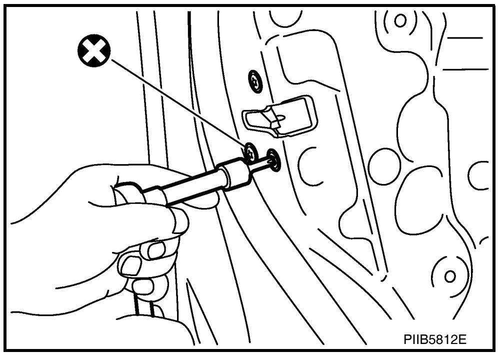
9. Disconnect front door request switch harness connector.
10. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



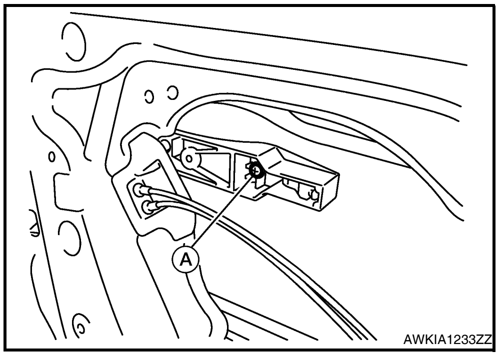
11. Remove the front gasket and rear gasket.


PIIB5811E

12. Remove the TORX bolts (T30), remove the door lock assembly.

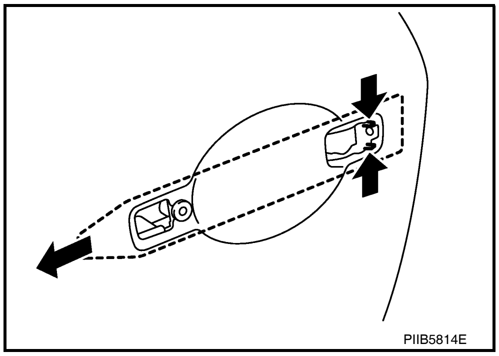

PIIB5812E

13. Remove the TORX bolt (T30) (A) of the outside handle bracket.



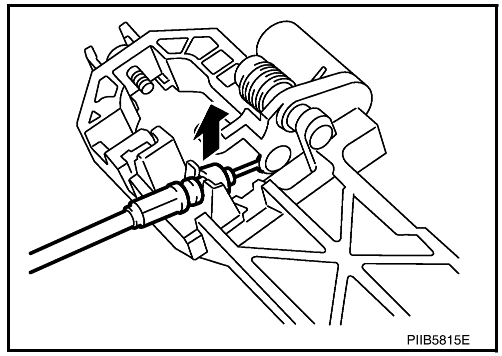
AWKIA1233ZZ

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


PIIB5814E

15. Disconnect the door lock actuator connector and remove the door lock assembly.

16. Disconnect the outside handle cable from the outside handle bracket connection.



INSTALLATION

Installation is in the reverse order of removal.

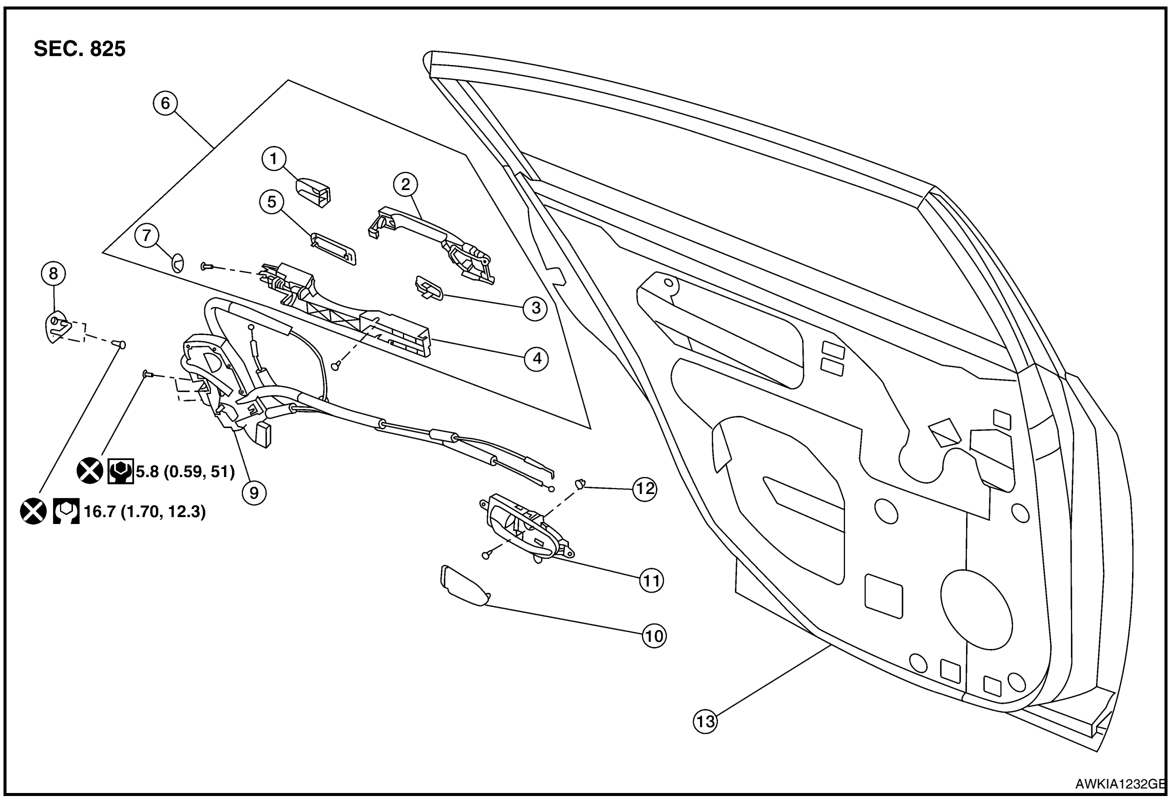
CAUTION:

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:0000000004204936



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

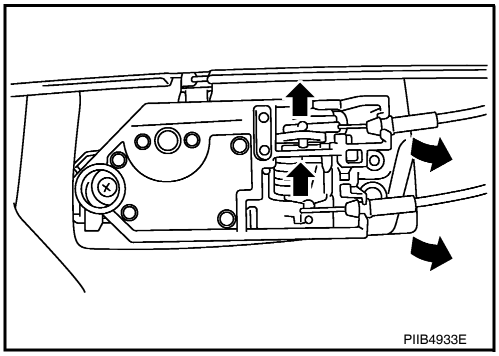
BACK DOOR LOCK : Removal and Installation

INFOID:0000000004204937

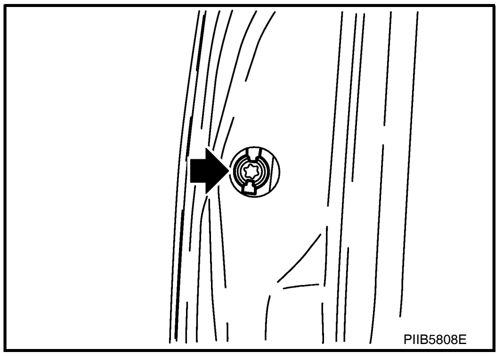
REMOVAL

1. Remove the rear door finisher. Refer to INT-34, "Removal and Installation".

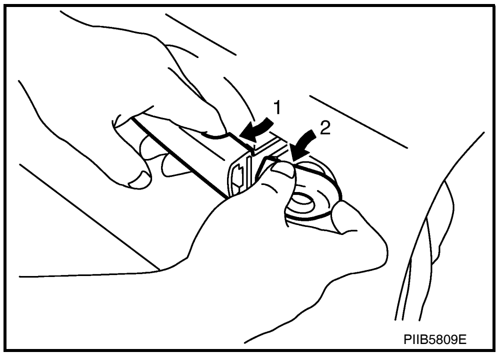
2. Disconnect the inside handle knob cable and lock knob cable from the back side of the inside door handle.


PIIB4933E

3. Remove the rear door sash. Refer to EXT-43, "Removal and Installation".
4. Remove the rear door window and rear door screen assembly.
5. Remove door side grommet, and remove outside handle escutcheon bolt (TORX T30) from grommet hole.

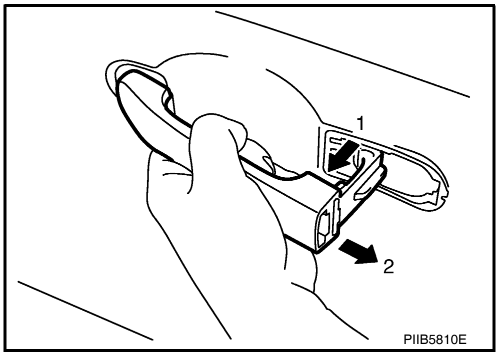

PIIB5808E

6. While pulling the outside handle, remove outside handle escutcheon.



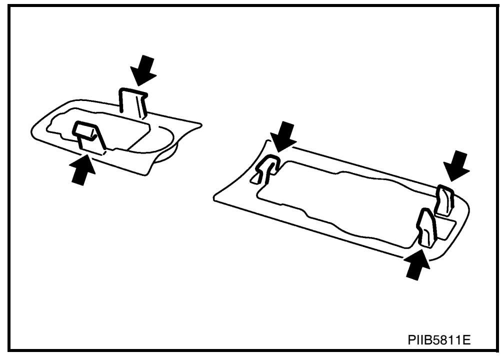
PIIB5809E

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

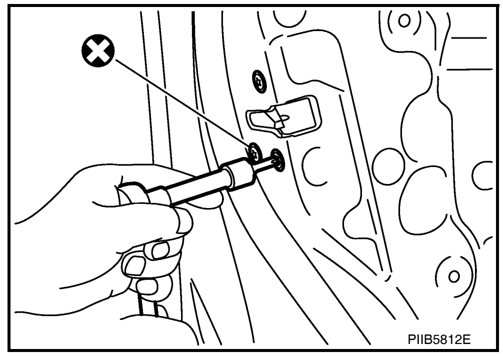


PIIB5810E

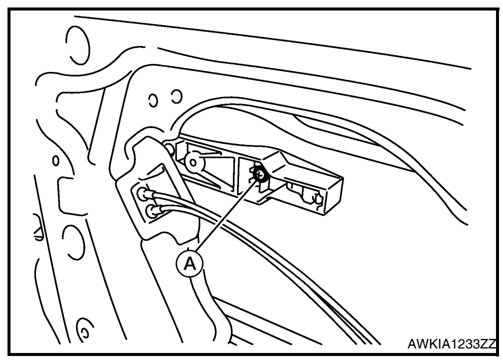
8. Remove the front gasket and rear gasket.



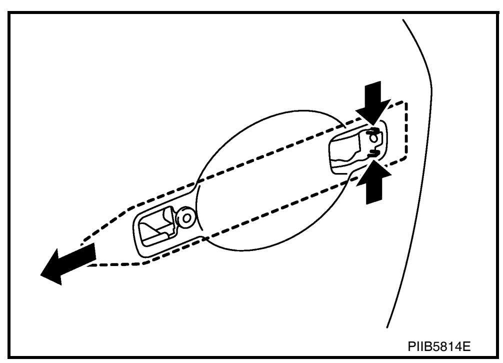
9. Remove the TORX bolts (T30), remove the door lock assembly.



10. Remove the TORX bolt (T30) (A) from the outside handle bracket.

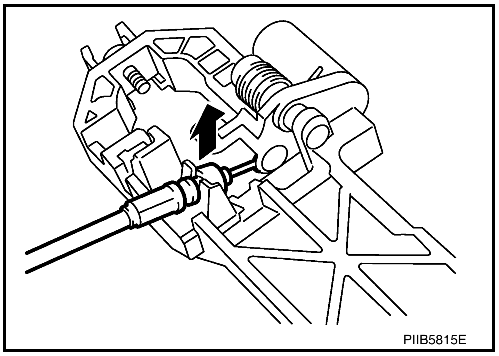


11. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



12. Disconnect the door lock actuator connector and remove the door lock assembly.

13. Disconnect the outside handle cable from the outside handle bracket.



INSTALLATION

Installation is in the reverse order of removal.

TRUNK LID

TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY : Removal and Installation

INFOID:0000000004204938

REMOVAL

1. Remove trunk lid finisher. Refer to INT-46, "Removal and Installation".
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

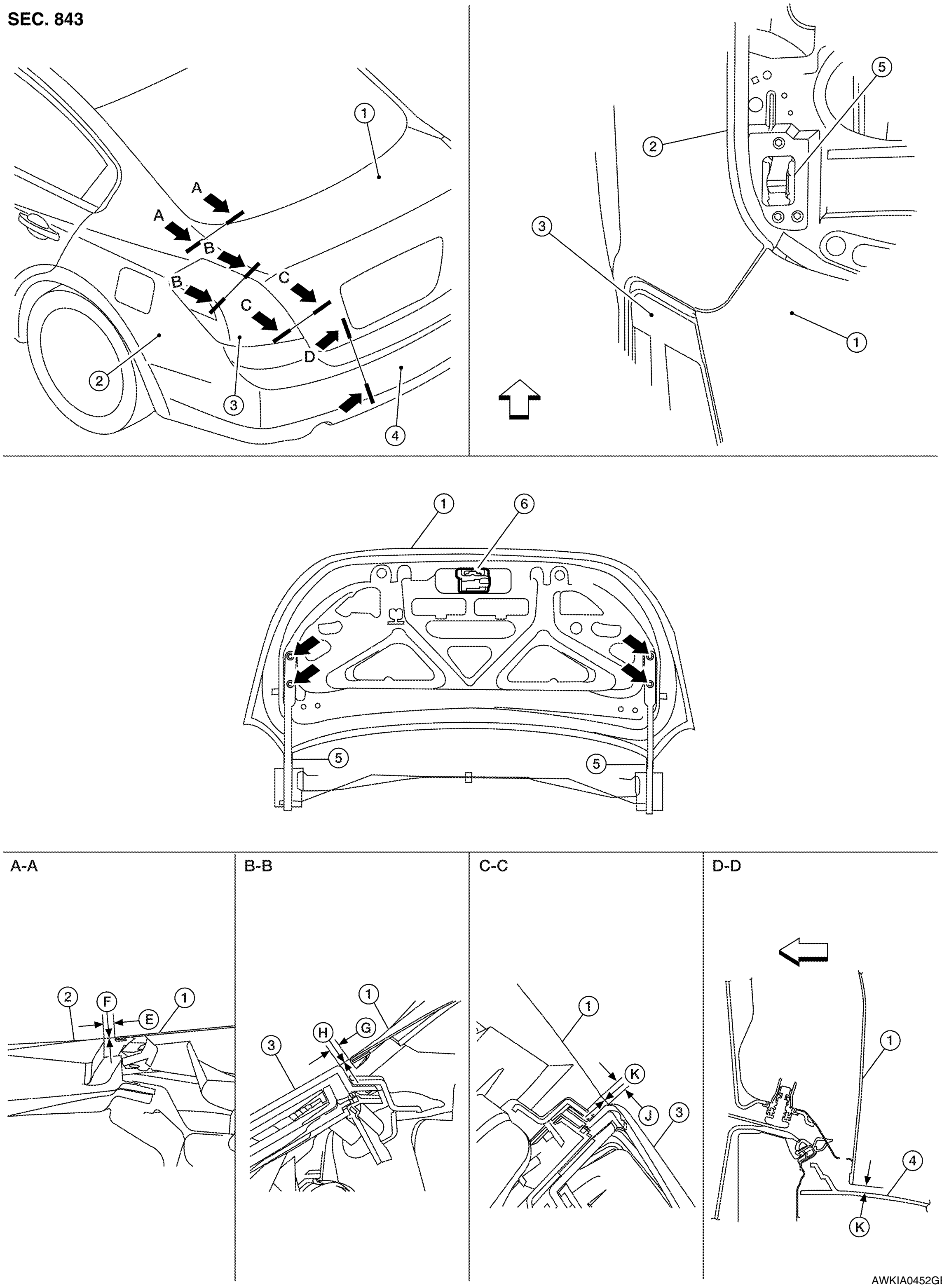
Installation is in the reverse order of removal.

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-459, "TRUNK LID ASSEMBLY : Adjustment".**

TRUNK LID ASSEMBLY : Adjustment

INFOID:0000000004204939



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
⇐	Front				

Unit: mm (in)

Parts		Standard	Right/left clearance (MAX)
A – A	E	4.0 ± 1.0 (0.16 ± 0.04)	2.0 (0.08)
	F	-0.5 ± 1.0 (-0.02 ± 0.04)	2.0 (0.08)
B – B	G	4.0 ± 1.5 (0.16 ± 0.06)	2.0 (0.08)
	H	-0.5 ± 1.5 (-0.02 ± 0.06)	2.0 (0.08)
C – C	J	4.0 ± 2.0 (0.16 ± 0.08)	—
	K	5.9 ± 2.0 (0.23 ± 0.08)	—
D – D	K	5.9 ± 2.0 (0.23 ± 0.08)	—

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-38, "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-38, "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:0000000004204940

LOCK

Removal

1. Remove the trunk lid inner trim panel. Refer to INT-46, "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

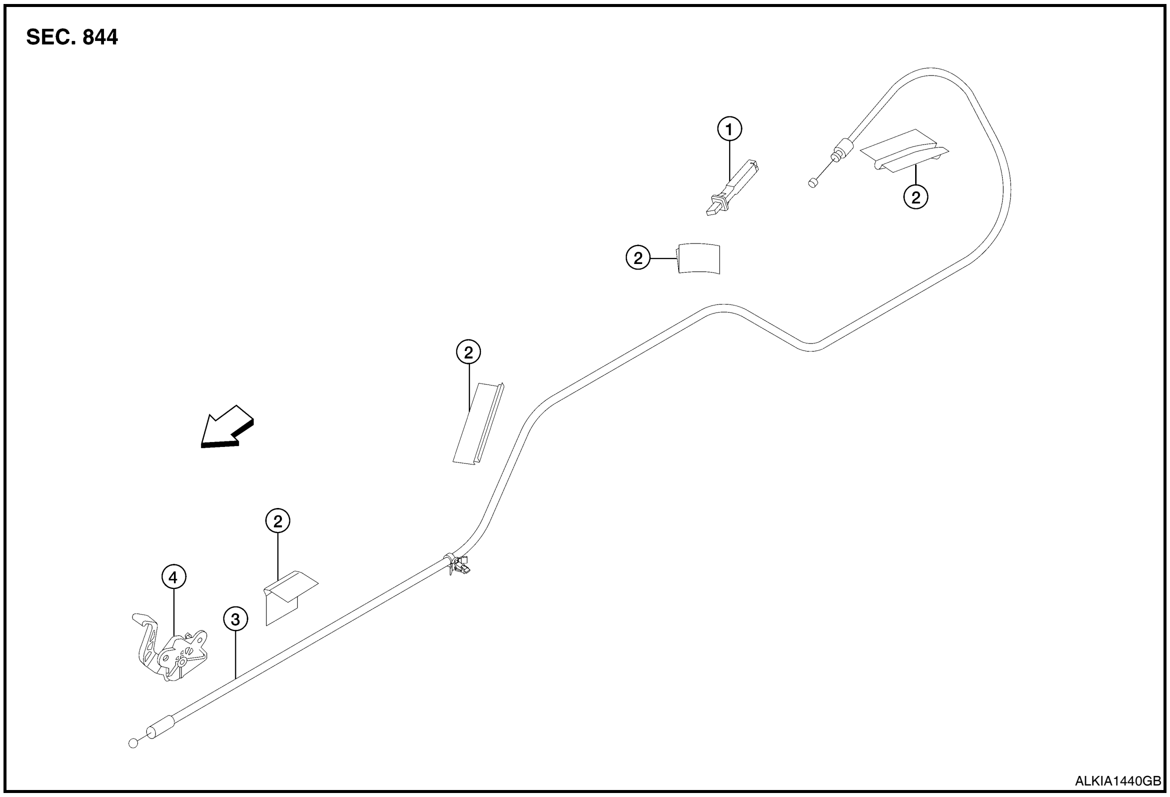
1. Remove the trunk end finisher. Refer to INT-46, "Removal and Installation".
2. Remove the bolts and the striker.

Installation
Installation is in the reverse order of removal.
NOTE:
Align the trunk lid lock. Refer to DLK-459, "TRUNK LID ASSEMBLY : Adjustment".

FUEL FILLER LID

Exploded View

INFOID:0000000004458411



1. Fuel door latch	2. Cable protector	3. Fuel door opener cable
4. Fuel door opener handle	⇐ Front	

Removal and Installation

INFOID:0000000004458412

REMOVAL

1. Remove the front and rear LH kicking plates. Refer to INT-36, "Removal and Installation".
2. Remove the rear seat. Refer to SE-53, "Removal and Installation".
3. Remove the LH front seat belt anchor. Refer to SB-7, "Exploded View".
4. Remove the LH center pillar lower finisher. Refer to INT-35, "Exploded View".
5. Position the carpet aside.
6. Remove the LH trunk side finisher. Refer to INT-45, "Exploded View".
7. Remove the fuel door opener handle and disconnect the fuel door opener cable.
8. Remove the fuel door latch and disconnect the fuel door opener cable.
9. Remove the fuel door opener cable.

INSTALLATION

Installation is in the reverse order of removal.

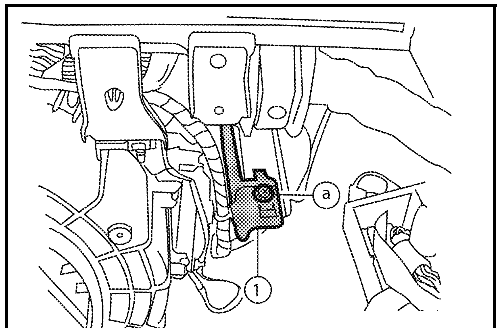
REMOTE KEYLESS ENTRY RECEIVER

Removal

INFOID:0000000004204941

REMOVAL

1. Remove glove compartment. Refer to IP-12, "Removal and Installation".
2. Remove the screw (a), lower the bracket and remote keyless entry receiver (1), then disconnect the harness and remove the receiver.



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Installation

INFOID:0000000004204942

Installation is in the reverse order of removal.

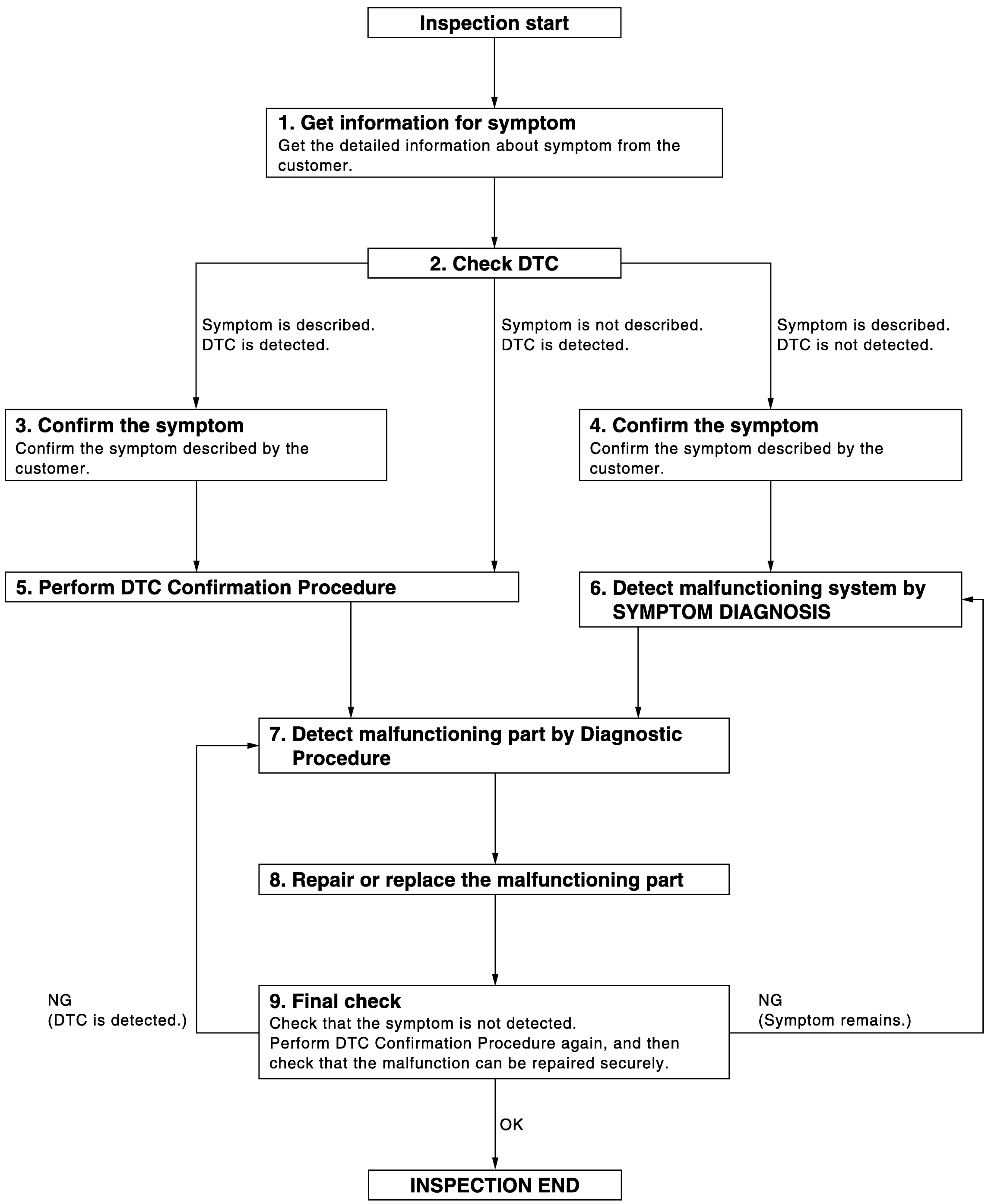
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000004496870

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-587, "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 7
No >> Refer to GI-42, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

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

>> GO TO 7

7.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 8
NO >> Check voltage of related BCM terminals using CONSULT-III.

8. 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 9

9. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction have been repaired securely.
When symptom was described from the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is the inspection result normal?

NO (DTC is detected)>>GO TO 7
NO (Symptom remains)>>GO TO 6
YES >> Inspection End.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000004496871

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000004496872

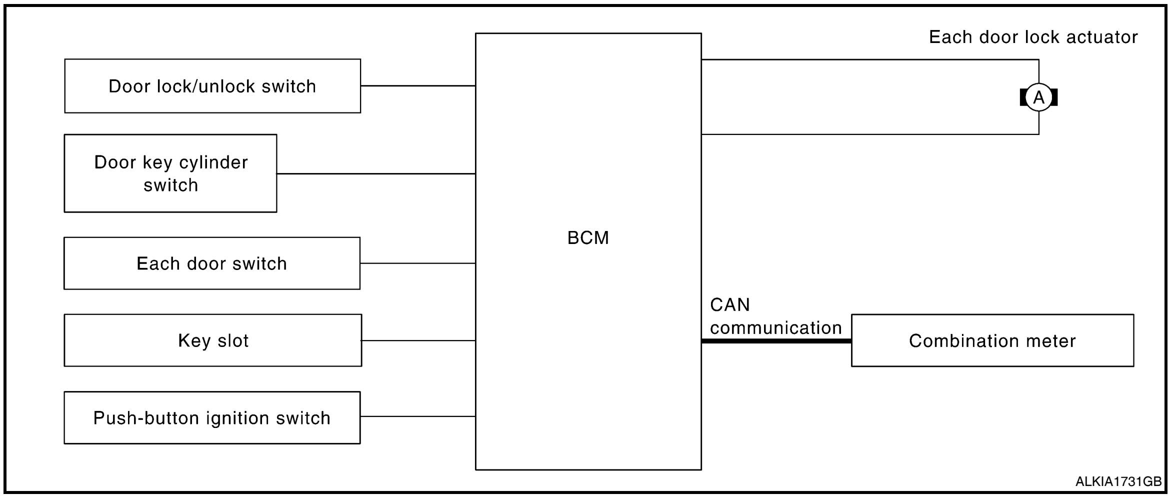
Refer to the CONSULT-III Operation Manual for the initialization procedure.

FUNCTION DIAGNOSIS

AUTOMATIC DOOR LOCKS

System Diagram

INFOID:0000000004496873



System Description

INFOID:0000000004496874

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

DOOR LOCK FUNCTION

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

Door Key Cylinder

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

Selective unlock operation mode can be changed using “DOOR LOCK-UNLOCK SET” mode in “WORK SUPPORT”. Refer to DLK-276, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

AUTOMATIC DOOR LOCKS (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock*1

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

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

Setting change of Automatic Door Locks (LOCK) Function

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

With CONSULT-III

The ON/OFF switching of the automatic door locks (LOCK) function and the type selection of the automatic door locks (LOCK) function can be performed at the WORK SUPPORT setting of CONSULT-III. Refer to DLK-276, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Without CONSULT- III

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

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

OFF → ON	: 2 blinks
ON → OFF	: 1 blink

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

AUTOMATIC DOOR LOCKS (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock*1

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

Setting change of Automatic Door Locks (UNLOCK) Function

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

With CONSULT- III

The ON/OFF switching of the automatic door locks (UNLOCK) function and the type selection of the automatic door locks (UNLOCK) function can be performed at the WORK SUPPORT setting of CONSULT-III. Refer to DLK-276, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Without CONSULT- III

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

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

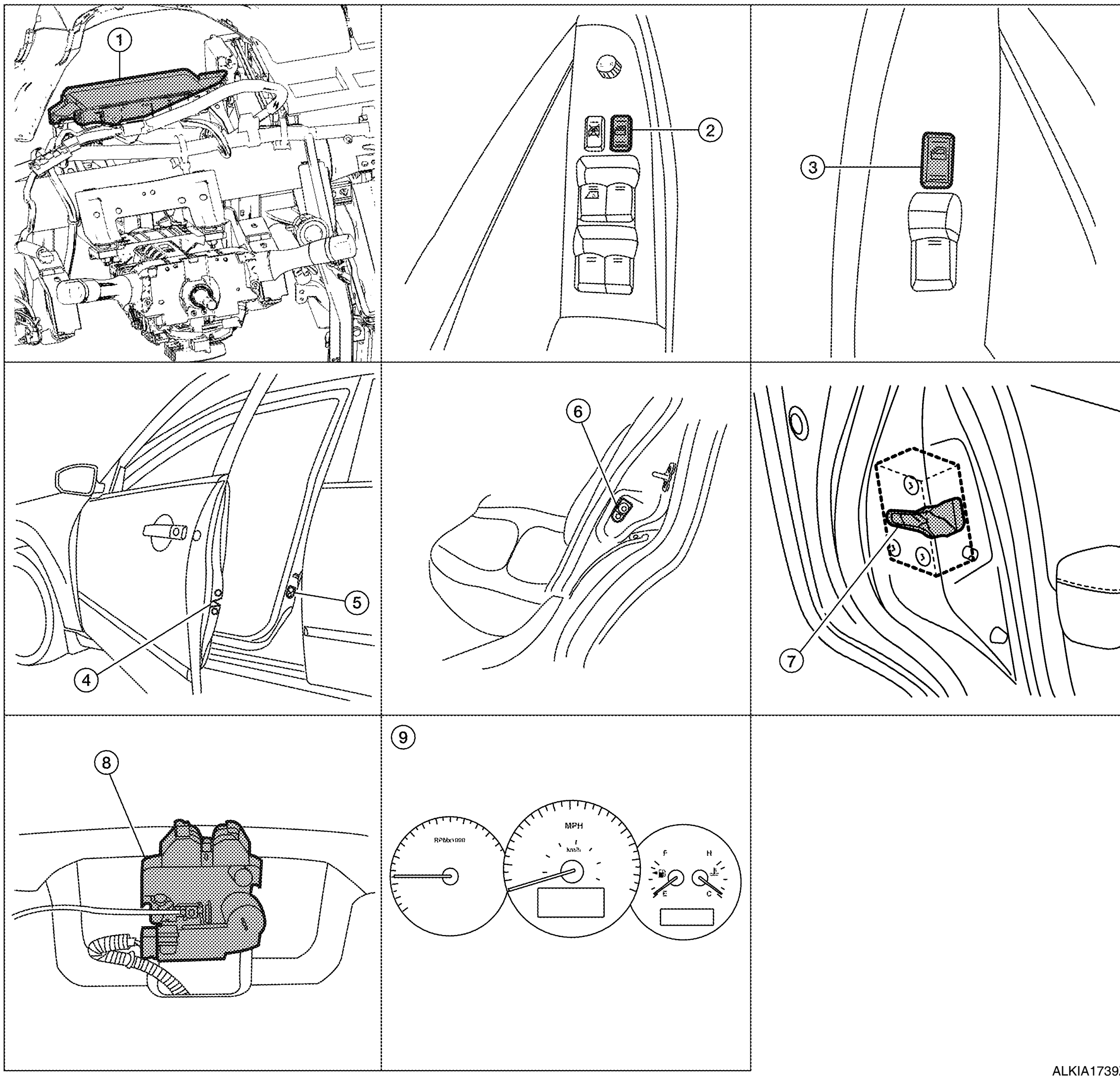
OFF → ON	: 2 blinks
ON → OFF	: 1 blink

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

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

Component Parts Location

INFOID:0000000004496875



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
9. Combination meter M24

Component Description

INFOID:0000000004496876

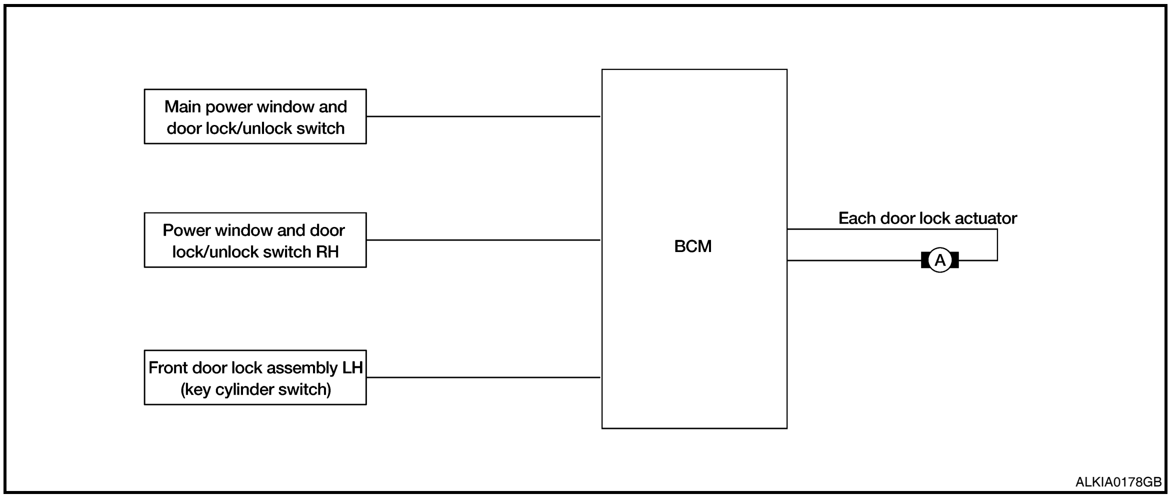
Item	Function
BCM	Controls the door lock function and fuel lid door lock actuator function.
Door lock and unlock switch	Input lock or unlock signal to BCM.
Door lock actuator	Output lock/unlock signal from BCM and locks/unlocks each door.
Door switch	Input door open/close condition to BCM.
Door key cylinder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

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

DOOR LOCK FUNCTION

System Diagram

INFOID:0000000004496877



System Description

INFOID:0000000004496878

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.

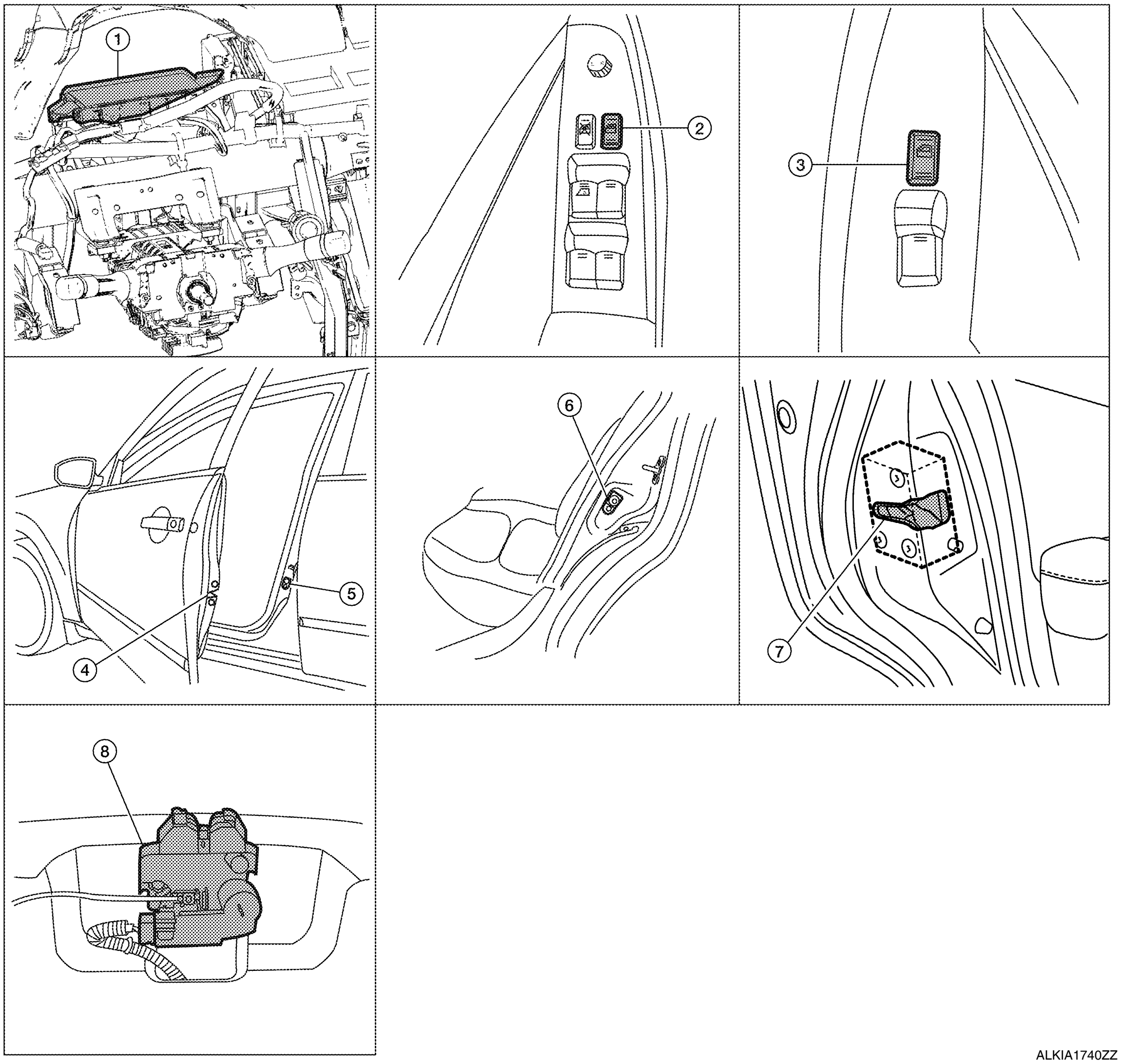
Selective Unlock Operation

- 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-481, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Component Parts Location

INFOID:0000000004496879



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

Component Description

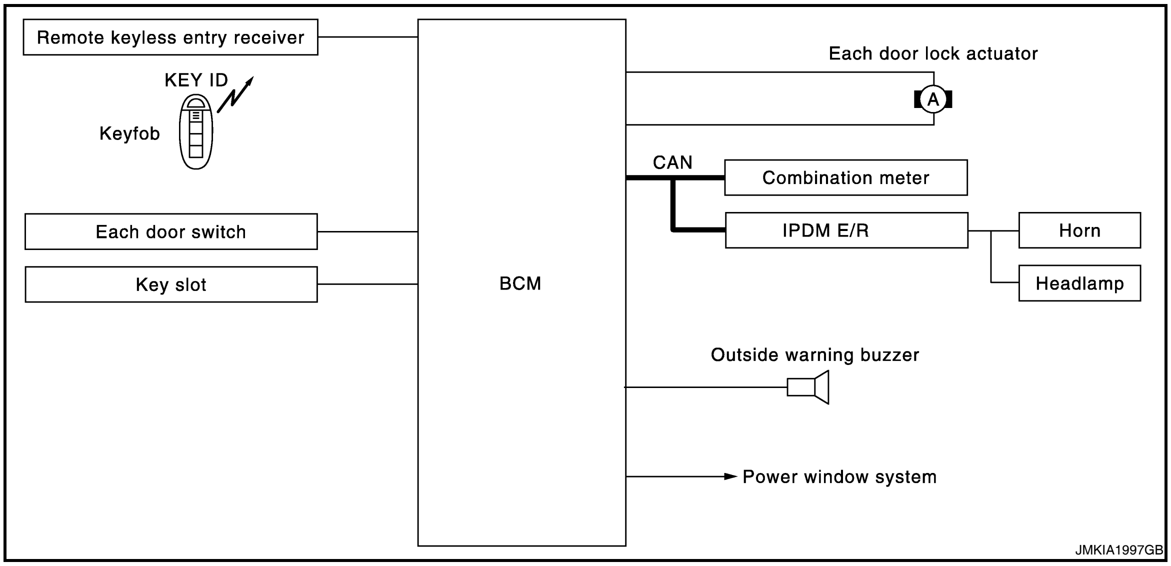
INFOID:0000000004496880

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 SYSTEM

System Diagram

INFOID:0000000004500450



System Description

INFOID:0000000004500451

The remote keyless entry system can be locked and unlocked by pressing door lock and unlock button of keyfob.

DOOR LOCK AND UNLOCK OPERATION

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

OPERATION CONDITION

Remote controller operation	Operation condition
Lock/unlock	Key switch is OFF (keyfob is removed from key slot).

OPERATION AREA

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

SELECTIVE UNLOCK OPERATION

When door lock is unlocked, pressing LOCK button on keyfob once will lock all doors. When door lock is locked, pressing UNLOCK button on keyfob will unlock driver side door. Pressing UNLOCK button on keyfob second time within 5 seconds from the first time will unlock all doors.

HAZARD AND HORN REMINDER

When the doors are locked or unlocked by keyfob, power is supplied to sound horn and flash hazard warning lamps as a reminder
The hazard and horn reminder has C mode (horn chirp mode) and S mode (non-horn chirp mode).

How to Change Hazard and Horn Reminder Modes

With CONSULT-III

Hazard and horn reminders can be changed using "WORK SUPPORT" mode in "MULTI ANSWER BACK SET".

Hazard reminder setting	Mode 1		Mode 2		Mode 3		Mode 4	
Keyfob operation	Lock	Unlock	Lock	Unlock	Lock	Unlock	Lock	Unlock
Hazard warning lamp blink	—	—	—	Once	Twice	—	Twice	Once

Horn reminder setting	ON		OFF	
Keyfob operation	Lock	Unlock	Lock	Unlock
Horns sound	Once	—	—	—

Hazard and horn reminders do not operate if any door switch is ON (any door is OPEN).
Hazard reminder can be changed using “HAZARD LAMP SET” mode in “WORK SUPPORT”.
Horn reminder can be changed using “HORN CHIRP SET” mode in “WORK SUPPORT”.
Refer to DLK-481.

Without CONSULT-III
Refer to Owner’s Manual for instructions.

AUTO DOOR LOCK OPERATION

When all doors are locked, ignition switch is OFF (ignition switch is not pressed) and key switch is OFF (keyfob is not inserted in key slot), doors are unlocked with keyfob button. When BCM does not receive the following signals within 1 minute, all doors are locked.

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

Auto door lock mode can be changed by “AUTO LOCK SET” mode in “WORK SUPPORT”. Refer to DLK-481.

PANIC ALARM OPERATION

When key switch is OFF (when keyfob is not inserted in key slot), BCM turns ON and OFF horn intermittently with input of PANIC ALARM signal from keyfob.
BCM outputs to IPDM E/R for panic alarm signal (horn signal) via CAN communication lines.
The alarm automatically turns OFF after 25 seconds or when BCM receives any signal from keyfob.
Panic alarm operation mode can be changed using “PANIC ALARM SET” mode in “WORK SUPPORT”.
Refer to DLK-481.

INTERIOR LAMP TIMER OPERATION

When the following conditions occur, remote keyless entry system turns on interior lamp with input of UNLOCK signal from keyfob. For detailed description, refer to INL-6, "System Description".

- Interior room lamp switch is in the DOOR position
- Door switch OFF (when all the doors are closed)

DOOR LOCK OPERATION WARNING

Outside warning buzzer will sound, when keyfob LOCK button is pressed with either one of the following conditions.

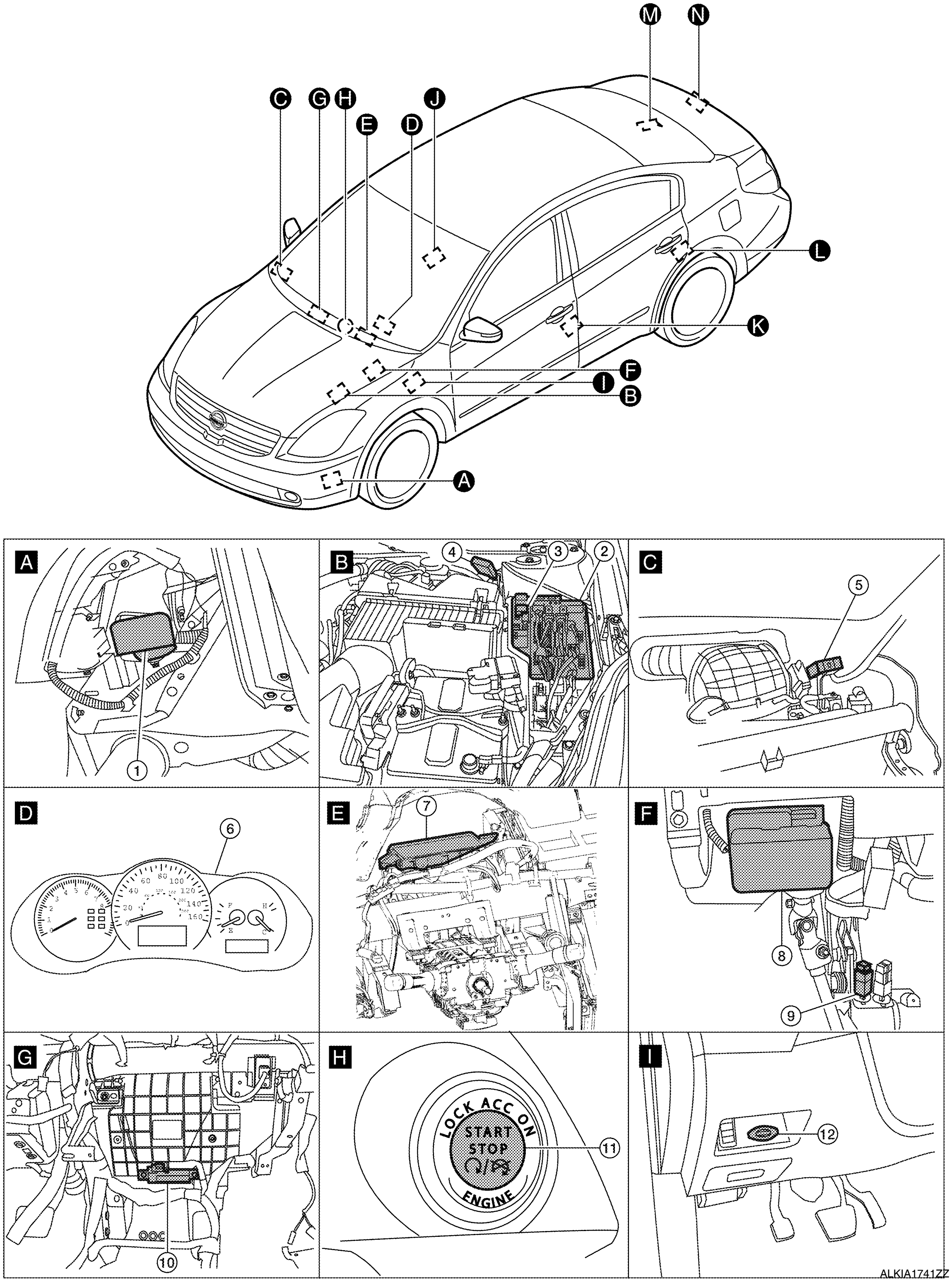
- Any door is open
- For 3 seconds after keyfob is removed from key slot

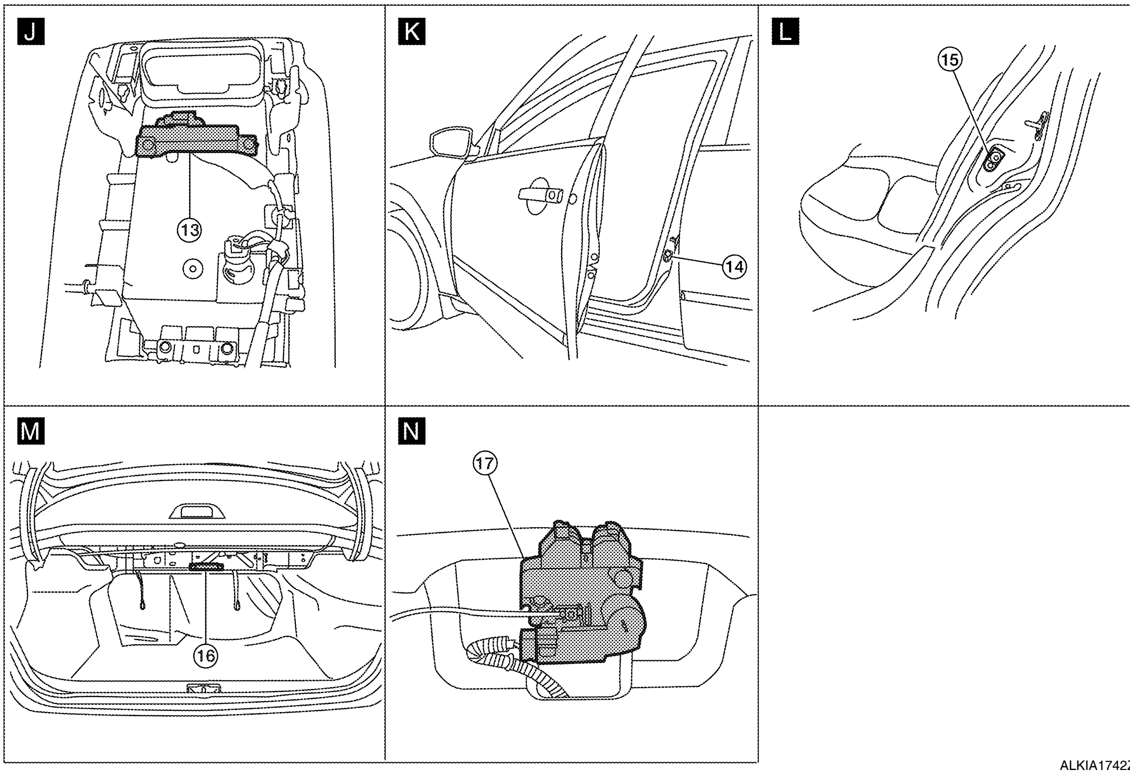
KEYFOB LOW BATTERY WARNING

Warning lamp is illuminated; when BCM detects keyfob low battery after ignition switch is turned ON.

Component Parts Location

INFOID:0000000004500454





ALKIA1742ZZ

1. Horn E216 (view with front fender protector LH removed)
2. IPDM E/R E17, E18
3. Horn relay H-1
4. Outside warning buzzer E73
5. Remote keyless entry receiver M27 (view with instrument panel removed)
6. Combination meter M24
7. BCM M16, M17, M18, M19, M20, M21 (view with instrument panel removed)
8. Electronic steering column lock M32 (view with instrument panel LH removed)
9. Stop lamp switch E38
10. Instrument panel antenna M49 (view with center console assembly removed)
11. Push button ignition switch M38
12. Key slot M40
13. Front console antenna M203 (view with center console assembly removed)
14. Front door switch LH B8 RH B108
15. Rear door switch LH B18 RH B116
16. Rear parcel shelf antenna B29
17. Trunk lamp switch and trunk release solenoid B28

Component Description

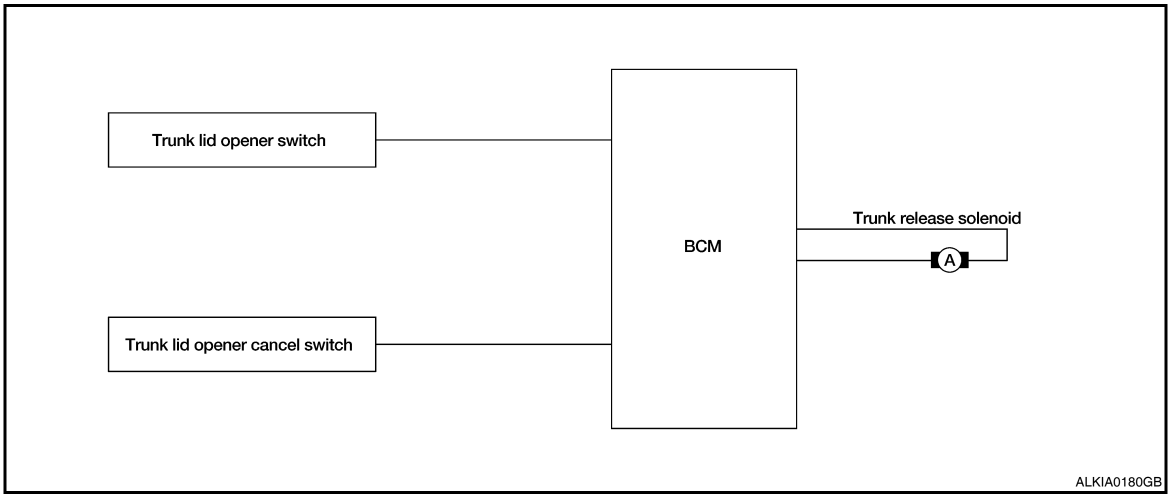
INFOID:0000000004500453

Item	Function
BCM	Controls the door lock and unlock function.
Key slot	Detects that keyfob is inserted into key slot.
Door lock actuator	Output lock / unlock signal from BCM and locks and unlocks each door.
Remote keyless entry receiver	Receives lock/unlock signal from the keyfob, and then transmits to BCM.
Keyfob	Transmits button operation to remote keyless entry receiver.

TRUNK OPEN FUNCTION

System Diagram

INFOID:0000000004496890



System Description

INFOID:0000000004496891

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			

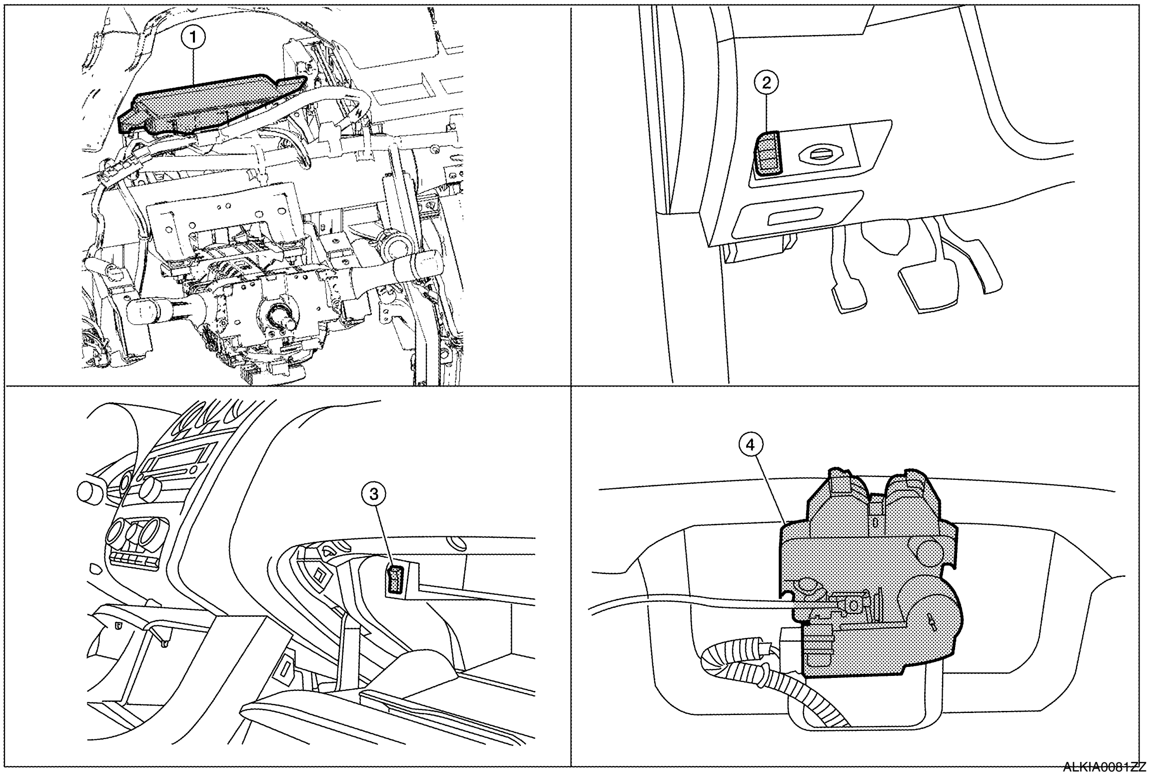
TRUNK LID OPENER OPERATION

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
- Within 3 seconds of removing the keyfob from the key slot

Component Parts Location

INFOID:0000000004496892



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

Component Description

INFOID:0000000004496893

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.

HOMELINK UNIVERSAL TRANSCEIVER

Component Description

INFOID:0000000004496910

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 : Diagnosis Description

INFOID:0000000004496911

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

System	Sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MUTI REMOTE ENT	×	×	×
Exterior lamp	HEADLAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	

COMMON ITEM : CONSULT-III Function

INFOID:0000000004496912

ECU IDENTIFICATION

Displays the BCM part No.

SELF-DIAG RESULT

Refer to BCS-91, "DTC Index".

DOOR LOCK

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

INFOID:0000000004496913

WORK SUPPORT

Work Item	Description
DOOR LOCK-UNLOCK SET	• ON • OFF
AUTOMATIC DOOR LOCK SELECT	• SHIFT OUT OF P • VH SPD
AUTOMATIC DOOR UNLOCK SE-LECT	• MODE1 • MODE2 • MODE3 • MODE4 • MODE5 • MODE6
AUTOMATIC LOCK/UNLOCK SE-LECT	• ON • OFF

DATA MONITOR

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

ACTIVE TEST

Test Item	Description
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/OTHER UNLOCK].

MULTI REMOTE ENT

MULTI REMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)

INFOID:0000000004507209

DATA MONITOR

Monitor Item	Condition
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.

Monitor Item	Condition
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
DOOR SW-BK	**NOTE:** This item is displayed, but cannot be monitored.
CDL LOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from keyfob.
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from keyfob.
RKE-TR/BD	Indicates [ON/OFF] condition of TRUNK OPEN signal from keyfob.
RKE-PANIC	Indicates [ON/OFF] condition of PANIC button of keyfob.
RKE-P/W OPEN	Indicates [ON/OFF] condition of P/W DOWN signal from keyfob.
RKE-MODE CHG	Indicates [ON/OFF] condition of MODE CHANGE signal from keyfob.
KEY CYL LK-SW	Indicated [ON/OFF] condition of lock signal from door key cylinder.
KEY CYL UN-SW	Indicated [ON/OFF] condition of unlock signal from door key cylinder.
KEY CYL SW-TR	**NOTE:** This item is displayed, but cannot be monitored.

ACTIVE TEST

Test item	Description
INT LAMP	This test is able to check interior room lamp operation. The interior room lamp will be activated after “ON” on CONSULT-III screen is touched.
LUGGAGE LAMP TEST	**NOTE:** This item is displayed, but cannot be tested.
DOOR LOCK	This test is able to check door lock/unlock operation. • The all door lock actuators are locked when “ALL LCK” on CONSULT-III screen is touched. • The all door lock actuators are unlocked when “ALL UNLK” on CONSULT-III screen is touched. • The door lock actuator (driver side) is unlocked when “DR UNLK” on CONSULT-III screen is touched. • The door lock actuator (passenger side) is unlocked when “AS UNLK” on CONSULT- III screen is touched. • The door lock actuator (rear LH and RH) is unlocked when “OTR ULK” on CONSULT-III screen is touched.
FLASHER	This test is able to check flasher operation [LH/RH/OFF].
HORN	This test is able to check horn operation [ON/OFF].
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.
TRUNK/BACK DOOR	**NOTE:** This item is displayed, but cannot be tested.
AUTOMATIC BACK DOOR	**NOTE:** This item is displayed, but cannot be tested.

WORK SUPPORT

Test item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operate (WITH) or not operate (WITHOUT) with this mode.
HORN CHIRP SET	Answer back function (horn) mode can be changed in this mode. For the detail of the setting.

Test item	Description
HAZARD LAMP SET	Answer back function (hazard) mode can be changed in this mode. • MODE1: Non-operation • MODE2: Lock (non-operation) Unlock (blink once) • MODE3: Lock (blink towice) Unlock (non-operation) • MODE4: Lock (blink towice) Unlock (blink once)
AUTO LOCK SET	Auto door lock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 5 minutes
PANIC ALARM SET	Panic alarm button pressing time on keyfob remote control button can be selected from the following with this mode. • MODE1: 0.5 sec. • MODE2: 1.5 sec. • MODE3: Non-operation
PW DOWN SET	Unlock button pressing time on keyfob button can be selected from the following with this mode. • MODE 1: 3 sec. • MODE 2: Non-operation • MODE 3: 5 se

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000004496915

DATA MONITOR

Monitor Item	Contents
PUSH SW	Indicates [ON/OFF] condition of push button ignition switch.
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
VEH SPEED 1	Indicates [Km/h] condition of vehicle speed signal from combination meter.
KEY CYL SW-TR	**NOTE:** This item is displayed, but cannot be monitored.
TR CANCEL SW	Indicates [ON/OFF] condition of trunk cancel switch.
TR/BD OPEN SW	Indicates [ON/OFF] condition of trunk opener switch.
TRNK/HAT MNTR	Indicates [ON/OFF] condition of trunk lid.
RKE-TR/BD	Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key.

ACTIVE TEST

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

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000004496920

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 vehicles are equipped with many electronic control units, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-25, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000004496921

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:0000000004496922

1.PERFORM SELF DIAGNOSTIC

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

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-8, "CAN Communication Control Circuit".
NO >> Refer to GI-42, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000004496923

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:0000000004496924

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

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

Special Repair Requirement

INFOID:0000000004496925

1.REQUIRED WORK WHEN REPLACING BCM

Initialize NVIS by CONSULT-III. For the details of initialization refer to CONSULT-III Operation Manual.

>> Work End.

B2621 INSIDE KEY ANTENNA 1

Description

INFOID:0000000004496926

Detects whether keyfob is inside the vehicle.
Installed in the center area of the instrument center.

DTC Logic

INFOID:0000000004496927

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 “MULTI REMOTE ENTRY”.
2. Perform “MULTI REMOTE ENTRY” Self Diagnostic Result.

Is inside key antenna DTC detected?

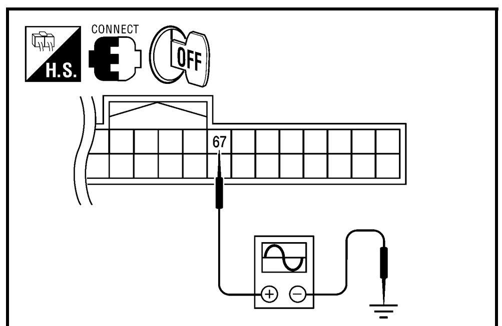
YES >> Refer to DLK-486, "Diagnosis Procedure".
NO >> Inside key antenna (instrument panel) is OK.

Diagnosis Procedure

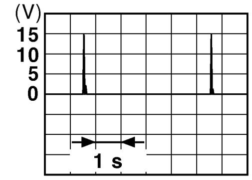
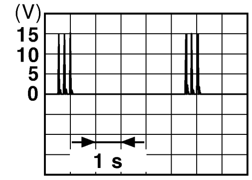
INFOID:0000000004496928

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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



ALKIA0325ZZ

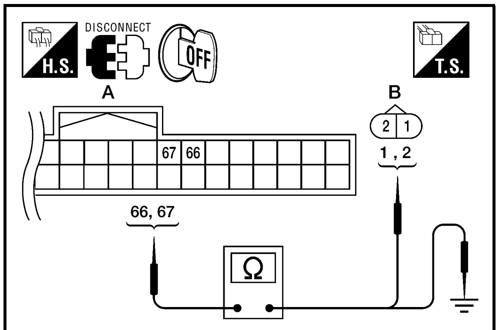
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M19	Instrument panel antenna	67	Ground	Place keyfob inside the vehicle.	 JMKIA0062GB
				Place keyfob outside the vehicle.	 JMKIA0063GB

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.



ALKIA0326ZZ

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

3. Check continuity between BCM connector and ground.

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

Is the inspection result normal?

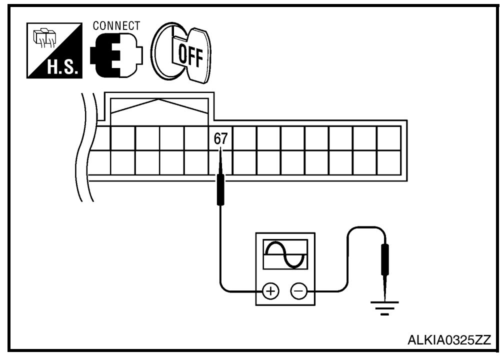
YES >> GO TO 3
NO >> Repair or replace harness between BCM and instrument panel antenna.

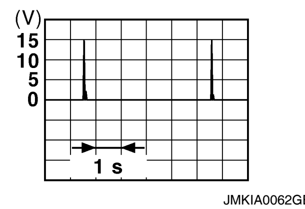
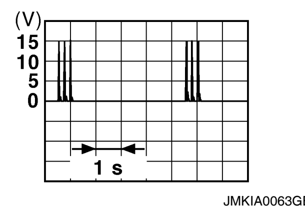
3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

A B C D E F G H I J DLK L M N O P

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 keyfob inside the vehicle.	
				Place keyfob outside the vehicle.	

Is the inspection result normal?

YES >> Replace instrument panel antenna. Refer to IP-12, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

B2622 INSIDE KEY ANTENNA 2

Description

INFOID:0000000004496929

Detects whether keyfob is inside the vehicle.
Installed in the console.

DTC Logic

INFOID:0000000004496930

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 “MULTI REMOTE ENTRY”.
2. Perform “MULTI REMOTE ENTRY” Self Diagnostic Result.

Is front console antenna DTC detected?

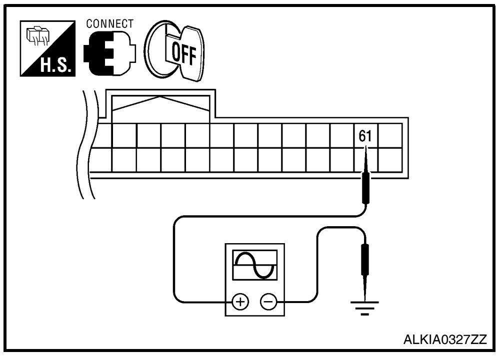
YES >> Refer to DLK-489, "Diagnosis Procedure".
NO >> Front console antenna is OK.

Diagnosis Procedure

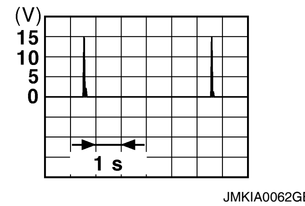
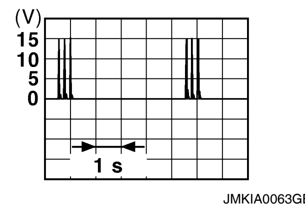
INFOID:0000000004496931

1. CHECK FRONT CONSOLE ANTENNA INPUT SIGNAL 1

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



ALKIA0327ZZ

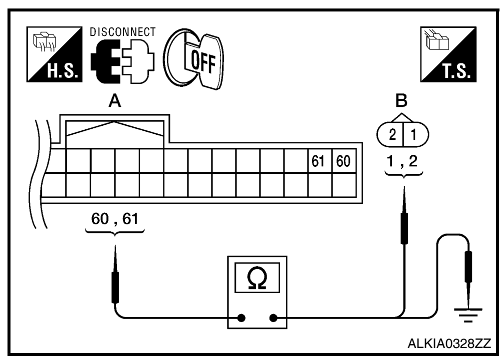
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M19	Front console antenna	61	Ground	Place keyfob inside the vehicle.	
				Place keyfob outside the vehicle.	

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
A: M19	60	B: M41	Console	2	Yes
	61			1	

3. Check continuity between BCM connector and ground.

BCM connector		Terminal		Continuity
A: M19	Console	60	Ground	No
		61		

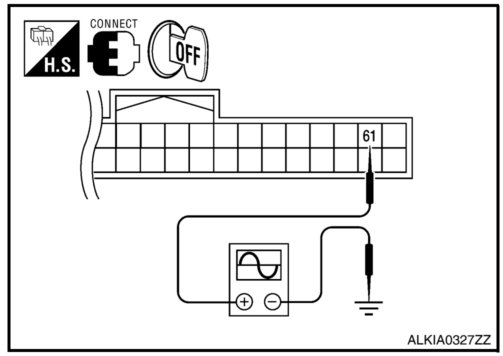
Is the inspection result normal?

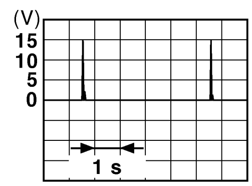
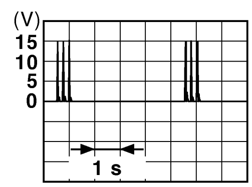
YES >> GO TO 3
NO >> Repair or replace harness between BCM and front console antenna.

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 keyfob inside the vehicle.	
				Place keyfob outside the vehicle.	

Is the inspection result normal?

YES >> Replace front console antenna. Refer to IP-18, "Disassembly and Assembly".
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

B2623 INSIDE KEY ANTENNA 3

Description

INFOID:0000000004496932

Detects whether keyfob is inside the vehicle.
Installed in the trunk room.

DTC Logic

INFOID:0000000004496933

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 “MULTI REMOTE ENTRY”.
2. Perform “MULTI REMOTE ENTRY”Self Diagnostic Result.

<u>Is rear parcel shelf antenna DTC detected?</u>

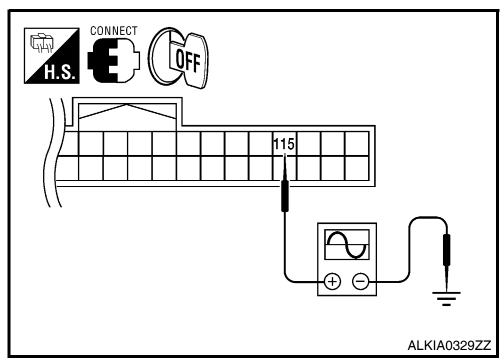
YES >> Refer to DLK-492, "Diagnosis Procedure".
NO >> Rear parcel shelf antenna is OK.

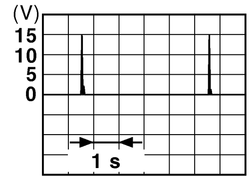
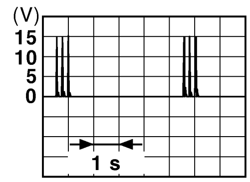
Diagnosis Procedure

INFOID:0000000004496934

1.CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 1

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



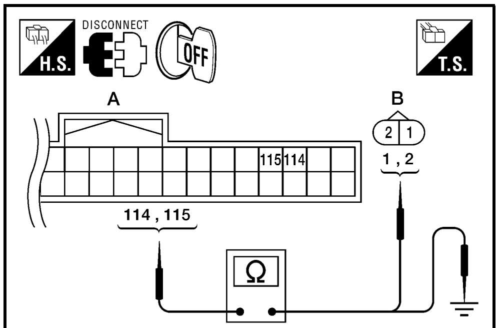
Terminals				Condition	Signal (Reference value.)
(+)			(–)		
BCM connector		Terminal			
M21	Rear parcel shelf antenna	115	Ground	Place keyfob inside the vehicle.	 JMKIA0062GB
				Place keyfob outside the vehicle.	 JMKIA0063GB

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.



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

3. Check continuity between BCM connector and ground.

BCM connector		Terminal	Ground	Continuity
A: M21	Trunk room	114	Ground	No
		115		

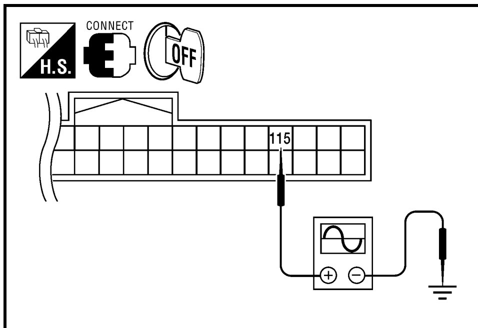
Is the inspection result normal?

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

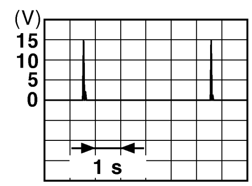
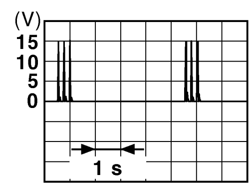
3.CHECK REAR PARCEL SHELF ANTENNA INPUT SIGNAL 2

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 oscillo-scope.



ALKIA0329ZZ

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

Is the inspection result normal?

YES >> Replace rear parcel shelf antenna. Refer to INT-38, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000004496935

1. CHECK FUSE AND FUSIBLE LINK

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

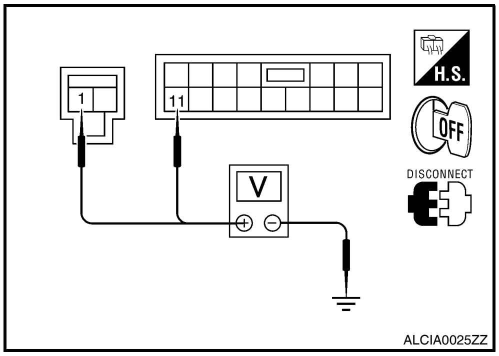
Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	H
11		10

Is the fuse or fusible link blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit.
NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

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



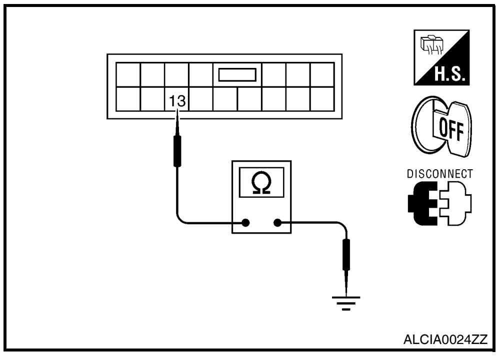
Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M16	1		Battery voltage
M17	11		

Is the measurement normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.



BCM		Ground	Continuity
Connector	Terminal		
M17	13		Yes

Does continuity exist?

YES >> Inspection End.
NO >> Repair or replace harness.

Special Repair Requirement

INFOID:0000000004496936

1. REQUIRED WORK WHEN REPLACING BCM

Initialize control unit. Refer to BCS-6, "CONFIGURATION (BCM) : Special Repair Requirement".

>> Work End.

DOOR SWITCH

Description

INFOID:0000000004496938

Detects door open/close condition.

Component Function Check

INFOID:0000000004496939

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?

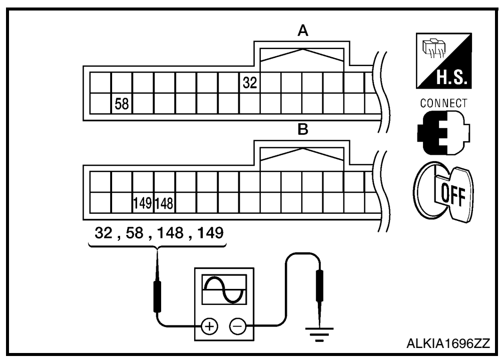
YES >> Door switch is OK.
NO >> Refer to DLK-496, "Diagnosis Procedure".

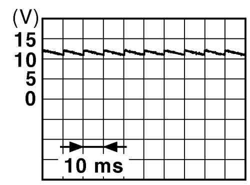
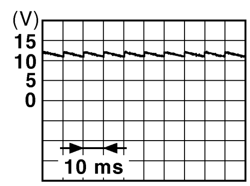
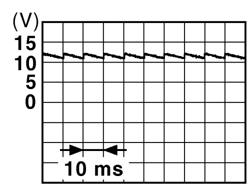
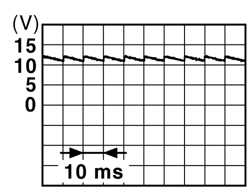
Diagnosis Procedure

INFOID:0000000004496940

1.CHECK DOOR SWITCH INPUT SIGNAL

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



Terminals			Door condition		Voltage (V) (Approx.)
(+)		(–)			
BCM connector	Terminal				
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

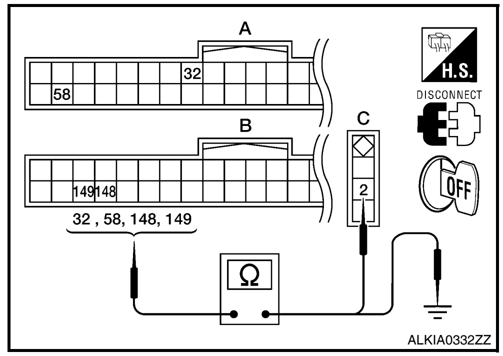
Is the inspection result normal?

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-498, "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".

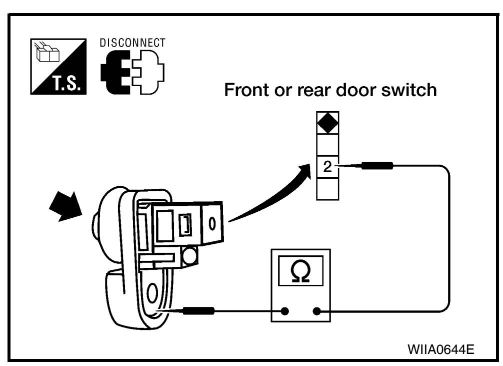
>> Inspection End.

Component Inspection

INFOID:0000000004496941

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 malfunctioning door switch.

DOOR LOCK AND UNLOCK SWITCH

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000004496942

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000004496943

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.

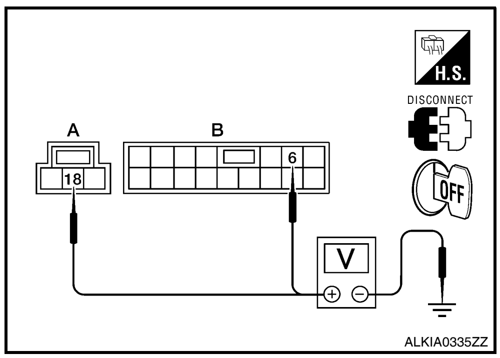
NO >> Refer to DLK-499, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000004496945

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
D8	Neutral → Lock	18	Ground	Battery voltage → 0
D7	Neutral → Unlock	6		

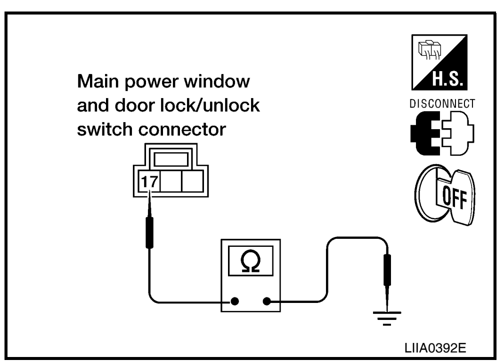
Is the inspection result normal?

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

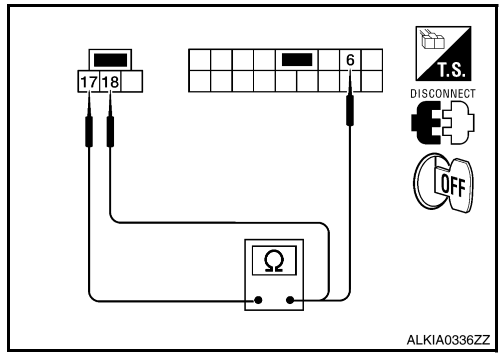
Is the inspection result normal?

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.



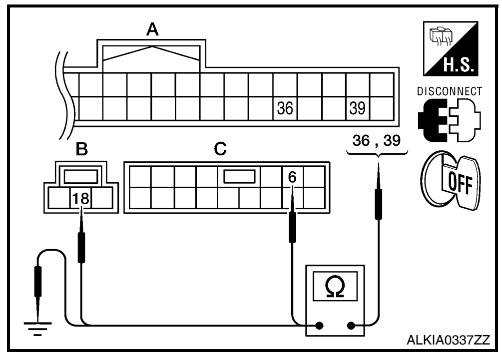
Main power window and door lock/unlock switch state	Terminals	Continuity
Lock	17 - 18	Yes
Unlock	6 - 17	
Neutral/Lock	6 - 17	No
Neutral/Unlock	17 - 18	

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace main power window and door lock/unlock switch. Refer to PWC-186, "Removal and Installation".

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	

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.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000004496947

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000004496948

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?

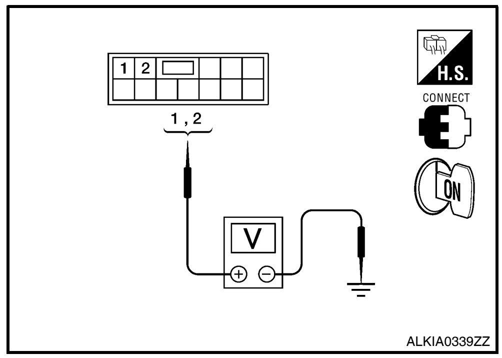
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-501, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000004496950

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”.



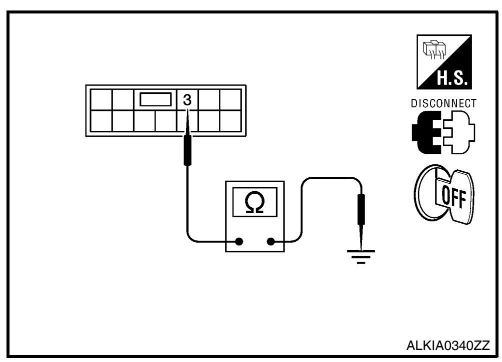
Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage
D105	Neutral → Lock	2	Ground	Battery voltage → 0
	Neutral → Unlock	1		

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.



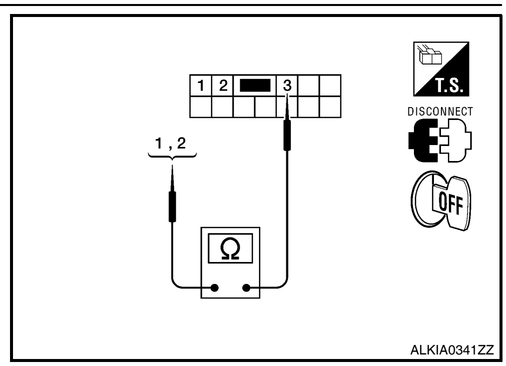
Power window and door lock/unlock switch RH connector	Terminal		Continuity
D105	3	Ground	Yes

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.



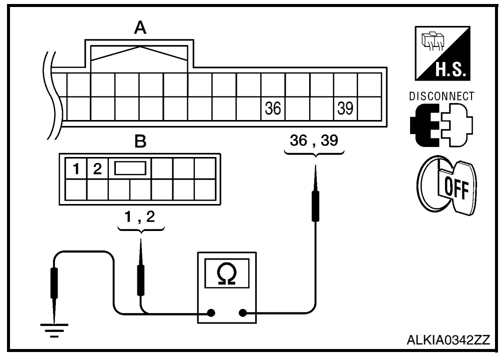
Power window and door lock/unlock switch RH state	Terminals	Continuity
Lock	2 - 3	Yes
Unlock	1 - 3	
Neutral/Unlock	2 - 3	No
Neutral/Lock	1 - 3	

Is the inspection result normal?

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

4.CHECK POWER WINDOW SWITCH CIRCUITS

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



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

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.

KEY SLOT

Description

INFOID:0000000004496952

Detects whether keyfob is inserted.
Immobilizer antenna amp checks keyfob transponder.

Component Function Check

INFOID:0000000004496953

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?

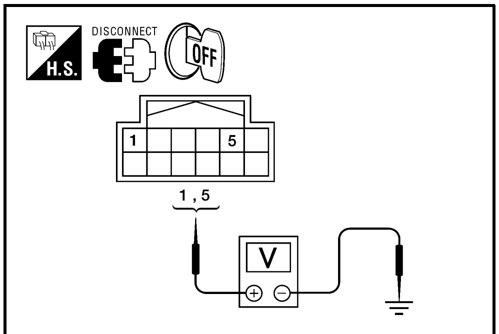
YES >> Key slot is OK.
NO >> Refer to DLK-503, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004496954

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.



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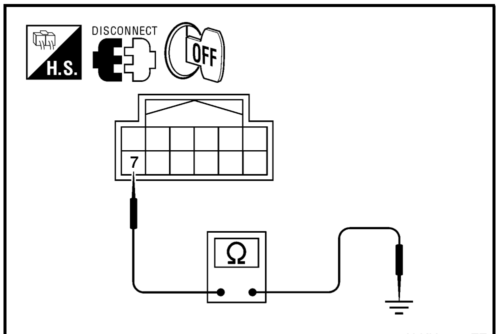
Terminals			Voltage (V) (Approx.)
(+)		(–)	
Key slot connector	Terminal		
M40	1	Ground	Battery voltage
	5		

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.



ALKIA0344ZZ

Key slot connector	Terminal	Ground	Continuity
M40	7		Yes

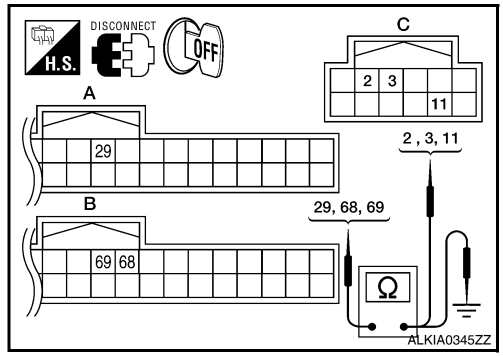
Is the inspection result normal?

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 and key slot connector.



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

3. Check continuity between BCM connector 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-504, "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".

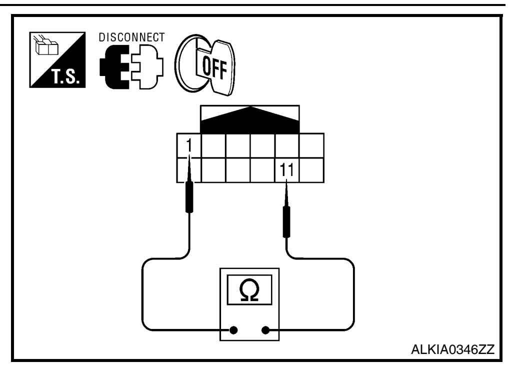
>> Inspection End.

Component Inspection

INFOID:0000000004496955

1.CHECK KEY SLOT

Check key slot.



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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace key slot. Refer to SEC-409, "Removal and Installation".

KEY CYLINDER SWITCH

Description

INFOID:0000000004496956

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:0000000004496957

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

Check KEY CYL UN-SW, KEY CYL UN-SW in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT-III. Refer to DLK-463, "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 >> Refer to DLK-505, "Diagnosis Procedure".

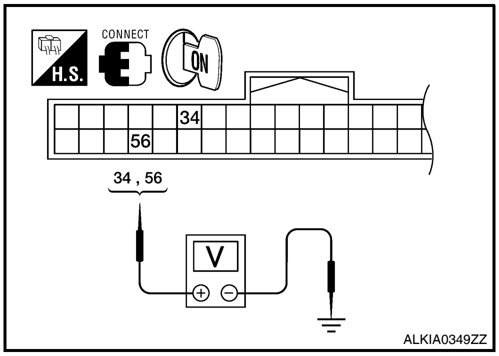
Diagnosis Procedure

INFOID:0000000004496959

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	5
	34		Unlock	0
			Neutral / Lock	5



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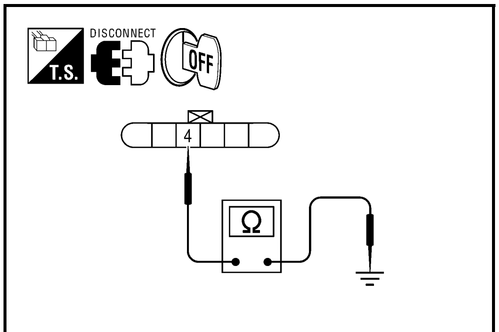
Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to DLK-623, "FRONT DOOR LOCK : Removal and Installation".
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.



ALKIA0348ZZ

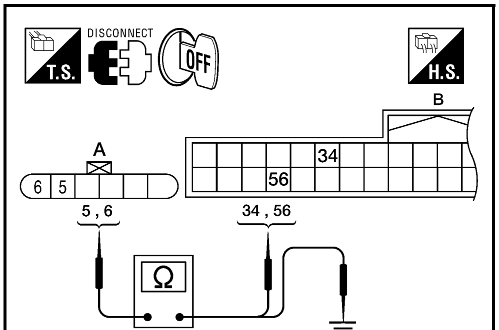
Front door lock assembly LH connector	Terminal	Ground	Continuity
D10	4		Yes

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 and BCM connector M18.



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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 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-506, "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-623, "FRONT DOOR LOCK : Removal and Installation".

Component Inspection

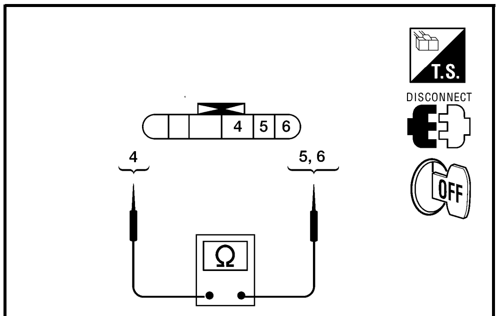
INFOID:0000000004496960

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) connector			
5	4	Unlock	Yes
		Neutral / Lock	No
6		Lock	Yes
		Neutral / Unlock	No



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Is the inspection result normal?

YES >> Key cylinder switch is OK.
NO >> Replace front door lock assembly LH (key cylinder switch). Refer to DLK-623, "FRONT DOOR LOCK : Removal and Installation".

TRUNK LID OPENER SWITCH

Description

INFOID:0000000004496966

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000004496967

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-508, "Diagnosis Procedure".

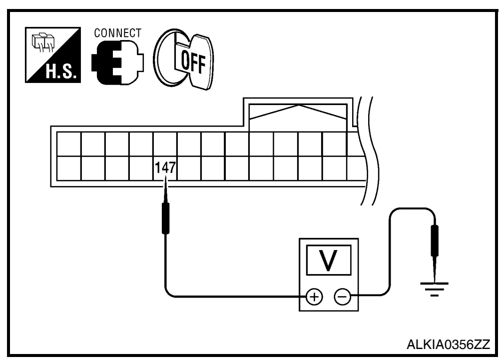
Diagnosis Procedure

INFOID:0000000004496968

1.CHECK TRUNK LID OPEN INPUT SIGNAL

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

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



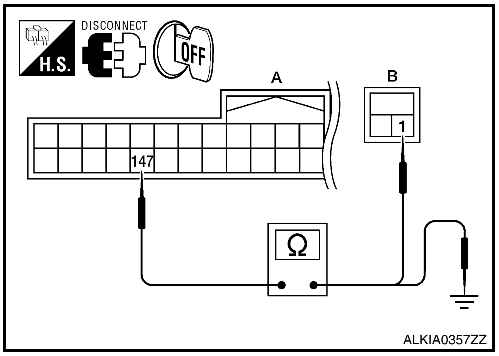
Is the inspection result normal?

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 and trunk lid opener switch connector.



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

3. Check continuity between BCM connector and ground.

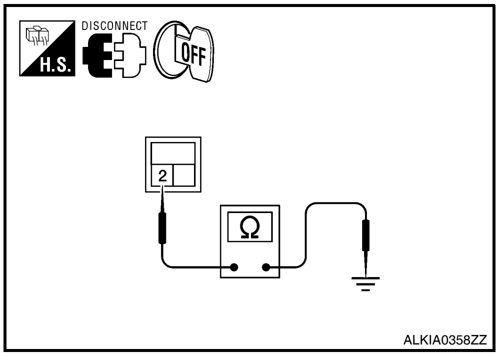
BCM connector	Terminal	Ground	Continuity
A: M21	147		No

Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER SWITCH GROUND CIRCUIT

Check continuity between trunk lid opener switch connector and ground.



Trunk lid opener switch	Terminal	Ground	Continuity
M75	2		Yes

Is the inspection result normal?

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

4.CHECK TRUNK LID OPENER SWITCH

Refer to DLK-509, "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".

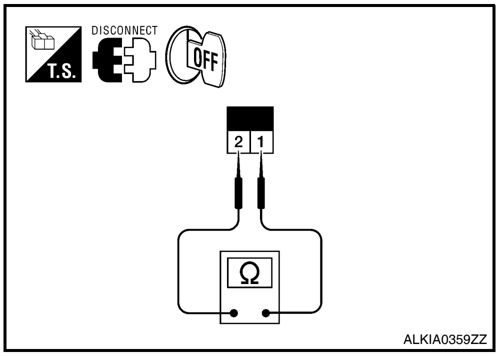
>> Inspection End.

Component Inspection

INFOID:0000000004496969

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:0000000004496970

Cancels trunk lid open operation.

Component Function Check

INFOID:0000000004496971

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?

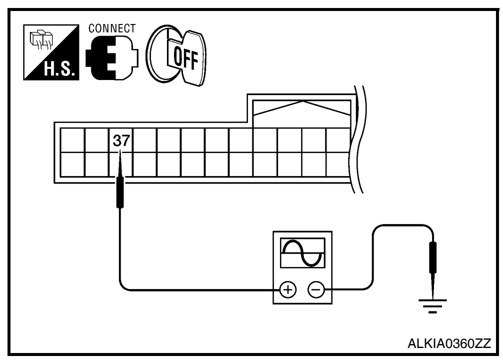
YES >> Trunk lid opener cancel switch is OK.
NO >> Refer to DLK-510, "Diagnosis Procedure".

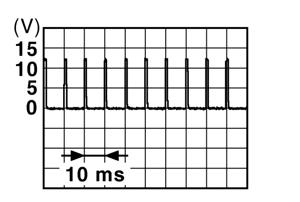
Diagnosis Procedure

INFOID:0000000004496972

1.CHECK TRUNK LID OPENER CANCEL SIGNAL

Check voltage between BCM connector and ground.



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

Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER CANCEL SWITCH CIRCUIT

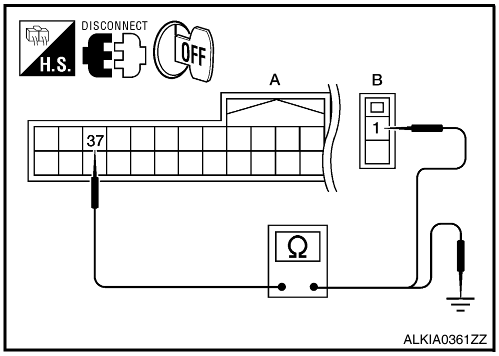
1. Disconnect BCM connector.

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

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

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
A: M18	37		No



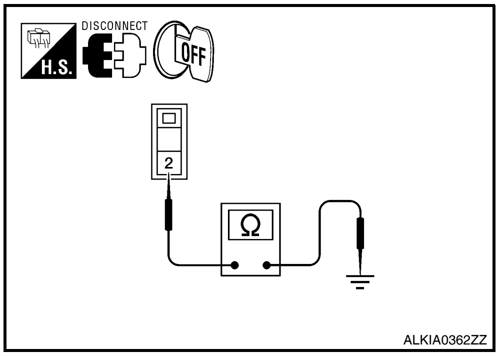
Is the inspection result normal?

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

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-511, "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.

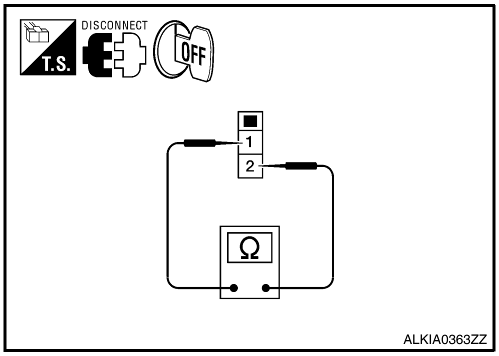
Component Inspection

INFOID:0000000004496973

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:0000000004496974

Detects trunk open/close condition.

Component Function Check

INFOID:0000000004496975

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?

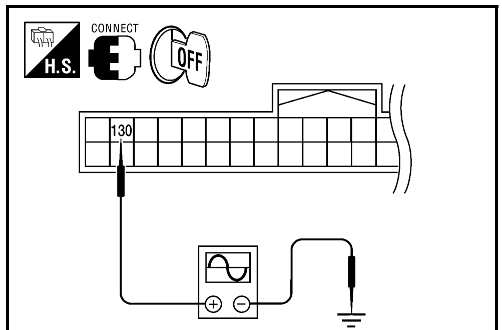
YES >> Trunk room lamp switch is OK.
NO >> Refer to DLK-512, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004496976

1.CHECK TRUNK LAMP SWITCH INPUT SIGNAL

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



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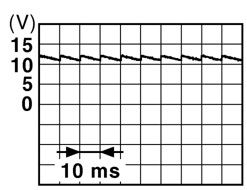
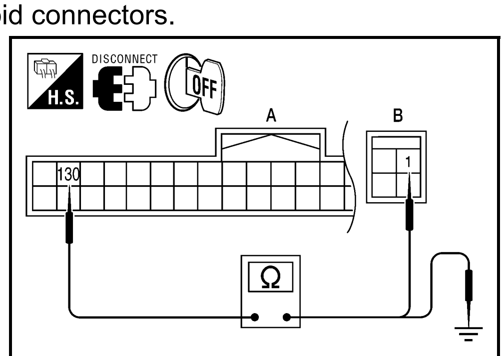
Terminals			Trunk condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M21	130	Ground	OPEN	0
			CLOSE	 JPMIA0011GB

Is the inspection result normal?

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

2.CHECK TRUNK LAMP SWITCH CIRCUIT

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



ALKIA0375ZZ

BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
A: M21	130	B: T7	2	Yes

3. Check continuity between BCM connector and ground.

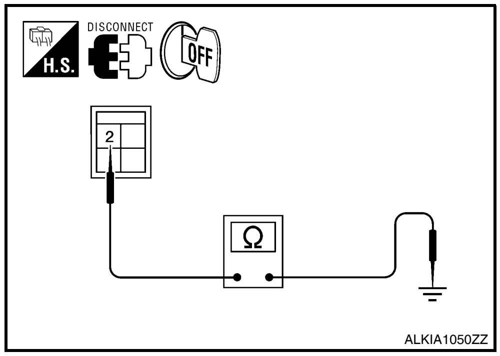
BCM connector	Terminal	Ground	Continuity
A: M21	130	Ground	No

Is the inspection result normal?

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

3. CHECK TRUNK LAMP SWITCH GROUND CIRCUIT

Check continuity between trunk lid lock assembly connector and ground.



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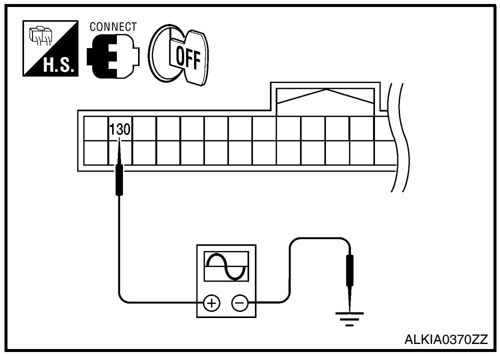
Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
T7	3	Ground	Yes

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.



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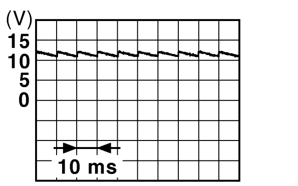
Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M21	130	Ground	 JPMIA0011GB

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to BCS-96, "Removal and Installation".

5. CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-514, "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.

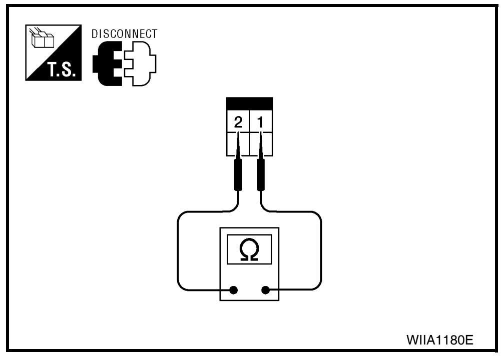
Component Inspection

INFOID:0000000004496977

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.

Terminal		Trunk condition	Continuity
Trunk lamp switch and trunk release solenoid			
2	3	OPEN	Yes
		CLOSE	No



Is the inspection result normal?

YES >> Inspection End.
NO >> Replace trunk lamp switch and trunk release solenoid.

DOOR LOCK ACTUATOR

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000004496986

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000004496987

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-515, "DRIVER SIDE : Diagnosis Procedure".

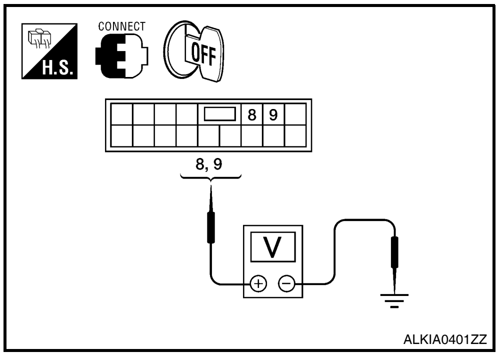
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000004496988

1.CHECK OUTPUT 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
	9		Unlock	0 → Battery voltage → 0

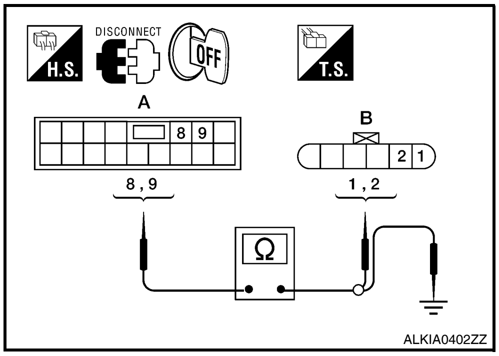


Is the inspection result normal?

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 and front door lock actuator driver side connector.



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

4. Check continuity between BCM connector 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:0000000004496989

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000004496990

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-516, "PASSENGER SIDE : Diagnosis Procedure".

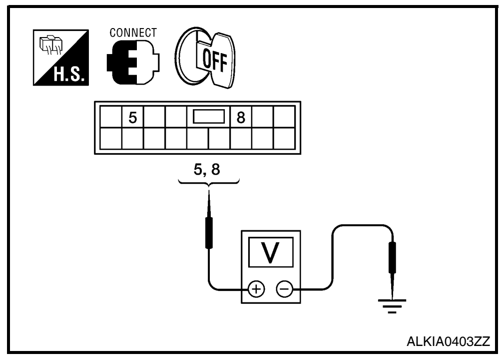
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000004496991

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

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



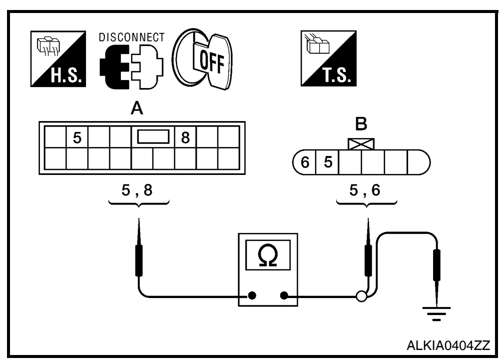
Is the inspection result normal?

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 and front door lock actuator RH.

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 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:0000000004496992

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000004496993

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-517, "REAR LH : Diagnosis Procedure".

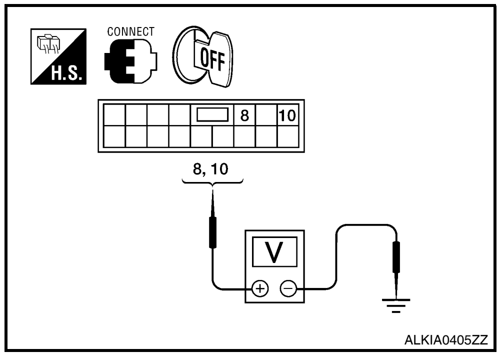
REAR LH : Diagnosis Procedure

INFOID:0000000004496994

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.

Terminals (+) BCM connector	Terminals (+) Terminal	Terminals (–)	Condition of door lock and unlock switch	Voltage (V) (Approx.)
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

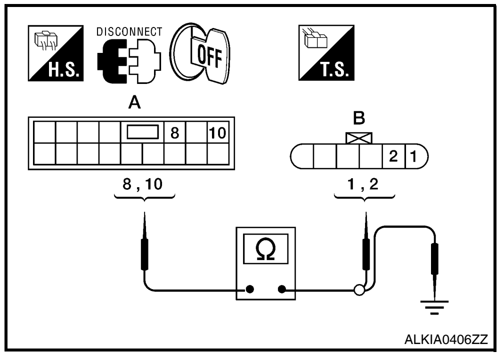
2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM and rear door lock actuator LH connectors.
2. Check continuity between BCM connector and rear door lock actuator LH connectors.

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:0000000004496995

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000004496996

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?

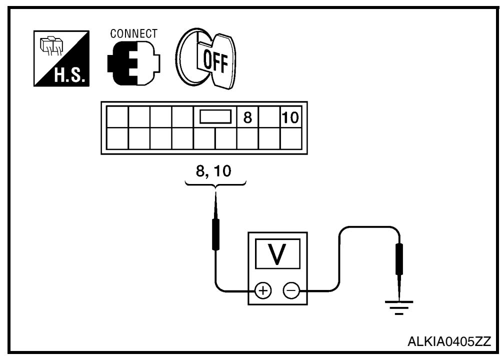
YES >> Door lock actuator is OK.
NO >> Refer to DLK-518, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000004496997

1.CHECK DOOR LOCK ACTUATOR SIGNAL

Check voltage between BCM connector and ground.



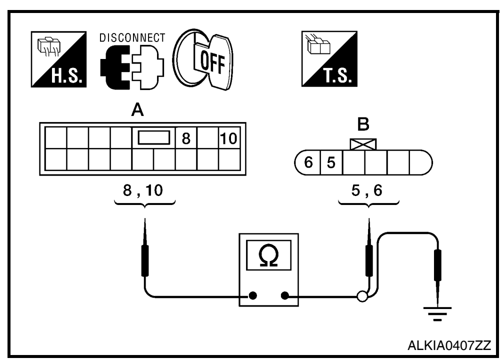
Terminals			Condition of door lock and unlock switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M17	8	Ground	Lock	0 → Battery voltage → 0
	10		Unlock	0 → Battery voltage → 0

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 and rear door lock actuator RH connectors.



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:0000000004496998

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000004496999

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-519, "Diagnosis Procedure".

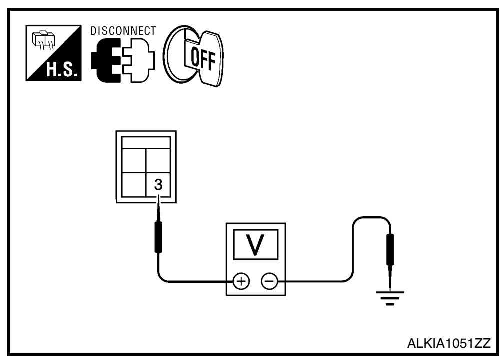
Diagnosis Procedure

INFOID:0000000004497000

1.CHECK OUTPUT CIRCUIT

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

Terminals (+) Trunk lamp switch and trunk release solenoid connector	Terminals (+) Terminal	Terminals (–)	Condition of trunk lid opener switch	Voltage (V) (Approx.)
T4	3	Ground	OFF → ON	0 → Battery voltage → 0



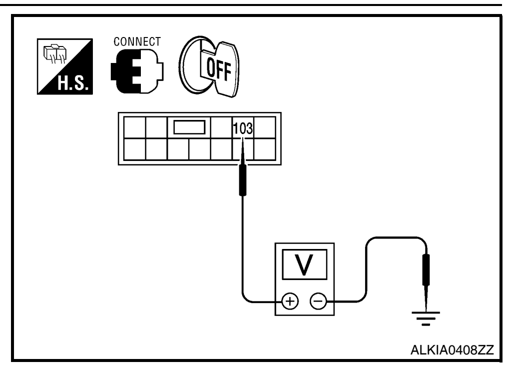
Is the inspection result normal?

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

2.CHECK OUTPUT SIGNAL

Check voltage between BCM connector and ground.

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



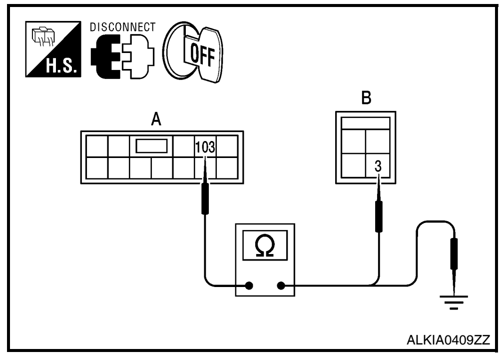
Is the inspection result normal?

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

3.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM.

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



BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
A: M20	103	B: T4	3	Yes

3. Check continuity between BCM connector and ground.

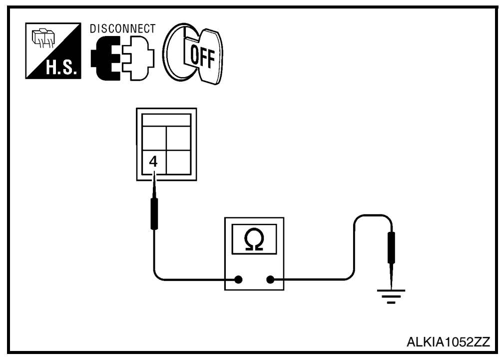
BCM connector	Terminal		Continuity
A: M20	103	Ground	No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK TRUNK LID OPENER GROUND CIRCUIT

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



Trunk lamp switch and trunk release solenoid connector	Terminal		Continuity
T4	4	Ground	Yes

Is the inspection result normal?

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

OUTSIDE WARNING BUZZER

Description

INFOID:0000000004497001

Answers back and warns for an inappropriate operation.

Component Function Check

INFOID:0000000004497002

1.CHECK FUNCTION

With CONSULT-III
Check outside warning buzzer OUTSIDE BUZZER in Active Test mode.

Is the inspection result normal?

YES >> Outside warning buzzer (engine room) is OK.
NO >> Refer to DLK-521, "Diagnosis Procedure".

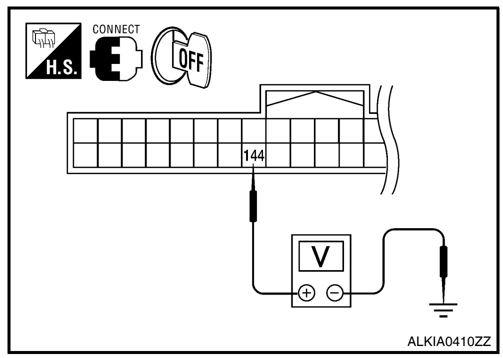
Diagnosis Procedure

INFOID:0000000004497003

1.CHECK OUTSIDE WARNING BUZZER

Check voltage between BCM connector and ground.

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



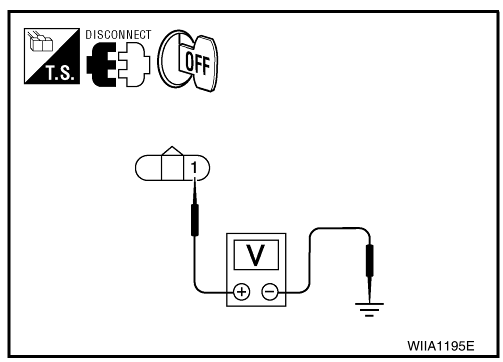
Is the inspection result normal?

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

2.CHECK OUTSIDE WARNING BUZZER POWER SUPPLY CIRCUIT

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

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



Is the inspection result normal?

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

3.CHECK OUTSIDE WARNING BUZZER CIRCUIT

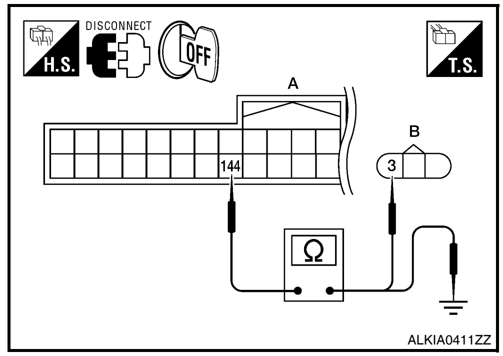
1. Disconnect BCM connector.

2. Check continuity between BCM connector and outside warning buzzer connector.

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

3. Check continuity between BCM connector 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 outside warning buzzer.

4.CHECK OUTSIDE WARNING BUZZER

Check DLK-522, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace outside warning buzzer.

5.CHECK INTERMITTENT INCIDENT

Check GI-42, "Intermittent Incident".

>> Inspection End.

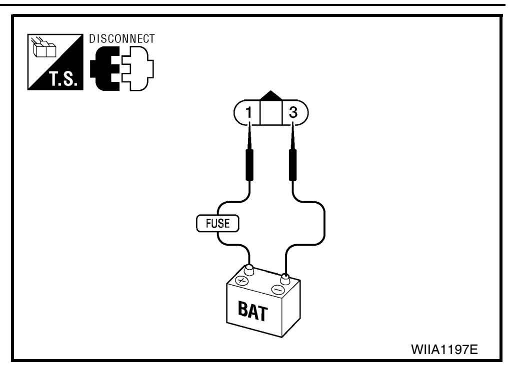
Component Inspection

INFOID:0000000004497004

1.CHECK OUTSIDE WARNING BUZZER

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

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



Is the inspection result normal?

YES >> Inspection End.
NO >> Replace outside warning buzzer.

REMOTE KEYLESS ENTRY RECEIVER

Description

INFOID:0000000004497008

Receives keyfob operation and transmits to BCM.

Component Function Check

INFOID:0000000004497009

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 keyfob.

Is the inspection result normal?

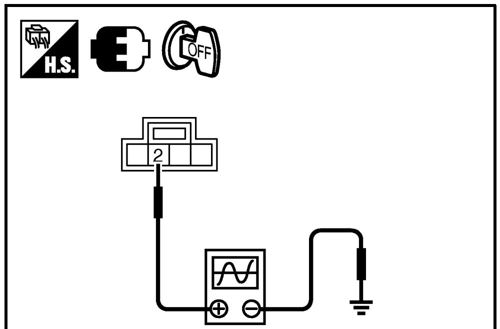
YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-523, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004497010

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.



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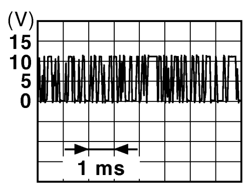
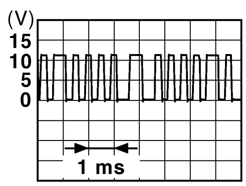
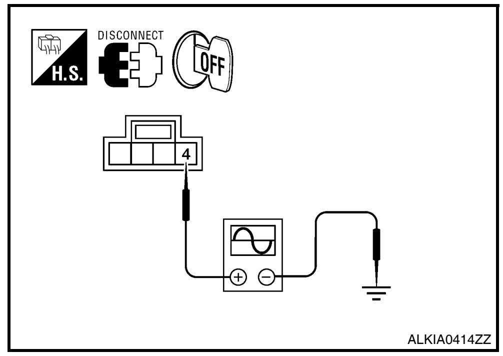
Terminals (+) Remote keyless entry receiver connector	Terminals (+) Terminal	Terminals (–)	Condition	Signal (Reference value)
M27	2	Ground	Waiting (All doors closed)	 JMKIA0064GB
			When signal is received (All doors closed)	 JMKIA0065GB

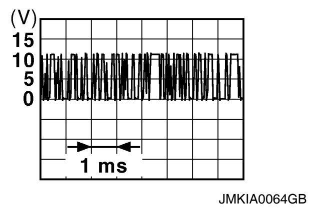
Is the inspection result normal?

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.



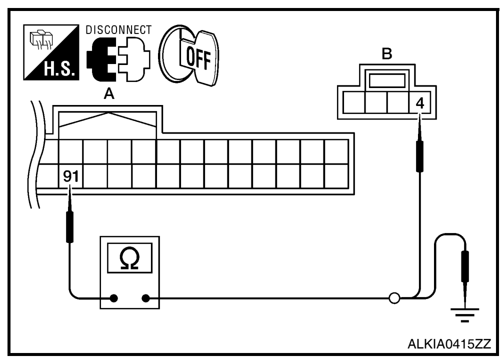
Terminals			Signal (Reference value)
(+)		(–)	
Remote keyless entry receiver connector	Terminal		
M27	4	Ground	

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 and remote keyless entry receiver connector.



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

3. Check continuity between BCM connector and ground.

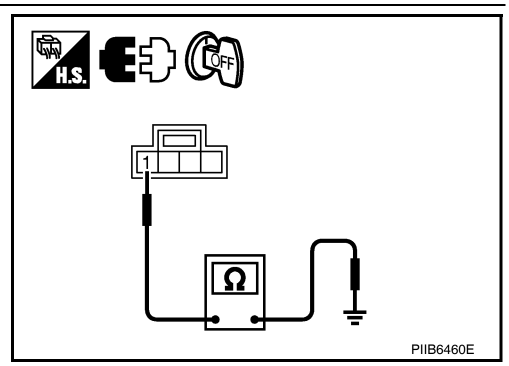
BCM connector	Terminal	Ground	Continuity
A: M19	91		No

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.



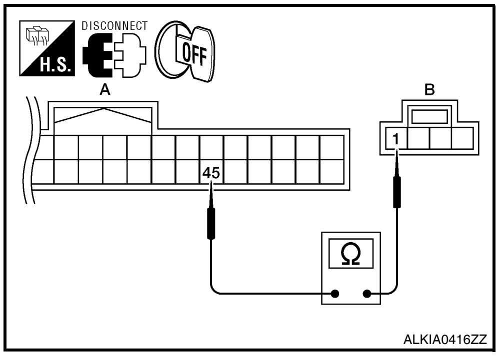
Remote keyless entry receiver connector	Terminal	Ground	Continuity
M27	1		Yes

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.



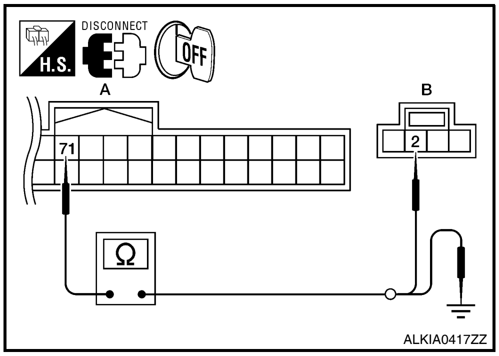
BCM connector	Terminal	Remote keyless entry receiver connector	Terminal	Continuity
A: M18	45	B: M27	1	Yes

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	Ground	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.

KEYFOB BATTERY AND FUNCTION

Description

INFOID:0000000004497011

The following functions are available when having and carrying the keyfob.

- Door lock/unlock
- Trunk open

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

Component Function Check

INFOID:0000000004497012

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 with the keyfob.

Is the inspection result normal?

YES >> Keyfob is OK.
NO >> Refer to DLK-526, "Diagnosis Procedure".

Diagnosis Procedure

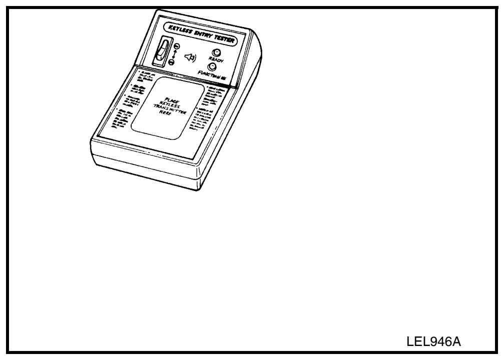
INFOID:0000000004497013

1.CHECK KEYFOB FUNCTION

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

Does the test pass?

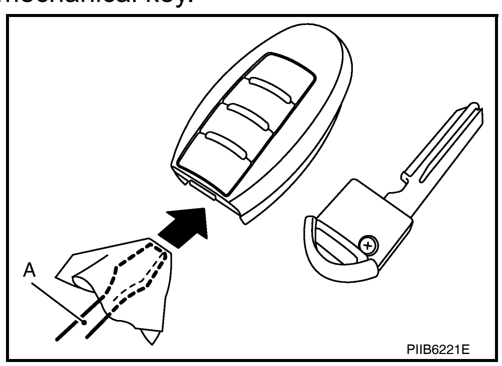
YES >> Keyfob is OK.
NO >> GO TO 2



LEL946A

2. CHECK KEYFOB COMPONENTS

1. Release the lock knob at the back of the keyfob 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. Remove the keyfob battery.
   CAUTION:
   - **Keep dirt, grease, and other foreign materials off the electrode contact area.**
4. Visually inspect keyfob internal components.



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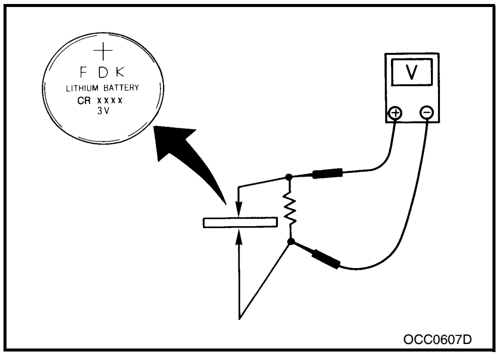
Is the inspection result normal?

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

3.CHECK KEYFOB BATTERY

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



Standard : Approx. 2.5 - 3.0V

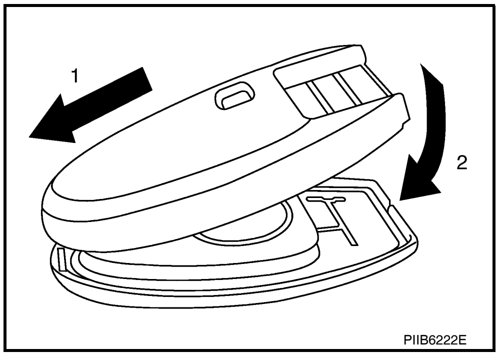
Is the measurement value within specification?

YES >> Keyfob battery is OK. Check remote keyless entry receiver. Refer to DLK-112, "Component Function Check".

NO >> GO TO 4

4. REPLACE KEYFOB BATTERY

1. Replace the keyfob battery.
2. 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.**
3. After replacing the battery, check that all keyfob functions work properly.



Is the inspection result normal?

YES >> Keyfob is OK.

NO >> Check remote keyless entry receiver. Refer to DLK-112, "Component Function Check".

KEY SLOT ILLUMINATION

Description

INFOID:0000000004497017

Blinks when keyfob insertion is required.

Component Function Check

INFOID:0000000004497018

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-528, "Diagnosis Procedure".

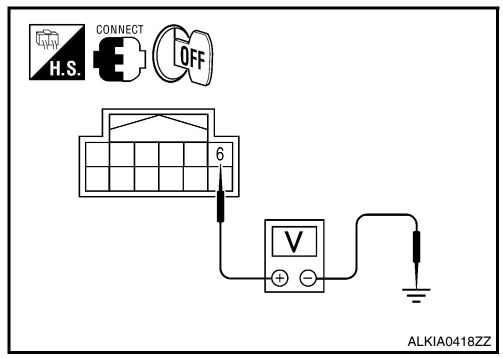
Diagnosis Procedure

INFOID:0000000004497019

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	Keyfob inserted	OFF	Battery voltage
			Keyfob removed	ON	0



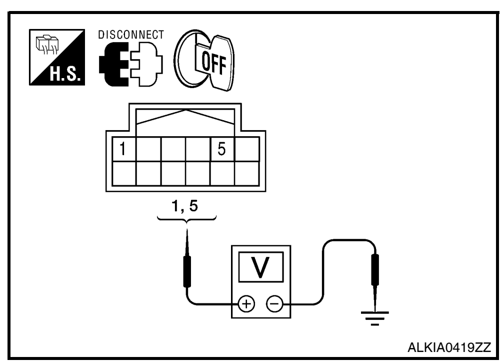
Is the inspection result normal?

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		

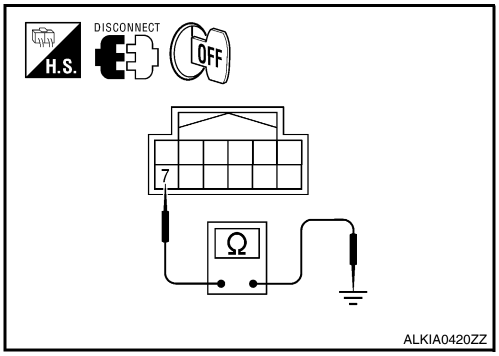


Is the inspection result normal?

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.



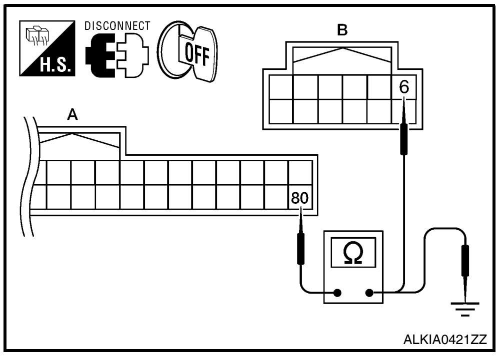
Key slot connector	Terminal	Ground	Continuity
M40	7		Yes

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-504, "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:0000000004497020

Perform answer-back for each operation with horn.

Component Function Check

INFOID:0000000004497021

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-530, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004497022

1.CHECK HORN FUNCTION

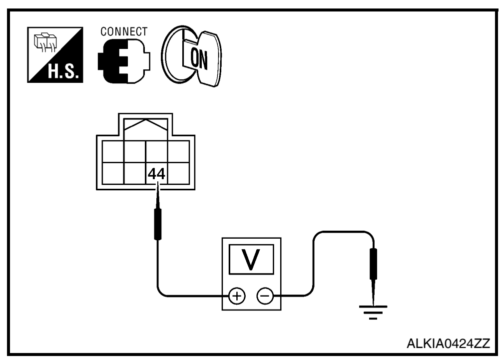
Check horn function with horn switch

Does the horn sound?

YES >> GO TO 2
NO >> Refer to HRN-7, "Wiring Diagram - Sedan".

2.CHECK HORN RELAY POWER SUPPLY

1. Turn ignition switch ON.
2. Perform “ACTIVE TEST” (“HORN”) with CONSULT-III.
3. Using an oscilloscope or analog voltmeter, check voltage between IPDM E/R connector 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 >> Repair or replace open harness between IPDM E/R and horn relay.
NO >> GO TO 3

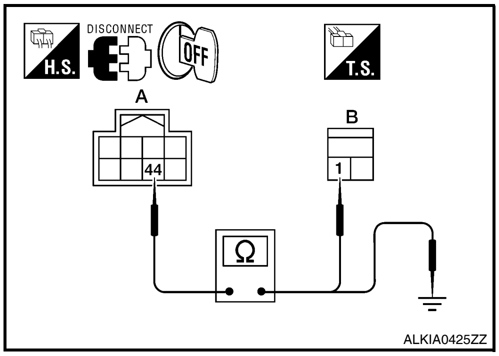
3.CHECK HORN RELAY CIRCUIT

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

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

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-48, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

COMBINATION METER DISPLAY FUNCTION

Description

INFOID:0000000004497023

Displays each operation method guide and warning for system malfunction.

Component Function Check

INFOID:0000000004497024

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-532, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004497025

1.CHECK COMBINATION METER

Refer to MWI-95, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2
NO >> Check combination meter. Refer to MWI-38, "Diagnosis Description".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

WARNING CHIME FUNCTION

Description

INFOID:0000000004497026

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000004497027

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-533, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004497028

1.CHECK METER BUZZER CIRCUIT

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

Is the inspection result normal?

YES >> GO TO 2
NO >> Replace combination meter. Refer to MWI-176, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

HAZARD FUNCTION

Description

INFOID:0000000004497029

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

Component Function Check

INFOID:0000000004497030

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 EXL-132, "Wiring Diagram - Sedan".

Diagnosis Procedure

INFOID:0000000004497031

1.CHECK HAZARD SWITCH CIRCUIT

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

Is the inspection result normal?

YES >> GO TO 2
NO >> Repair or replace hazard warning switch circuit. Refer to EXL-4, "Work Flow".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> Inspection End.

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000004497037

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	OFF
	Front wiper switch HI	ON
FR WIPER LOW	Other than front wiper switch LO	OFF
	Front wiper switch LO	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER INT	Other than front wiper switch INT	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Front wiper is not in STOP position	OFF
	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TURN SIGNAL R	Other than turn signal switch RH	OFF
	Turn signal switch RH	ON
TURN SIGNAL L	Other than turn signal switch LH	OFF
	Turn signal switch LH	ON
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	OFF
	Lighting switch 1ST or 2ND	ON
HI BEAM SW	Other than lighting switch HI	OFF
	Lighting switch HI	ON
HEAD LAMP SW 1	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
AUTO LIGHT SW	Other than lighting switch AUTO	OFF
	Lighting switch AUTO	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
DOOR SW-DR	Driver door closed	OFF
	Driver door opened	ON
DOOR SW-AS	Passenger door closed	OFF
	Passenger door opened	ON
DOOR SW-RR	Rear door RH closed	OFF
	Rear door RH opened	ON
DOOR SW-RL	Rear door LH closed	OFF
	Rear door LH opened	ON

Monitor Item	Condition	Value/Status
DOOR SW-BK	**NOTE:** This item is displayed, but cannot be monitored.	OFF
CDL LOCK SW	Other than power door lock switch LOCK	OFF
	Power door lock switch LOCK	ON
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF
	Power door lock switch UNLOCK	ON
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF
	Driver door key cylinder LOCK position	ON
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF
	Driver door key cylinder UNLOCK position	ON
KEY CYL SW-TR	**NOTE:** This item is displayed, but cannot be monitored.	OFF
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF
	Trunk lid opener cancel switch ON	ON
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF
	While the trunk lid opener switch is turned ON	ON
TRNK/HAT MNTR	Trunk lid closed	OFF
	Trunk lid opened	ON
RKE-LOCK	When LOCK button of Intelligent Key is not pressed	OFF
	When LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF
	When UNLOCK button of Intelligent Key is pressed	ON
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
	When TRUNK OPEN button of Intelligent Key is pressed	ON
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF
	When PANIC button of Intelligent Key is pressed	ON
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF
	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V
	When outside of the vehicle is dark	Close to 0 V
REQ SW-DR	When driver door request switch is not pressed	OFF
	When driver door request switch is pressed	ON
REQ SW-AS	When passenger door request switch is not pressed	OFF
	When passenger door request switch is pressed	ON
REQ SW-BD/TR	When trunk request switch is not pressed	OFF
	When trunk request switch is pressed	ON
PUSH SW	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON

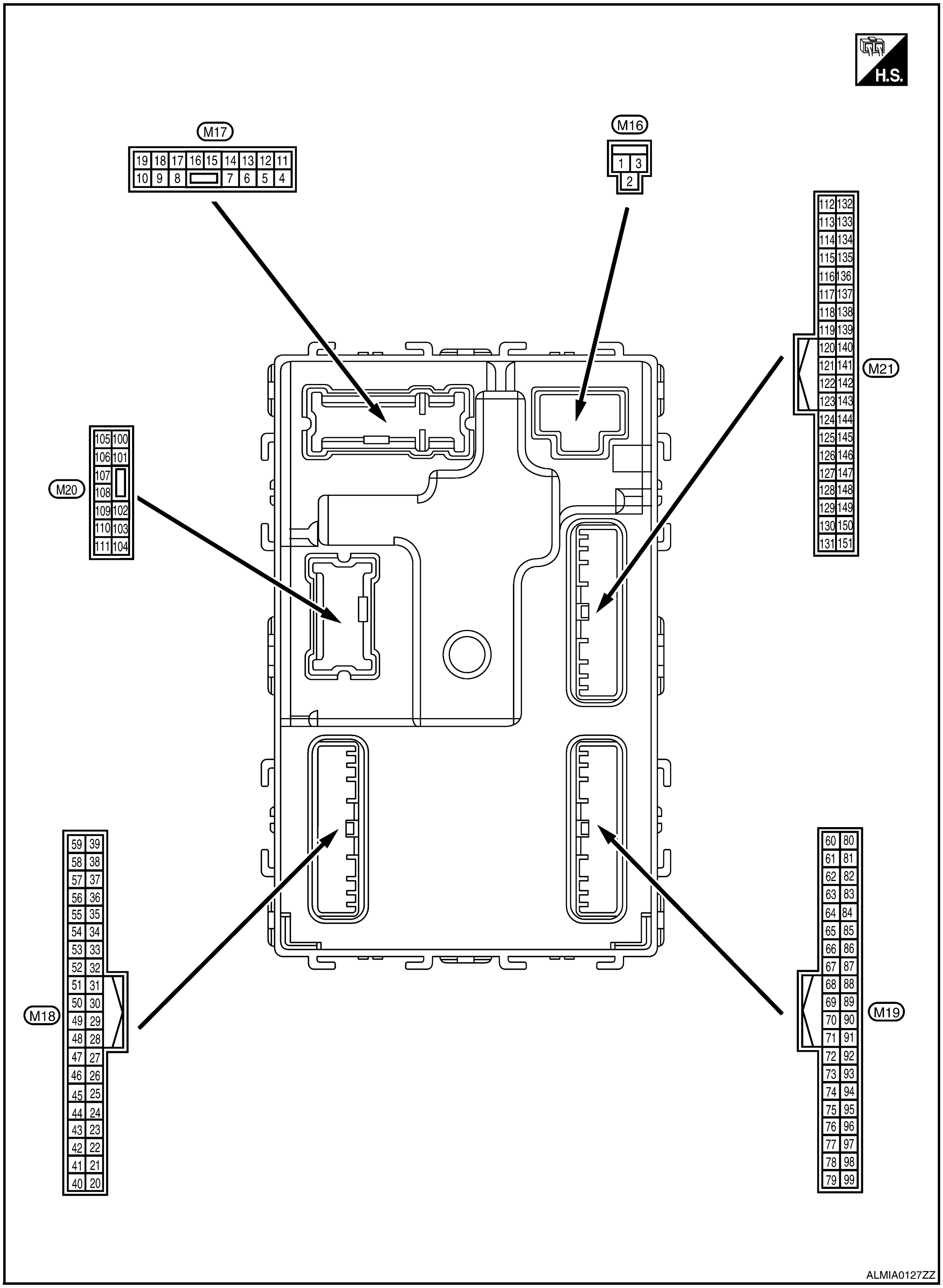
Monitor Item	Condition	Value/Status
IGN RLY2-F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
ACC RLY-F/B	Ignition switch OFF	OFF
	Ignition switch ACC or ON	ON
CLUTCH SW	When the clutch pedal is not depressed	OFF
	When the clutch pedal is depressed	ON
BRAKE SW 1	When the brake pedal is not depressed	ON
	When the brake pedal is depressed	OFF
DETE/CANCL SW	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN/N SW	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
S/L-LOCK	Electronic steering column lock LOCK status	OFF
	Electronic steering column lock UNLOCK status	ON
S/L-UNLOCK	Electronic steering column lock UNLOCK status	OFF
	Electronic steering column lock LOCK status	ON
S/L RELAY-F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
UNLK SEN-DR	Driver door UNLOCK status	OFF
	Driver door LOCK status	ON
PUSH SW-IPDM	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON
IGN RLY1 F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
DETE SW -IPDM	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN -IPDM	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
SFT P-MET	When selector lever is in any position other than P	OFF
	When selector lever is in P position	ON
SFT N-MET	When selector lever is in any position other than N	OFF
	When selector lever is in N position	ON
ENGINE STATE	Engine stopped	STOP
	While the engine stalls	STALL
	At engine cranking	CRANK
	Engine running	RUN
S/L LOCK-IPDM	Electronic steering column lock LOCK status	OFF
	Electronic steering column lock UNLOCK status	ON
S/L UNLCK-IPDM	Electronic steering column lock UNLOCK status	OFF
	Electronic steering column lock LOCK status	ON
S/L RELAY-REQ	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading

Monitor Item	Condition	Value/Status
DOOR STAT-DR	Driver door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
DOOR STAT-AS	Passenger door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
ID OK FLAG	Ignition switch ACC or ON	RESET
	Ignition switch OFF	SET
PRMT ENG STAT	When the engine start is prohibited	RESET
	When the engine start is permitted	SET
PRMT RKE STAT	**NOTE:** This item is displayed, but cannot be monitored.	RESET
KEY SW -SLOT	When Intelligent Key is not inserted into key slot	OFF
	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	**NOTE:** This item is displayed, but cannot be monitored.	Operation frequency of Intelligent Key
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE
TP 4	The ID of fourth key is not registered to BCM	YET
	The ID of fourth key is registered to BCM	DONE
TP 3	The ID of third key is not registered to BCM	YET
	The ID of third key is registered to BCM	DONE
TP 2	The ID of second key is not registered to BCM	YET
	The ID of second key is registered to BCM	DONE
TP 1	The ID of first key is not registered to BCM	YET
	The ID of first key is registered to BCM	DONE
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire

Monitor Item	Condition	Value/Status
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	When ID of front LH tire transmitter is registered	DONE
	When ID of front LH tire transmitter is not registered	YET
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE
	When ID of front RH tire transmitter is not registered	YET
ID REGST RR1	When ID of rear RH tire transmitter is registered	DONE
	When ID of rear RH tire transmitter is not registered	YET
ID REGST RL1	When ID of rear LH tire transmitter is registered	DONE
	When ID of rear LH tire transmitter is not registered	YET
WARNING LAMP	Tire pressure indicator OFF	OFF
	Tire pressure indicator ON	ON
BUZZER	Tire pressure warning alarm is not sounding	OFF
	Tire pressure warning alarm is sounding	ON

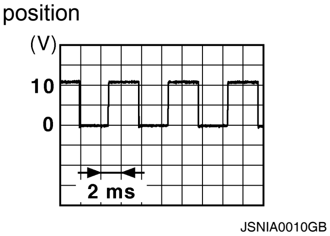
Terminal Layout

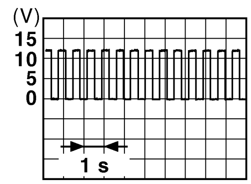
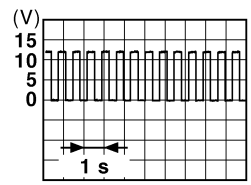
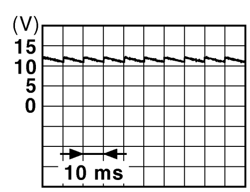
INFOID:0000000004497038

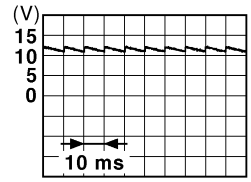
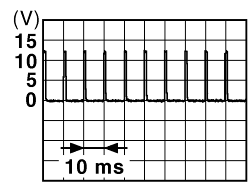
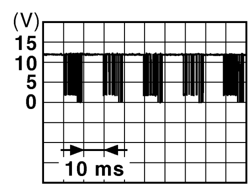


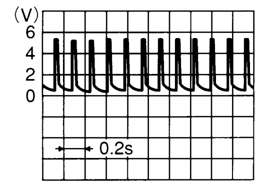
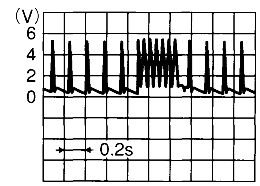
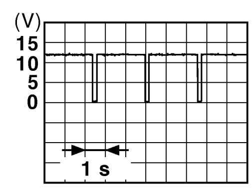
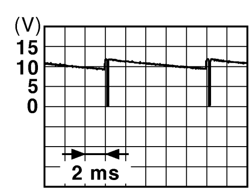
Physical Values

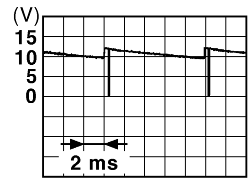
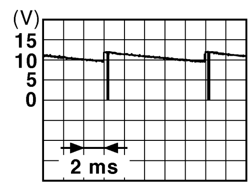
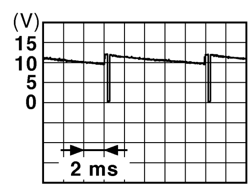
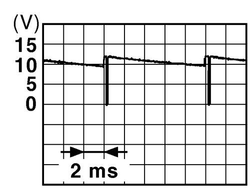
INFOID:0000000004497039

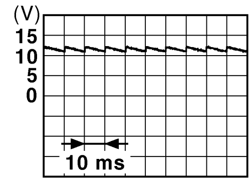
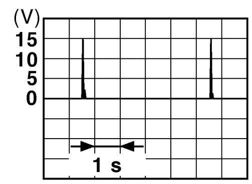
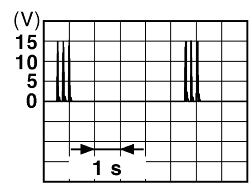
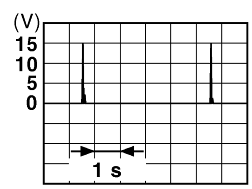
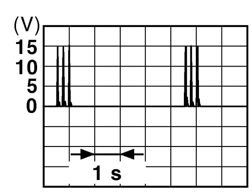
Terminal No. (Wire color) (+)	(-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OFF		Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4 (P/W)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
5 (G/Y)	Ground	Front door RH UNLOCK	Output	Front door RH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
7 (R/W)	Ground	Step lamp	Output	Step lamp	ON	0V
					OFF	Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (actuator is activated)	Battery voltage
					Other than LOCK (actuator is not activated)	0V
9 (G)	Ground	Front door LH UNLOCK	Output	Front door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
10[1] (G/Y)	Ground	Rear door RH and rear door LH UNLOCK	Output	Rear door RH and rear door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0V
14 (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	0V
					ON	**NOTE:** When the illumination brightening/dimming level is in the neutral position 
15 (Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC or ON	0V

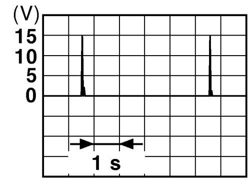
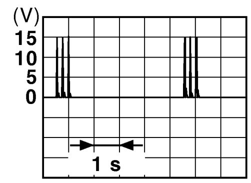
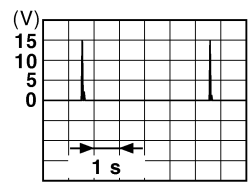
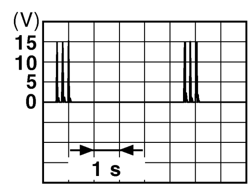
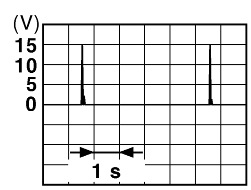
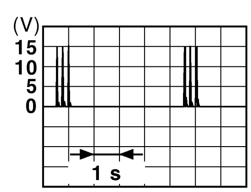
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0V
21 (P/B)	Ground	Optical sensor signal	Input	Ignition switch ON	When outside of the vehicle is bright	Close to 5V
					When outside of the vehicle is dark	Close to 0V
22 (R/Y)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (clutch pedal is not depressed)	0V
					ON (clutch pedal is depressed)	Battery voltage
24 (R/W)	Ground	Stop lamp switch 1	Input	—		Battery voltage
26 (O/L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	0V
					ON (brake pedal is depressed)	Battery voltage
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	 JPMIA0011GB 11.8V
					UNLOCK status	0V
29 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0V
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	OFF	0
					ACC or ON	Battery voltage

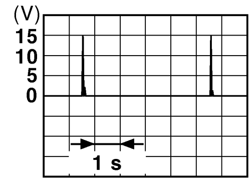
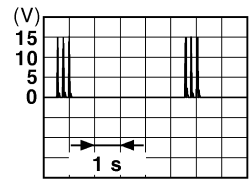
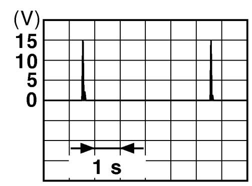
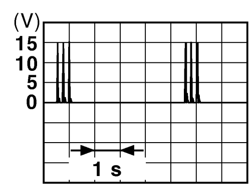
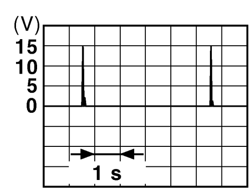
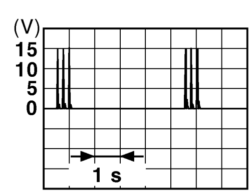
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
31 (G)	Ground	Rear window defogger feedback signal	Input	Rear window defogger switch	OFF	0V
					ON	Battery voltage
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	 JPMIA0011GB 11.8 V
					ON (when front door RH opens)	0V
33 (SB)	Ground	Compressor ON signal	Input	A/C switch	OFF	5V
					ON	0V
34[2] (L/R)	Ground	Front door lock assembly LH (key cylinder switch) (unlock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
					ON (unlock)	0V
36[2] (GR)	Ground	Lock switch signal	Input	Door lock/unlock switch	Lock	Battery voltage
					Unlock	0V
37 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1V
					ON	0V
38 (GR/ W)	Ground	Rear window defogger ON signal	Input	Rear window defogger switch	OFF	5V
					ON	0V
39[2] (GR/ R)	Ground	Unlock switch signal	Input	Door lock/unlock switch	Unlock	Battery voltage
					Lock	0V
40[3] (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2V
				Ignition switch OFF or ACC		0V
41 (W)	Ground	Engine switch (push switch) illumination	Output	Engine switch (push switch) illumination	ON	5.5V
					OFF	0V
42 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0V
					OFF	Battery voltage

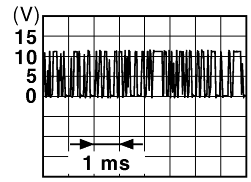
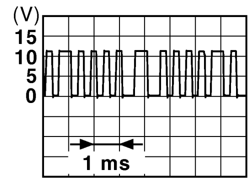
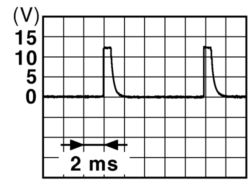
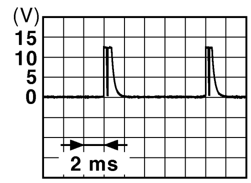
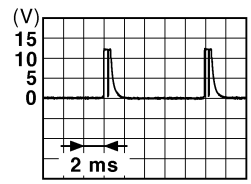
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	OFF	0V
					ACC or ON	5.0V
47 (G/O)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
48 (R/G)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position	12.0V
					Except P and N positions	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	ON	0V
					Blinking	 JPMIA0014GB 11.3V
					OFF	Battery voltage
50 (LG/B)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Lighting switch 1ST	 JPMIA0031GB 10.7V
					Lighting switch high-beam	
					Lighting switch 2ND	
					Turn signal switch RH	

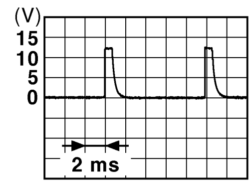
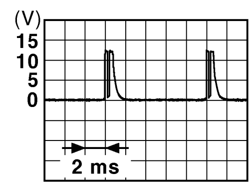
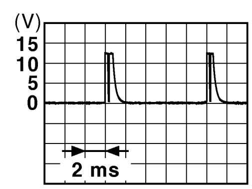
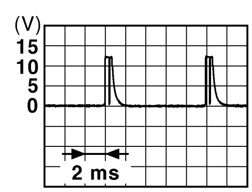
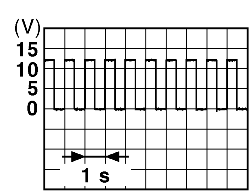
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/Output	Condition		Value (Approx.)
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front wiper switch HI (Wiper intermittent dial 4)	JPMIA0032GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
52 (G/B)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front washer switch ON (Wiper intermittent dial 4)	JPMIA0033GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 5 • Wiper intermittent dial 6	
53 (LG/R)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front wiper switch INT	JPMIA0034GB 10.7V
					Front wiper switch LO	
					Lighting switch AUTO	
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front fog lamp switch ON	JPMIA0035GB 10.7V
					Lighting switch 2ND	
					Lighting switch flash-to-pass	
					Turn signal switch LH	
55 (BR/W)	Ground	Front blower monitor	Input	Front blower motor switch	ON	Battery voltage
					OFF	0V
56[2] (L/B)	Ground	Front door lock assembly LH (key cylinder switch) (lock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
					ON (lock)	0V
57 (W)	Ground	Tire pressure warning check switch	Input	—		5V

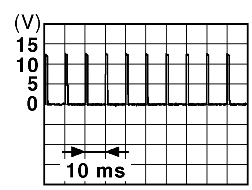
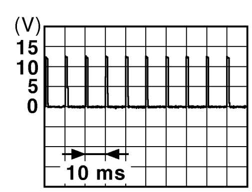
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	 JPMIA0011GB 11.8V
					ON (front door LH OPEN)	0V
59 (G/R)	Ground	Rear window defogger relay	Output	Rear window defogger	Active	Battery voltage
					Not activated	0V
60 (B/R)	Ground	Front console antenna 2 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
61 (W/R)	Ground	Center console antenna 2 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

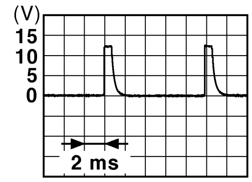
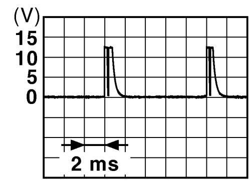
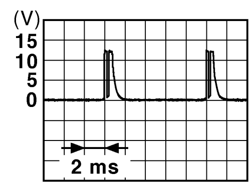
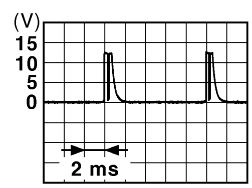
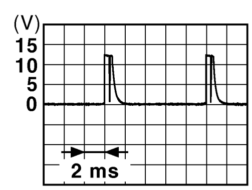
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
62[4] (B/Y)	Ground	Front outside handle RH antenna (-)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
63[4] (LG)	Ground	Front outside handle RH antenna (+)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
64[4] (V)	Ground	Front outside handle LH antenna (-)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

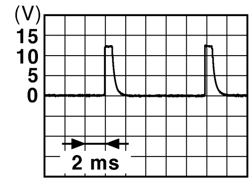
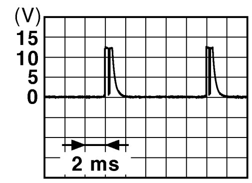
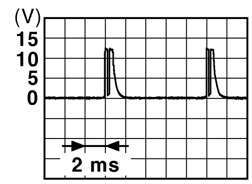
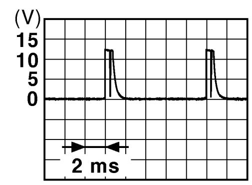
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
65[4] (P)	Ground	Front outside handle LH antenna (+)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
66 (R)	Ground	Instrument panel antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
67 (G)	Ground	Instrument panel antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

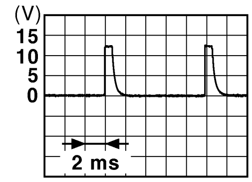
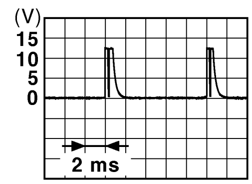
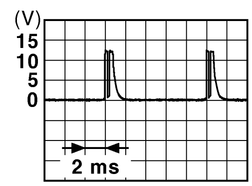
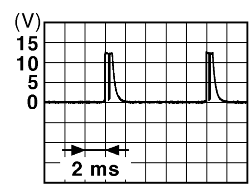
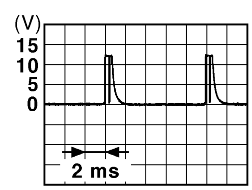
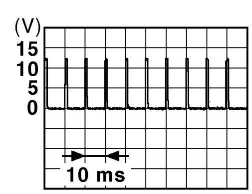
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
70 (R/B)	Ground	Ignition relay-2 control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
71 (L/O)	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB
75 (R/Y)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3V

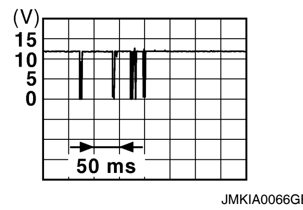
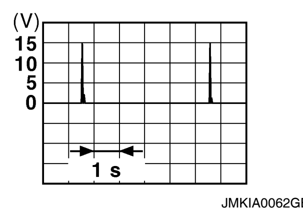
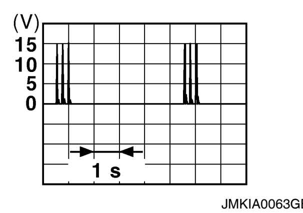
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
76 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch high-beam (Wiper intermittent dial 4)	 JPMIA0036GB 1.3V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3V
77 (BR)	Ground	Engine switch (push switch)	Input	Engine switch (push switch)	Pressed	0V
					Not pressed	Battery voltage
78 (P)	Ground	CAN-L	Input/ Output	—		—
79 (L)	Ground	CAN-H	Input/ Output	—		—
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0V
					Blinking	 JPMIA0015GB 6.5V
					ON	Battery voltage

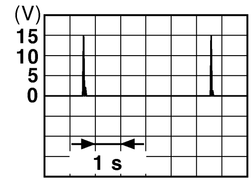
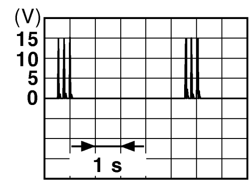
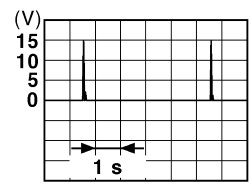
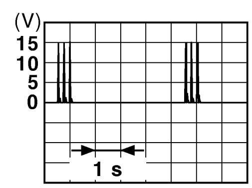
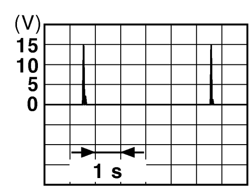
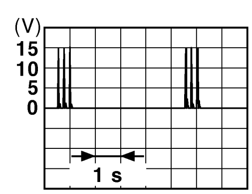
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/Output	Condition		Value (Approx.)
81 (LG)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
83 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0V
					ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT device	Output	—		Battery voltage
85 (L/O)	Ground	Electronic steering column lock condition No. 1	Input	Electronic steering column lock	Lock status	0V
					Unlock status	Battery voltage
86 (G/R)	Ground	Electronic steering column lock condition No. 2	Input	Electronic steering column lock	Lock status	Battery voltage
					Unlock status	0V
87 (G/B)	Ground	Selector lever P position switch	Input	Selector lever	P position	0V
					Any position other than P	Battery voltage
88[4] (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
89[4] (B/W)	Ground	Front door LH request switch	Input	Front door LH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
90 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage
94 (G/Y)	Ground	Steering wheel lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V

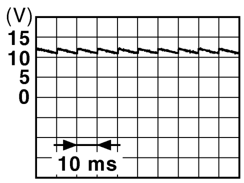
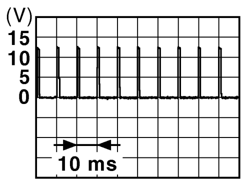
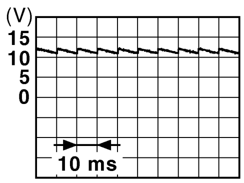
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
95 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit-tent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Turn signal switch LH	 JPMIA0037GB 1.3V
					Turn signal switch RH	 JPMIA0036GB 1.3V
					Front wiper switch LO	 JPMIA0038GB 1.3V
					Front washer switch ON	 JPMIA0039GB 1.3V

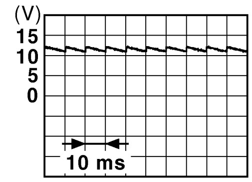
Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
96 (P/B)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch AUTO (Wiper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

Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Lighting switch flash-to-pass	 JPMIA0037GB 1.3V
					Lighting switch 2ND	 JPMIA0036GB 1.3V
					Front wiper switch INT	 JPMIA0038GB 1.3V
					Front wiper switch HI	 JPMIA0040GB 1.3V
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Pressed	0 V
					Not pressed	 JPMIA0012GB 1.1V

<table>
<tr><th colspan="2">Terminal No. (Wire color)</th><th colspan="2">Description</th><th colspan="2" rowspan="2">Condition</th><th rowspan="2">Value (Approx.)</th></tr>
<tr><th>(+)</th><th>(-)</th><th>Signal name</th><th>Input/ Output</th></tr>
<tr><td rowspan="4">99 (L/Y)</td><td rowspan="4">Ground</td><td rowspan="4">Electronic steering column lock unit communication</td><td rowspan="4">Input/ Output</td><td rowspan="4">Electronic steering column lock</td><td>LOCK status</td><td>Battery voltage</td></tr>
<tr><td>LOCK or UNLOCK</td><td></td></tr>
<tr><td>For 15 seconds after UNLOCK</td><td>Battery voltage</td></tr>
<tr><td>15 seconds or later after UNLOCK</td><td>0V</td></tr>
<tr><td rowspan="2">103 (V)</td><td rowspan="2">Ground</td><td rowspan="2">Trunk lid opening</td><td rowspan="2">Output</td><td rowspan="2">Trunk lid</td><td>Open (trunk lid opener actuator is activated)</td><td>Battery voltage</td></tr>
<tr><td>Close (trunk lid opener actuator is not activated)</td><td>0V</td></tr>
<tr><td rowspan="2">110 (V/W)</td><td rowspan="2">Ground</td><td rowspan="2">Trunk room lamp</td><td rowspan="2">Output</td><td rowspan="2">Trunk room lamp</td><td>ON</td><td>0V</td></tr>
<tr><td>OFF</td><td>Battery voltage</td></tr>
<tr><td rowspan="2">114 (B)</td><td rowspan="2">Ground</td><td rowspan="2">Rear parcel shelf antenna 1 (-)</td><td rowspan="2">Output</td><td rowspan="2">Ignition switch OFF</td><td>When Intelligent Key is in the passenger compartment</td><td></td></tr>
<tr><td>When Intelligent Key is not in the passenger compartment</td><td></td></tr>
</table>

Terminal No. (Wire color) (+)	(-)	Description: Signal name	Input/ Output	Condition		Value (Approx.)
115 (W)	Ground	Rear parcel shelf antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
118[4] (L/O)	Ground	Rear bumper antenna (-)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
119[4] (BR/ W)	Ground	Rear bumper antenna (+)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

Terminal No. (Wire color) (+)	Terminal No. (Wire color) (-)	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
127 (BR/ W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	 JPMIA0011GB 11.8V
					ON (trunk is open)	0V
132 (R)	Ground	Starter motor relay control	Output	Ignition switch OFF (M/T vehicle)	When the clutch pedal is depressed	Battery voltage
					When the clutch pedal is not depressed	0V
				Ignition switch ON (other than M/T vehicle)	When selector lever is in P or N position and the brake is depressed	Battery voltage
					When selector lever is in P or N position and the brake is not depressed	0V
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
144[4] (GR)	Ground	Intelligent Key warning buzzer	Output	Request switch buzzer	Sounding	0V
					Not sounding	Battery voltage
144[5] (GR)	Ground	Outside warning buzzer	Output	Outside warning buzzer	Sounding	0V
					Not sounding	Battery voltage
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0V
					Not pressed	Battery voltage
148[1] (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	 JPMIA0011GB 11.8V
					ON (when rear door RH opens)	0V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
149[1] (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	 JPMIA0011GB 11.8V
					ON (when rear door LH opens)	0V

1: Sedan only

2: With LH front window anti-pinch

3: With LH and RH front window anti-pinch

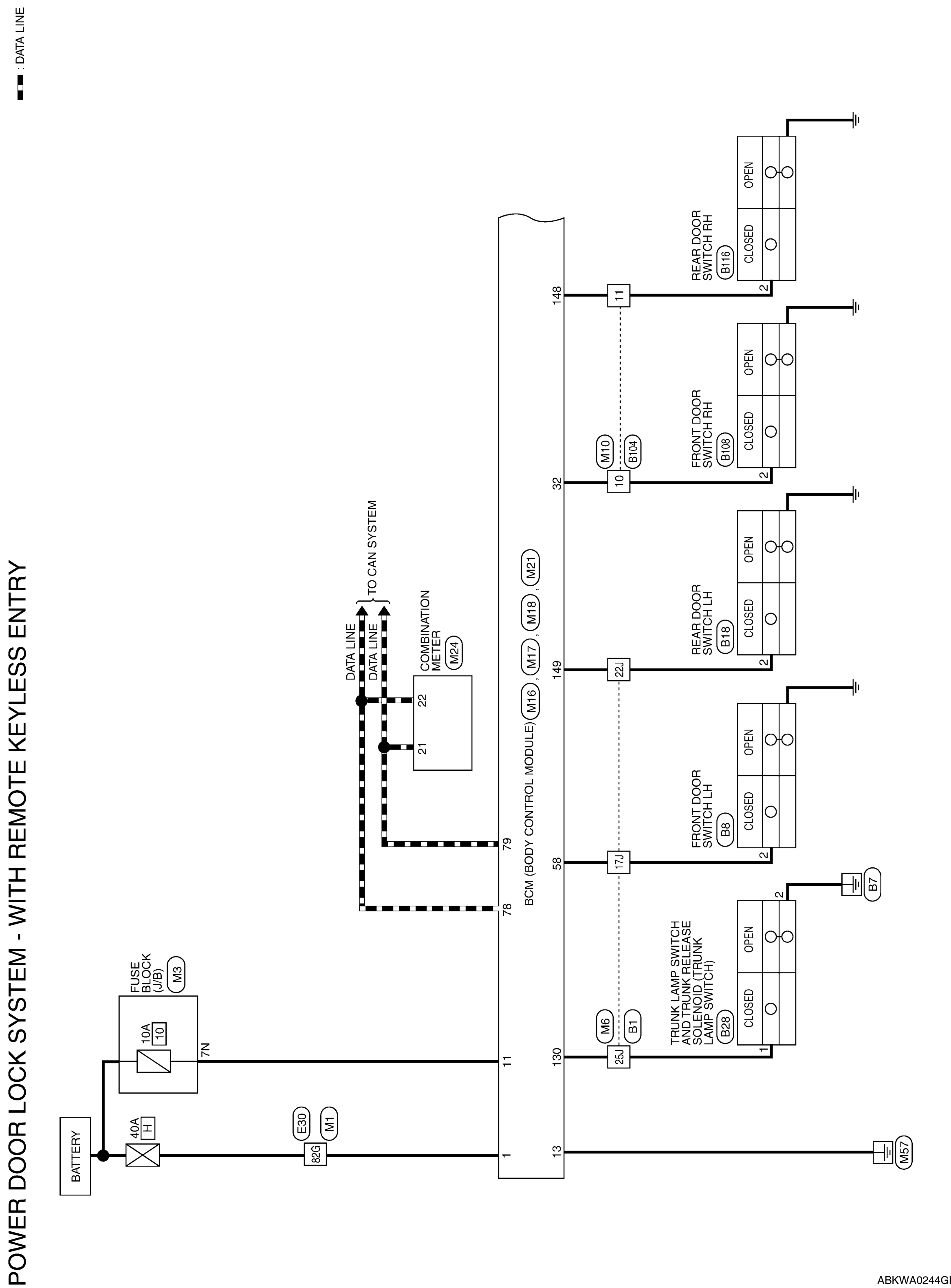
4: With Intelligent Key

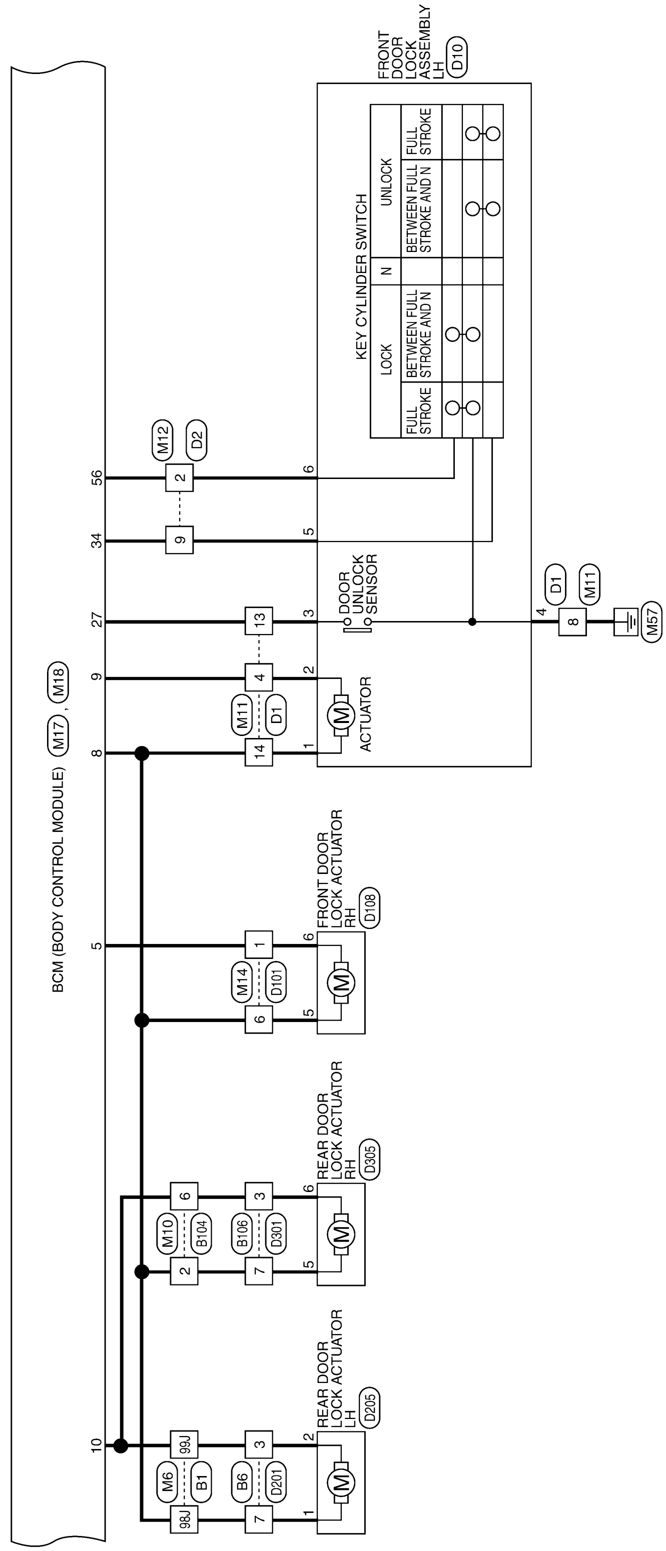
5: Without Intelligent Key

Wiring Diagram—POWER DOOR LOCK SYSTEM—WITH REMOTE KEYLESS EN-

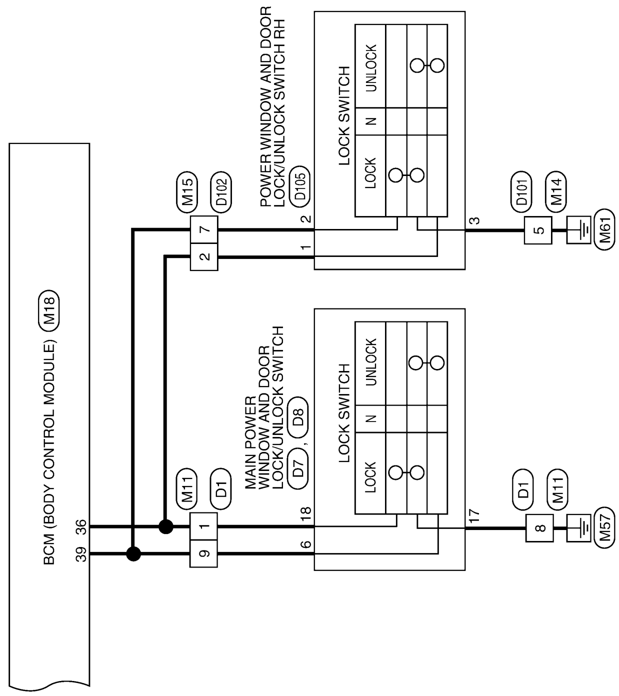
TRY

INFOID:0000000004497040





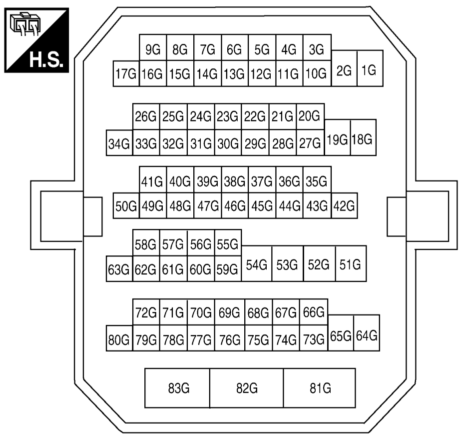
ABKWA0245GB



ABKWA0246GE

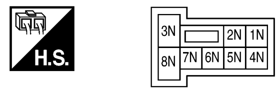
POWER DOOR LOCK SYSTEM CONNECTORS - WITH REMOTE KEYLESS ENTRY

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



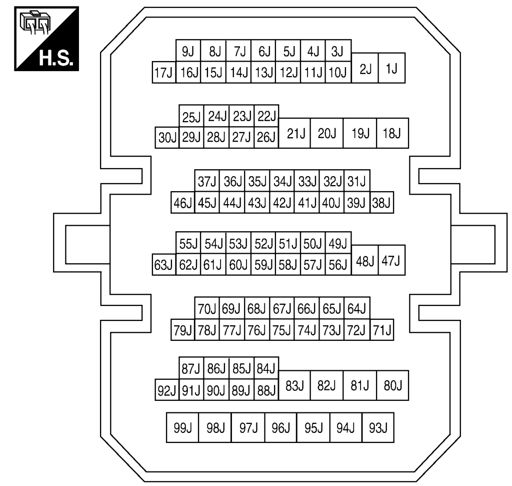
Terminal No.	Color of Wire	Signal Name
82G	W/B	–

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



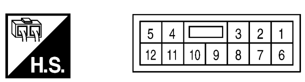
Terminal No.	Color of Wire	Signal Name
7N	Y/R	–

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



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

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

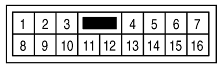


Terminal No.	Color of Wire	Signal Name
2	V	–
6	G/Y	–
10	R/B	–
11	R/W	–

ABKIA0837GB

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

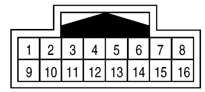
H.S.



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

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

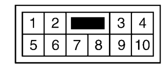
H.S.



Terminal No.	Color of Wire	Signal Name
2	L/B	–
9	L/R	–

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

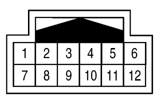
H.S.



Terminal No.	Color of Wire	Signal Name
1	G/Y	–
6	V	–

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

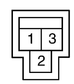
H.S.



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

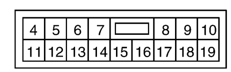
H.S.



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

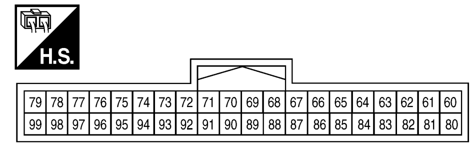
H.S.



Terminal No.	Color of Wire	Signal Name
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

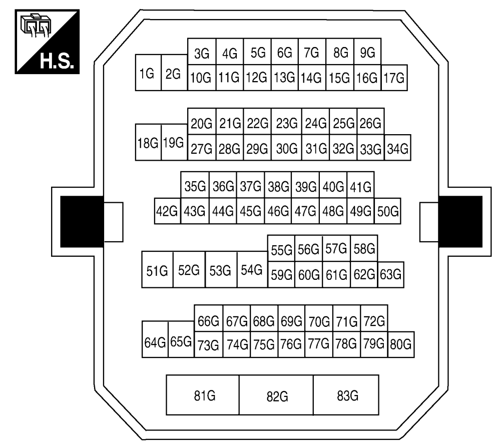
ABKIA0838GB

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



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

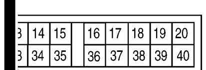
Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
82G	LG	–

Name
/C_UNLOCK SW
LOCK_SW
_UNLOCK SW
Y/C_LOCK SW
OR_SW

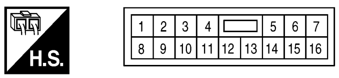
METER



Name
N-H
N-L

ABKIA0839GB

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

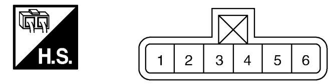


Terminal No.	Color of Wire	Signal Name
6	GR/R	UNLOCK

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

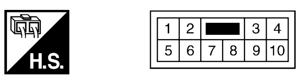
Terminal No.	Color of Wire	Signal Name
17	B	GND
18	GR	LOCK

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



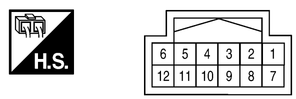
Terminal No.	Color of Wire	Signal Name
1	V	–
2	G	–
3	G/W	–
4	B	GND
5	L/R	DOOR_KEY/C_UNLOCK_SW
6	L/B	DOOR_KEY/C_LOCK_SW

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



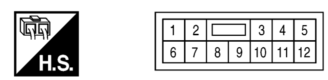
Terminal No.	Color of Wire	Signal Name
1	G/Y	–
6	V	–

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



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

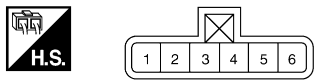
Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Color	WHITE



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

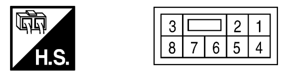
ABKIA0842GB

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



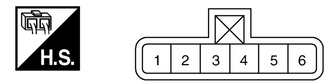
Terminal No.	Color of Wire	Signal Name
5	V	–
6	G/Y	–

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



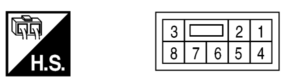
Terminal No.	Color of Wire	Signal Name
3	G/Y	–
7	V	–

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



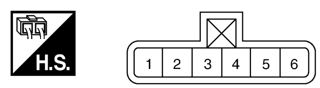
Terminal No.	Color of Wire	Signal Name
1	V	–
2	G/Y	–

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



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

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

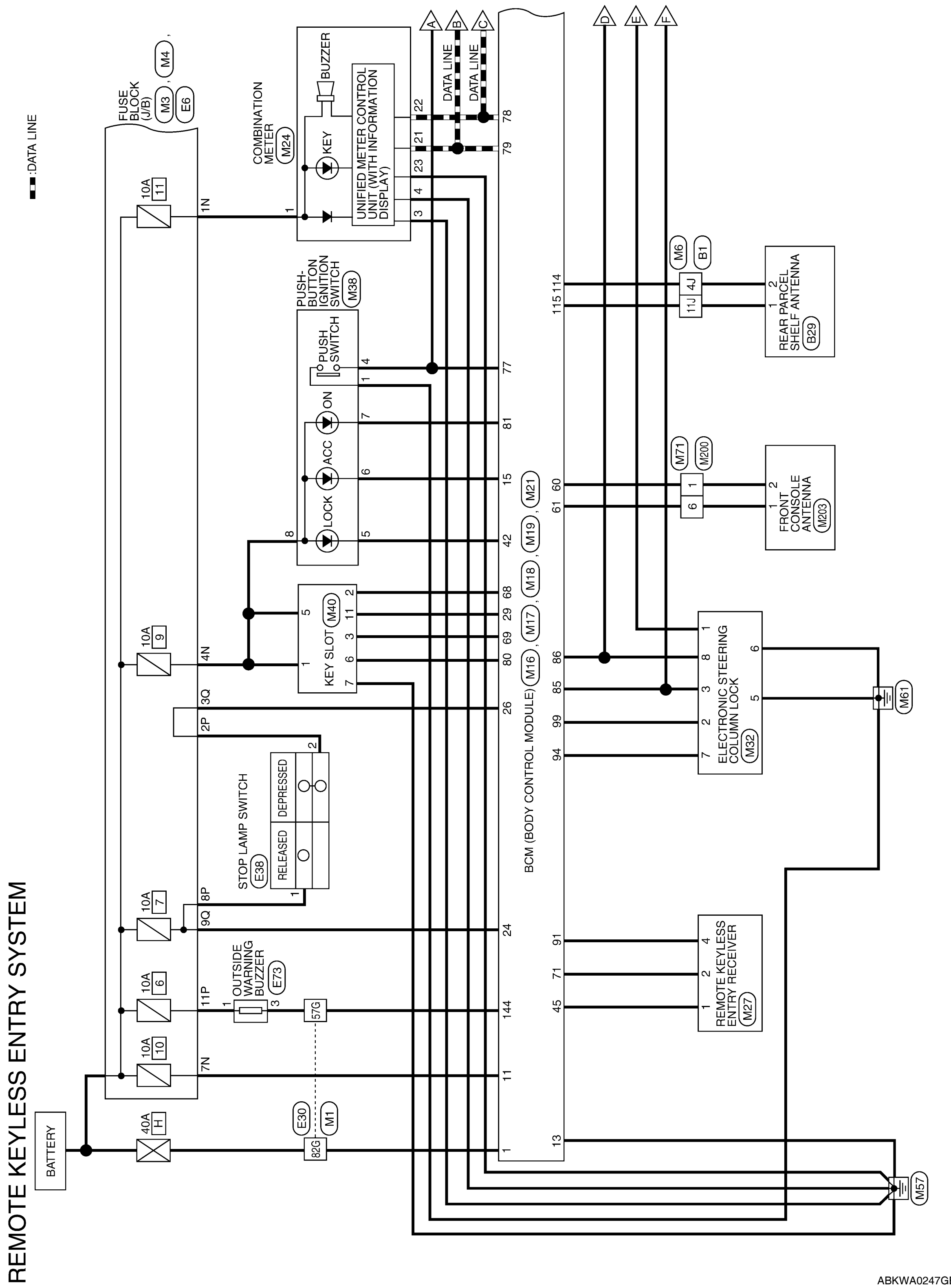


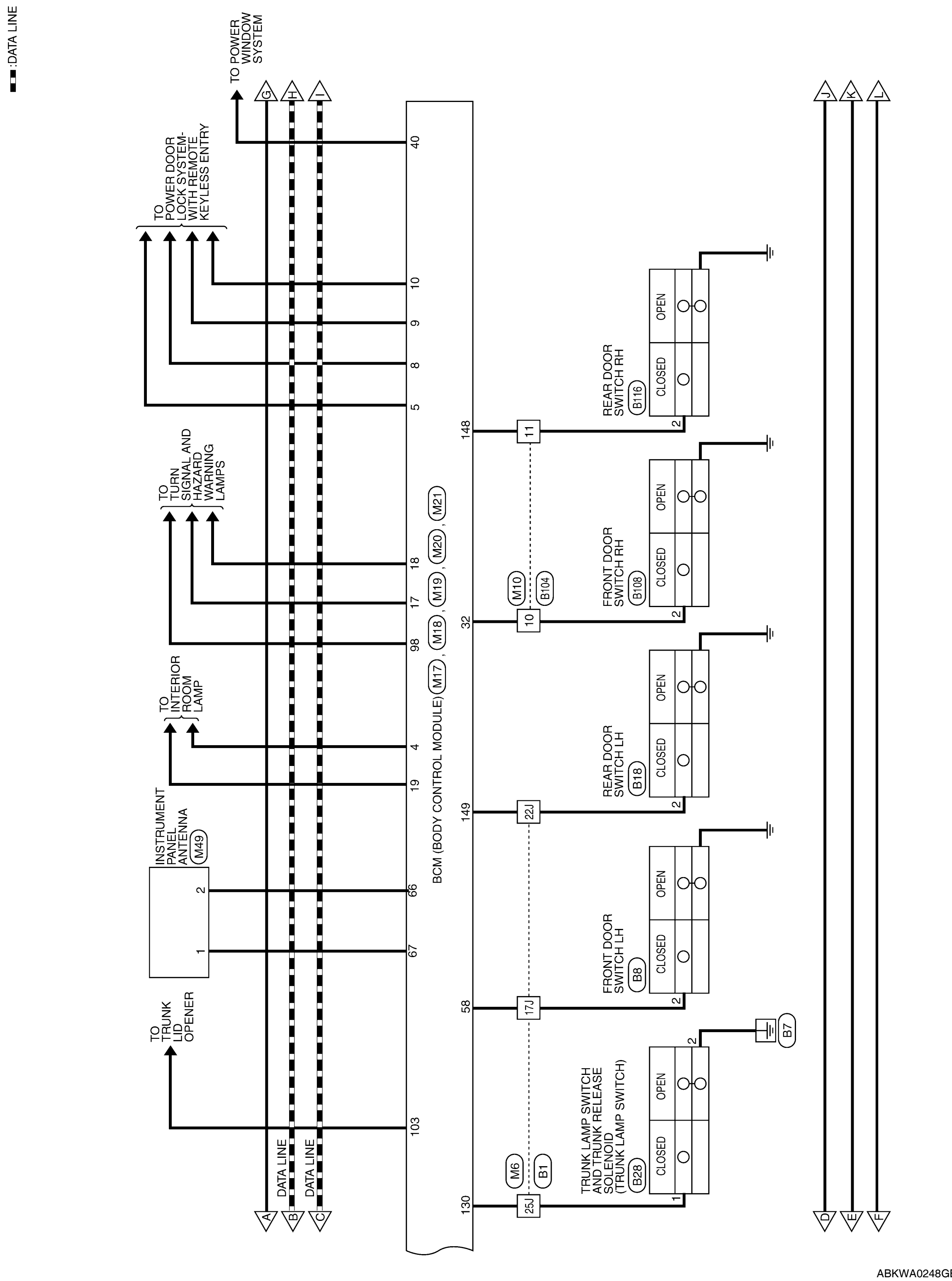
Terminal No.	Color of Wire	Signal Name
5	V	–
6	G/Y	–

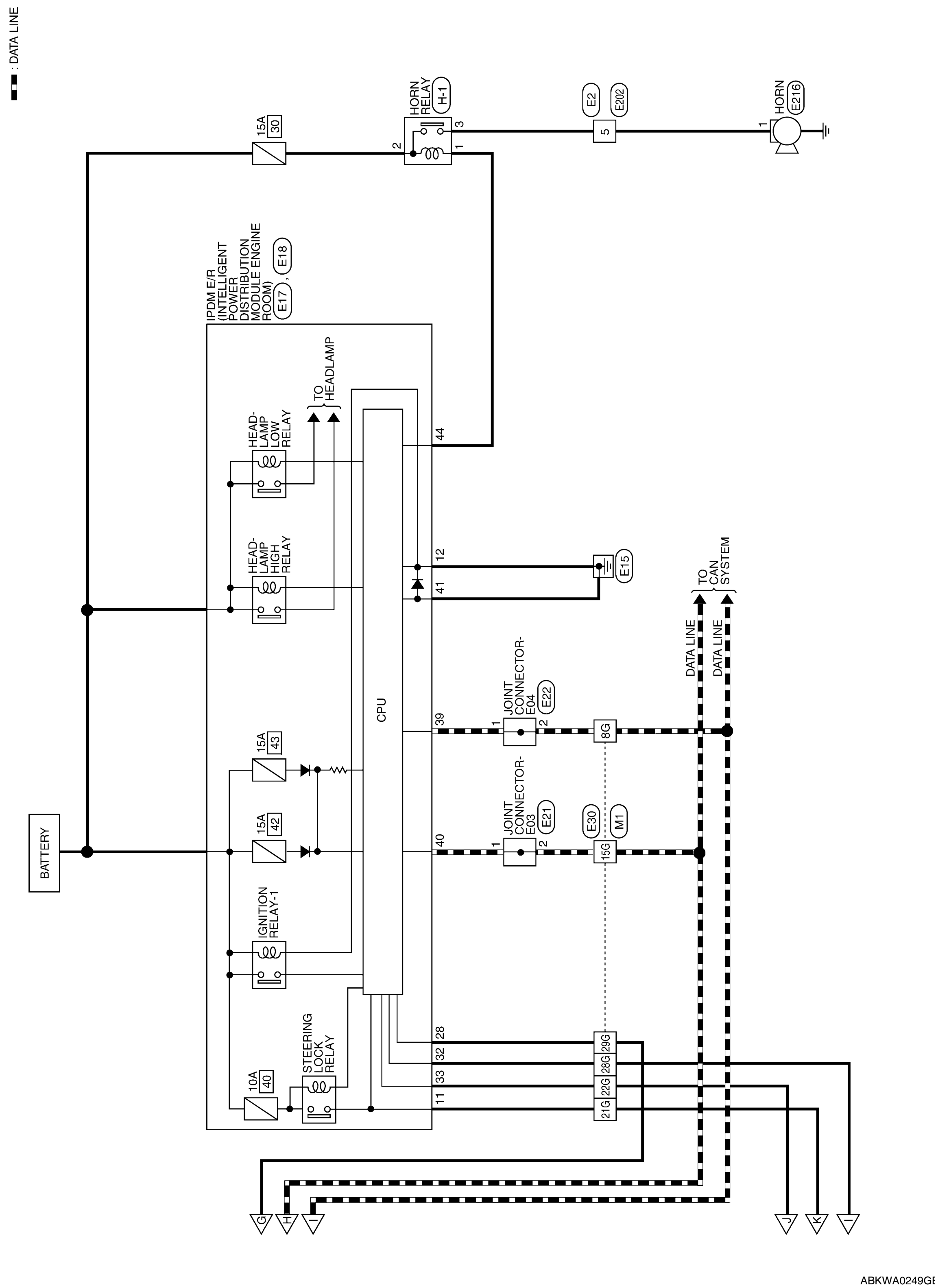
ABKIA0843GB

Wiring Diagram—REMOTE KEYLESS ENTRY—

INFOID:0000000004497041




: DATA LINE
TO POWER WINDOW SYSTEM
TO POWER DOOR LOCK SYSTEM-WITH REMOTE KEYLESS ENTRY
TO TURN SIGNAL AND HAZARD WARNING LAMPS
TO INTERIOR ROOM LAMP
INSTRUMENT PANEL ANTENNA
M49
TO TRUNK LID OPENER
DATA LINE
DATA LINE
BCM (BODY CONTROL MODULE)
M17, M18, M19, M20, M21
M10
B104
M6
B1
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 (TRUNK LAMP SWITCH)
B28
B7
CLOSED
OPEN
ABKWA0248GB

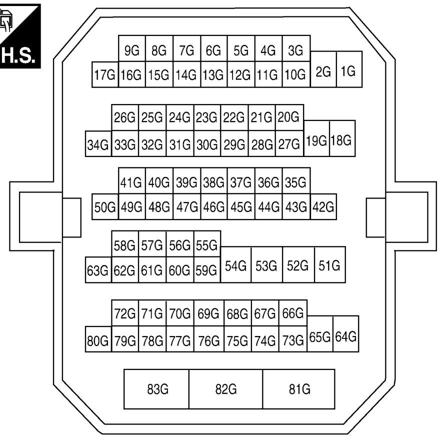


: DATA LINE
HORN RELAY H-1
E2 E202
HORN E216
15A 30
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E17, E18
TO HEADLAMP
HEAD-LAMP LOW RELAY
HEAD-LAMP HIGH RELAY
E15
TO CAN SYSTEM
DATA LINE
DATA LINE
JOINT CONNECTOR-E04 E22
JOINT CONNECTOR-E03 E21
E30 M1
CPU
15A 43
15A 42
BATTERY
IGNITION RELAY-1
STEERING LOCK RELAY
10A 40
ABKWA0249GB

REMOTE KEYLESS ENTRY SYSTEM CONNECTORS

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

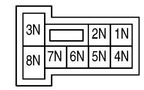
H.S.



Terminal No.	Color of Wire	Signal Name
8G	P	–
15G	L	–
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

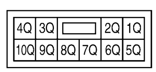
H.S.



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	–

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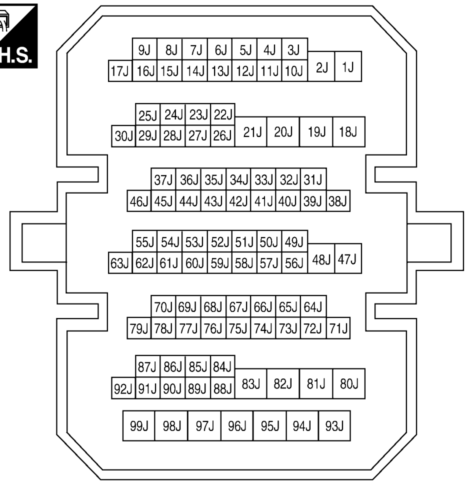
Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

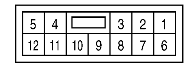
H.S.



Terminal No.	Color of Wire	Signal Name
4J	B	–
11J	W	–
17J	SB	–
22J	R/B	–
25J	Y/G	–

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

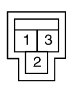
H.S.



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

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

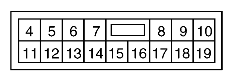
H.S.



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
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

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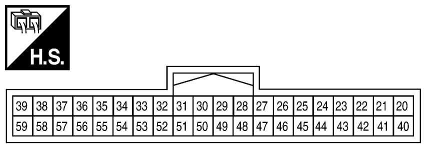
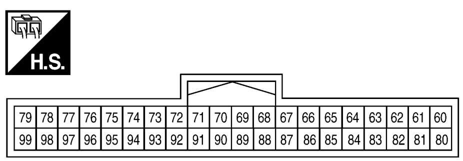
Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



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
40	Y/G	PW K-LINE
42	R	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



Terminal No.	Color of Wire	Signal Name
60	B/R	ROOM_ANT_2_B
61	W/R	ROOM_ANT_2_A
66	R	ROOM_ANT_1_B
67	G	ROOM_ANT_1_A
68	G/O	FOB_READER_CLOCK
69	O	FOB_READER_DATA
71	L/O	RF1_TUNER_SIGNAL
77	BR	ENG_START_SW

Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H
80	R/L	FOB_SLOT_ ILLUMINATION
81	LG	IGN_ON_LED
85	L/O	S/L_CONDITION_1
86	G/R	S/L_CONDITION_2
91	L/R	RF1_POWER_SUPPLY
94	G/Y	S/L_POWER_SUPPLY_ 12V
98	G/O	HAZARD SW
99	L/Y	S/L_K-LINE

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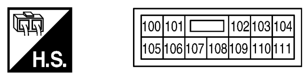
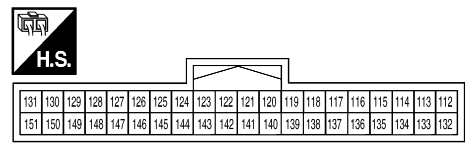
Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



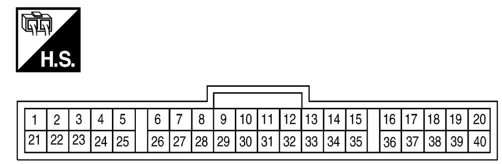
Terminal No.	Color of Wire	Signal Name
103	V	CDL_BACK_TRUNK

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



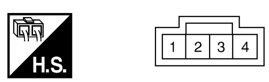
Terminal No.	Color of Wire	Signal Name
114	B	TRUNK_ANT_1_B
115	W	TRUNK_ANT_1_A
130	Y/G	TRUNK_SW
144	GR	BUZZER
148	R/W	RR_DOOR_SW
149	R/B	RL_DOOR_SW

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



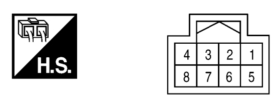
Terminal No.	Color of Wire	Signal Name
1	W/L	BATT
3	B	GND
4	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND

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



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



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

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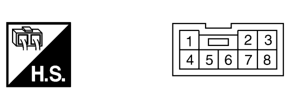
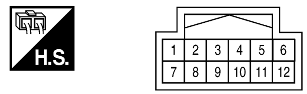
Connector No.	M38
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	B	GND
4	BR	SSTART_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

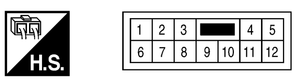


Terminal No.	Color of Wire	Signal Name
1	G/Y	B+
2	G/O	CLOCK
3	O	DATA
5	G/Y	LIGHT _BAT+
6	R/L	LIGHT_A
7	B	GND
11	Y	CARD_SW_1

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

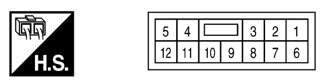
Terminal No.	Color of Wire	Signal Name
1	G	ANT+
2	R	ANT-

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



Terminal No.	Color of Wire	Signal Name
1	B/R	–
6	W/R	–

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



Terminal No.	Color of Wire	Signal Name
1	B/R	–
6	W/R	–

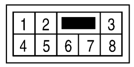
Connector No.	M203
Connector Name	FRONT CONSOLE ANTENNA
Connector Color	GRAY

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

ABKIA0848GB

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

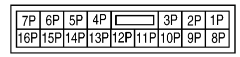
H.S.



Terminal No.	Color of Wire	Signal Name
5	O	–

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

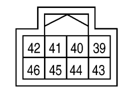
H.S.



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

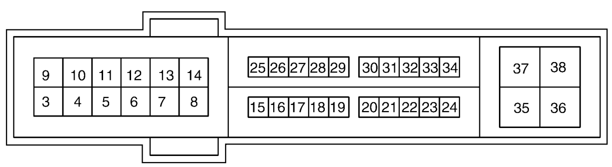
H.S.



Terminal No.	Color of Wire	Signal Name
39	P	CAN-L
40	L	CAN-H
41	B	GND (SIGNAL)
44	G/W	HORN RLY

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

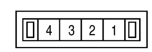
H.S.



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

Connector No.	E21
Connector Name	JOINT CONNECTOR-E03
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–

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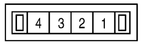
A B C D E F G H I J DLK L M N O P

Connector No.	E22
Connector Name	JOINT CONNECTOR-E04
Connector Color	WHITE

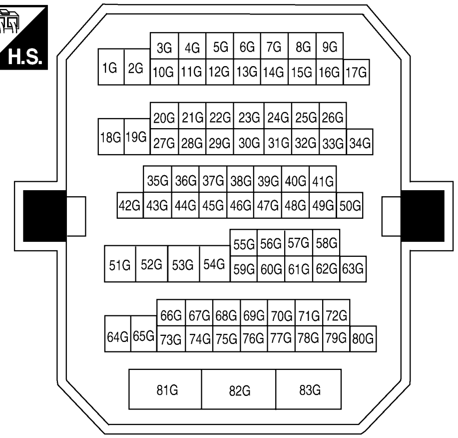
H.S.



Terminal No.	Color of Wire	Signal Name
1	P	–
2	P	–

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

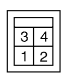
H.S.



Terminal No.	Color of Wire	Signal Name
8G	P	–
15G	L	–
21G	O	–
22G	G	–
28G	P	–
29G	SB	–
57G	R	–
82G	LG	–

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

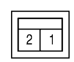
H.S.



Terminal No.	Color of Wire	Signal Name
1	R	–
2	LG	–

Connector No.	E38
Connector Name	STOP LAMP SWITCH (WITH M/T)
Connector Color	BLACK

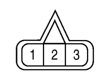
H.S.



Terminal No.	Color of Wire	Signal Name
1	R	–
2	LG	–

Connector No.	E73
Connector Name	OUTSIDE WARINING BUZZER
Connector Color	BROWN

H.S.



Terminal No.	Color of Wire	Signal Name
1	G	–
3	R	–

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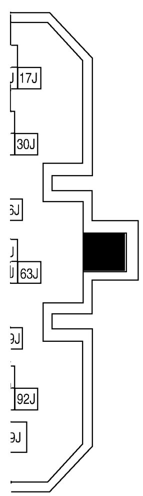


Terminal No.	Color of Wire	Signal Name
4J	B	–
11J	W	–
17J	SB	–
22J	R/B	–
25J	Y/G	–

Connector No.	E216
Connector Name	HORN
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	–

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)

ABKIA0851GB

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

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

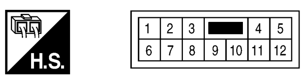
Connector No.	B28
Connector Name	TRUNK LAMP SWITCH AND TRUNK RELEASE SOLENOID
Connector Color	WHITE

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

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

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

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



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

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

Terminal No.	Color of Wire	Signal Name
1	Q	–

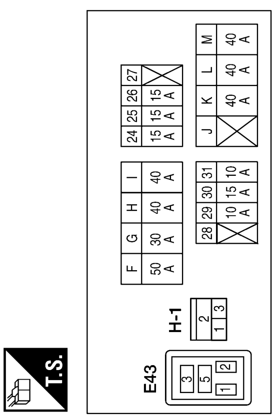
Connector No.	B116
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	Q	–

ABKIA0852GB

A B C D E F G H I J DLK L M N O P

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

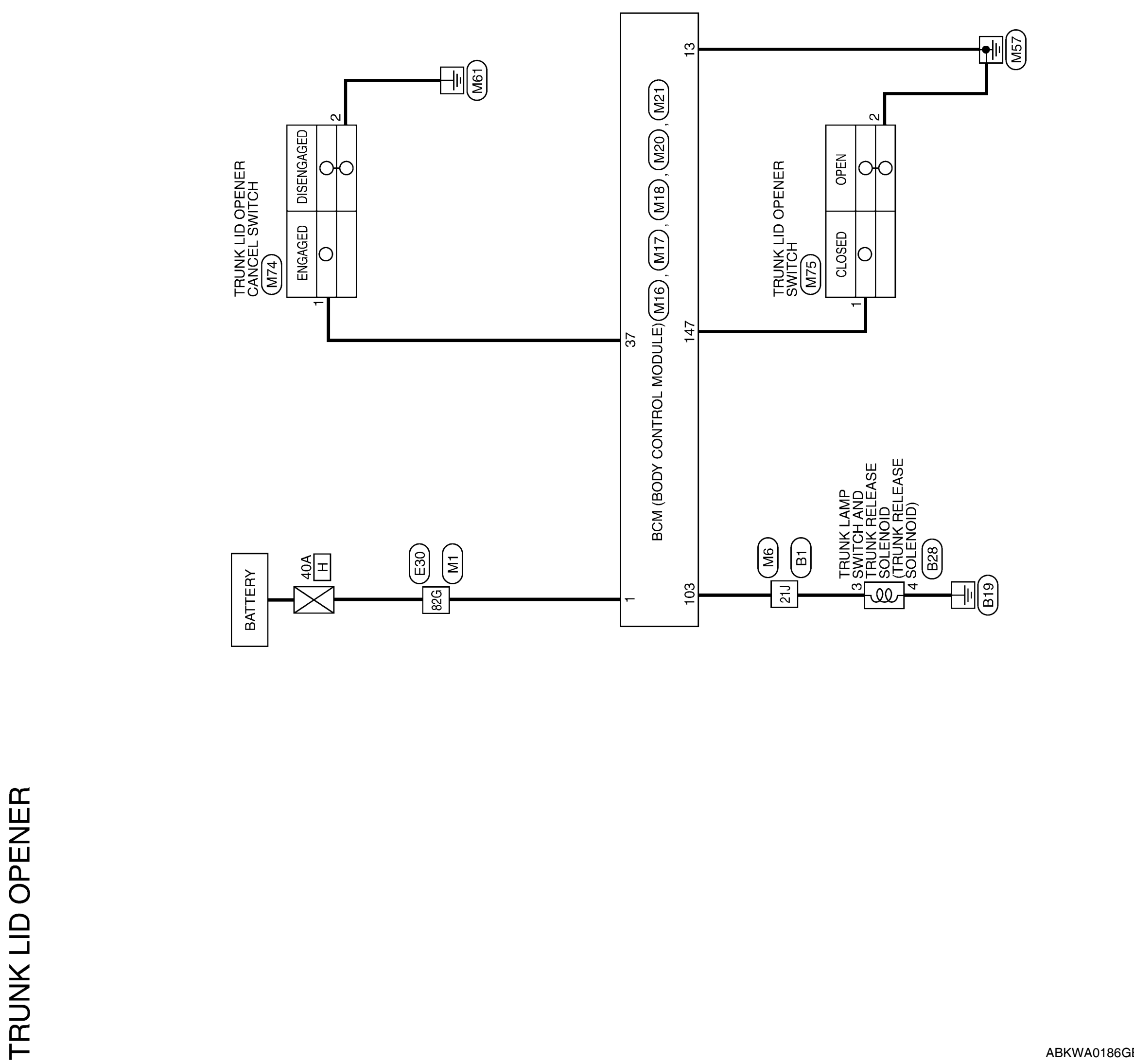


Terminal No.	Color of Wire	Signal Name
1	G/W	–
2	SB	–
3	G	–

ABKIA0853GB

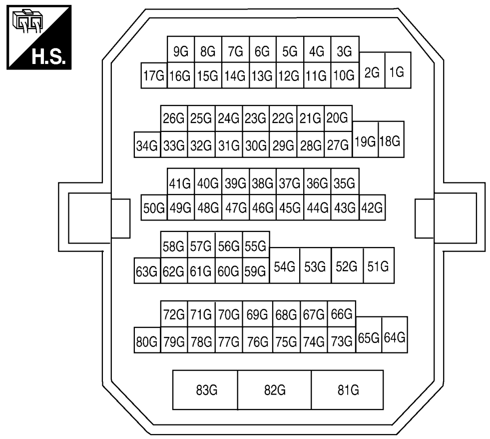
Wiring Diagram — TRUNK LID OPENER SYSTEM —

INFOID:0000000004497042



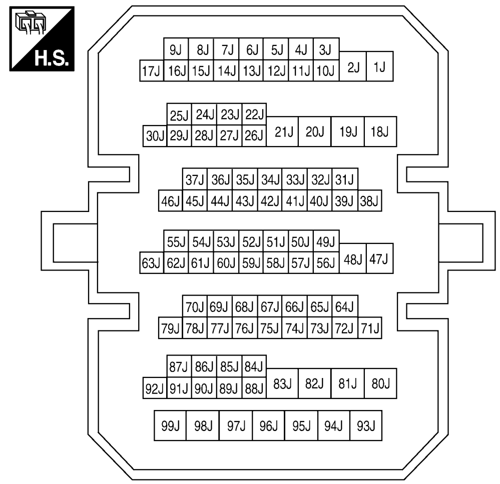
TRUNK LID OPENER CONNECTORS

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



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

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

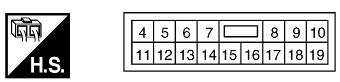


Terminal No.	Color of Wire	Signal Name
21J	V	–

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

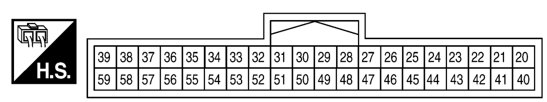
Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L

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



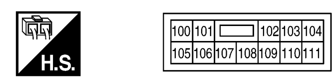
Terminal No.	Color of Wire	Signal Name
13	B	GND1

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



Terminal No.	Color of Wire	Signal Name
37	O	TRUNK_CANCEL_SW

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



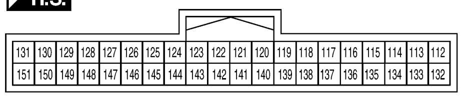
Terminal No.	Color of Wire	Signal Name
103	V	CDL_BACK_TRUNK

ABKIA0612GB

A B C D E F G H I J DLK L M N O P

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

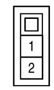
H.S.



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

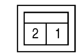
H.S.



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

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

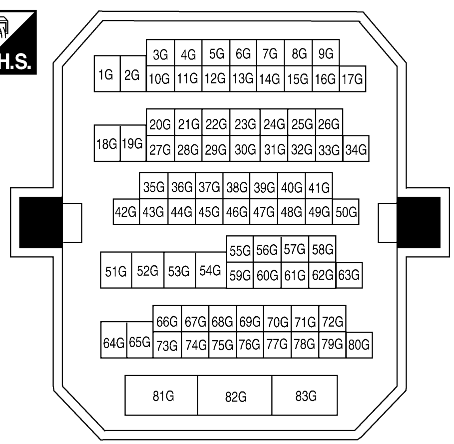
H.S.



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

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

H.S.



Terminal No.	Color of Wire	Signal Name
82G	LG	–

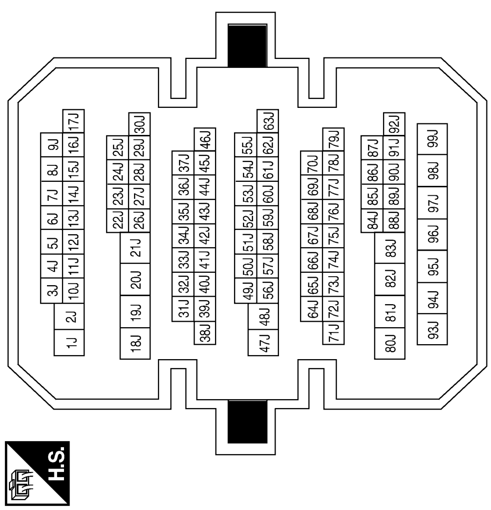
ABKIA0613GB

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	–

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

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



AAKIA0154GB

Fail Safe

INFOID:0000000004497043

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC

Display contents of CONSULT	Fail-safe	Cancellation
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Erase DTC
B2557: VEHICLE SPEED	Inhibit electronic steering column lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
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: LO VOLTAGE	• Inhibit engine cranking • Inhibit electronic steering column lock	100 ms after the power supply voltage increases to more than 8.8 V
B2601: SHIFT POSITION	Inhibit electronic steering column lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit electronic steering column lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 /h or more
B2603: SHIFT POSI STATUS	Inhibit electronic steering column lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/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
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Electronic steering column lock relay signal (Request signal) • Electronic steering column lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Electronic steering column lock relay signal (Request signal) • Electronic steering column lock relay signal (Condition signal)

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 electronic steering column lock	When the following electronic steering column lock conditions agree • BCM electronic steering column lock control status • Electronic steering column lock condition No. 1 signal status • Electronic steering column lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	• Inhibit engine cranking • Inhibit electronic steering column lock	When any of the following conditions is fulfilled • Electronic steering column lock unit status signal (CAN) is received normally • The BCM electronic steering column lock control status matches the electronic steering column lock status recognized by the electronic steering column lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
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 electronic steering column lock unit power supply output control inside BCM becomes normal
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:0000000004497044

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

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

Priority	DTC
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 • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B26E1: ENG STATE NO RECIV • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
5	• C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1712: [CHECKSUM ERR] FL • C1713: [CHECKSUM ERR] FR • C1714: [CHECKSUM ERR] RR • C1715: [CHECKSUM ERR] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1720: [CODE ERR] FL • C1721: [CODE ERR] FR • C1722: [CODE ERR] RR • C1723: [CODE ERR] RL • C1724: [BATT VOLT LOW] FL • C1725: [BATT VOLT LOW] FR • C1726: [BATT VOLT LOW] RR • C1727: [BATT VOLT LOW] RL • C1734: CONTROL UNIT
6	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000004497045

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	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	BCS-38
U1010: CONTROL UNIT (CAN)	—	—	—	BCS-39
U0415: VEHICLE SPEED SIG	—	—	—	BCS-40
B2013: ID DISCORD BCM-S/L	×	—	—	SEC-38
B2014: CHAIN OF S/L-BCM	×	—	—	SEC-39
B2190: NATS ANTENNA AMP	×	—	—	SEC-64
B2191: DIFFERENCE OF KEY	×	—	—	SEC-67
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-68
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-69
B2553: IGNITION RELAY	—	—	—	PCS-60
B2555: STOP LAMP	—	—	—	SEC-70
B2556: PUSH-BTN IGN SW	—	×	—	SEC-72
B2557: VEHICLE SPEED	×	×	—	SEC-74
B2560: STARTER CONT RELAY	×	×	—	SEC-75
B2562: LOW VOLTAGE	—	—	—	BCS-41
B2601: SHIFT POSITION	×	×	—	SEC-76
B2602: SHIFT POSITION	×	×	—	SEC-79
B2603: SHIFT POSI STATUS	×	×	—	SEC-81
B2604: PNP SW	×	×	—	SEC-84
B2605: PNP SW	×	×	—	SEC-86
B2606: S/L RELAY	×	×	—	SEC-88
B2607: S/L RELAY	×	×	—	SEC-89
B2608: STARTER RELAY	×	×	—	SEC-91
B2609: S/L STATUS	×	×	—	SEC-93
B260A: IGNITION RELAY	×	×	—	PCS-62
B260B: STEERING LOCK UNIT	—	×	—	SEC-97
B260C: STEERING LOCK UNIT	—	×	—	SEC-98
B260D: STEERING LOCK UNIT	—	×	—	SEC-99
B260F: ENG STATE SIG LOST	×	×	—	SEC-100
B2612: S/L STATUS	×	×	—	SEC-101
B2614: ACC RELAY CIRC	—	×	—	PCS-65
B2615: BLOWER RELAY CIRC	—	×	—	PCS-68
B2616: IGN RELAY CIRC	—	×	—	PCS-71
B2617: STARTER RELAY CIRC	×	×	—	SEC-105
B2618: BCM	×	×	—	PCS-74

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2619: BCM	×	×	—	SEC-107
B261A: PUSH-BTN IGN SW	—	×	—	SEC-108
B2621: INSIDE ANTENNA	—	—	—	DLK-59
B2622: INSIDE ANTENNA	—	—	—	DLK-62
B2623: INSIDE ANTENNA	—	—	—	DLK-65
B26E1: ENG STATE NO RES	×	×	—	SEC-110
C1704: LOW PRESSURE FL	—	—	×	WT-52
C1705: LOW PRESSURE FR	—	—	×	WT-52
C1706: LOW PRESSURE RR	—	—	×	WT-52
C1707: LOW PRESSURE RL	—	—	×	WT-52
C1708: [NO DATA] FL	—	—	×	WT-14
C1709: [NO DATA] FR	—	—	×	WT-14
C1710: [NO DATA] RR	—	—	×	WT-14
C1711: [NO DATA] RL	—	—	×	WT-14
C1712: [CHECKSUM ERR] FL	—	—	×	WT-16
C1713: [CHECKSUM ERR] FR	—	—	×	WT-16
C1714: [CHECKSUM ERR] RR	—	—	×	WT-16
C1715: [CHECKSUM ERR] RL	—	—	×	WT-16
C1716: [PRESSDATA ERR] FL	—	—	×	WT-18
C1717: [PRESSDATA ERR] FR	—	—	×	WT-18
C1718: [PRESSDATA ERR] RR	—	—	×	WT-18
C1719: [PRESSDATA ERR] RL	—	—	×	WT-18
C1720: [CODE ERR] FL	—	—	×	WT-16
C1721: [CODE ERR] FR	—	—	×	WT-16
C1722: [CODE ERR] RR	—	—	×	WT-16
C1723: [CODE ERR] RL	—	—	×	WT-16
C1724: [BATT VOLT LOW] FL	—	—	×	WT-16
C1725: [BATT VOLT LOW] FR	—	—	×	WT-16
C1726: [BATT VOLT LOW] RR	—	—	×	WT-16
C1727: [BATT VOLT LOW] RL	—	—	×	WT-16
C1729: VHCL SPEED SIG ERR	—	—	×	WT-19
C1734: CONTROL UNIT	—	—	×	WT-20

SYMPTOM DIAGNOSIS

DOOR LOCK FUNCTION

Symptom Table

INFOID:0000000004497050

DOOR LOCK/UNLOCK FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check "WORK FLOW". Refer to DLK-463, "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.

Symptom	Diagnosis/service procedure		Reference page
Power door locks do not operate with door lock and unlock switch.	1. Check BCM Power supply and ground circuit.		DLK-495
	2. Check door lock and unlock switch.		DLK-499
	3. Check door lock actuator (driver side)		DLK-515
	4. Check Intermittent Incident.		GI-42
Power door locks do not operate with door key cylinder operation. (Power door locks operate properly with door lock and unlock switch.)	1. Check key cylinder switch.		DLK-505
	2. Replace power window main switch.		PWC-186
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	DLK-515
		Passenger side	DLK-516
		Rear LH	DLK-517
		Rear RH	DLK-518
	2. Check Intermittent Incident.		GI-42
Vehicle speed sensing auto door LOCK operation does not operate.	1. Ensure automatic door lock/unlock function (lock operation) is enabled.		DLK-481
	2. Check combination meter vehicle speed signal.		MWI-42
	3. Check intermittent incident.		GI-42
Ignition OFF interlock auto door UNLOCK function does not operate.	1. Ensure automatic door lock/unlock function (unlock operation) is enabled.		DLK-481
	2. Check BCM for DTCs.		DLK-588
	3. Check intermittent incident.		GI-42

REMOTE KEYLESS ENTRY SYSTEM

Symptom Table

INFOID:0000000004500459

REMOTE KEYLESS ENTRY SYSTEM

Symptom	Diagnoses/service procedure	Reference page
All functions of remote keyless entry system do not operate.	1. Keyfob battery and function check (use Remote Keyless Entry Tester J-43241) **NOTE:** If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-526
	2. Check BCM and remote keyless entry receiver.	DLK-523
The new ID of keyfob cannot be entered.	1. Keyfob battery and function check (use Remote Keyless Entry Tester J-43241) **NOTE:** If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-526
	2. Door switch check	DLK-496
	3. ACC power check	DLK-495
	4. Replace BCM.	BCS-96
Door lock or unlock does not function. (If the power door lock system does not operate manually, check power door lock system)	1. Keyfob battery and function check (use Remote Keyless Entry Tester J-43241) **NOTE:** If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-526
	2. Replace BCM.	BCS-96
Hazard and horn reminder does not activate properly when pressing lock or unlock button of keyfob.	1. Check hazard and horn reminder mode with CONSULT-III **NOTE:** Hazard and horn reminder mode can be changed. First check the hazard and horn reminder mode setting.	Dummy cross-reference("XX-XX")
	2. Door switch check	DLK-496
	3. Replace BCM.	BCS-96
Hazard reminder does not activate properly when pressing lock or unlock button of keyfob. (Horn reminder OK)	1. Check hazard reminder mode with CONSULT-III **NOTE:** Hazard reminder mode can be changed. First check the hazard reminder mode setting.	Dummy cross-reference("XX-XX")
	2. Check hazard function with hazard switch	—
	3. Replace BCM.	BCS-96
Horn reminder does not activate properly when pressing lock or unlock button of keyfob. (Hazard reminder OK)	1. Check horn reminder mode with CONSULT-III **NOTE:** Horn reminder mode can be changed. First check the horn reminder mode setting.	Dummy cross-reference("XX-XX")
	2. Check horn function with horn switch	—
	3. IPDM E/R operation check	DLK-530
	4. Replace BCM.	BCS-96
Room lamp illumination does not operate properly.	1. Room lamp operation check	INL-3
	2. Door switch check	DLK-496
	3. Replace BCM.	BCS-96

Symptom	Diagnoses/service procedure	Reference page
Panic alarm (horn and headlamp) does not activate when panic alarm button is continuously pressed.	1. Keyfob battery and function check (use Remote Keyless Entry Tester J-43241) **NOTE:** If the result of keyfob function check is OK, keyfob is not malfunctioning.	DLK-526
	2. ACC power check	DLK-495
	3. Replace BCM.	BCS-96
Auto door lock operation does not activate properly. (All other remote keyless entry functions OK.)	1. Check auto door lock operation mode with CONSULT-III **NOTE:** Auto door lock operation mode can be changed. First check the auto door lock operation mode setting.	DLK-481
	2. Replace BCM.	BCS-96

TRUNK OPEN FUNCTION

Symptom Table

INFOID:0000000004497053

TRUNK OPEN FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-463, "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)

- Keyfob 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-508
	2. Check trunk lid opener cancel switch.	DLK-510
	3. Check Intermittent Incident.	GI-42

WARNING FUNCTION

Symptom Table

INFOID:0000000004497056

WARNING FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-463, "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-307
		2. Check door switch.	DLK-496
		3. Check warning chime function.	DLK-533
		4. Check Intermittent Incident.	GI-42
	For external	1. Check push-button ignition switch position indicator.	SEC-307
		2. Check door switch.	DLK-496
		3. Check outside warning buzzer.	DLK-521
		4. Check Intermittent Incident.	GI-42
P position warning does not operate.		1. Check Park position switch.	SEC-283
		2. Check door switch.	DLK-496
		3. Check outside warning buzzer.	DLK-521
		4. Check warning chime function.	DLK-533
		5. Check combination meter display function.	DLK-532
		6. Check Intermittent Incident.	GI-42
ACC warning does not operate		1. Check push-button ignition switch position indicator.	SEC-307
		2. Check warning chime function.	DLK-533
		3. Check combination meter display function.	DLK-532
		4. Check Intermittent Incident.	GI-42

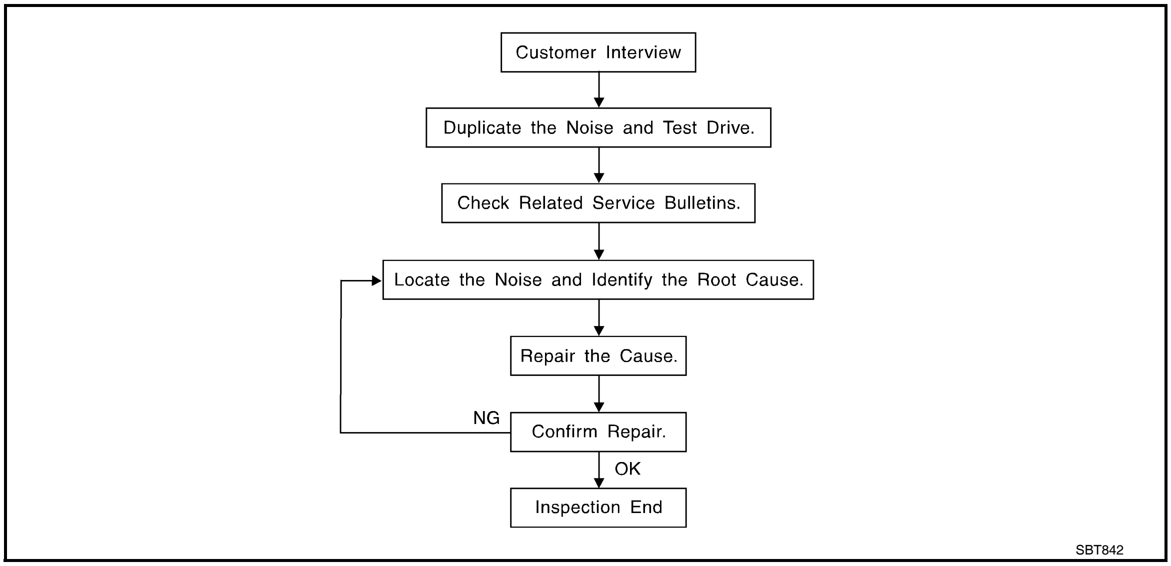
Symptom		Diagnosis/service procedure		Reference page
Take away warning does not operate.	Door open to close	1. Check door switch.		DLK-496
		2. Check inside key antenna.	Instrument center	DLK-486
			Console	DLK-489
			Trunk room	DLK-492
		3. Check outside warning buzzer.		DLK-521
		4. Check warning chime function.		DLK-533
		5. Check key slot illumination.		DLK-528
		6. Check combination meter display function.		DLK-532
		7. Check Intermittent Incident.		GI-42
	Push-button ignition switch operation	1. Check push-button ignition switch position indicator.		SEC-307
		2. Check inside key antenna.	Instrument center	DLK-486
			Console	DLK-489
			Trunk room	DLK-492
		3. Check warning chime function.		DLK-533
		4. Check key slot illumination.		DLK-528
		5. Check combination meter display function.		DLK-532
		6. Check Intermittent Incident.		GI-42
	Door is open	1. Check push-button ignition switch position indicator.		SEC-307
		2. Check inside key antenna.	Instrument center	DLK-486
			Console	DLK-489
			Trunk room	DLK-492
		3. Check combination meter display function.		DLK-532
		4. Check Intermittent Incident.		GI-42
	Take away through window	1. Check "TAKE OUT FROM WIN WARN" setting in "WORK SUPPORT".		Dummy cross-reference("XX-XX")
		2. Check inside key antenna.	Instrument center	DLK-486
			Console	DLK-489
			Trunk room	DLK-492
		3. Check warning chime function.		DLK-533
		4. Check key slot illumination.		DLK-528
		5. Check combination meter display function.		DLK-532
		6. Check Intermittent Incident.		GI-42
Key warning chime does not operate.		1. Check key slot.		DLK-503
		2. Check door switch.		DLK-496
		3. Check warning chime function.		DLK-533
		4. Check key slot illumination.		DLK-528
		5. Check combination meter display function.		DLK-532
		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-496
	2. Check key slot illumination.		DLK-528
	3. Check outside warning buzzer.		DLK-521
	4. Check inside key antenna.	Instrument center	DLK-486
		Console	DLK-489
		Trunk room	DLK-492
	5. Check Intermittent Incident.		GI-42

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000004497061



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-602, "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-600, "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:0000000004497062

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 bumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

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:0000000004497063

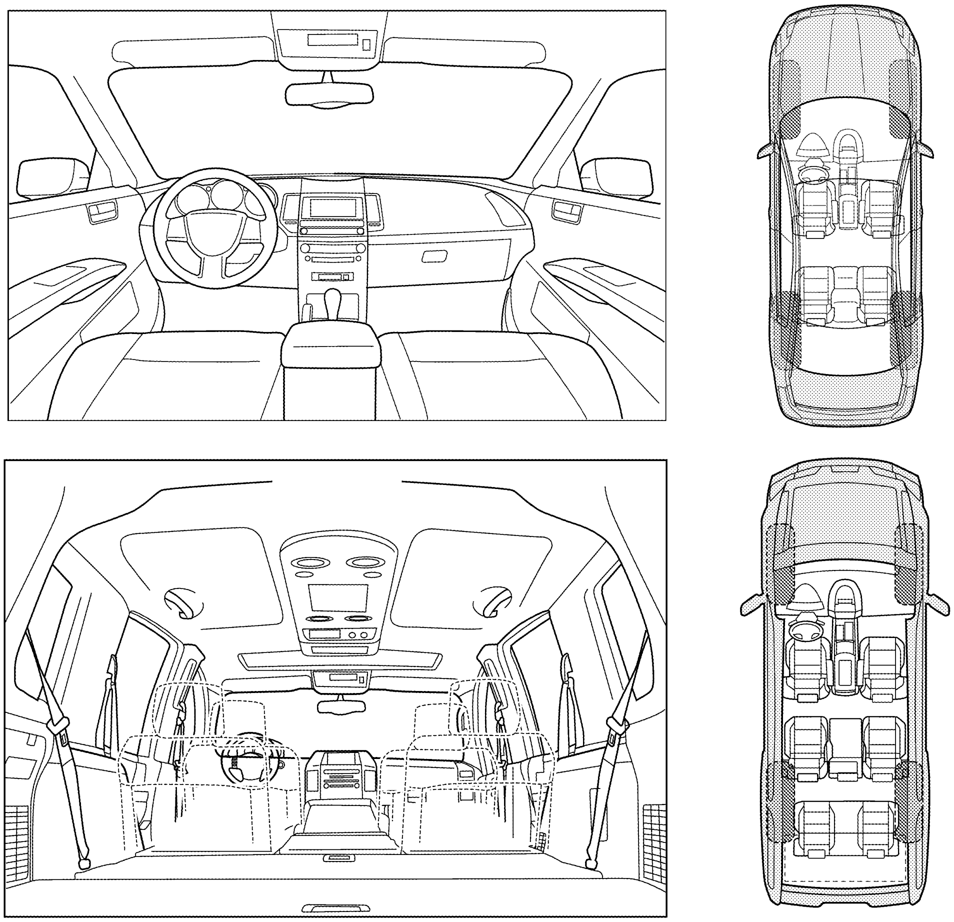
Dear Customer:

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.

-1-

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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

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PRECAUTION

PRECAUTIONS

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

INFOID:0000000004497064

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

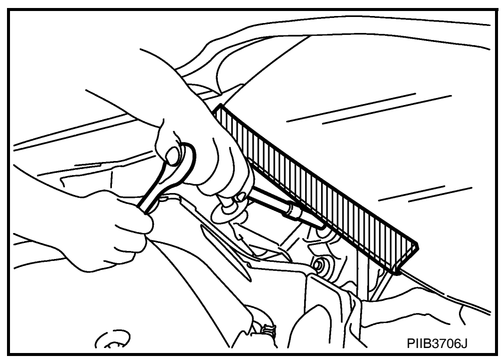
WARNING:

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

Procedure without Cowl Top Cover

INFOID:0000000004497065

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



Precaution for work

INFOID:0000000004497066

- 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.

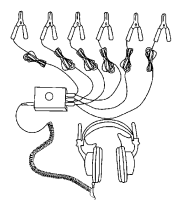
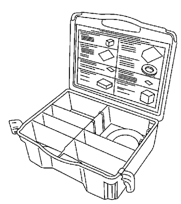
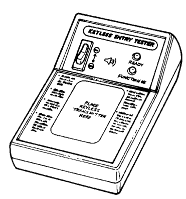
PREPARATION

PREPARATION

Special Service Tools

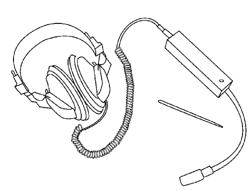
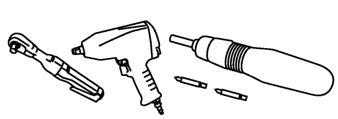
INFOID:0000000004497067

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:0000000004497068

Tool name		Description
Engine ear	 SIIA0995E	Locating the noise
Power tool	 PIIB1407E	

ON-VEHICLE REPAIR

HOOD

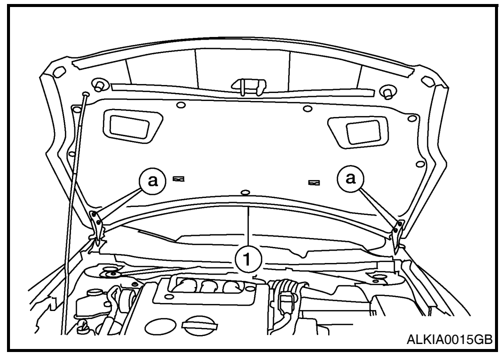
HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000004497069

REMOVAL

1. Remove the hinge nuts (a) and the hood assembly (1).
   CAUTION:
   Operate with two workers, because of its large size.



INSTALLATION

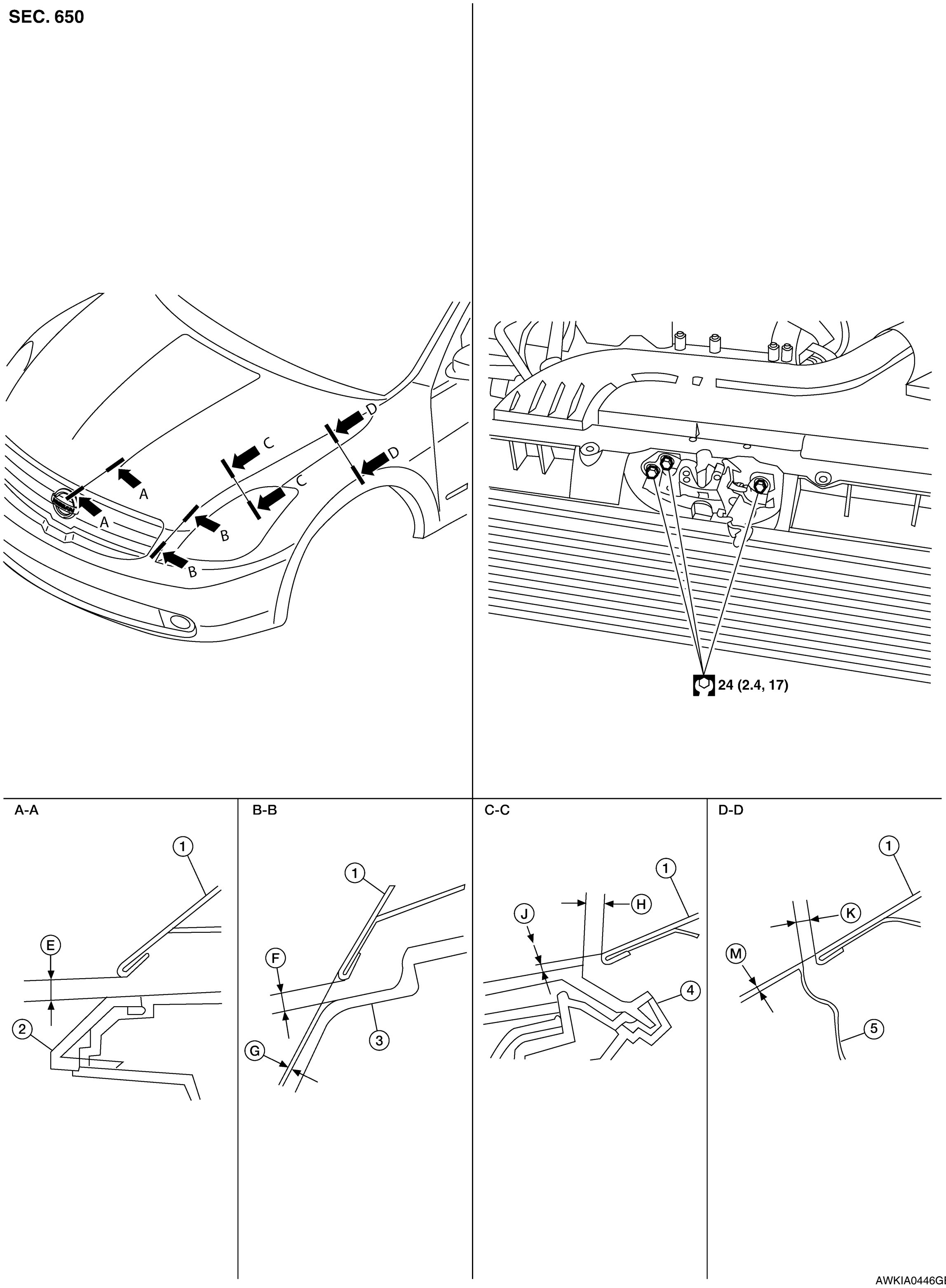
Installation is in the reverse order of removal.

NOTE:

After installing, perform hood fitting adjustment. Refer to DLK-607, "HOOD ASSEMBLY : Adjustment".

HOOD ASSEMBLY : Adjustment

INFOID:0000000004497070



1. Hood assembly	2. Front grille	3. Front fascia
4. Headlamp assembly	5. Front fender	

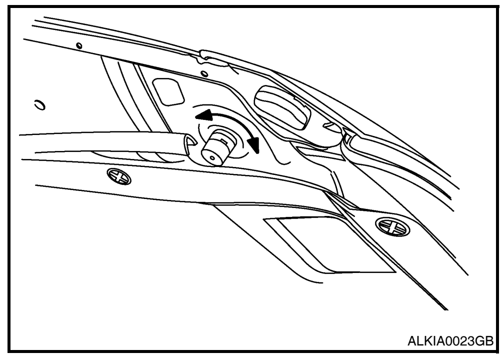
FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDUNAL CLEARANCE ADJUSTMENT

Unit: mm (in)

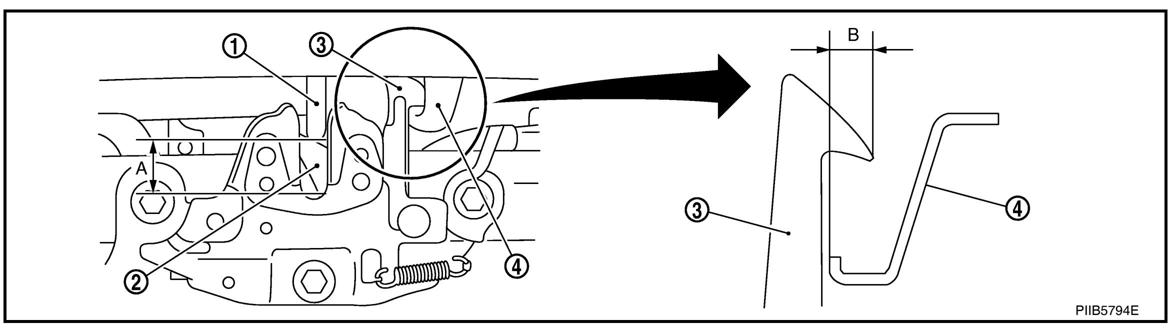
Section	Item	Measurement	Standard	Parallelism	Equality
A – A	E	Clearance	5.0 ± 2.0 (0.20 ± 0.079)	≤ 2.0 (0.079)	—
B – B	F	Clearance	5.0 ± 2.0 (0.20 ± 0.079)	≤ 2.0 (0.079)	≤ 2.2 (0.087)
	G	Surface height	1.0 ± 2.0 (0.04 ± 0.079)	≤ 2.0 (0.079)	≤ 2.0 (0.079)
C – C	H	Clearance	4.5 ± 2.0 (0.18 ± 0.079)	—	2.1 (0.083)
	J	Surface height	1.0 ± 2.1 (0.04 ± 0.083)	—	< 2.0 (0.079)
D – D	K	Clearance	4.0 ± 1.0 (0.16 ± 0.04)	1.0 (0.04)	1.0 (0.04)
	M	Surface height	0.2 ± 1.0 (0.01 ± 0.04)	1.0 (0.04)	1.0 (0.04)

FRONT END HEIGHT ADJUSTMENT

1. Check the surface height between the hood and each part by visual and tactile feeling.
2. Remove the front grille. Refer to EXT-38, "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.

Hood hinge bolts : 14 N·m (1.4 kg·m, 10 ft-lb)

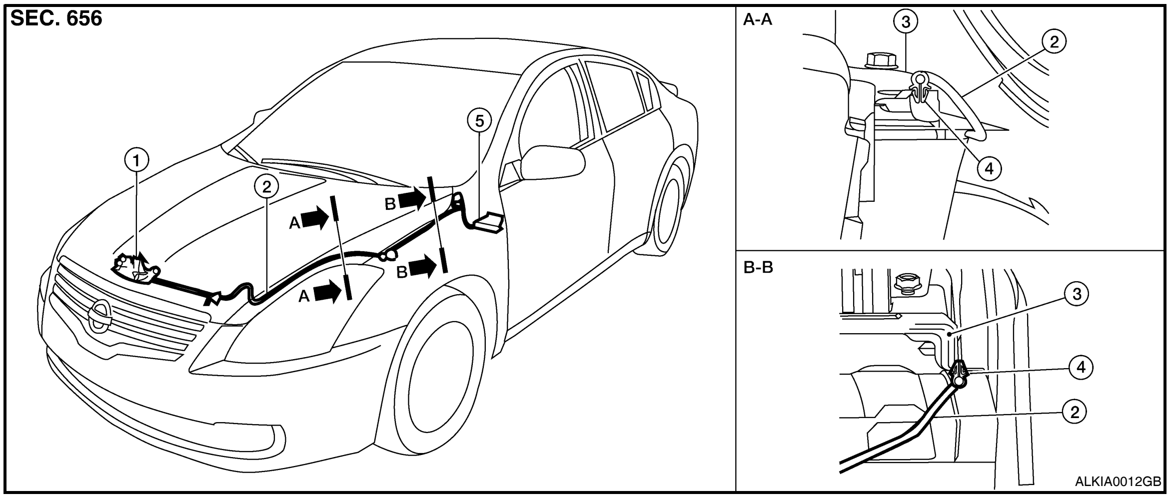
NOTE:
After installation apply touch-up paint onto the hinge bolts and around the base of the hinge.

5. If the clearance measurements between the hood and fender cannot be corrected by moving the hood, the fender must be adjusted. Refer to DLK-614, "Removal and Installation".

HOOD LOCK CONTROL

HOOD LOCK CONTROL : Component Parts Location

INFOID:0000000004497071



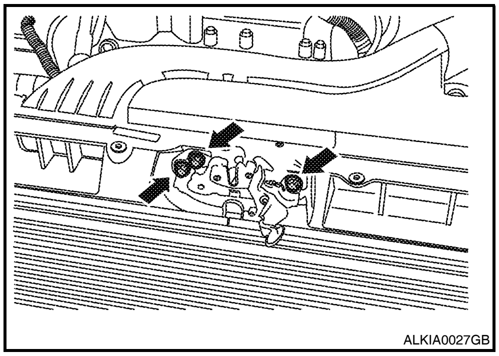
1. Hood lock assembly
2. Hood lock cable
3. Hoodledge reinforcement
4. Clip
5. Hood lock release handle

HOOD LOCK CONTROL : Removal and Installation

INFOID:0000000004497072

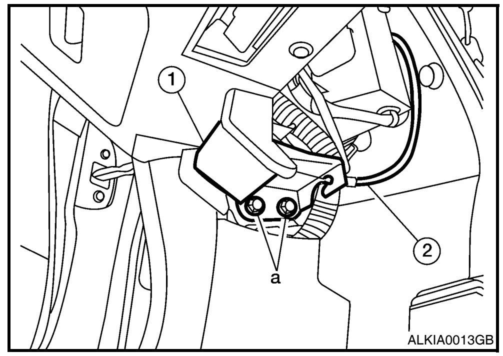
REMOVAL

1. Remove the front grill. Refer to EXT-38, "Removal and Installation".
2. Remove the LH fender protector. Refer to EXT-40, "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.

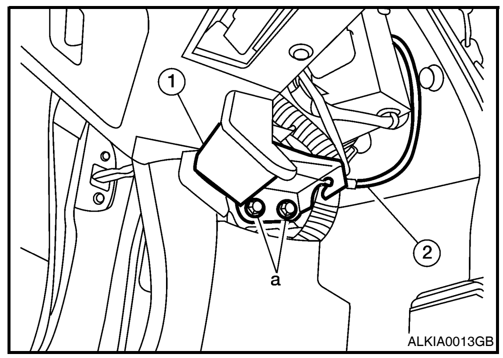
5. Remove the screws (a) with power tool, and separate the hood lock release handle (1) from the hood lock release cable (2).



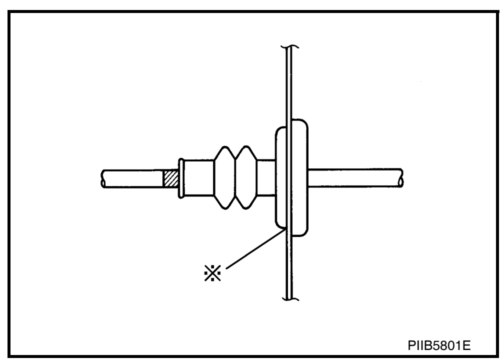
6. Remove the grommet from the upper dash, and pull the hood lock cable into the passenger compartment.
   CAUTION:
   While pulling, be careful not to damage (peel) the outside of the hood lock cable.

INSTALLATION

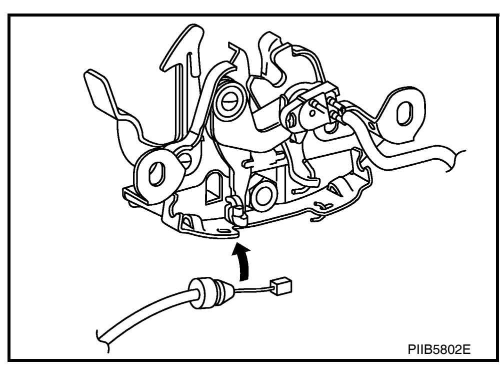
1. Pull the hood lock cable through the upper dash into the engine compartment.
   CAUTION:
   Be careful not to bend the cable too much, keep the radius 100 mm (3.94 in) or more.
2. Attach the hood lock release cable (2) to the hood lock release handle (1) and install the hood lock release handle screws (a).



3. Check that the cable is not offset from the center of the grommet, and seat the grommet into the upper dash hole.
4. Apply the sealant around the grommet at * mark.



5. Position the hood lock cable and clip it into place.
6. Connect the hood lock cable to the hood lock assembly.
7. Loosely install the hood lock assembly.
8. Perform hood fitting adjustment. Refer to DLK-607, "HOOD ASSEMBLY : Adjustment".
9. Check the hood lock control operation.

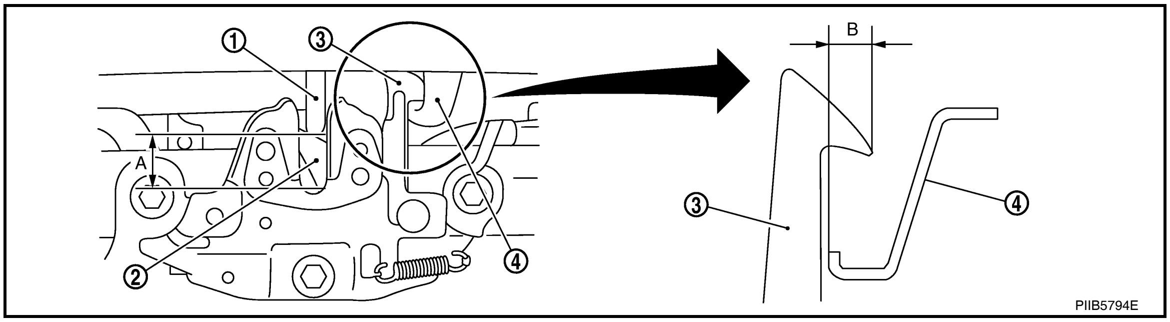


INSPECTION

CAUTION:

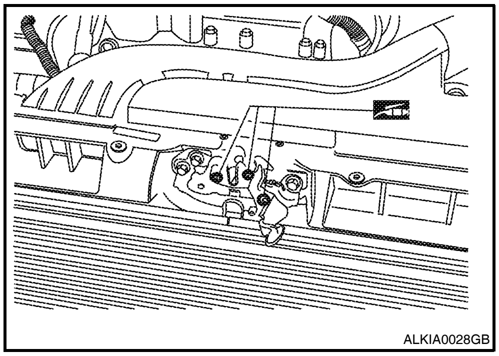
If the hood lock cable is bent or deformed, replace it.

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				

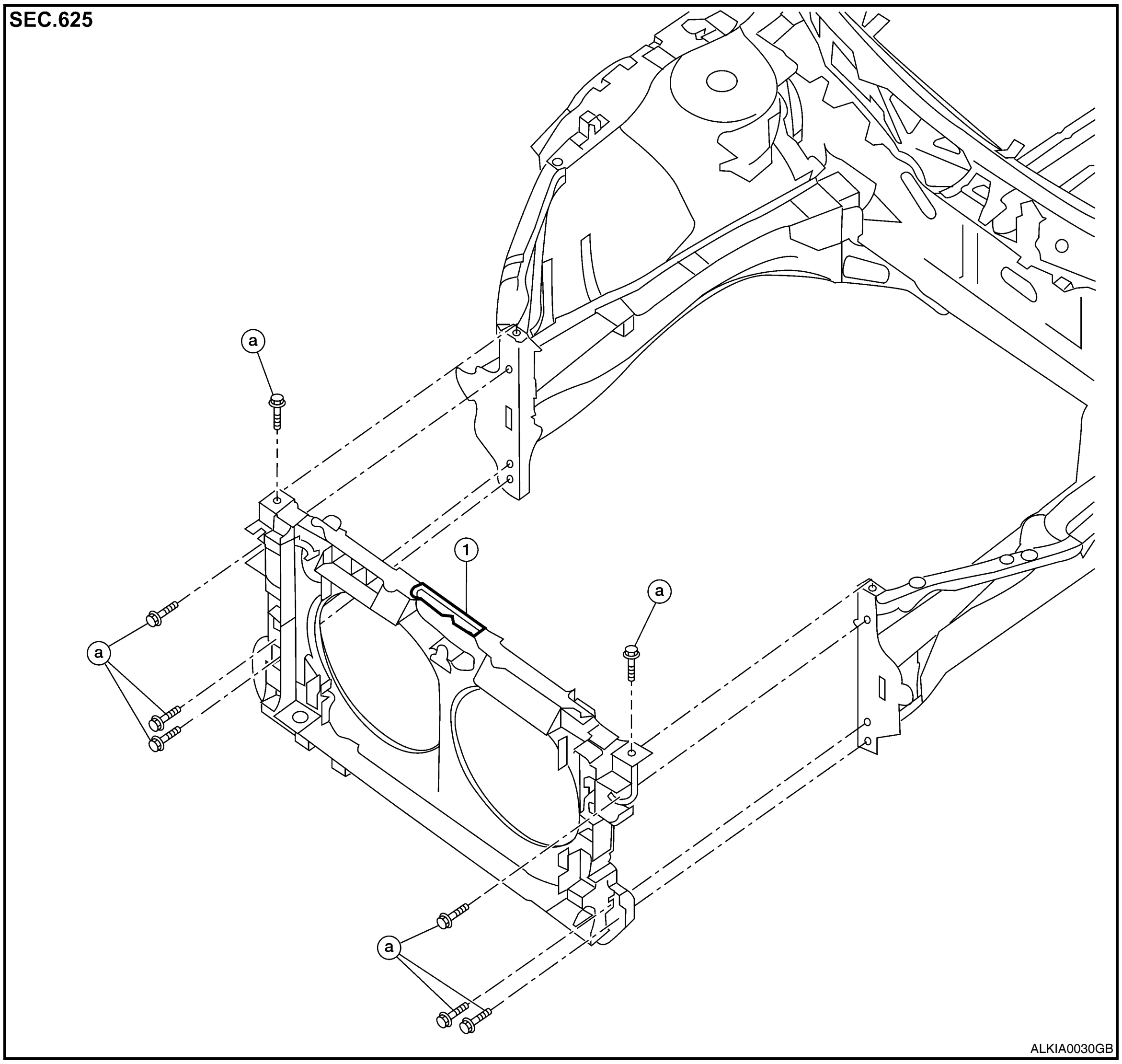
2. While operating the hood opener, carefully check that the front end of the hood is raised by approx. 20 mm (0.79 in). Also check that the hood opener returns to the original position.
3. Check that the hood lock release handle operating force is 49 N (5.0 kg-f, 11 ft-lb) or less.
4. Install so the static closing force of the hood is 343 – 490 N (35– 44 kg-f, 77.1 - 110.2 lb-f).
5. Check the hood lock lubrication condition. If necessary, apply “body grease” as shown.



RADIATOR CORE SUPPORT

Removal and Installation

INFOID:0000000004497073



1. Radiator core support a. Bolts

REMOVAL

1. Remove front bumper reinforcement. Refer to EXT-34, "Removal and Installation".
2. Remove head lamps (LH/RH). Refer to EXL-253, "Removal and Installation".
3. Remove washer tank. Refer to WW-119, "WASHER TANK : Removal and Installation".
4. Remove air duct. Refer to EM-19, "Removal and Installation" QR25DE, EM-123, "Removal and Installation" VQ35DE.
5. Remove the radiator cooling fans. Refer to CO-17, "Removal and Installation" QR25DE, CO-40, "Removal and Installation" VQ35DE.
6. Remove the radiator. Refer to CO-15, "Removal and Installation" QR25DE, CO-38, "Removal and Installation" VQ35DE.
7. Remove the hood lock control. Refer to DLK-609, "HOOD LOCK CONTROL : Removal and Installation".
8. Remove ambient sensor. Refer to HA-43, "Removal and Installation".
9. Remove crash zone sensor. Refer to SR-14, "Removal and Installation".
10. Remove air guides (LH/RH).

11. Remove power steering tube assembly. Refer to ST-22, "QR25DE : Removal and Installation" QR25DE, ST-22, "VQ35DE : With 17 Inch Tire" or ST-24, "VQ35DE : With 18 Inch Tire" VQ35DE.
12. Remove horn (High/Low). Refer to HRN-11, "Removal and Installation".
13. Remove the harness clips from the radiator core support assembly, the harness is separate.
14. Remove the bolts and the radiator core support.

INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

Removal and Installation

INFOID:0000000004497074

REMOVAL

1. Remove the head lamp. Refer to EXL-253, "Removal and Installation".
2. Remove the front fender protector. Refer to EXT-40, "Removal and Installation".
3. Remove the inner fender bolt cover.
4. Remove the center mud guard. Refer to EXT-41, "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.**

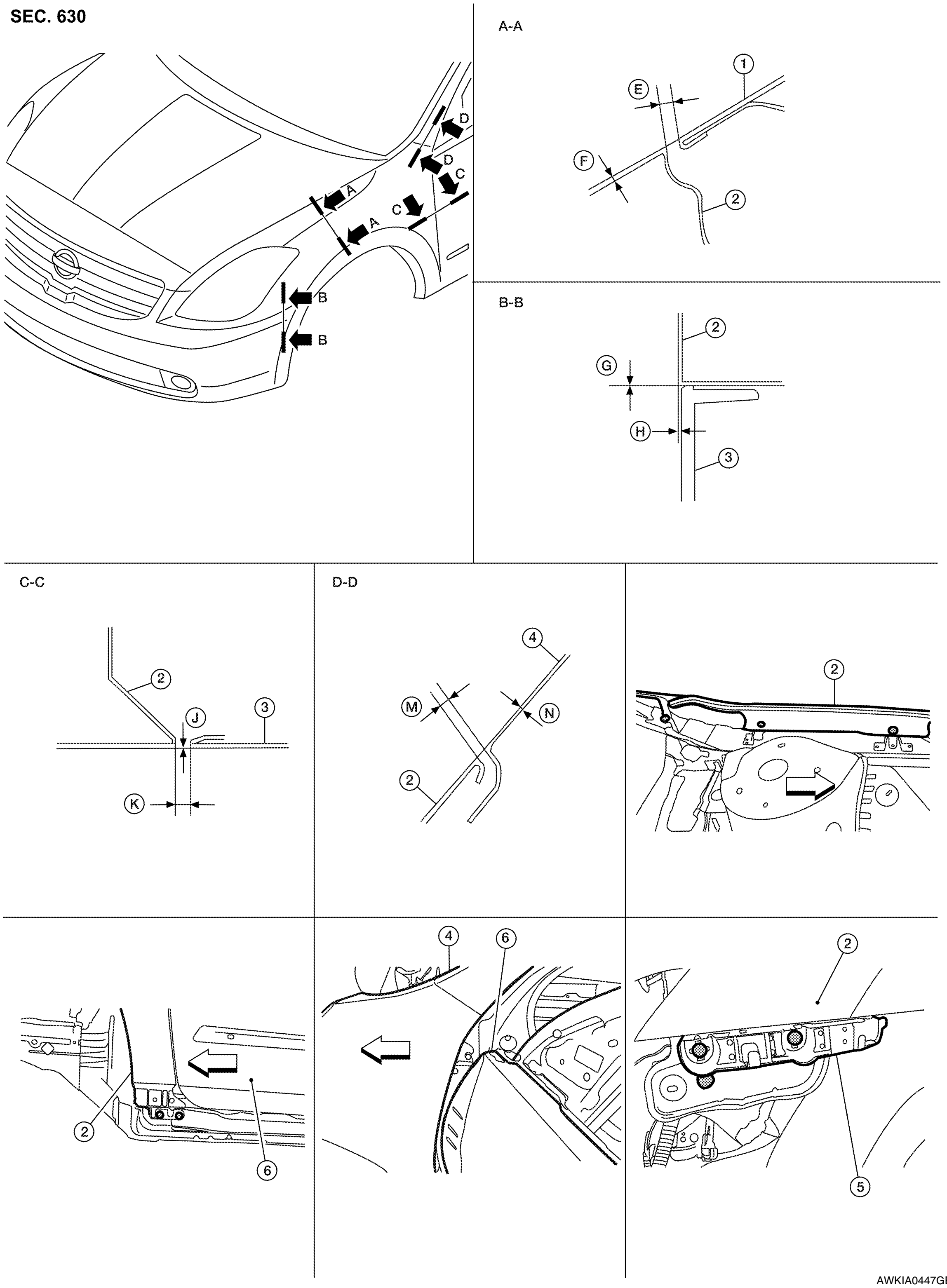
INSTALLATION

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
⇐	Front				

Unit: mm (in)

Section	Item	Measurement	Standard	Parallelism	Equality
A-A	E	Clearance	4.0 ± 1.0 (0.16 ± 0.04)	1.0 (0.04)	1.0 (0.04)
	F	Surface height	0.2 ± 1.0 (0.01 ± 0.04)	1.0 (0.04)	1.0 (0.04)
B-B	G	Clearance	0.0 + 0.8 (0.0 +0.031)	—	—
	H	Surface height	0.7 ± 1.0 (0.028 ± 0.04)	1.0 (0.04)	1.0 (0.04)
C-C	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	—	—
	K	Clearance	3.6 ± 1.0 (0.14 ± 0.04)	1.0 (0.04)	—
D-D	M	Clearance	2.3 ± 1.0 (0.09 ± 0.04)	1.0 (0.04)	—
	N	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-40, "Removal and Installation".
3. Remove the center mud guard. Refer to EXT-41, "Removal and Installation".
4. Loosen the front fender bolts and screws.
5. Adjust the clearance (J) and surface height (K) between the front fender and the front door.
6. Tighten the rear upper and lower front fender bolts.
7. Adjust the clearance (E) and surface height (F) between the front fender and the hood.
8. Adjust the clearance (M) and surface height (N) between the front fender and the body side outer.
9. Tighten the inner front fender bolts.
10. Adjust the clearance (G) and the surface height (H) between the front fender and the front fascia.
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-41, "Removal and Installation".
14. Install the front fender protector. Refer to EXT-40, "Removal and Installation".
15. Install the inner fender bolt cover.

DOOR

FRONT DOOR

FRONT DOOR : Removal and Installation

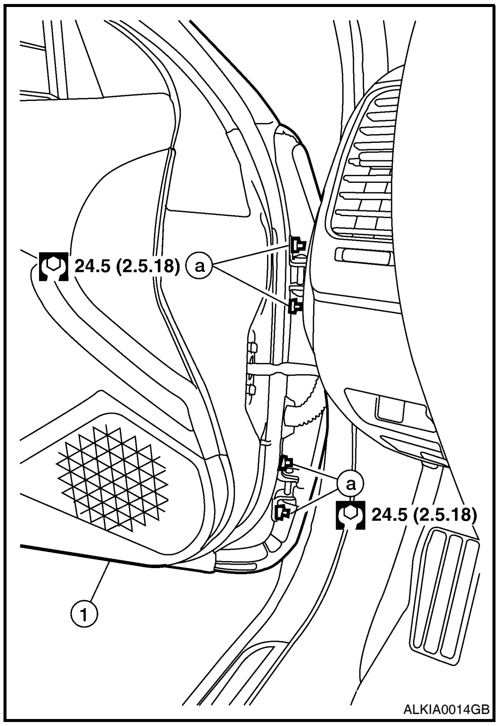
INFOID:0000000004497075

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-618, "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.**

REMOVAL

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



INSTALLATION

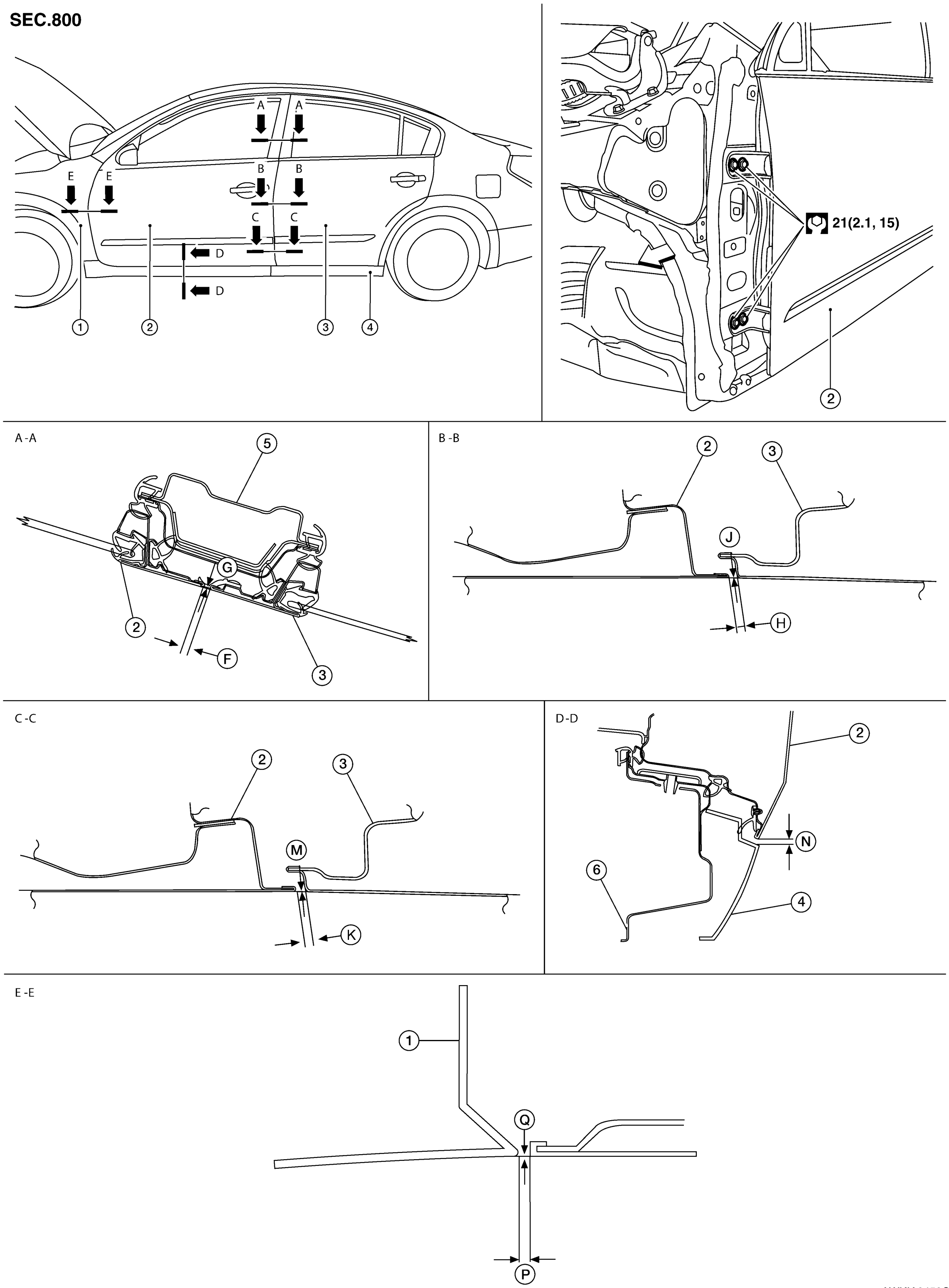
Installation is in the reverse order of removal.

NOTE:

Adjust the door. Refer to DLK-618, "FRONT DOOR : Adjustment".

FRONT DOOR : Adjustment

INFOID:0000000004497076



1. Front fender
2. Front door assembly
3. Rear door assembly
4. Center mud guard
5. Center pillar
6. Outer sill

Unit: mm (in)

Section	Item	Measurement	Standard
A-A	F	Clearance	4.5 ± 1.5 (0.18 ± 0.06)
	G	Surface height	0.0 ± 1.5 (0.0 ± 0.06)
B-B	H	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	J	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C-C	K	Clearance	4.2 ± 1.0 (0.17 ± 0.04)
	M	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
D-D	N	Clearance	5.1 ± 1.7 (0.20 ± 0.07)
E-E	P	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	Q	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

LONGITUDINAL CLEARANCE

1. Confirm the back door adjustments and adjust if necessary. Refer to DLK-619, "BACK DOOR : Removal and Installation".
2. Remove the front fender. Refer to DLK-614, "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-614, "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:0000000004497077

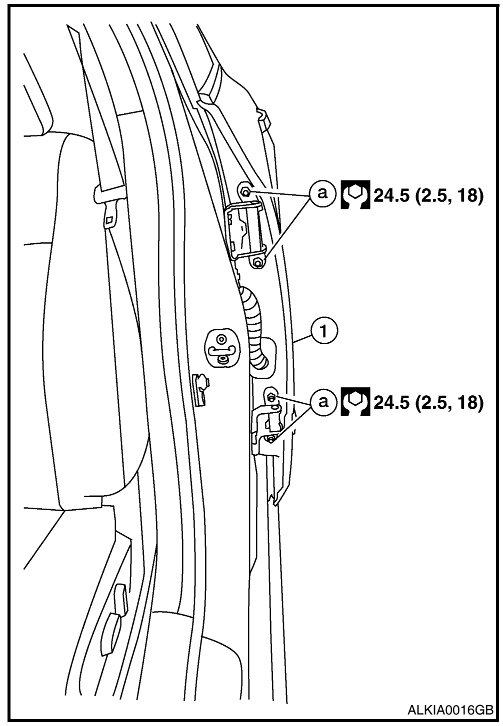
CAUTION:

- **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.**

REMOVAL

1. Pull out grommet and disconnect rear door harness connector.
2. Remove the check link bolt from the center pillar.

3. Remove the door-side hinge nuts (a) and the door assembly (1).



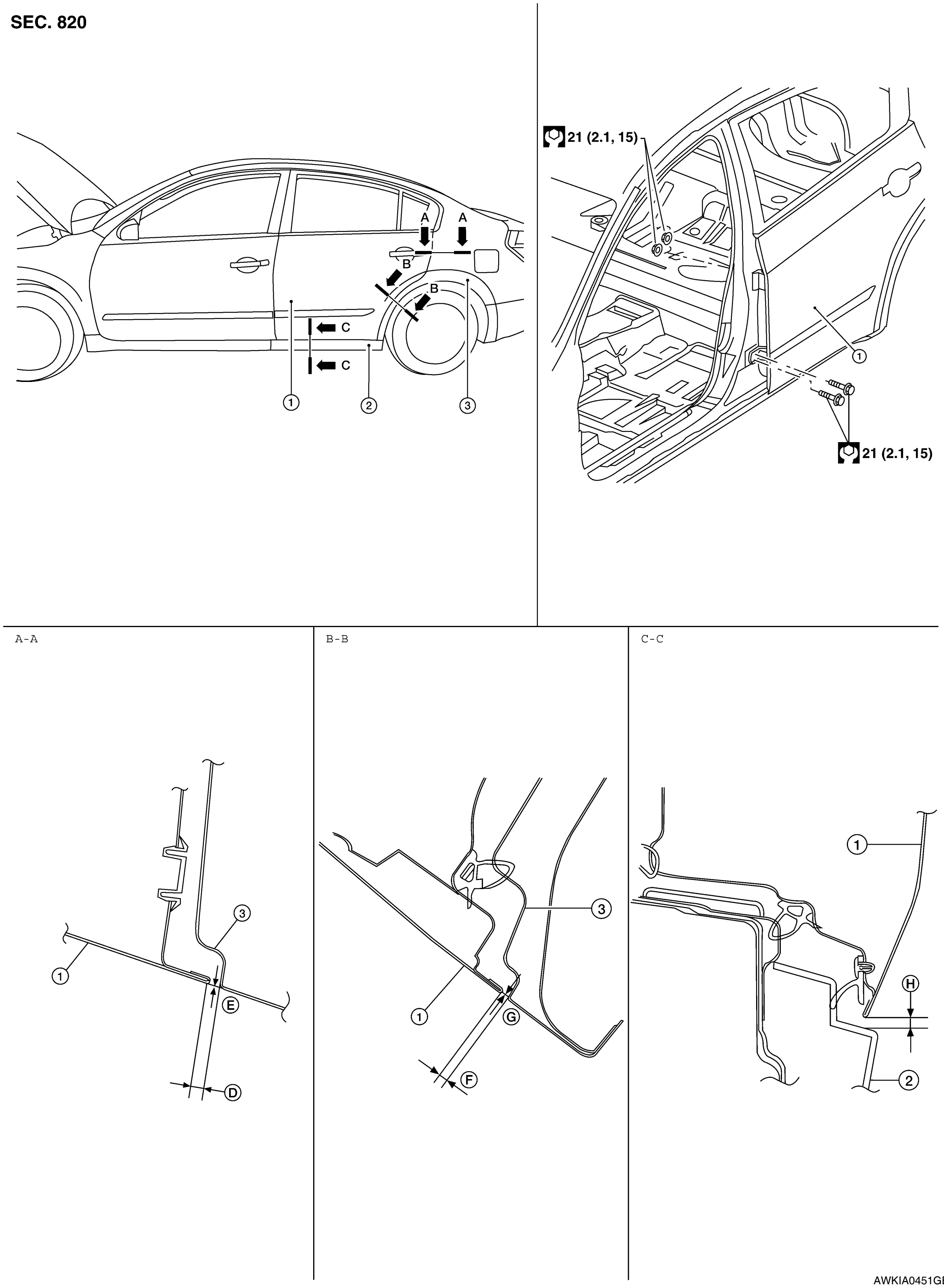
INSTALLATION

Installation is in the reverse order of removal.

BACK DOOR : Adjustment

INFOID:0000000004497078

ADJUSTMENT



1. Rear door assembly
2. Center mud guard
3. Body side outer

Unit: mm (in)

Section	Item	Measurement	Standard
A-A	D	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	E	Surface height	0.0 ± 1.0 (0.0 ± 0.04)

Section	Item	Measurement	Standard
B-B	F	Clearance	3.6 ± 1.0 (0.14 ± 0.04)
	G	Surface height	0.0 ± 1.0 (0.0 ± 0.04)
C-C	H	Clearance	5.3 ± 1.7 (0.21 ± 0.07)

LONGITUDINAL CLEARANCE

1. Remove the center pillar upper and lower trim. Refer to INT-36, "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-36, "Removal and Installation".

SURFACE HEIGHT ADJUSTMENT

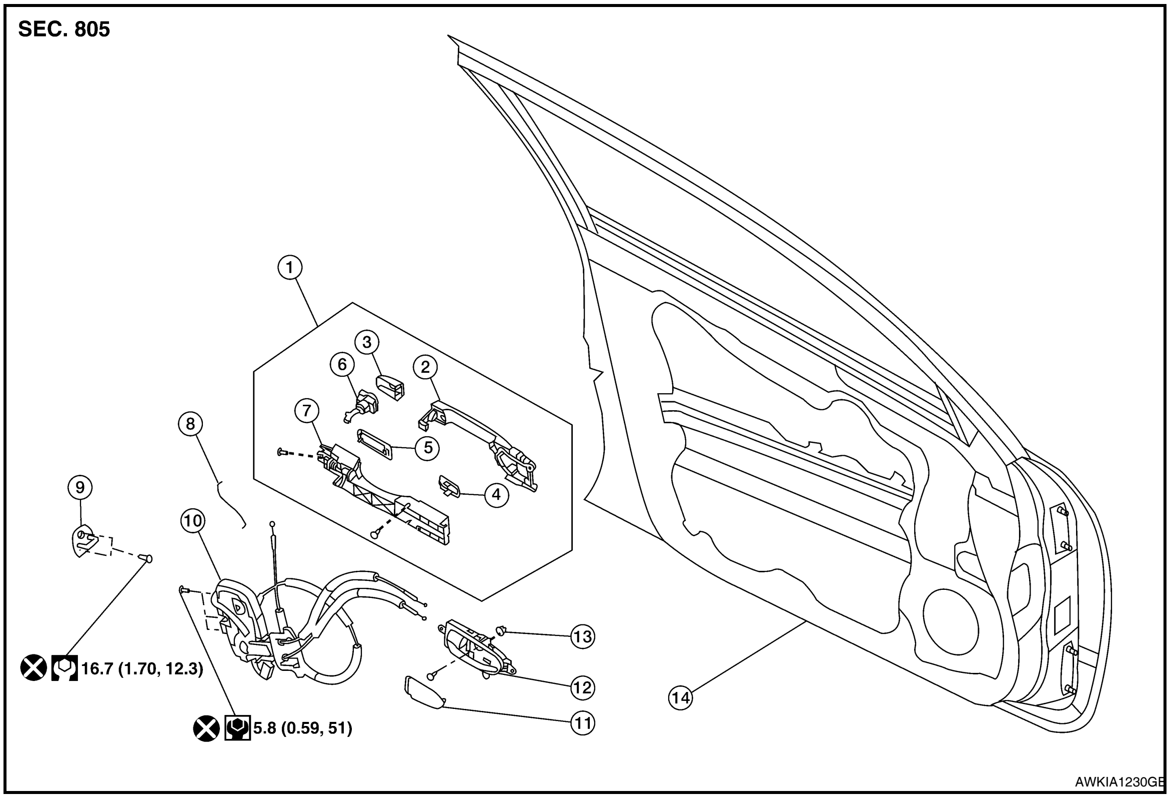
1. Loosen the hinge nuts.
2. Move the top and or the bottom in or out as necessary until it is within specification.
3. Tighten the hinge nuts to specification.

DOOR LOCK

FRONT DOOR LOCK

FRONT DOOR LOCK : Component Parts Location

INFOID:0000000004497079



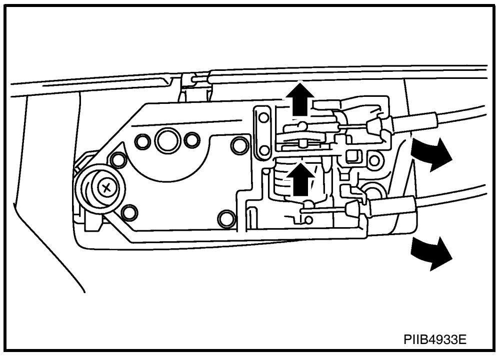
1. Outside handle assembly
2. Front gasket
3. Door key cylinder escutcheon (Driver side)
   Outside handle escutcheon (Passenger side)
4. Front gasket
5. Rear gasket
6. Key cylinder assembly (Driver side only)
7. Outside handle bracket
8. Key cylinder rod (Driver side only)
9. Front door striker
10. Door lock assembly
11. Cap
12. Inside door handle assembly
13. Grommet
14. Front door assembly

FRONT DOOR LOCK : Removal and Installation

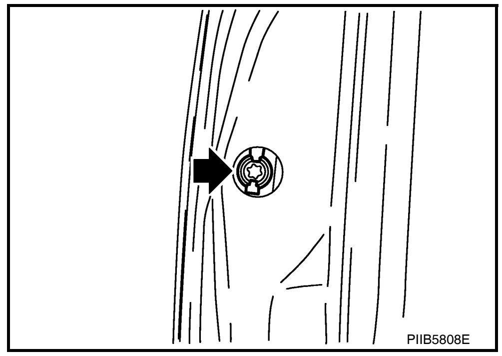
INFOID:0000000004497080

REMOVAL

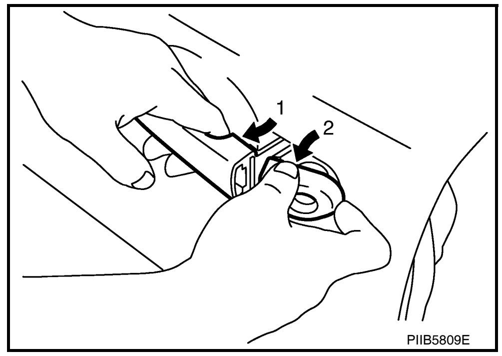
1. Remove the front door finisher. Refer to INT-34, "Removal and Installation".
2. Disconnect the inside handle knob cable and lock knob cable from the back side of the front door finisher.



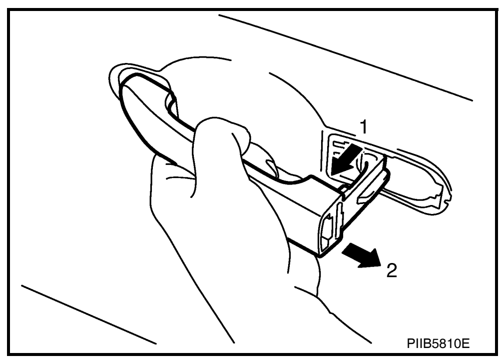
3. Remove the front door window and front door module assembly. Refer to GW-16, "Removal and Installation".
4. Remove door side grommet, and remove door key cylinder assembly (driver side) and outside handle escutcheon (passenger side) bolts (TORX T30) from grommet hole.



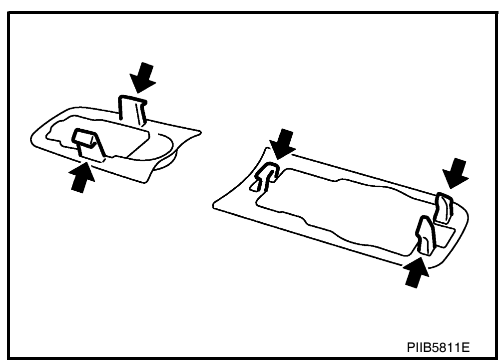
5. Disconnect the key cylinder rod.
6. Disconnect door key cylinder switch harness connector.
7. While pulling the outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).



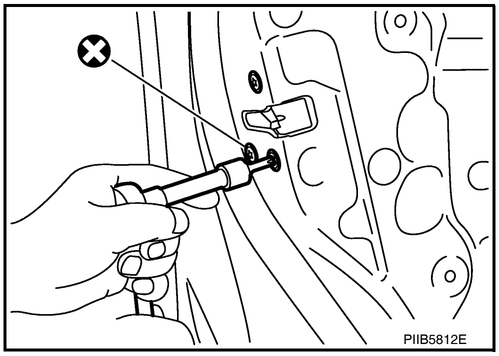
8. Disconnect front door request switch harness connector.
9. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



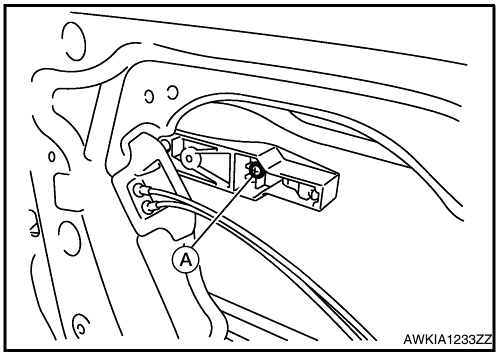
10. Remove the front gasket and rear gasket.



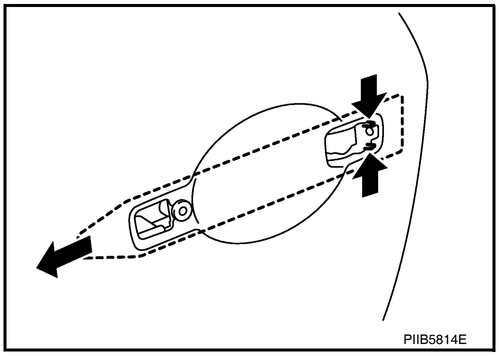
11. Remove the TORX bolts (T30), remove the door lock assembly.



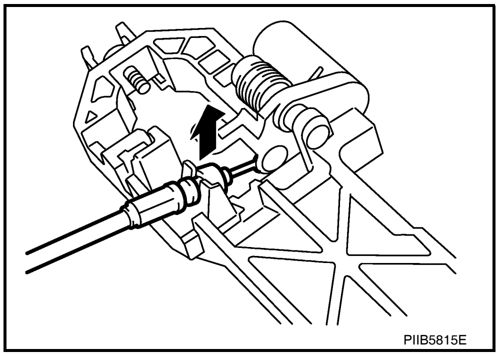
12. Remove the TORX bolt (T30) (A) of the outside handle bracket.



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



14. Disconnect the door lock actuator connector and remove the door lock assembly.
15. Disconnect the outside handle cable from the outside handle bracket connection.



INSTALLATION

Installation is in the reverse order of removal.

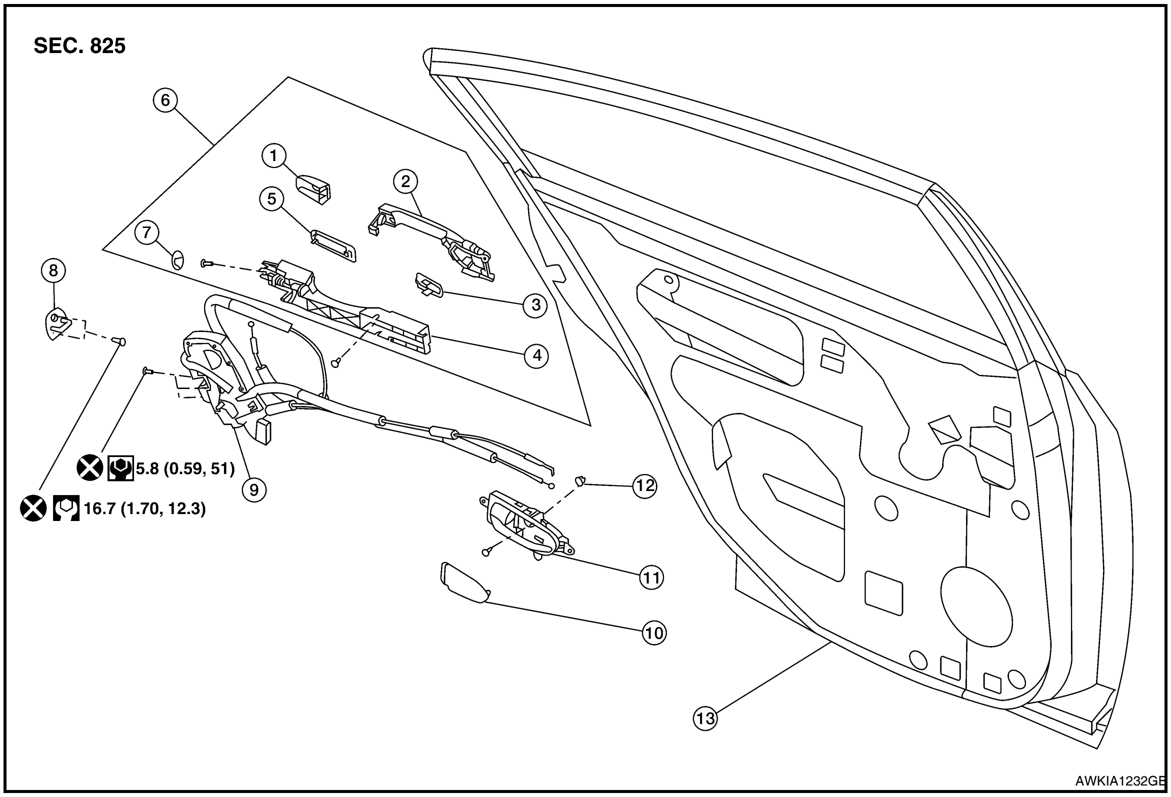
CAUTION:

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:0000000004497081



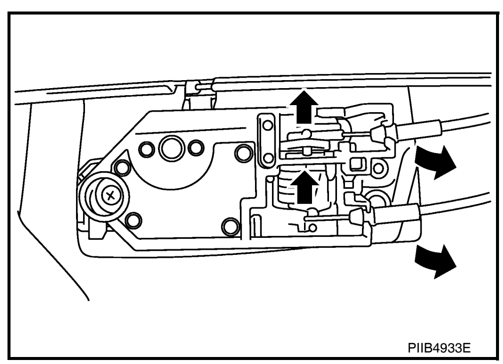
1. Outside handle escutcheon	2. Outside handle	3. Front gasket
4. Outside handle bracket	5. Rear gasket	6. Outside handle assembly
7. Hole plug	8. Rear door striker	9. Rear door lock assembly
10. Cap	11. Inside handle assembly	12. Grommet
13. Rear door assembly		

BACK DOOR LOCK : Removal and Installation

INFOID:0000000004497082

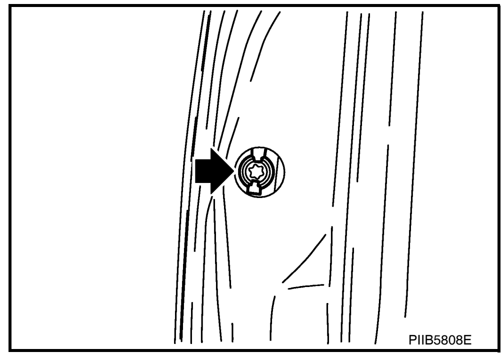
REMOVAL

1. Remove the rear door finisher. Refer to INT-34, "Removal and Installation".
2. Disconnect the inside handle knob cable and lock knob cable from the back side of the inside door handle.

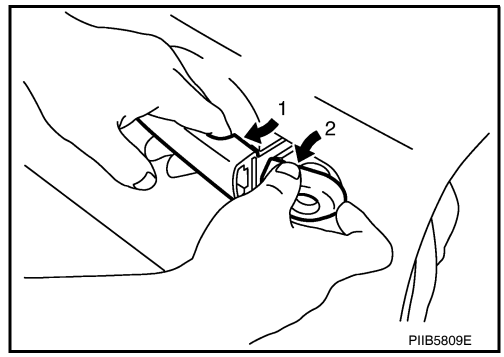


3. Remove the rear door sash. Refer to EXT-43, "Removal and Installation".
4. Remove the rear door window and rear door screen assembly.

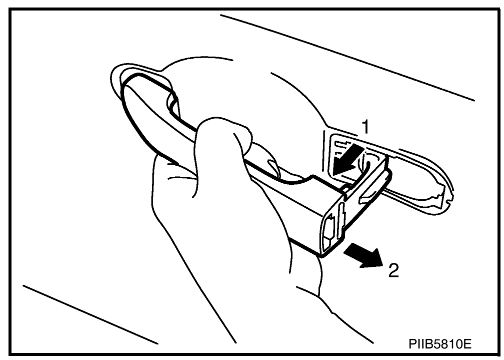
5. Remove door side grommet, and remove outside handle escutcheon bolt (TORX T30) from grommet hole.



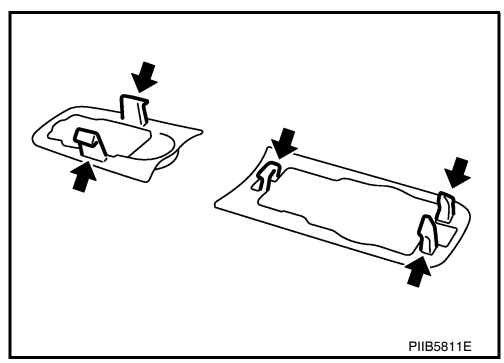
6. While pulling the outside handle, remove outside handle escutcheon.



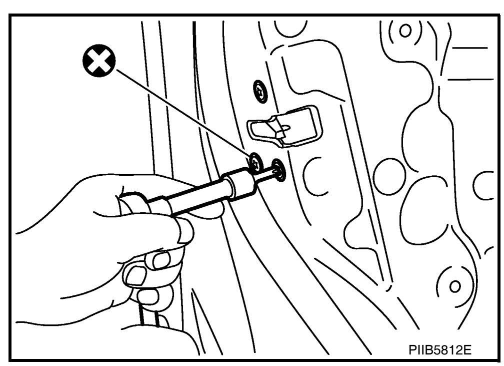
7. While pulling outside handle, slide toward rear of vehicle to remove outside handle.



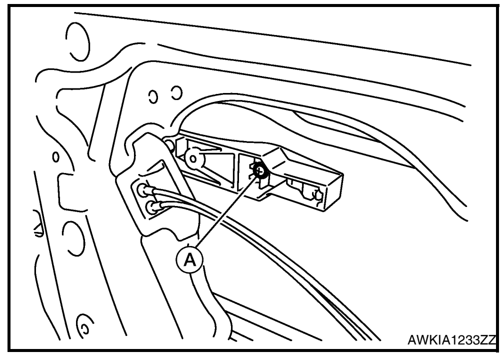
8. Remove the front gasket and rear gasket.



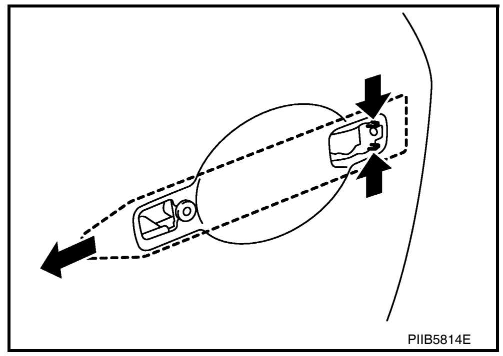
9. Remove the TORX bolts (T30), remove the door lock assembly.



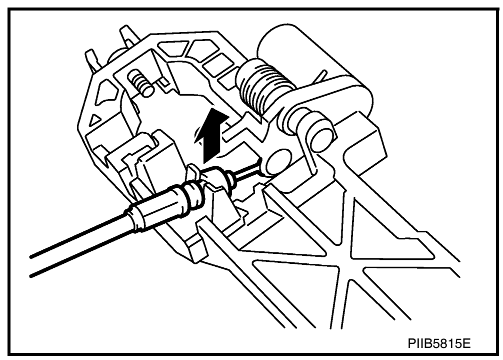
10. Remove the TORX bolt (T30) (A) from the outside handle bracket.



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



12. Disconnect the door lock actuator connector and remove the door lock assembly.
13. Disconnect the outside handle cable from the outside handle bracket.



INSTALLATION

Installation is in the reverse order of removal.

TRUNK LID

TRUNK LID ASSEMBLY

TRUNK LID ASSEMBLY : Removal and Installation

INFOID:0000000004497083

REMOVAL

1. Remove trunk lid finisher. Refer to INT-46, "Removal and Installation".
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

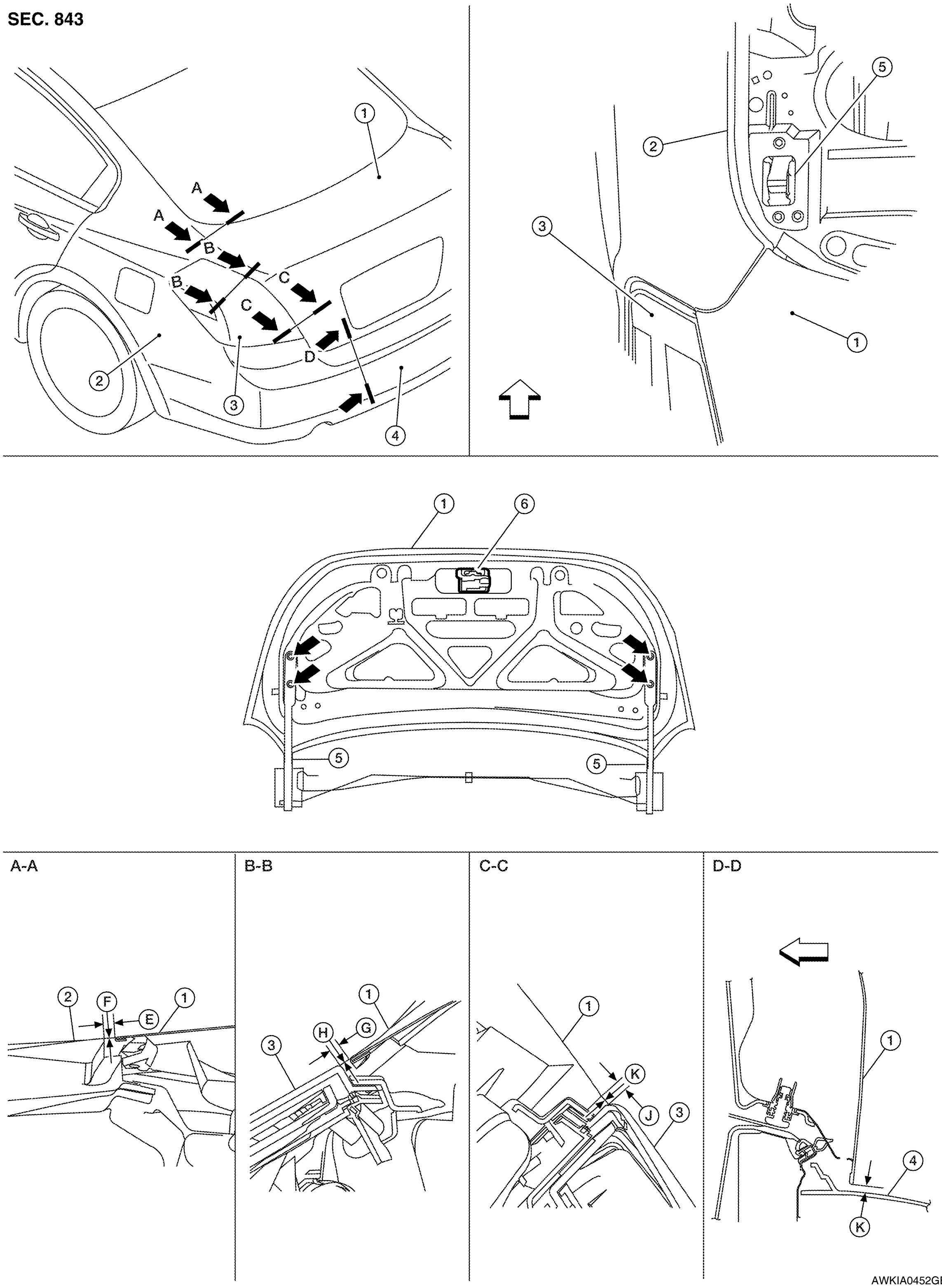
Installation is in the reverse order of removal.

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-630, "TRUNK LID ASSEMBLY : Adjustment".**

TRUNK LID ASSEMBLY : Adjustment

INFOID:0000000004497084



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
⇦	Front				

Unit: mm (in)

Parts		Standard	Right/left clearance (MAX)
A – A	E	4.0 ± 1.0 (0.16 ± 0.04)	2.0 (0.08)
	F	-0.5 ± 1.0 (-0.02 ± 0.04)	2.0 (0.08)
B – B	G	4.0 ± 1.5 (0.16 ± 0.06)	2.0 (0.08)
	H	-0.5 ± 1.5 (-0.02 ± 0.06)	2.0 (0.08)
C – C	J	4.0 ± 2.0 (0.16 ± 0.08)	—
	K	5.9 ± 2.0 (0.23 ± 0.08)	—
D – D	K	5.9 ± 2.0 (0.23 ± 0.08)	—

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-38, "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-38, "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:0000000004497085

LOCK

Removal

1. Remove the trunk lid inner trim panel. Refer to INT-46, "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-46, "Removal and Installation".
2. Remove the bolts and the striker.

Installation

Installation is in the reverse order of removal.

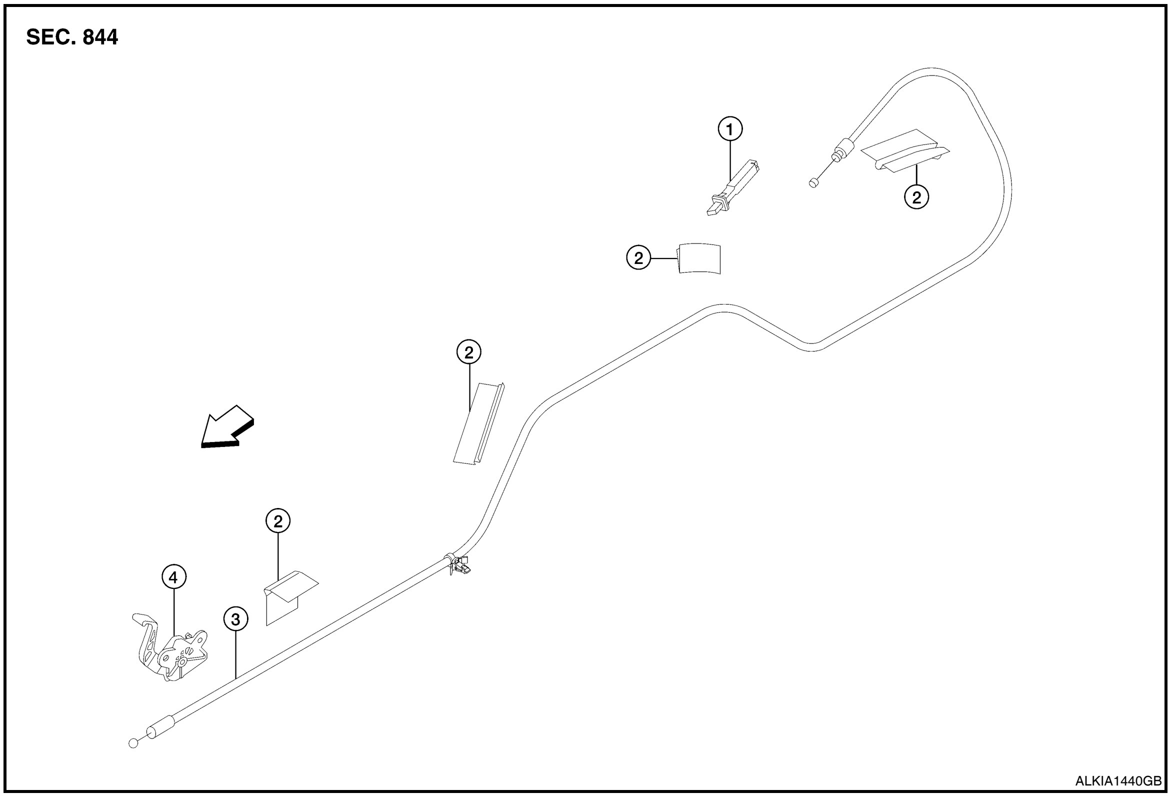
NOTE:

Align the trunk lid lock. Refer to DLK-630, "TRUNK LID ASSEMBLY : Adjustment".

FUEL FILLER LID

Exploded View

INFOID:0000000004497086



1. Fuel door latch
2. Cable protector
3. Fuel door opener cable
4. Fuel door opener handle

⇐ Front

Removal and Installation

INFOID:0000000004497087

REMOVAL

1. Remove the front and rear LH kicking plates. Refer to INT-36, "Removal and Installation".
2. Remove the rear seat. Refer to SE-53, "Removal and Installation".
3. Remove the LH front seat belt anchor. Refer to SB-7, "Exploded View".
4. Remove the LH center pillar lower finisher. Refer to INT-35, "Exploded View".
5. Position the carpet aside.
6. Remove the LH trunk side finisher. Refer to INT-45, "Exploded View".
7. Remove the fuel door opener handle and disconnect the fuel door opener cable.
8. Remove the fuel door latch and disconnect the fuel door opener cable.
9. Remove the fuel door opener cable.

INSTALLATION

Installation is in the reverse order of removal.

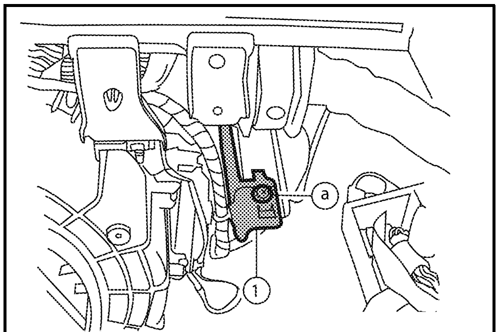
REMOTE KEYLESS ENTRY RECEIVER

Removal

INFOID:0000000004497088

REMOVAL

1. Remove glove compartment. Refer to IP-12, "Removal and Installation".
2. Remove the screw (a), lower the bracket and remote keyless entry receiver (1), then disconnect the harness and remove the receiver.



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Installation

INFOID:0000000004497089

Installation is in the reverse order of removal.