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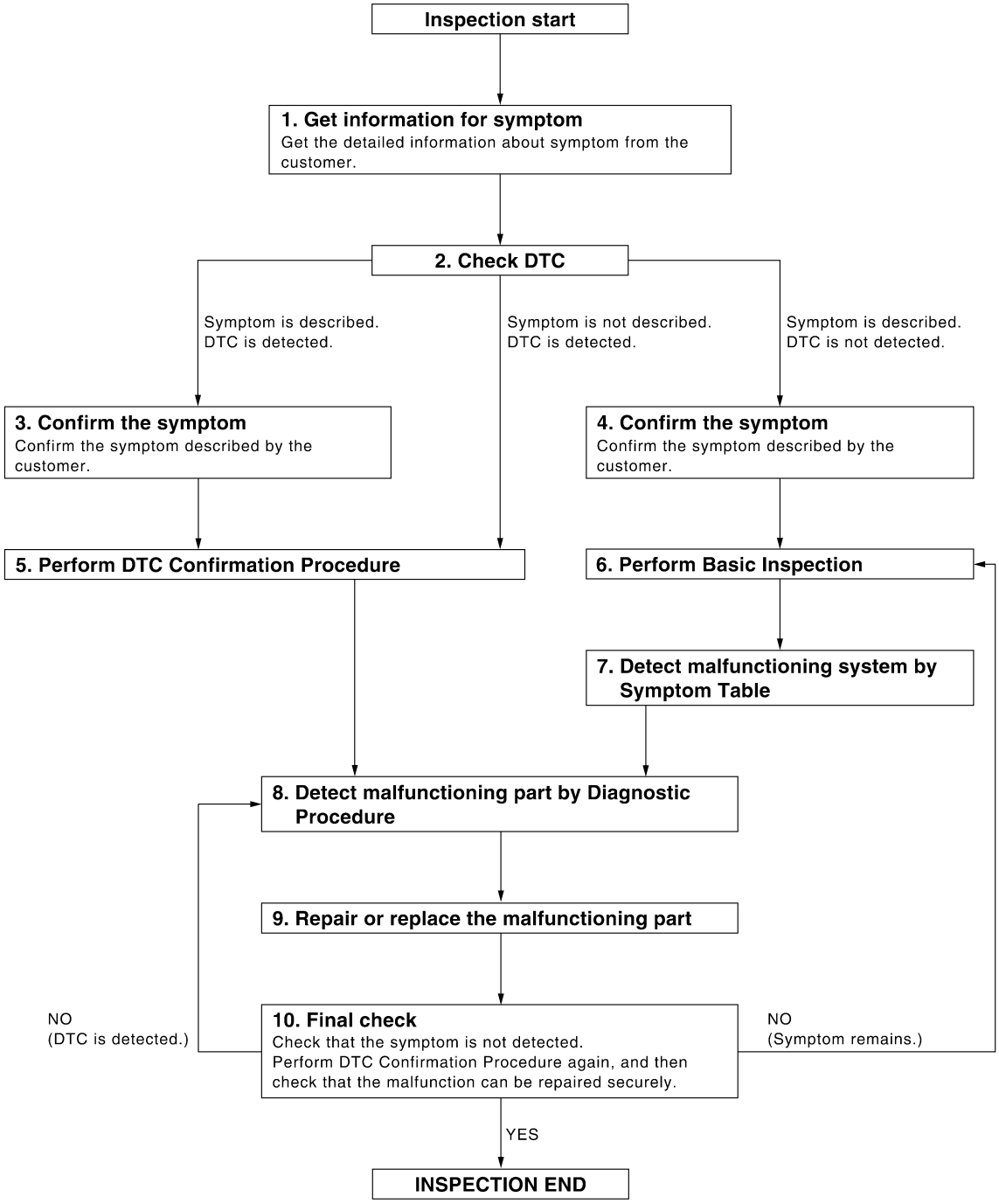
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001396459

OVERALL SEQUENCE



ALKIA0246GB

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 for Intelligent Key unit and BCM.
2. Perform the following procedure if DTC is displayed.

- 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.
If two or more DTCs are detected, refer to DLK-171, "DTC Inspection Priority Chart" (Intelligent Key unit), DLK-189, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 8.
NO >> Refer to XX-XX, "*****".

6.PERFORM BASIC INSPECTION

Perform Basic Inspection. Refer to DLK-211, "Basic Inspection".

>> GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

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

>> GO TO 9.

9.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 10.

10.FINAL CHECK

When DTC was detected in step 9, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunctions have been fully repaired.
When symptom was described by the customer, refer to the confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8.
YES (Symptom remains)>>GO TO 6.
NO >> **INSPECTION END**

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001396460

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

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Refer to the CONSULT-III Operation Manual-NATS.

FUNCTION DIAGNOSIS

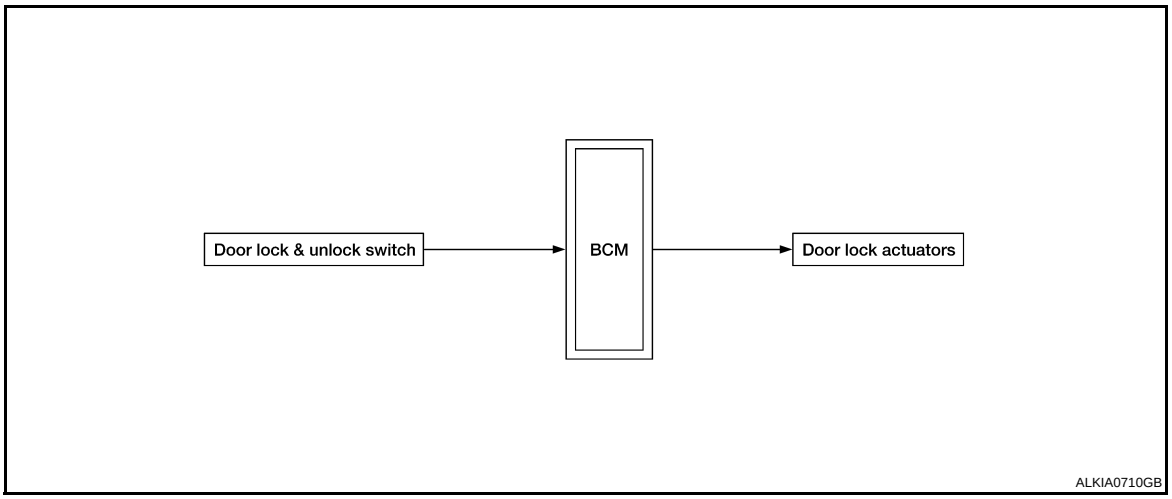
DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

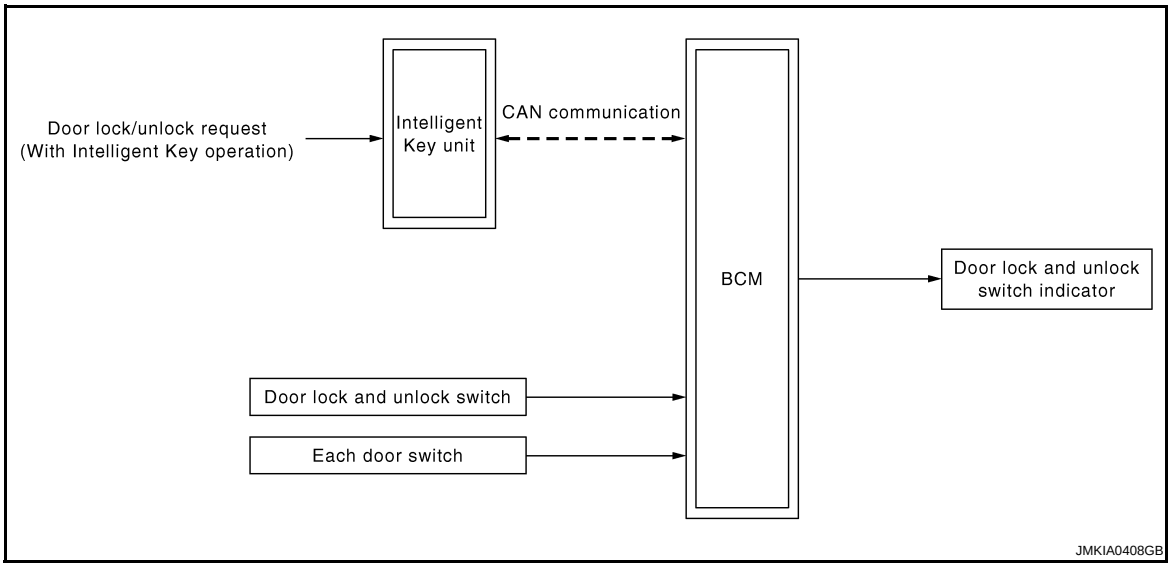
DOOR LOCK AND UNLOCK SWITCH : System Diagram

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DOOR LOCK AND UNLOCK SWITCH OPERATION



DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001396463

DOOR LOCK AND UNLOCK SWITCH OPERATION

Functions are available by operating the door lock and unlock switch on driver door. Interlocked with the lock/unlock operation of door lock and unlock switch, door lock actuators of all doors are locked/unlocked.

Operation Condition

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

Door lock and unlock switch	Operation condition
Lock operation	All of the following conditions are satisfied. • Except driver side doors are closed. • Doors are not locked with Intelligent Key or door request switch.
Unlock operation	All of the following conditions are satisfied. • Doors are not locked with Intelligent Key or door request switch.

NOTE:
When the door lock is locked with Intelligent Key or door request switch, door lock and unlock switch operation will be invalid until either of the following conditions is satisfied.
- Turn ignition switch ON.
- Unlock with Intelligent Key or door request switch.

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION

Door lock and unlock switch indicator indicates door lock status. The indicator turns ON while ignition switch is ON and each door lock is locked. If any door is opened, the indicator will turn OFF.

1 Minute Timer

A timer must be running to turn OFF the indicator. The timer will run for 1 minute after locking with Intelligent Key, door request switch or auto door lock.

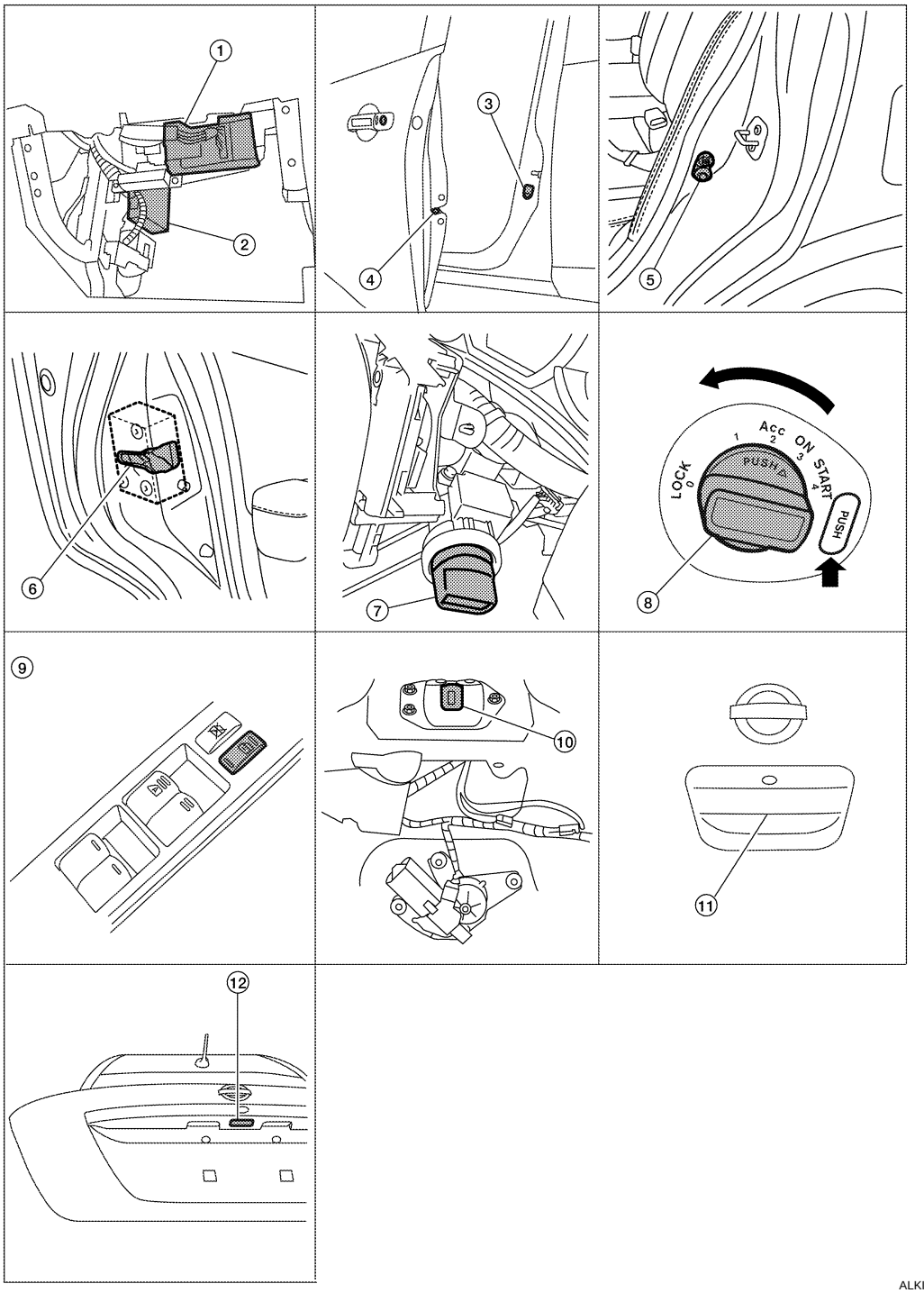
30 Minutes Timer

A timer must be running to turn OFF the indicator. The timer will run for 30 minutes after locking with door lock and unlock switch.

NOTE:
1 minute timer condition is satisfied while the 30 minutes timer is active, however the 30 minutes timer does not change to 1 minute timer condition.

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

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1. BCM M18, M19, M20 (view with glove box removed)
2. Intelligent Key unit M52
3. Front door switch (driver side) B34 (Passenger side) B27
4. Front door lock actuator (driver side) D14 (Passenger side) D114 Door unlock sensor (driver side) D14
5. Rear door switch LH B71 RH B53
6. Rear door lock actuator LH D205 RH D305
7. Key switch and ignition knob switch (A/T) M32
8. Key switch and ignition knob switch (M/T) M32
9. Main power window and door lock/ unlock switch D7, D8
10. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
11. Back door opener switch (hatch-back) D408
12. Trunk lid opener switch (sedan) B61

DOOR LOCK AND UNLOCK SWITCH : Component Description

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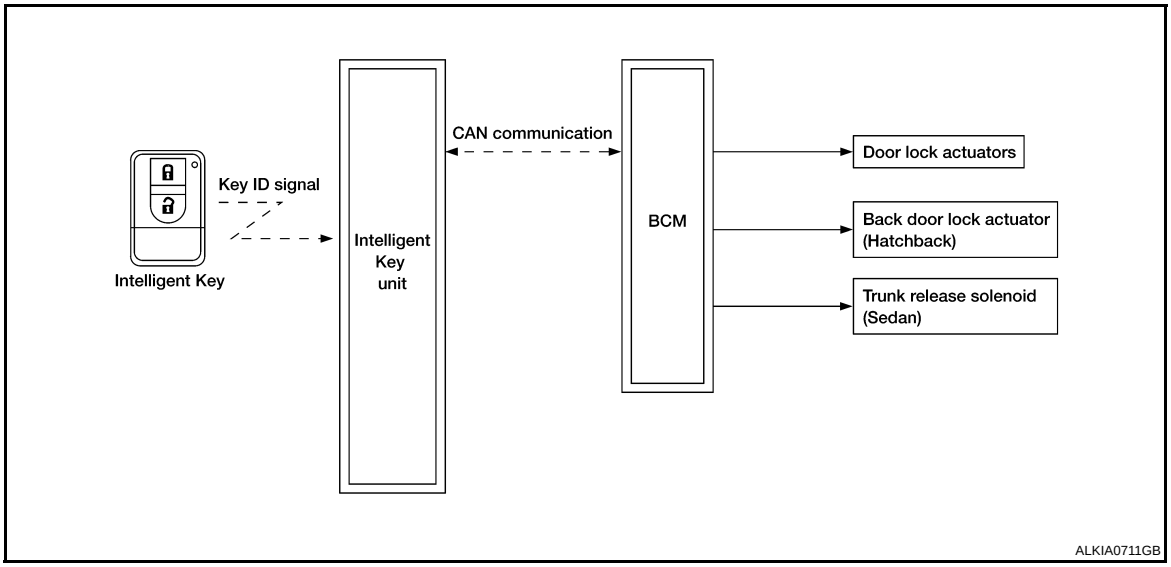
Item	Function
BCM	Controls the door lock function.
Door switch	Detects door state (open or close).
Door lock and unlock switch	Transmits door lock/unlock signal to BCM. Door lock/unlock switch indicator is built-in door lock and unlock switch.
Door lock actuator	Receives door lock/unlock signal from BCM and locks/unlocks each door.

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram

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INTELLIGENT KEY OPERATION



INTELLIGENT KEY : System Description

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INTELLIGENT KEY OPERATION

The Intelligent Key has the same functions as the remote keyless entry system. In addition to other safety features, it can be used to lock and unlock all doors including the back door (hatchback) or the trunk (sedan).
This function can be set to OFF with CONSULT-III. For the setting information, refer to DLK-53, "CONSULT-III Function (INTELLIGENT KEY)".

OPERATION CONDITION

Remote controller operation	Operation condition
Lock	• All doors are closed • Key switch is OFF (key is removed from ignition key cylinder) • Ignition knob switch is OFF (Ignition switch is not pressed)
Unlock	• Key switch is OFF (key is removed from ignition key cylinder) • Ignition knob switch is OFF (Ignition switch is not pressed)

OPERATION AREA

To ensure that the Intelligent Key works effectively, use within a 100 cm range of each door, however the operable range may differ according to surroundings.

DOOR LOCK AND UNLOCK CONTROL

When door lock and unlock button of the Intelligent Key are pressed, lock signal or unlock signal is transmitted from Intelligent Key to Intelligent Key unit.
When Intelligent Key unit receives the door lock and unlock signal, it operates door lock actuator.

ANTI-HIJACK MODE

When door lock is unlocked, pressing LOCK buttons on Intelligent Key once will lock all doors. When door lock is locked, pressing UNLOCK button on Intelligent Key once will unlock driver door. Pressing UNLOCK button on Intelligent Key a second time within 5 seconds from the first time will unlock all doors and back door (hatchback) can be opened with back door opener switch or trunk (sedan) can be opened with trunk lid opener switch.

CONVENIENCE MODE

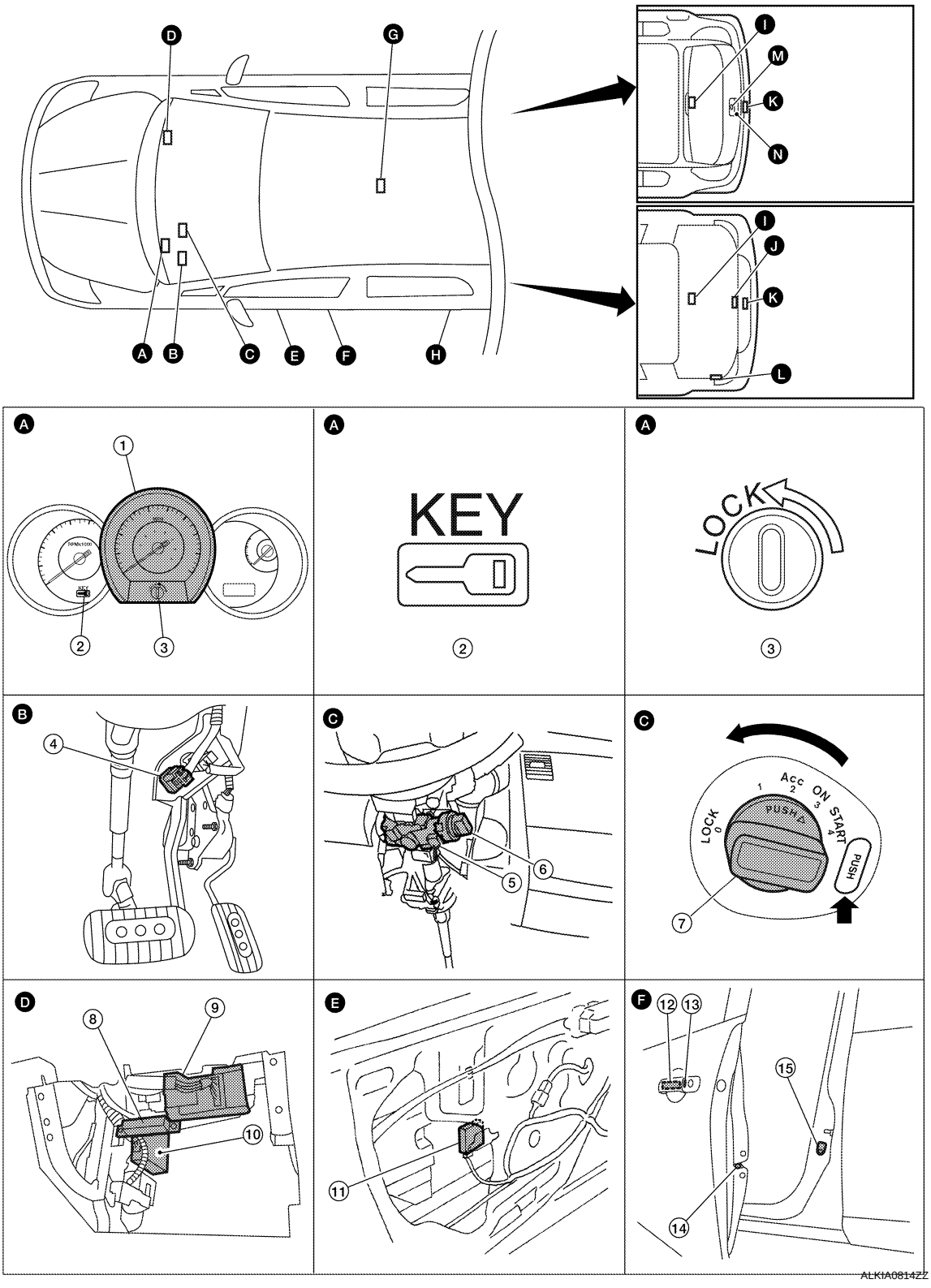
When door lock is unlocked, pressing LOCK buttons on Intelligent Key once will lock all doors. When door lock is locked, pressing UNLOCK button on Intelligent Key once will unlock all doors and back door (hatchback) can be opened with back door opener switch or trunk (sedan) can be opened with trunk lid opener switch.

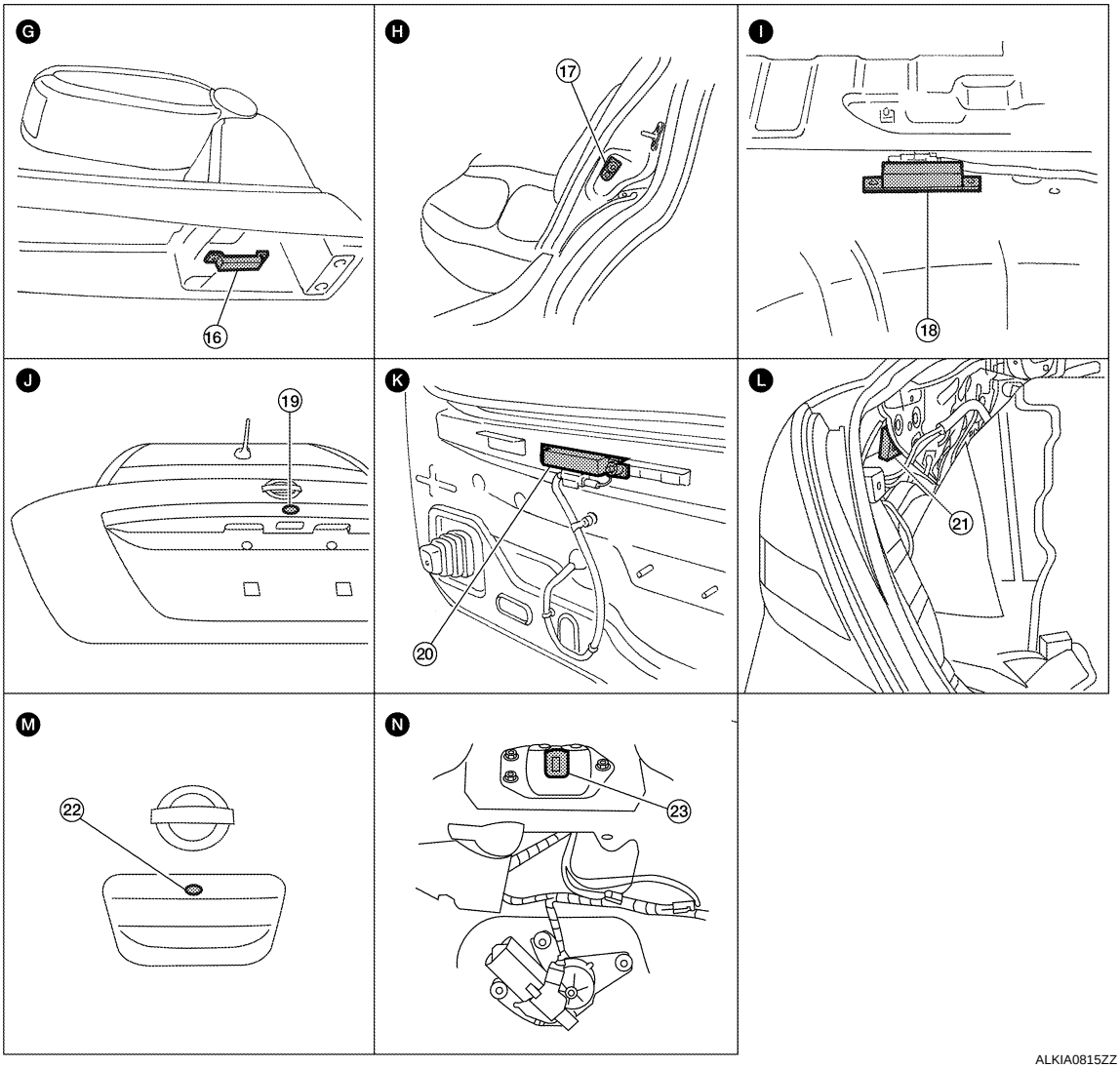
NOTE:

Anti-hijack mode can be set to ON or OFF with CONSULT-III. Once OFF, the convenience mode will be active. For setting information with CONSULT-III, refer to DLK-53, "CONSULT-III Function (INTELLIGENT KEY)". For setting information without CONSULT-III, refer to Owner's Manual.

INTELLIGENT KEY : Component Parts Location

INFOID:0000000001396468





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1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch E13 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
10. Intelligent Key Unit M52
11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
12. Front outside antenna (driver side) D10 (Passenger side) D106
13. Front door request switch (driver side) D5 (Passenger side) D103
14. Door unlock sensor D14 [Front door lock actuator (driver side)]
15. Front door switch (driver side) B34 (Passenger side) B29
16. Front console antenna B45 (view with front console removed)
17. Rear door switch LH B71 RH B53
18. Rear floor antenna B46 (behind rear seat)
19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

INTELLIGENT KEY : Component Description

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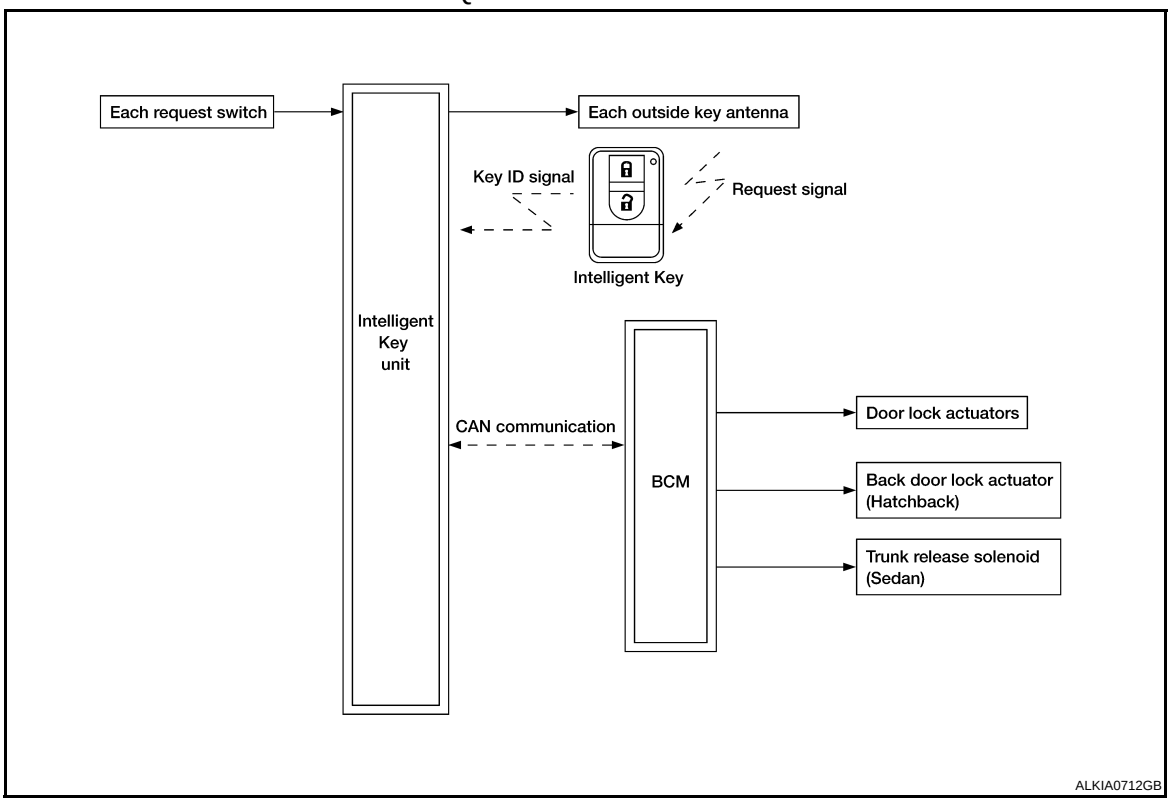
Item	Function
Intelligent Key unit	Controls the door lock/unlock operation with BCM.
BCM	Controls the door lock/unlock operation with Intelligent Key unit.
Door switch	Detects door state (open or closed).
Key switch	Detects that mechanical key is inserted into ignition key cylinder.
Ignition knob switch	Detects ignition knob state (push or release).
Outside key antenna	Detects that Intelligent Key is in detection area of outside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when lock/unlock button is pressed.
Door lock actuator	Receives lock/unlock signal from BCM and locks and unlocks each door.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : System Diagram

INFOID:0000000001396470

DOOR REQUEST SWITCH OPERATION



DOOR REQUEST SWITCH : System Description

INFOID:0000000001396471

DOOR REQUEST SWITCH OPERATION

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 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 (Intelligent Key unit).

This function can be set to OFF with CONSULT-III. For the setting information, refer to DLK-53, "CONSULT-III Function (INTELLIGENT KEY)".

CAUTION:

The driver should always carry the Intelligent Key

OPERATION CONDITION

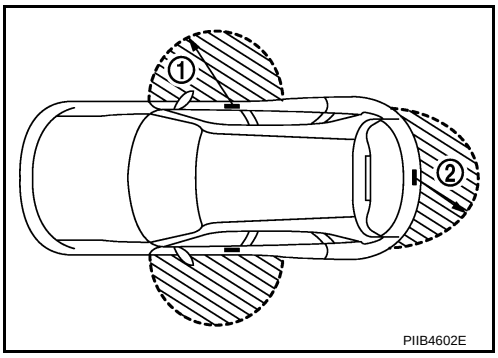
If the following conditions are not satisfied, door lock and unlock operation is not performed even if the request switch is operated.

Each request switch operation	Operation condition
Lock operation	• All doors are closed. • Key switch is OFF. (Key is removed from ignition key cylinder.) • Ignition knob switch is OFF. (Ignition switch is not pushed.) • Any Intelligent Key is not inside the vehicle • Intelligent Key is within outside key antenna detection area
Unlock Operation	• Key switch is OFF. (Key is removed from ignition key cylinder.) • Ignition knob switch is OFF. (Ignition switch is not pushed.) • Intelligent Key is not inside 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 and unlock function is in the range of approximately 80 cm (31.50 in) surrounding the driver and passenger door handles (1) and the back door (hatchback) or trunk (sedan) request switch. However, this operating range depends on the ambient conditions.



DOOR LOCK AND UNLOCK CONTROL

When the Intelligent Key detects that door request switch is pressed, it starts corresponding with outside key antenna (door of request switch pressed side). Then, the Intelligent Key is checked to be 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 Intelligent Key unit. Intelligent Key unit receives the key ID signal and compares it with the registered key ID. Intelligent Key unit sends the door lock and unlock signal to BCM via CAN communication.

ANTI-HIJACK MODE

When door lock is unlocked, pressing LOCK buttons on Intelligent Key once will lock all doors. When door lock is locked, pressing UNLOCK button on Intelligent Key once will unlock driver door. Pressing UNLOCK button on Intelligent Key a second time within 5 seconds from the first time will unlock all doors and back door (hatchback) can be opened with back door opener switch or trunk (sedan) can be opened with trunk lid opener switch.

CONVENIENCE MODE

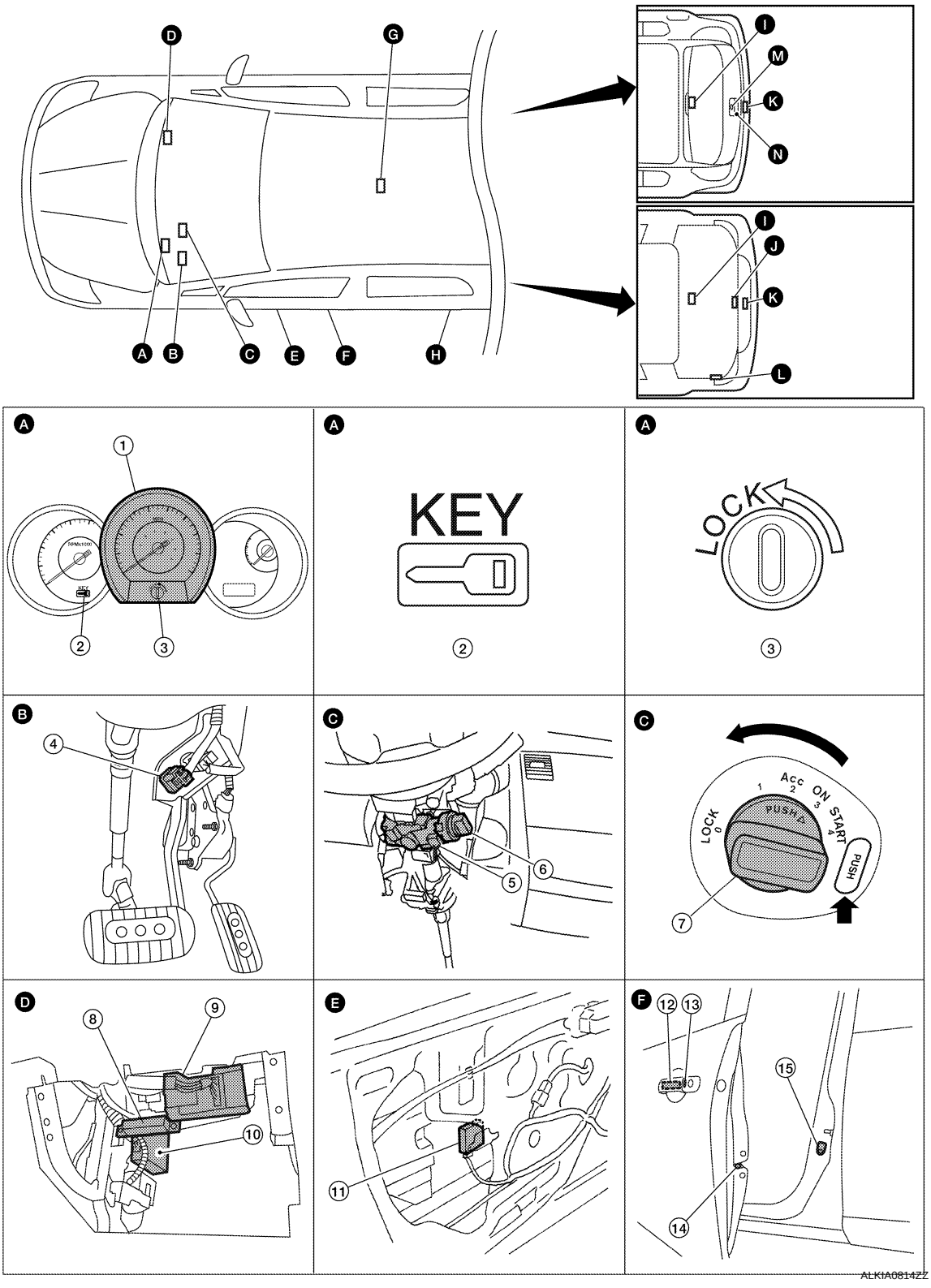
When door lock is unlocked, pressing LOCK buttons on Intelligent Key once will lock all doors. When door lock is locked, pressing UNLOCK button on Intelligent Key once will unlock all doors and back door (hatchback) can be opened with back door opener switch or trunk (sedan) can be opened with trunk lid opener switch.

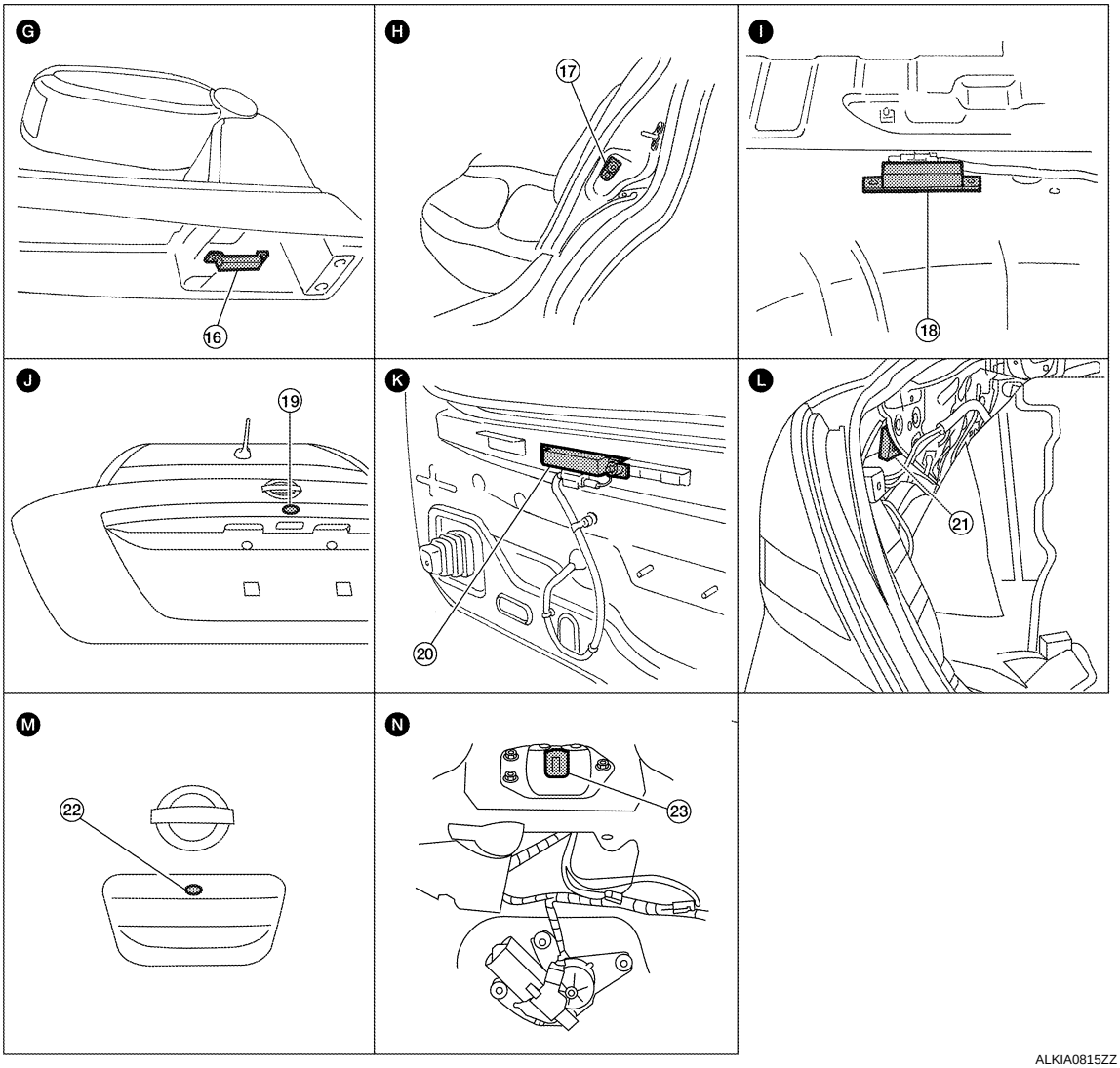
NOTE:

Anti-hijack mode can be set to ON or OFF with CONSULT-III. Once OFF, the convenience mode will be active. For setting information with CONSULT-III, refer to DLK-53, "CONSULT-III Function (INTELLIGENT KEY)". For setting information without CONSULT-III, refer to Owner's Manual.

DOOR REQUEST SWITCH : Component Parts Location

INFOID:0000000001396472





ALKIA0815ZZ

1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch E13 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
10. Intelligent Key Unit M52
11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
12. Front outside antenna (driver side) D10 (Passenger side) D106
13. Front door request switch (driver side) D5 (Passenger side) D103
14. Door unlock sensor D14 [Front door lock actuator (driver side)]
15. Front door switch (driver side) B34 (Passenger side) B29
16. Front console antenna B45 (view with front console removed)
17. Rear door switch LH B71 RH B53
18. Rear floor antenna B46 (behind rear seat)
19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

DOOR REQUEST SWITCH : Component Description

INFOID:0000000001396473

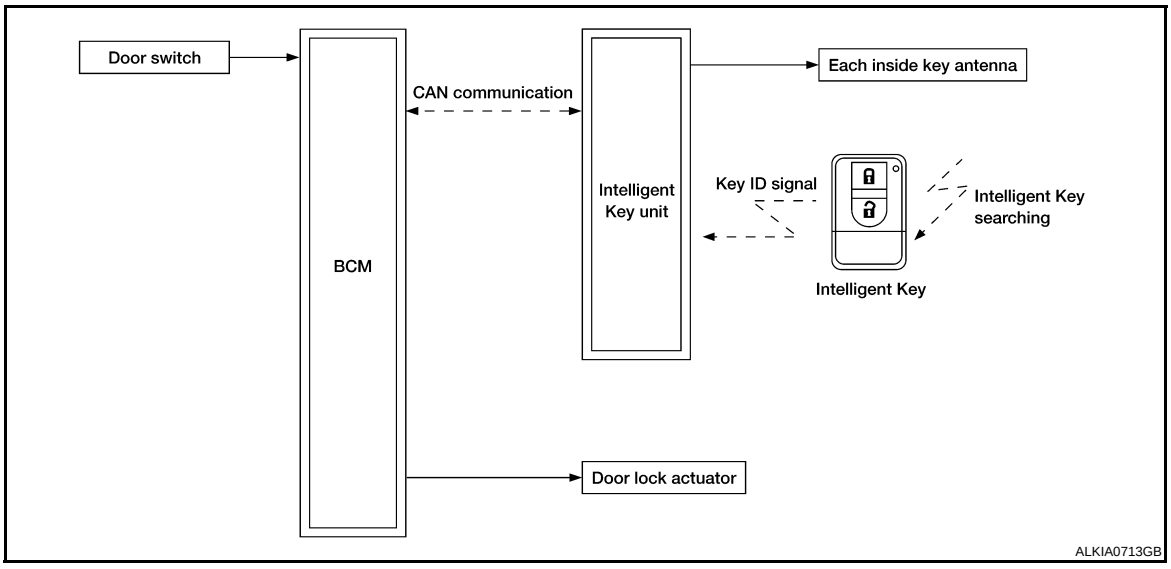
Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock/unlock function with Intelligent Key unit.
Door request switch	Transmits opertion signal (lock and unlock) to Intelligent Key unit.
Door switch	Detects door state (open or closed).
Key switch	Detects that mechanical key is inserted into ignition key cylinder.
Ignition knob switch	Detects ignition knob state (push or release).
Outside key antenna	Detects that Intelligent Key is in detection area of outside key antenna.
Inside key antenna	Detects that Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when request signal is received from outside key antenna.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.

KEY REMINDER

KEY REMINDER : System Diagram

INFOID:0000000001396474

KEY REMINDER OPERATION



KEY REMINDER : System Description

INFOID:0000000001396475

KEY REMINDER OPERATION

Key reminder have the following 2 functions.

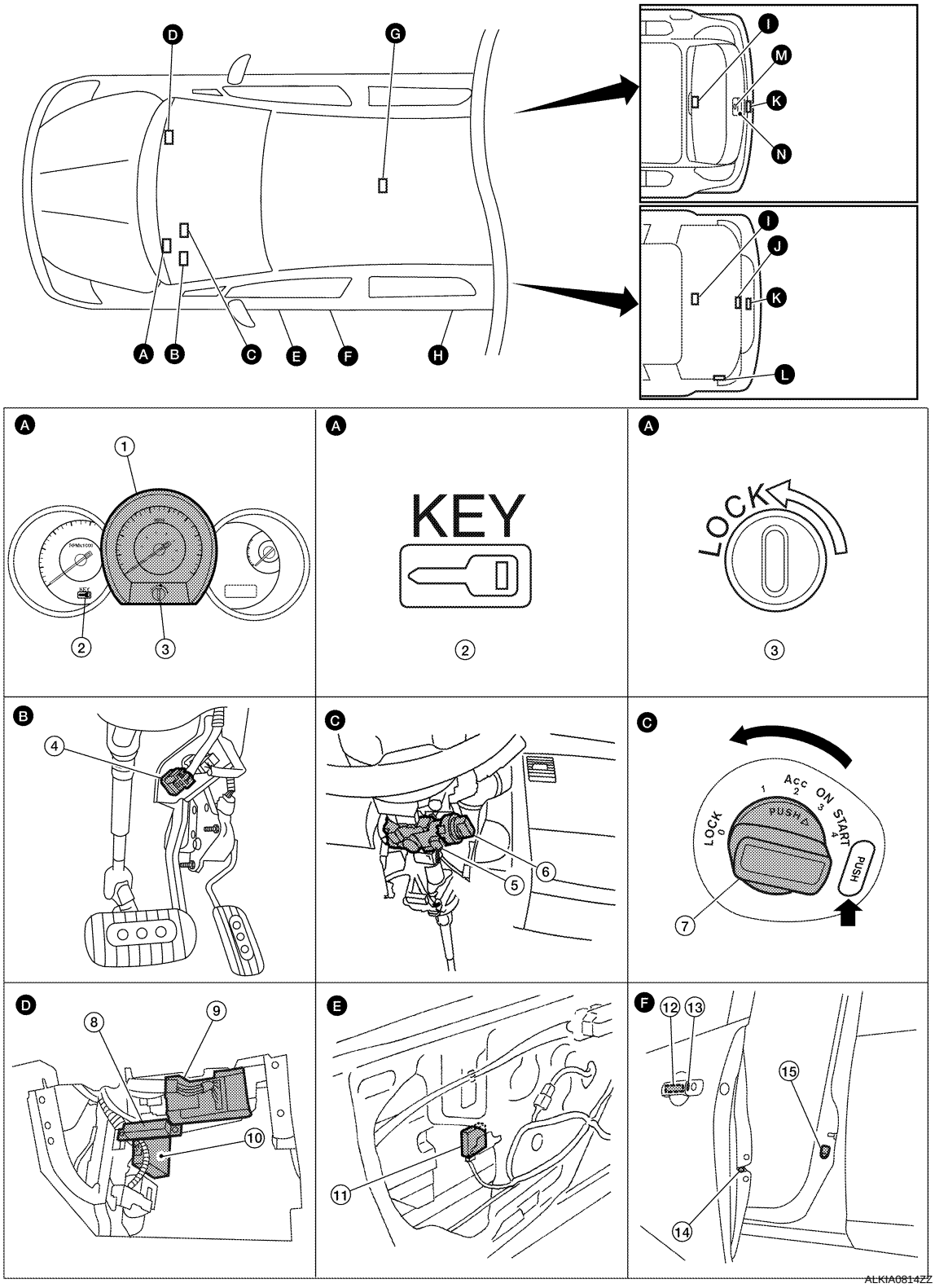
Operation	Operation condition	Operation
Driver door close	Right after driver side door is closed under the following conditions. • Door lock operation. • Driver side door is opened. • Driver side door is in unlock state.	All doors unlock
Any door open to all doors close	Right after all doors are closed under the following conditions. • Intelligent Key is inside the vehicle. • Any door is opened. • All doors are locked by door lock and unlock switch.	• All doors unlock • Active Intelligent Key warning buzzer

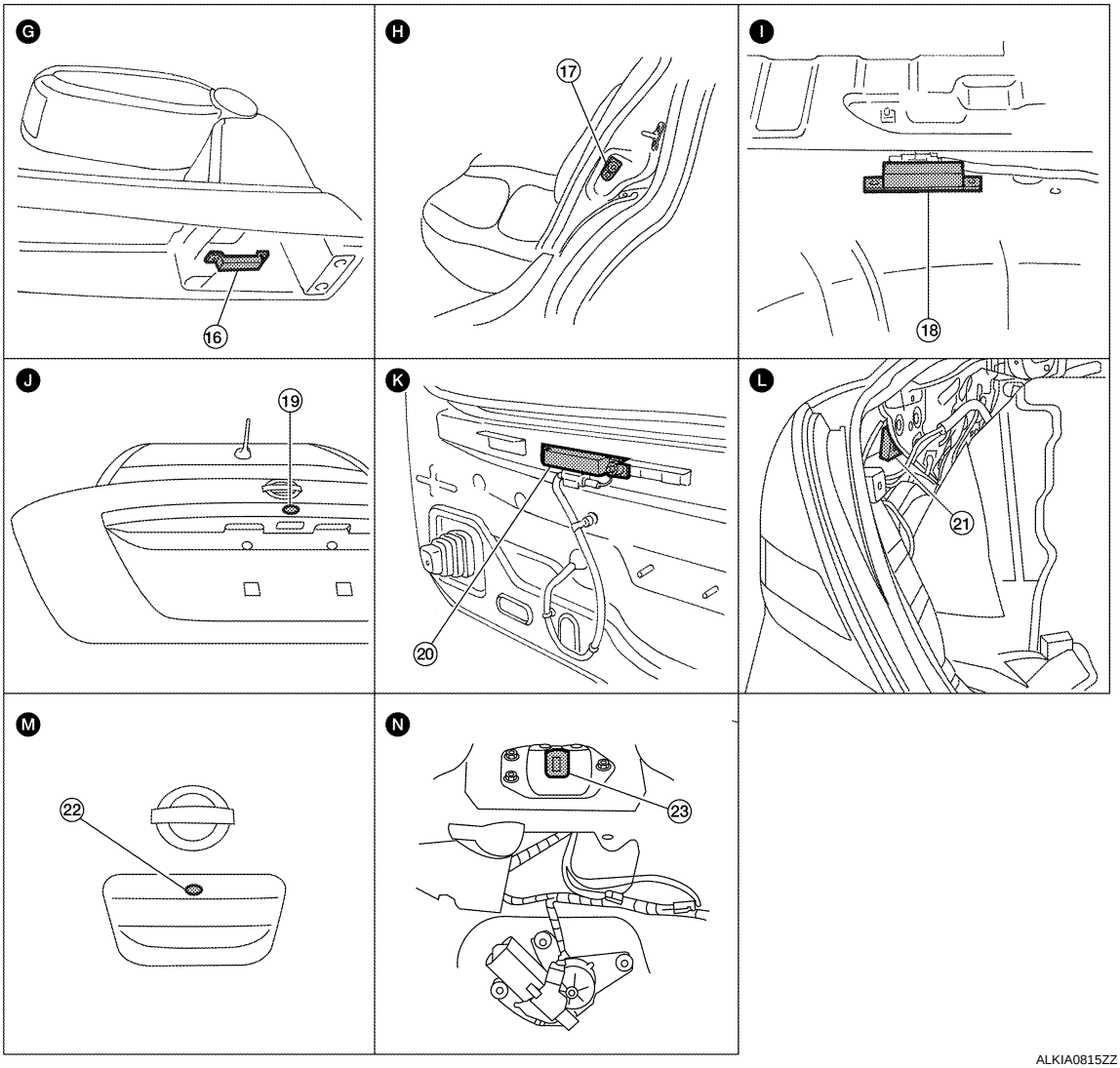
CAUTION:

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 of an open door.

KEY REMINDER : Component Parts Location

INFOID:0000000001396476





ALKIA0815ZZ

1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch E13 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
10. Intelligent Key Unit M52
11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
12. Front outside antenna (driver side) D10 (Passenger side) D106
13. Front door request switch (driver side) D5 (Passenger side) D103
14. Door unlock sensor D14 [Front door lock actuator (driver side)]
15. Front door switch (driver side) B34 (Passenger side) B29
16. Front console antenna B45 (view with front console removed)
17. Rear door switch LH B71 RH B53
18. Rear floor antenna B46 (behind rear seat)
19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

KEY REMINDER : Component Description

INFOID:0000000001396477

Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock and unlock operation with Intelligent Key unit.
Door switch	Detects door state (open or closed).
Inside key antenna	Detects that Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when Intelligent Key is searching.
Door lock actuator	Receives lock and unlock signal from BCM and locks/unlocks each door.

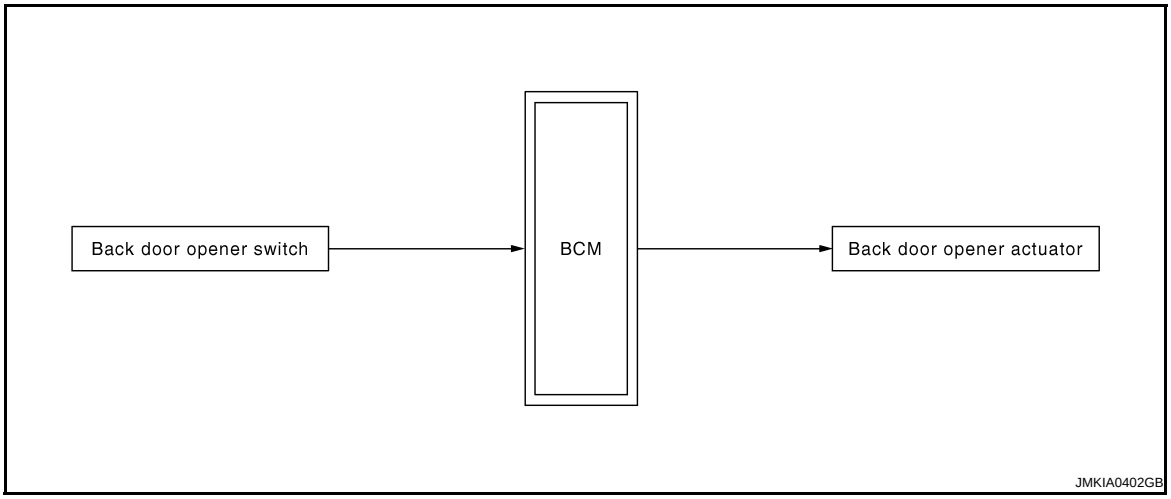
BACK DOOR OPENER FUNCTION

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001396490

BACK DOOR OPENER OPERATION



BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001396491

BACK DOOR OPENER OPERATION

When back door opener switch is pressed, BCM opens back door opener actuator.

NOTE:

Back door opener actuator is not for locking the back door. The function is only to open the back door.

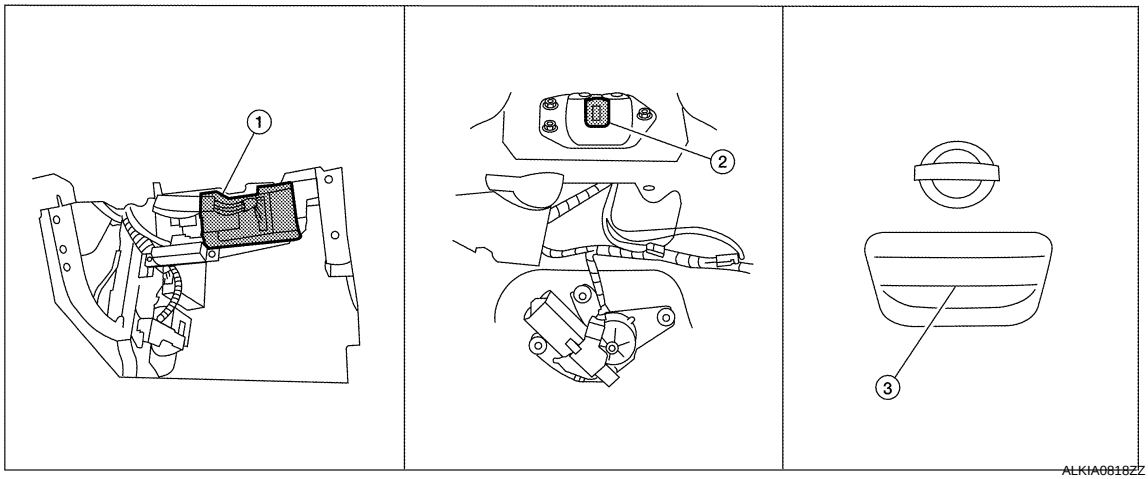
OPERATION CONDITION

If the following conditions are not satisfied, back door opener operation is not performed.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

BACK DOOR OPENER SWITCH : Component Parts Location

INFOID:0000000001396492



1. BCM M18, M20 (view with glove box removed)
2. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
3. Back door opener switch D408

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001396493

Item	Function
BCM	Controls the back door opener function.
Back door opener switch	Transmits back door opener switch operation signal to BCM.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

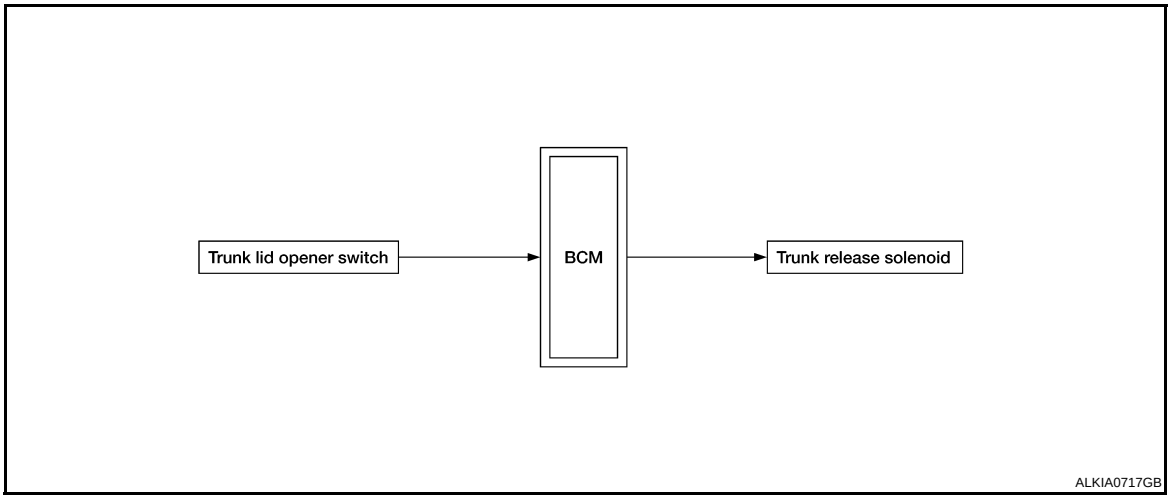
TRUNK LID OPENER

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : System Diagram

INFOID:0000000001451786

TRUNK LID OPENER OPERATION



TRUNK LID OPENER SWITCH : System Description

INFOID:0000000001451787

TRUNK LID OPENER OPERATION

When trunk lid opener switch is pressed, BCM opens trunk release solenoid.

NOTE:

Trunk release solenoid is not for locking the back door. The function is only to open the trunk.

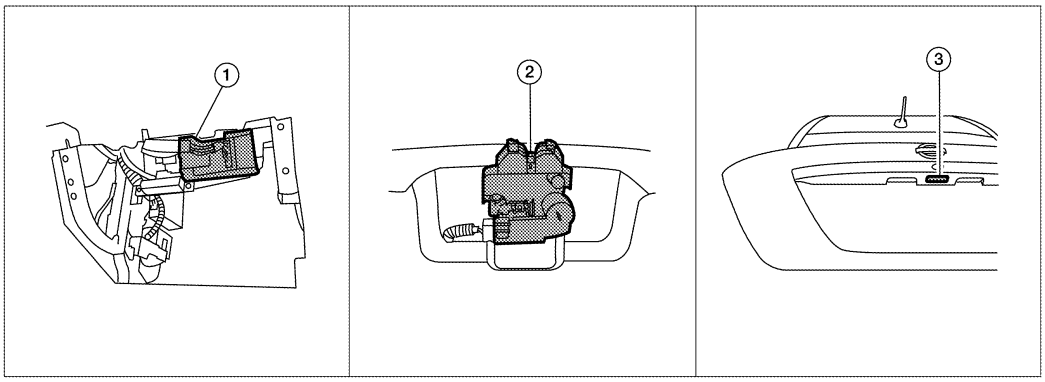
OPERATION CONDITION

If the following conditions are not satisfied, trunk release operation is not performed.

Trunk lid opener switch operation	Operation condition
Trunk release solenoid	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

TRUNK LID OPENER SWITCH : Component Parts Location

INFOID:0000000001451788



1. BCM M18, M20 (view with glove box removed)
2. Trunk lamp switch and trunk release solenoid B66
3. Trunk lid opener switch B61

TRUNK LID OPENER SWITCH : Component Description

INFOID:0000000001451789

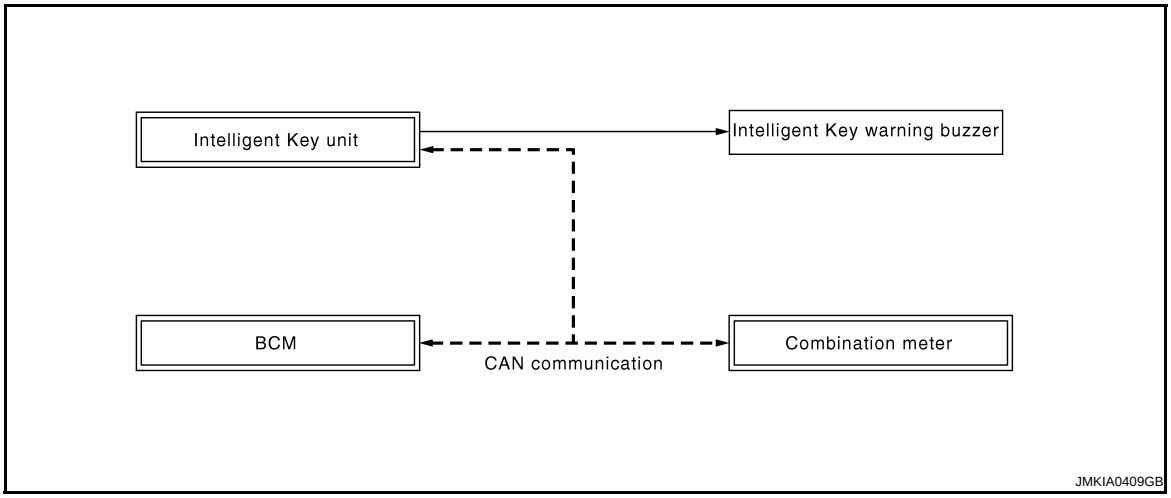
Item	Function
BCM	Controls the trunk lid opener switch function.
Trunk lid opener switch	Transmits trunk lid opener switch operation signal to BCM.
Trunk release solenoid	Opens the trunk with the trunk release solenoid signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

WARNING FUNCTION

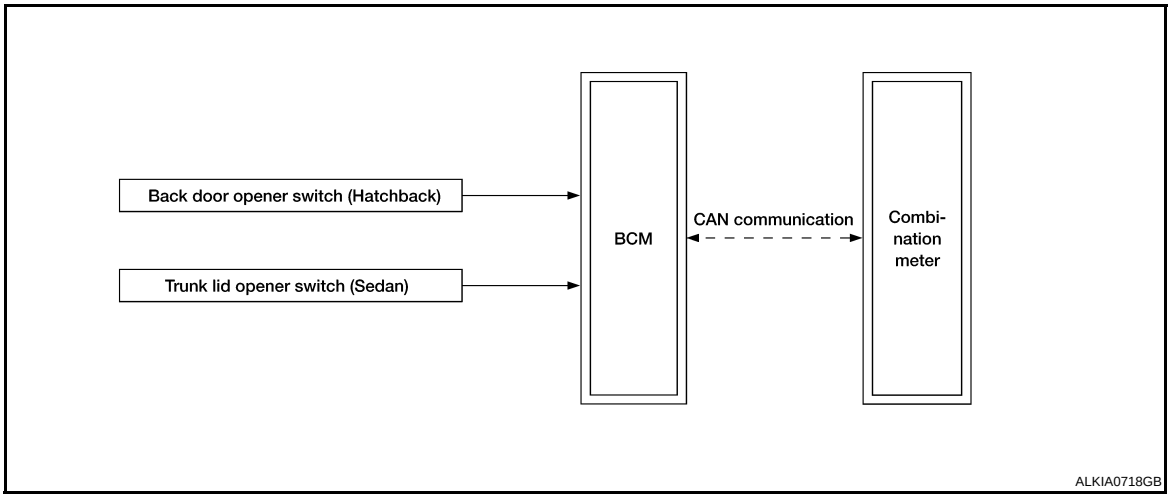
System Diagram

INFOID:0000000001396494

INTELLIGENT KEY WARNING OPERATION



BACK DOOR/TRUNK LID OPEN WARNING OPERATION



System Description

INFOID:0000000001396495

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(s), key warning lamps and buzzer (built in combination meter).

INTELLIGENT KEY WARNING OPERATION

Once one of the following conditions below is established, alert or warning will be executed.

Warning/Information functions		Operation conditions	Warning lamp	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer(s)
Ignition knob return forgotten warning		When all the conditions below are met. • Ignition knob: OFF or LOCK (knob is pressed). • Door switch (driver side): ON (Door is open).	—	Active for 5 seconds (pipipipi, pipipipi···)	—
Ignition key warning (when mechanical key is used)		When all the conditions below are met. • Ignition switch: OFF position. • Key switch: ON (inserted) • Door switch (driver side): ON (Door is open).	—	Active for 5 seconds (pipipipi, pipipipi···)	—
OFF position warning		When all the conditions below are met. • Ignition switch is between ACC and OFF position or ignition knob is pressed in while ignition switch is in LOCK position. • 3 seconds in the above state have passed.	"LOCK" (RED blinking)	Active for 1 second (pipi, pipi···)	—
Take away warning	Any door open to all doors closed	When all the conditions below are met. • Ignition switch: Except LOCK position. • Door switch: ON to OFF (Door is open to closed). • Intelligent Key cannot be detected inside the vehicle.	"KEY" (RED blinking)	—	Active (pi, pi, pi)
	Door is open	When all the conditions below are met. • Door switch: ON (Door is open) • Key ID verification every 5 seconds when registered Intelligent Key can not be detected inside the vehicle.	"KEY" (RED blinking)	—	—
	Take away through window	When all the conditions below are met. • Key ID verification: OK • Every 30 seconds when registered Intelligent Key cannot be detected inside the vehicle or result of vehicle speed verification is NG. (The registered Intelligent Key cannot be detected inside the vehicle when ignition switch is ON.) • Key switch: OFF (Key is removed from ignition key cylinder.)	"KEY" (RED blinking)	Active for 3 seconds (pipipi···	—

Warning/Information functions		Operation conditions	Warning lamp	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer(s)
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). • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserted into ignition key cylinder. • Intelligent Key is inside vehicle.	—	—	Active for 2 seconds (pipipi···)
	Intelligent Key button operation	When Intelligent Key button is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserted into ignition key cylinder.	—	—	Active for 2 seconds (pipipi···)
Intelligent Key low battery warning		When Intelligent Key battery voltage is low, Intelligent Key unit is detected after ignition switch is turned ON.	"KEY" (GREEN blinking for 30 seconds)	—	—

KEY WARNING LAMP & LOCK WARNING LAMP

The key indicator and lock indicator indicates Intelligent Key system status.

Operation Condition

Behavior of lamps			Operation condition
KEY	GREEN	Lighting	All the following conditions are satisfied. • Ignition knob is pushed in LOCK position. (Ignition knob switch is ON) • Ignition key is removed from ignition key cylinder. (Key switch is OFF) • Intelligent Key is detected inside of the vehicle. • KEY RED lighting/blinking conditions are not satisfied.
		Blinking	while Intelligent Key low battery warning is operating.
	RED	Lighting	All the following conditions are satisfied. • Ignition knob is pushed. (Ignition knob switch is ON) • Ignition key is removed from ignition key cylinder. (Key switch is OFF) • Intelligent Key is not detected inside of the vehicle.
		Blinking	All the following conditions are satisfied. • Take away warning is operating. • KEY RED lighting condition is not satisfied.
LOCK		Blinking	While OFF position warning is operating.
KEY(RED) and LOCK lighting			All the following conditions are satisfied. • Ignition switch is ON. • Steering lock ID is NG.

BACK DOOR/TRUNK OPEN WARNING OPERATION

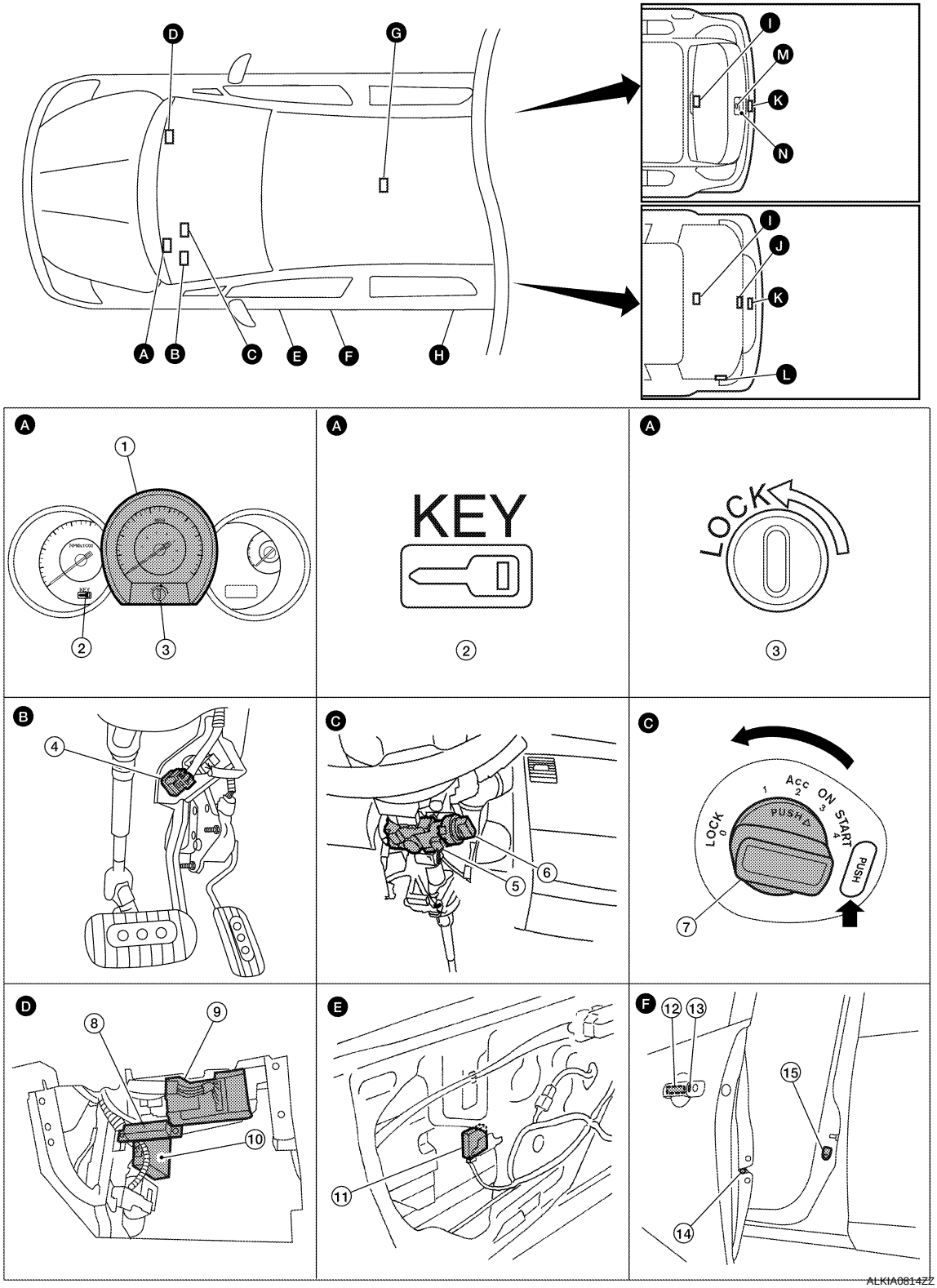
When back door (hatchback) or trunk lid (sedan) opener switch is operated, when door lock is locked with door lock and unlock switch, speed sensing lock or only driver side is unlocked with anti-hijack function, the buzzer (built in combination meter) will sound.

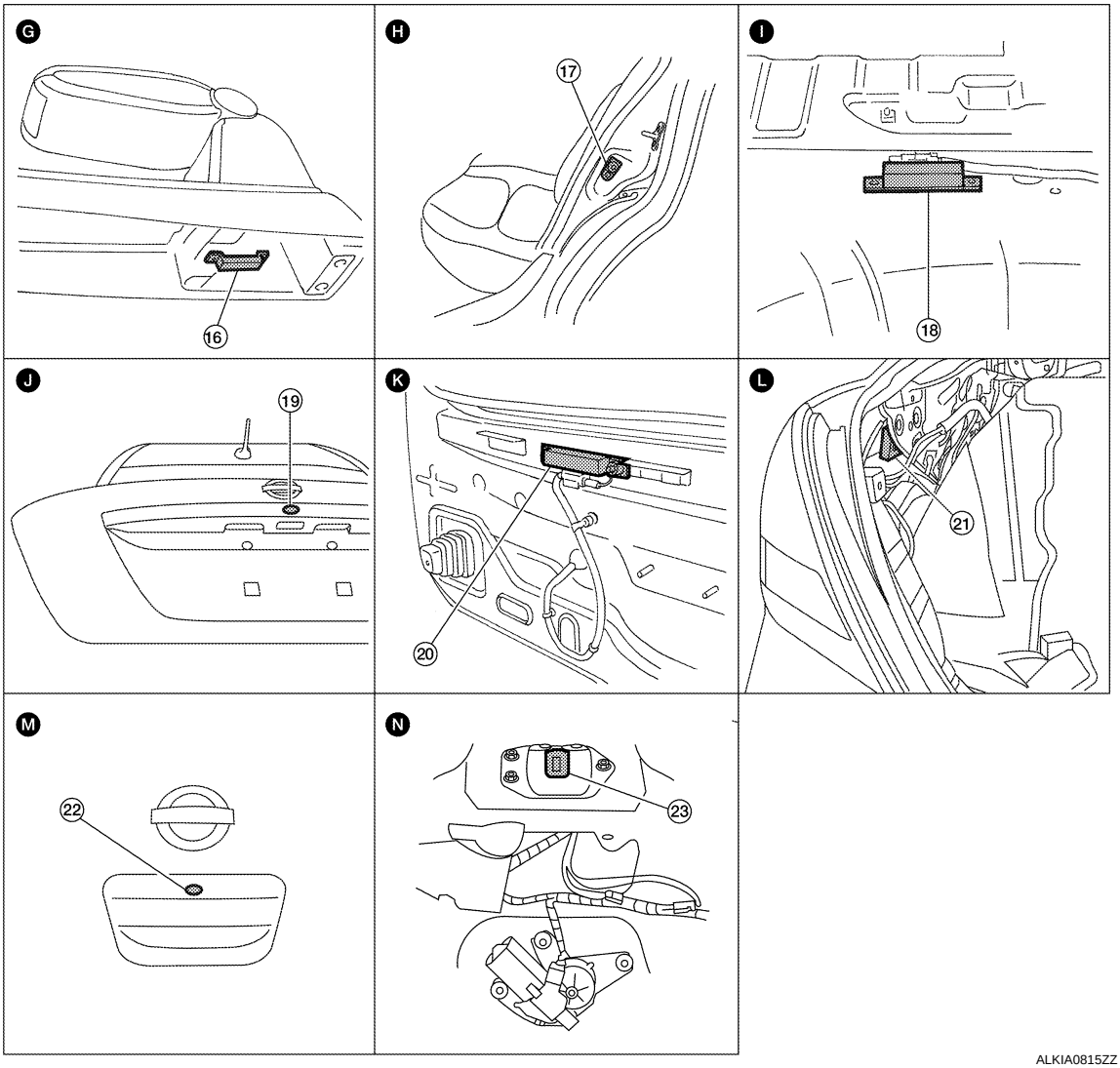
KEY REMINDER OPERATION

- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while the driver door is open and mechanical key is inserted into ignition key cylinder.
- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while any door other than the driver door is open.

Component Parts Location

INFOID:0000000001396496





ALKIA0815ZZ

1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch E13 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
10. Intelligent Key Unit M52
11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
12. Front outside antenna (driver side) D10 (Passenger side) D106
13. Front door request switch (driver side) D5 (Passenger side) D103
14. Door unlock sensor D14 [Front door lock actuator (driver side)]
15. Front door switch (driver side) B34 (Passenger side) B29
16. Front console antenna B45 (view with front console removed)
17. Rear door switch LH B71 RH B53
18. Rear floor antenna B46 (behind rear seat)
19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

Component Description

INFOID:0000000001396497

Item	Function
BCM	Controls the warning function with Intelligent Key unit.
Intelligent Key unit	Controls the warning function with BCM.
Key switch	Detects that mechanical key is inserted into ignition key cylinder.
Door switch	Detects door state (open or closed).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM.
Intelligent Key unit	Requests to turn ON hazard warning lamp to BCM and turn signal indicator to combination meter.
Combination meter	Turns ON the LOCK indicator, KEY indicator, turn signal indicator and buzzer (built in combination meter) by the request from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer (driver side)	Sounds by the request from Intelligent Key unit.
Intelligent Key warning buzzer (trunk)*	Sounds by the request from Intelligent Key unit.
Back door opener switch**	Transmits back door open signal to BCM
Trunk lid opener switch*	Transmits trunk open signal to BCM

* : Sedan only

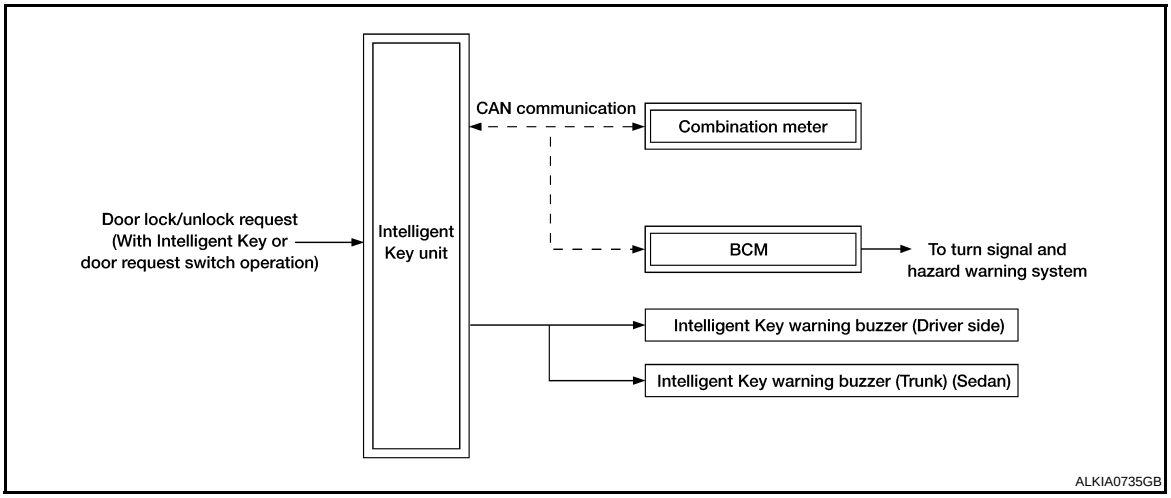
**: Hatchback only

HAZARD AND BUZZER REMINDER FUNCTION

System Diagram

INFOID:0000000001396498

HAZARD & BUZZER REMINDER FUNCTION



System Description

INFOID:0000000001396499

HAZARD AND BUZZER REMINDER FUNCTION

When door is locked or unlocked by Intelligent Key or door request switch, Intelligent Key unit sounds buzzer(s) and sends hazard request signal to BCM via CAN communication. Then BCM flashes hazard warning lamps as a reminder.

NOTE:

Hazard and buzzer reminder function mode can be changed with CONSULT-III. Refer to DLK-53, "CONSULT-III Function (INTELLIGENT KEY)".

Hazard Operation

Hazard reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Hazard warning lamp flash
HAZARD ANSWER BACK	OFF	Any	—
	LOCK ONLY	Lock	Once
		Unlock	—
		Unlock (Anti-hijack)	—
	UNLK ONLY	Lock	—
		Unlock	Twice
		Unlock (Anti-hijack)	Twice (quick)
	LOCK/UNLK	Lock	Once
		Unlock	Twice
		Unlock (Anti-hijack)	Twice (quick)

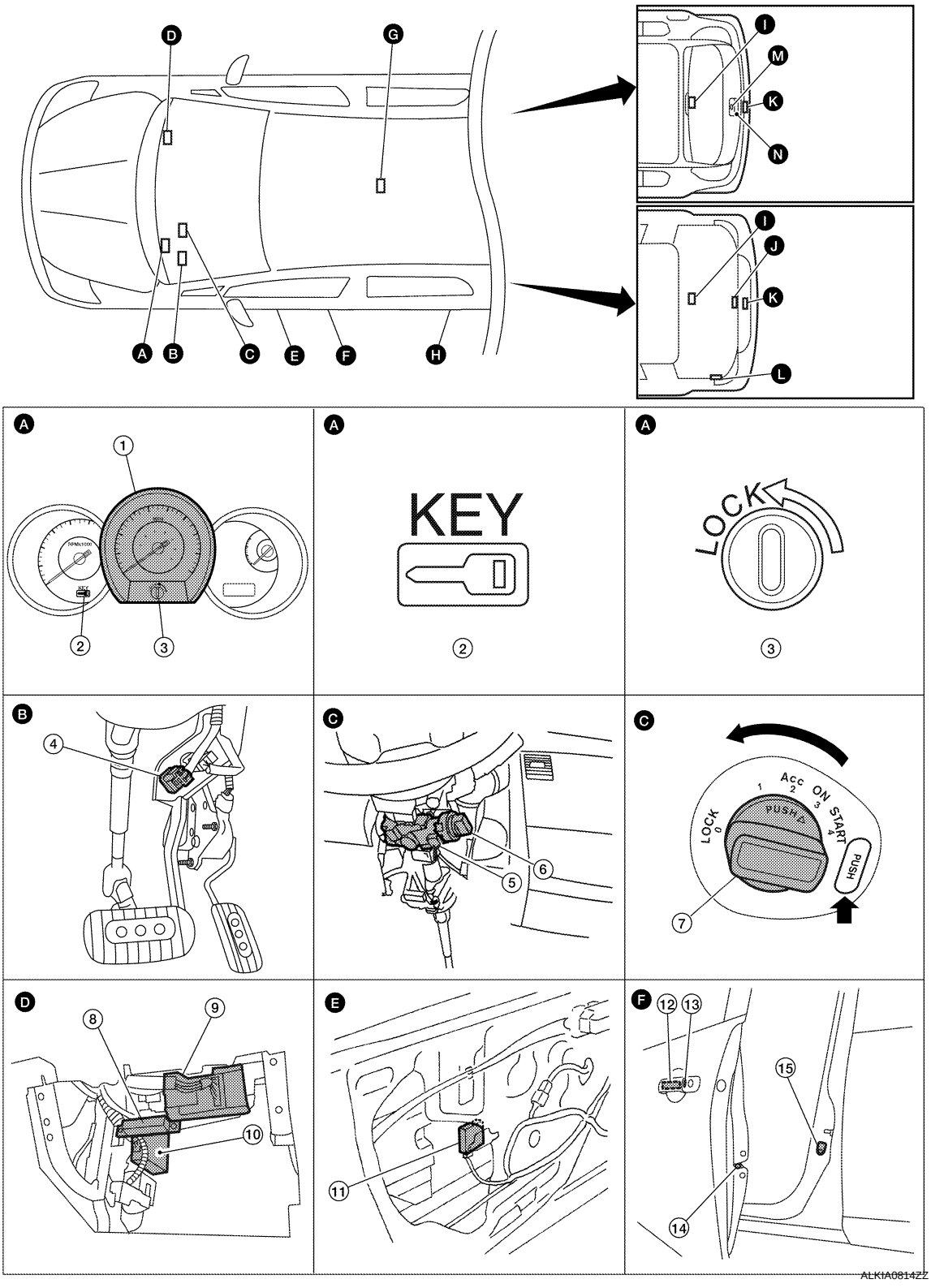
Buzzer Operation

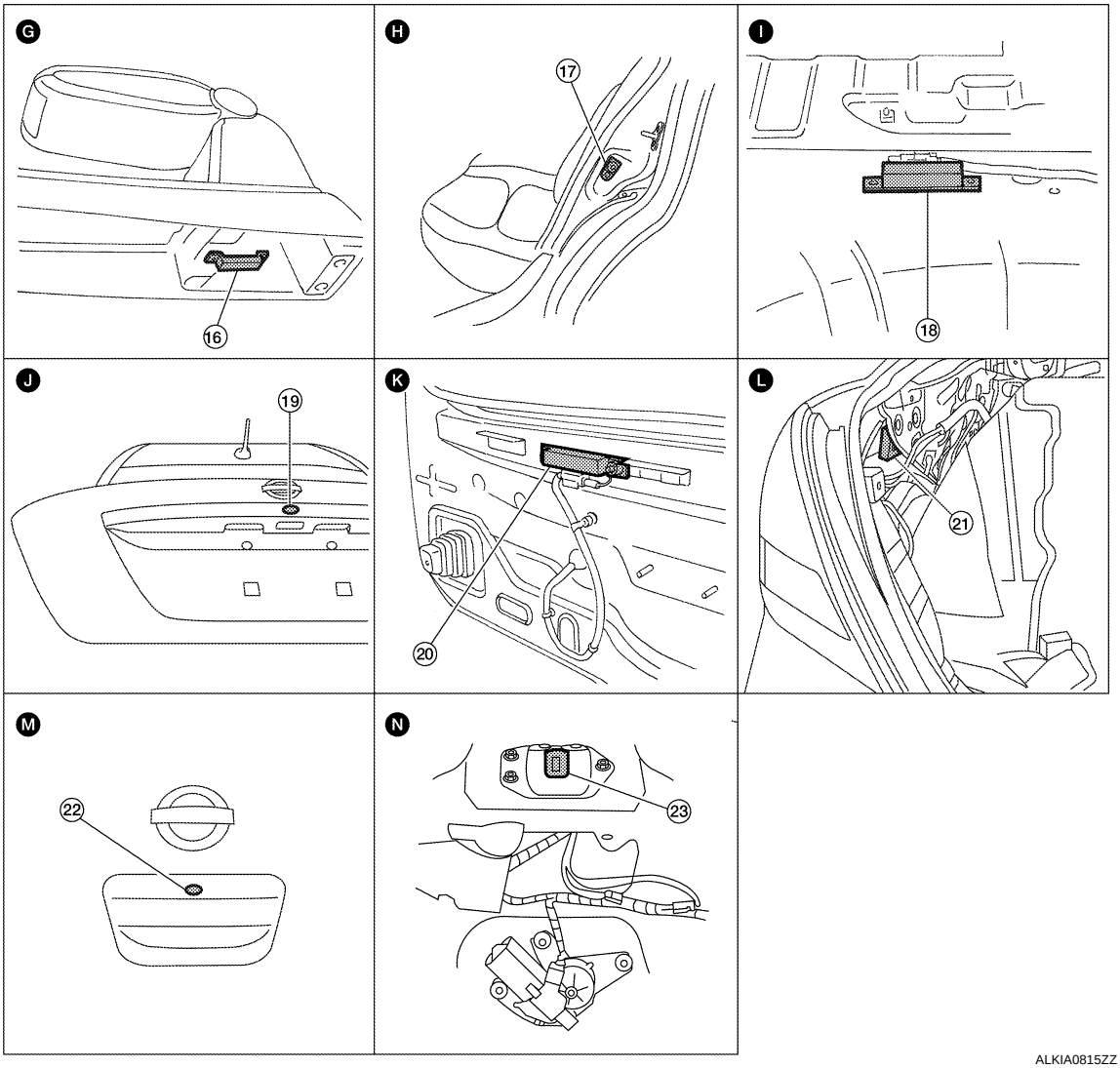
Buzzer reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Buzzer warning sounds
ANSWER BACK WITH I-KEY LOCK	BUZZER	Lock	Once
		Unlock	Depends on other setting
		Unlock (Anti-hijack)	Depends on other setting
	OFF	Any	—

Buzzer reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Buzzer warning sounds
ANSWER BACK WITH I-KEY UNLOCK	BUZZER	Lock	Depends on other setting
		Unlock	Twice
		Unlock (Anti-hijack)	Twice
	OFF	Any	—
ANSWER BACK FUNCTION	ON	Lock	Once
		Unlock	Twice
		Unlock (Anti-hijack)	Twice
	OFF	Any	—

Component Parts Location

INFOID:0000000001396500





ALKIA0815ZZ

1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch E13 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
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11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
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19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

Component Description

INFOID:0000000001396501

Item	Function
BCM	Controls the hazard and buzzer reminder function with Intelligent Key unit.
Intelligent Key unit	Controls the hazard and buzzer reminder function with BCM.
Combination meter	Turns ON the LOCK indicator, KEY indicator, turn signal indicator and buzzer (built in combination meter) by the request from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer (driver side)	Sounds by the request signal from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer (trunk)*	Sounds by the request signal from Intelligent Key unit via CAN communication.

*: Sedan only

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

INFOID:0000000001396502

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to XX-XX, "*****".
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	• Enables to read and save the vehicle specification. • Enables to write the vehicle specification when replacing BCM.

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
—	BCM	×		
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
PTC heater system	PTC HEATER		×	×

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

INFOID:0000000001396503

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
PUSH SW	Indicates [ON/OFF] condition of ignition knob switch.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
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.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
BD/TR OPNR SW	Indicates [ON/OFF] condition of back door/trunk opener switch.
I-KEY LOCK	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.
UNLOCK WITH DR	This item is indicated, but not monitored.
UNLOCK SHOCK	Indicates [ON/OFF] condition of signal from air bag diagnosis unit. • ON: During the unlock operation interlock with air bag. • OFF: Other than above.
SHOCK SENSOR	Indicates [NOMAL/ON/OFF] condition of circuit between BCM and air bag diagnosis sensor unit. • NORMAL: Ignition switch ON. (BCM is receiving normal condition signal from air bag diagnosis sensor unit.) • ON: During the receiving of air bag deployment signal from air bag diagnosis sensor unit. • OFF: After the receiving of air bag deployment signal from air bag diagnosis sensor unit.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
DOOR LOCK IND	This test is able to check door lock indicator (built in door lock and unlock switch on center console) operation [ON/OFF].
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].

WORK SUPPORT

Test item	Description
SECURITY DOOR LOCK SET	Anti hijack function mode can be changed in this mode. • ON: Anti hijack mode is active. • OFF: Anti hijack mode is inactive.

INTELLIGENT KEY

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

INFOID:0000000001396504

BCM CONSULT-III FUNCTION

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW	Indicates [ON/OFF] condition of ignition knob switch.
I-KEY LOCK	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000001396505

APPLICATION ITEM

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW	Indicates [ON/OFF] condition of ignition knob switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of back door/trunk opener switch.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
TRUNK/GLASS HATCH	This test is able to check back door actuator/trunk release solenoid operation [ON/OFF].

DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

CONSULT-III Function (INTELLIGENT KEY)

INFOID:0000000001396506

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with Intelligent Key unit.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by Intelligent Key unit.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from Intelligent Key unit.
DATA MONITOR	The Intelligent Key unit input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.
ECU IDENTIFICATION	The Intelligent Key unit part number is displayed.

WORK SUPPORT

Support item	Description	Selection item	Condition
CONFIRM KEY FOB ID	It can check whether Intelligent Key ID code is registered or not.	—	—
TAKE OUT FROM WINDOW WARN	Take away warning chime (from window) mode can be changed.	ON	Active
		OFF	Inactive
LOW BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed.	ON	Active
		OFF	Inactive
KEYLESS FUNCTION	Door lock function with Intelligent Key can be changed.	ON	Active
		OFF	Inactive
ANSWER BACK FUNCTION	Buzzer reminder operation can be changed.	ON	Active
		OFF	Inactive
SELECTIVE UNLOCK FUNCTION	Anti-hijack mode can be changed.	ON	Active
		OFF	Inactive
HAZARD ANSWER BACK	Hazard reminder operation mode can be changed.	Refer to DLK-45.	
ANSWER BACK WITH I-KEY LOCK	Buzzer reminder operation (lock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
ANSWER BACK WITH I-KEY UNLOCK	Buzzer reminder operation (unlock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
AUTO RELOCK TIMER	Auto door lock operation mode can be changed.	OFF	Inactive
		2 min	Active
ENGINE START BY I-KEY	Engine start function (by Intelligent Key) mode can be changed.	ON	Active
		OFF	Inactive
LOCK/UNLOCK BY I-KEY	Door lock function by door request switch can be changed.	ON	Active
		OFF	Inactive

SELF-DIAG RESULT

Refer to DLK-171, "DTC Index".

DATA MONITOR

Monitor Item	Condition
PUSH SW	Indicates [ON (pressed)/OFF (released)] condition of ignition knob switch.
KEY SW	Indicates [ON (inserted)/OFF (removed)] condition of key switch.
DR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (driver side).
AS REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (passenger side).
BD/TR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of back door/trunk request switch.
IGN SW	Indicates [ON (ON or START position)/OFF (other than ON and START position)] condition of ignition switch ON position.
ACC SW	Indicates [ON/OFF] condition of ignition switch ACC position.
STOP LAMP SW	Indicates [ON/OFF] condition of stop lamp switch.
DOOR LOCK SIG	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
DOOR UNLOCK SIG	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
DOOR SW DR	Indicates [OPEN/CLOSE] condition of front door switch (driver side) from BCM via CAN communication.
DOOR SW AS	Indicates [OPEN/CLOSE] condition of front door switch (passenger side) from BCM via CAN communication.
DOOR SW RR	Indicates [OPEN/CLOSE] condition of rear door switch (RH) from BCM via CAN communication.
DOOR SW RL	Indicates [OPEN/CLOSE] condition of rear door switch (LH) from BCM via CAN communication.
DOOR BK SW	Indicates [OPEN/CLOSE] condition of back door switch from BCM via CAN communication.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
DOOR LOCK/UNLOCK	This test is able to check door lock/unlock operation. • ALL UNLK: All door lock actuators are unlocked. • DR UNLK: Door lock actuator (driver side) is unlocked. • AS UNLK: Door lock actuator (passenger side) is unlocked. • BK UNLK: This item is indicated, but inactive. • LOCK: All door lock actuator is locked.
ANTENNA	This test is able to check Intelligent Key antenna operation. When the following condition are met, hazard warning lamps flash. • ROOM ANT1: Inside key antenna (console) detects Intelligent Key, when “ROOM ANT1” is selected. • ROOM ANT2: Inside key antenna (instrument center/rear seat) detects Intelligent Key, when “ROOM ANT2”is selected. • DRIVER ANT: Outside key antenna (driver side) detects Intelligent Key, when “DRIVER ANT” is selected. • ASSIST ANT: Outside key antenna (passenger side) detects Intelligent Key, when “ASSIST ANT” is selected. • BK DOOR ANT: Outside key antenna (rear bumper) detects Intelligent Key, when “BK DOOR ANT” is selected.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer(s) operation. • ON • OFF
INSIDE BUZZER	This test is able to check warning chime in combination meter operation. • TAKE OUT: Take away warning chime sounds. • KNOB: Ignition knob switch warning chime sounds. • KEY: Key warning chime sounds. • OFF

Test item	Description
INDICATOR	This test is able to check warning lamp operation. • BLUE ON: Key warning lamp (green) illuminates. • RED ON: Key warning lamp (red) illuminates. • KNOB ON: Lock warning lamp illuminates. • BLUE IND: Key warning lamp (green) flashes. • RED IND: Key warning lamp (red) flashes. • KNOB IND: Lock warning lamp flashes. • OFF
KEY LOCK SOLENOID*1	This test is able to check key interlock operation. • LOCK: Key interlock is active. • UNLOCK: Key interlock is inactive.

*1: The item is only for M/T model.

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001396507

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 XX-XX, "*****".

DTC Logic

INFOID:0000000001396508

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When Intelligent Key unit 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 (BCM) • Receiving (ECM) • Receiving (METER/M&A)

Diagnosis Procedure

INFOID:0000000001396509

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 XX-XX, "*****".
NO >> Refer to XX-XX, "*****".

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000001396510

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 XX-XX, "*****".

DTC Logic

INFOID:0000000001396511

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of Intelligent Key unit.	Intelligent Key unit

Diagnosis Procedure

INFOID:0000000001396512

1.REPLACE INTELLIGENT KEY UNIT

When DTC [U1010] is detected, replace Intelligent Key unit.

>> Replace Intelligent Key unit. Refer to SEC-79, "Removal and Installation".

Special Repair Requirement

INFOID:0000000001396513

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III Operation Manual.

>> Work end.

B2552 INTELLIGENT KEY

Description

INFOID:0000000001396514

Intelligent key unit performs engine start operation and steering lock control by crosschecking ID with the Intelligent key.

DTC Logic

INFOID:0000000001396515

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2552	INTELLIGENT KEY UNIT	Malfunction is detected inside Intelligent key unit.	Intelligent Key unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT-III.

Is DTC detected?

YES >> Refer to DLK-58, "Diagnosis Procedure".
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:0000000001396516

1.REPLACE INTELLIGENT KEY UNIT

1. Replace Intelligent Key unit. Refer to SEC-79, "Removal and Installation".
2. Perform initialization with CONSULT-III. Re-register all mechanical keys. Refer to “CONSULT-III operation manual NATS-IVIS/NVIS”.
3. Start the engine.

Does the engine start?

YES >> INSPECTION END
NO >> Perform “DTC confirmation procedure”. Refer to DLK-58, "DTC Logic".

Special Repair Requirement

INFOID:0000000001396517

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III Operation Manual.

>> Work end.

POWER SUPPLY AND GROUND CIRCUIT
INTELLIGENT KEY UNIT

INTELLIGENT KEY UNIT : Diagnosis Procedure

INFOID:0000000001396518

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse is not blown.

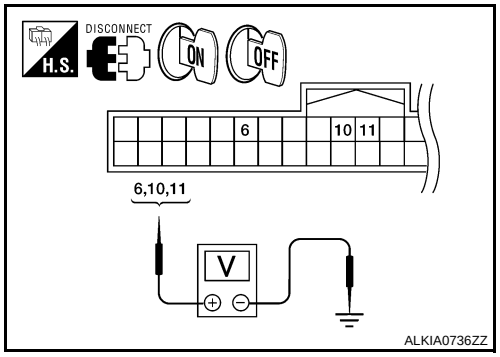
Terminal No.	Signal name	Fuse No.
11	Battery power supply	31 (10A)
10	Ignition power supply (ACC/ON)	6 (10A)
6	Ignition power supply (ON/START)	2 (10A)

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit connector.
3. Check voltage between Intelligent Key unit harness connector M52 terminals 6, 10, 11 and ground.



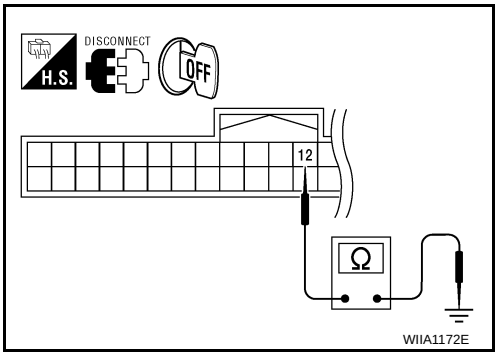
Terminal			Ignition switch position	
(+)		(–)	OFF	ON
Intelligent Key unit		Ground		
Connector	Terminal			
M52	11		Battery voltage	Battery voltage
	10		0V	Battery voltage
	6		0V	Battery voltage

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between Intelligent Key unit harness connector and ground.



Intelligent Key unit		Ground	Continuity
Connector	Terminal		
M52	12		Yes

Is the inspection result normal?

YES >> Intelligent Key unit power supply and ground circuit are OK.
NO >> Repair harness or connector.

BCM

BCM : Diagnosis Procedure

INFOID:0000000001396519

Refer to BCS-30, "Diagnosis Procedure".

DOOR LOCK AND UNLOCK SWITCH

Description

INFOID:0000000001396520

Transmits door lock/unlock operation to BCM.

Component Function Check

INFOID:0000000001396521

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “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?

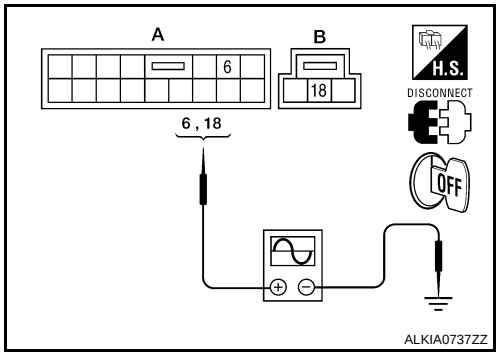
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-61, "Diagnosis Procedure".

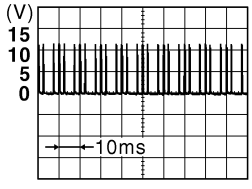
Diagnosis Procedure

INFOID:0000000001396522

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect door lock and unlock switch connector.
3. Using an oscilloscope, check voltage between door lock and unlock switch harness connector (A) D7 terminal 6, connector (B) D8 terminal 18 and ground.



Terminal			Signal (Reference value)
(+)		(–)	
Door lock and unlock switch connector	Terminal		
D7	6	Ground	
D8	18		

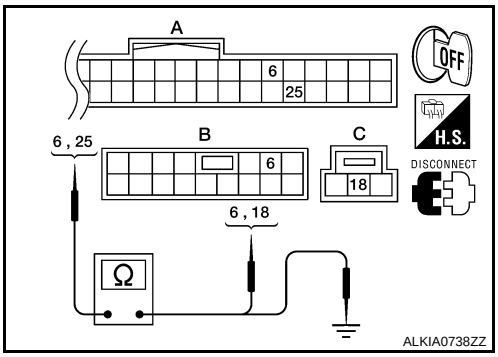
JPMIA0154GB

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector (A) M18 terminals 6, 25 and door lock and unlock switch connector (B) D7 terminal 6, connector (C) D8 terminal 18.



BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M18	6	D8	18	Yes
	25	D7	6	

4. Check continuity between BCM connector (A) M18 terminals 6, 25 and ground.

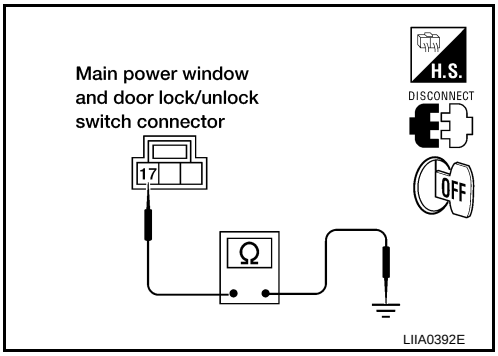
BCM connector	Terminal	Ground	Continuity
M18	6		No
	25		

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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



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

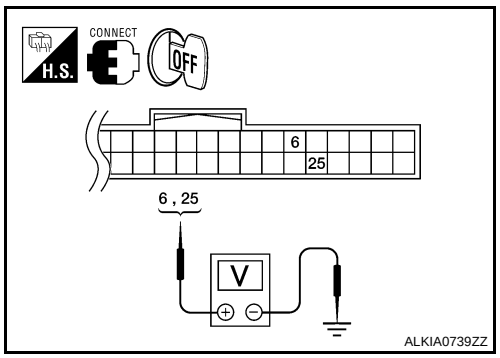
Is the inspection result normal?

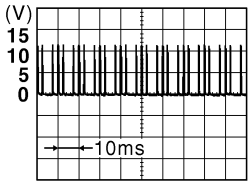
YES >> GO TO 5.
NO >> Repair or replace harness.

4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check signal between BCM connector and ground.



Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M18	6	Ground	
	25		

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Is the inspection result normal?

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

5. CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-63, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace door lock and unlock switch. Refer to XX-XX, "*****".

6. CHECK INTERMITTENT INCIDENT

Refer to @@@.

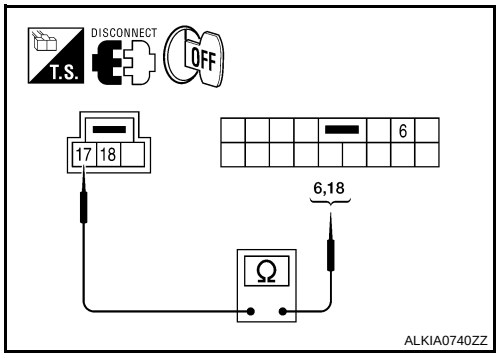
>> INSPECTION END

Component Inspection

INFOID:0000000001396523

1. CHECK DOOR LOCK AND UNLOCK SWITCH

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



Door lock and unlock switch	Terminals		Condition	Continuity
D7, D8	6	17	UNLOCK	Yes
			NEUTRAL/LOCK	No
	18		LOCK	Yes
			NEUTRAL/UNLOCK	No

Is the inspection result normal?

YES >> Main power window and door lock/unlock switch is OK.
NO >> Replace main power window and door lock/unlock switch. Refer to XX-XX, "*****".

DOOR SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001396536

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001396537

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-DR” in “Data Monitor” mode with CONSULT-III.

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

Is the inspection result normal?

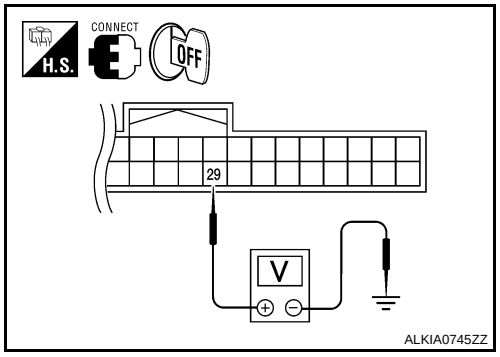
YES >> Door switch is OK.
NO >> Refer to DLK-65, "DRIVER SIDE : Diagnosis Procedure".

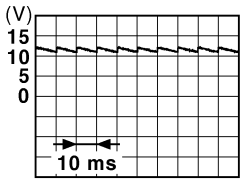
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001396538

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			
M18	29	Ground	OPEN	0
			CLOSE	

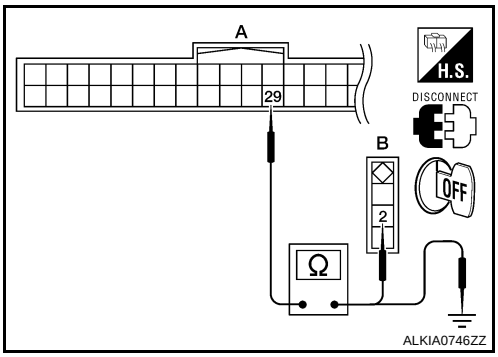
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Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM and driver door switch connectors.
2. Check continuity between BCM connector (A) M18 terminal 29 and door switch connector (B) B34 terminal 2.



BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	29	B34	2	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M18	29		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-66, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (driver side). Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

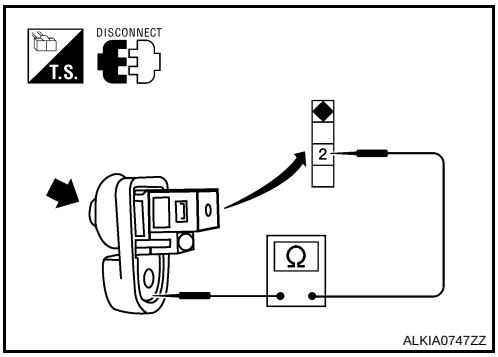
>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001396539

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check door switch.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace front door switch (driver side). Refer to XX-XX, "*****".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001396540

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check

INFOID:0000000001396541

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-AS” in “Data Monitor” mode with CONSULT-III.

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

Is the inspection result normal?

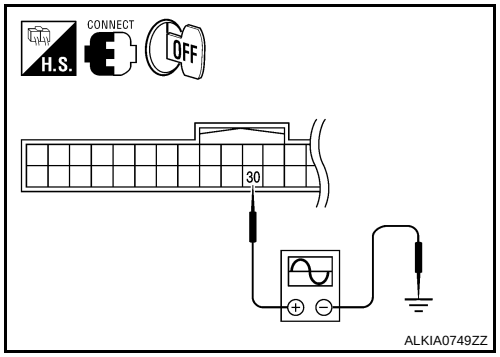
YES >> Door switch is OK.
NO >> Refer to DLK-67, "PASSENGER SIDE : Diagnosis Procedure".

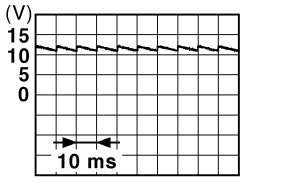
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001396542

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			
M18	30	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

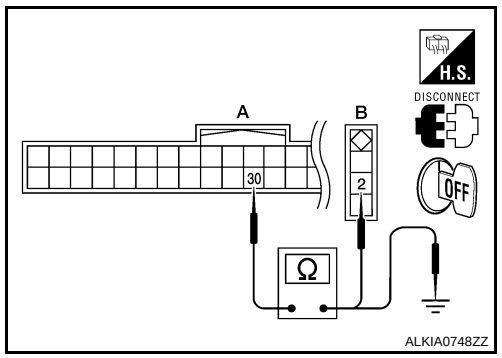
YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM and passenger door switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 30 and passenger door switch connector (B) B27 terminal 2.

BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	30	B27	2	Yes



3. Check continuity between BCM connector (A) M18 terminal 30 and ground.

BCM connector	Terminal	Ground	Continuity
M18	30		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-68, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (passenger side). Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

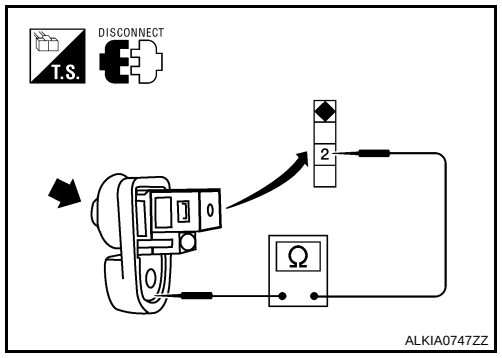
>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001396543

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check passenger door switch.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace front door switch (passenger side). Refer to XX-XX, "*****".

REAR LH

REAR LH : Description

INFOID:0000000001396544

Detects door open/closed condition.

REAR LH : Component Function Check

INFOID:0000000001396545

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RL” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RL	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

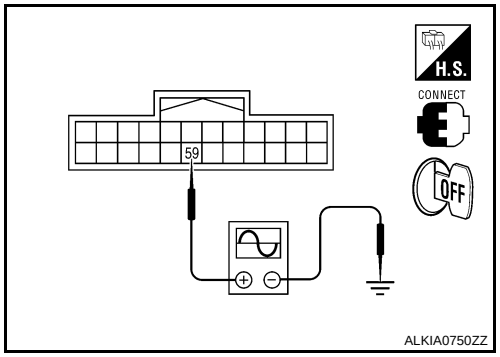
YES >> Door switch is OK.
NO >> Refer to DLK-69, "REAR LH : Diagnosis Procedure".

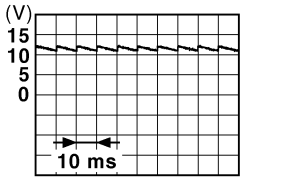
REAR LH : Diagnosis Procedure

INFOID:0000000001396546

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			
M19	59	Ground	OPEN	0
			CLOSE	

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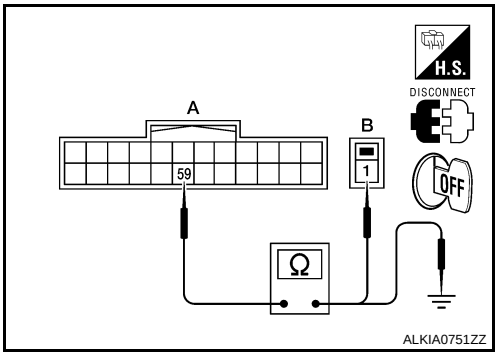
Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector and rear door switch LH.

2. Check continuity between BCM connector (A) M19 terminal 59 and rear door switch LH connector (B) B71 terminal 1.



BCM connector	Terminal	Rear door switch LH connector	Terminal	Continuity
M19	59	B71	1	Yes

3. Check continuity between BCM connector (A) M19 terminal 59 and ground.

BCM connector	Terminal	Ground	Continuity
M19	59		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-70, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch LH. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

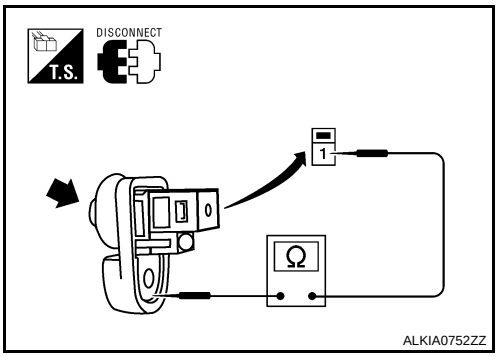
>> INSPECTION END

REAR LH : Component Inspection

INFOID:0000000001396547

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check rear door switch LH.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace rear door switch LH. Refer to XX-XX, "*****".

REAR RH

REAR RH : Description

INFOID:0000000001396548

Detects door open/close condition.

REAR RH : Component Function Check

INFOID:0000000001396549

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

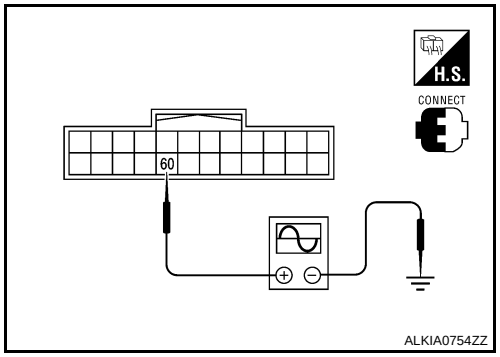
YES >> Door switch is OK.
NO >> Refer to DLK-71, "REAR RH : Diagnosis Procedure".

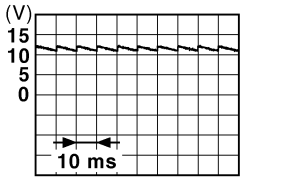
REAR RH : Diagnosis Procedure

INFOID:0000000001396550

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			
M19	60	Ground	OPEN	0
			CLOSE	

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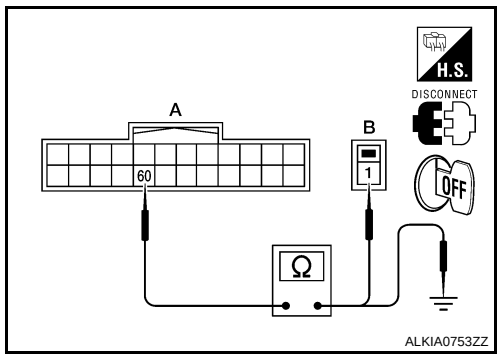
Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM connector (A) M19 terminal 60 and rear door switch RH connector (B) B53 terminal 1.



BCM connector	Terminal	Rear door switch RH connector	Terminal	Continuity
M19	60	B53	1	Yes

3. Check continuity between BCM connector (A) M19 terminal 60 and ground.

BCM connector	Terminal	Ground	Continuity
M19	60		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-72, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch RH. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

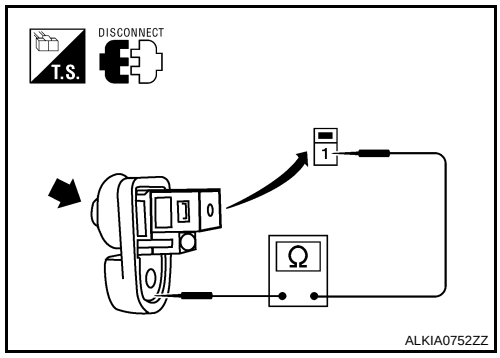
>> INSPECTION END

REAR RH : Component Inspection

INFOID:0000000001396551

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check rear door switch RH.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace rear door switch RH. Refer to XX-XX, "*****".

BACK DOOR

BACK DOOR : Description

INFOID:0000000001396552

Detects back door open condition.

BACK DOOR : Component Function Check

INFOID:0000000001396553

1.CHECK FUNCTION

With CONSULT-III

Check “BACK DOOR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
BACK DOOR SW	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

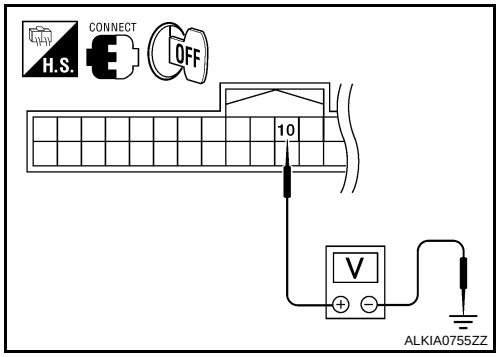
YES >> Back door lock assembly (door switch) is OK.
NO >> Refer to DLK-73, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001396554

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) INPUT SIGNAL

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



Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	10	Ground	OPEN	0
			CLOSE	Battery voltage

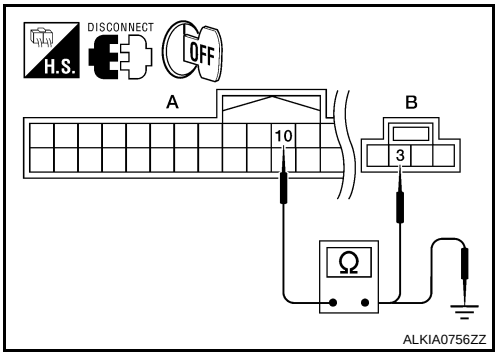
Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) CIRCUIT

1. Disconnect BCM connector and back door lock assembly.

2. Check continuity between BCM connector (A) M18 terminal 10 and back door lock assembly (door switch) connector (B) D405 terminal 3.



BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M18	10	D405	3	Yes

3. Check continuity between BCM connector and ground.

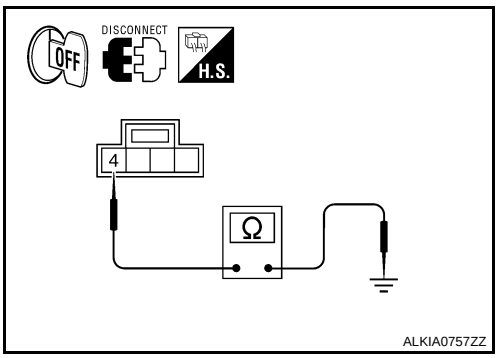
BCM connector	Terminal	Ground	Continuity
M18	10		No

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.



Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D405	4		Yes

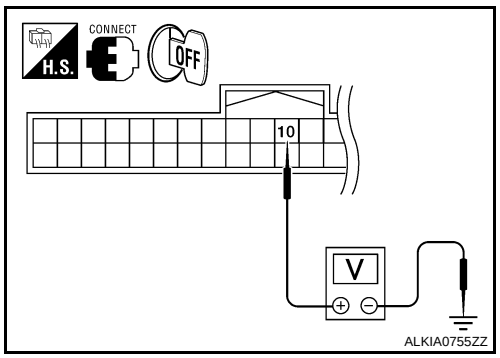
Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door lock assembly 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		
M18	10	Ground	Battery voltage

Is the inspection result normal?

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

5. CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-75, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly (door switch). Refer to XX-XX, "*****" and XX-XX, "*****".

6. CHECK INTERMITTENT INCIDENT

Refer to @@@.

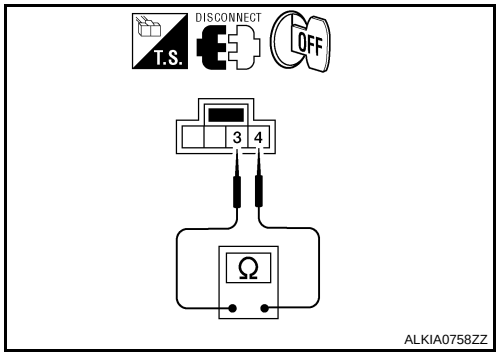
>> INSPECTION END

BACK DOOR : Component Inspection

INFOID:0000000001396555

1. CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

1. Turn ignition switch OFF.
2. Check back door lock assembly (door switch).



Terminal		Back door condition	Continuity
Back door lock assembly (door switch)			
3	4	OPEN	Yes
		CLOSE	No

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Replace back door lock assembly (door switch). Refer to XX-XX, "*****" and XX-XX, "*****".

KEY SWITCH

Description

INFOID:0000000001396556

Key switch detects that mechanical key is inserted into the key cylinder, and then transmits the signal to Intelligent Key unit.

Component Function Check

INFOID:0000000001396557

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch (“KEY SW”) in “Data Monitor” mode with CONSULT-III. Refer to DLK-50, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
KEY SW	Insert mechanical key into key cylinder	: ON
	Remove mechanical key from key cylinder	: OFF

Is the inspection result normal?

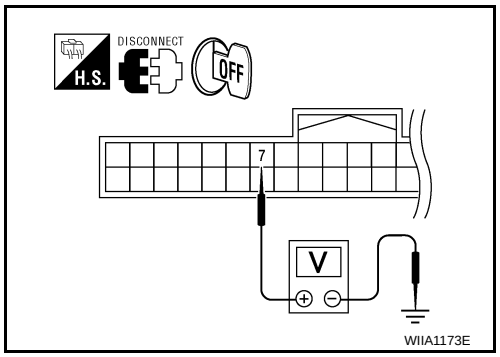
YES >> Key switch is OK.
NO >> Refer to DLK-77, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001396558

1.CHECK KEY SWITCH INPUT SIGNAL

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



Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	7	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

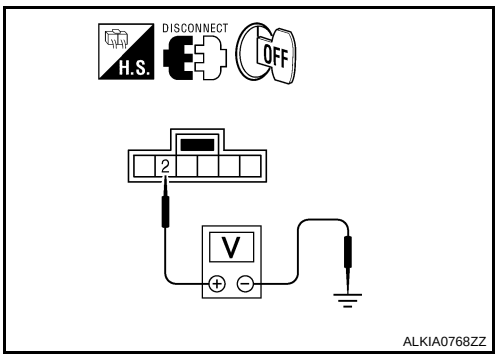
Is the inspection result normal?

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

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove mechanical key from key cylinder.
2. Disconnect key switch and ignition knob switch connector.

3. Check voltage between key switch and ignition knob switch connector and ground.



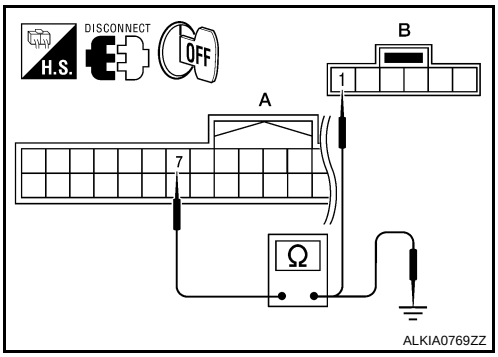
Terminals			Voltage (V) (Approx.)
(+)		(–)	
key switch and ignition knob switch connector	Terminal		
M32	2	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK KEY SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 7 and key switch and ignition knob switch connector (B) M32 terminal 1.



Intelligent Key unit connector	Terminal	key switch and ignition knob switch connector	Terminal	Continuity
M52	7	M32	1	Yes

2. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 7 and ground.

Intelligent Key unit harness connector	Terminal	Ground	Continuity
M52	7	Ground	No

Is the inspection result normal?

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

4.CHECK KEY SWITCH

Check key switch function.
Refer to DLK-79, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace key switch and ignition knob switch.

5.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

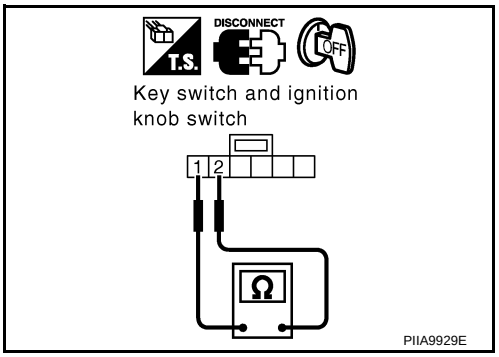
Component Inspection

INFOID:0000000001396559

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch and ignition knob switch terminals.



Terminals		Condition	Continuity
key switch and ignition knob switch			
1	2	Insert mechanical key into key cylinder	Yes
		Remove mechanical key from key cylinder	No

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Replace key cylinder assembly.

IGNITION KNOB SWITCH

Description

INFOID:0000000001396560

Ignition knob switch detects that ignition knob is pressed, and then transmits the signal to Intelligent Key unit.

Component Function Check

INFOID:0000000001396561

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

Check ignition knob switch (“PUSH SW”) in “Data Monitor” mode with CONSULT-III. Refer to DLK-50, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
PUSH SW	Ignition knob switch is pressed	: ON
	Ignition knob switch is released	: OFF

Is the inspection result normal?

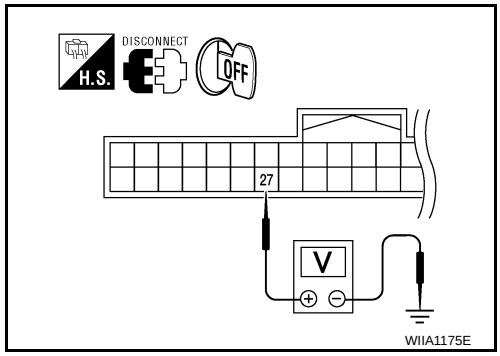
YES >> Ignition knob switch is OK.
NO >> Refer to XX-XX, "*****".

Diagnosis Procedure

INFOID:0000000001396562

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

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



Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	27	Ground	Ignition knob switch is pressed	Battery voltage
			Ignition knob switch is released	0

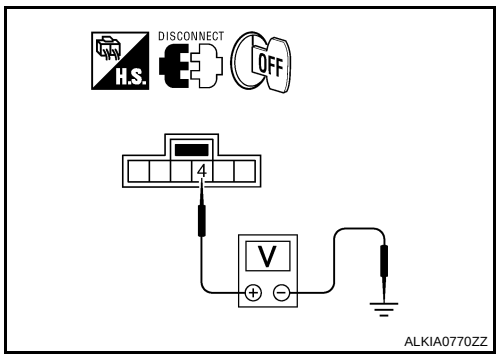
Is the inspection result normal?

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

2.CHECK IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT

1. Disconnect key switch and ignition knob switch connector.

2. Check voltage between key switch and ignition knob switch harness connector and ground.



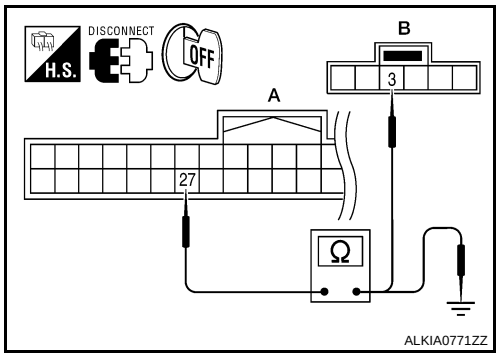
Terminals			Voltage (V) (Approx.)
(+)		(–)	
key switch and ignition knob switch connector	Terminal		
M52	4	Ground	Battery voltage

Is the inspection result normal?

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

3. CHECK IGNITION KNOB SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 27 and key switch and ignition knob switch connector (B) M32 terminal 3.



Intelligent Key unit connector	Terminal	key switch and ignition knob switch connector	Terminal	Continuity
M52	27	M32	3	Yes

2. Check continuity between Intelligent Key unit connector (A) M52 terminal 27 and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M52	27		No

Is the inspection result normal?

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

4. CHECK IGNITION KNOB SWITCH

Check ignition knob switch function.
Refer to XX-XX, "*****".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace key switch and ignition knob switch.

5. CHECK INTERMITTENT INCIDENT

Refer to @@@.

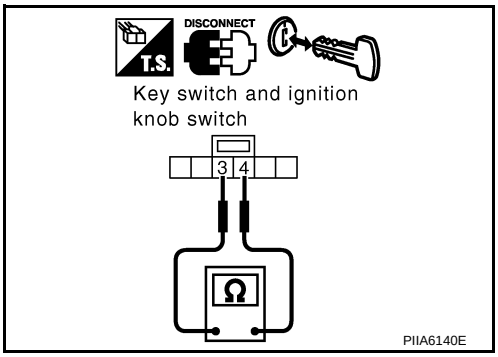
>> INSPECTION END

Component Inspection

INFOID:0000000001396563

1.CHECK IGNITION KNOB SWITCH

1. Turn ignition switch OFF.
2. Check continuity between key switch and ignition knob switch terminals under the following conditions.



key switch and ignition knob switch		Condition	Continuity
Terminals			
3	4	Ignition knob switch is pressed	Yes
		Ignition knob switch is released	No

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace key switch and ignition knob switch.

DOOR REQUEST SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001396524

Transmits lock/unlock operation to Intelligent Key unit.

DRIVER SIDE : Component Function Check

INFOID:0000000001396525

1.CHECK FUNCTION

With CONSULT-III

Check door request switch “DR REQ SW” in “Data Monitor” mode.

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

Is the inspection result normal?

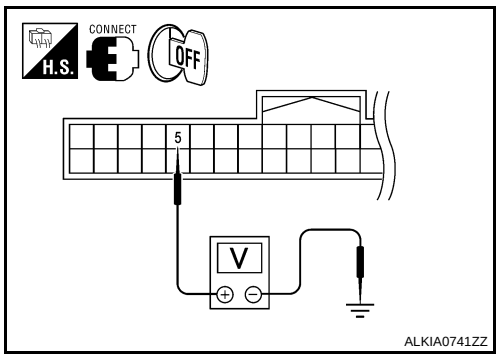
YES >> Door request switch is OK.
NO >> Refer to DLK-83, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001396526

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.



Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	5	Ground	Pressed	0
			Released	5

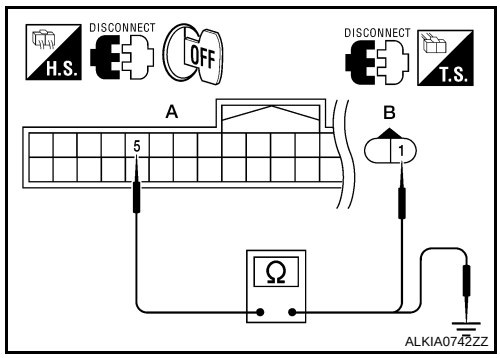
Is the inspection result normal?

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

2.CHECK FRONT DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit and driver door request switch.

2. Check continuity between Intelligent Key unit connector (A) M52 terminal 5 and front door request switch (driver side) connector (B) D5 terminal 1.



Intelligent Key unit connector	Terminal	Front door request switch (driver side)	Terminal	Continuity
M52	5	D5	1	Yes

3. Check continuity between Intelligent Key unit connector (A) M52 terminal 5 and ground.

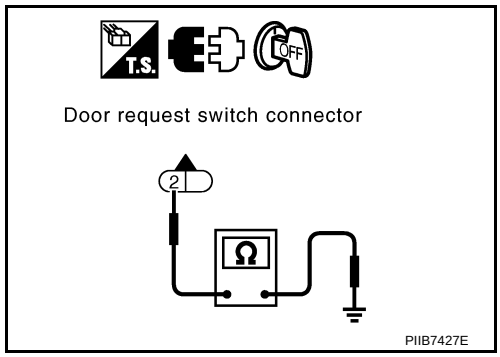
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	5		No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and front door request switch (driver side).

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front door request switch (driver side) connector and ground.



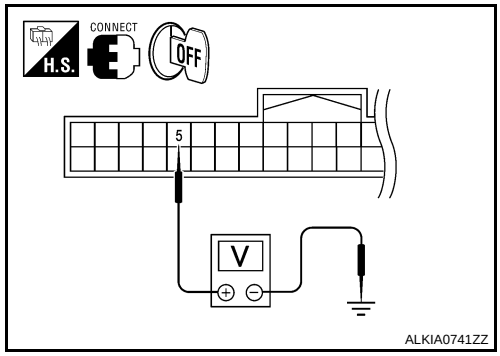
Front door request switch (driver side) connector	Terminal	Ground	Continuity
D5	2		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace front door request switch (driver side) ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.



Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M52	5		5

Is the inspection result normal?

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

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-85, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace front outside handle (driver side). Refer to XX-XX, "*****" and XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

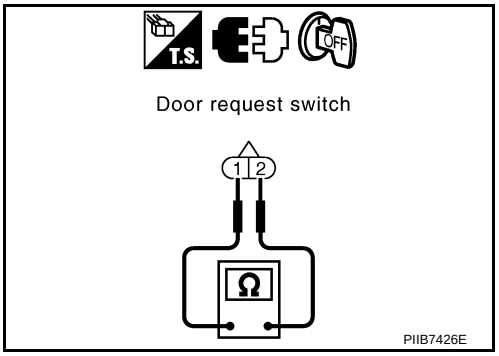
>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001396527

1.CHECK DOOR REQUEST SWITCH

Check door request switch.



Terminal		Door request switch condition	Continuity
front door request switch (driver side)			
1	2	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace front outside handle (driver side). Refer to XX-XX, "*****" and XX-XX, "*****".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001396528

Transmits lock/unlock operation to Intelligent Key unit.

PASSENGER SIDE : Component Function Check

INFOID:0000000001396529

1.CHECK FUNCTION

With CONSULT-III
Check door request switch “AS REQ SW” in “Data Monitor” mode.

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

Is the inspection result normal?

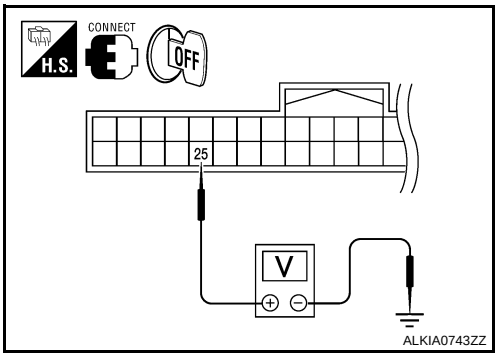
YES >> Door request switch is OK.
NO >> Refer to DLK-91, "Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001396530

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.



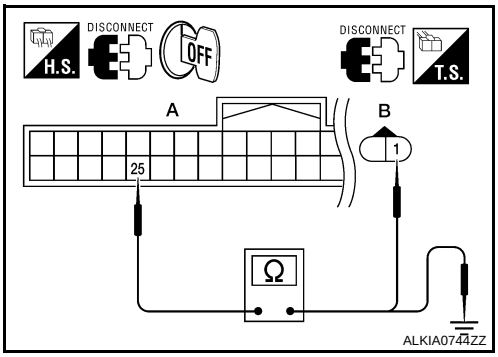
Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	25	Ground	Pressed	0
			Released	5

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit and passenger door request switch.
2. Check continuity between Intelligent Key unit connector (A) M52 terminal 25 and front door request switch (passenger side) connector (B) D103 terminal 1.



Intelligent Key unit connector	Terminal	Front door request switch (passenger side) connector	Terminal	Continuity
M52	25	D103	1	Yes

3. Check continuity between Intelligent Key unit connector (A) M52 terminal 25 and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M52	25		No

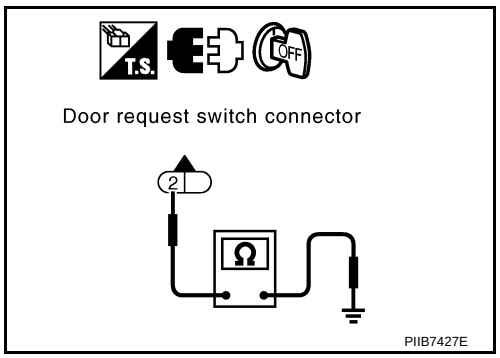
Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and front door request switch (passenger side).

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front door request switch (passenger side) connector and ground.

Front door request switch (passenger side) connector	Terminal	Ground	Continuity
D103	2		Yes



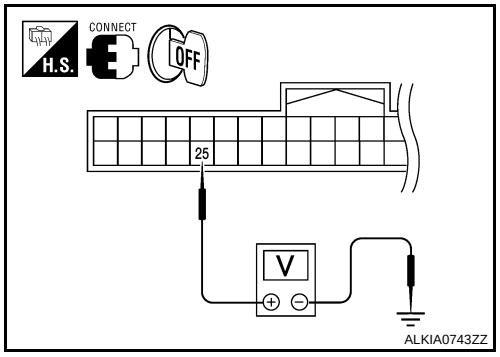
Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace front door request switch (passenger side) ground circuit.

4. CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M52	25		5



Is the inspection result normal?

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

5. CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-93, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace front outside handle (passenger side). Refer to XX-XX, "*****" and XX-XX, "*****".

6. CHECK INTERMITTENT INCIDENT

Refer to @@@.

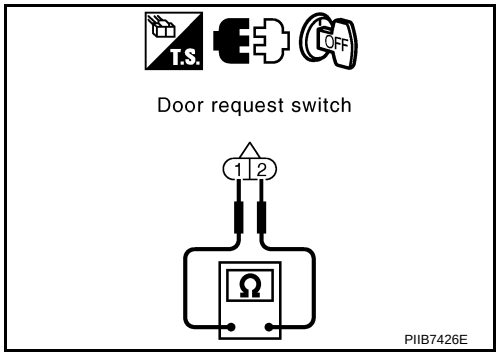
>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001396531

1. CHECK DOOR REQUEST SWITCH

Check door request switch.



Terminal	Door request switch condition	Continuity
Front door request switch (passenger side)		

1	2	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace front outside handle (passenger side). Refer to XX-XX, "*****" and XX-XX, "*****".

BACK DOOR

BACK DOOR : Description

INFOID:0000000001500102

Transmits lock/unlock operation to Intelligent Key unit.

BACK DOOR : Component Function Check

INFOID:0000000001500103

1.CHECK FUNCTION

With CONSULT-III

Check door request switch “BD/TR REQ SW” in “Data Monitor” mode.

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

Is the inspection result normal?

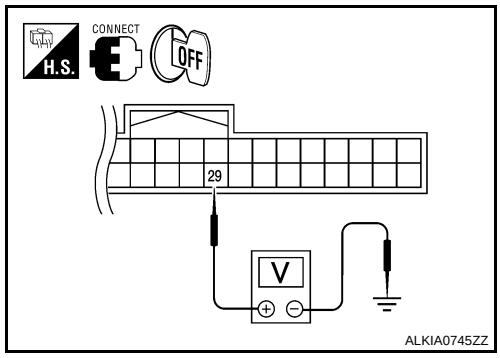
YES >> Door request switch is OK.
NO >> Refer to DLK-88, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001500104

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.



Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	29	Ground	Pressed	0
			Released	5

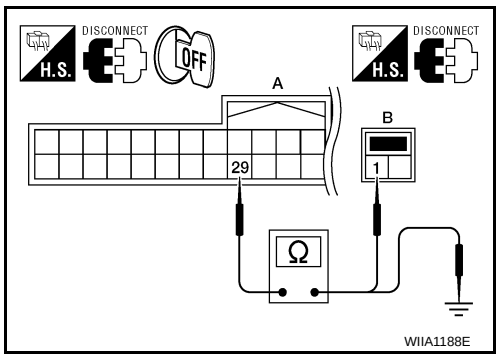
Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit and back door request switch.

2. Check continuity between Intelligent Key unit connector (A) M52 terminal 29 and back door request switch connector (B) D406 terminal 1.



Intelligent Key unit connector	Terminal	Back door request switch connector	Terminal	Continuity
M52	29	D406	1	Yes

3. Check continuity between Intelligent Key unit connector (A) M52 terminal 29 and ground.

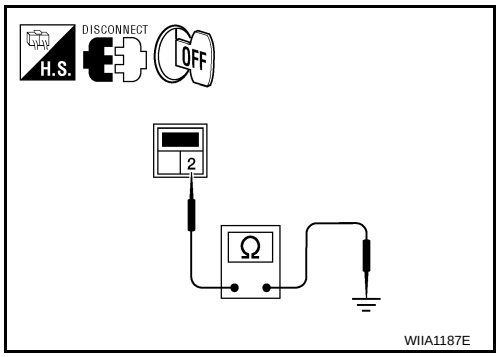
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	29		No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and back door request switch.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between back door request switch connector and ground.



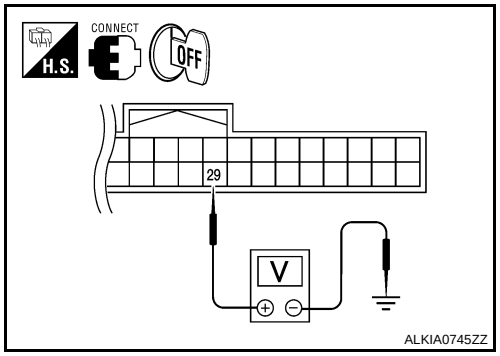
Back door request switch connector	Terminal	Ground	Continuity
D406	2		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door request switch ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.



Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M52	29		5

Is the inspection result normal?

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

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-90, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door request switch. Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

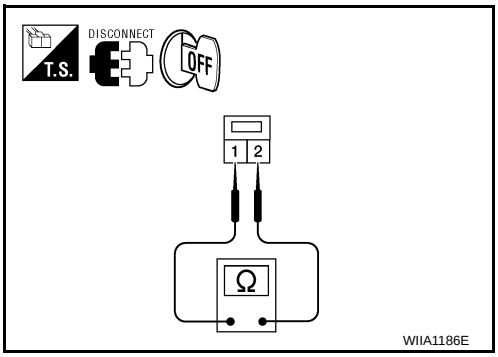
>> INSPECTION END

BACK DOOR : Component Inspection

INFOID:0000000001500105

1.CHECK DOOR REQUEST SWITCH

Check door request switch.



Terminal		Door request switch condition	Continuity
Door request switch			
1	2	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace back door request switch. Refer to XX-XX, "*****".

TRUNK REQUEST SWITCH

Description

INFOID:0000000001396532

Transmits lock/unlock operation to Intelligent Key unit.

Component Function Check

INFOID:0000000001396533

1.CHECK FUNCTION

With CONSULT-III

Check door request switch “BD/TR REQ SW” in “Data Monitor” mode.

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

Is the inspection result normal?

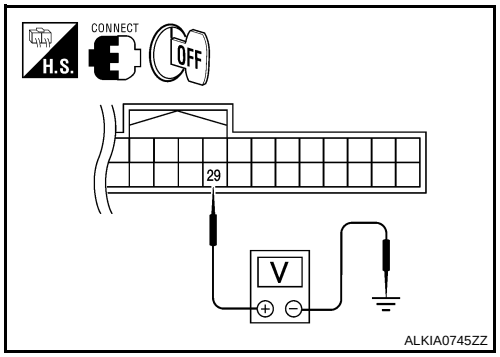
YES >> Door request switch is OK.
NO >> Refer to DLK-91, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001396534

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.



Terminal			trunk request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	29	Ground	Pressed	0
			Released	5

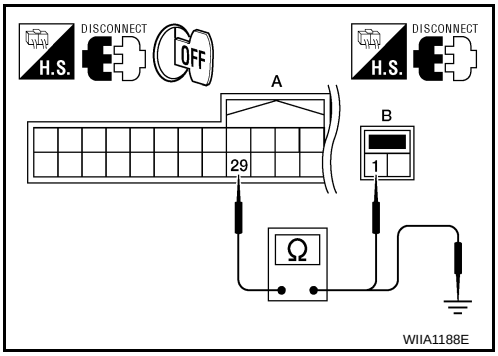
Is the inspection result normal?

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

2.CHECK TRUNK REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit and trunk request switch.

2. Check continuity between Intelligent Key unit connector (A) M52 terminal 29 and trunk request switch connector (B) B67 terminal 1.



Intelligent Key unit connector	Terminal	trunk request switch connector	Terminal	Continuity
M52	29	B67	1	Yes

3. Check continuity between Intelligent Key unit connector (A) M52 terminal 29 and ground.

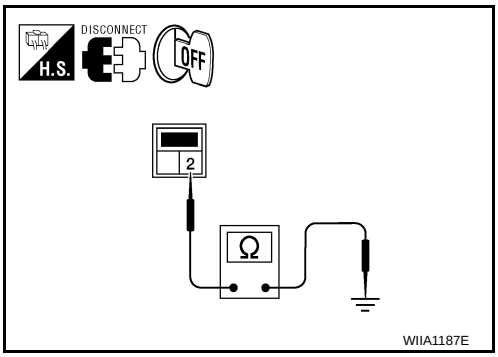
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	29		No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and trunk request switch.

3.CHECK TRUNK REQUEST SWITCH GROUND CIRCUIT

Check continuity between trunk request switch connector and ground.



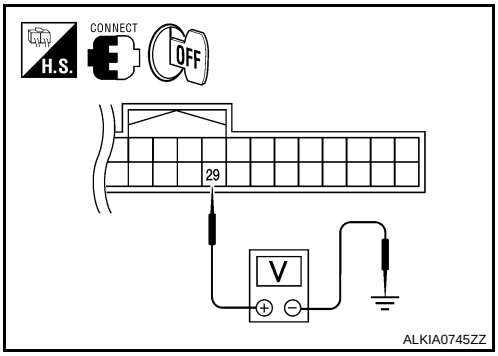
Trunk request switch connector	Terminal	Ground	Continuity
B67	2		Yes

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.



Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M52	29		5

Is the inspection result normal?

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

5.CHECK TRUNK REQUEST SWITCH

Check trunk request switch.
Refer to DLK-93, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back trunk request switch. Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

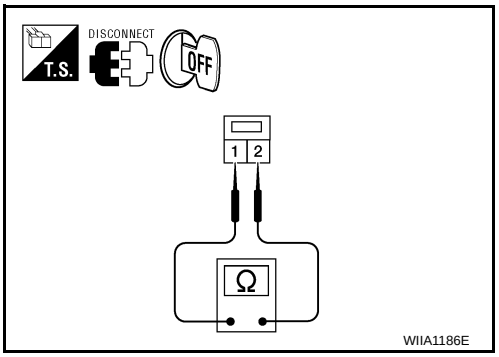
>> INSPECTION END

Component Inspection

INFOID:0000000001396535

1. CHECK TRUNK REQUEST SWITCH

Check trunk request switch.



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

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace trunk request switch. Refer to XX-XX, "*****".

TRUNK LID UNLOCK SWITCH

Description

INFOID:0000000001507341

Detects trunk open/close condition.

Component Function Check

INFOID:0000000001507342

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?

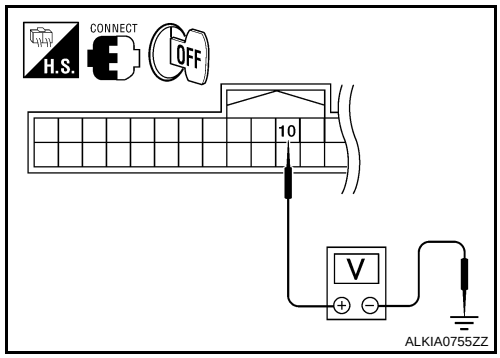
YES >> Trunk lamp switch is OK.
NO >> Refer to DLK-94, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001507343

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			
M18	10	Ground	OPEN	0
			CLOSE	Battery voltage

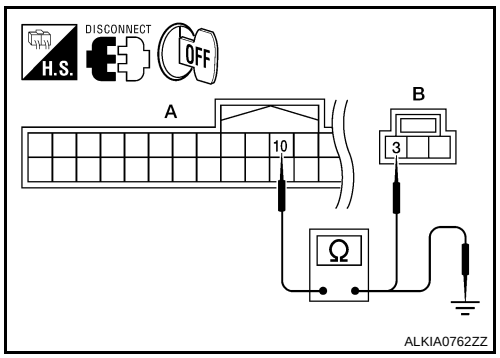
Is the inspection result normal?

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 (A) M18 terminals10 and trunk lamp switch and trunk release solenoid connector (B) B66 terminal 3.



BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
M18	10	B66	3	Yes

3. Check continuity between BCM connector and ground.

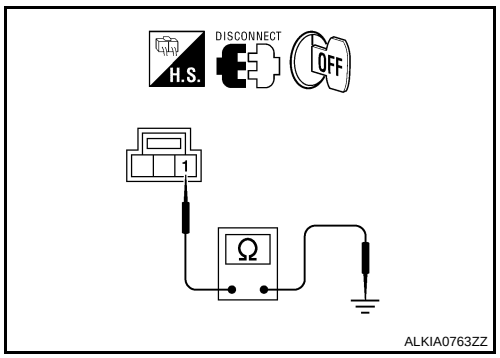
BCM connector	Terminal	Ground	Continuity
M18	10		No

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 lamp switch and trunk release solenoid connector and ground.



Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B66	1		Yes

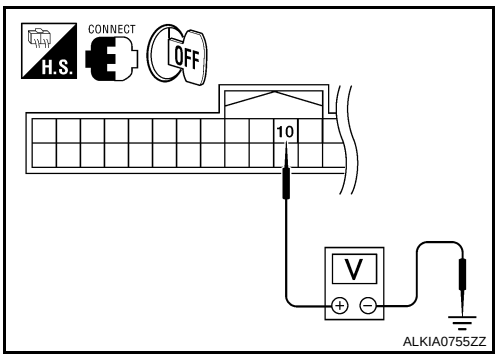
Is the inspection result normal?

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

4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM connector and ground.



Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M18	10	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to XX-XX, "*****".

5.CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-96, "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 XX-XX, "*****".

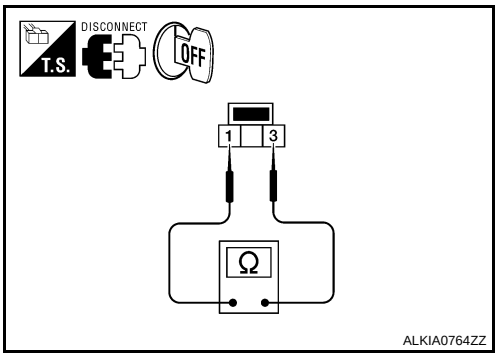
>> INSPECTION END.

Component Inspection

INFOID:0000000001507344

1.CHECK TRUNK LAMP SWITCH

1. Turn ignition switch OFF.
2. Check trunk lamp switch.



Terminal		Trunk condition	Continuity
Trunk lamp switch and trunk release solenoid			
1	3	OPEN	Yes
		CLOSE	No

Is the inspection result normal?

YES >> INSPECTION END.

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

BACK DOOR OPENER SWITCH

Description

INFOID:0000000001396588

Sends the back door opening signal to BCM.

Component Function Check

INFOID:0000000001396589

1.CHECK FUNCTION

With CONSULT-III

Check “TR/BD OPNR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
TR/BD OPNR SW	Back door opener switch is pressed	:ON
	Back door opener switch is released	:OFF

Is the inspection result normal?

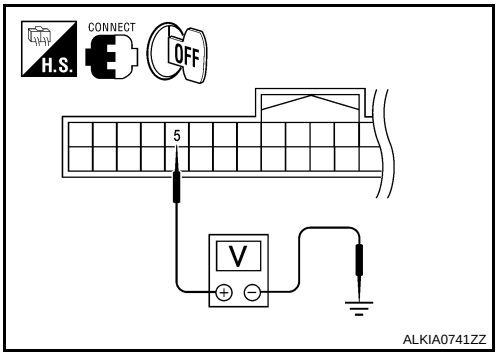
YES >> Back door opener switch is OK.
NO >> Refer to XX-XX, "*****".

Diagnosis Procedure

INFOID:0000000001507413

1.CHECK BACK DOOR OPENER SWITCH INPUT SIGNAL

Check voltage between BCM connector and ground.



Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	5	Ground	ON (press and hold)	0
			OFF (release)	Battery voltage

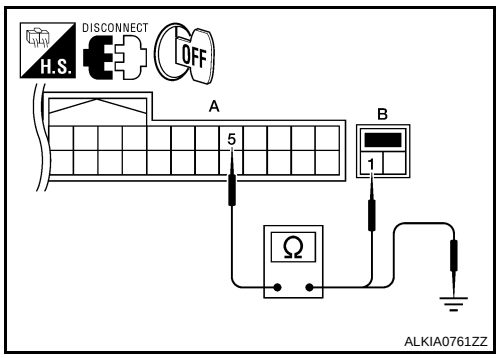
Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

1. Disconnect BCM and back door opener switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 5 and back door opener switch connector (B) D408 terminal 1.



BCM connector	Terminal	back door opener switch connector	Terminal	Continuity
M18	5	D408	1	Yes

3. Check continuity between BCM connector (A) M18 terminal 5 and ground.

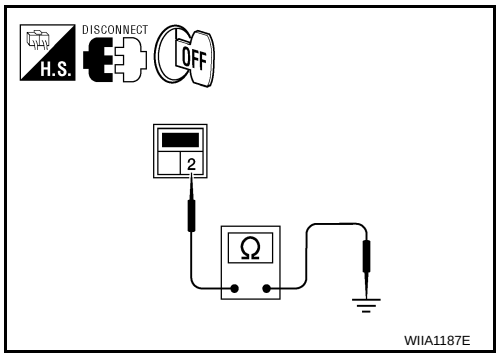
BCM connector	Terminal	Ground	Continuity
M18	5		No

Is the inspection result normal?

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

3. CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch connector and ground.



back door opener switch	Terminal	Ground	Continuity
D408	2		Yes

Is the inspection result normal?

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

4. CHECK BACK DOOR OPENER SWITCH

Refer to DLK-100, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace back door opener switch.

5. CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

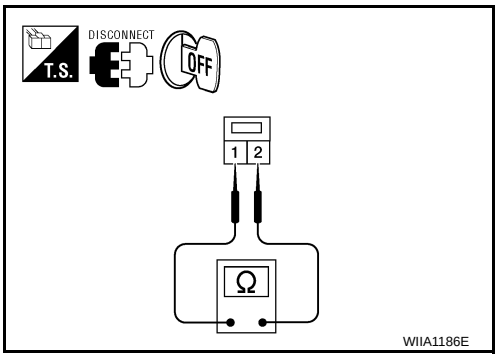
>> INSPECTION END.

Component Inspection

INFOID:0000000001507414

1. CHECK BACK DOOR OPENER SWITCH

1. Turn ignition switch OFF.
2. Check continuity between back door opener switch terminals.



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

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace back door opener switch.

TRUNK LID OPENER SWITCH

Description

INFOID:0000000001507337

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000001507338

1.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 pressed.

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.

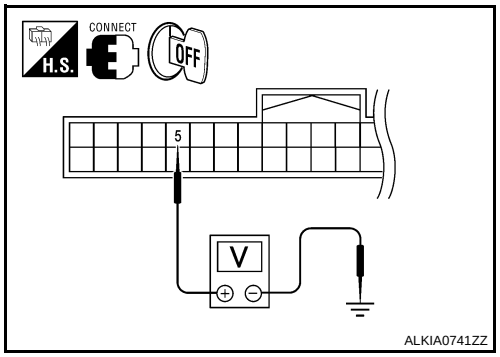
NO >> Refer to DLK-101, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001507339

1.CHECK TRUNK LID OPEN INPUT SIGNAL

Check voltage between BCM connector and ground.



Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	5	Ground	ON (press and hold)	0
			OFF (release)	Battery voltage

Is the inspection result normal?

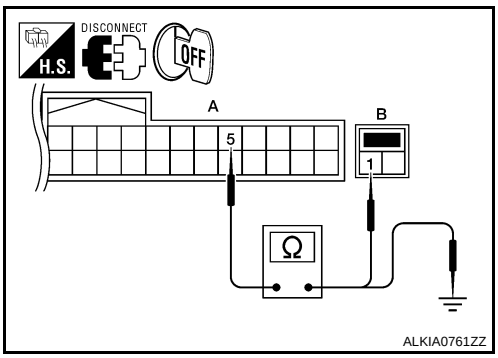
YES >> GO TO 5

NO >> GO TO 2

2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

1. Disconnect BCM and trunk lid opener switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 5 and trunk lid opener switch connector (B) B61 terminal 1.



BCM connector	Terminal	Trunk lid opener switch connector	Terminal	Continuity
M18	5	B61	1	Yes

3. Check continuity between BCM connector (A) M18 terminal 5 and ground.

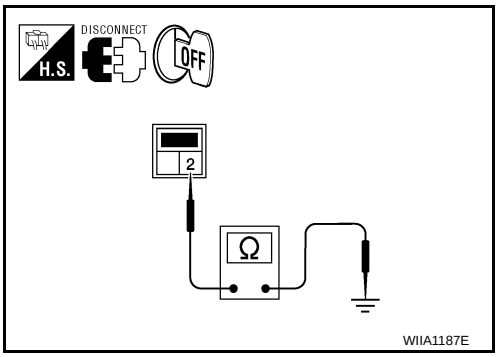
BCM connector	Terminal	Ground	Continuity
M18	5		No

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
B61	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-103, "Component Inspection".

Is the inspection result normal?

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

5. CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

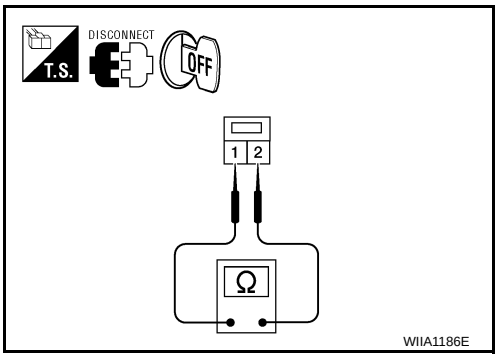
>> INSPECTION END.

Component Inspection

INFOID:0000000001507340

1. CHECK TRUNK LID OPENER SWITCH

1. Turn ignition switch OFF.
2. Check continuity between trunk lid opener switch terminals.



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.

UNLOCK SENSOR

Description

INFOID:0000000001507333

Detects door lock condition of driver door.

Component Function Check

INFOID:0000000001507334

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?

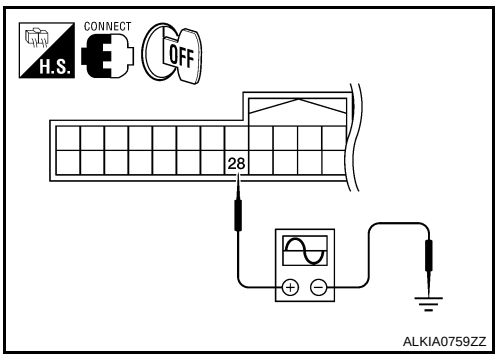
YES >> Unlock sensor is OK.
NO >> Refer to DLK-104, "Diagnosis Procedure".

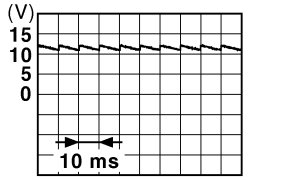
Diagnosis Procedure

INFOID:0000000001507335

1.CHECK UNLOCK SENSOR POWER SUPPLY

Check signal between Intelligent Key unit connector and ground with oscilloscope.



Terminals			Front door lock actuator (driver side) consition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	28	Ground	Locked	
			Unlocked	0

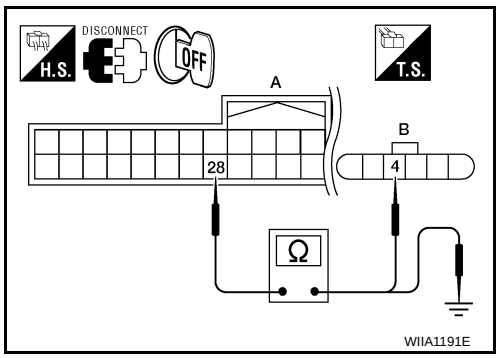
Is the inspection result normal?

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

2.CHECK UNLOCK SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit and front door lock actuator (driver side) connectors.

3. Check continuity between Intelligent Key unit connector (A) M52 terminal 28 and front door lock actuator (driver side) connector (B) D14 terminal 4.



Intelligent Key unit connector	Terminal	Front door lock actuator (driver side) connector	Terminal	Continuity
M52	28	D14	4	Yes

4. Check continuity between Intelligent Key unit connector and ground.

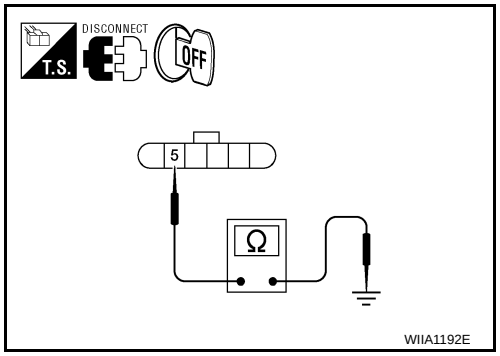
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	28		No

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between Intelligent Key unit and front door lock actuator (driver side).

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

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



Front door lock actuator (driver side) connector	Terminal	Ground	Continuity
D14	5		Yes

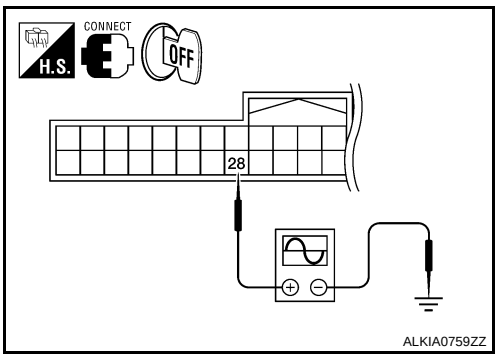
Is the inspection result normal?

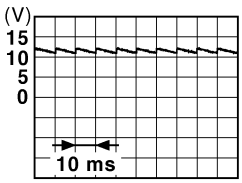
YES >> GO TO 4
NO >> Repair or replace harness.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit harness connector.

2. Check signal between Intelligent Key unit connector and ground with oscilloscope.



Terminals			Voltage (V) (Approx.)
(+)		(–)	
Intelligent Key unit connector	Terminal		
M52	28	Ground	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace Intelligent Key unit. XX-XX, "*****"

5.CHECK UNLOCK SENSOR

Refer to DLK-106, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6
NO >> Replace front door lock actuator (driver side). Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

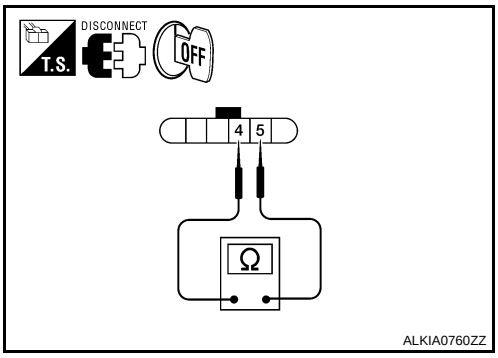
>> INSPECTION END.

Component Inspection

INFOID:0000000001507336

1.CHECK UNLOCK SENSOR

Check unlock sensor.



Terminal		Front door lock actuator (driver side) condition	Continuity
Front door lock actuator (driver side)			
4	5	Unlock	Yes
		Lock	No

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace front lock assembly LH. Refer to XX-XX, "*****".

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001507385

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001507386

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?

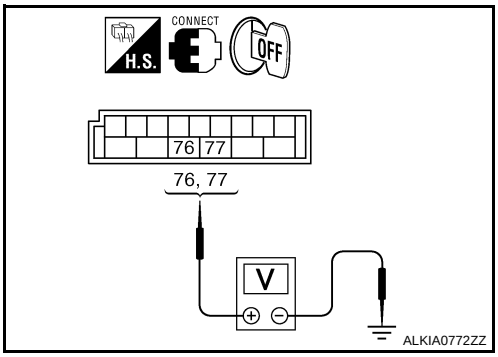
YES >> Door lock actuator is OK.
NO >> Refer to DLK-108, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001507387

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 76, 77 and ground.



Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	76	Ground	Driver door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0
	77		Driver door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0

Is the inspection result normal?

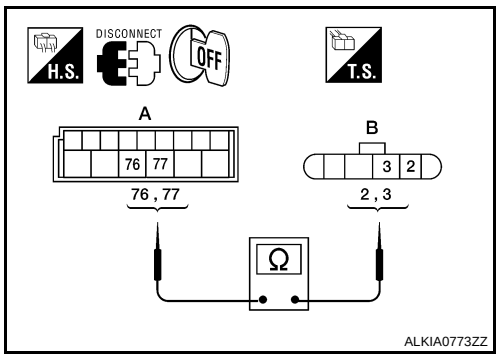
YES >> GO TO 2.
NO >> GO TO 3.

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).

2. Check continuity between BCM connector (A) M20 terminals 76, 77 and front door lock actuator (driver side) connector (B) D14 terminals 2, 3.

Connector	Terminals	Connector	Terminals	Continuity
M20	76	D14	2	Yes
	77		3	Yes



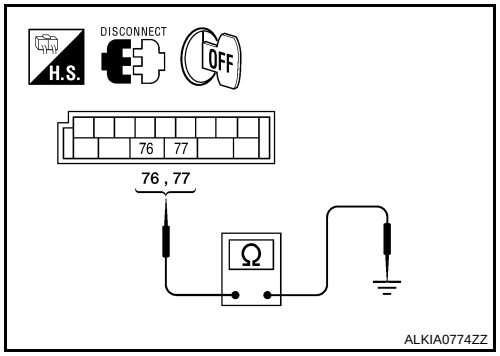
Is the inspection result normal?

YES >> Replace front door lock actuator (driver side).
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).
2. Check continuity between BCM connector M20 terminals 76, 77 and ground.

Connector	Terminals		Continuity
M20	76	Ground	No
	77		No



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001507382

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001507383

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-109, "PASSENGER SIDE : Diagnosis Procedure".

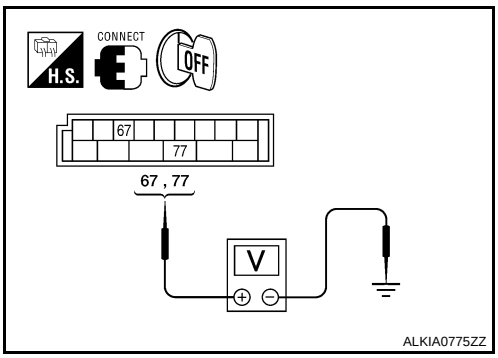
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001507384

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) SIGNAL

1. Turn ignition switch OFF.

2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



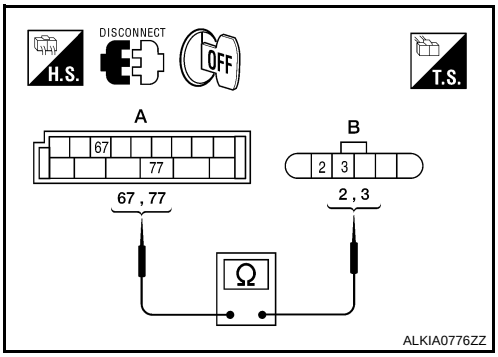
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and front door lock actuator (passenger side) (B) D114 terminals 2, 3.



BCM connector	Terminal	Front door lock actuator (passenger side) connector	Terminal	Continuity
M20	67	D114	2	Yes
	77		3	

Is the inspection result normal?

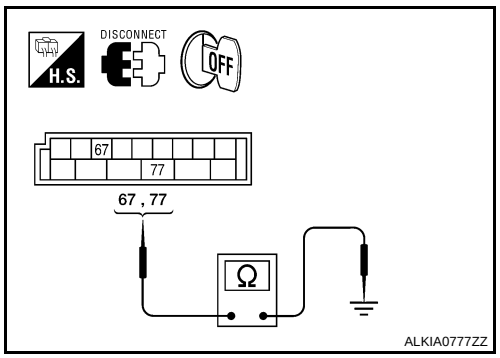
YES >> Replace front door lock actuator (passenger side). Refer to XX-XX, "*****".
NO >> Repair or replace harness.

3. CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).

2. Check continuity between BCM connector M19 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR LH

REAR LH : Description

INFOID:0000000001507388

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001507389

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?

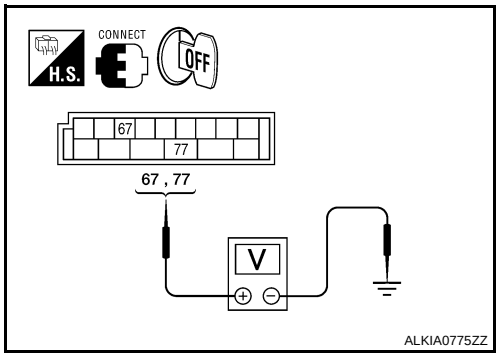
YES >> Door lock actuator is OK.
NO >> Refer to DLK-111, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001507390

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



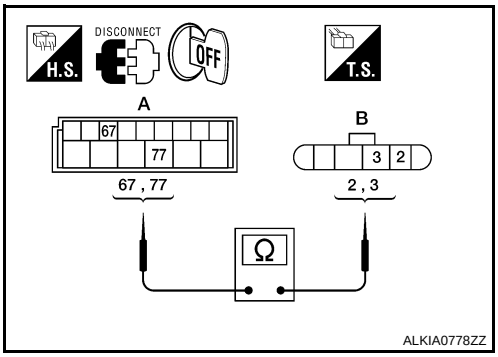
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator LH.
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and rear door lock actuator LH connector (B) D205 terminals 2, 3.



BCM connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M20	67	D205	2	Yes
	77		3	

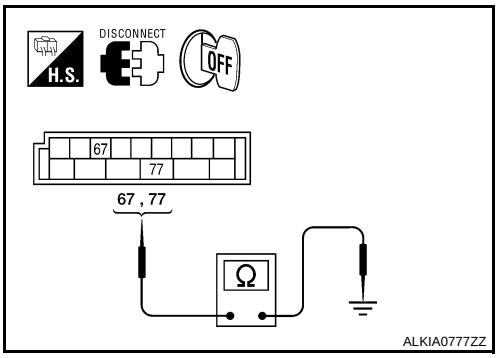
Is the inspection result normal?

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

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and each door lock actuator.
2. Check continuity between BCM connector M20 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR RH

REAR RH : Description

INFOID:0000000001507391

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001507392

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?

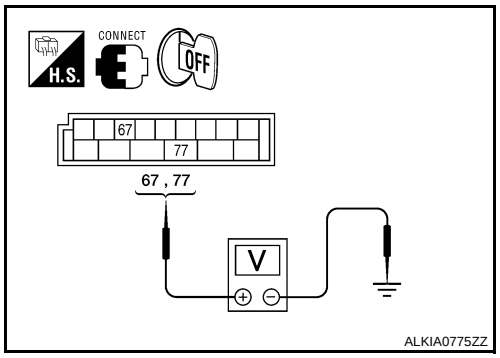
YES >> Door lock actuator is OK.
NO >> Refer to XX-XX, "*****".

REAR RH : Diagnosis Procedure

INFOID:0000000001507393

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



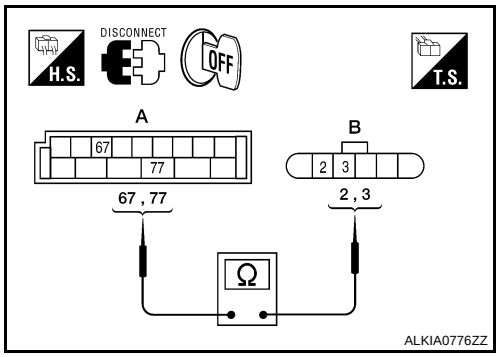
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and rear door lock actuator RH connector (B) D305 terminals 2, 3.



BCM connector	Terminal	Rear door lock actuator RH connector	Terminal	Continuity
M20	67	D305	2	Yes
	77		3	

Is the inspection result normal?

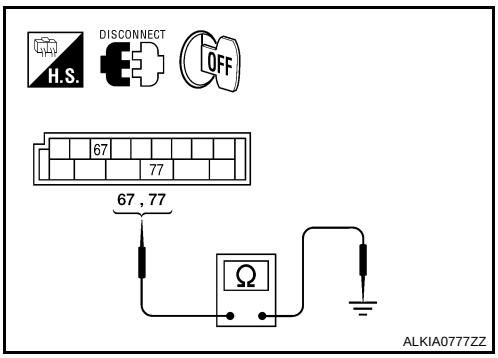
YES >> Replace rear door lock actuator RH.
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.

2. Check continuity between BCM connector (A) M20 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

BACK DOOR

BACK DOOR : Description

INFOID:0000000001507394

Locks/unlocks the door with the signal from BCM.

BACK DOOR : Component Function Check

INFOID:0000000001507395

1.CHECK FUNCTION

1. Unlock all doors using main power window and door lock/unlock switch.
2. Press the back door opener switch.

Does the back door open?

YES >> Door lock actuator is OK.
NO >> GO TO 2.

2.CHECK FUNCTION

With CONSULT-III

Check back door opener request switch “BK DOOR OPNR SW” in “Data Monitor” mode.

Monitor item	Condition	
BD/TR OPNR SW	Back door opener request switch is pressed	:ON
	Back door opener request switch is released	:OFF

Is the inspection result normal?

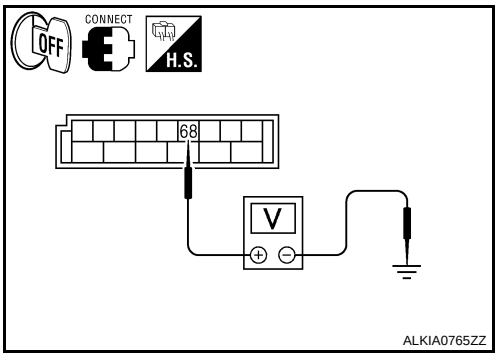
YES >> Refer to DLK-114, "BACK DOOR : Diagnosis Procedure".
NO >> Refer to XX-XX, "*****".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001507396

1.CHECK BACK DOOR LOCK ACTUATOR SIGNAL

1. Ensure the door lock system is in the unlock position.
2. Turn ignition switch OFF.
3. Press the back door opener switch while checking voltage between BCM connector M20 terminals 68 and ground.



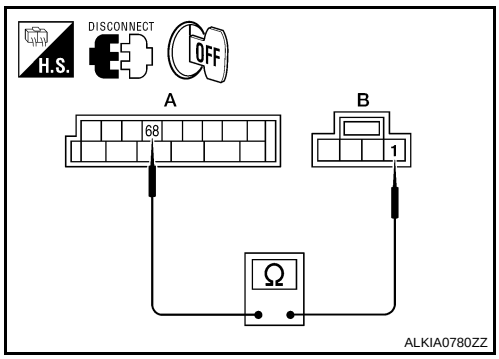
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	68	Ground	Door lock opener switch is pressed	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and back door lock assembly.
2. Check continuity between BCM connector (A) M20 terminal 68 and back door lock assembly connector (B) D405 terminal 1.



BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M20	68	D405	1	Yes

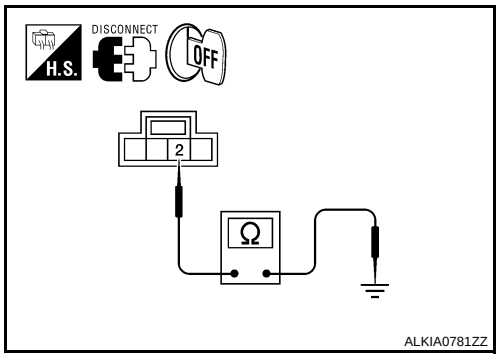
Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ACTUATOR GROUND CIRCUIT

Check continuity between back door lock assembly connector D405 terminal 2 and ground.

Terminals		Continuity
2	Ground	Yes



Is the inspection result normal?

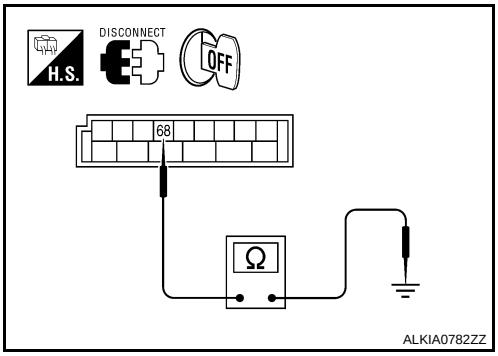
YES >> Replace back door lock assembly.
NO >> Repair or replace harness.

4.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and back door lock actuator.

2. Check continuity between BCM connector M20 terminals 68 and ground.

Terminals		Continuity
68	Ground	No



Is the inspection result normal?

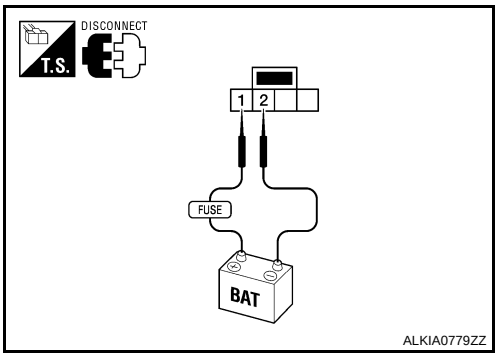
YES >> Harness is OK. Refer to DLK-116, "BACK DOOR : Component Inspection".
NO >> Repair or replace harness.

BACK DOOR : Component Inspection

INFOID:0000000001507410

1. CHECK TRUNK LAMP SWITCH

Momentarily, connect battery power supply to back door lock assembly terminals and check for actuator operation.



Terminal		Back door condition
Back door lock assembly (actuator)		
1 BAT (+)	2 BAT (-)	Actuator operates

Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Replace back door lock assembly.

TRUNK LID OPENER ACTUATOR

Description

INFOID:0000000001507345

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000001507346

1.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?

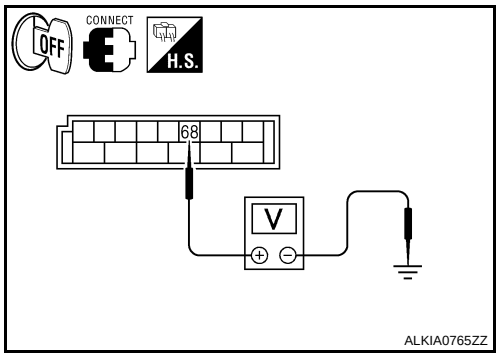
YES >> Trunk lid opener actuator is OK.
NO >> Refer to DLK-117, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001507347

1.CHECK OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Ensure door lock system is unlocked.
3. Check voltage between BCM connector and ground.



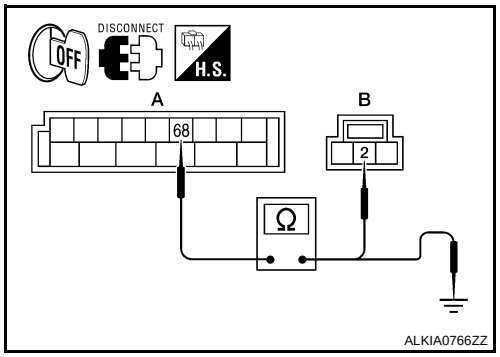
Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M20	68	Ground	ON	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM and trunk lamp switch and trunk release solenoid connectors.
2. Check continuity between BCM connector (A) M20 terminal 68 and trunk lamp switch and trunk release solenoid connector (B) B66 terminal 2.



BCM connector	Terminal	trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
M20	68	B66	2	Yes

3. Check continuity between BCM connector (A) M20 terminal 68 and ground.

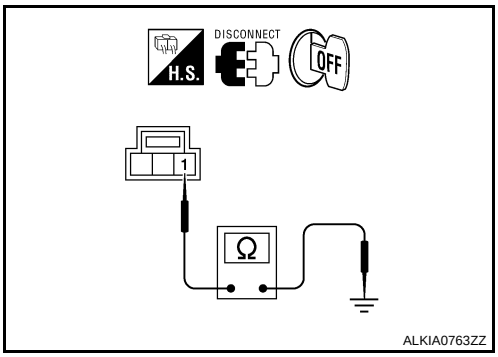
BCM connector	Terminal		Continuity
M20	68	Ground	No

Is the inspection result normal?

YES >> Refer to DLK-118, "Component Inspection".
NO >> Repair or replace harness.

3.CHECK TRUNK LID OPENER ACTUATOR GROUND CIRCUIT

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



Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B66	1		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 INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

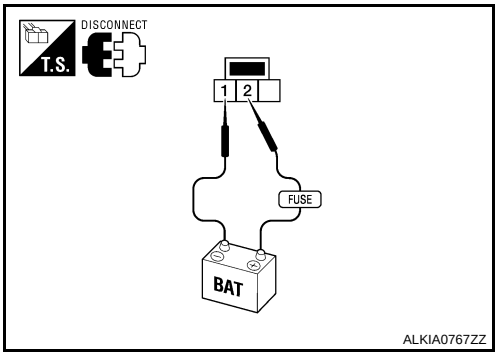
>> INSPECTION END.

Component Inspection

INFOID:0000000001507351

1.CHECK TRUNK LAMP SWITCH

Momentarily, connect battery power supply to trunk lamp switch and trunk release solenoid terminals and check for solenoid operation.



Terminal		Trunk condition
Trunk lamp switch and trunk release solenoid		
1 BAT (-)	2 BAT (+)	Solenoid operates

Is the inspection result normal?

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

INSIDE KEY ANTENNA
INSTRUMENT CENTER

INSTRUMENT CENTER : Description

INFOID:0000000001396601

Detects whether Intelligent Key is inside the vehicle.

INSTRUMENT CENTER : Component Function Check

INFOID:0000000001396602

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ROOM ANT 2”.
3. When Intelligent Key is in inside key antenna (instrument panel) detection area, hazard lamp flashes.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 2	Inside key antenna (instrument panel)

Is the inspection result normal?

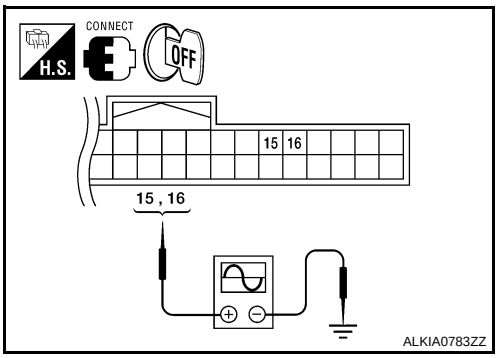
YES >> Inside key antenna (instrument panel) is OK.
NO >> Refer to DLK-120, "INSTRUMENT CENTER : Diagnosis Procedure".

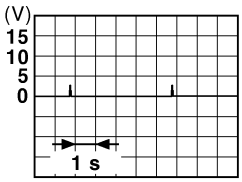
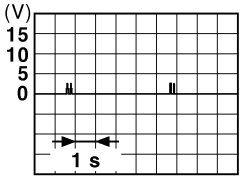
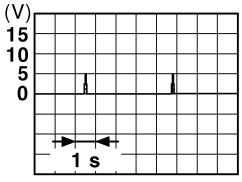
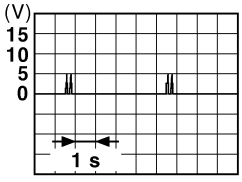
INSTRUMENT CENTER : Diagnosis Procedure

INFOID:0000000001396603

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.



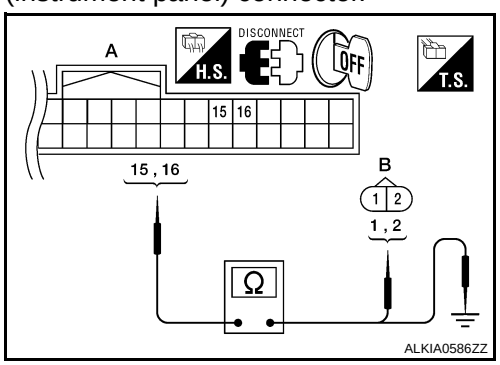
Terminals				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M52	Instrument panel (+)	15	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Instrument panel (-)	16			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

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

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (instrument panel) connector.
2. Check continuity between Intelligent Key unit connector (A) M52 terminals 15, 16 and instrument panel antenna connector (B) M10 terminals 1, 2.



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Intelligent Key unit connector	Terminal	Instrument panel antenna connector	Terminal	Continuity
M52	15	M10	1	Yes
	16		2	

3. Check continuity between Intelligent Key unit connector and ground.

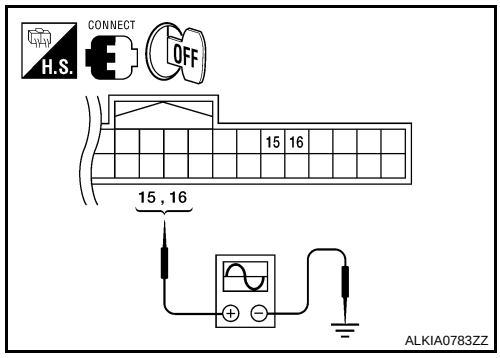
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	15		No
	16		

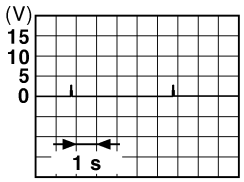
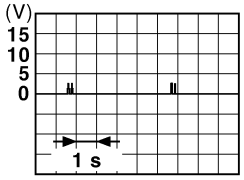
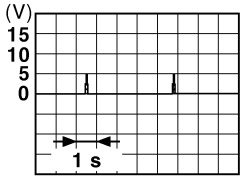
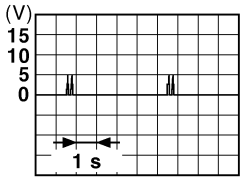
Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace instrument panel antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and instrument panel antenna connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.



Terminals				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M52	Instrument panel (+)	15	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Instrument panel (-)	16			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace instrument panel antenna. Refer to XX-XX, "*****" (instrument panel).
NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

CONSOLE

CONSOLE : Description

INFOID:0000000001396604

Detects whether Intelligent Key is inside the vehicle.

CONSOLE : Component Function Check

INFOID:0000000001396605

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ROOM ANT 1”.
3. When Intelligent Key is in inside front console antenna detection area, hazard lamps flash.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 1	Front console antenna

Is the inspection result normal?

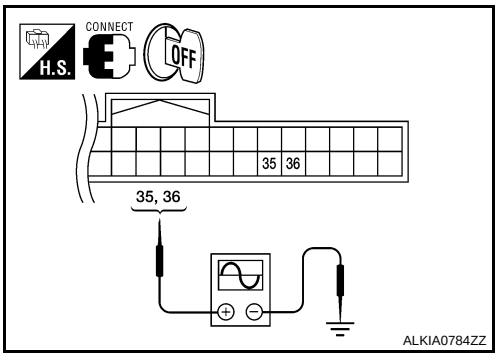
YES >> Front console antenna is OK.
NO >> Refer to DLK-124, "CONSOLE : Diagnosis Procedure".

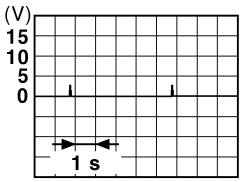
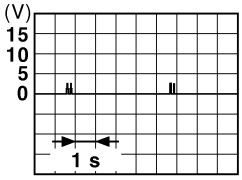
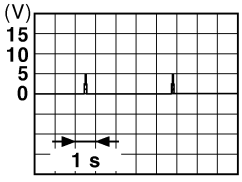
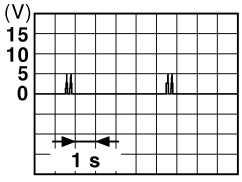
CONSOLE : Diagnosis Procedure

INFOID:0000000001396606

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.



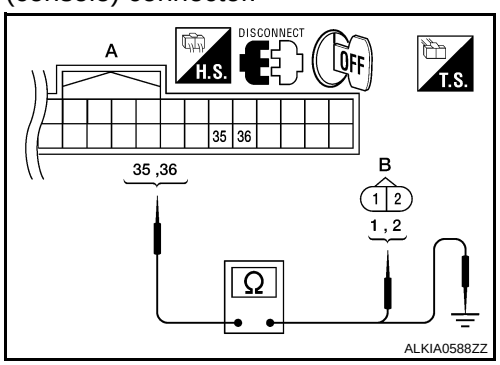
Terminal (+)		Terminal (+)	Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector						
M52	Console (+)	35	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Console (-)	36			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

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

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (console) connector.
2. Check continuity between Intelligent Key unit connector (A) M52 terminals 35, 36 and inside key antenna (console) connector (B) M45 terminals 1, 2.



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Intelligent Key unit connector	Terminal	Inside key antenna (console) connector	Terminal	Continuity
M52	35	B45	1	Yes
	36		2	

3. Check continuity between Intelligent Key unit connector and ground.

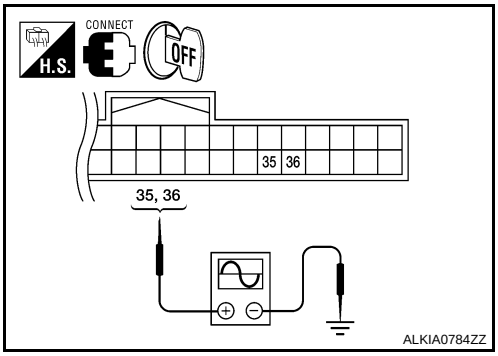
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	35		No
	36		

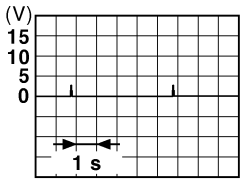
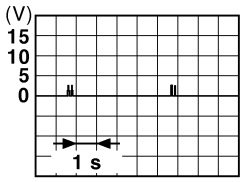
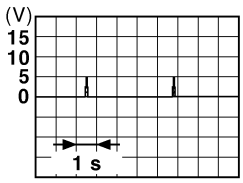
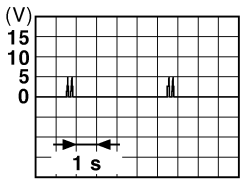
Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna (console).

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna (console) connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.



Terminal (+)		Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector	Terminal				
M52	Console (+) 35	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Console (-) 36			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to XX-XX, "*****" (console).
NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

REAR FLOOR

REAR FLOOR : Description

INFOID:0000000001396607

Detects whether Intelligent Key is inside the vehicle.

REAR FLOOR : Component Function Check

INFOID:0000000001396608

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ROOM ANT 2”.
3. When Intelligent Key is in inside key antenna (rear floor) detection area, hazard lamps flash.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 2	Rear floor antenna

Is the inspection result normal?

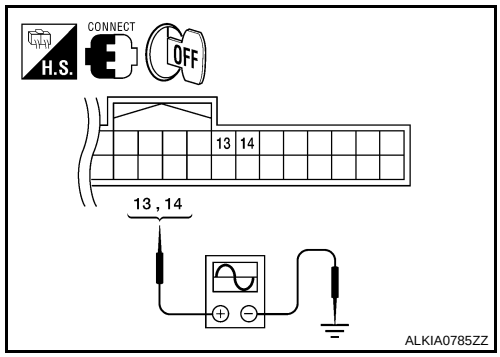
YES >> Rear floor antenna is OK.
NO >> Refer to DLK-128, "REAR FLOOR : Diagnosis Procedure".

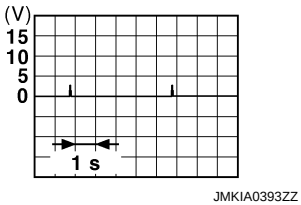
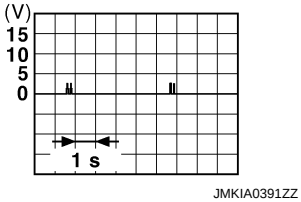
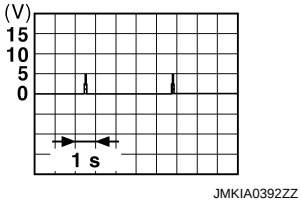
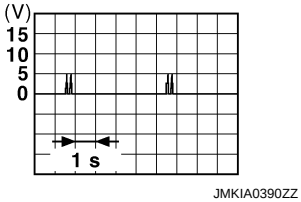
REAR FLOOR : Diagnosis Procedure

INFOID:0000000001396609

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.



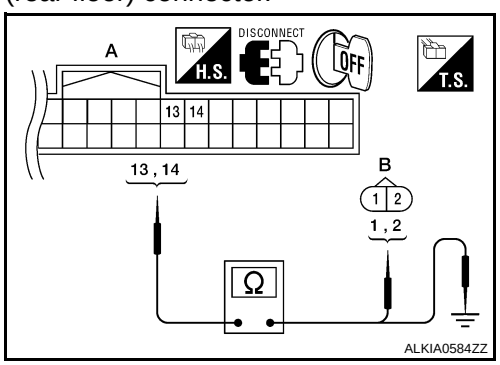
Terminal				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M40	Rear floor (+)	13	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Rear floor (-)	14			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

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

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (rear floor) connector.
2. Check continuity between Intelligent Key unit connector and inside key antenna (rear floor) connector.



ALKIA0584ZZ

Intelligent Key unit connector	Terminal	Inside key antenna (rear floor) connector	Terminal	Continuity
M40	13	B45	1	Exists
	14		2	

3. Check continuity between Intelligent Key unit connector and ground.

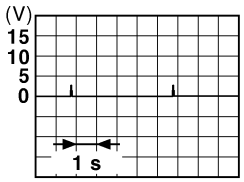
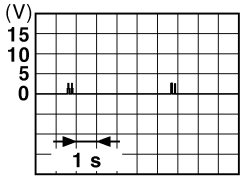
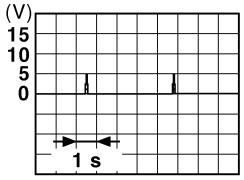
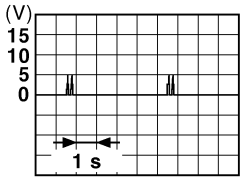
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	13		Does not exist
	14		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna (rear floor).

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna (rear floor) connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.

Terminal (+) Intelligent Key unit connector	Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Rear floor (+)	13	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Rear floor (-)	14			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna (rear floor). Refer to XX-XX, "*****" (rear floor).
NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

OUTSIDE KEY ANTENNA

Description

INFOID:0000000001507417

Detects whether the Intelligent Key is in the operating range of the outside antennas.
Front outside antennas are integrated in front outside door handles (driver side, passenger side) to allow locking and unlocking of door locks including back door (hatchback) and trunk lid (sedan) when the Intelligent Key is present.
Rear bumper antenna is mounted on the rear bumper and is used to allow the locking and unlocking of door locks including back door (hatchback) and trunk lid (sedan) when the Intelligent Key is present.

Component Function Check

INFOID:0000000001507418

1.CHECK DOOR REQUEST SWITCH

Check that door request switches operate normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Inspect door request switches. Refer to XX-XX, "*****".

2.CHECK FRONT ANTENNAS FUNCTION

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

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

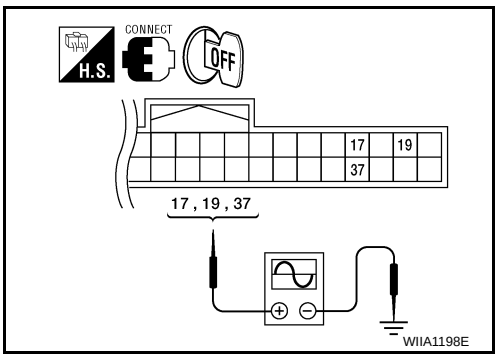
YES >> Outside key antenna is OK.
NO >> Refer to DLK-132, "Diagnosis Procedure".

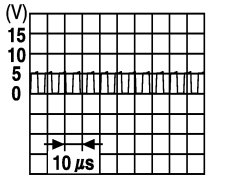
Diagnosis Procedure

INFOID:0000000001507419

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector M52 terminals 17, 19, 37 and ground with an oscilloscope.



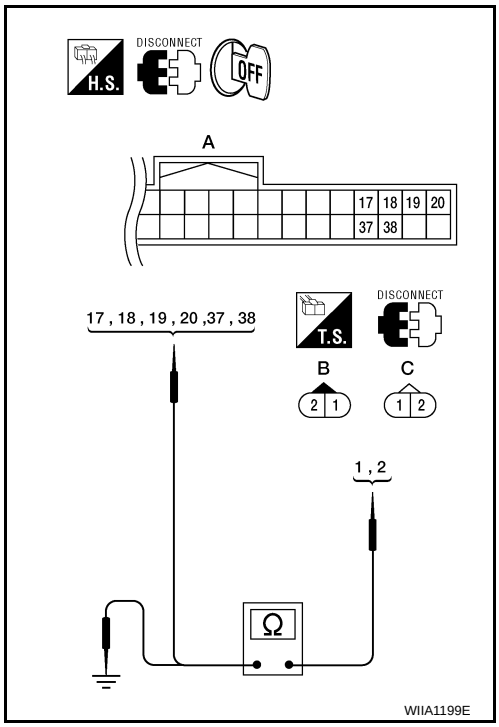
Connector	Item	Terminals (+)	Terminals (-)	Condition	Signal (Reference value)
M52	Rear bumper antenna	17	Ground	Request switch is pushed	
	Front outside antenna (driver side)	19			
	Front outside antenna (passenger side)	37			

Is the inspection result normal?

YES >> Outside key antenna is OK.
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and outside key antenna connector.
2. Check continuity between each outside key antenna harness connector (B) D10 (driver side) or D106 (passenger side), rear bumper antenna connector (C) B81 terminals 1, 2 and Intelligent Key unit harness connector (A) M52 terminals 17, 18, 19, 20, 37, and 38.



Item	Connector	Terminal	Connector	Terminal	Continuity
Rear bumper antenna	C: B81	1	A: M52	17	Yes
		2		18	
Front outside antenna (driver side)	B: D10	1		19	
		2		20	
Front outside antenna (passenger side)	B: D106	1		37	
		2		38	

3. Check continuity between each outside key antenna harness connector terminals 1, 2 and ground.

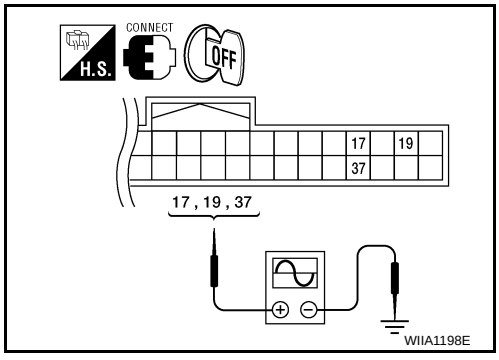
Item	Connector		Terminal	Continuity
Rear bumper antenna	C: B81	1	Ground	No
		2		
Front outside antenna (driver side)	B: D10	1		
		2		
Front outside antenna (passenger side)	B: D106	1		
		2		

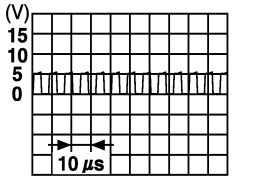
Is the inspection result normal?

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

3.CHECK OUTSIDE KEY ANTENNA POWER SUPPLY

1. Replace outside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and outside key antenna connector.
3. Check signal between Intelligent Key unit connector terminals 17, 19, 37 and ground with an oscilloscope.



Connector	Item	Terminals (+)	Terminals (-)	Condition	Signal (Reference value)
M52	Rear bumper	17	Ground	Request switch is pushed	
	Driver side	19			
	Pas-senger side	37			

SIIA1910J

Is the inspection result normal?

YES >> Replace outside key antenna.
NO >> Replace Intelligent Key unit. Refer to XX-XX, "*****".

STEERING LOCK SOLENOID

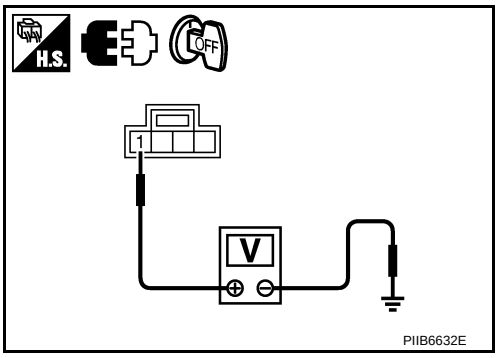
Diagnosis Procedure

INFOID:0000000001516663

1.CHECK STEERING LOCK SOLENOID POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect steering lock solenoid connector.
3. Check voltage between steering lock solenoid and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Steering lock solenoid	Terminal		
M6	1	Ground	Battery voltage



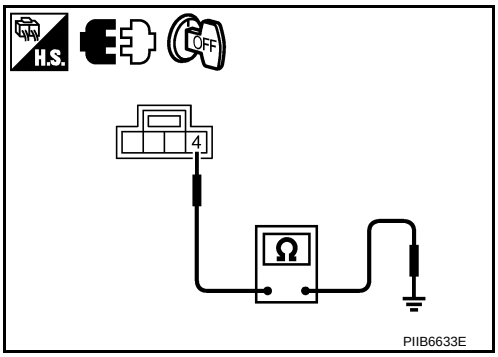
Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace steering lock solenoid power supply circuit.

2.CHECK STEERING LOCK SOLENOID GROUND CIRCUIT

Check continuity between steering lock solenoid and ground.

Steering lock solenoid connector	Terminal	Ground	Continuity
M6	4		Yes



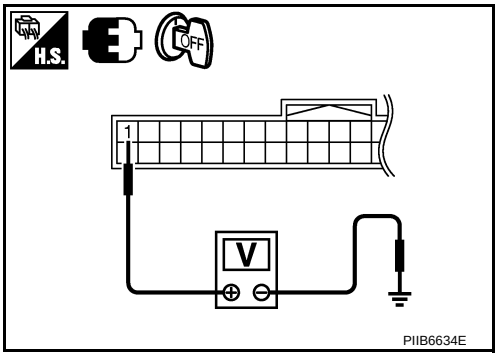
Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 6.

3.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect steering lock solenoid connector.
2. Check voltage between Intelligent Key unit and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Intelligent Key unit connector	Terminal		
M52	1	Ground	5

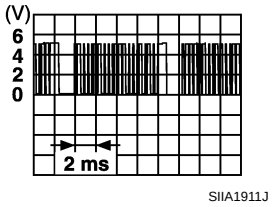


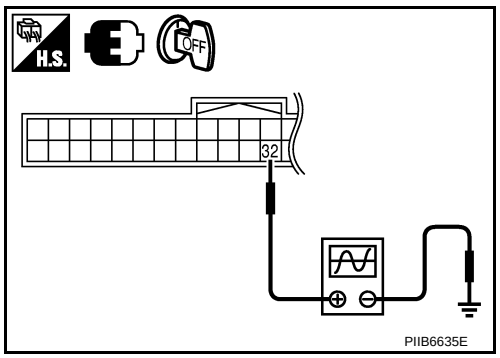
Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace Intelligent Key unit. Refer to SEC-79, "Removal and Installation".

4.CHECK STEERING LOCK COMMUNICATION SIGNAL

Check signal between Intelligent Key unit and ground with oscilloscope.

Terminals			Condition of key switch	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	32	Ground	Ignition switch is pressed, when Intelligent Key is into the vehicle.	 SIIA1911J
			Other than above	5



PIIB6635E

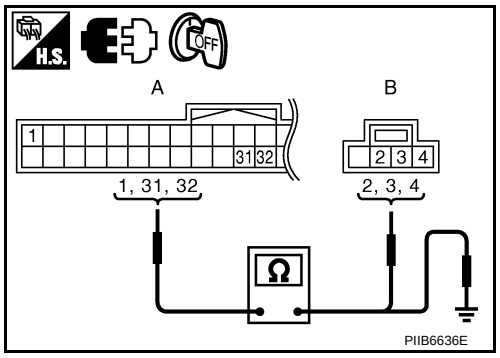
Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace Intelligent Key unit. Refer to SEC-79, "Removal and Installation".

5. CHECK STEERING LOCK SOLENOID COMMUNICATION CIRCUIT

1. Disconnect Intelligent Key unit and steering lock solenoid connectors.
2. Check continuity between Intelligent Key unit and steering lock solenoid.

A		B		Continuity
Intelligent Key unit connector	Terminal	Steering lock solenoid connector	Terminal	
M52	1	M6	2	Yes
	31		4	
	32		3	



PIIB6636E

3. Check continuity between steering lock solenoid and ground.

A		Ground	Continuity
Intelligent Key unit connector	Terminal		
M52	1		No
	31		
	32		

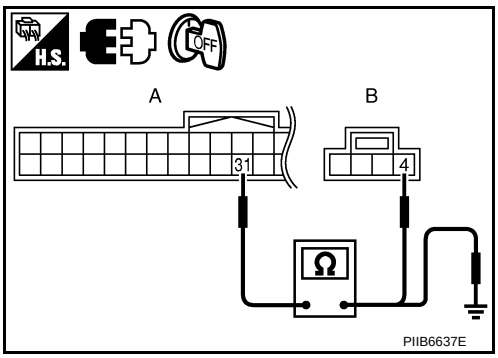
Is the inspection result normal?

YES >> Replace steering lock solenoid.
NO >> Repair or replace harness between steering lock solenoid and Intelligent Key unit.

6. CHECK STEERING LOCK SOLENOID GROUND CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit and steering lock solenoid.

A		B		Continuity
Intelligent Key unit connector	Terminal	Steering lock solenoid connector	Terminal	
M52	31	M6	4	Yes



3. Check continuity between steering lock solenoid connector and ground.

A		Ground	Continuity
Intelligent Key unit connector	Terminal		
M52	31		No

Is the inspection result normal?

YES >> Check the following.
- Intelligent Key unit ground circuit.
- Intelligent Key unit.

NO >> Repair or replace harness between steering lock solenoid and Intelligent Key unit.

KEY INTERLOCK SOLENOID (M/T)

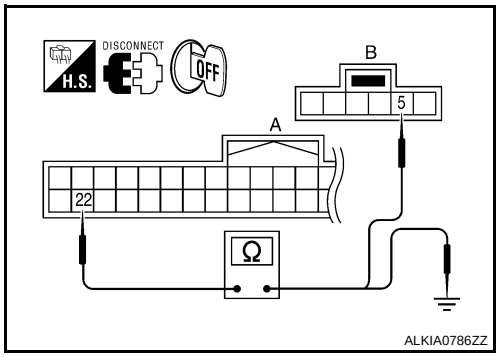
Diagnosis Procedure

INFOID:0000000001516684

1.CHECK INTERLOCK SOLENOID POWER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit and key switch and ignition knob switch connector.
3. Check continuity between Intelligent Key unit connector M52 (A) terminal 22 and key switch and ignition knob switch connector M32 (B) terminal 5.

A		B		Continuity
Intelligent Key unit connector	Terminal	Key switch and ignition knob switch connector	Terminal	
M52	22	M32	5	Yes



4. Check continuity between Intelligent Key unit connector (A) terminal 22 and ground.

A		Ground	Continuity
Intelligent Key unit connector	Terminal		
M52	22		No

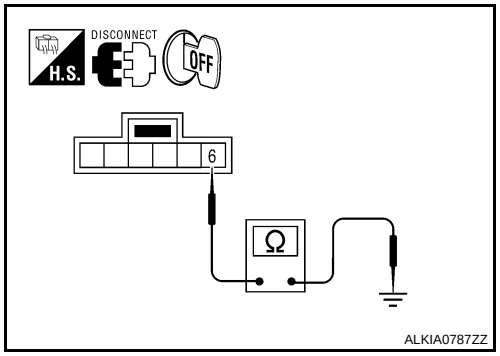
OK or NG

OK >> GO TO 2.
NG >> Repair or replace harness between Intelligent Key unit and key switch and ignition knob switch.

2.CHECK INTERLOCK SOLENOID GROUND CIRCUIT

Check continuity between key switch and ignition knob switch connector M32 terminal 6 and ground.

Key switch and ignition knob switch connector	Terminal	Ground	Continuity
M32	6		Yes



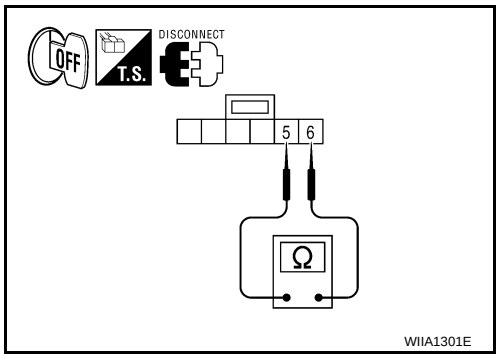
OK or NG

OK >> GO TO 3.
NG >> Repair or replace harness.

3.CHECK INTELLIGENT KEY SOLENOID RESISTANCE

Check resistance between key switch and ignition knob switch terminals 5 and 6.

Key switch and ignition knob switch	Terminal	Terminal	Resistance
	5	6	1-10 Ω



OK or NG

OK >> Key switch and ignition knob switch is OK.
NG >> Replace key switch and ignition knob switch.

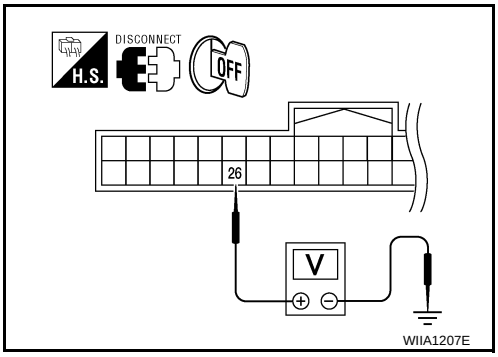
STOP LAMP SWITCH (A/T)

Diagnosis Procedure

INFOID:0000000001516691

1.CHECK STOP LAMP SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit connector.
3. Check voltage between Intelligent Key unit harness connector M52 terminal 26 and ground.



Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M52	26	Ground	Brake pedal depressed	Battery voltage
			Brake pedal released	0

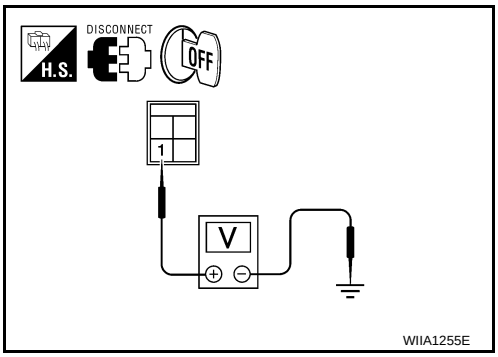
Is the inspection result normal?

YES >> Stop lamp switch is OK.
NO >> GO TO 2.

2.CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

1. Disconnect stop lamp switch connector.
2. Check voltage between stop lamp switch harness connector E13 terminal 1 and ground.

1 - Ground : Battery voltage

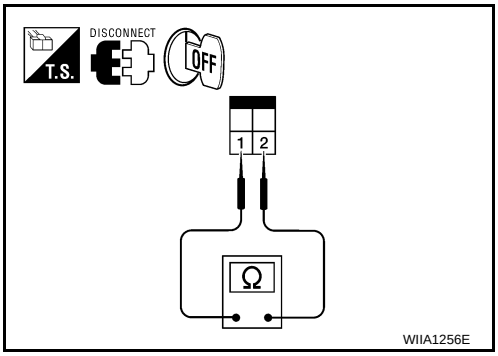


Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between stop lamp switch power supply circuit and fuse.

3.CHECK STOP LAMP SWITCH OPERATION

Check continuity between stop lamp switch terminals 1 and 2.



Component	Terminals		Condition	Continuity
Stop lamp switch	1	2	Brake pedal depressed	Yes
			Brake pedal released	No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace stop lamp switch.

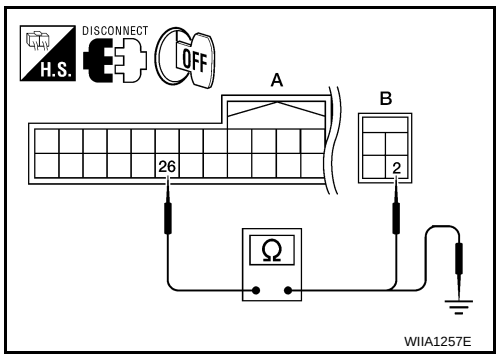
4.CHECK STOP LAMP SWITCH CIRCUIT

1. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 26 and stop lamp switch harness connector (B) E13 terminal 2.

26 - 2 : Continuity should exist.

2. Check continuity between Intelligent Key unit harness connector M52 terminal 26 and ground.

26 - Ground : Continuity should not exist.



Is the inspection result normal?

YES >> Check condition of harness and connector.
NO >> Repair or replace harness.

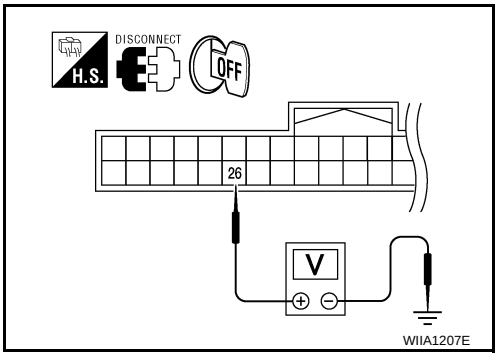
STOP LAMP SWITCH (M/T)

Diagnosis Procedure

INFOID:0000000001516670

1.CHECK STOP LAMP SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit connector.
3. Check voltage between Intelligent Key unit harness connector M52 terminal 26 and ground.



Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M52	26	Ground	Brake pedal depressed	Battery voltage
			Brake pedal released	0

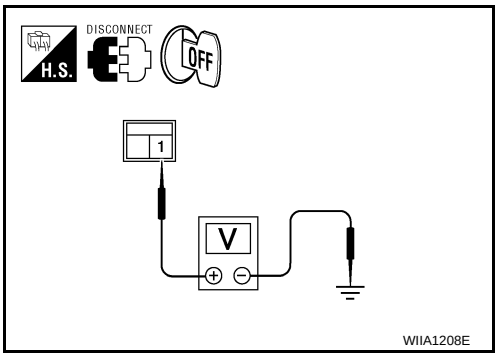
Is the inspection result normal?

YES >> Stop lamp switch is OK.
NO >> GO TO 2.

2.CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

1. Disconnect stop lamp switch connector.
2. Check voltage between stop lamp switch harness connector M203 terminal 1 and ground.

1 - Ground : Battery voltage

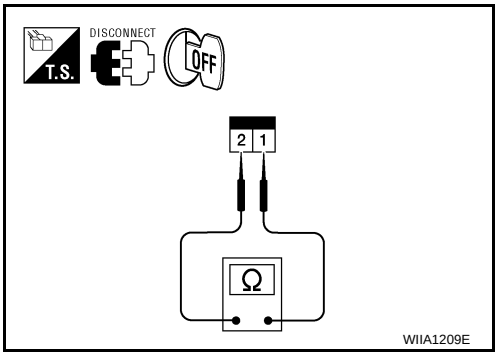


Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between stop lamp switch power supply circuit and fuse.

3.CHECK STOP LAMP SWITCH OPERATION

Check continuity between stop lamp switch terminals 1 and 2.



Component	Terminals		Condition	Continuity
Stop lamp switch	1	2	Brake pedal depressed	Yes
			Brake pedal released	No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace stop lamp switch.

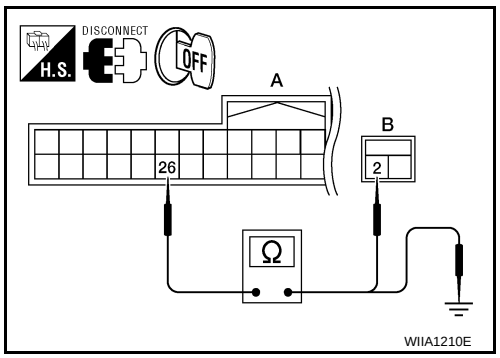
4.CHECK STOP LAMP SWITCH CIRCUIT

1. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 26 and stop lamp switch harness connector (B) M203 terminal 2.

26 - 2 : Continuity should exist.

2. Check continuity between Intelligent Key unit harness connector M52 terminal 26 and ground.

26 - Ground : Continuity should not exist.



Is the inspection result normal?

YES >> Check condition of harness and connector.
NO >> Repair or replace harness.

INTELLIGENT KEY WARNING BUZZER

Description

INFOID:0000000001396614

Answers back and warns about an inappropriate operation. Hatchback vehicles are equipped with a warning buzzer located inside the driver door. In addition to this buzzer, the sedan vehicles are equipped with a second buzzer located in the trunk area.

Component Function Check

INFOID:0000000001396615

1.CHECK FUNCTION

With CONSULT-III

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

Does the warning buzzer(s) sound?

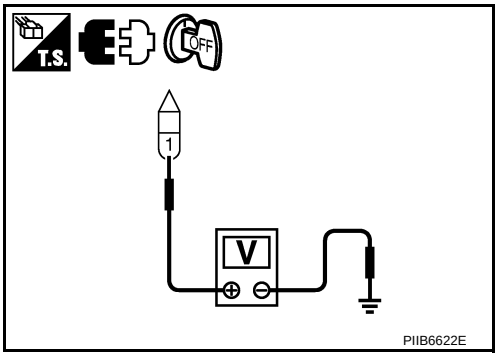
YES >> Intelligent Key warning buzzer(s) is OK.
NO >> Refer to DLK-142, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001396616

1.CHECK INTELLIGENT KEY WARNING BUZZER(S) 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.



Terminal			Voltage (V) (Approx.)
(+)		(–)	
Intelligent Key warning buzzer connector	Terminal		
D6 (driver door)	1	Ground	Battery voltage
B82 (trunk)*			

*: Sedan only

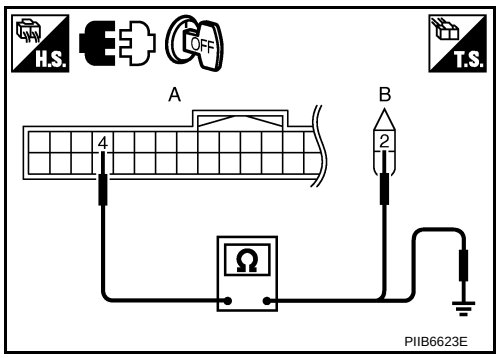
Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace Intelligent Key warning buzzer power supply circuit.

2.CHECK HARNESS CONTINUITY

NOTE:
For sedan vehicles, ensure both Intelligent Key warning buzzers are disconnected before proceeding.
1. Disconnect Intelligent Key unit connector.

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



Intelligent Key unit connector	Terminal	Intelligent Key warning buzzer connector		Terminal	Continuity
M52	4	Driver door	D6	2	Yes
		Trunk*	B82		

*: Sedan only

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

Intelligent Key unit connector	Terminal	Ground	Continuity
M52	4		No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key warning buzzer and Intelligent Key unit.

3.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-143, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace Intelligent Key warning buzzer. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

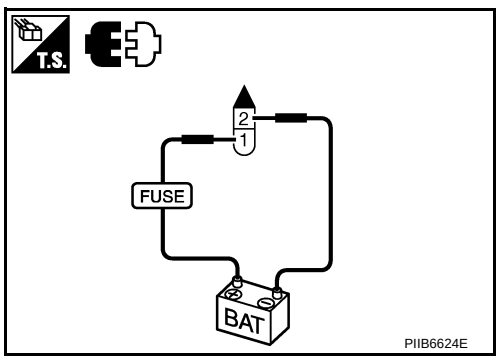
>> INSPECTION END

Component Inspection

INFOID:0000000001396617

1.CHECK INTELLIGENT KEY WARNING BUZZER

Connect battery power supply to Intelligent Key warning buzzer terminals 1 and 2, and check the operation.



Intelligent Key warning buzzer connector	Terminal		Operation
	(+)	(-)	
D6 (driver door)	1	2	Buzzer sounds
B82 (trunk)*			

*: Sedan only

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.
NO >> Replace Intelligent Key warning buzzer. Refer to XX-XX, "*****".

BUZZER (COMBINATION METER)

Description

INFOID:0000000001396618

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000001396619

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INSIDE BUZZER” in “Active Test”.

Test item	Condition	
INSIDE BUZZER	:TAKE OUT	Take away warning chime sounds
	:KNOB	Ignition knob switch warning chime sounds
	:KEY	Key warning chime sounds

Is the inspection result normal?

Yes >> Warning buzzer in combination meter is OK.
No >> Refer to DLK-145, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001396620

1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to XX-XX, "*****".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

KEY WARNING LAMP

Description

INFOID:0000000001396621

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000001396622

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INDICATOR” in “Active Test” mode.

Test item	Condition	
INDICATOR	:BLUE ON	Key warning lamp (green) illuminates
	:RED ON	Key warning lamp (red) illuminates
	:BLUE IND	Key warning lamp (green) flashes
	:RED IND	Key warning lamp (red) flashes

Is the inspection result normal?

Yes >> Key warning lamp in combination meter is OK.
No >> Refer to DLK-146, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001396623

1.CHECK KEY WARNING LAMP CIRCUIT

Refer to XX-XX, "*****".

Is the inspection result normal?

Yes >> GO TO 2.
No >> Repair or replace key warning lamp circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

LOCK WARNING LAMP

Description

INFOID:0000000001396624

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000001396625

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INDICATOR” in “Active Test” mode.

Test item	Condition	
INDICATOR	:KNOB ON	Lock warning lamp illuminates
	:KNOB IND	Lock warning lamp flashes

Is the inspection result normal?

Yes >> Lock warning lamp in combination meter is OK.
No >> Refer to DLK-147, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001396626

1.CHECK COMBINATION METER OPERATION

Check the operation of the combination meter.

Does the combination meter operate normally?

Yes >> GO TO 2.
No >> Refer to MWI-3, "Work Flow".

2.CHECK LOCK WARNING LAMP CIRCUIT

1. Engage the parking brake.
2. Turn ignition switch ON.
3. Depress the brake pedal and take the shift lever out of park.
4. With the shift lever out of park, attempt to turn ignition switch to the LOCK position.

Does the "LOCK" indicator illuminate?

Yes >> GO TO 3.
No >> Refer to MWI-3, "Work Flow" in combination meter to diagnose the park/neutral position indicator circuit.

3.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

HAZARD WARNING LAMPS

Description

INFOID:0000000001396627

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

Component Function Check

INFOID:0000000001396628

1.CHECK FUNCTION

With CONSULT-III

Check hazard warning lamp “FLASHER” in “Active Test” mode.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-148, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001396629

1.CHECK HAZARD SWITCH CIRCUIT

Use the hazard warning switch circuit.

Do the hazard warning lamps operate normally?

YES >> GO TO 2.
NO >> Repair hazard warning lamps. Refer to BCS-9, "System Diagram".

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

VEHICLE SPEED SIGNAL CIRCUIT

Description

INFOID:0000000001396630

Displays the vehicle speed signal received from combination meter as a numerical value (km/h).

Component Function Check

INFOID:0000000001396631

1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 12 km/h (7 MPH).

Is the inspection result normal?

YES >> Vehicle speed signal circuit is OK.
NO >> Refer to DLK-149, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001396632

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal “VEHICLE SPEED” in “Data Monitor” mode.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace vehicle speed signal circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

INTELLIGENT KEY BATTERY AND FUNCTION

Description

INFOID:0000000001516665

The following functions are available when having and carrying the Intelligent Key.
- Door lock/unlock
- Back door open (hatchback)
- Trunk lid release (sedan)
- Engine start

Remote control entry function is available when operating the remote buttons.

Component Function Check

INFOID:0000000001516666

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 the Intelligent Key.

Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Refer to DLK-150, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001516667

1.CHECK INTELLIGENT KEY FUNCTION

Do doors lock and unlock when using the Intelligent Key buttons?

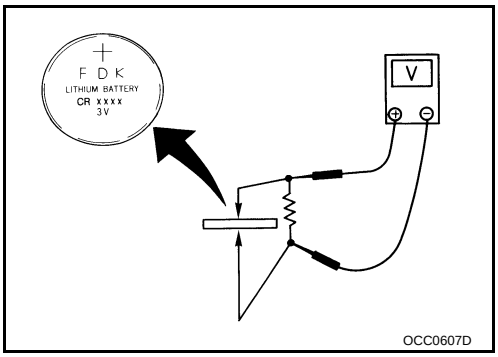
YES or NO?

YES >> Intelligent Key is OK.
NO >> GO TO 2.

2.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.
NO >> Replace Intelligent Key battery.

Component Inspection

INFOID:0000000001516668

For battery removal and installation, refer to XX-XX, "*****".

Special Repair Requirement

INFOID:0000000001516669

Refer to CONSULT-III Operation Manual.

ECU DIAGNOSIS

INTELLIGENT KEY UNIT

Reference Value

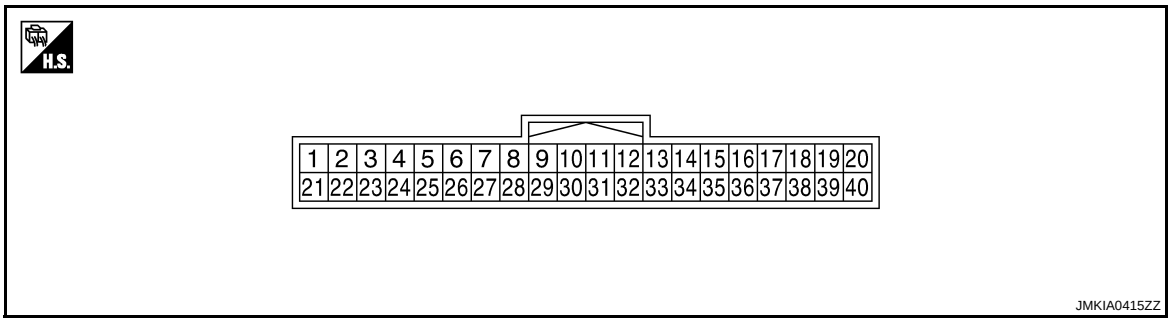
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VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

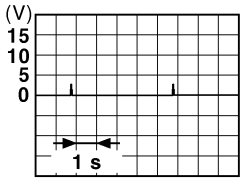
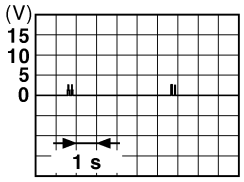
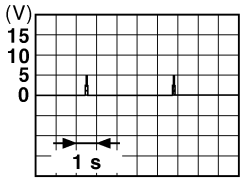
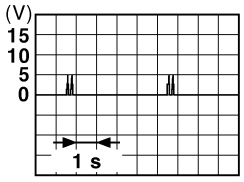
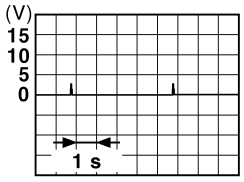
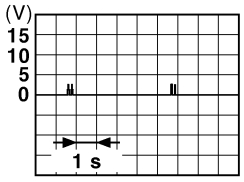
Monitor Item	Condition		Value/Status
PUSH SW	Ignition knob	Release	OFF
		Press	ON
KEY ON SW	Mechanical key	Removed	OFF
		Inserted	ON
DR REQ SW	Door request switch (driver)	Release	OFF
		Press	ON
AS REQ SW	Door request switch (passenger)	Release	OFF
		Press	ON
BD/TR REQ SW	Door request switch (back door)	Release	OFF
		Press	ON
IGN SW	Ignition switch	Other than ON position	OFF
		ON position	ON
ACC SW	Ignition switch	Other than ACC or ON position	OFF
		ACC or ON position	ON
STOP LAMP SW	Brake pedal	Press	OFF
		Release	ON
DOOR LOCK SIG	Lock button of Intelligent Key	Release	OFF
		Press	ON
DOOR UNLOCK SIG	Unlock button of Intelligent Key	Release	OFF
		Press	ON
DOOR SW DR	Door (driver side)	Close	OFF
		Open	ON
DOOR SW AS	Door (passenger side)	Close	OFF
		Open	ON
DOOR SW RR	Door (rear RH)	Close	OFF
		Open	ON
DOOR SW RL	Door (rear LH)	Close	OFF
		Open	ON
DOOR BK SW	Back door	Close	OFF
		Open	ON
VEHICLE SPEED	While driving		Equivalent to speedometer reading

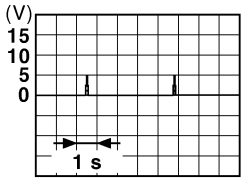
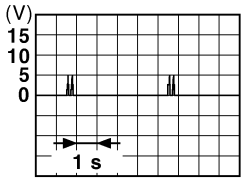
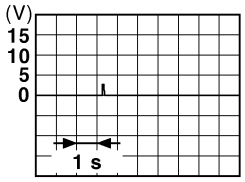
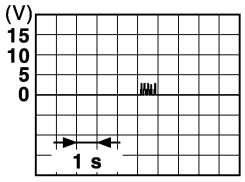
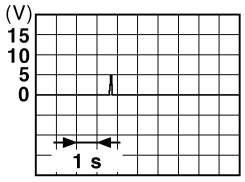
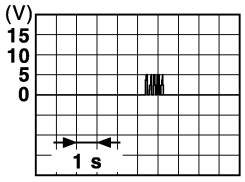
TERMINAL LAYOUT

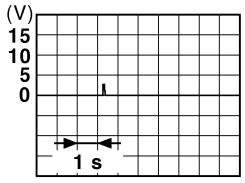
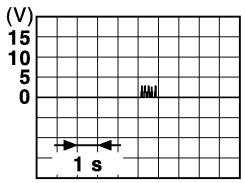
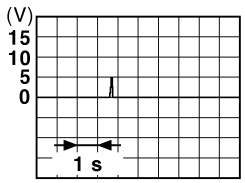
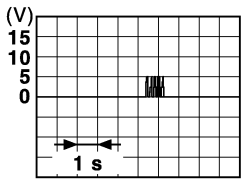


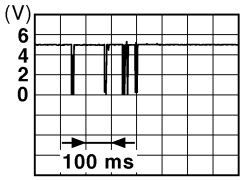
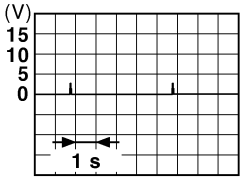
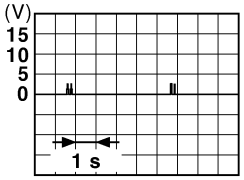
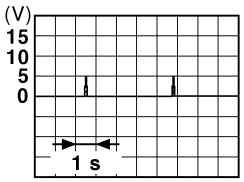
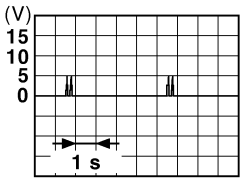
PHYSICAL VALUES

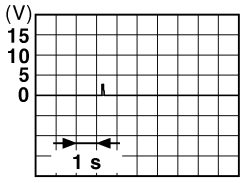
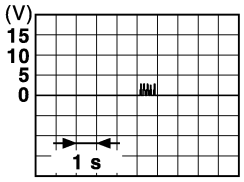
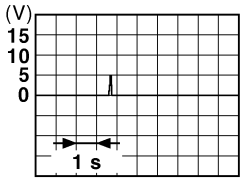
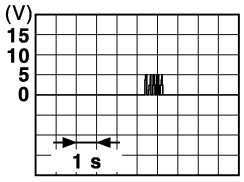
Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
1	Ground	R	Steering lock unit power supply	Output	—		5
2	Ground	L	CAN - H	Input/ Output	—		—
3	Ground	P	CAN - L	Input/ Output	—		—
4	Ground	O	Intelligent Key warning buzzer	Output	Intelligent Key warning buzzer	Sounding	0
						Not sounding	Battery voltage
5	Ground	G	Front door request switch (driver side)	Input	Front door request switch (driver side)	ON (Pressed)	0
						OFF (Released)	5
6	Ground	Y	Ignition switch power supply	Input	Ignition switch	OFF or ACC	0
						ON or START	Battery voltage
7	Ground	LG	Key switch	Input	When ignition key is inserted into ignition key cylinder		Battery voltage
					When ignition key is not inserted into ignition key cylinder		0
8	Ground	W	Imm-	Input	—		—
9	Ground	O	Imm-	Output	—		—
10	Ground	V	Battery power supply	Input	Ignition switch OFF		Battery voltage
11	Ground	SB	Battery power supply	Input	Ignition switch OFF		Battery voltage
12	Ground	B	Ground	—	Ignition switch ON		0

Terminal No. +	Terminal No. –	Wire color	Description Signal name	Description Input/ Output	Condition		Value [V] (Approx.)
13	Ground	R	Inside key antenna (+) (rear floor)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ
14	Ground	G	Inside key antenna (-) (rear floor)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ
15	Ground	LG	Instrument panel antenna (+)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ

Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
16	Ground	V	Instrument panel antenna (-)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ
17	Ground	W	Outside key antenna (+) (rear bumper)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0514ZZ
18	Ground	B	Outside key antenna (-) (rear bumper)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ

Terminal No. +	Terminal No. –	Wire color	Description: Signal name	Description: Input/ Output	Condition		Value [V] (Approx.)
19	Ground	V	Outside key antenna (+) (driver side)	Output	When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0514ZZ
20	Ground	P	Outside key antenna (-) (driver side)	Output	When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ
22*1	Ground	BR	Key lock solenoid	Output	Key lock solenoid	LOCK*2	Battery voltage
						UNLOCK*2	0
25	Ground	L	Front door request switch (passenger side)	Input	Front door request switch (passenger side)	ON (Pressed)	0
						OFF (Released)	5
26	Ground	SB	Stop lamp switch	Input	Depress the brake pedal		Battery voltage
					Release the brake pedal		0
27	Ground	W	Ignition knob switch	Input	Ignition switch OFF	When ignition knob switch is pressed	Battery voltage
						When ignition knob switch is released	0
28	Ground	Y	Door lock status switch	Input	Lock (ON)		5
					Unlock (OFF)		0
29*2	Ground	V	Back door request switch	Input	Back door request switch	ON (Pressed)	0
						OFF (Released)	5

Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
29*3	Ground	V	Trunk opener request switch	Input	Trunk opener request switch	ON (Pressed)	0
						OFF (Released)	5
30	Ground	GR	Security indicator lamp	Output	Ignition switch OFF	When security indicator lamp is ON	0
						When security indicator lamp is OFF	Battery voltage
31	Ground	BR	Steering lock unit ground	—	—	—	0
32	Ground	GR	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	5
						LOCK or UNLOCK	 JMKIA0433ZZ
35	Ground	L	Front console antenna (+)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ
36	Ground	P	Front console antenna (-)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ

Terminal No. +	Terminal No. –	Wire color	Description Signal name	Description Input/ Output	Condition		Value [V] (Approx.)
37	Ground	BR	Outside key antenna (+) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is in the antenna detection area	 JMKIA0514ZZ
38	Ground	Y	Outside key antenna (-) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ

*1:M/T models.

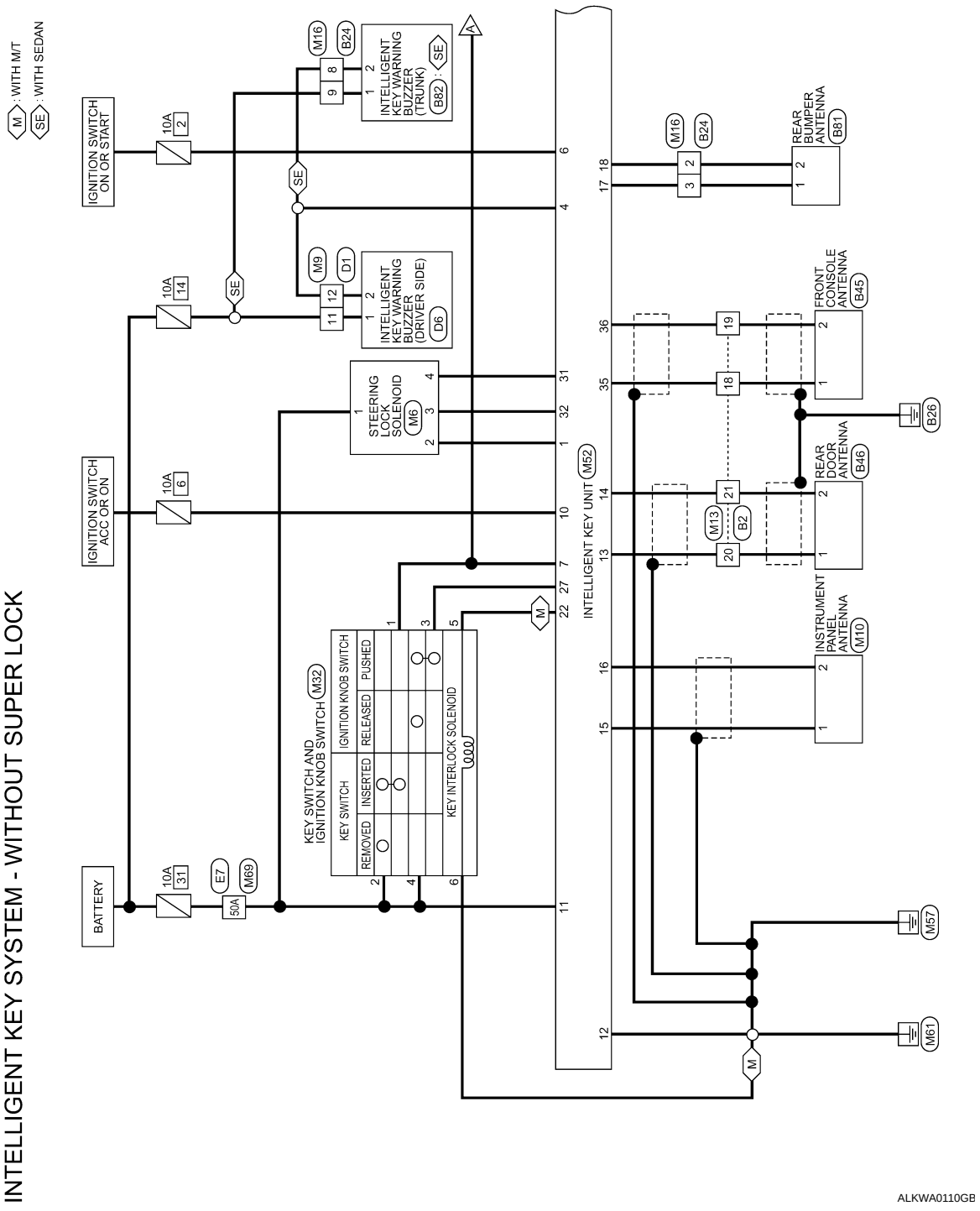
*2: Hatchback models.

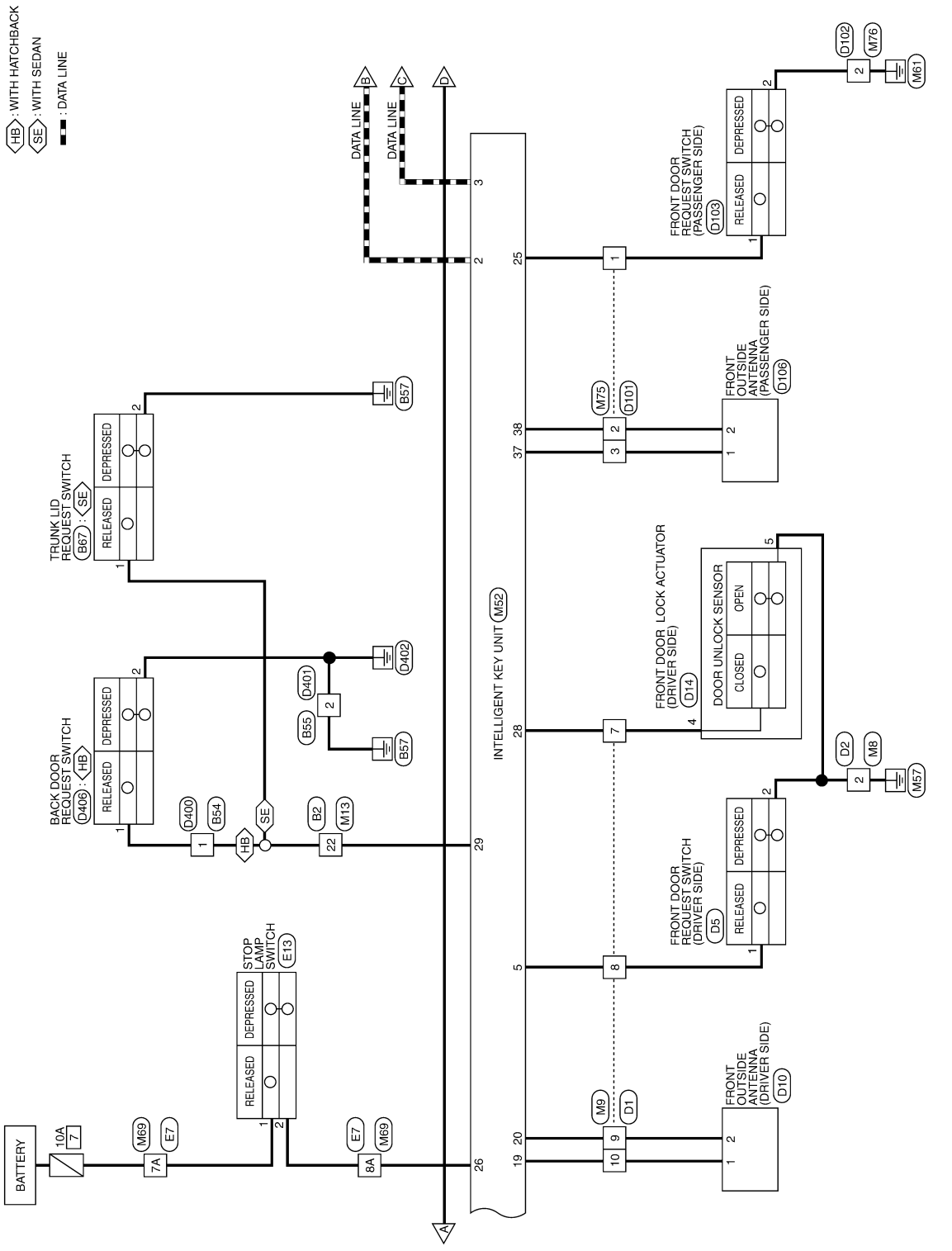
*3: Sedan models.

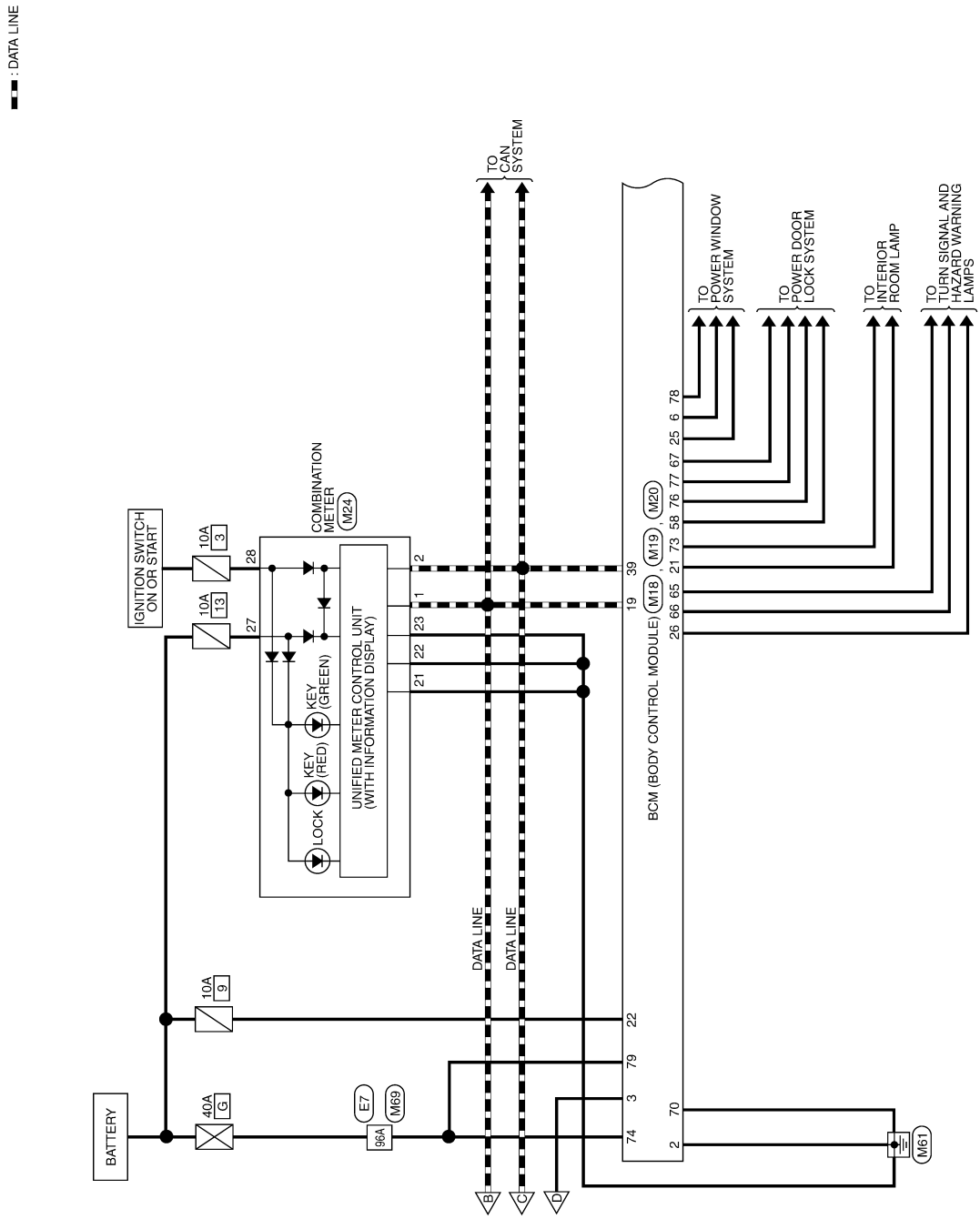
Wiring Diagram - INTELLIGENT KEY SYSTEM -

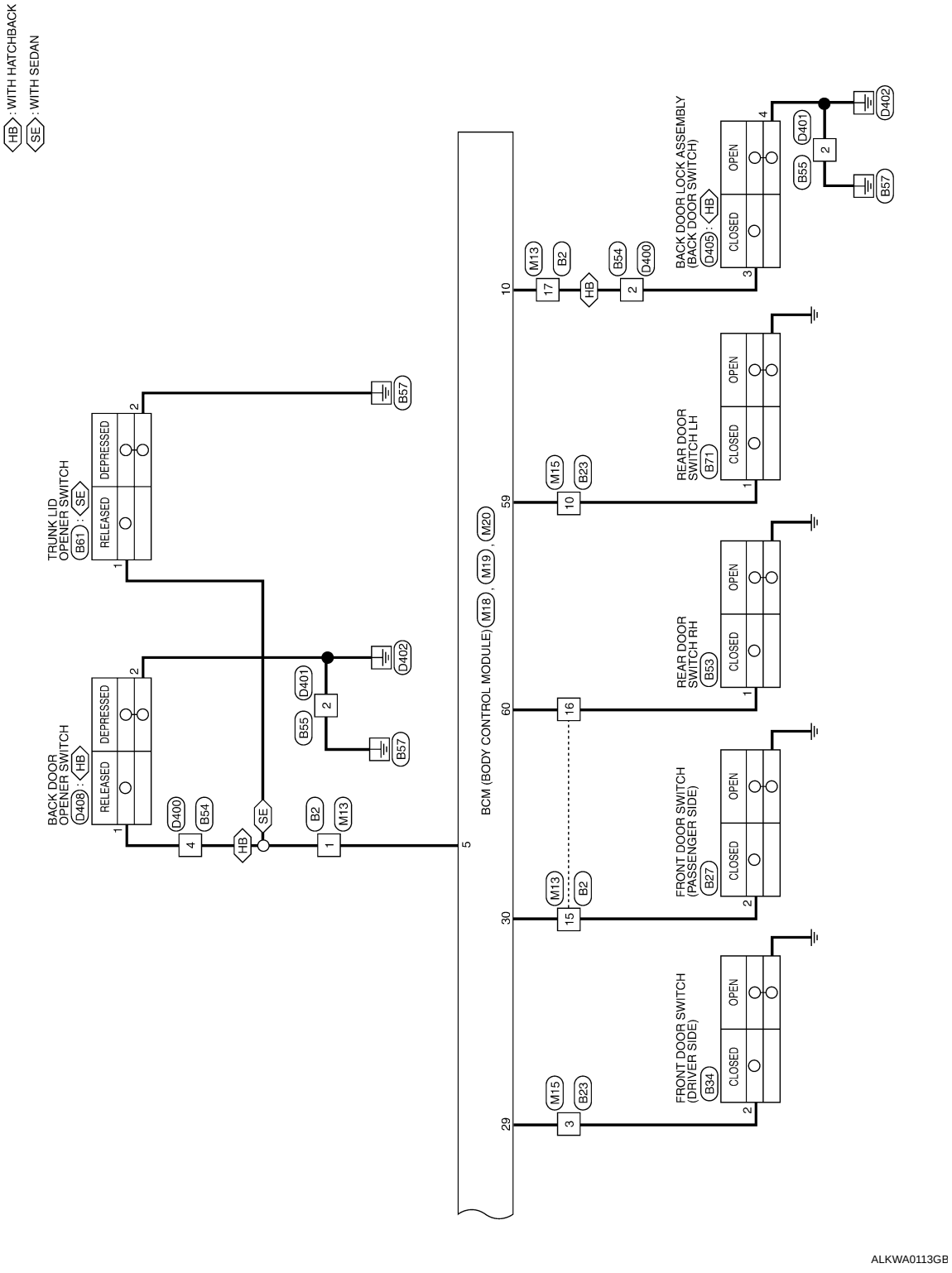
INFOID:0000000001396638

INTELLIGENT KEY SYSTEM - WITHOUT SUPER LOCK




HB : WITH HATCHBACK
SE : WITH SEDAN
: DATA LINE
DATA LINE
DATA LINE
INTELLIGENT KEY UNIT (M52)
FRONT DOOR REQUEST SWITCH (PASSENGER SIDE) (D103)
FRONT OUTSIDE ANTENNA (PASSENGER SIDE) (D106)
FRONT DOOR LOCK ACTUATOR (DRIVER SIDE) (D14)
DOOR UNLOCK SENSOR
FRONT DOOR REQUEST SWITCH (DRIVER SIDE) (D5)
FRONT OUTSIDE ANTENNA (DRIVER SIDE) (D10)
TRUNK LID REQUEST SWITCH (B67) : SE
BACK DOOR REQUEST SWITCH (D406) : HB
STOP LAMP SWITCH (E13)
BATTERY
10A 7
7A
8A
DEPRESSED
RELEASED
OPEN
CLOSED
ALKWA0111GB


: DATA LINE
TO CAN SYSTEM
TO POWER WINDOW SYSTEM
TO POWER DOOR LOCK SYSTEM
TO INTERIOR ROOM LAMP
TO TURN SIGNAL AND HAZARD WARNING LAMPS
IGNITION SWITCH ON OR START
10A 3
10A 13
10A 9
40A G
BATTERY
COMBINATION METER M24
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
KEY (GREEN)
KEY (RED)
LOCK
BCM (BODY CONTROL MODULE) M18 M19 M20
DATA LINE
DATA LINE
E7 M69
96A
E5 M61
B
C
D
ALKWA0112GB


HB : WITH HATCHBACK
SE : WITH SEDAN
BCM (BODY CONTROL MODULE) (M18), (M19), (M20)
BACK DOOR OPENER SWITCH (D408) : HB
TRUNK LID OPENER SWITCH (B61) : SE
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH) (D405) : HB
REAR DOOR SWITCH LH (B71)
REAR DOOR SWITCH RH (B53)
FRONT DOOR SWITCH (PASSENGER SIDE) (B27)
FRONT DOOR SWITCH (DRIVER SIDE) (B34)
RELEASED
DEPRESSED
CLOSED
OPEN
ALKWA0113GB

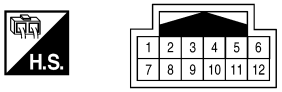
INTELLIGENT KEY SYSTEM WITHOUT SUPER LOCK CONNECTORS

Connector No.	M6
Connector Name	STEERING LOCK SOLENOID
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	P	B+
2	R	5V+
3	GR	SIGNAL
4	BR	GND

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE



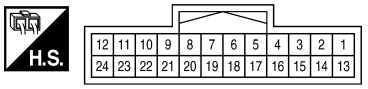
Terminal No.	Color of Wire	Signal Name
7	Y	–
8	G	–
9	P	–
10	V	–
11	LG	–
12	O	–

Connector No.	M10
Connector Name	INSTRUMENT PANEL ANTENNA
Connector Color	GRAY



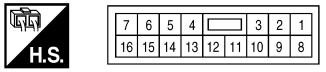
Terminal No.	Color of Wire	Signal Name
1	LG	–
2	V	–

Connector No.	M13 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	V	–
17	Y	–
18	L	–
19	P	–
20	R	–
21	G	–
22	V	–

Connector No.	M15 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	BR	–
10	O	–
15	SB	–
16	G	–

ALKIA1135GB

Connector No.	M16 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	–
3	W	–
8	O	–
9	LG	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND

Terminal No.	Color of Wire	Signal Name
3	G	KEY IN SW
5	V	TRUNK OPENER SWITCH
6	GR	CENTRAL LOCK SW
10	Y	DOOR SW BACK
19	L	CAN-H
21	BR	LOGICAL LIGHTING CONTROL
22	P	BATT SAFETY LINE
25	L	CENTRAL UNLOCK SW
26	L	HAZARD SW
29	BR	DOOR SW DR
30	SB	DOOR SW AS
39	P	CAN-L

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

H.S.

52	51	50	49	48	47	46	45	44	43	42	41
64	63	62	61	60	59	58	57	56	55	54	53

Terminal No.	Color of Wire	Signal Name
58	Y	LOCK KNOB SWITCH
59	O	DOOR SW RL
60	GR	DOOR SW DR

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

H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
65	V	TURN LAMP LH
66	W	TURN LAMP RH
67	G	DOORLOCK2 COMMON

Terminal No.	Color of Wire	Signal Name
70	B	POWER GND
73	R	ROOM LAMP POWER
74	Y	BATT BCM
76	G	DOORLOCK1 COMMON
77	SB	CDL OUT
78	L	POWER WINDOW SUPPLY
79	Y	BATT PW

ALKIA1136GB

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	L	–
15	R	–

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
21	B	GND 1(ILL)
22	B	GND2 (POWER)
23	B	GND3
27	G	BAT
28	SB	IGN

Connector No.	M32 (MANUAL TRANS)
Connector Name	KEY SWITCH AND IGNITION KNOB SWITCH
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	L	–
3	W	–
4	P	–
5	B	–
6	BR	–

Connector No.	M32 (AUTOMATIC TRANS)
Connector Name	KEY SWITCH AND IGNITION KNOB SWITCH
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	L	–
3	W	–
4	P	–

ALKIA1137GB

Connector No.	M52
Connector Name	INTELLIGENT KEY UNIT
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	R	5V
2	L	CAN-H
3	P	CAN-L
4	O	BUZZER DR O/P

Terminal No.	Color of Wire	Signal Name
5	G	DR LOCK/UNLOCK SW
7	LG	KEY SW I/P
8	W	IMM ANT RX
10	V	ACC SW I/P
11	SB	BATT
12	B	GND
13	R	LUGG(+)
14	G	LUGG(-)
15	LG	ROOM ANT 1(+)
16	V	ROOM ANT 1(-)
17	W	RR OUTSIDE ANT (+)
18	B	RR OUTSIDE ANT (-)
19	V	DR ANT(+)
20	P	DR ANT(-)

Terminal No.	Color of Wire	Signal Name
22	BR	SOL UNLOCK
25	L	AS LOCK/UNLOCK SW
26	SB	STOP LAMP SW
27	W	PUSH SW I/P
28	Y	DR LOCK STATE SW I/P
29	V	TRUNK LOCK/UNLOCK SW
31	BR	GND
32	GR	–
35	L	ROOM ANT 3(+)
36	P	ROOM ANT 3(-)
37	BR	AS ANT (+)
38	Y	AS ANT (-)

Connector No.	M75
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4

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

Terminal No.	Color of Wire	Signal Name
7A	L	–
50A	P	–
84A	L	–
96A	Y	–

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

ALKIA1138GB

Connector No.	M76 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	Y	–

Connector No.	M201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	L	–
15	R	–

Connector No.	M203 (AUTOMATIC TRANS)
Connector Name	STOP LAMP SWITCH
Connector Color	WHITE

H.S.

3	4
1	2

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

Connector No.	M203 (MANUAL TRANS)
Connector Name	STOP LAMP SWITCH
Connector Color	BLACK

H.S.

2	1

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

Connector No.	E7 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
7A	L	–
50A	Y	–
84A	??	–
96A	Y	–

ALKIA1139GB

Connector No.	B24 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
2	R	–
3	L	–
8	GR	–
9	Y	–

Connector No.	B23 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	LG	–
10	W	–

Connector No.	B45
Connector Name	FRONT CONSOLE ANTENNA
Connector Color	GRAY

H.S.

2	1

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

Connector No.	B34 (LHD)
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Color	WHITE

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name
2	LG	–

Connector No.	B2 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
1	L	–
15	SB	–
16	GR	–
17	P	–
18	L	–
19	R	–
20	R	–
21	G	–
22	Y	–

Connector No.	B27 (LHD)
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Color	WHITE

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name
2	SB	–

ALKIA1140GB

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

H.S.

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

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	GR	–

Connector No.	B54 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Connector No.	B55
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

Connector No.	B67
Connector Name	TRUNK LID REQUEST SWITCH
Connector Color	GRAY

H.S.

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

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–

ALKIA1141GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
7	Y	–
8	W	–
9	P	–
10	V	–
11	LG	–
12	BR	–

Connector No.	B82
Connector Name	INTELLIGENT KEY WARNING BUZZER (TRUNK)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	GR	–

Connector No.	B81
Connector Name	REAR BUMPER ANTENNA
Connector Color	GRAY

H.S.

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

Connector No.	D10
Connector Name	FRONT OUTSIDE ANTENNA (DRIVER SIDE)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	V	ANT(+)
2	P	ANT(-)

Connector No.	D6
Connector Name	INTELLIGENT KEY WARNING BUZZER (DRIVER SIDE)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	BR	–

Connector No.	D5
Connector Name	FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	SW(+)
2	B	SW(-)

ALKIA1142GB

Connector No.	D14 (LHD)
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
4	Y	–
5	B	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	P	–
3	O	–

Connector No.	D102 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

Connector No.	D103
Connector Name	FRONT DOOR REQUEST SWITCH (PASSENGER SIDE)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	SW(+)
2	B	SW(-)

Connector No.	D106
Connector Name	FRONT OUTSIDE ANTENNA (PASSENGER SIDE)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	O	ANT(+)
2	P	ANT(-)

Connector No.	D400 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

ALKIA1143GB

Fail Safe

INFOID:0000000001396640

Display contents of CONSULT-III	Fail-safe	Cancellation
B2013: STRG COMM 1	• Inhibits steering look unlocking	Erase DTC
B2552: INTELLIGENT KEY	• Inhibits steering look unlocking • Inhibits engine cranking (BCM) • Fuel cut (ECM)	Erase DTC
B2590: NATS MALFUNCTION	• Inhibits steering look unlocking • Inhibits engine cranking (BCM) • Fuel cut (ECM)	Erase DTC

DTC Inspection Priority Chart

INFOID:0000000001396641

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

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN) • B2552: INTELIGENT KEY
2	• B2013: STRG COMM 1 • B2590: NATS MALFUNCTION

DTC Index

INFOID:0000000001396642

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	Detection condition	Fail-safe	Diagnosis
No DTC is detected. further testing may be required.	—	—	—
U1000: CAN COMM CIRCUIT	Intelligent Key unit cannot receive CAN communication signal continuously for 2 seconds or more.	—	Check CAN communication system. Refer to DLK-56
U1010: CONTROL UNIT (CAN)	Intelligent Key unit detects internal CAN communication circuit malfunction.	—	Replace Intelligent Key unit.
B2013: STRG COMM 1	The ID verification result between Intelligent key unit and steering lock unit are NG. Or Intelligent Key unit cannot communicate with steering lock unit.	×	Perform steering lock unit ID registration with CONSULT-III
B2552: INTELLIGENT KEY	Intelligent Key unit internal malfunction.	×	Replace Intelligent Key unit.
B2590: NATS MALFUNCTION	The ID verification result between Intelligent key unit and BCM are NG. Or Intelligent Key unit cannot communicate with BCM.	×	Check NATS Refer to XX-XX, "*****"

BCM (BODY CONTROL MODULE)

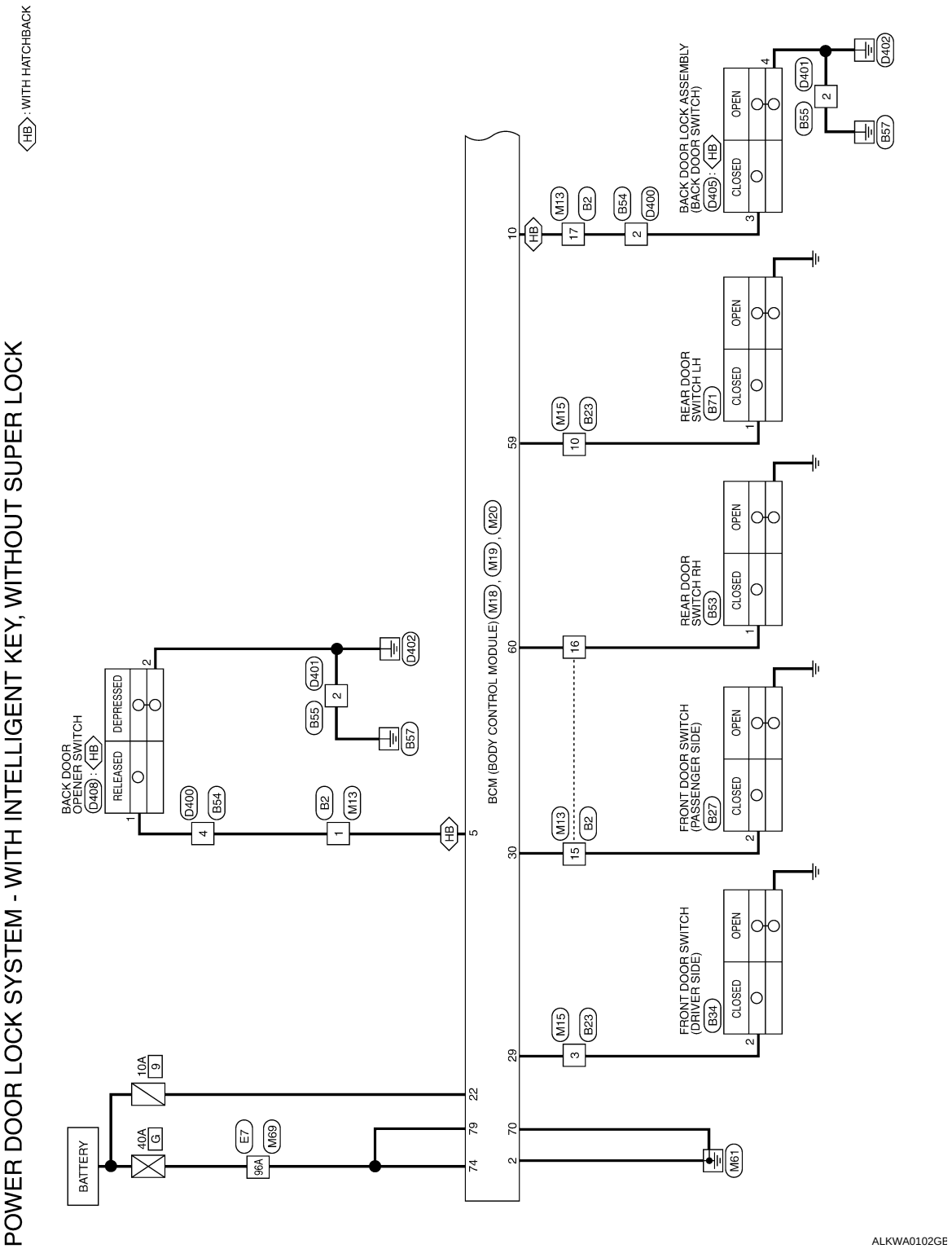
Reference Value

INFOID:0000000001396643

VALUES ON THE DIAGNOSIS TOOL
Refer to BCS-35, "Reference Value".

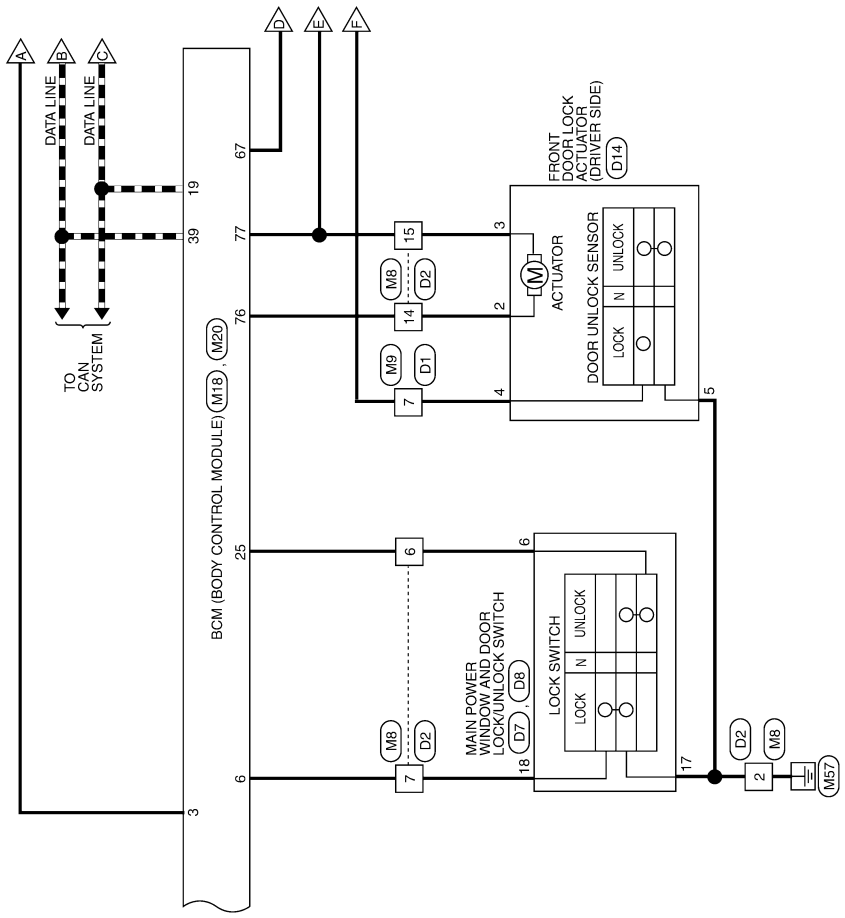
Wiring Diagram - POWER DOOR LOCK SYSTEM -

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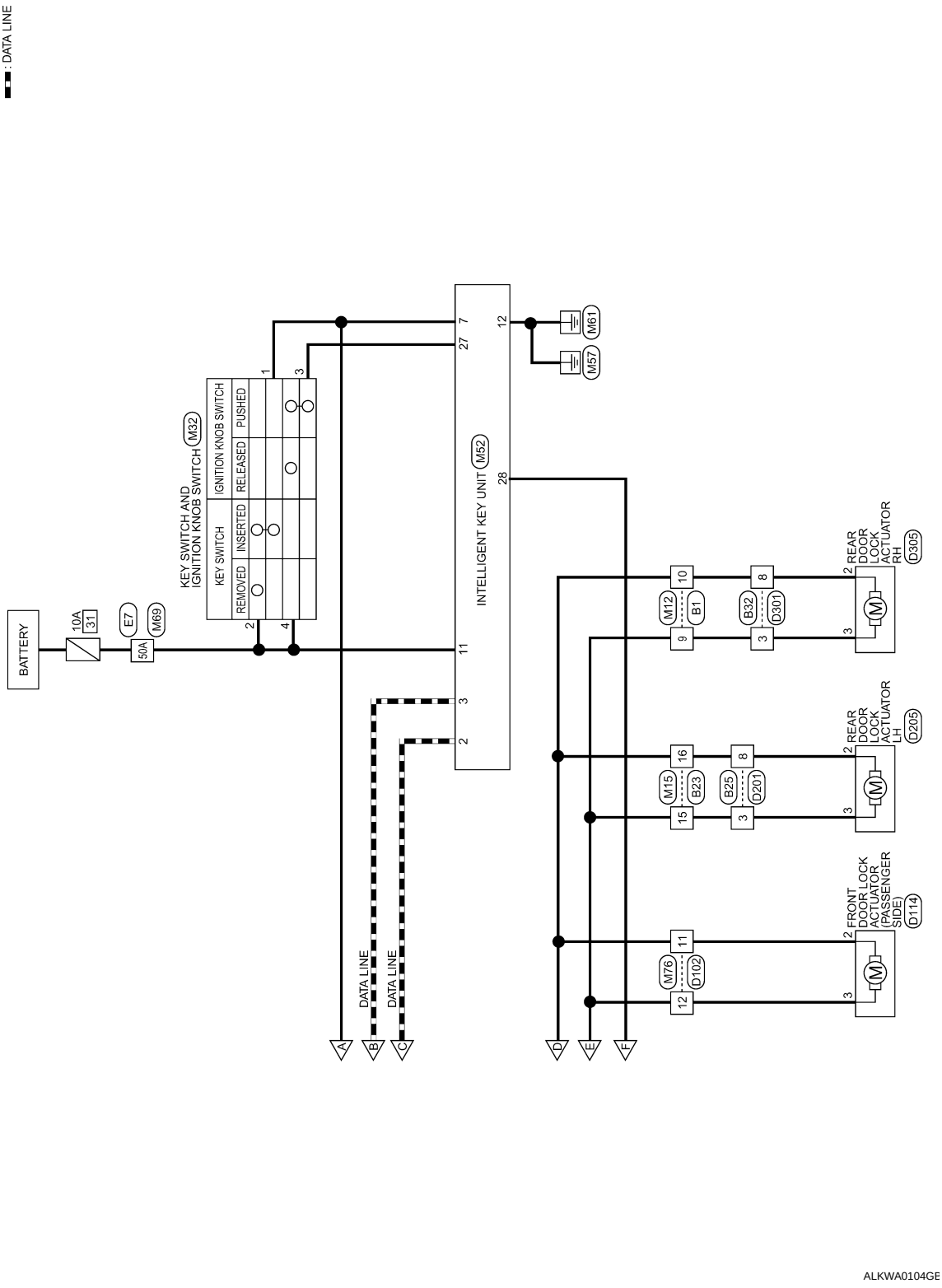


ALKWA0102GE

: DATA LINE



ALKWA0103GE


: DATA LINE
BATTERY
10A
31
E7
50A
M69
KEY SWITCH AND IGNITION KNOB SWITCH M32
KEY SWITCH
IGNITION KNOB SWITCH
REMOVED
INSERTED
RELEASED
PUSHED
INTELLIGENT KEY UNIT M52
M61
M57
DATA LINE
DATA LINE
REAR DOOR LOCK ACTUATOR RH D305
REAR DOOR LOCK ACTUATOR LH D205
FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) D114
M12
B1
B32
D301
M15
B23
B25
D201
M76
D102
A
B
C
D
E
F
ALKWA0104GE

POWER DOOR LOCK SYSTEM - WITH INTELLIGENT KEY, WITHOUT SUPER LOCK

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	—
6	L	—
7	GR	—
14	G	—
15	SB	—

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
7	Y	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
9	SB	—
10	G	—

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	—
15	SB	—
16	GR	—
17	Y	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	BR	—
10	O	—
15	SB	—
16	G	—

ALKIA1115GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	G	KEY IN SW
5	V	TRUNK OPENER SWITCH
6	GR	CENTRAL LOCK SW
8	V	COMBI SW OUTPUT 3
10	Y	DOOR SW BACK
19	L	CAN-H
22	P	BATT SAFETY LINE
25	L	CENTRAL UNLOCK SW
29	BR	DOOR SW DR
30	SB	DOOR SW AS
39	P	CAN-L

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

H.S.

52	51	50	49	48	47	46	45	44	43	42	41
64	63	62	61	60	59	58	57	56	55	54	53

Terminal No.	Color of Wire	Signal Name
59	O	DOOR SW RL
60	GR	DOOR SW DR

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

H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
67	G	DOORLOCK2 COMMON
70	B	POWER GND
74	Y	BATT BCM
76	G	DOORLOCK1 COMMON
77	SB	CDL OUT
79	Y	BATT PW

Connector No.	M32
Connector Name	KEY SWITCH AND IGNITION KNOB SWITCH (A/T)
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	LG	—
2	L	—
3	W	—
4	P	—

Connector No.	M32
Connector Name	KEY SWITCH AND IGNITION KNOB SWITCH (M/T)
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	LG	—
2	L	—
3	W	—
4	P	—

ALKIA1116GB

Terminal No.	Color of Wire	Signal Name
50A	P	—
96A	Y	—

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
50A	Y	—
96A	Y	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Connector No.	M52
Connector Name	INTELLIGENT KEY UNIT
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	L	CAN-H
3	P	CAN-L
7	LG	KEY SW I/P
11	SB	BATT
12	B	GND
27	W	PUSH SW I/P
28	Y	DR LOCK STATE SW I/P

Connector No.	M76
Connector Name	WIRE TO WIRE
Connector Color	WHITE

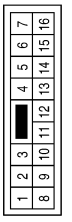
H.S.

Terminal No.	Color of Wire	Signal Name
11	G	—
12	SB	—

ALKIA1117GB

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

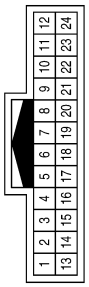
H.S.



Terminal No.	Color of Wire	Signal Name
9	SB	—
10	G	—

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

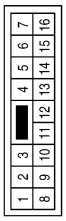
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	—
15	SB	—
16	GR	—
17	P	—

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE

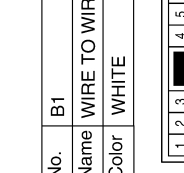
H.S.



Terminal No.	Color of Wire	Signal Name
3	LG	—
10	W	—
15	SB	—
16	G	—

Connector No.	B25
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	SB	—
8	G	—

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Color	WHITE

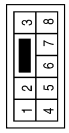
H.S.



Terminal No.	Color of Wire	Signal Name
2	SB	—

Connector No.	B32
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	SB	—
8	G	—

ALKIA1118GB

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	—
4	L	—

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

H.S.

1

Terminal No.	Color of Wire	Signal Name
1	GR	—

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Color	WHITE

H.S.

◇1	2	3

Terminal No.	Color of Wire	Signal Name
2	LG	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
7	Y	—

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

1

Terminal No.	Color of Wire	Signal Name
1	W	—

Connector No.	B55
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

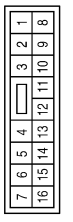
1
2

Terminal No.	Color of Wire	Signal Name
2	B	—

ALKIA1119GB

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

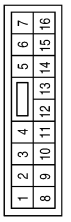
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	—
6	V	—
7	GR	—
14	G	—
15	GR	—

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

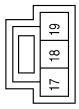
H.S.



Terminal No.	Color of Wire	Signal Name
6	V	DOOR LOCK UNLOCK

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.



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

Connector No.	D14
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Color	BLACK

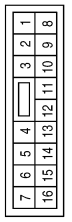
H.S.



Terminal No.	Color of Wire	Signal Name
2	G	—
3	GR	—
4	Y	—
5	B	—

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

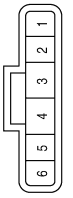
H.S.



Terminal No.	Color of Wire	Signal Name
11	G	—
12	SB	—

Connector No.	D114
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
2	G	
3	O	

ALKIA1120GB

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

H.S.

1		2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
3	SB	—
8	G	—

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

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
2	G	
3	SB	

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	SB	—
8	G	—

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	D400
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	—
4	L	—

Connector No.	D305
Connector Name	REAR DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Color	BLACK

H.S.

6	5	4	3	2	1

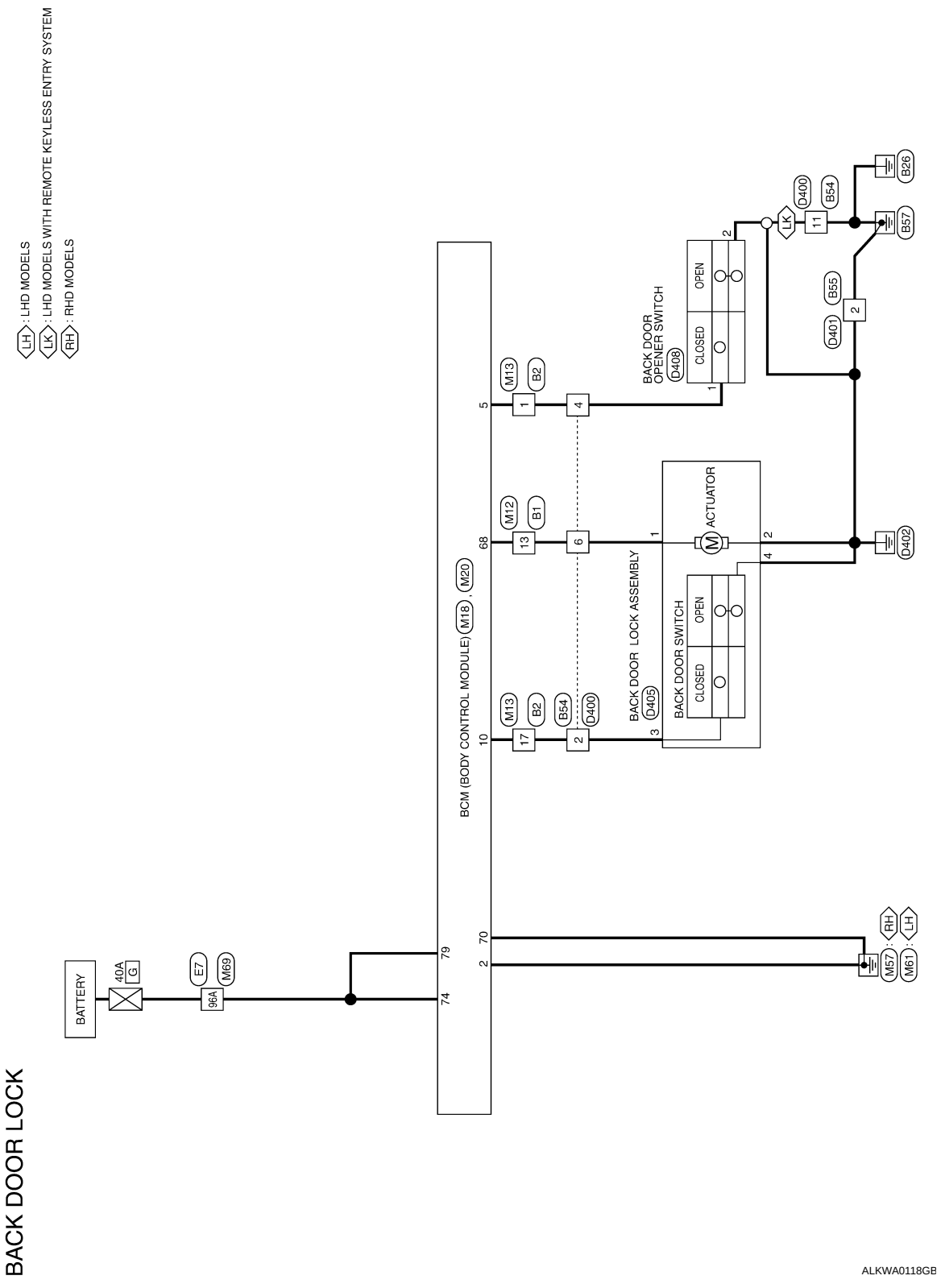
Terminal No.	Color of Wire	Signal Name
2	G	
3	SB	

ALKIA1121GB

Wiring Diagram - BACK DOOR OPENER SYSTEM -

INFOID:0000000001396639

BACK DOOR LOCK



BACK DOOR LOCK

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	R	–

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1	13
24	23	22	21	20	19	18	17	16	15	14		

Terminal No.	Color of Wire	Signal Name
1	V	–
17	Y	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND
5	V	TRUNK OPENER SWITCH
10	Y	DOOR SW BACK

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	–

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

H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
68	R	TRUNK LID ACTUATOR
70	B	POWER GND
74	Y	BATT BCM
79	Y	BATT PW

ALKIA1152GB

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
1	L	–
17	P	–

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

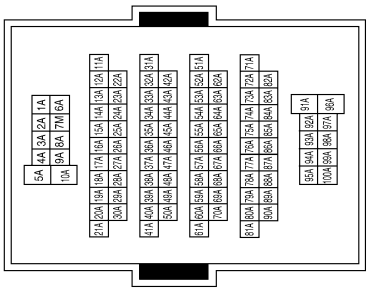
H.S.

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

Terminal No.	Color of Wire	Signal Name
13	O	–

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
96A	Y	–

Connector No.	B54 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	B54 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	B55
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
2	B	–

ALKIA1153GB

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

Connector No.	D400 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	W	–
4	W	–
6	W	–
11	B	–

Connector No.	D400 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	D408 (LHD)
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	BROWN

H.S.

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

Connector No.	D405 (RHD)
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–
2	B	–
3	W	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D405 (LHD)
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

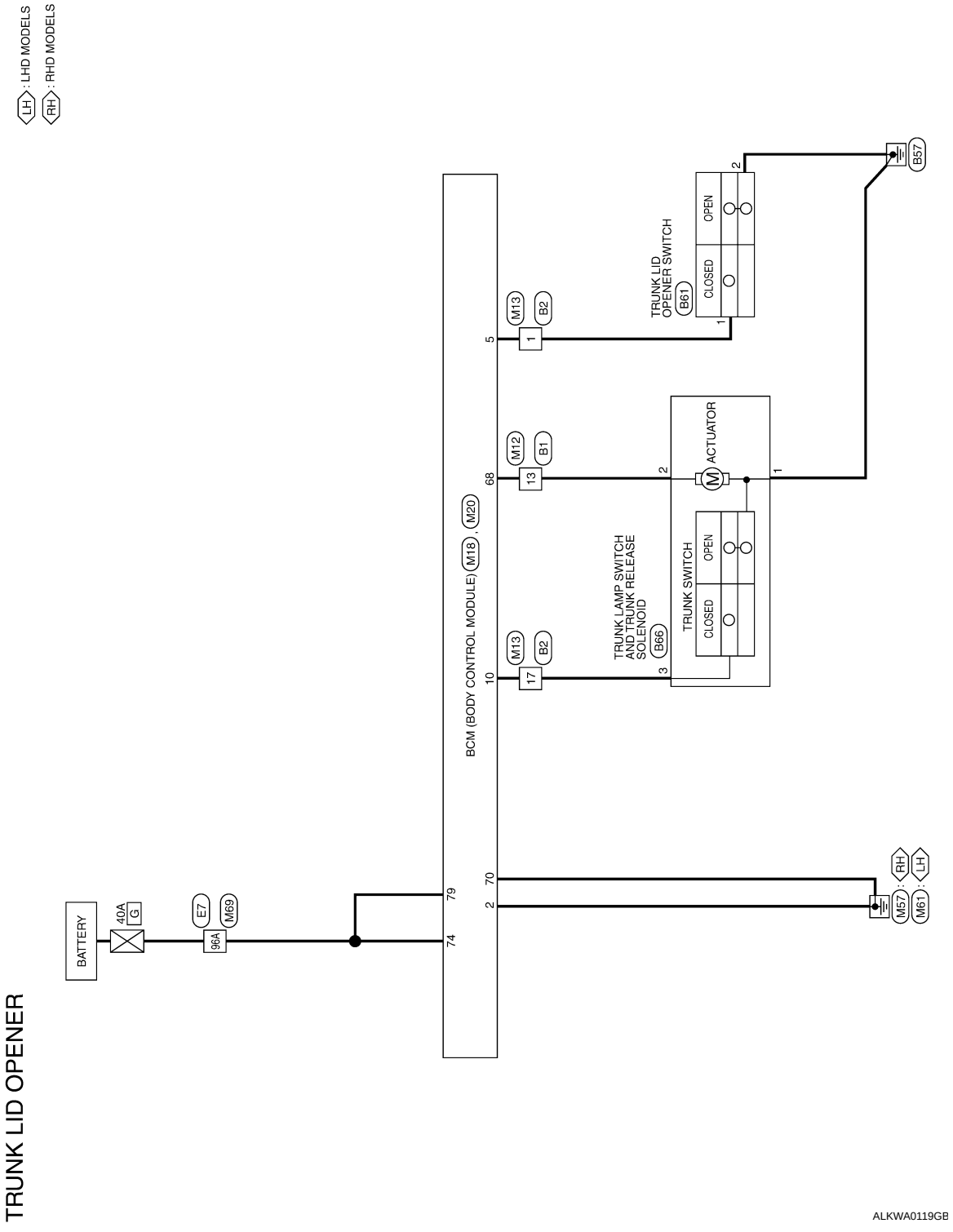
H.S.

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	B	–
3	O	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

ALKIA1154GB

Wiring Diagram - TRUNK LID OPENER SYSTEM -

INFOID:0000000001523299



TRUNK LID OPENER CONNECTORS

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	R	—

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1	
24	23	22	21	20	19	18	17	16	15	14	13	

Terminal No.	Color of Wire	Signal Name
1	V	—
17	Y	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND
5	V	TRUNK OPENER SWITCH
10	Y	DOOR SW BACK

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

H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
68	R	TRUNK LID ACTUATOR
70	B	POWER GND
74	Y	BATT BCM
79	Y	BATT PW

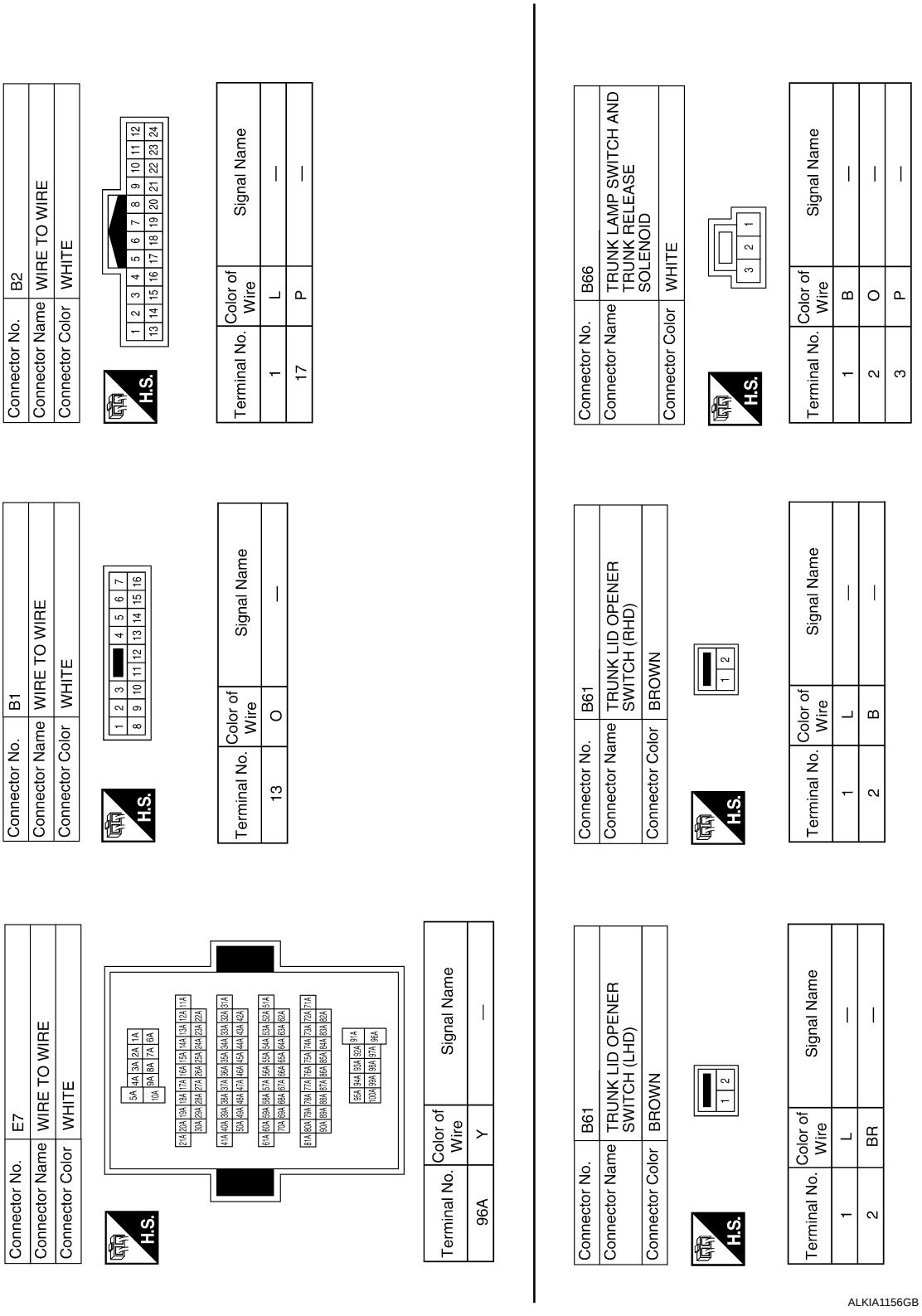
Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1A	2A	3A	4A	5A		
6A	7A	8A	9A	10A		
11A	12A	13A	14A	15A	16A	17A	18A	19A	20A	21A
22A	23A	24A	25A	26A	27A	28A	29A	30A		
31A	32A	33A	34A	35A	36A	37A	38A	39A	40A	41A
42A	43A	44A	45A	46A	47A	48A	49A	50A		
51A	52A	53A	54A	55A	56A	57A	58A	59A	60A	61A
62A	63A	64A	65A	66A	67A	68A	69A	70A		
71A	72A	73A	74A	75A	76A	77A	78A	79A	80A	81A
82A	83A	84A	85A	86A	87A	88A	89A	90A		
91A	92A	93A	94A	95A						
96A	97A	98A	99A	100A						

Terminal No.	Color of Wire	Signal Name
96A	Y	—

ALKIA1155GB



Fail Safe

INFOID:0000000001396647

Fail-safe index

BCM performs fail-safe control when any DTC listed below is detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2191: DIFFERENCE OF KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2195: ANTI SCANNING	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2196: DONGLE NG	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC

TURN SIGNAL LAMP CONTROL

BCM detects the turn signal lamp circuit status from the terminal voltage.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

LIGHT & RAIN SENSOR MALFUNCTION DETECTION FUNCTION

BCM controls the following items when LIGHT & RAIN sensor has a malfunction.

Auto Light Control
Headlamp is turned ON.

Front Wiper Control
The condition just before the activation of Fail-safe is maintained until the front wiper switch is turned OFF.

DTC Inspection Priority Chart

INFOID:0000000001396648

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
2	• B2190: NATS ANTENNA AMP • B2191: DIFFERNCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2194: DISCORD BCM-I-KEY • B2195: ANTI SCANNING • B2196: DONGLE NG

DTC Index

INFOID:0000000001396649

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.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 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	TIME		Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	0	1 - 39	—	XX-XX, "*****"
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	XX-XX, "*****"
B2190: NATS ANTENNA AMP	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	XX-XX, "*****"
B2195: ANTI SCANNING	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2196: DONGLE NG	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"

SYMPTOM DIAGNOSIS

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000001396650

DOOR LOCK AND UNLOCK SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Except driver side, doors are closed.
- Doors are not locked by Intelligent Key or door request switch.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Power door lock does not operate with door lock and unlock switch.	1. BCM Power supply and ground circuit check.	BCS-30
	2. Door lock and unlock switch check.	DLK-61
	3. Door lock actuator (driver side) check	DLK-108
	4. Intermittent Incident check.	GI
Specific door lock actuator does not operate.	1a. Driver side door lock actuator check.	DLK-108
	1b. Passenger side door lock actuator check.	DLK-109
	1c. Rear LH side door lock actuator check.	DLK-111
	1d. Rear RH side door lock actuator check.	DLK-113
	1e. Back door lock actuator (hatchback) check.	DLK-114
	2. Intermittent Incident check.	GI
Door lock/unlock do not operate by request switch.	1a. Driver side door switch check.	DLK-65
	1b. Passenger side door switch check.	DLK-67
	1c. Rear LH side door switch check.	DLK-69
	1d. Rear RH side door switch check.	DLK-71
	1e. Back door switch (hatchback) check.	DLK-73
	2. Ignition knob switch check.	DLK-80
	3. Replace Intelligent Key unit.	SEC-79
Door lock/unlock does not operate by request switch (driver side).	1. Front door request switch (driver side) check.	DLK-83
	2. Front outside antenna (driver side) check.	DLK-132
	3. Replace Intelligent Key unit.	SEC-79
Door lock/unlock does not operate by request switch (passenger side).	1. Front door request switch (passenger side) check.	DLK-86
	2. Front outside antenna (passenger side) check.	DLK-132
	3. Replace Intelligent Key unit.	SEC-79

Symptom	Diagnosis/service procedure		Reference page
Auto relock function does not operate properly.	1.	Check “AUTO RELOCK TIMER” setting in “WORK SUPPORT”.	DLK-50
	2.	Key switch check.	DLK-77
	3.	Ignition knob switch check.	DLK-80
	4a.	Driver side door switch check.	DLK-65
	4b.	Passenger side door switch check.	DLK-67
	4c.	Rear LH side door switch check.	DLK-69
	4d.	Rear RH side door switch check.	DLK-71
	4e.	Back door switch (hatchback) check.	DLK-73
	5.	Replace Intelligent Key unit.	SEC-79
Key reminder function does not operate properly.	1.	Check “ANTI KEY LOCK IN FUNCTION” setting in “WORK SUPPORT”.	DLK-50
	2a.	Driver side door switch check.	DLK-65
	2b.	Passenger side door switch check.	DLK-67
	2c.	Rear LH side door switch check.	DLK-69
	2d.	Rear RH side door switch check.	DLK-71
	2e.	Back door switch (hatchback) check.	DLK-73
	3a.	Inside key antenna (instrument panel) check.	DLK-120
	3b.	Inside key antenna (front console) check.	DLK-124
	3c.	Inside key antenna (rear floor) check.	DLK-128
	4.	Front door lock actuator LH (door unlock sensor) check.	DLK-104
	5.	Intelligent Key battery and function inspection.	DLK-150
	6.	Replace Intelligent Key unit.	SEC-79

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000001396651

INTELLIGENT KEY OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock and unlock operation are normal.
- Emergency key is removed from ignition key cylinder.
- All doors are closed.
- Ignition knob is not pressed.
- No Intelligent Keys are inside the vehicle.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
All of the Intelligent Key functions do not operate.	1. Check Intelligent Key power supply and ground circuit.	DLK-59
	2. Check driver side door switch.	DLK-65
	3. Check key switch.	DLK-77
	4. Check ignition knob switch.	DLK-80
	5. Check Intelligent Key battery.	XX-XX, "*****"
	6. Check intermittent incident.	XX-XX, "*****"

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:0000000001396652

DOOR REQUEST SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 operation is normal.
- “LOCK/UNLOCK BY I-KEY” is ON when setting on CONSULT-III.
- Emergency key is removed from ignition key cylinder.
- Ignition switch is in OFF position.
- Intelligent Keys are not inside the vehicle.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Door lock and unlock do not operate by door request switch.	1. Check “LOCK/UNLOCK BY I-KEY” setting in “WORK SUPPORT”.	DLK-53
	2. Check intermittent incident.	XX-XX, "*****"
Door lock/unlock does not operate by request switch (driver side).	1. Check door request switch (driver side).	DLK-83
	2. Check outside key antenna (driver side).	XX-XX, "*****"
	3. Check intermittent incident.	XX-XX, "*****"
Door lock/unlock does not operate by request switch (passenger side).	1. Check door request switch (passenger side).	DLK-85
	2. Check outside key antenna (passenger side).	XX-XX, "*****"
	3. Check intermittent incident.	XX-XX, "*****"
Door lock/unlock does not operate by request switch (back door).	1. Check door request switch (back door).	DLK-91
	2. Check outside key antenna (rear bumper).	XX-XX, "*****"
	3. Check intermittent incident.	XX-XX, "*****"

KEY REMINDER

KEY REMINDER : Symptom Table

INFOID:0000000001396653

KEY REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "Work Flow".
- To understand the operation when it does work, refer to DLK-31, "KEY REMINDER : System Description".
- 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)

- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Key reminder operation does not operate.	1. Check door switch (driver side).		DLK-65
	2. Check inside key antenna.	Instrument panel	DLK-120
		Front console	DLK-123
		Rear floor	DLK-127
	3. Check intermittent incident.		XX-XX, "*****"

AUTO RELOCK

AUTO RELOCK : Symptom Table

INFOID:0000000001396654

AUTO RELOCK OPERATION MALFUNCTION

NOTE:

- “AUTO RELOCK TIMER” is not OFF when setting on CONSULT-III.
- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "Work Flow".
- To understand the operation when it does work, refer to XX-XX, "*****"“
- 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)

- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Auto relock operation does not operate.	1. Check “AUTO RELOCK TIMER” setting in “WORK SUPPORT”.		DLK-53
	2. Check door switch.	Driver side	DLK-65
		Passenger side	DLK-67
		Rear LH	DLK-69
		Rear RH	DLK-71
		Back door	DLK-73
	3. Check ignition knob switch.		DLK-80
	4. Check key switch.		DLK-77
	5. Check intermittent incident.		XX-XX, "*****"

BACK DOOR OPEN FUNCTION SYMPTOMS

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : Symptom Table

INFOID:0000000001396656

BACK DOOR OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3 MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door opener function does not operate by back door opener switch.	1. Check back door opener switch.	DLK-98
	2. Check vehicle speed signal.	DLK-149
	3. Check back door opener actuator.	XX-XX, "*****"
	4. Check intermittent incident.	XX-XX, "*****"

TRUNK OPEN FUNCTION SYMPTOMS
TRUNK LID OPENER SWITCH
TRUNK LID OPENER SWITCH : Symptom Table

INFOID:0000000001523324

TRUNK LID OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3 MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Trunk lid opener function does not operate by trunk lid opener switch.	1. Check trunk lid opener switch.	DLK-101
	2. Check vehicle speed signal.	DLK-149
	3. Check trunk lid opener actuator.	DLK-117
	4. Check intermittent incident.	XX-XX, "*****"
Trunk room lamp switch inoperative.	1. Check trunk room lamp switch.	DLK-94

WARNING FUNCTION SYMPTOMS

BUZZER (COMBINATION METER)

BUZZER (COMBINATION METER) : Symptom Table

INFOID:0000000001396657

BUZZER (COMBINATION METER) OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 conditions are extremely complicated. During operation confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-39, "System Description".
- Door lock function is normal.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
Ignition knob return forgotten warning does not operate properly.		1. Check buzzer (combination meter).	DLK-145
		2. Check intermittent incident.	XX-XX, "*****"
Ignition key warning does not operate properly.		1. Check buzzer (combination meter).	DLK-145
		2. Check intermittent incident.	XX-XX, "*****"
OFF position warning does not operate properly.		1. Check buzzer (combination meter).	DLK-145
		2. Check intermittent incident.	XX-XX, "*****"
Take away warning does not operate properly.	Take away through window	1. Check buzzer (combination meter).	DLK-145
		2. Check intermittent incident.	XX-XX, "*****"

INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER : Symptom Table

INFOID:0000000001396658

INTELLIGENT KEY WARNING BUZZER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 conditions are extremely complicated. During operation confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-39, "System Description".

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
Take away warning does not operate properly.	Any door open to all doors closed.	1. Check “TAKE OUT FROM WINDOW WARN” setting in “WORK SUPPORT”.	DLK-53
		2. Check Intelligent Key warning buzzer.	DLK-142
		3. Check intermittent incident.	XX-XX, "*****"

Symptom		Diagnosis/service procedure	Reference page
Door lock operation warning chime does not operate properly.	Request switch operation	1. Check Intelligent Key warning buzzer.	DLK-142
		2. Check intermittent incident.	XX-XX, "*****"
	Intelligent Key button operation	1. Check Intelligent Key warning buzzer.	DLK-142
		2. Check intermittent incident.	XX-XX, "*****"

IGNITION KNOB SWITCH DOES NOT TURN ON

IGNITION KNOB SWITCH DOES NOT TURN ON : Symptom Table

INFOID:0000000001523328

WARNING LAMP OPERATION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 registered.
- Key is not inserted in ignition switch.
- One or more registered Intelligent Keys are in the vehicle.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
OFF position warning does not operate properly.		1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
Take away warning does not operate properly.	Any door open to all doors closed.	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
	Door is open	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
	Take away through window	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
Intelligent Key low battery warning does not operate properly.		1. Check “LOW BAT OF KEY FOB WARN” setting in “WORK SUPPORT”.	DLK-53
		2. Check Intelligent Key battery.	XX-XX, "*****"
		3. Check KEY warning lamp. (GREEN blinking)	DLK-146
		4. Check intermittent incident.	XX-XX, "*****"

KEY WARNING LAMP (GREEN) ILLUMINATES

Conditions of Vehicle (Operating Conditions)
- Intelligent Key is registered.
- Key is not inserted in ignition switch.
- One or more registered Intelligent Keys are in the vehicle.

Symptom	Diagnosis/service procedure	Reference page
Ignition switch does not turn on with Intelligent Key. [KEY warning lamp (green) illuminates].	1. Check steering lock solenoid.	DLK-134
	2. Replace Intelligent Key unit.	SEC-79

KEY WARNING LAMP (RED) ILLUMINATES

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is registered.
- Key is not inserted in ignition switch.
- One or more registered Intelligent Keys are in the vehicle.

Symptom	Diagnosis/service procedure	Reference page
Ignition switch does not turn on with Intelligent Key. [KEY warning lamp (red) illuminates].	1a. Check instrument panel inside key antenna.	DLK-120
	1b. Check front console inside key antenna.	DLK-123
	1c. Check rear floor inside key antenna.	DLK-127
	2. Replace Intelligent Key unit.	SEC-79

KEY WARNING LAMP DOES NOT ILLUMINATE

Conditions of Vehicle (Operating Conditions)
- Intelligent Key is registered.
- Mechanical key is out of ignition switch.
- One or more registered Intelligent Keys are in the vehicle.

Symptom	Diagnosis/service procedure	Reference page
Ignition switch does not turn on with Intelligent Key. [GREEN key warning lamp does not illuminate].	1. Check Intelligent Key unit power supply and ground circuit.	DLK-59
	2. Check ignition knob switch.	DLK-80
	3. Check key switch.	DLK-77
	4. Check "KEY" warning lamp (GREEN).	DLK-146
	5. Replace Intelligent Key unit.	SEC-79
RED key warning lamp does not illuminate [Without Intelligent Key].	1. Check "KEY" warning lamp (RED).	DLK-146
	2. Replace Intelligent Key unit.	SEC-79

ENGINE START CONDITION CHECK (LOCKED IGNITION KNOB)

NOTE:
- Before performing the diagnosis in the following table, check “Trouble Diagnosis Procedure”. Refer to DLK-16, "Work Flow".
- If the following “symptoms” are detected, check systems shown in the ”Diagnoses/service procedure” column in this order.

Symptom	Diagnosis/service procedure	Reference page
Engine start condition check	1. Check park/neutral position switch in combination meter (A/T)	MWI-3
	2. Check key interlock solenoid (M/T)	DLK-137
	3. Check stop lamp switch (A/T)	DLK-138
	4. Check stop lamp switch (M/T)	DLK-140

WARNING LAMP

WARNING LAMP : Symptom Table

INFOID:0000000001396659

WARNING LAMP OPERATION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 conditions are extremely complicated. During operation confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-39, "System Description".
- Door lock function is normal.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
OFF position warning does not operate properly.		1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
Take away warning does not operate properly.	Any door open to all doors closed.	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
	Door is open	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
	Take away through window	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
Intelligent Key low battery warning does not operate properly.		1. Check “LOW BAT OF KEY FOB WARN” setting in “WORK SUPPORT”.	DLK-53
		2. Check Intelligent Key battery.	XX-XX, "*****"
		3. Check KEY warning lamp. (GREEN blinking)	DLK-146
		4. Check intermittent incident.	XX-XX, "*****"

BACK DOOR

BACK DOOR : Symptom Table

INFOID:0000000001396660

BACK DOOR OPEN WARNING OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock function and back door opener function is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door open warning does not operate properly.	1. Check back door opener switch.	DLK-98
	2. Check intermittent incident.	XX-XX, "*****"

HAZARD AND BUZZER REMINDER FUNCTION SYMPTOMS

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Symptom Table

INFOID:0000000001396661

BUZZER REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 WITH I-KEY LOCK”, “ANSWER BACK WITH I-KEY UNLOCK” and “ANSWER BACK FUNCTION” are ON when setting on CONSULT-III.
- Door lock function is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Buzzer reminder operation does not operate properly.	1. Check setting of buzzer reminder with CONSULT-III.	DLK-53
	2. Check intermittent incident.	XX-XX, "*****"

INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER : Symptom Table

INFOID:0000000001396662

HAZARD REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- “HAZARD ANSWER BACK” is ON when setting on CONSULT-III.
- Door lock function is normal.

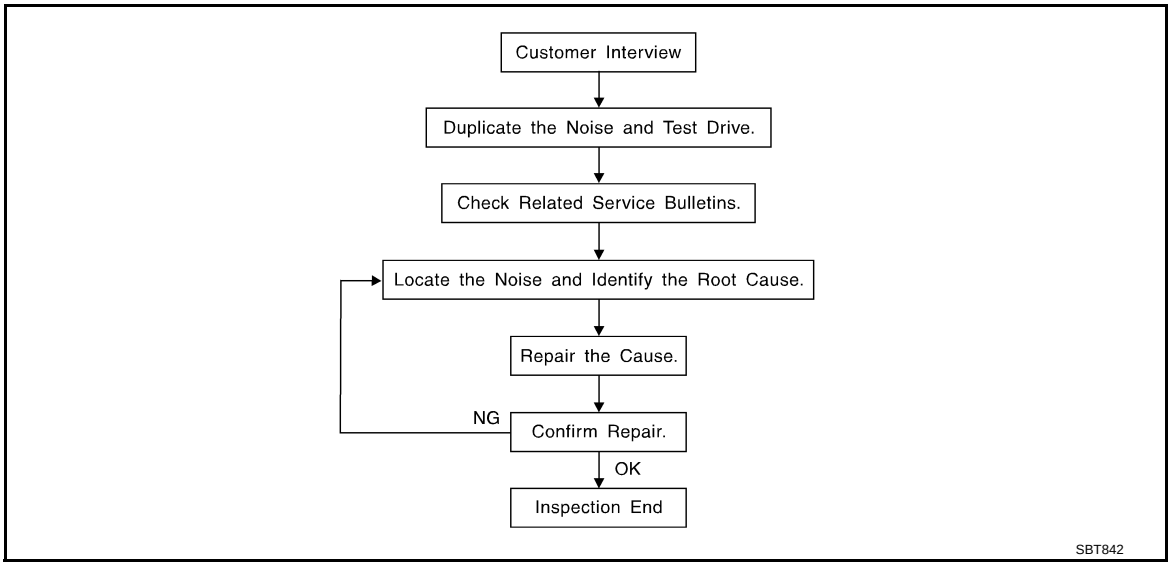
Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Hazard reminder operation does not operate properly.	1. Check setting of hazard reminder with CONSULT-III.	DLK-53
	2. Check intermittent incident.	XX-XX, "*****"

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001396663



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to DLK-206, "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 a test drive 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 (TSB) 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 (Engine Ear or 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-204, "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 are 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:

- URETHANE PADS
  Insulates connectors, harness, etc.
- INSULATOR (Foam blocks)
  Insulates components from contact. Can be used to fill space behind a panel.
- INSULATOR (Light foam block)
- FELT CLOTHTAPE
  Used to insulate where movement does not occur. Ideal for instrument panel applications.
  The following materials, not available through NISSAN Parts Department, 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.
  Note: Will only last a few months.
- SILICONE SPRAY
  Use when grease cannot be applied.
- DUCT TAPE
  Use to eliminate movement.

CONFIRM THE REPAIR

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

Inspection Procedure

INFOID:0000000001396664

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. 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 to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.
In addition look for:

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment
3. 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 is 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. 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.

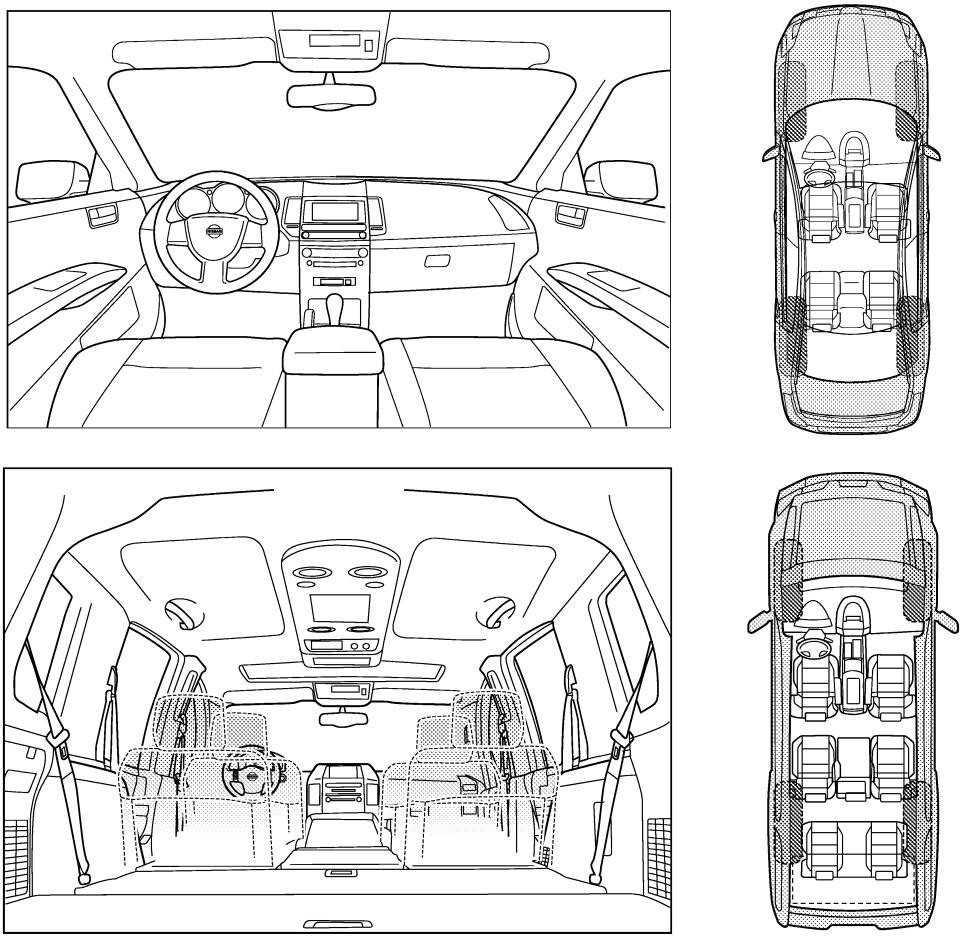
Diagnostic Worksheet

INFOID:0000000001396665

SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

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

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



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

PIIB8740E

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

PIIB8742E

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001530402

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. 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.**

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:0000000001315826

NOTE:

- This procedure is applied only to models with Intelligent Key system and NVIS/IVIS (NISSAN/INFINITI VEHICLE IMMOBILIZER SYSTEM - NATS).
- Remove and install all control units after disconnecting both battery cables with the ignition in the ″LOCK″ position.
- Always use CONSULT-II to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NVIS/IVIS, an electrically controlled steering lock mechanism is adopted on the key cylinder.
For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.
If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

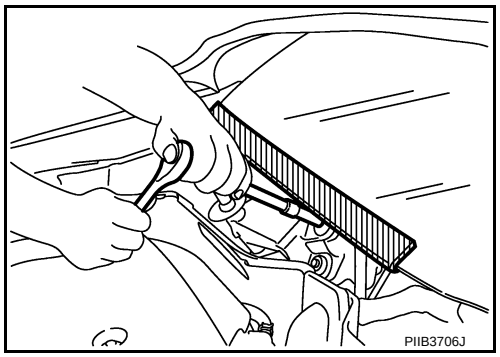
OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Use the Intelligent Key or mechanical key to turn the ignition switch to the ″ACC″ position. At this time, the steering lock will be released.
3. Disconnect both battery cables. The steering lock will remain released and the steering wheel can be rotated.
4. Perform the necessary repair operation.
5. When the repair work is completed, return the ignition switch to the ″LOCK″ position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
6. Perform a self-diagnosis check of all control units using CONSULT-II.

Precaution for Procedure without Cowl Top Cover

INFOID:0000000001315827

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



Precaution for Work

INFOID:0000000001315828

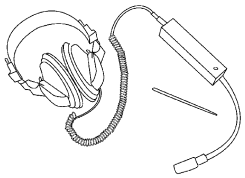
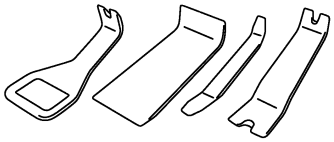
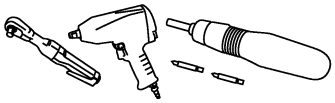
- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operation.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.

PREPARATION

PREPARATION

Commercial Service Tool

INFOID:0000000001315830

Tool name	Description
Engine ear  SIIA0995E	Locating the noise
Remover tool  PIIB7923J	Remove the clips, pawls, and metal clips
Power tool  PIIB1407E	Removing nuts and bolts

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

INFOID:0000000001396666

BASIC INSPECTION

1. CHECK POWER DOOR LOCK AND UNLOCK SWITCH OPERATION

Check door lock and unlock operation by operating door lock and unlock switch.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-191, "DOOR LOCK AND UNLOCK SWITCH : Symptom Table".

2. CHECK INTELLIGENT KEY OPERATION

Check door lock and unlock operation by operating the Intelligent Key remote control button.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-192, "INTELLIGENT KEY : Symptom Table".

3. CHECK DOOR REQUEST SWITCH OPERATION

Check door lock and unlock operation by operating door request switch.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to DLK-193, "DOOR REQUEST SWITCH : Symptom Table".

4. CHECK KEY REMINDER OPERATION

Check key reminder operation. Refer to DLK-31, "KEY REMINDER : System Description".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to DLK-194, "KEY REMINDER : Symptom Table".

5. CHECK AUTO DOOR LOCK OPERATION

Check auto door lock operation. Refer to XX-XX, "*****".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Refer to DLK-194, "AUTO RELOCK : Symptom Table".

6. CHECK VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

Check vehicle speed sensing auto door lock operation. Refer to XX-XX, "*****".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Refer to XX-XX, "*****".

7. CHECK BACK DOOR (HATCHBACK) / TRUNK LID (SEDAN) OPENER OPERATION

Check back door (hatchback)/trunk lid (sedan) opener operation by operating the opener switch.

Is the inspection result normal?

YES >> GO TO 8.
NO >> Refer to DLK-195, "BACK DOOR OPENER SWITCH : Symptom Table".

8. CHECK WARNING FUNCTION

Check warning function. Refer to DLK-39, "System Description".

Is the inspection result normal?

YES >> GO TO 9.
NO [Buzzer (combination meter)]>> Refer to DLK-197, "BUZZER (COMBINATION METER) : Symptom Table".

NO (Intelligent Key warning buzzer)>> Refer to DLK-197, "INTELLIGENT KEY WARNING BUZZER : Symptom Table".
NO (Warning lamp)>> Refer to DLK-199, "WARNING LAMP : Symptom Table".
NO (Back door open warning)>> Refer to DLK-200, "BACK DOOR : Symptom Table".

9.CHECK HAZARD AND BUZZER REMINDER FUNCTION

Check hazard and buzzer reminder function by Intelligent Key or request switch. Refer to XX-XX, "*****".

Is the inspection result normal?

YES >> GO TO 10.
NO (Hazard warning lamp)>> Refer to DLK-201, "HAZARD WARNING LAMP : Symptom Table".
NO (Intelligent Key warning buzzer)>> Refer to DLK-201, "INTELLIGENT KEY WARNING BUZZER : Symptom Table".

10.CHECK OUT

CHECK OUT.

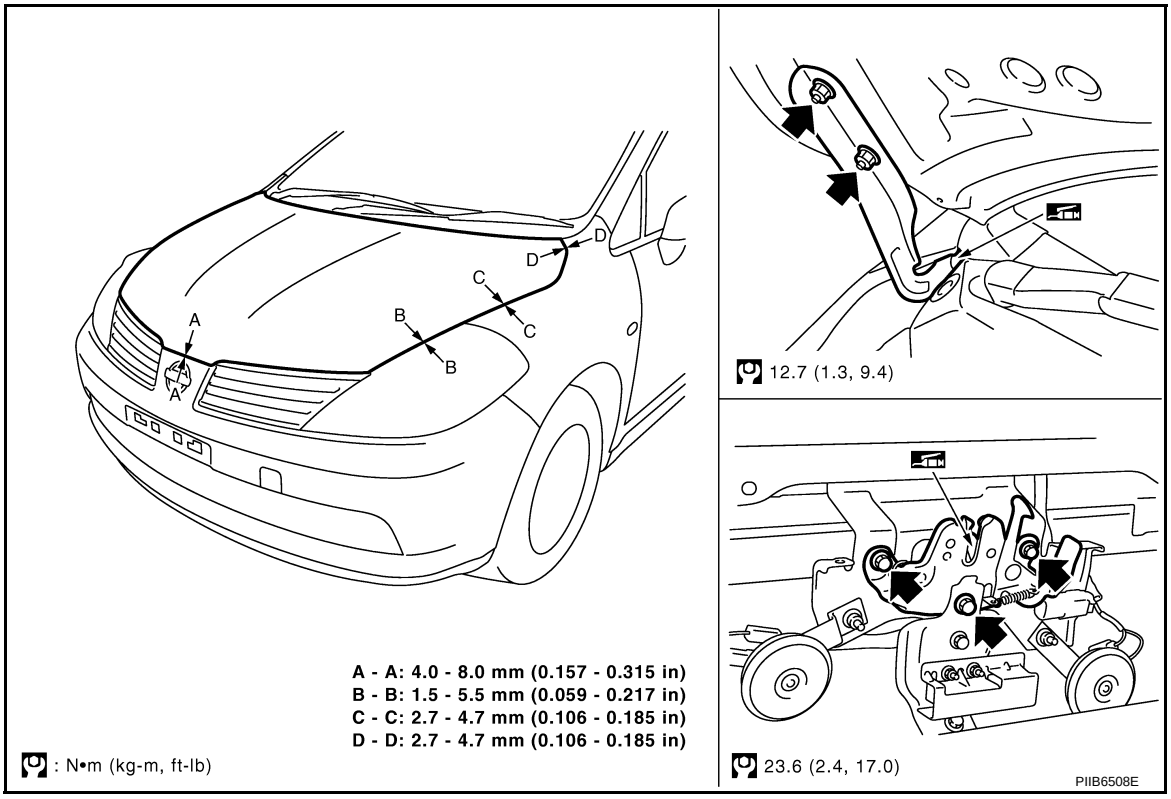
>> INSPECTION END

REMOVAL AND INSTALLATION

HOOD

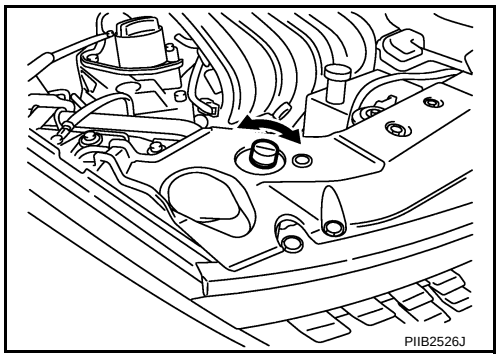
Fitting Adjustment

INFOID:0000000001315831



FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDINAL CLEARANCE ADJUSTMENT

1. Remove the front grille. Refer to EXT-19, "Removal and Installation".
2. Remove hood lock. Rotate bumper rubber to adjust height until hood becomes 1.0 to 1.5 mm lower than the fender.
3. Position hood lock and engage striker. Check hood lock and striker for looseness. Tighten lock bolts to the specified torque.
4. Install the front grille. Refer to EXT-19, "Removal and Installation".



CAUTION:

Adjust the clearance between hood and other parts so that the dimensional difference left and right is as follows.

Hood and headlamp (B - B) : Less than 2.0 mm (0.08 in)
Hood and fender (C - C) : Less than 1.5 mm (0.06 in)
Hood and fender (D - D) : Less than 1.5 mm (0.06 in)

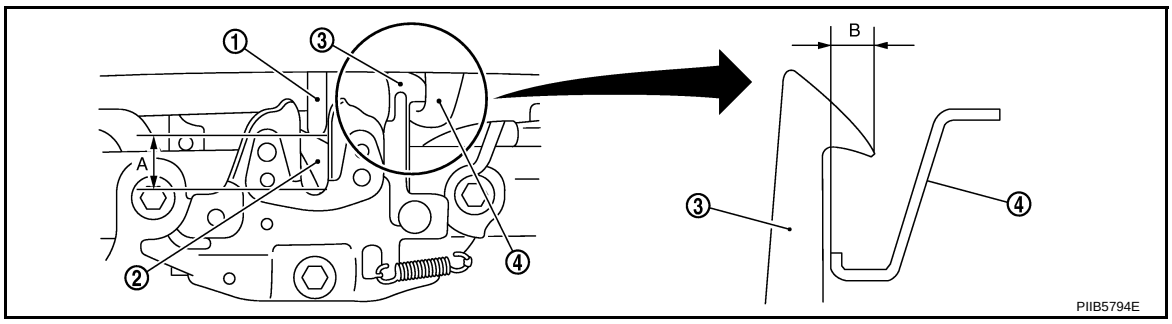
SURFACE MISMATCH ADJUSTMENT

1. Remove the front grille. Refer to EXT-19, "Removal and Installation".
2. Release hood lock, and adjust surface level difference of hood, fender, and headlamp according to the fitting standard dimension, using RH and LH bumper rubbers.

Hood and front bumper (A - A) : -1.3 - 2.7 mm (-0.05 - 0.11 in)
Hood and fender (D - D) : -0.4 - 1.7 mm (-0.16 - 0.07 in)

3. Install and align the hood lock until the center of the striker and the hood lock are vertically aligned.

4. Press the hood lightly with [approx. 29 N (3 kg] of force and adjust A and B as shown.



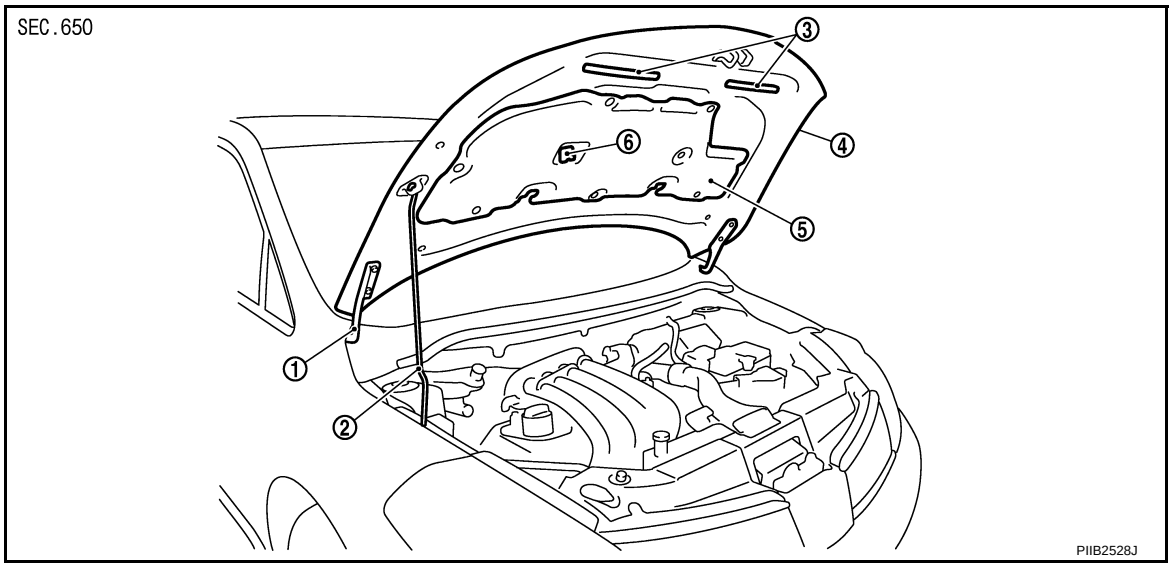
1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

A : 20 mm (0.79 in)
B : 6.8 mm (0.268 in) min.

5. After adjustment tighten lock bolts to the specified torque.
6. Install the front grille. Refer to EXT-19, "Removal and Installation".

Removal and Installation

INFOID:0000000001315832



1. Hood hinge
2. Hood stay
3. Radiator core seal rubber
4. Hood assembly
5. Hood insulator
6. Hood stay holder

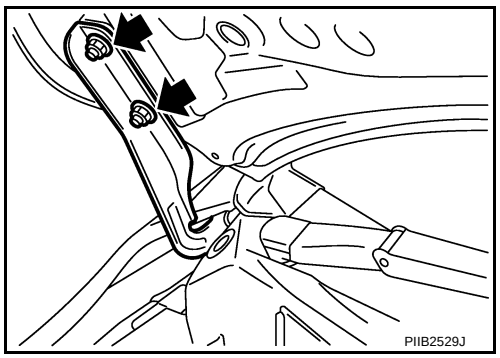
HOOD ASSEMBLY

Removal

1. Remove hinge nuts on hood and remove hood assembly.

CAUTION:
Two technicians should be used to avoid damaging the hood during removal.

12.7 N·m (1.3 kg-m, 9.4 ft-lb)



Installation

Installation is in the reverse order of removal.

CAUTION:

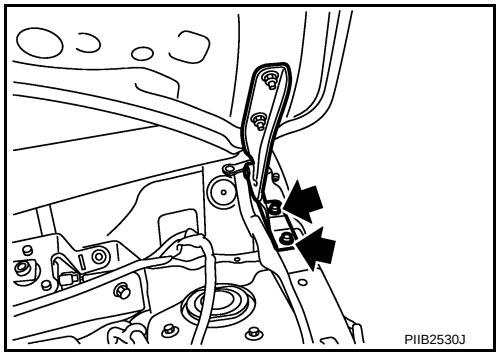
- **Before installing hood hinge, apply anticorrosive agent onto the surfaces that make contact with the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-213, "Fitting Adjustment".**

HOOD HINGE

Removal

1. Remove hood assembly. Refer to DLK-214, "Removal and Installation".
2. Remove front fender. Refer to DLK-221, "Removal and Installation".
3. Remove bolts and the hood hinge.

12.7 N·m (1.3 kg-m, 9.4 ft-lb)



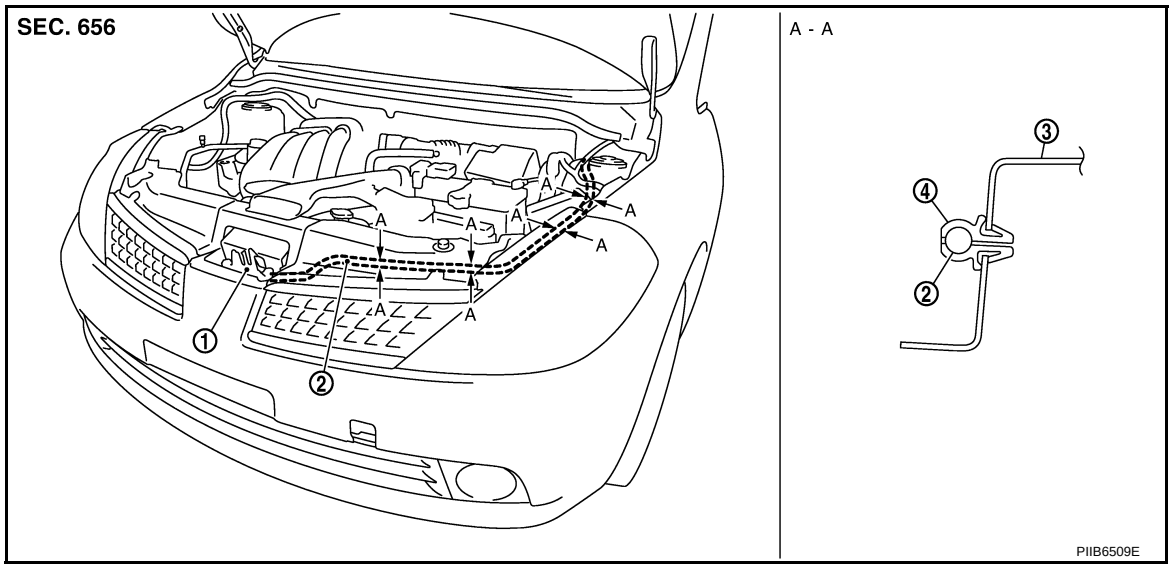
Installation

Installation is in the reverse order of removal.

Removal and Installation of Hood Lock Control

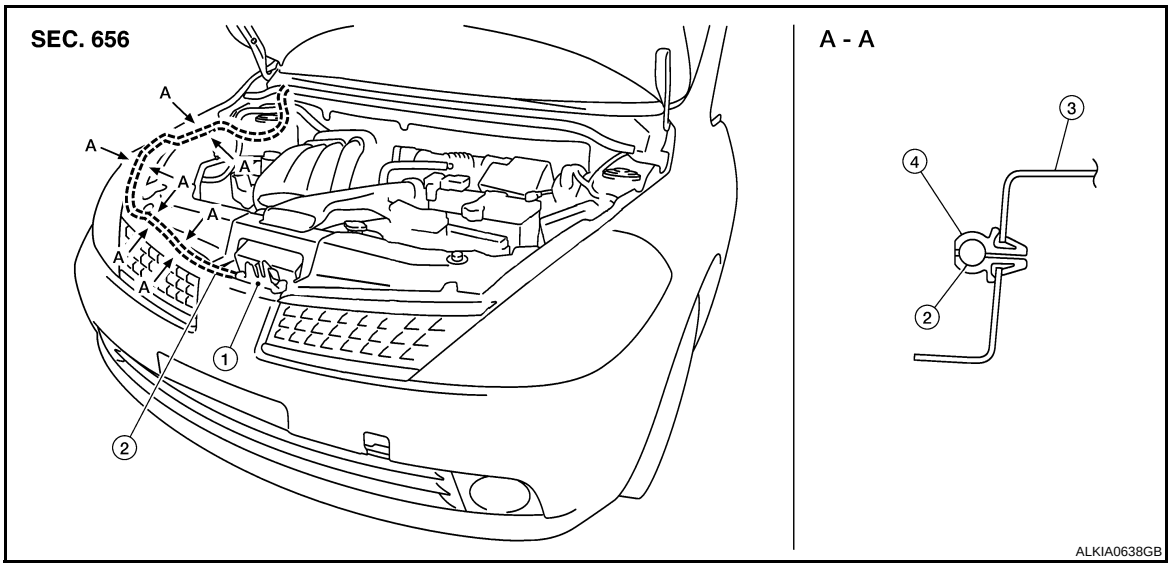
INFOID:0000000001315833

LH Drive



1. Hood lock
2. Hood lock cable
3. Hood ledge upper front
4. Clip

RH Drive



1. Hood lock
2. Hood lock cable
3. Hood ledge upper front
4. Clip

REMOVAL

Hood Lock

1. Remove front grille (LH or RH as necessary). Refer to EXT-19, "Removal and Installation".
2. Remove hood lock bolts.

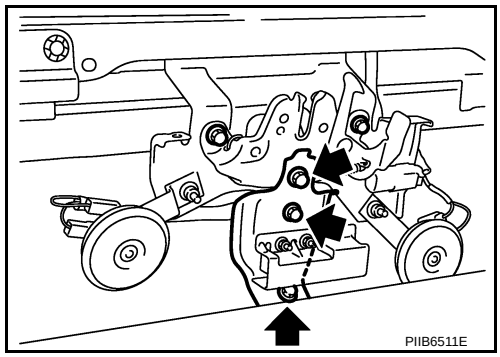
23.6 N·m (2.4 kg-m, 17 ft-lb)

3. Remove hood lock from hood lock cable.

Hood Lock Reinforcement

1. Remove front bumper. Refer to EXT-15, "Removal and Installation - Hatchback" or EXT-17, "Removal and Installation - Sedan".
2. Remove crash zone sensor.
3. Remove bolts, and the hood lock reinforcement.

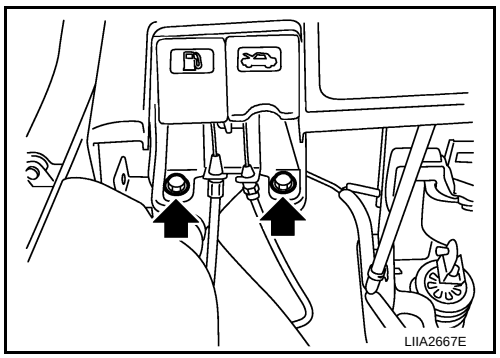
23.6 N·m (2.4 kg-m, 17 ft-lb)



Hood Lock Cable

1. Remove front grille (LH/RH). Refer to EXT-19, "Removal and Installation".
2. Remove fender protector (LH or RH as necessary). Refer to EXT-22, "Removal and Installation".
3. Remove hood lock, and remove hood lock cable from hood lock.
4. Remove radiator core upper support, hood ledge, and then remove hood lock cable.

5. Remove hood opener on bottom left of instrument panel, and then remove hood lock cable.
6. Remove grommet on lower dashboard, and pull out hood lock cable from passenger room side.
   CAUTION:
   While pulling the cable, be careful not to damage (peel) hood opener cable outer surface on edges of body through hole.



INSTALLATION

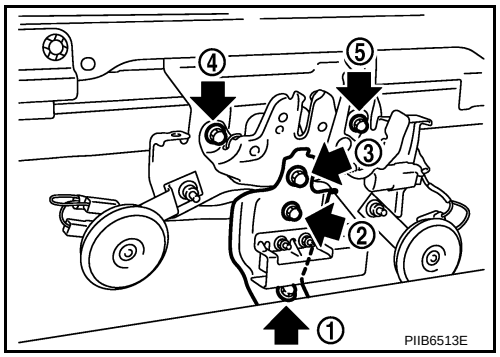
Installation is in the reverse order of removal.

- Perform hood fitting adjustment. Refer to DLK-213, "Fitting Adjustment".

Hood Lock Reinforcement

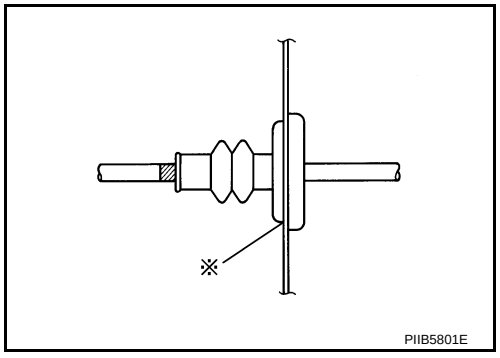
When installing hood lock reinforcement, loosen hood bolts, and then tighten bolts in the order as shown.

23.6 N·m (2.4 kg-m, 17 ft-lb)

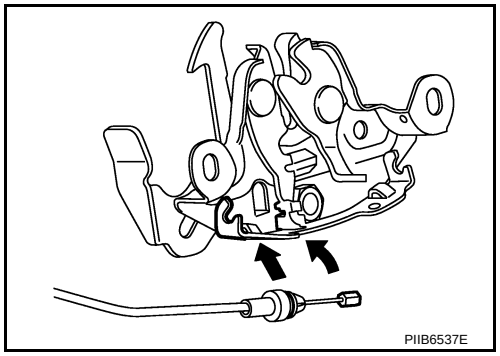


Hood Lock Cable

1. Pull the hood lock cable through the panel hole to the engine compartment.
   CAUTION:
   Be careful not to bend the cable too much, keeping the radius 100 mm (3.94 in) or more.
2. Check that the cable is not offset from the positioning grommet, and push the grommet into the panel hole securely.
3. Apply the sealant around the grommet (at * mark).



4. Install cable securely to lock.
5. After installing, check hood lock adjustment and hood opener operation.

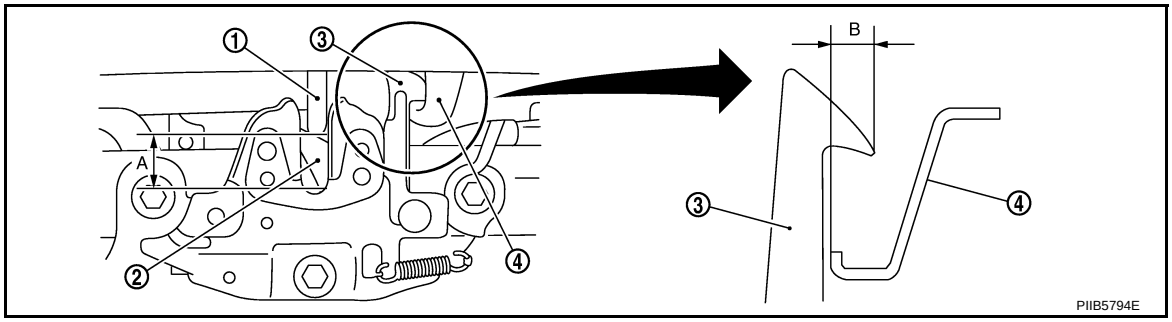


Hood Lock Control Inspection

INFOID:0000000001315834

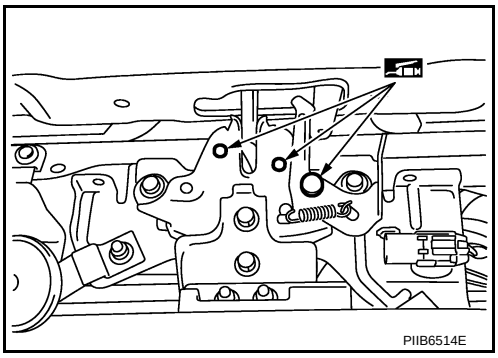
CAUTION:
If the hood lock cable is bent or deformed, replace it.

1. Check that the secondary latch is properly engaged with the secondary striker (B: 6.8 mm (0.268 in) with hood's own weight.



1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

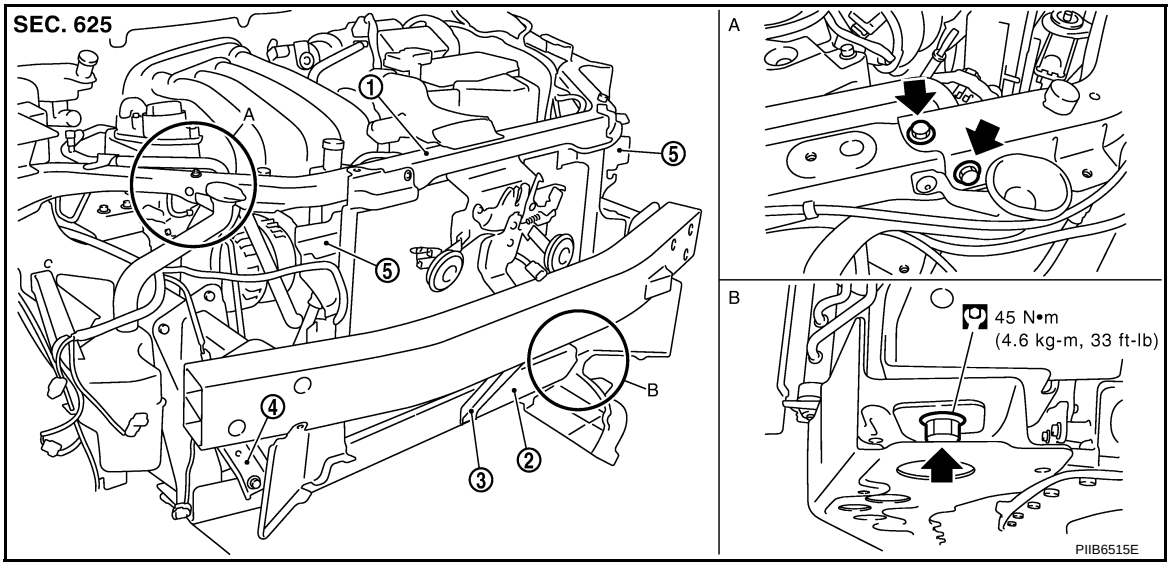
2. While operating the hood release handle, carefully check that the front end of the hood is raised by approx. 20 mm (0.79 in). Also check that the hood release handle returns to the original position.
3. Check that the secondary hood release operates at 29.4 N (3.0 kg) or below.
4. Confirm static closing force of the hood is 343 – 441 N·m (35 – 44 kg-m).
5. Check the hood lock lubrication condition. If necessary, apply “body grease” to the points as shown.



RADIATOR CORE SUPPORT

Removal and Installation

INFOID:0000000001315835



1. Radiator core support upper
2. Radiator core support lower
3. Radiator core support lower stay
4. Radiator core support side stay
5. Air guide

REMOVAL

Radiator Core Support Upper

1. Remove the air duct. Refer to EM-27, "Removal and Installation" (HR16DE), EM-154, "Removal and Installation" (MR18DE), or EM-269, "Removal and Installation" (K9K).
2. Remove the headlamp (LH/RH). Refer to EXL-84, "Removal and Installation" .
3. Remove the hood lock assembly, and remove hood lock cable. Refer to DLK-215 .
4. Remove the air guide and hood lock cable clip.
5. Remove the washer tank inlet. Refer to WW-64, "Removal and Installation" .
6. Remove the radiator core support upper.

Radiator Core Support Lower

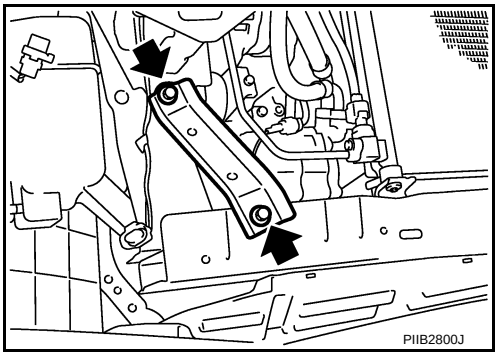
1. Remove the air duct. Refer to EM-27, "Removal and Installation" (HR16DE), EM-154, "Removal and Installation" (MR18DE), or EM-269, "Removal and Installation" (K9K).
2. Remove the front bumper. Refer to EXT-13, "Removal and Installation" .
3. Remove the headlamp (LH/RH). Refer to EXL-84, "Removal and Installation" .
4. Remove the hood lock assembly, and remove hood lock cable. Refer to DLK-215 .
5. Remove the air guide and hood lock cable mounting clip.
6. Remove the front bumper reinforcement. Refer to EXT-13, "Removal and Installation".
7. Remove the radiator core lower stay.

24.5 N·m (2.5 kg-m, 18 ft-lb)

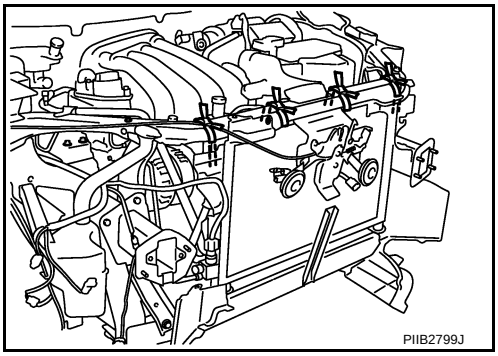
8. Remove the undercover.

9. Remove radiator core support lower side stay.

55.0 N·m (5.6 kg-m, 41 ft-lb)



10. Tie a cord to all radiator core upper supports of the radiator and condenser.
    NOTE:
    To prevent the compressor and radiator from being dropped when the radiator core lower support is removed.
11. Remove the bolts, and lower radiator core lower supports.
12. Remove the radiator core lower supports.



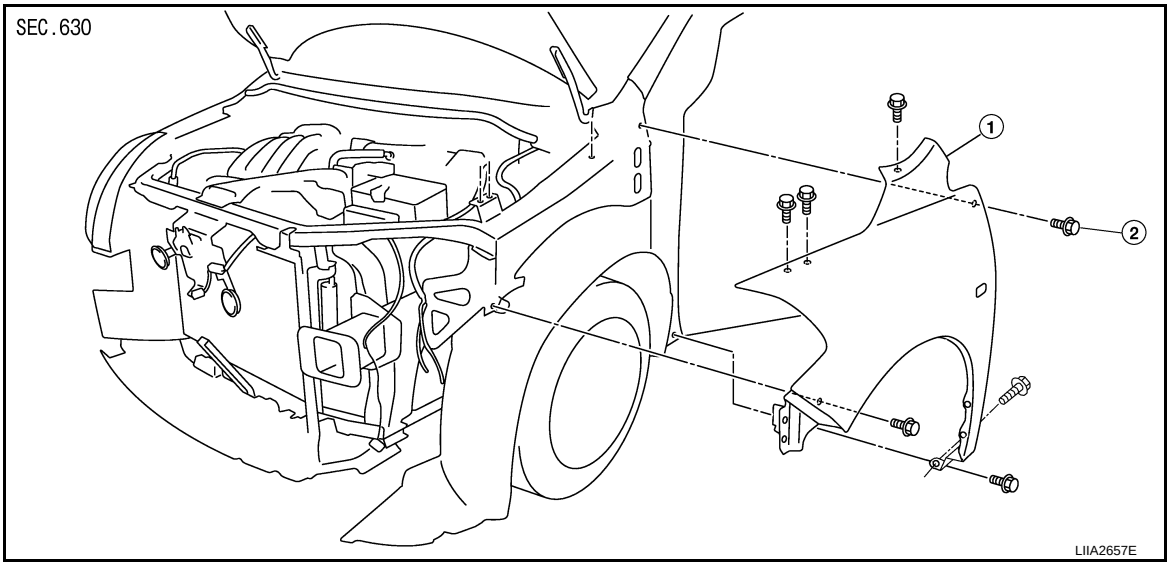
INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

Removal and Installation

INFOID:0000000001315836



1. Front fender
2. Bolt (LH 7 bolts required) (RH 8 bolts required)

REMOVAL

1. Remove the headlamp assemblies. Refer to EXL-84, "Removal and Installation".
2. Remove the cowl top cover (LH/RH). Refer to EXT-20, "Removal and Installation".
3. Remove the front fender protector. Refer to DLK-221, "Removal and Installation".
4. Remove the bolt and the front fender.

CAUTION:
While removing use a shop cloth to protect the vechicle body from damage.

INSTALLATION

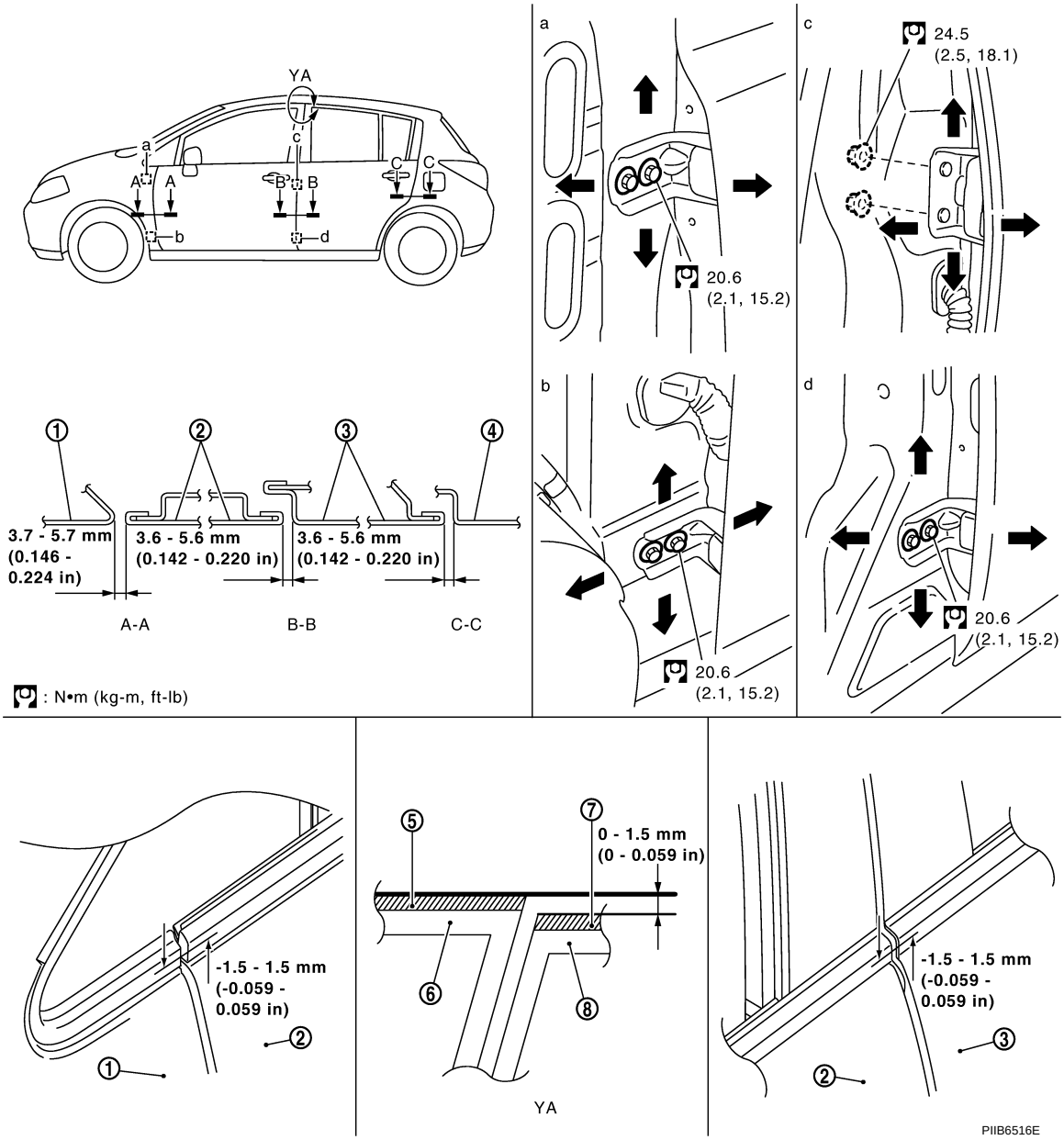
Installation is in the reverse order of removal.

CAUTION:
- **After installing, apply touch-up paint onto the head of the front fender bolts.**
- **After installing, check front fender adjustment. Refer to DLK-213, "Fitting Adjustment" and DLK-222, "Fitting Adjustment".**

DOOR

Fitting Adjustment

INFOID:0000000001315837



1. Front fender
2. Front door outer
3. Rear door outer
4. Rear fender
5. Front door weatherstrip
6. Front door sash
7. Rear door weatherstrip
8. Rear door sash

FRONT DOOR

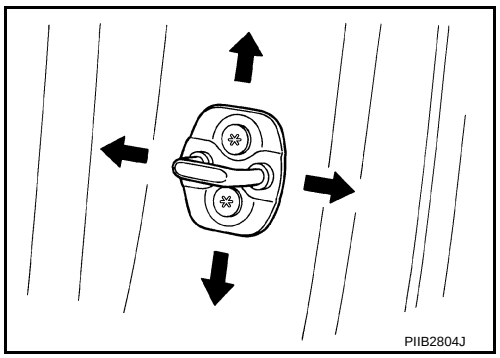
Longitudinal Clearance and Surface Height Adjustment at Front End
Access from inside the fender to loosen the hinge bolts. Raise the front door at rear end to adjust.

Surface Height Adjustment
Loosen the front door bolts, and adjust the surface height difference of fender and front door according to the fitting standard dimension.

Striker Adjustment

1.

16.7 N·m (1.7 kg-m, 12 ft-lb)



REAR DOOR

Longitudinal Clearance and Surface Height Adjustment at Front End

1. Remove the center pillar upper and lower garnishes. Refer to INT-20, "Removal and Installation".
2. Access from inside the vehicle to loosen the hinge nuts. Open the rear door, and raise the rear door at rear end to adjust.

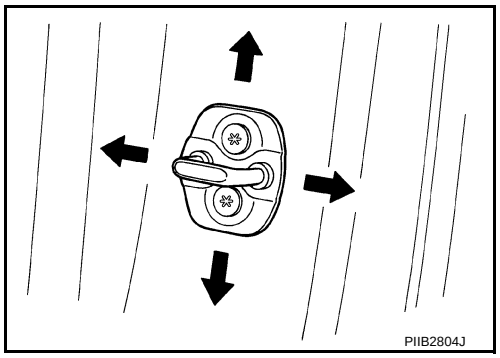
Surface Height Adjustment

Loosen the front door striker bolts and rear door hinge nuts, and adjust the surface height difference of front and rear doors according to the fitting standard dimension.

Striker Adjustment

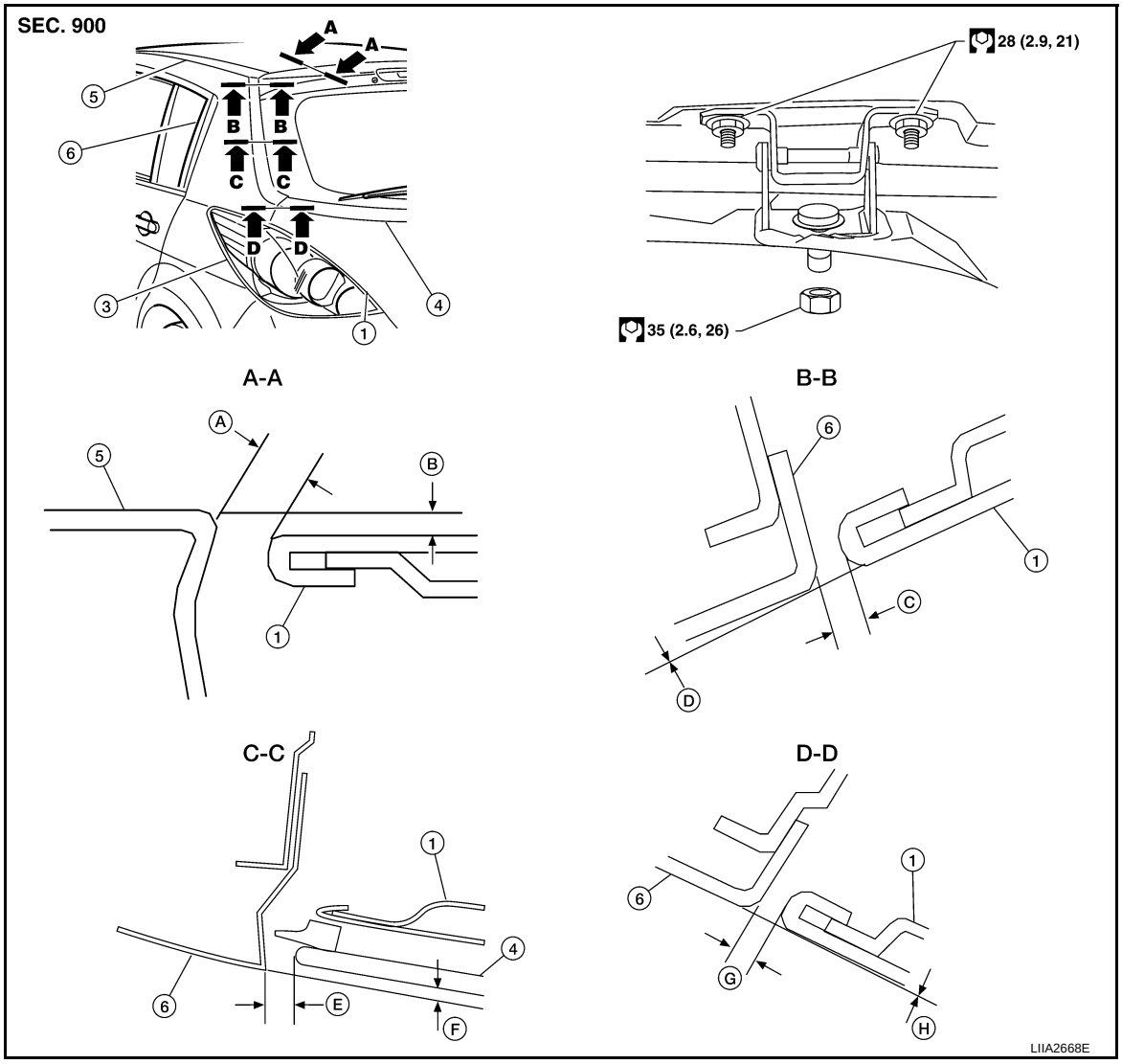
1.

16.7 N·m (1.7 kg-m, 12 ft-lb)



BACK DOOR

Longitudinal Clearance and Surface Height Adjustment



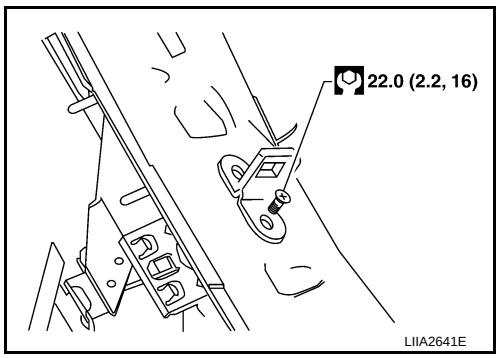
1. Back door assembly	2. Back door hinge	3. Tail lamp assembly
4. Back window glass	5. Roof	6. Rear pillar
A. 6.0 ± 1.0 mm (0.24 ± 0.04 in)	B. -0.5 ± 1.0 mm (-0.02 ± 0.04 in)	C. 5.0 ± 1.2 mm (0.20 ± 0.05 in)
D. 0.0 ± 1.5 mm (0.0 ± 0.06 in)	E. 5.0 ± 2.3 mm (0.20 ± 0.9 in)	F. 2.7 +1.6 -2.1 mm (0.11 + 0.06 - 0.08 in)
G. 5.0 ± 1.2 mm (0.20 ± 0.05 in)	H. 0.0 ± 1.5 mm (0.0 ± 0.06 in)	

1. Open and support the back door.
2. Slightly loosen the hinge nuts.
3. Reposition the door as necessary and tighten the nuts.
4. Confirm the adjustment. Repeat as necessary to obtain the desired fit.

Striker Adjustment

1.

Striker bolts **20 N·m (2.2 kg-m, 16 ft-lb)**



Removal and Installation

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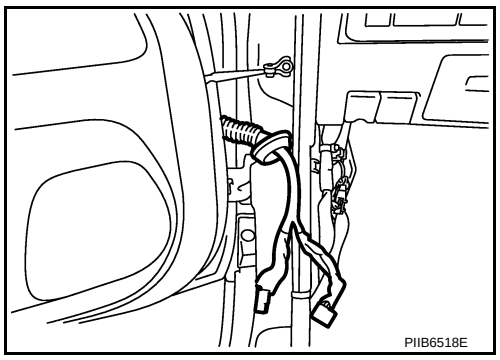
FRONT DOOR

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-222, "Fitting Adjustment".**
- **After installing, apply touch-up paint onto the head of the hinge nuts.**
- **Check the hinge rotating part for lubrication. If necessary, apply “body grease”.**
- **Operate with two workers, because of its heavy weight.**
- **Check front door open/close operation after installation.**

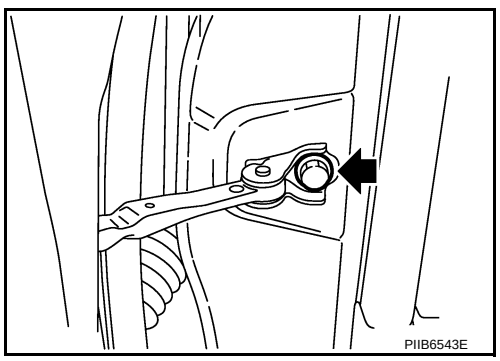
Removal

1. Remove dash side finisher. Refer to INT-20, "Removal and Installation".
2. Disconnect the front door harness connectors.
3. Remove the front door harness grommet, and then remove the harness from the vehicle.



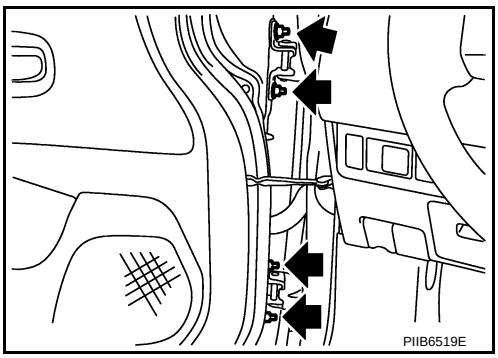
4. Remove the check link bolt.

14.7 N·m (1.5 kg-m, 11 ft-lb)



5. Remove the hinge nuts and then the door assembly.

24.5 N·m (2.5 kg-m, 18 ft-lb)



Installation
Installation is in the reverse order of removal.

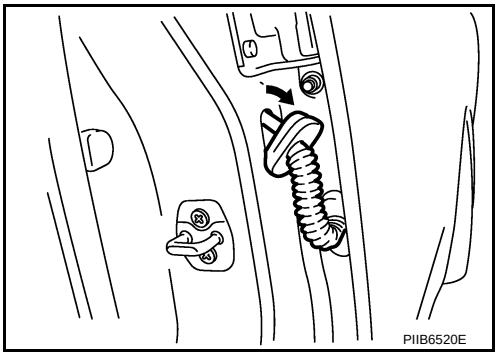
REAR DOOR

CAUTION:

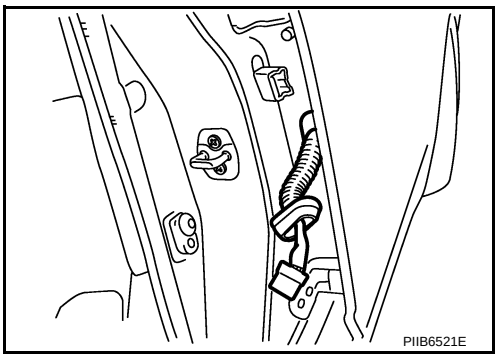
- **When removing and installing the rear door assembly, support the door with a jack and cloth to protect the door and body.**
- **When removing and installing rear door assembly, be sure to carry out the fitting adjustment. Refer to DLK-222, "Fitting Adjustment".**
- **After installing, apply touch-up paint onto the head of the hinge nuts.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply “body grease”.**
- **Operate with two workers, because of its heavy weight.**
- **Check rear door open/close operation after installation.**

Removal

1. Remove the rear door harness grommet.

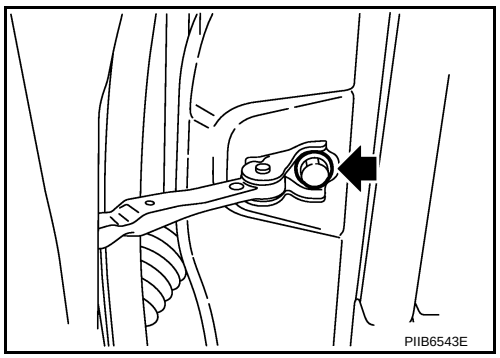


2. Disconnect the rear door harness connector.



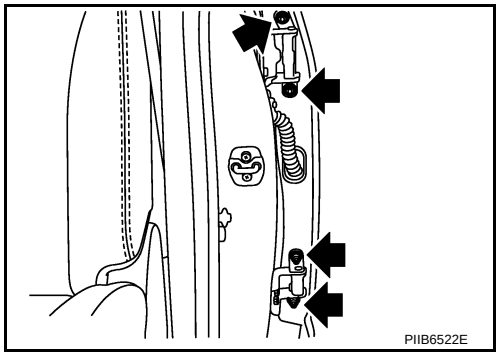
3. Remove the check link bolt.

14.7 N·m (1.5 kg-m, 11 ft-lb)



4. Remove the hinge nuts and the door assembly.

24.5 N·m (2.5 kg-m, 18 ft-lb)

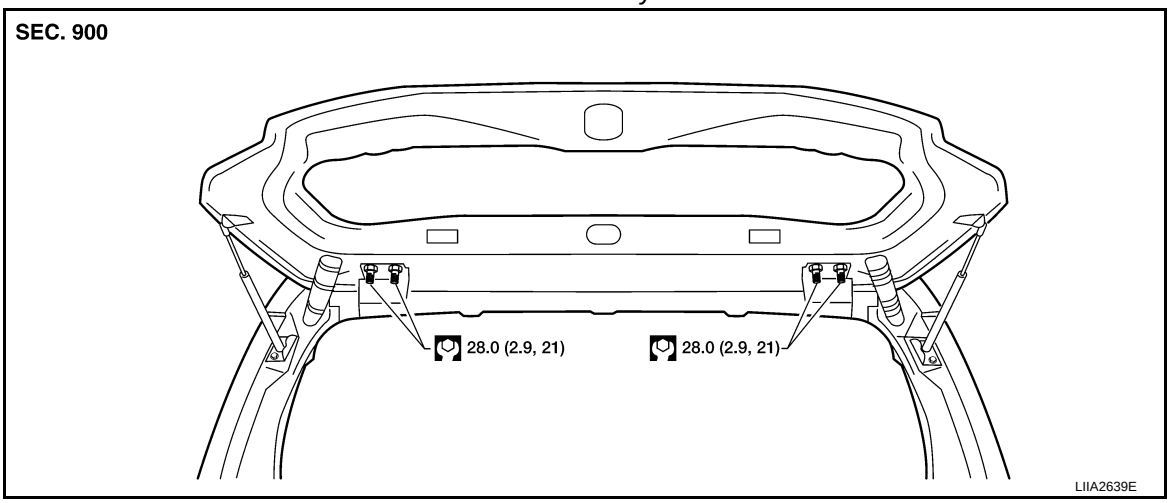


Installation
Installation is in the reverse order of removal.

BACK DOOR

Removal

1. Remove the back door glass. Refer to GW-18, "Removal and Installation".
2. Remove the back door lock assembly. Refer to DLK-236, "Removal and Installation".
3. Remove the back door wire harness.
4. Remove the rear washer nozzle and hose from the back door. Refer to WW-80, "Removal and Installation".
5. Support the back door.
   CAUTION:
   Two technicians should be used to avoid damaging the back door during removal.
6. Remove the back door stays.
7. Remove the door side nuts and the back door assembly.



Installation
Installation is in the reverse order of removal.
- Align the back door. Refer to DLK-222, "Fitting Adjustment".

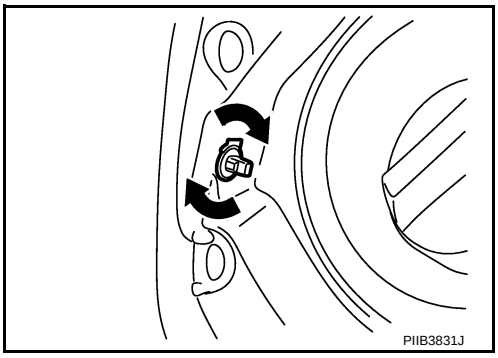
FUEL FILLER LID OPENER

Removal and Installation of Fuel Filler Lid Opener

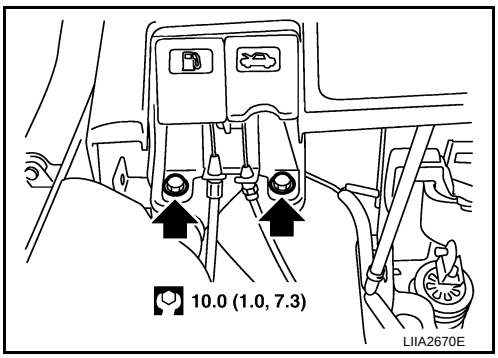
INFOID:0000000001315839

REMOVAL

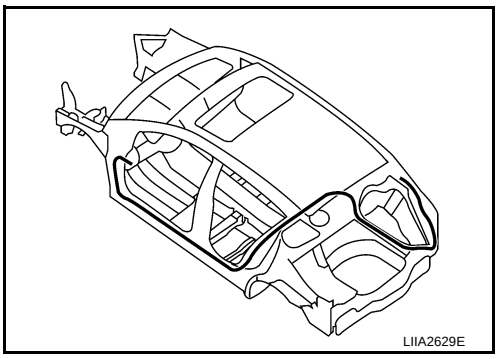
1. Remove trunk side finisher (RH). Refer to INT-35, "Removal and Installation".
2. Remove fuel filler lid opener cable lock ring.



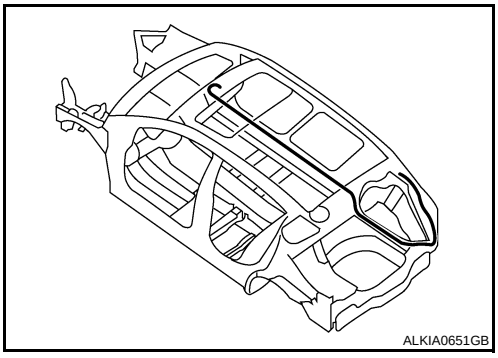
3. Remove front and rear kicking plates. Refer to INT-20, "Removal and Installation".
4. Remove rear cushion assembly. Refer to SE-16, "Exploded View".
5. Remove the bolts and the fuel filler lid opener handle.



6. Remove fuel filler lid opener cable clips from the vehicle.
7. Remove the fuel filler lid opener cable (LH drive).



8. Remove the fuel filler lid opener cable (RH drive).



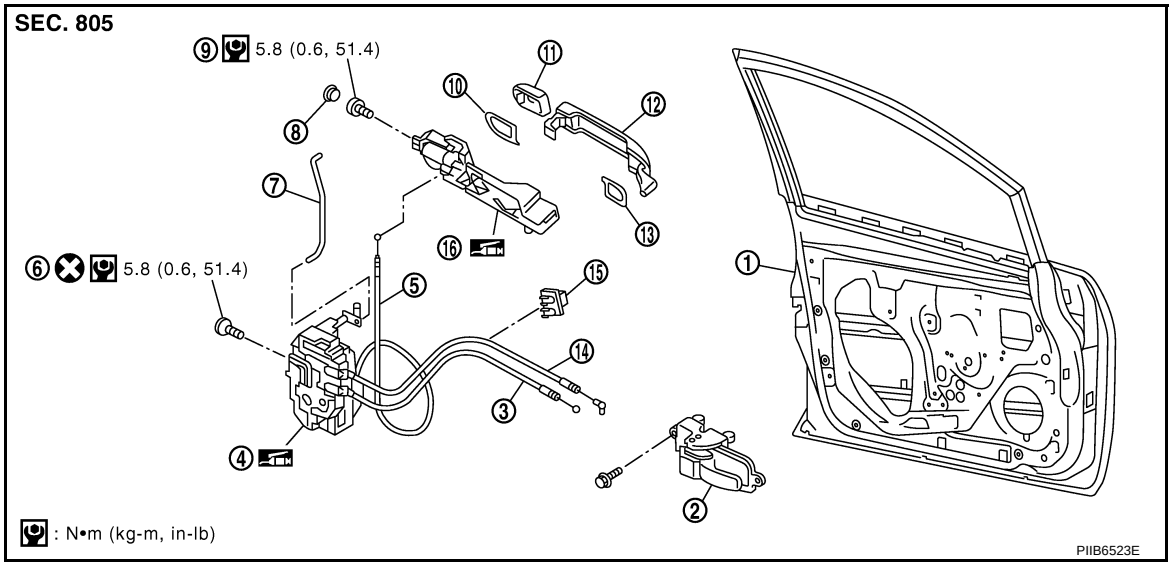
INSTALLATION

Installation is in the reverse order of removal.

FRONT DOOR LOCK

Component Parts Location

INFOID:0000000001315860



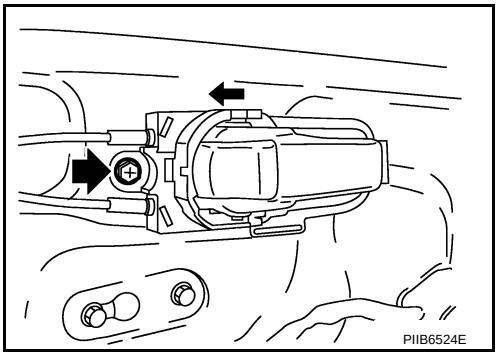
1. Front door
2. Inside handle
3. Inside handle cable
4. Door lock assembly
5. Outside handle cable
6. TORX bolt (T30)
7. Key cylinder connecting rod
8. Grommet
9. TORX bolt (T30)
10. Rear gasket
11. Door key cylinder assembly (Driver's side) Outside handle escutcheon (passenger's side)
12. Outside handle
13. Front gasket
14. Lock knob cable
15. Holder
16. Outside handle bracket

Removal and Installation

INFOID:0000000001315861

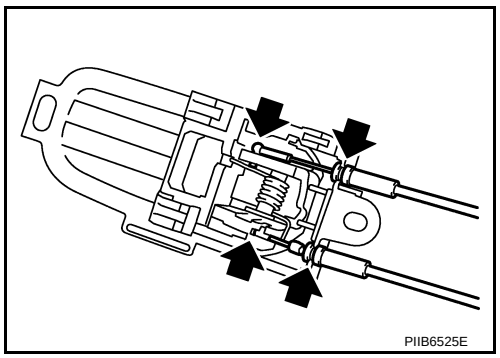
REMOVAL

1. Remove front door finisher. Refer to INT-13, "Removal and Installation" .
2. Fully close front door window.
3. Remove the front door sealing screen.
   NOTE:
   If sealing screen is reused, cut butyl tape in a way that leaves it on the sealing screen.
4. Remove front door rear glass run channel. Refer to GW-14, "Removal and Installation" .
5. Remove the cables from the holder.
6. Remove inside handle bolt, and slide the handle toward the rear of the vehicle. disengage the handle from the door panel, and remove the inside handle.

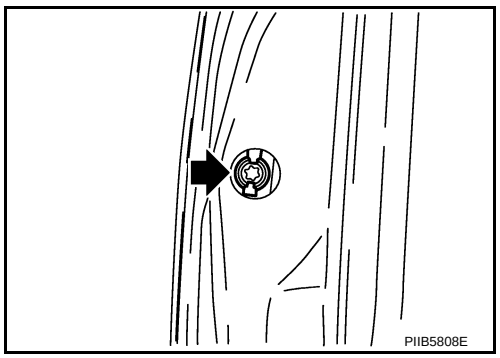


7. Disengage the handle from the door panel, and remove the inside handle.

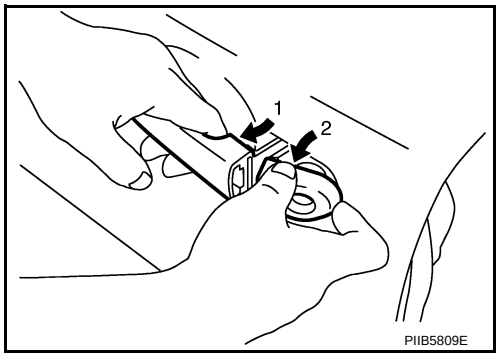
8. Disconnect the inside handle cable and lock knob cable from the inside handle.
CAUTION:
During removal and installation, work so as not to bend the ends of the lock knob cable and inside handle cable.


PIIB6525E

9. Remove the door side grommet, and the door key cylinder assembly (escutcheon) bolt.
10. Remove the key cylinder connecting rod (key cylinder side).
11. If equipped, disconnect the door antenna, the door request switch connector and remove the harness clamp. (Vehicle with intelligent key systems only).

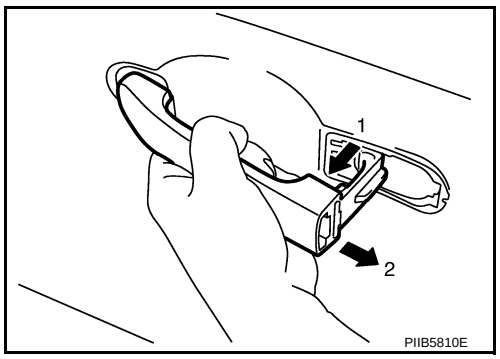

PIIB5808E

12. Remove the door cylinder assembly while pulling the outside handle forward.



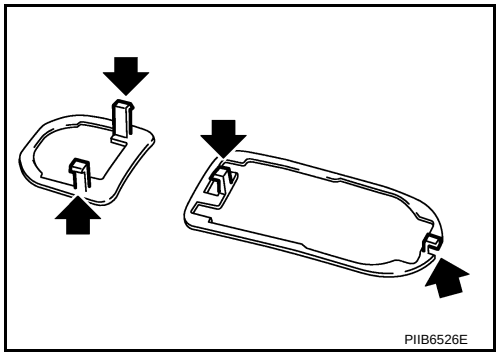
PIIB5809E

13. Pull the outside door handle forward and then slide it toward the rear of the vehicle to remove.



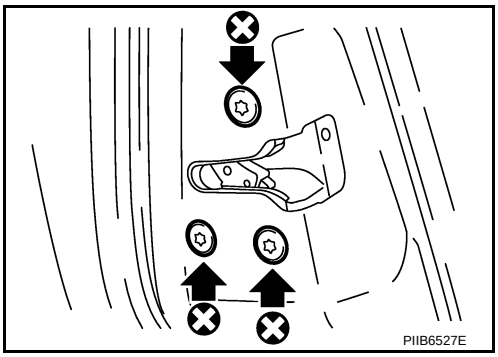
PIIB5810E

14. Remove the front and rear gaskets.

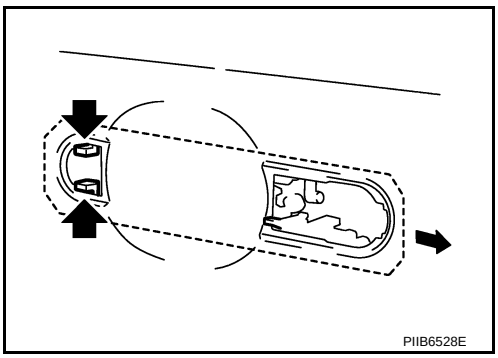

PIIB6526E

15. Remove the door lock assembly bolts.

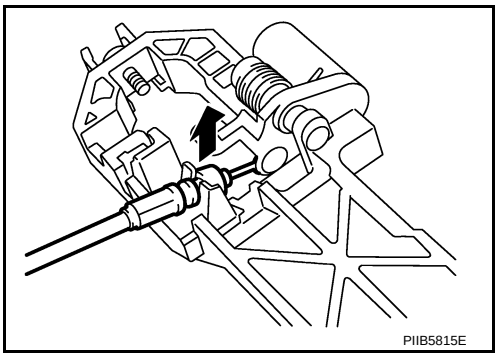
5.8 N·m (0.6 kg-m, 51.4 in-lb)



16. Slide the outside handle bracket toward the rear of the vehicle, and remove the assembly.



17. If equipped, disconnect the door lock assembly electrical connector.
18. Separate the outside handle cable from the outside handle bracket.

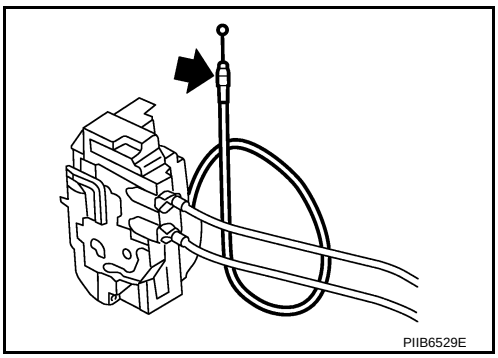


INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

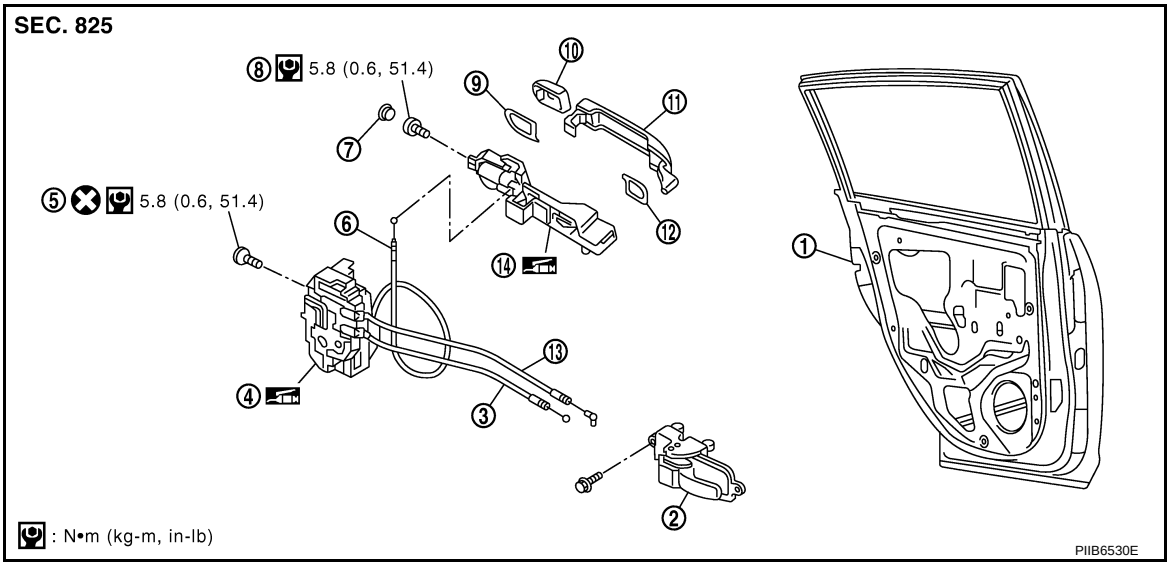
- **To install each rod, be sure to rotate the rod holder until a click is felt.**
- **When installing door lock assembly, be careful when rotating the outside handle cable as shown in the figure.**
  - **Place the outside handle bracket cable on the inside of door lock assembly before installing.**



REAR DOOR LOCK

Component Parts Location

INFOID:0000000001315858



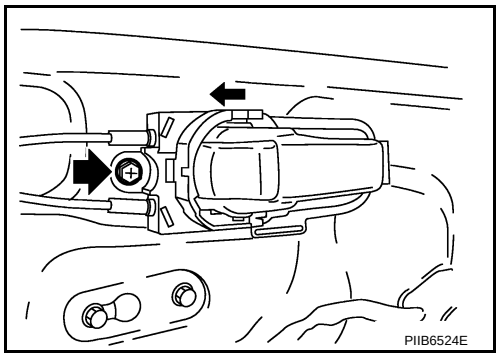
1. Rear door
2. Inside handle
3. Inside handle cable
4. Door lock assembly
5. TORX bolt (T30)
6. Outside handle cable
7. Grommet
8. TORX bolt (T30)
9. Rear gasket
10. Outside handle escutcheon
11. Outside handle
12. Front gasket
13. Lock knob cable
14. Outside handle bracket

Removal and Installation

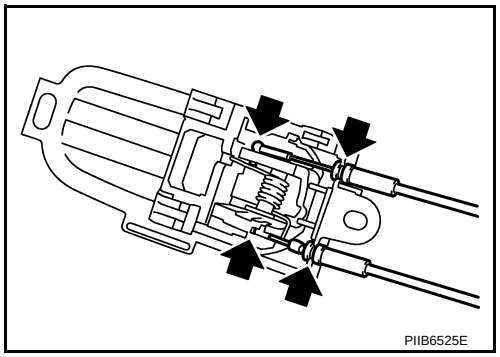
INFOID:0000000001315859

REMOVAL

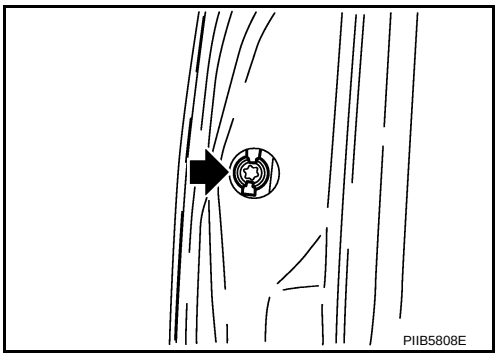
1. Remove the partition glass. Refer to GW-18, "Removal and Installation".
2. Support door glass while lifting it up to the door window completely closed position.
3. Remove inside handle bolt, slide handle toward rear of vehicle, disconnect it from the door panel, and remove the inside handle.



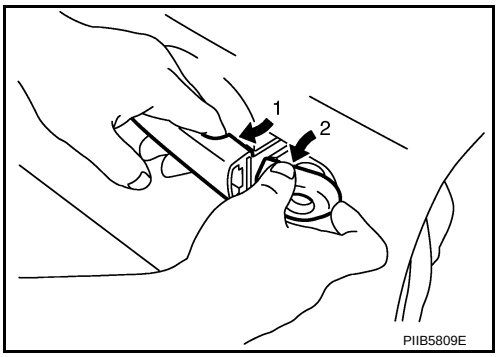
4. Disconnect the inside handle and lock knob cables from the inside handle.
   CAUTION:
   During removal and installation, do not to bend the ends of the lock knob cable and inside handle cable.



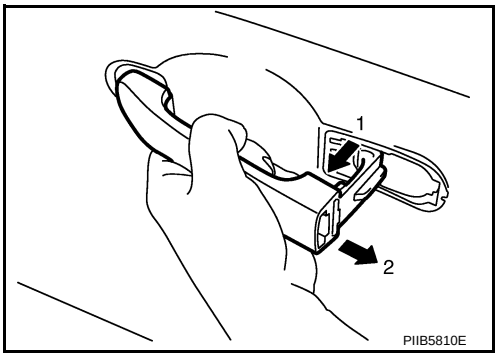
5. Remove the door side grommet, and the outside handle escutcheon screw.



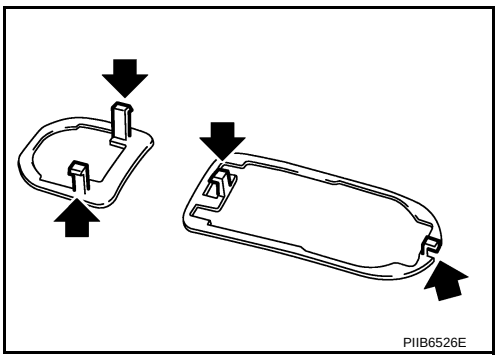
6. Pull the outside handle forward (1), while removing outside handle escutcheon (2).



7. Pull outside door handle forward (1), and slide it toward the rear of the vehicle to remove (2).

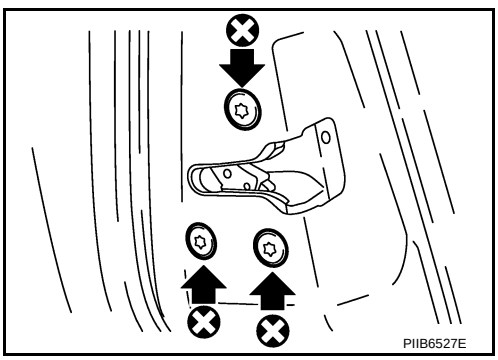


8. Remove the front and rear gaskets.

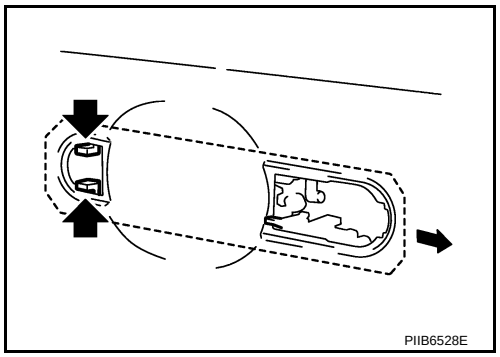


9. Remove the door lock assembly screws.

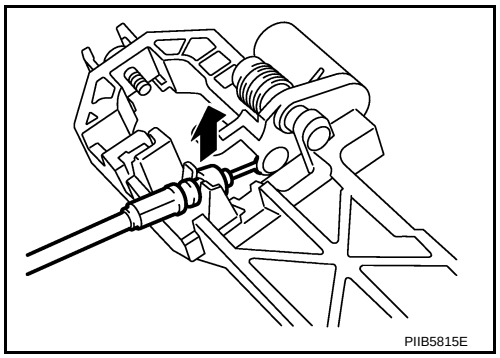
: **5.8 N·m (0.6 kg-m, 51.4 in-lb)**



10. Slide the outside handle bracket toward the rear of vehicle, remove the outside handle bracket and the door lock assembly.


PIIB6528E

11. If equipped, disconnect the door lock assembly electrical connector.
12. Disconnect the outside handle cable from the outside handle bracket.

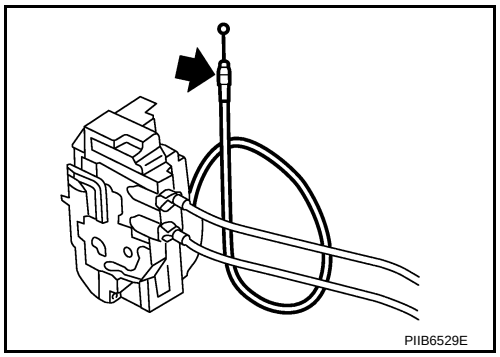

PIIB5815E

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **To install each rod, be sure to rotate the rod holder until a click is felt.**
- **When installing door lock assembly, be careful when rotating the outside handle cable as shown.**
- **Place the outside handle bracket cable on the inside of door lock assembly before installing.**


PIIB6529E

BACK DOOR LOCK

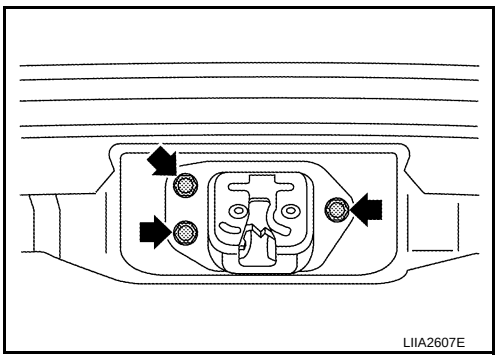
Removal and Installation

INFOID:0000000001315857

BACK DOOR LOCK

Removal

1. Remove the back door finisher lower. Refer to INT-18, "Removal and Installation".
2. Remove the bolts, disconnect the electrical connector and separate the lock from the door.

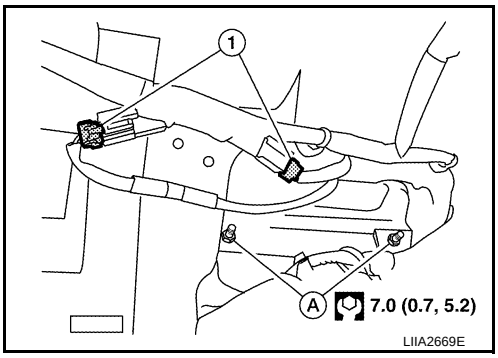


Installation
Installation is in the reverse order of removal.

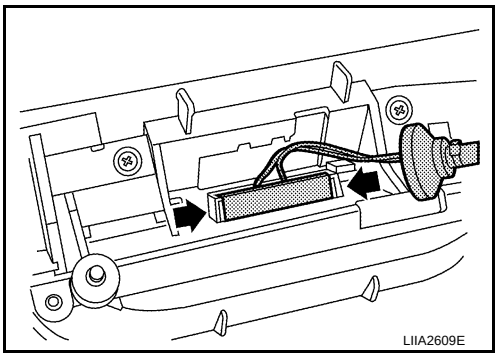
BACK DOOR HANDLE

Removal

1. Remove the back door finisher lower. Refer to INT-18, "Removal and Installation".
2. Disconnect the harness connectors (1), remove the nuts and the back door handle (A).



3. Release the clips and remove the switch from the housing.

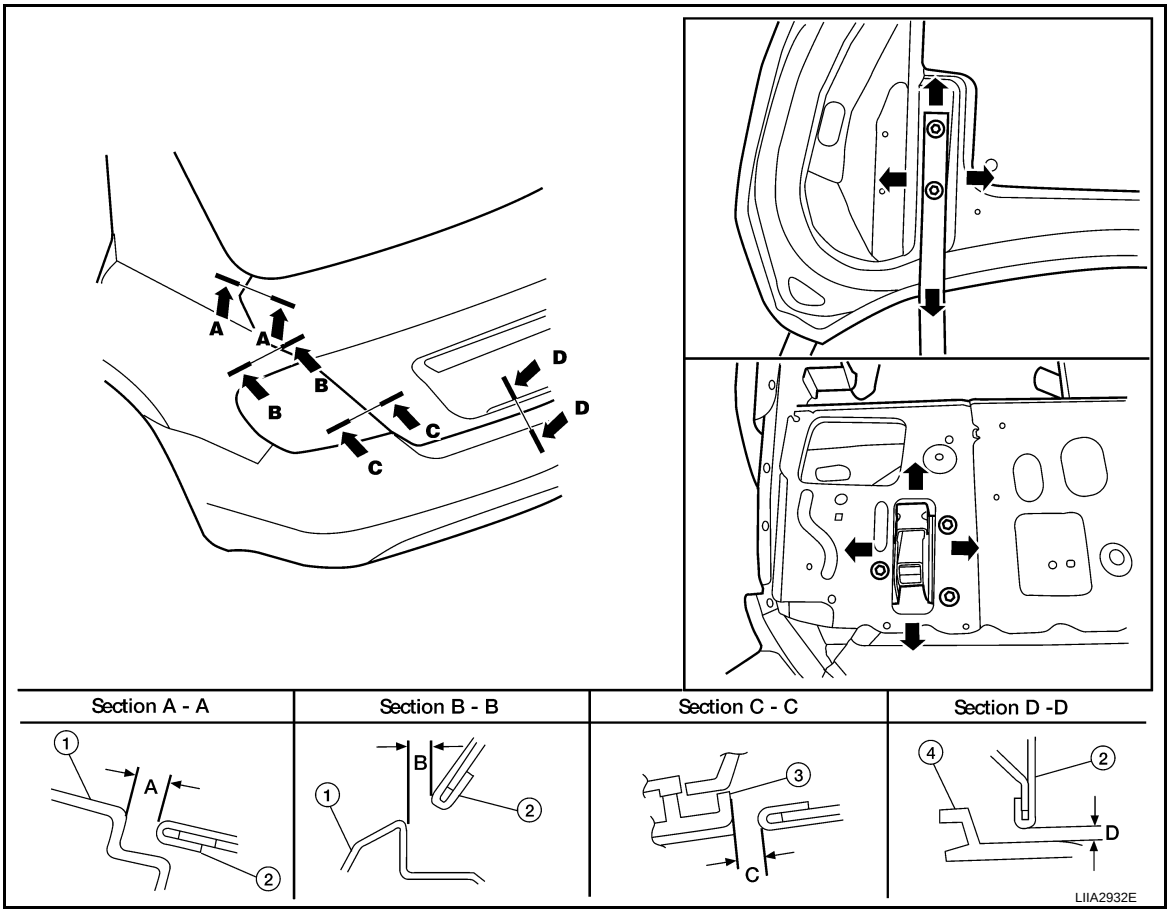


Installation
Installation is in the reverse order of removal.

TRUNK LID

Fitting Adjustment

INFOID:0000000001315840



1. Rear fender
2. Trunk lid
3. Rear combination lamp
4. Rear bumper fascia
a. 4.0 ± 1.0 mm (0.16 ± 0.04 in)
b. 3.5 ± 1.0 mm (0.14 ± 0.04 in)
c. 4.5 ± 1.7 mm (0.03 ± 0.06 in)
d. 7.0 ± 2.2 mm (0.28 ± 0.09 in)

Longitudinal and lateral clearance adjustment

1. With the striker released, loosen the trunk lid hinge nuts and close the trunk lid.
2. Make the lateral clearance and the clearance to the rear window glass equal. Then open the trunk lid to tighten the nuts.

Surface height adjustment

1. Loosen the striker bolts. Raise the striker to the top position, and temporarily tighten the upper bolt.
2. Close the trunk lid lightly and adjust the surface height. Then open the trunk lid and tighten the striker bolts.

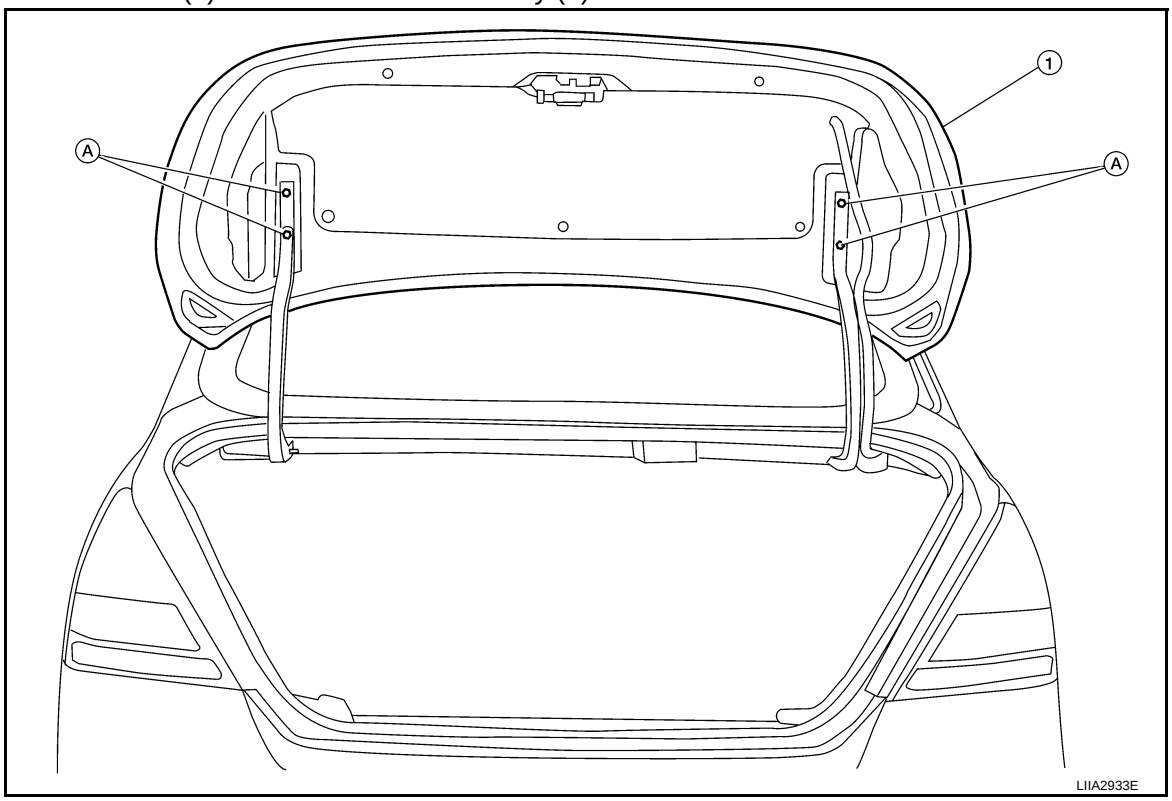
Trunk Lid Assembly

INFOID:0000000001315841

REMOVAL

1. Remove the trunk lid finisher. Refer to INT-17, "Removal and Installation" .
2. Remove the trunk lid wire harness.

3. Remove the nuts (a) and the trunk lid assembly (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

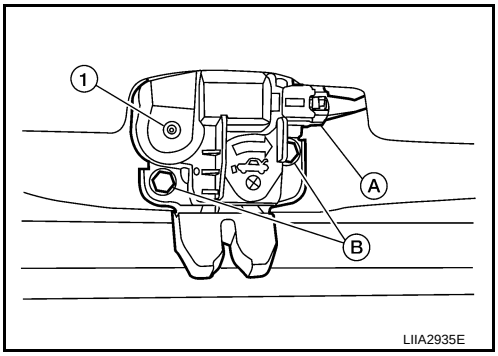
After installing, apply touch-up paint (body color) to the head of the hinge nuts.

Trunk Lid Lock

INFOID:0000000001315842

REMOVAL

1. Remove the trunk lid finisher. Refer to INT-17, "Removal and Installation".
2. If equipped, disconnect the trunk lid lock cylinder rod.
3. Remove the release cable.
4. Disconnect the electrical connector (a), remove the bolts (b) and the trunk lid lock (1).



INSTALLATION

Installation is in the reverse order of removal.

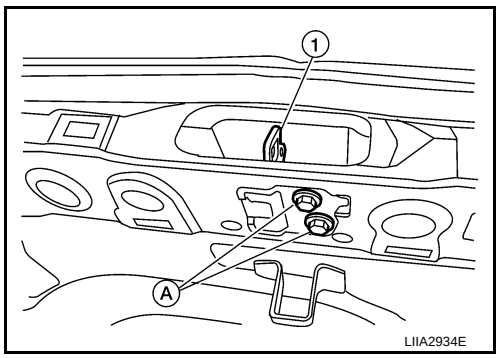
Trunk Lid Striker

INFOID:0000000001315843

REMOVAL

1. Remove the trunk rear plate and trunk rear finisher. Refer to INT-35, "Removal and Installation".
2. Remove the bolts, disconnect the electrical connector and remove the trunk lock actuator.
3. Remove the bolt and disconnect the trunk lid release cable.

4. Remove the bolts (a) and the trunk lid striker (1).



INSTALLATION

Installation is in the reverse order of removal.

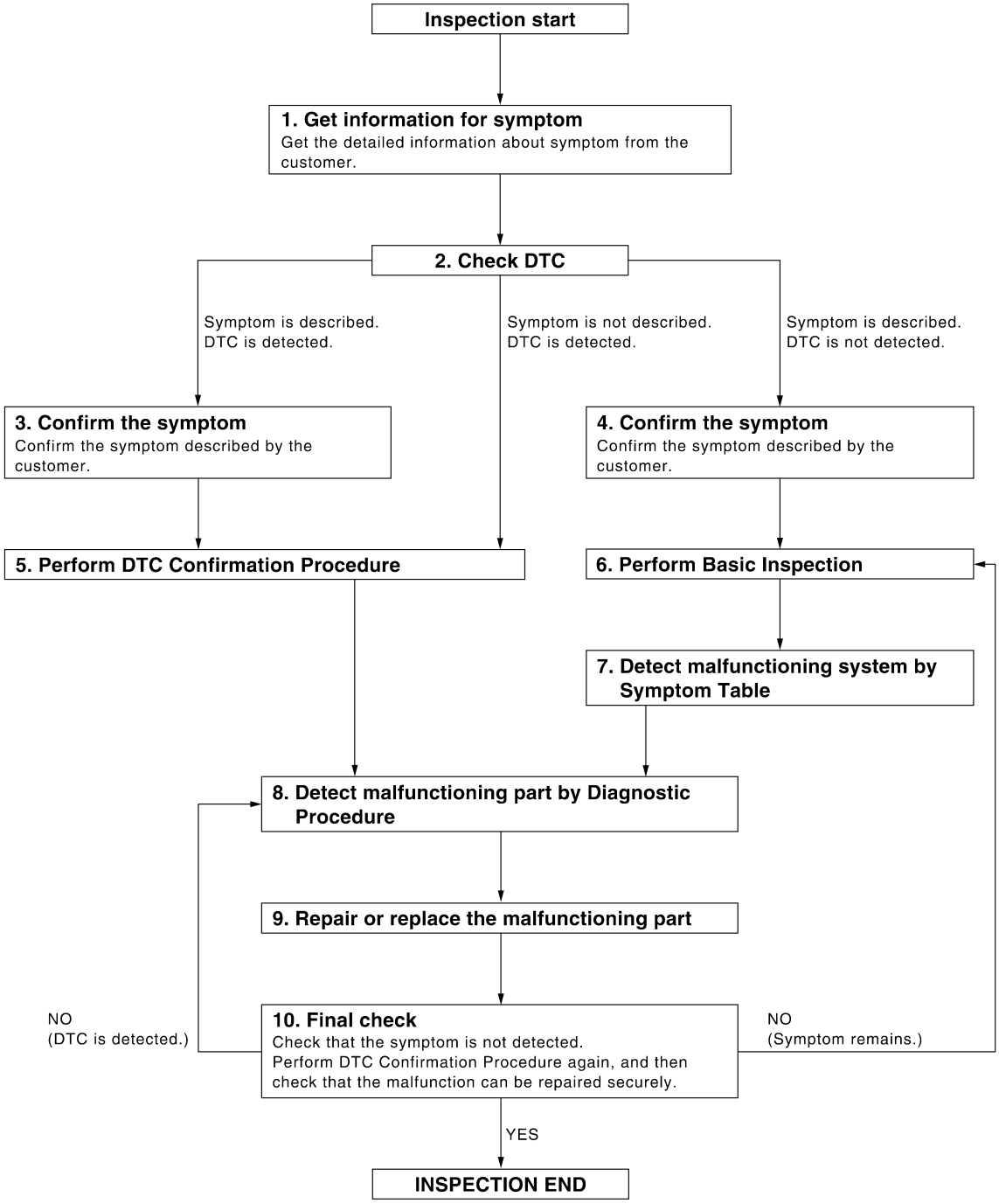
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001396667

OVERALL SEQUENCE



ALKIA0246GB

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 for Intelligent Key unit and BCM.
2. Perform the following procedure if DTC is displayed.

- 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.
If two or more DTCs are detected, refer to XX-XX, "*****" (Intelligent Key unit), XX-XX, "*****" (BCM) and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 8.
NO >> Refer to XX-XX, "*****".

6.PERFORM BASIC INSPECTION

Perform Basic Inspection. Refer to DLK-440, "Basic Inspection".

>> GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

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

>> GO TO 9.

9.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 10.

10.FINAL CHECK

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

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8.
YES (Symptom remains)>>GO TO 6.
NO >> **INSPECTION END**

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001396668

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000001396669

Refer to the CONSULT-III Operation Manual-NATS.

FUNCTION DIAGNOSIS

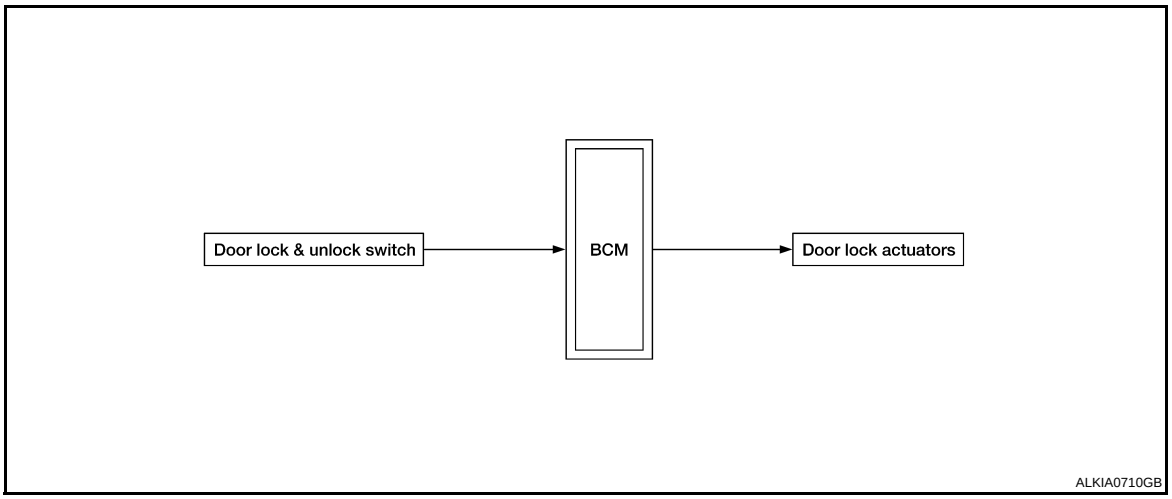
DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

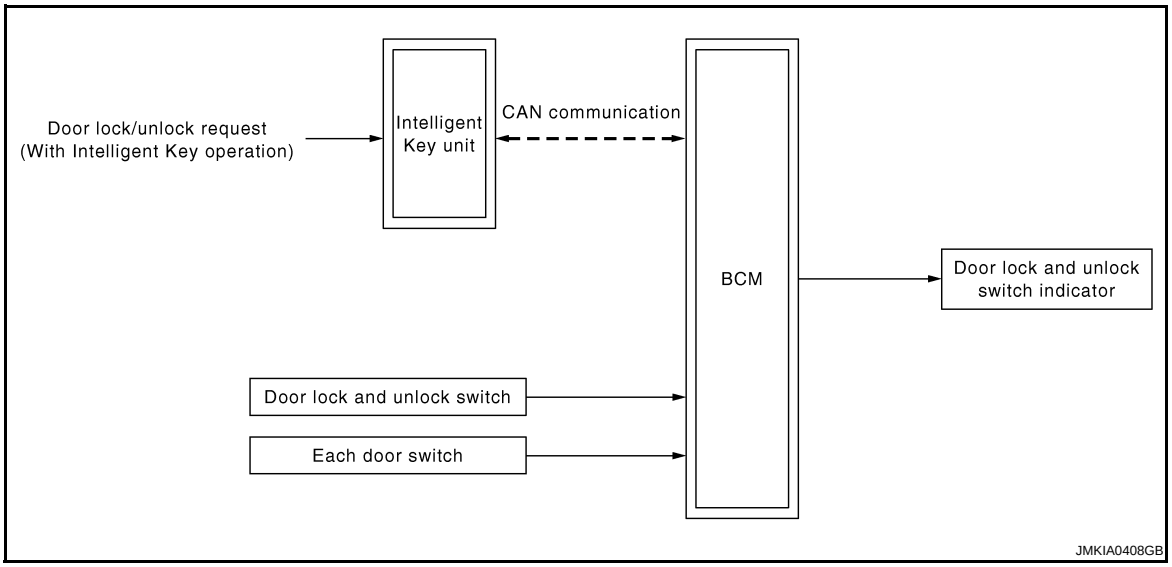
DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001396670

DOOR LOCK AND UNLOCK SWITCH OPERATION



DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001396671

DOOR LOCK AND UNLOCK SWITCH OPERATION

Functions available by operating the door lock and unlock switch on driver or passenger door. Interlocked with the lock/unlock operation of door lock and unlock switch, door lock actuators of all doors are locked/unlocked.

Operation Condition

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

Door lock and unlock switch	Operation condition
Lock operation	Following all conditions are satisfied. • Except driver side doors are closed. • Doors are not locked with Intelligent Key or door request switch.
Unlock operation	Following all conditions are satisfied. • Doors are not locked with Intelligent Key or door request switch.

NOTE:
When the door lock is locked with Intelligent Key or door request switch (in super lock set state), door lock and unlock switch operation will be invalid until either following condition is satisfied.
- Turn ignition switch ON.
- Unlock with Intelligent key or door request switch.

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION

Door lock and unlock switch indicator indicates door lock status. The indicator turn ON while ignition switch is ON and door lock is locked or super lock is set. If any door is opened, the indicator will turn OFF.
Door lock and unlock switch indicator have the following 2 functions.

1 Minute Timer

A timer must be running to turn OFF the indicator. The timer will be running for 1 minute after super lock set or lock with Intelligent Key, door request switch or auto door lock.

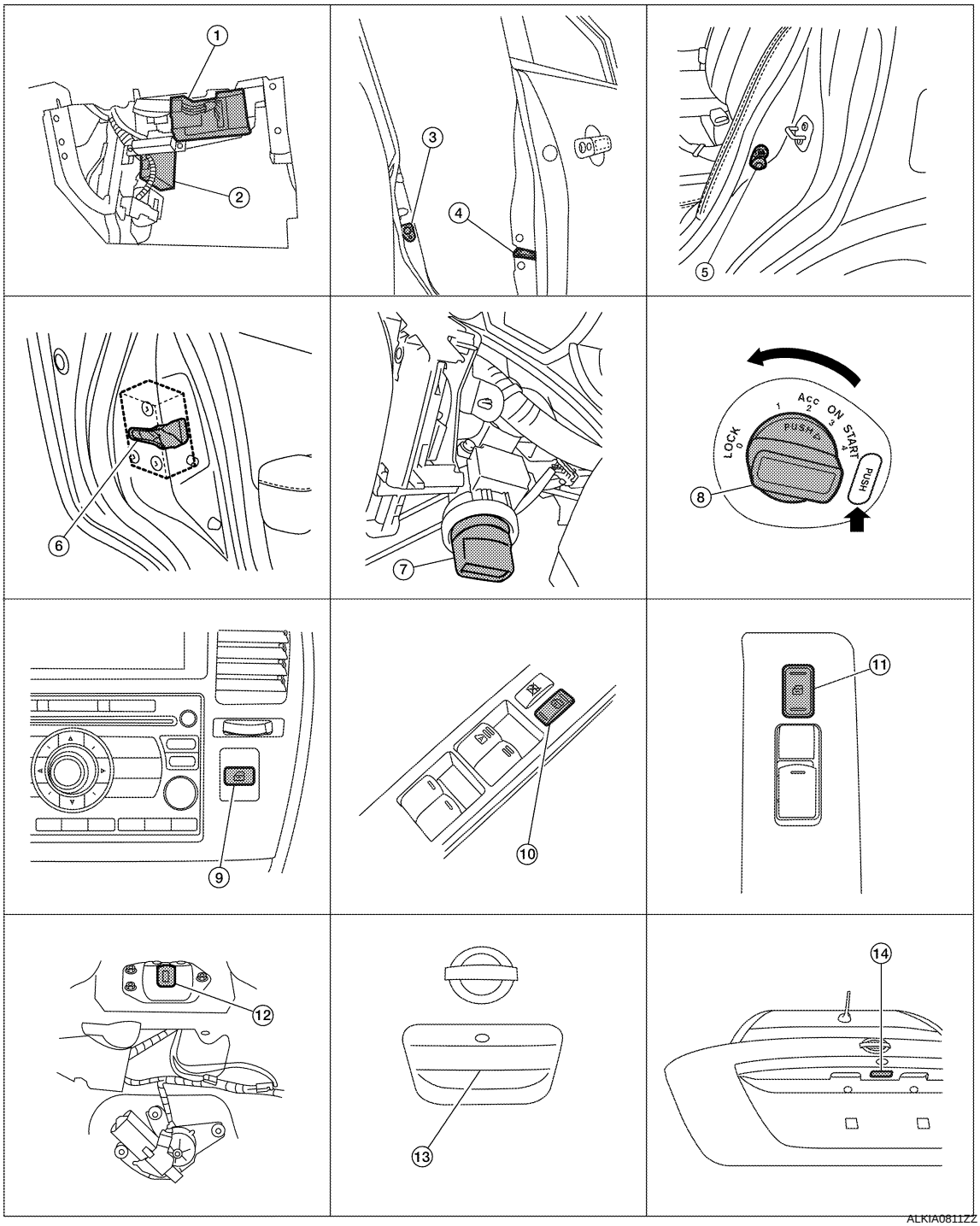
30 Minutes Timer

A timer must be running to turn OFF the indicator. The timer will be running for 30 minutes after locking with door lock and unlock switch.

NOTE:
1 minute timer condition is satisfied during 30 minutes timer is active, 30 minutes timer is not change to 1 minute.

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:0000000001396672



ALKIA0811ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Intelligent Key unit M52
3. Front door switch (driver side) B34 (Passenger side) B27
4. Front door lock actuator (driver side) D14 (Passenger side) D114 Door unlock sensor (driver side) D14
5. Rear door switch LH B71 RH B53
6. Rear door lock actuator LH D205 RH D305
7. Key switch and ignition knob switch (A/T) M32
8. Key switch and ignition knob switch (M/T) M32
9. Instrument panel warning lamp assembly (door lock) M37

10. Main power window and door lock/unlock switch D7, D8
11. Power window and door lock/unlock switch (passenger side) D105
12. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
13. Back door opener switch (hatchback) D408
14. Trunk lid opener switch (sedan) B61

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000001396673

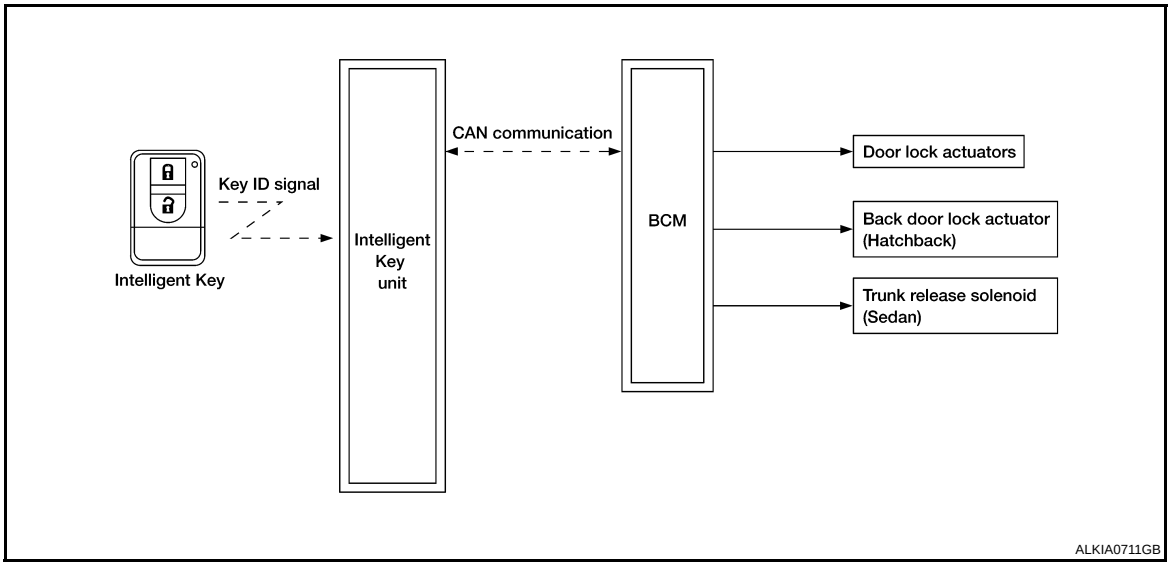
Item	Function
BCM	Controls the door lock function.
Door switch	Detects door state (open or close).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM. Door lock/unlock switch indicator is built-in door lock/unlock switch.
Door lock actuator	Receives door lock/unlock signal from BCM and locks/unlock each door.

INTELLIGENT KEY

INTELLIGENT KEY : System Diagram

INFOID:0000000001396674

INTELLIGENT KEY OPERATION



INTELLIGENT KEY : System Description

INFOID:0000000001396675

INTELLIGENT KEY OPERATION

The Intelligent Key has the same functions as the multi remote control system. In addition to other safety features, it can be used to lock and unlock all doors including the back door (hatchback) or the trunk (sedan). This function can be set to OFF with CONSULT-III. For the setting information, refer to DLK-278, "CONSULT-III Function (INTELLIGENT KEY)".

OPERATION CONDITION

Remote controller operation	Operation condition
Lock	• All doors are closed • Key switch is OFF (key is removed from ignition key cylinder) • Ignition knob switch is OFF (Ignition switch is not pressed) • No Intelligent Keys are inside the vehicle.
Unlock	• Key switch is OFF (key is removed from ignition key cylinder) • Ignition knob switch is OFF (Ignition switch is not pressed)

OPERATION AREA

To ensure that the Intelligent Key works effectively, use within 100 cm range of each door, however the operable range may differ according to surroundings.

LOCK AND UNLOCK CONTROL

When door lock and unlock button of the Intelligent Key is pressed, lock signal or unlock signal is transmitted from Intelligent Key to Intelligent Key unit.
When Intelligent Key unit receives the door lock and unlock signal, it operates door lock actuator.

SUPER LOCK OPERATION

Super lock provides a higher anti-theft performance than a conventional power door lock system. The super lock system is controlled by BCM.
When super lock is set, all doors can not be opened from the inside.

ANTI-HIJACK MODE

When door lock is unlocked, pressing LOCK buttons on Intelligent Key once will lock all doors. When door lock is locked, pressing UNLOCK button on Intelligent Key once will unlock driver door. Pressing UNLOCK button on Intelligent Key a second time within 5 seconds from the first time will unlock all doors and back door (hatchback) can be opened with back door opener switch or trunk (sedan) can be opened with trunk lid opener switch.

CONVENIENCE MODE

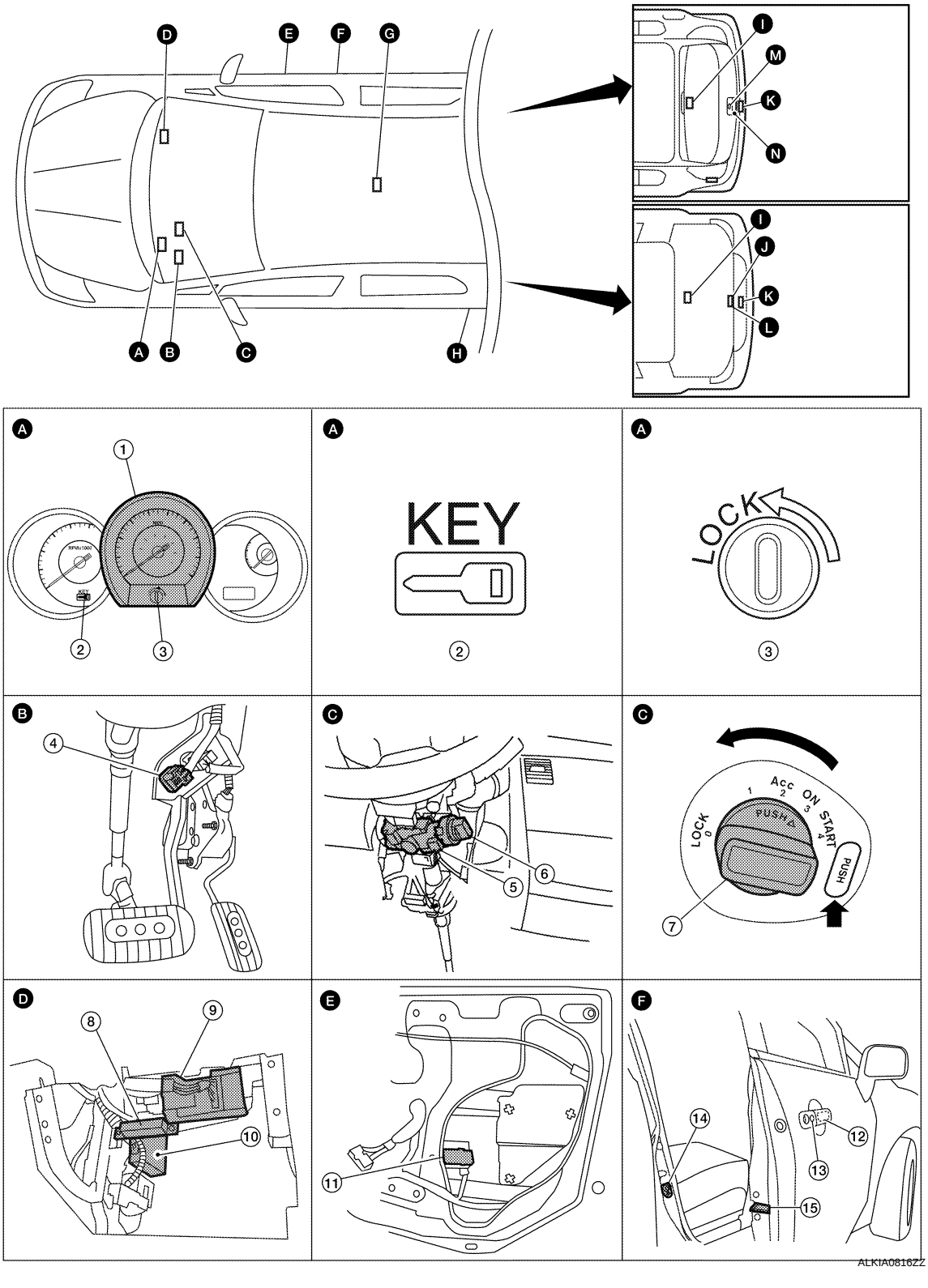
When door lock is unlocked, pressing LOCK buttons on Intelligent Key once will lock all doors. When door lock is locked, pressing UNLOCK button on Intelligent Key once will unlock all doors and back door (hatchback) can be opened with back door opener switch or trunk (sedan) can be opened with trunk lid opener switch.

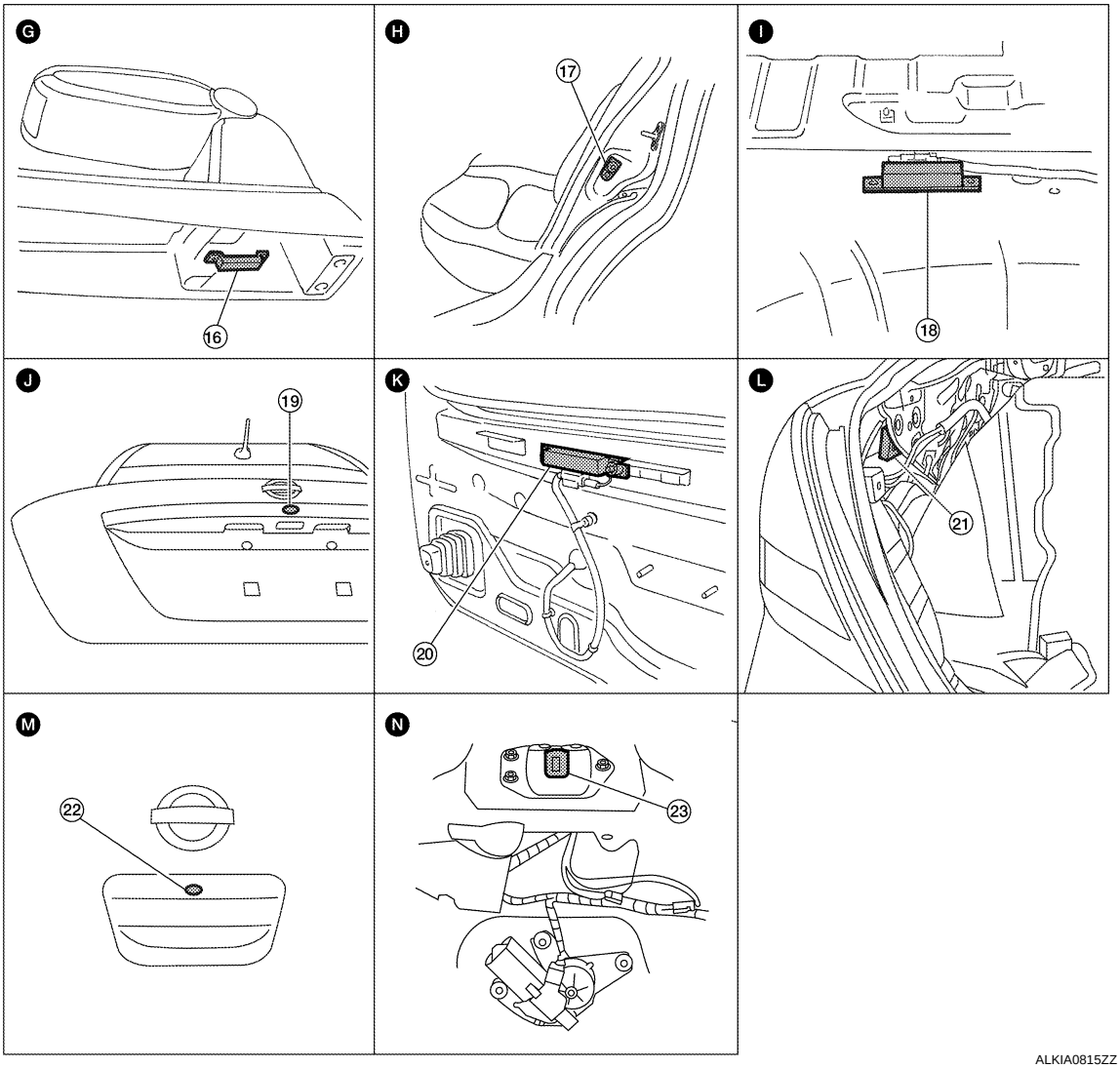
NOTE:

Anti-hijack mode can be set to ON or OFF with CONSULT-III. Once OFF, the convenience mode will be active. For setting information with CONSULT-III, refer to DLK-53, "CONSULT-III Function (INTELLIGENT KEY)". For setting information without CONSULT-III, refer to Owner's Manual.

INTELLIGENT KEY : Component Parts Location

INFOID:0000000001396676





ALKIA0815ZZ

1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch E13 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
10. Intelligent Key Unit M52
11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
12. Front outside antenna (driver side) D10 (Passenger side) D106
13. Front door request switch (driver side) D5 (Passenger side) D103
14. Door unlock sensor D14 [Front door lock actuator (driver side)]
15. Front door switch (driver side) B34 (Passenger side) B29
16. Front console antenna B45 (view with front console removed)
17. Rear door switch LH B71 RH B53
18. Rear floor antenna B46 (behind rear seat)
19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

INTELLIGENT KEY : Component Description

INFOID:0000000001396677

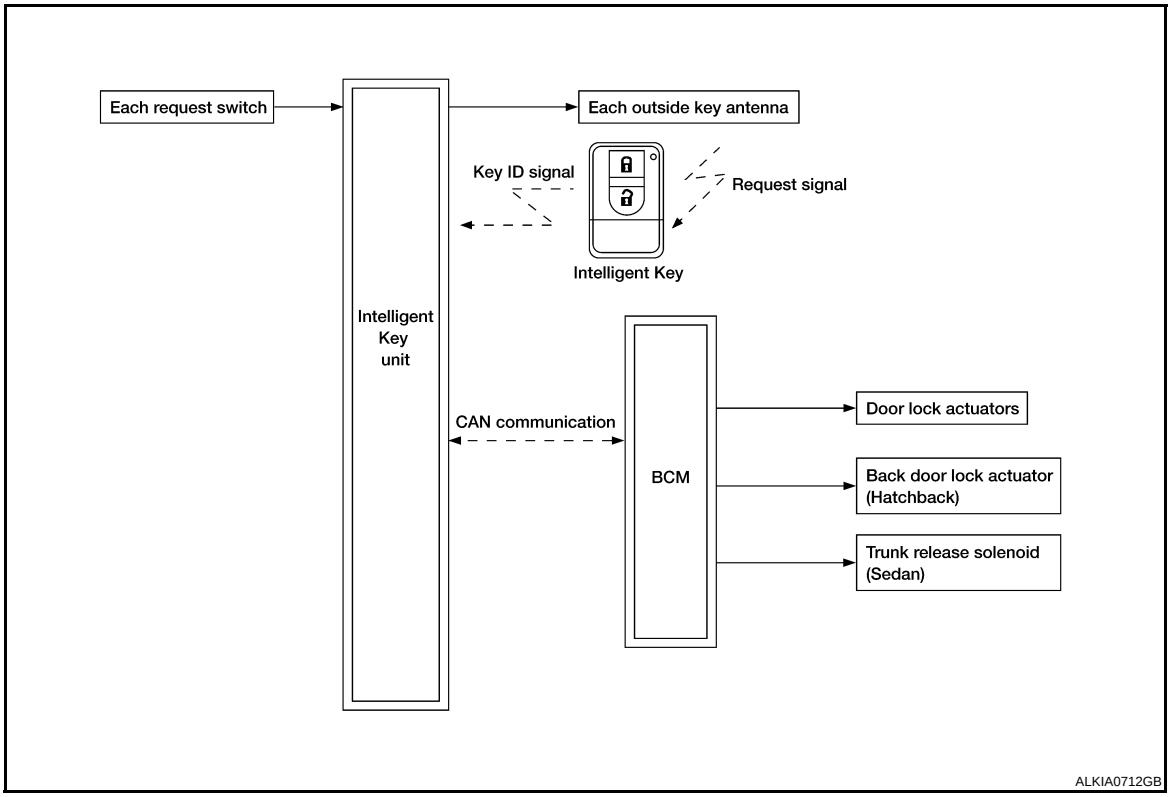
Item	Function
Intelligent Key unit	Controls the door lock/unlock operation with BCM.
BCM	Controls the door lock/unlock operation with Intelligent Key unit.
Door switch	Detects door state (open or close).
Key switch	Detects mechanical key is inserted into ignition key cylinder.
Outside key antenna	Detects Intelligent Key is in detection area of outside key antenna.
Inside key antenna	Detects Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when lock/unlock button is pressed.
Door lock actuator	Receives lock/unlock signal from BCM and lock and unlock each door.
Super lock actuator	Receives super lock set/release signal from BCM and set/release super lock system.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : System Diagram

INFOID:0000000001396678

DOOR REQUEST SWITCH OPERATION



DOOR REQUEST SWITCH : System Description

INFOID:0000000001396679

DOOR REQUEST SWITCH OPERATION

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 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 (Intelligent Key unit).

This function can be set to OFF with CONSULT-III. For the setting information, refer to DLK-278, "CONSULT-III Function (INTELLIGENT KEY)".

CAUTION:

The driver should always carry the Intelligent Key

OPERATION CONDITION

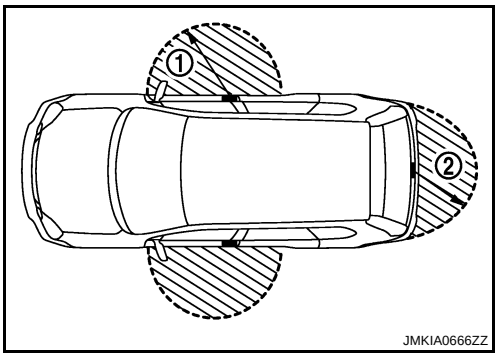
If the following conditions are not satisfied, door lock and unlock operation is not performed even if the request switch is operated.

Each request switch operation	Operation condition
Lock operation	• All doors are closed. • Key switch is OFF. (Key is removed from ignition key cylinder) • Ignition knob switch is OFF. (Ignition switch is not pressed) • No Intelligent Keys are inside the vehicle. • Intelligent Key is within outside key antenna detection area.
Unlock Operation	• Key switch is OFF. (Key is removed from ignition key cylinder) • Ignition knob switch is OFF. (Ignition switch is not pressed) • Intelligent Key is not inside 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) and the back door request switch (2). However, this operating range depends on the ambient conditions.



DOOR LOCK AND UNLOCK CONTROL

When the Intelligent Key detects that door request switch is pressed, it starts corresponding with outside key antenna (request switch pressed door). Then, the Intelligent Key is checked to be 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 Intelligent Key unit. Intelligent Key unit receives the key ID signal and compares it with the registered key ID. Intelligent Key unit sends door lock and unlock signal to BCM via CAN communication.

SUPER LOCK OPERATION

Super lock provides a higher anti-theft performance than a conventional power door lock system. The super lock system is controlled by BCM and Intelligent Key unit.
When super lock is set, all doors cannot be opened from inside.

ANTI-HIJACK MODE

When door lock is unlocked, pressing LOCK buttons on Intelligent Key once will lock all doors. When door lock is locked, pressing UNLOCK button on Intelligent Key once will unlock driver door. Pressing UNLOCK button on Intelligent Key a second time within 5 seconds from the first time will unlock all doors and back door (hatchback) can be opened with back door opener switch or trunk (sedan) can be opened with trunk lid opener switch.

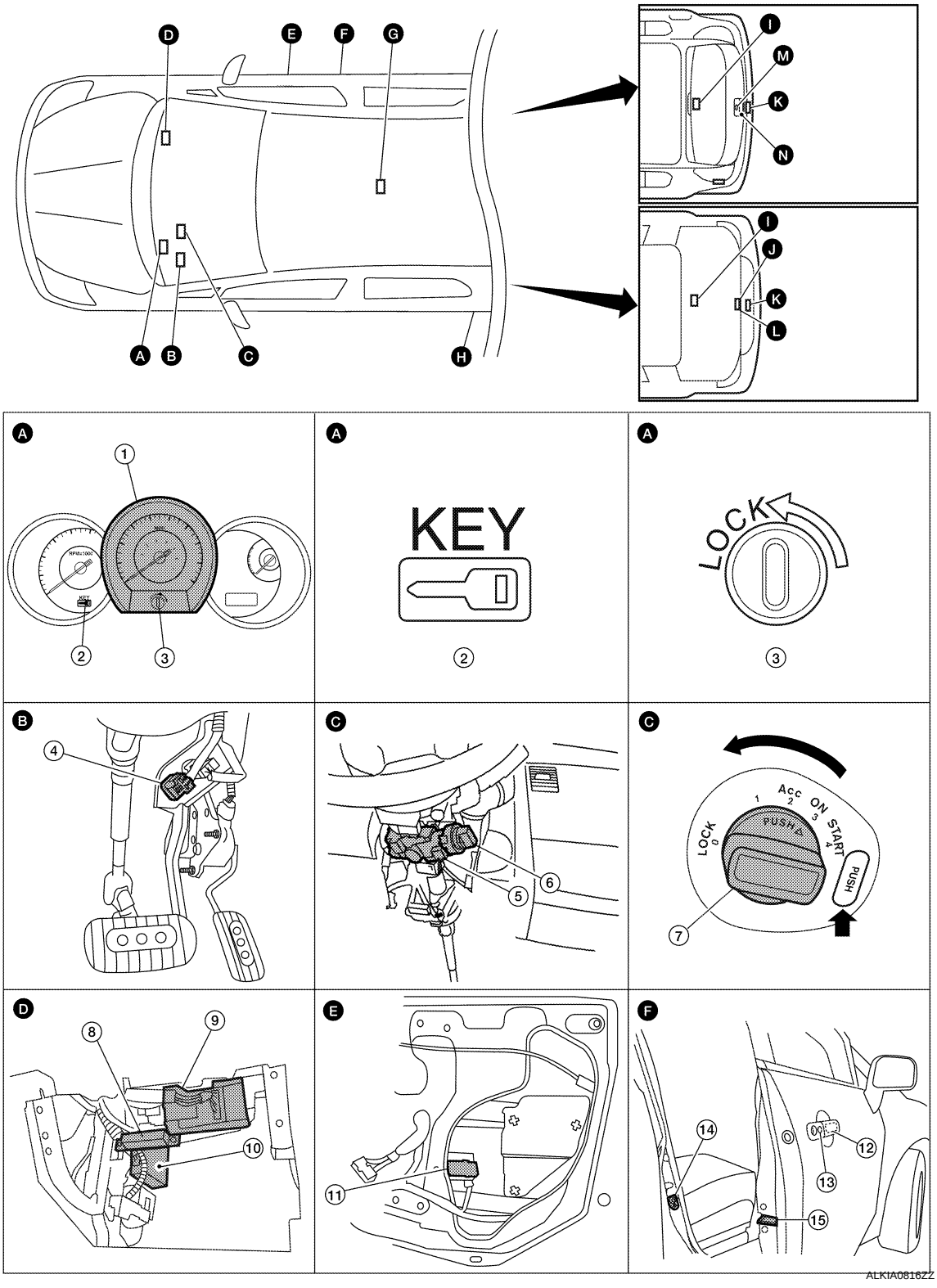
CONVENIENCE MODE

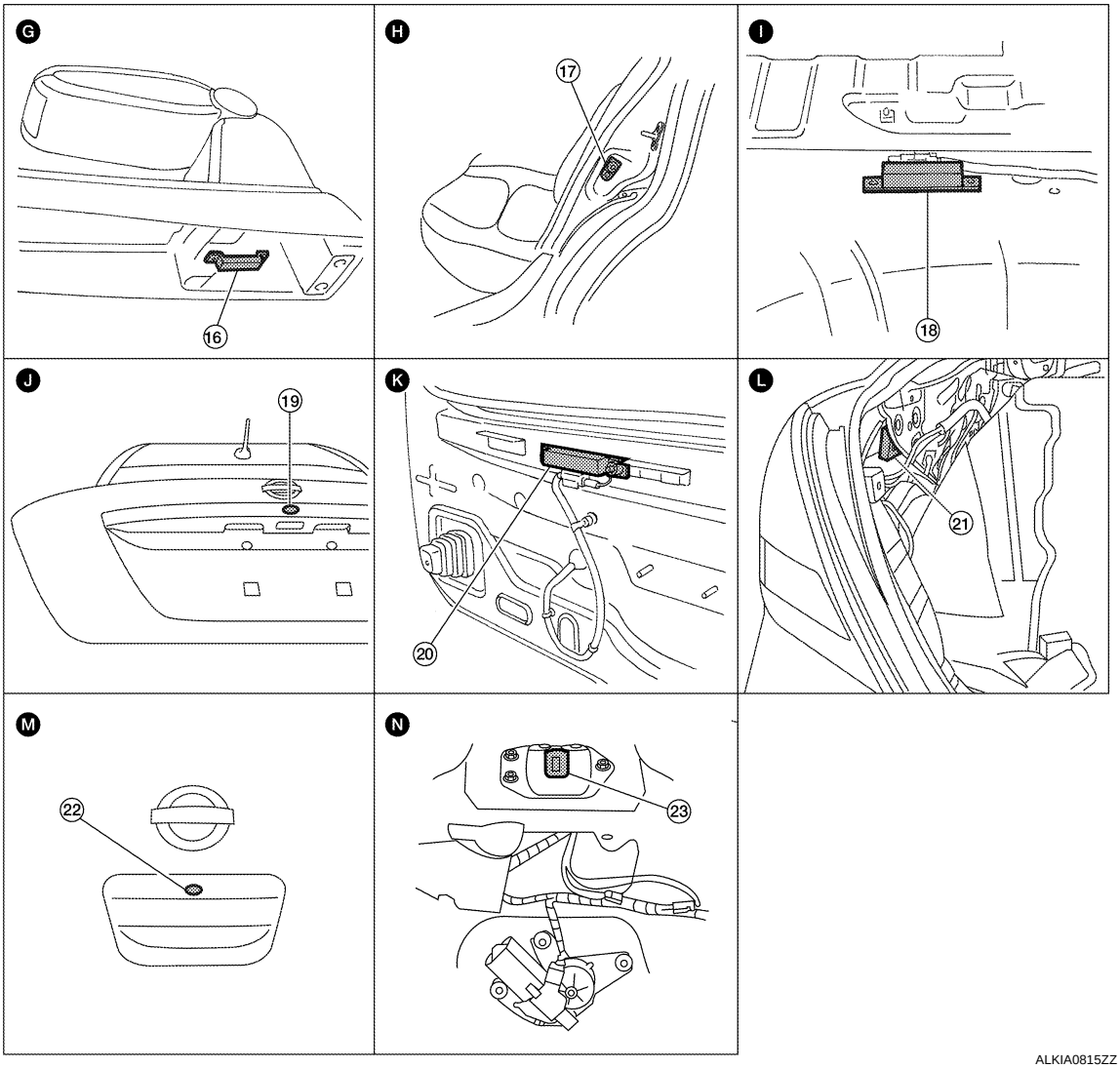
When door lock is unlocked, pressing LOCK buttons on Intelligent Key once will lock all doors. When door lock is locked, pressing UNLOCK button on Intelligent Key once will unlock all doors and back door (hatchback) can be opened with back door opener switch or trunk (sedan) can be opened with trunk lid opener switch.

NOTE:
Anti-hijack mode can be set to ON or OFF with CONSULT-III. Once OFF, the convenience mode will be active. For setting information with CONSULT-III, refer to DLK-53, "CONSULT-III Function (INTELLIGENT KEY)". For setting information without CONSULT-III, refer to Owner's Manual.

DOOR REQUEST SWITCH : Component Parts Location

INFOID:0000000001396680





ALKIA0815ZZ

1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch M203 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
10. Intelligent Key Unit M52
11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
12. Front outside antenna (driver side) D10 (Passenger side) D106
13. Front door request switch (driver side) D5 (Passenger side) D103
14. Door unlock sensor D14 [Front door lock actuator (driver side)]
15. Front door switch (driver side) B34 (Passenger side) B29
16. Front console antenna B45 (view with front console removed)
17. Rear door switch LH B71 RH B53
18. Rear floor antenna B46 (behind rear seat)
19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

DOOR REQUEST SWITCH : Component Description

INFOID:0000000001396681

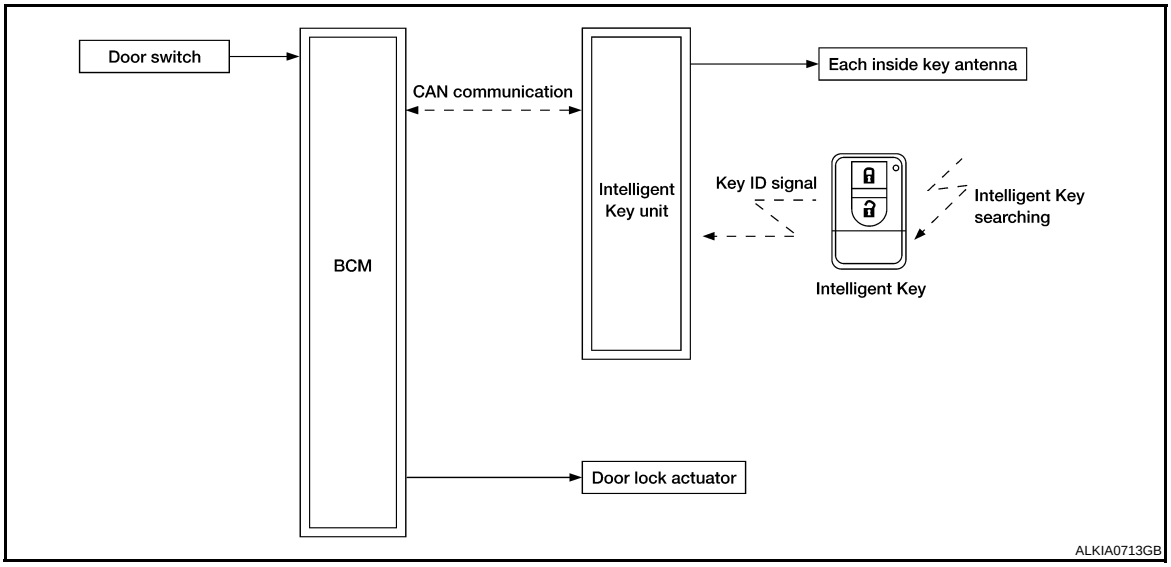
Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock function with Intelligent Key unit.
Door request switch	Transmits operation signal (lock and unlock) to Intelligent Key unit.
Door switch	Detects door state (open or close).
Key switch	Detects mechanical key is inserted into ignition key cylinder.
Ignition knob switch	Detects ignition knob state (push or release).
Outside key antenna	Detects Intelligent Key is in detection area of outside key antenna.
Inside key antenna	Detects Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when request signal is received from outside key antenna.
Door lock actuator	Receives lock/unlock signal from BCM and locks/unlocks each door.
Super lock actuator	Receives super lock set/release signal from BCM and sets/releases super lock system.

KEY REMINDER

KEY REMINDER : System Diagram

INFOID:0000000001396682

KEY REMINDER OPERATION



KEY REMINDER : System Description

INFOID:0000000001396683

KEY REMINDER OPERATION

Key reminder have the following 2 functions.

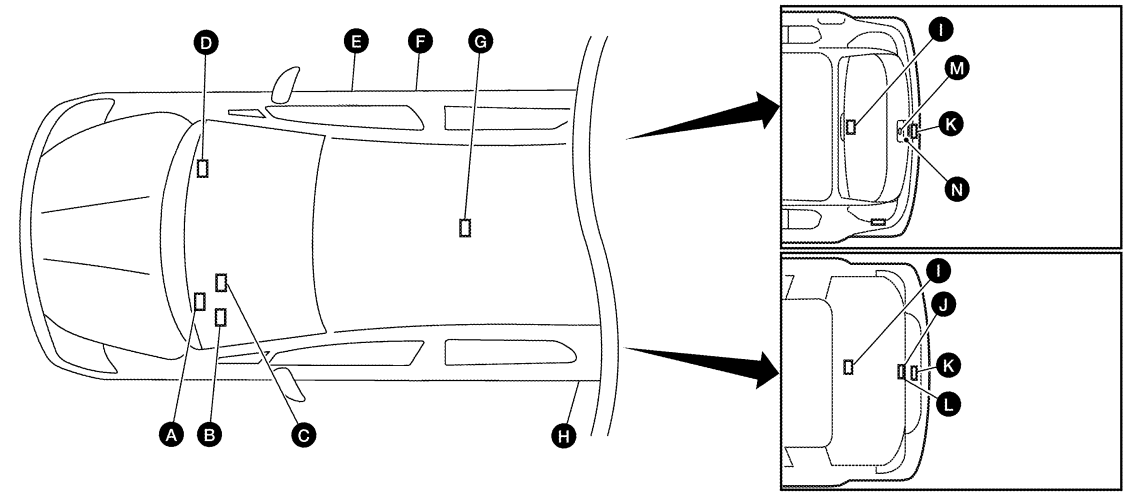
Operation	Operation condition	Operation
Driver door close	Right after driver side door is closed under the following conditions • Door lock operation • Driver side door is opened • Driver side door is in unlock state.	All doors unlock
Any door open to all door close	Right after all doors are closed under the following conditions • Intelligent Key is inside the vehicle • Any door is opened • All doors are locked by door lock and unlock switch.	• All doors unlock • Honk Intelligent Key warning buzzer

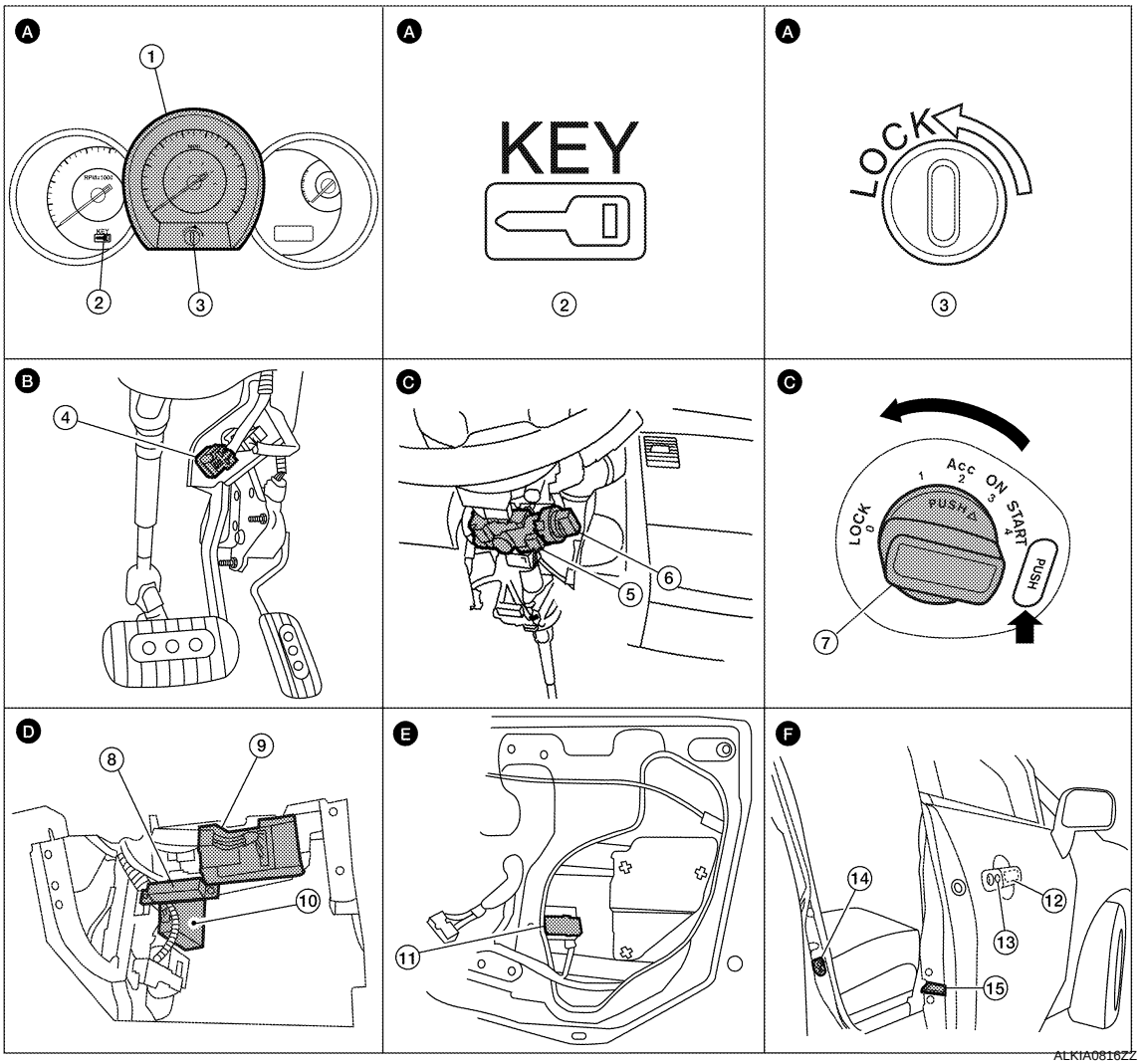
CAUTION:

The above function operates when the Intelligent Key is inside the vehicle. However, there may be times when the Intelligent Key can not 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 some times does not operate if the Intelligent Key is in the door pocket for the open door.

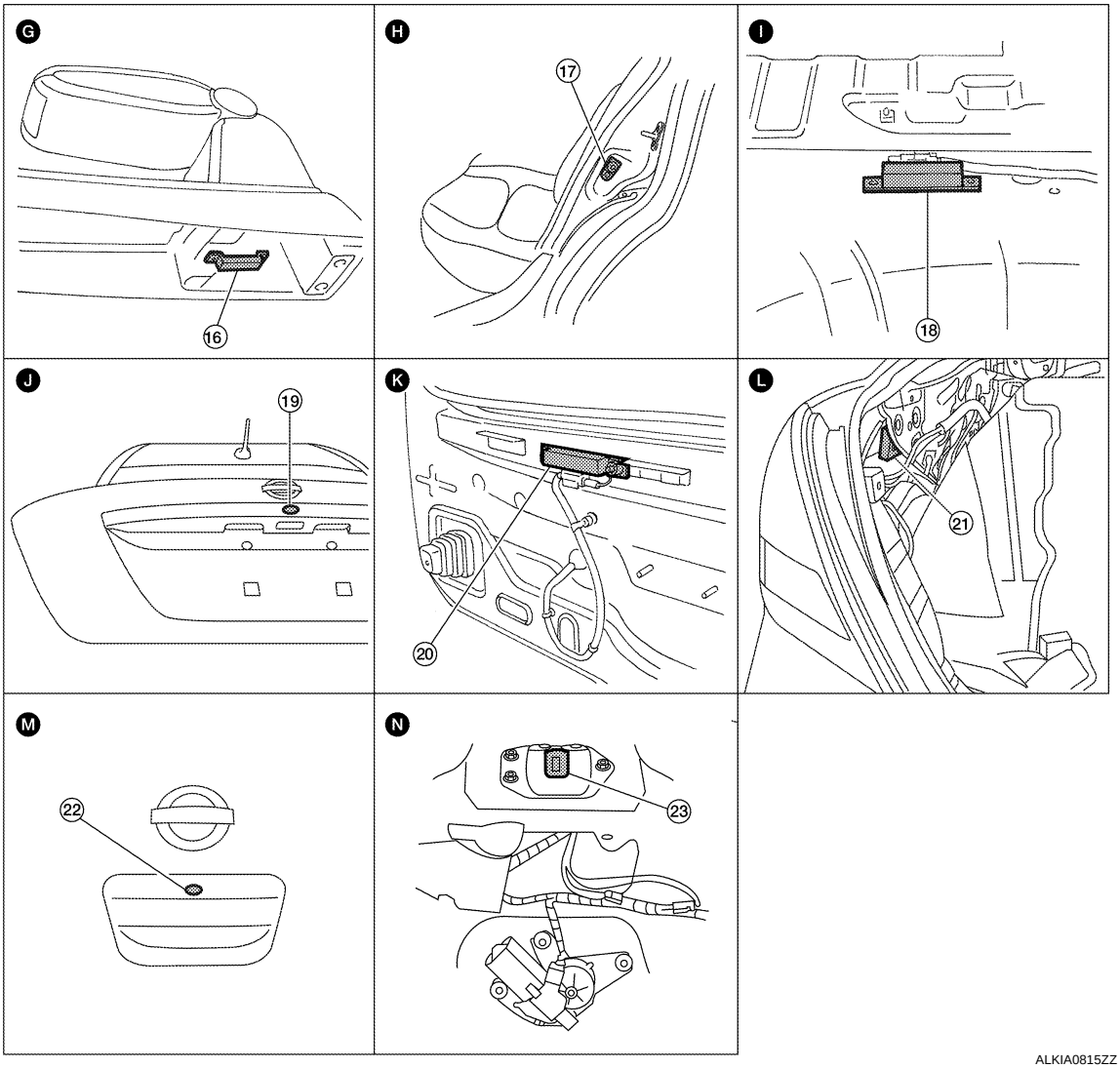
KEY REMINDER : Component Parts Location

INFOID:0000000001396684





ALKIA0816ZZ



ALKIA0815ZZ

1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch M203 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
10. Intelligent Key Unit M52
11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
12. Front outside antenna (driver side) D10 (Passenger side) D106
13. Front door request switch (driver side) D5 (Passenger side) D103
14. Door unlock sensor D14 [Front door lock actuator (driver side)]
15. Front door switch (driver side) B34 (Passenger side) B29
16. Front console antenna B45 (view with front console removed)
17. Rear door switch LH B71 RH B53
18. Rear floor antenna B46 (behind rear seat)
19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

KEY REMINDER : Component Description

INFOID:0000000001396685

Item	Function
Intelligent Key unit	Controls the door lock function with BCM.
BCM	Controls the door lock and unlock operation with Intelligent Key unit.
Door switch	Detects door state (open or close).
Inside key antenna	Detects Intelligent Key is in detection area of inside key antenna.
Intelligent Key	Transmits key ID to Intelligent Key unit when Intelligent Key searching.
Door lock actuator	Receives lock and unlock signal from BCM and locks/unlocks each door.

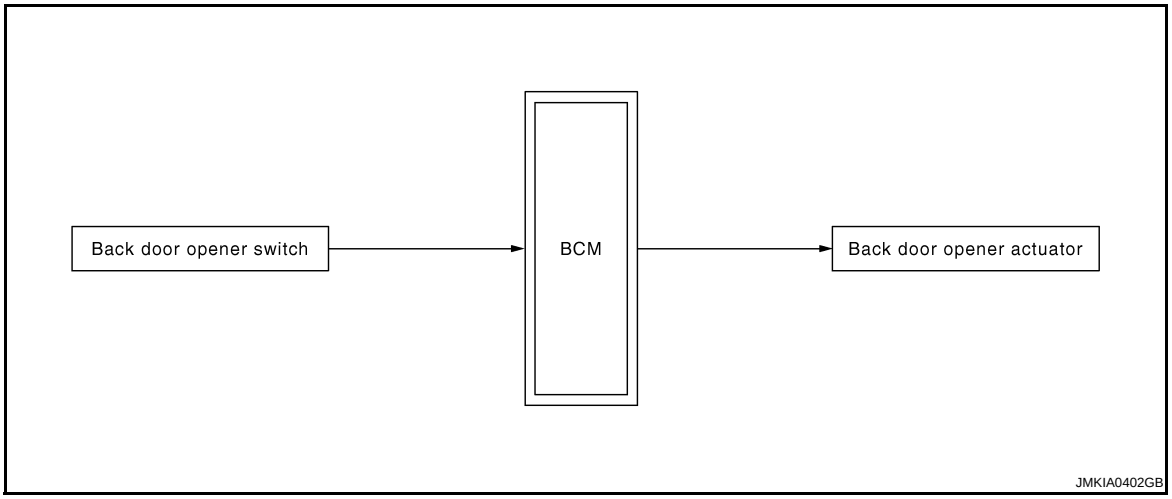
BACK DOOR OPENER FUNCTION

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001396698

BACK DOOR OPENER OPERATION



BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001396699

BACK DOOR OPENER OPERATION

When back door opener switch is pressed, BCM opens back door opener actuator.

NOTE:

Back door opener actuator is not for locking the back door. The function is only to open the back door.

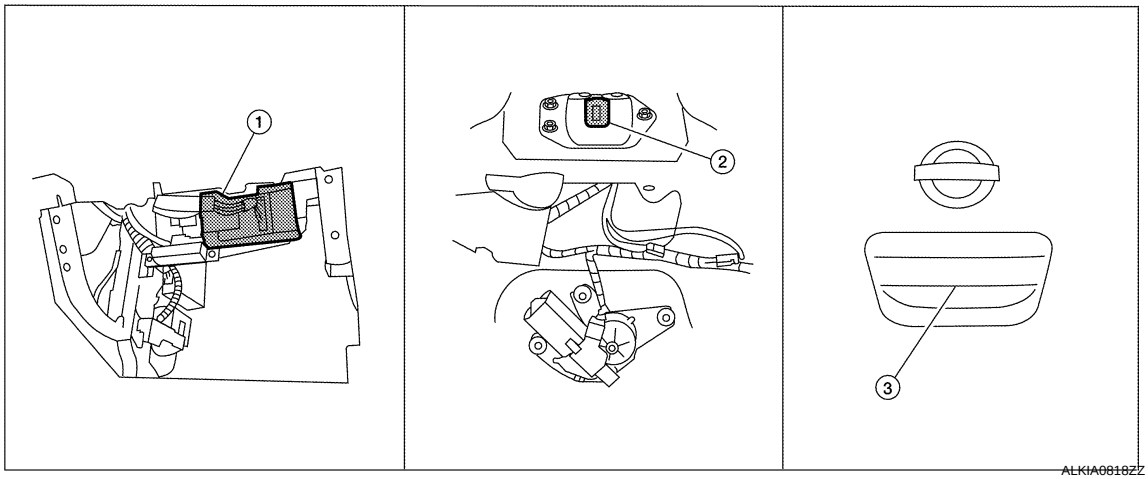
OPERATION CONDITION

If the following conditions are not satisfied, back door opener operation is not performed.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

BACK DOOR OPENER SWITCH : Component Parts Location

INFOID:0000000001530244



1. BCM M18, M20 (view with glove box removed)
2. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
3. Back door opener switch D408

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001396701

Item	Function
BCM	Controls the back door opener function.
Back door opener switch	Transmits back door opener switch operation signal to BCM.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

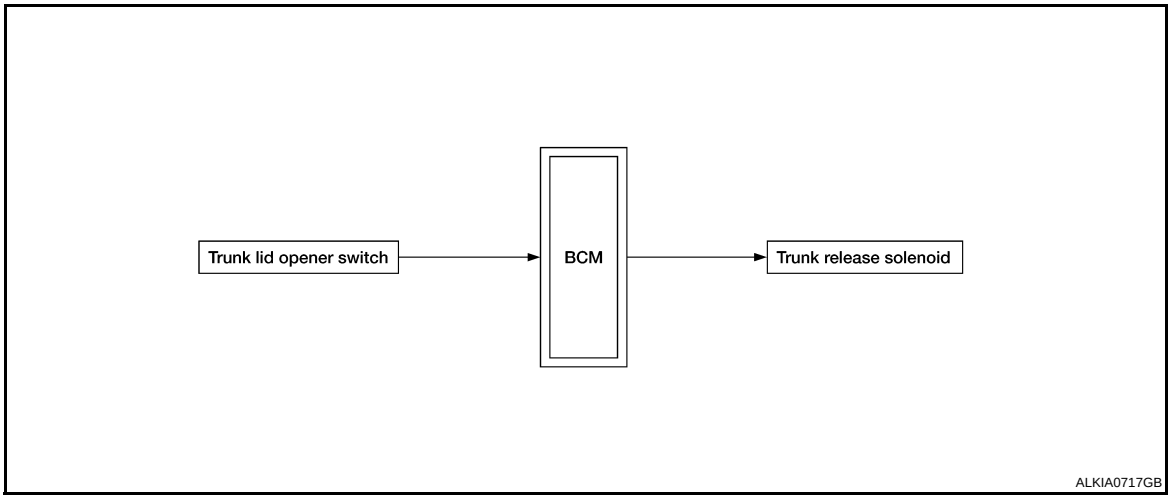
TRUNK LID OPENER

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : System Diagram

INFOID:0000000001500106

TRUNK LID OPENER OPERATION



TRUNK LID OPENER SWITCH : System Description

INFOID:0000000001500107

TRUNK LID OPENER OPERATION

When trunk lid opener switch is pressed, BCM opens trunk release solenoid.

NOTE:

Trunk release solenoid is not for locking the trunk. The function is only to open the trunk.

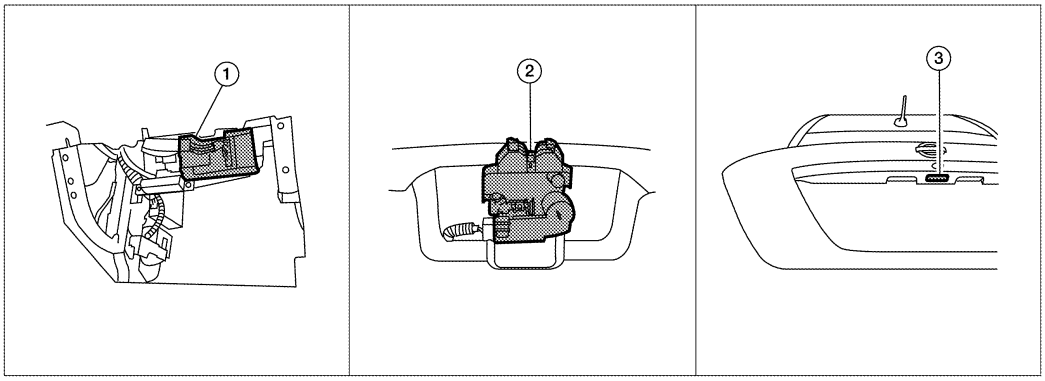
OPERATION CONDITION

If the following conditions are not satisfied, trunk release operation is not performed.

Trunk lid opener switch operation	Operation condition
Trunk release solenoid	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

TRUNK LID OPENER SWITCH : Component Parts Location

INFOID:0000000001530245



1. BCM M18, M20 (view with glove box removed)
2. Trunk lamp switch and trunk release solenoid B66
3. Trunk lid opener switch B61

TRUNK LID OPENER SWITCH : Component Description

INFOID:0000000001500109

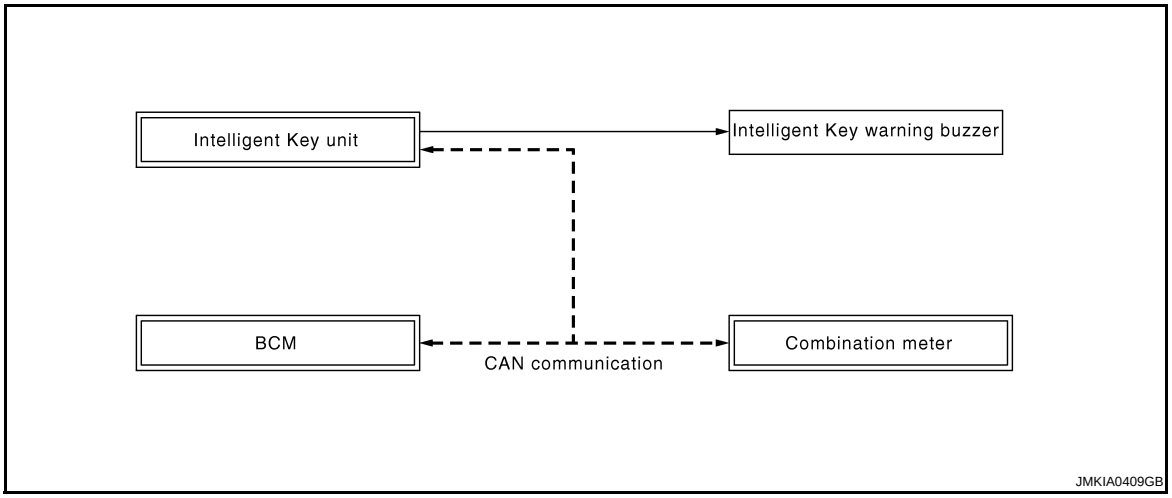
Item	Function
BCM	Controls the trunk lid opener switch function.
Trunk lid opener switch	Transmits trunk lid opener switch operation signal to BCM.
Trunk release solenoid	Opens the trunk with the trunk release solenoid signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

WARNING FUNCTION

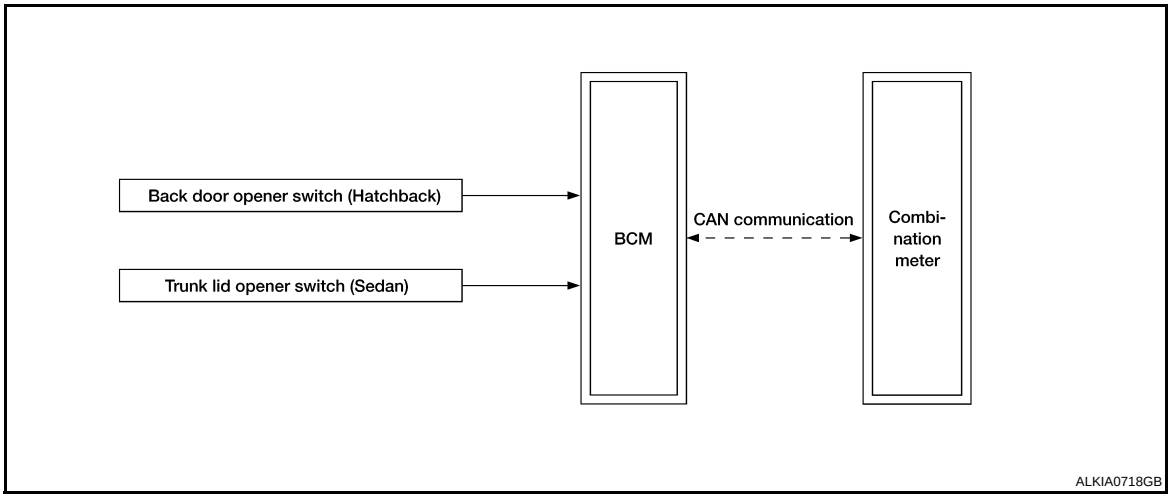
System Diagram

INFOID:0000000001396702

INTELLIGENT KEY WARNING OPERATION



BACK DOOR OPEN WARNING OPERATION



System Description

INFOID:0000000001396703

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(s), key warning lamps and buzzer (built in combination meter).

INTELLIGENT KEY WARNING OPERATION

Once one of the following conditions below is established, alert or warning will be executed.

Warning/Information functions		Operation conditions	Warning lamp	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer(s)
Ignition knob return forgotten warning		When all the conditions below are met. • Ignition knob: OFF or LOCK (knob is pressed). • Door switch (driver side): ON (Door is open).	—	Active for 5 seconds (pipipipi, pipipipi···)	—
Ignition key warning (when mechanical key is used)		When all the conditions below are met. • Ignition switch: OFF position. • Key switch: ON (inserted) • Door switch (driver side): ON (Door is open).	—	Active for 5 seconds (pipipipi, pipipipi···)	—
OFF position warning		When all the conditions below are met. • Ignition switch is between ACC and OFF position or ignition knob is pressed in while ignition switch is in LOCK position. • 3 seconds in the above state have passed.	"LOCK" (RED blinking)	Active for 1 second (pipi, pipi···)	—
Take away warning	Any door open to all doors closed	When all the conditions below are met. • Ignition switch: Except LOCK position. • Door switch: ON to OFF (Door is open to closed). • Intelligent Key cannot be detected inside the vehicle.	"KEY" (RED blinking)	—	Active (pi, pi, pi)
	Door is open	When all the conditions below are met. • Door switch: ON (Door is open) • Key ID verification every 5 seconds when registered Intelligent Key can not be detected inside the vehicle.	"KEY" (RED blinking)	—	—
	Take away through window	When all the conditions below are met. • Key ID verification: OK • Every 30 seconds when registered Intelligent Key cannot be detected inside the vehicle or result of vehicle speed verification is NG. (The registered Intelligent Key cannot be detected inside the vehicle when ignition switch is ON.) • Key switch: OFF (Key is removed from ignition key cylinder.)	"KEY" (RED blinking)	Active for 3 seconds (pipipi···	—

Warning/Information functions		Operation conditions	Warning lamp	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer(s)
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). • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserted into ignition key cylinder. • Intelligent Key is inside vehicle.	—	—	Active for 2 seconds (pipipi···)
	Intelligent Key button operation	When Intelligent Key button is pushed (lock operation) under the following conditions. • Door switch: ON (Any door is open). • Ignition switch is in ACC or OFF position or ignition knob is pressed in LOCK position or mechanical key is inserted into ignition key cylinder.	—	—	Active for 2 seconds (pipipi···)
Intelligent Key low battery warning		When Intelligent Key battery voltage is low, Intelligent Key unit is detected after ignition switch is turned ON.	"KEY" (GREEN blinking for 30 seconds)	—	—

KEY WARNING LAMP & LOCK WARNING LAMP

The key indicator and lock indicator indicates Intelligent Key system status.

Operation Condition

Behavior of lamps			Operation condition
KEY	GREEN	Lighting	All the following conditions are satisfied. • Ignition knob is pushed in LOCK position. (Ignition knob switch is ON) • Ignition key is removed from ignition key cylinder. (Key switch is OFF) • Intelligent Key is detected inside of the vehicle. • KEY RED lighting/blinking conditions are not satisfied.
		Blinking	while Intelligent Key low battery warning is operating.
	RED	Lighting	All the following conditions are satisfied. • Ignition knob is pushed. (Ignition knob switch is ON) • Ignition key is removed from ignition key cylinder. (Key switch is OFF) • Intelligent Key is not detected inside of the vehicle.
		Blinking	All the following conditions are satisfied. • Take away warning is operating. • KEY RED lighting condition is not satisfied.
LOCK		Blinking	While OFF position warning is operating.
KEY(RED) and LOCK lighting			All the following conditions are satisfied. • Ignition switch is ON. • Steering lock ID is NG.

BACK DOOR OPEN WARNING OPERATION

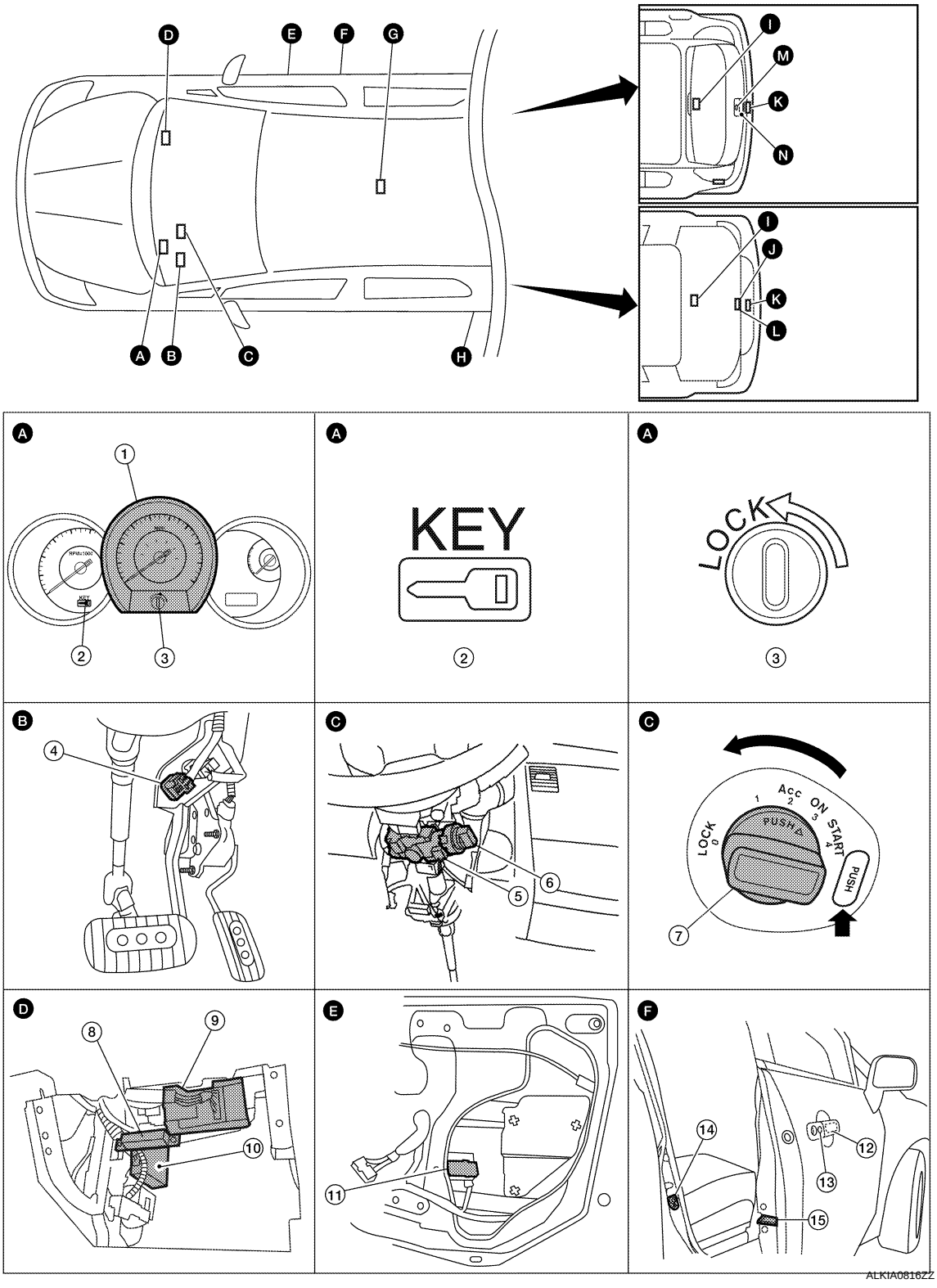
When back door opener switch is operated, when door lock is locked with door lock and unlock switch, speed sensing lock or only driver side is unlocked with anti-hijack function, the buzzer (built in combination meter) will sound.

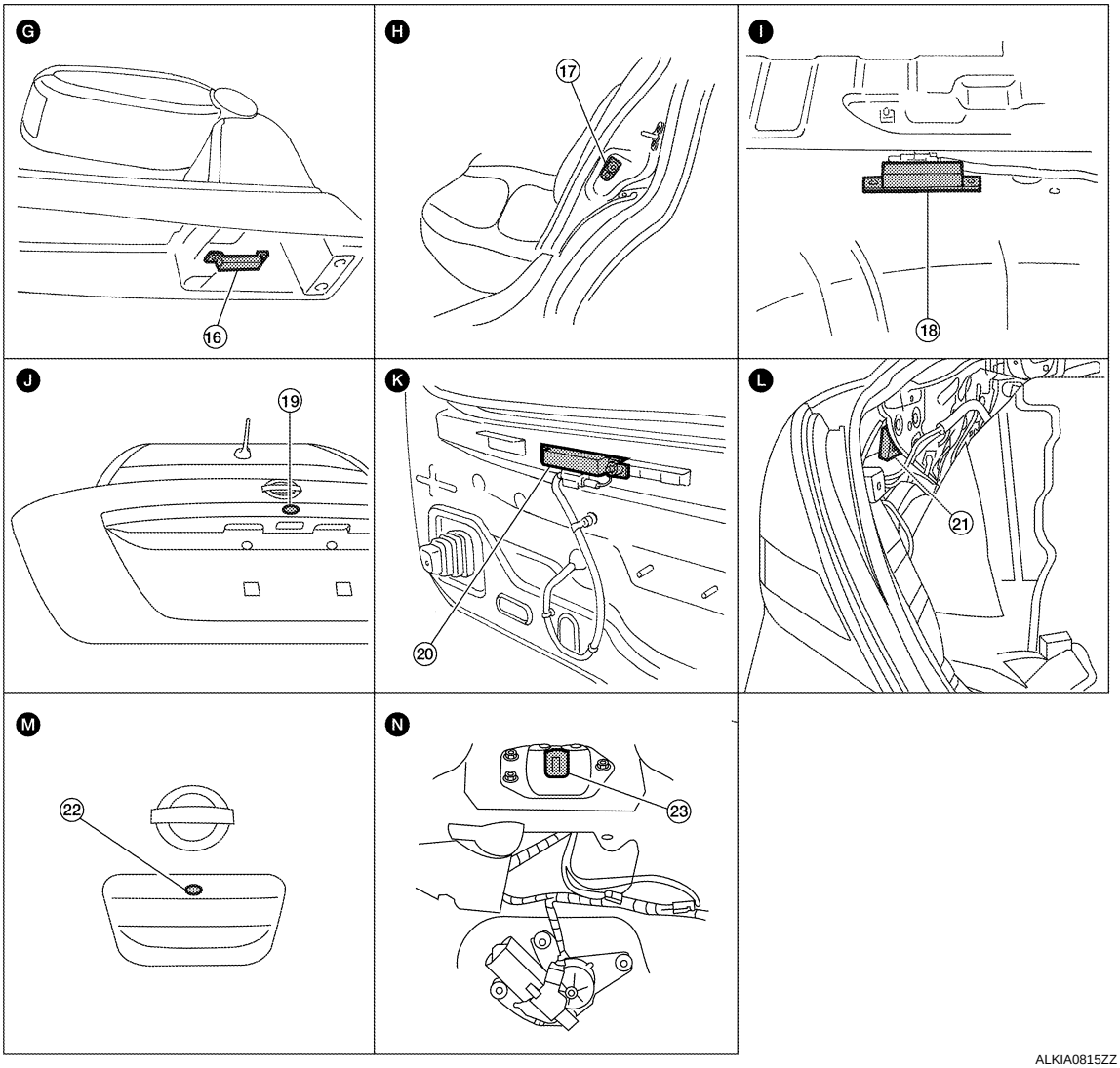
KEY REMINDER OPERATION

- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while the driver door is open and mechanical key is inserted ignition key cylinder.
- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while any door other than the driver door is open.

Component Parts Location

INFOID:0000000001396704





ALKIA0815ZZ

1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch M203 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
10. Intelligent Key Unit M52
11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
12. Front outside antenna (driver side) D10 (Passenger side) D106
13. Front door request switch (driver side) D5 (Passenger side) D103
14. Door unlock sensor D14 [Front door lock actuator (driver side)]
15. Front door switch (driver side) B34 (Passenger side) B29
16. Front console antenna B45 (view with front console removed)
17. Rear door switch LH B71 RH B53
18. Rear floor antenna B46 (behind rear seat)
19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

Component Description

INFOID:0000000001530246

Item	Function
BCM	Controls the warning function with Intelligent Key unit.
Intelligent Key unit	Controls the warning function with BCM.
Key switch	Detects that mechanical key is inserted into ignition key cylinder.
Door switch	Detects door state (open or closed).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM.
Intelligent Key unit	Requests to turn ON hazard warning lamp to BCM and turn signal indicator to combination meter.
Combination meter	Turns ON the LOCK indicator, KEY indicator, turn signal indicator and buzzer (built in combination meter) by the request from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer (driver side)	Sounds by the request from Intelligent Key unit.
Intelligent Key warning buzzer (trunk)*	Sounds by the request from Intelligent Key unit.
Back door opener switch**	Transmits back door open signal to BCM
Trunk lid opener switch*	Transmits trunk open signal to BCM

* : Sedan only

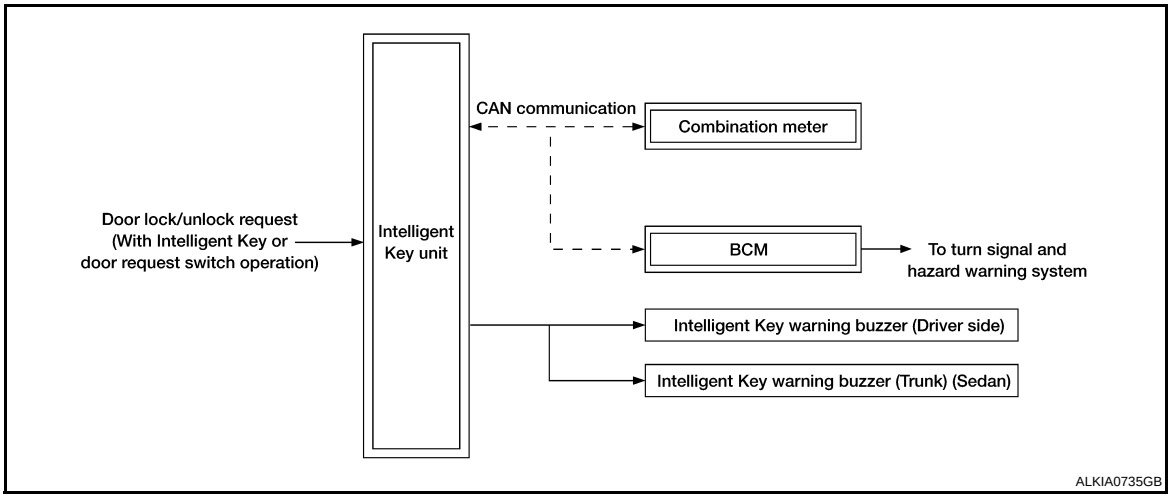
**: Hatchback only

HAZARD AND BUZZER REMINDER FUNCTION

System Diagram

INFOID:0000000001396706

HAZARD & BUZZER REMINDER FUNCTION



System Description

INFOID:0000000001396707

HAZARD AND BUZZER REMINDER FUNCTION

When door is locked or unlocked by Intelligent Key or door request switch, Intelligent Key unit sounds buzzer(s) and sends hazard request signal to BCM via CAN communication. Then BCM flashes hazard warning lamps as a reminder.

NOTE:

Hazard and buzzer reminder function mode can be changed with CONSULT-III. Refer to DLK-278, "CONSULT-III Function (INTELLIGENT KEY)".

Hazard Operation

Hazard reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Hazard warning lamp flash
HAZARD ANSWER BACK	OFF	Any	—
	LOCK ONLY	Lock	Once
		Unlock	—
		Unlock (Anti-hijack)	—
	UNLK ONLY	Lock	—
		Unlock	Twice
		Unlock (Anti-hijack)	Twice (quick)
	LOCK/UNLK	Lock	Once
		Unlock	Twice
		Unlock (Anti-hijack)	Twice (quick)

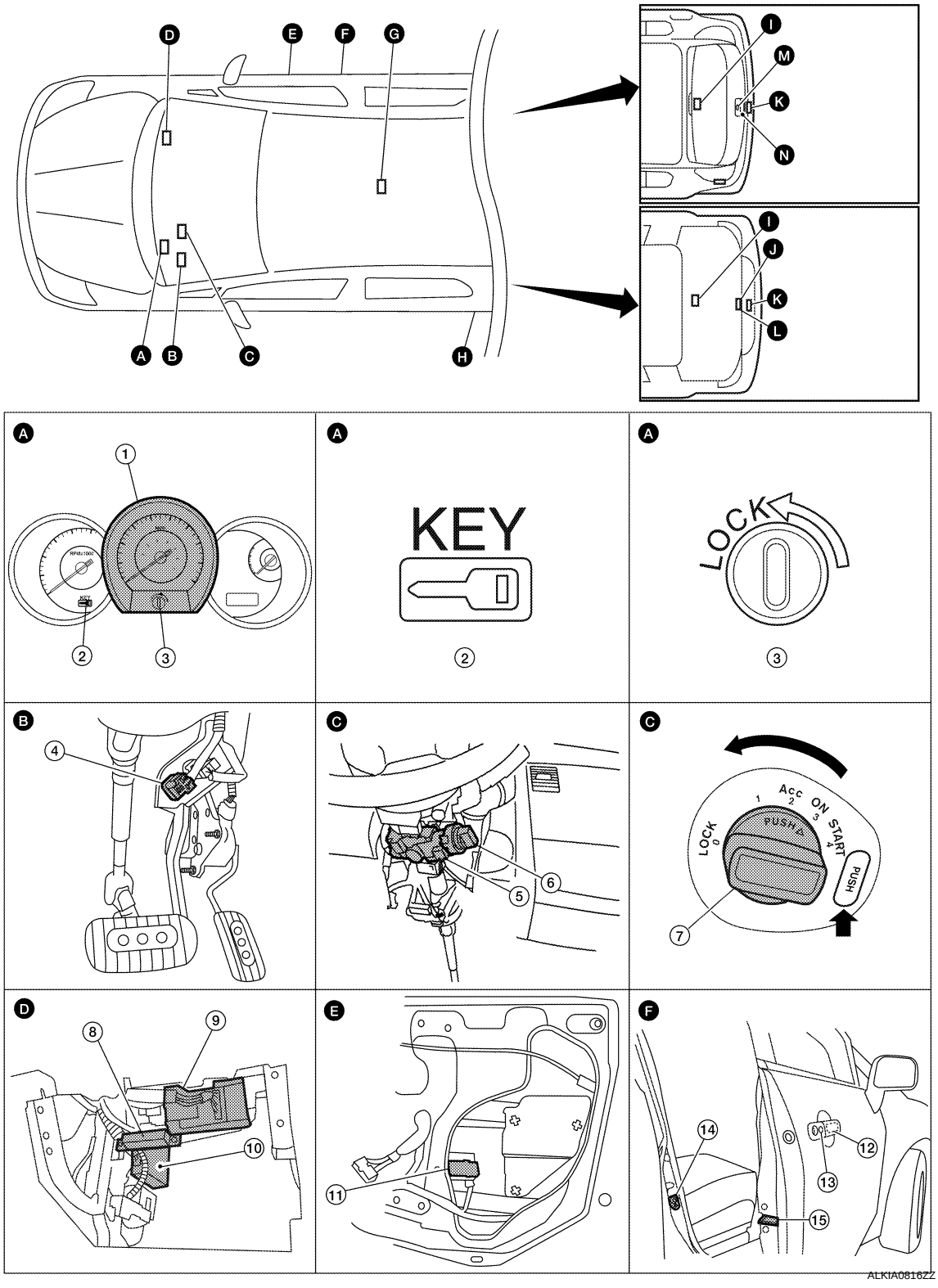
Buzzer Operation

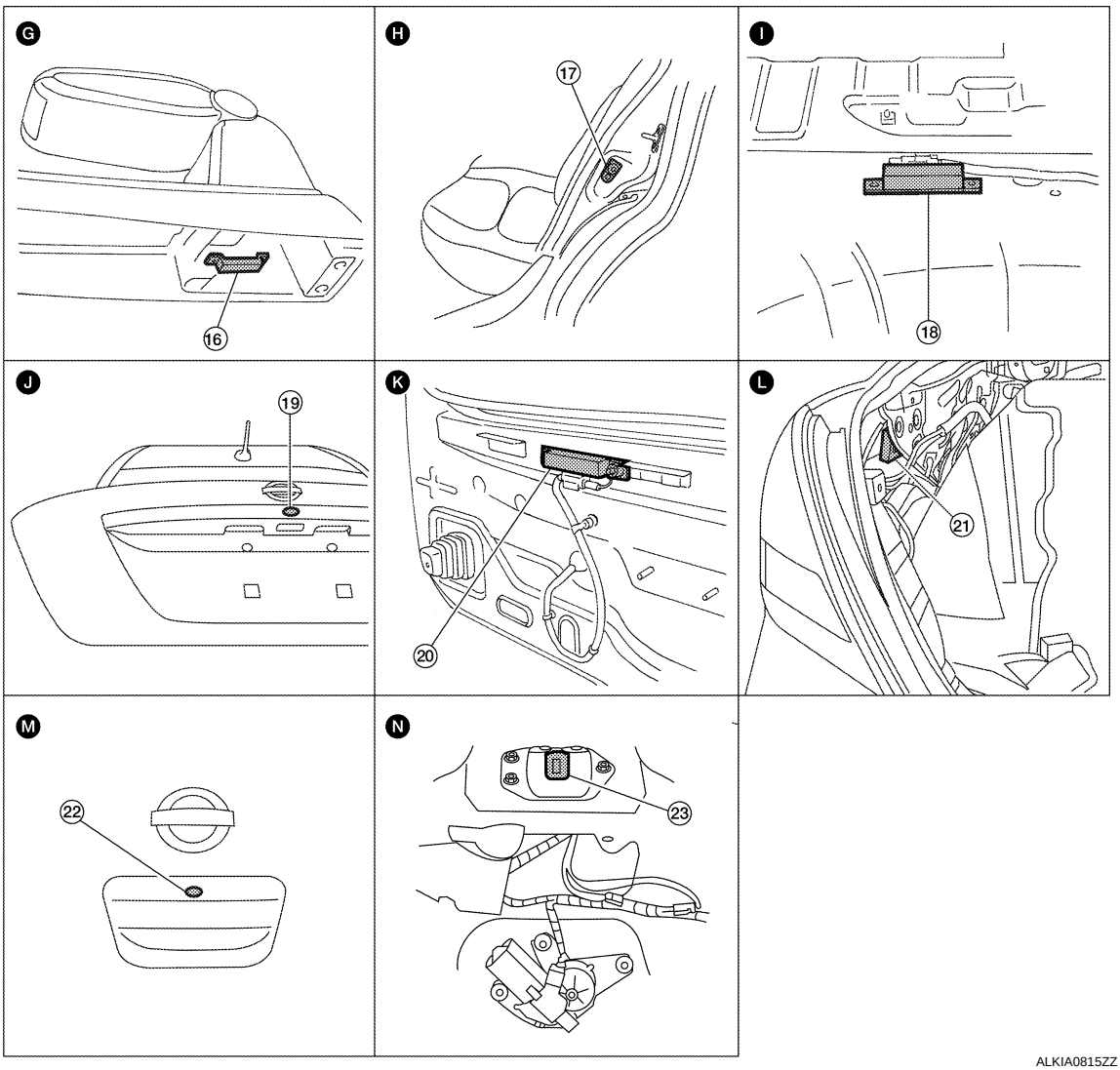
Buzzer reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Buzzer warning sounds
ANSWER BACK WITH I-KEY LOCK	BUZZER	Lock	Once
		Unlock	Depends on other setting
		Unlock (Anti-hijack)	Depends on other setting
	OFF	Any	—

Buzzer reminder setting (With CONSULT-III)		Door lock operation (with Intelligent Key or door request switch)	Buzzer warning sounds
ANSWER BACK WITH I-KEY UNLOCK	BUZZER	Lock	Depends on other setting
		Unlock	Twice
		Unlock (Anti-hijack)	Twice
	OFF	Any	—
ANSWER BACK FUNCTION	ON	Lock	Once
		Unlock	Twice
		Unlock (Anti-hijack)	Twice
	OFF	Any	—

Component Parts Location

INFOID:0000000001396708





ALKIA0815ZZ

1. Combination meter M24
2. Key warning lamp (combination meter)
3. Lock warning lamp (combination meter)
4. Stop lamp switch M203 (view with instrument panel LH removed)
5. Steering lock solenoid M6 (bottom view of steering column)
6. Key switch and ignition knob switch (A/T) M32
7. Key switch and ignition knob switch (M/T) M32
8. Instrument panel antenna M10 (view with glove box removed)
9. BCM M18, M19, M20
10. Intelligent Key Unit M52
11. Intelligent key warning buzzer (driver side) D6 (view with front door finisher removed)
12. Front outside antenna (driver side) D10 (Passenger side) D106
13. Front door request switch (driver side) D5 (Passenger side) D103
14. Door unlock sensor D14 [Front door lock actuator (driver side)]
15. Front door switch (driver side) B34 (Passenger side) B29
16. Front console antenna B45 (view with front console removed)
17. Rear door switch LH B71 RH B53
18. Rear floor antenna B46 (behind rear seat)
19. Trunk request switch B67 (sedan)
20. Rear bumper antenna B81 (view with rear fascia removed)
21. Intelligent Key warning buzzer (trunk) B82 (sedan) (view with trunk finisher LH removed)
22. Back door request switch D406 (hatchback)
23. Back door lock assembly (back door switch) D405 (hatchback view with back door open)

Component Description

INFOID:0000000001396709

Item	Function
BCM	Controls the hazard and buzzer reminder function with Intelligent Key unit.
Intelligent Key unit	Controls the hazard and buzzer reminder function with BCM.
Combination meter	Turns ON the LOCK indicator, KEY indicator, turn signal indicator and buzzer (built in combination meter) by the request from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer (driver side)	Sounds by the request signal from Intelligent Key unit via CAN communication.
Intelligent Key warning buzzer (trunk)*	Sounds by the request signal from Intelligent Key unit via CAN communication.

*: Sedan only

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

INFOID:0000000001396710

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to XX-XX, "*****".
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	• Enables to read and save the vehicle specification. • Enables to write the vehicle specification when replacing BCM.

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
—	BCM	×		
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
PTC heater system	PTC HEATER		×	×

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

INFOID:0000000001396711

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
PUSH SW	Indicates [ON/OFF] condition of ignition knob switch.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
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.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
BACK DOOR OPNR SW	Indicates [ON/OFF] condition of back door opener switch.
I-KEY LOCK	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.
UNLOCK WITH DR	This item is indicated, but not monitored.
UNLOCK SHOCK	Indicates [ON/OFF] condition of signal from air bag diagnosis unit. • ON: During the unlock operation interlock with air bag. • OFF: Other than above.
SHOCK SENSOR	Indicates [NOMAL/ON/OFF] condition of circuit between BCM and air bag diagnosis sensor unit. • NORMAL: Ignition switch ON. (BCM is receiving normal condition signal from air bag diagnosis sensor unit.) • ON: During the receiving of air bag deployment signal from air bag diagnosis sensor unit. • OFF: After the receiving of air bag deployment signal from air bag diagnosis sensor unit.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
SUPER LOCK	This test is able to check super lock operation [LOCK (SET)/UNLOCK (RELEASE)].
DOOR LOCK IND	This test is able to check door lock indicator (built in door lock and unlock switch on center console) operation [ON/OFF].
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].

WORK SUPPORT

Test item	Description
SECURITY DOOR LOCK SET	Anti hijack function mode can be changed in this mode. • ON: Anti hijack mode is active. • OFF: Anti hijack mode is inactive.

INTELLIGENT KEY

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

INFOID:0000000001396712

BCM CONSULT-III FUNCTION

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW	Indicates [ON/OFF] condition of ignition knob switch.
I-KEY LOCK	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000001396713

APPLICATION ITEM

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW	Indicates [ON/OFF] condition of ignition knob switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of back door opener switch.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
TRUNK/GLASS HATCH	This test is able to check back door/trunk opener operation [ON/OFF].

DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

CONSULT-III Function (INTELLIGENT KEY)

INFOID:0000000001396714

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with Intelligent Key unit.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by Intelligent Key unit.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from Intelligent Key unit.
DATA MONITOR	The Intelligent Key unit input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.
ECU IDENTIFICATION	The Intelligent Key unit part number is displayed.

WORK SUPPORT

Support item	Description	Selection item	Condition
CONFIRM KEY FOB ID	It can check whether Intelligent Key ID code is registered or not.	—	—
TAKE OUT FROM WINDOW WARN	Take away warning chime (from window) mode can be changed.	ON	Active
		OFF	Inactive
LOW BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed.	ON	Active
		OFF	Inactive
KEYLESS FUNCTION	Door lock function with Intelligent Key can be changed.	ON	Active
		OFF	Inactive
ANSWER BACK FUNCTION	Buzzer reminder operation can be changed.	ON	Active
		OFF	Inactive
SELECTIVE UNLOCK FUNCTION	Anti-hijack mode can be changed.	ON	Active
		OFF	Inactive
HAZARD ANSWER BACK	Hazard reminder operation mode can be changed.	Refer to DLK-270.	
ANSWER BACK WITH I-KEY LOCK	Buzzer reminder operation (lock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
ANSWER BACK WITH I-KEY UNLOCK	Buzzer reminder operation (unlock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
AUTO RELOCK TIMER	Auto door lock operation mode can be changed.	OFF	Inactive
		2 min	Active
ENGINE START BY I-KEY	Engine start function (by Intelligent Key) mode can be changed.	ON	Active
		OFF	Inactive
LOCK/UNLOCK BY I-KEY	Door lock function by door request switch can be changed.	ON	Active
		OFF	Inactive

SELF-DIAG RESULT

Refer to XX-XX, "*****".

DATA MONITOR

Monitor Item	Condition
PUSH SW	Indicates [ON (pressed)/OFF (released)] condition of ignition knob switch.
KEY SW	Indicates [ON (inserted)/OFF (removed)] condition of key switch.
DR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (driver side).
AS REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (passenger side).
BD/TR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of back door/trunk request switch.
IGN SW	Indicates [ON (ON or START position)/OFF (other than ON and START position)] condition of ignition switch ON position.
ACC SW	Indicates [ON/OFF] condition of ignition switch ACC position.
STOP LAMP SW	Indicates [ON/OFF] condition of stop lamp switch.
DOOR LOCK SIG	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
DOOR UNLOCK SIG	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
DOOR SW DR	Indicates [OPEN/CLOSE] condition of front door switch (driver side) from BCM via CAN communication.
DOOR SW AS	Indicates [OPEN/CLOSE] condition of front door switch (passenger side) from BCM via CAN communication.
DOOR SW RR	Indicates [OPEN/CLOSE] condition of rear door switch (RH) from BCM via CAN communication.
DOOR SW RL	Indicates [OPEN/CLOSE] condition of rear door switch (LH) from BCM via CAN communication.
DOOR BK SW	Indicates [OPEN/CLOSE] condition of back door switch from BCM via CAN communication.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
DOOR LOCK/UNLOCK	This test is able to check door lock/unlock operation. • ALL UNLK: All door lock actuators are unlocked. • DR UNLK: Door lock actuator (driver side) is unlocked. • AS UNLK: Door lock actuator (passenger side) is unlocked. • BK UNLK: This item is indicated, but inactive. • LOCK: All door lock actuator is locked.
ANTENNA	This test is able to check Intelligent Key antenna operation. When the following condition are met, hazard warning lamps flash. • ROOM ANT1: Inside key antenna (console) detects Intelligent Key, when “ROOM ANT1” is selected. • ROOM ANT2: Inside key antenna (instrument center/rear seat) detects Intelligent Key, when “ROOM ANT2”is selected. • DRIVER ANT: Outside key antenna (driver side) detects Intelligent Key, when “DRIVER ANT” is selected. • ASSIST ANT: Outside key antenna (passenger side) detects Intelligent Key, when “ASSIST ANT” is selected. • BK DOOR ANT: Outside key antenna (rear bumper) detects Intelligent Key, when “BK DOOR ANT” is selected.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer(s) operation. • ON • OFF
INSIDE BUZZER	This test is able to check warning chime in combination meter operation. • TAKE OUT: Take away warning chime sounds. • KNOB: Ignition knob switch warning chime sounds. • KEY: Key warning chime sounds. • OFF

Test item	Description
INDICATOR	This test is able to check warning lamp operation. • BLUE ON: Key warning lamp (green) illuminates. • RED ON: Key warning lamp (red) illuminates. • KNOB ON: Lock warning lamp illuminates. • BLUE IND: Key warning lamp (green) flashes. • RED IND: Key warning lamp (red) flashes. • KNOB IND: Lock warning lamp flashes. • OFF
KEY LOCK SOLENOID*1	This test is able to check key interlock operation. • LOCK: Key interlock is active. • UNLOCK: Key interlock is inactive.

*1: The item is only for M/T model.

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001396715

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 XX-XX, "*****".

DTC Logic

INFOID:0000000001396716

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When Intelligent Key unit 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 (BCM) • Receiving (ECM) • Receiving (METER/M&A)

Diagnosis Procedure

INFOID:0000000001396717

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 XX-XX, "*****".
NO >> Refer to XX-XX, "*****".

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000001396718

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 XX-XX, "*****".

DTC Logic

INFOID:0000000001396719

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of Intelligent Key unit.	Intelligent Key unit

Diagnosis Procedure

INFOID:0000000001396720

1.REPLACE INTELLIGENT KEY UNIT

When DTC [U1010] is detected, replace Intelligent Key unit.

>> Replace Intelligent Key unit. Refer to SEC-79, "Removal and Installation".

Special Repair Requirement

INFOID:0000000001396721

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual.

>> Work end.

B2552 INTELLIGENT KEY

Description

INFOID:0000000001396722

Intelligent key unit performs engine start operation and steering lock control by crosschecking ID with the Intelligent key.

DTC Logic

INFOID:0000000001396723

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2552	INTELLIGENT KEY UNIT	Malfunction is detected inside Intelligent key unit.	Intelligent Key unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT-III.

Is DTC detected?

YES >> Refer to DLK-283, "Diagnosis Procedure".
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:0000000001396724

1.REPLACE INTELLIGENT KEY UNIT

1. Replace Intelligent Key unit. Refer to SEC-79, "Removal and Installation".
2. Perform initialization with CONSULT-III. Re-register all mechanical keys. Refer to “CONSULT-III operation manual NATS-IVIS/NVIS”.
3. Start the engine.

Does the engine start?

YES >> INSPECTION END
NO >> Perform “DTC confirmation procedure”. Refer to DLK-283, "DTC Logic".

Special Repair Requirement

INFOID:0000000001396725

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual.

>> Work end.

POWER SUPPLY AND GROUND CIRCUIT
INTELLIGENT KEY UNIT

INTELLIGENT KEY UNIT : Diagnosis Procedure

INFOID:0000000001530262

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse is not blown.

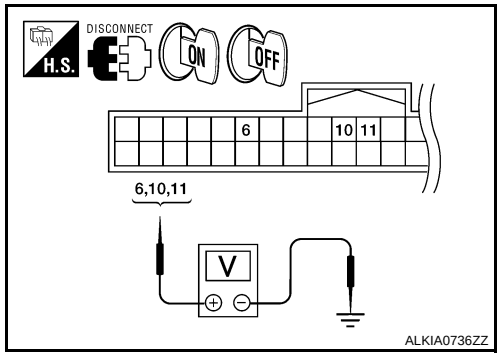
Terminal No.	Signal name	Fuse No.
11	Battery power supply	31 (10A)
10	Ignition power supply (ACC/ON)	6 (10A)
6	Ignition power supply (ON/START)	2 (10A)

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit connector.
3. Check voltage between Intelligent Key unit harness connector M52 terminals 6, 10, 11 and ground.



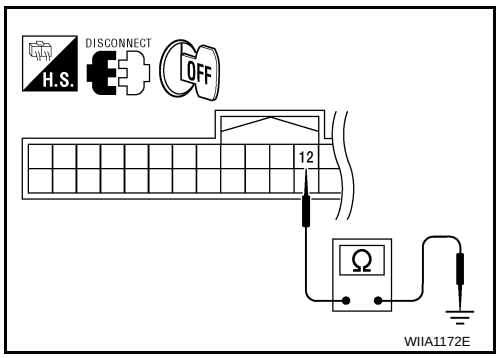
Terminal			Ignition switch position	
(+)		(–)	OFF	ON
Intelligent Key unit		Ground		
Connector	Terminal			
M52	11		Battery voltage	Battery voltage
	10		0V	Battery voltage
	6		0V	Battery voltage

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between Intelligent Key unit harness connector and ground.



Intelligent Key unit		Ground	Continuity
Connector	Terminal		
M52	12		Yes

Is the inspection result normal?

YES >> Intelligent Key unit power supply and ground circuit are OK.
NO >> Repair harness or connector.

BCM

BCM : Diagnosis Procedure

INFOID:0000000001530263

Refer to BCS-30, "Diagnosis Procedure".

DOOR LOCK AND UNLOCK SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001530271

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001530272

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “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?

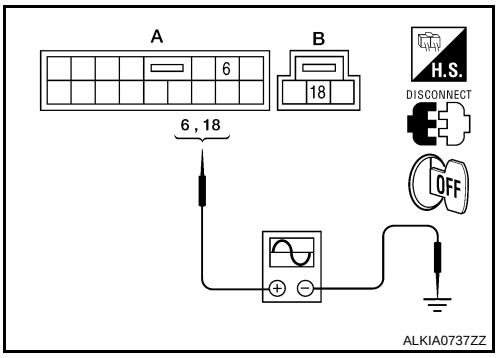
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-286, "DRIVER SIDE : Diagnosis Procedure".

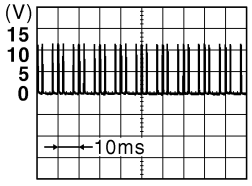
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530273

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect door lock and unlock switch connector.
3. Using an oscilloscope, check voltage between door lock and unlock switch harness connector (A) D7 terminal 6, connector (B) D8 terminal 18 and ground.



Terminal			Signal (Reference value)
(+)		(–)	
Door lock and unlock switch connector	Terminal		
D7	6	Ground	
D8	18		

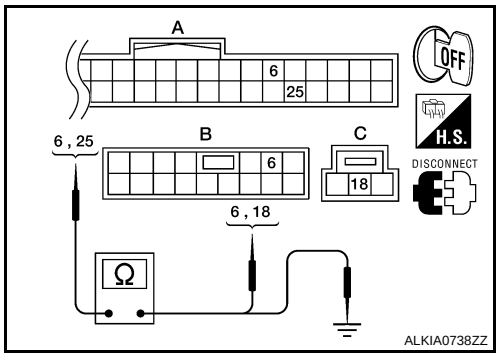
Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector (A) M18 terminals 6, 25 and door lock and unlock switch connector (B) D7 terminal 6, connector (C) D8 terminal 18.



BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M18	6	D8	18	Yes
	25	D7	6	

4. Check continuity between BCM connector (A) M18 terminals 6, 25 and ground.

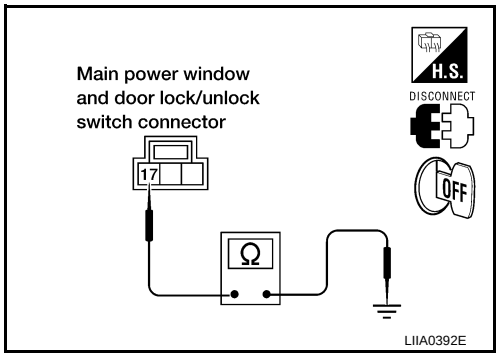
BCM connector	Terminal	Ground	Continuity
M18	6		No
	25		

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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



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

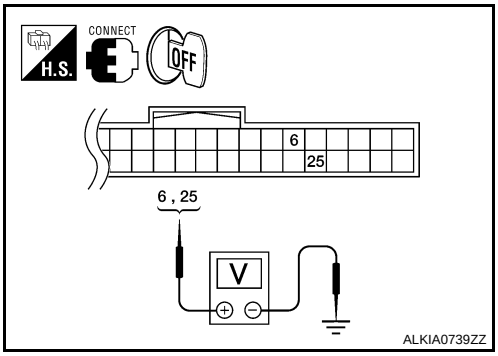
Is the inspection result normal?

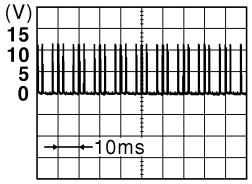
YES >> GO TO 5.
NO >> Repair or replace harness.

4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check signal between BCM connector and ground.



Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M18	6	Ground	
	25		

Is the inspection result normal?

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

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-288, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace door lock and unlock switch. Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

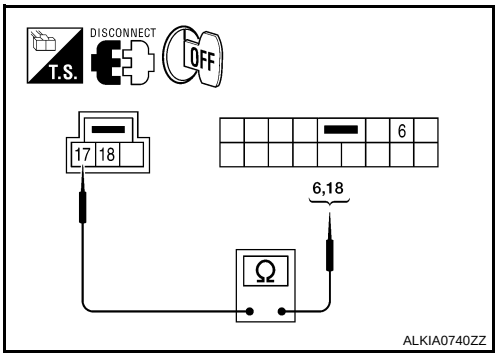
>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001530274

1.CHECK DOOR LOCK AND UNLOCK SWITCH

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



Door lock and unlock switch	Terminals		Condition	Continuity
D7, D8	6	17	UNLOCK	Yes
			NEUTRAL/LOCK	No
	18		LOCK	Yes
			NEUTRAL/UNLOCK	No

Is the inspection result normal?

YES >> Main power window and door lock/unlock switch is OK.
NO >> Replace main power window and door lock/unlock switch. Refer to XX-XX, "*****".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530495

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530496

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “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?

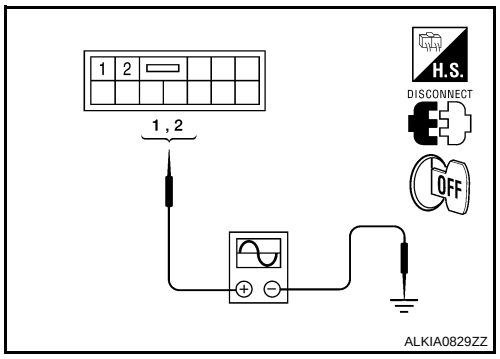
YES >> Power window and door lock/unlock switch (passenger side) is OK.
NO >> Refer to DLK-289, "PASSENGER SIDE : Diagnosis Procedure".

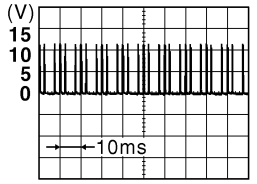
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530497

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch (passenger side) connector.
3. Using an oscilloscope, check voltage between passenger door lock and unlock switch harness connector (A) D105 terminals 1, 2 and ground.



Terminal			Signal (Reference value)
(+)		(–)	
Power window and door lock/ unlock switch (passenger side) connector	Terminal		
D105	1	Ground	
	2		

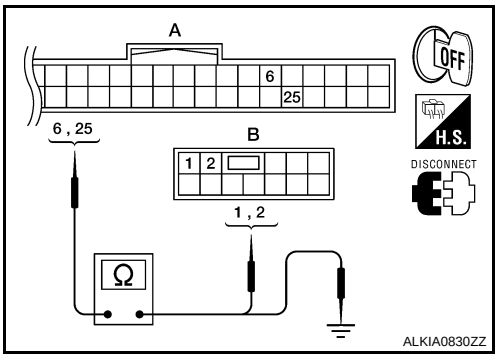
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Is the inspection result normal?

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

2.CHECK PASSENGER DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector (A) M18 terminals 6, 25 and passenger door lock/unlock switch connector (B) D105 terminals 1, 2.



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BCM connector	Terminal	Passenger door lock and unlock switch connector	Terminal	Continuity
M18	6	D105	1	Yes
	25		2	

4. Check continuity between BCM connector (A) M18 terminals 6, 25 and ground.

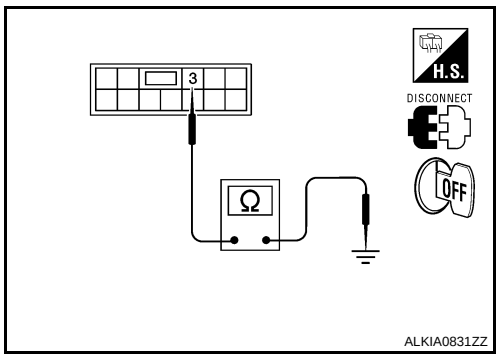
BCM connector	Terminal	Ground	Continuity
M18	6		No
	25		

Is the inspection result normal?

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

3.CHECK PASSENGER DOOR LOCK AND UNLOCK SWITCH GROUND

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



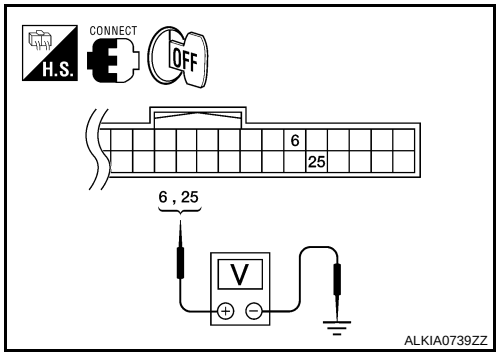
Power window and door lock/unlock switch (passenger side) connector	Terminal	Ground	Continuity
D105	3		Yes

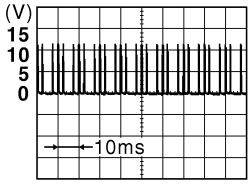
Is the inspection result normal?

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

4. CHECK BCM OUTPUT SIGNAL

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



Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M18	6	Ground	
	25		

Is the inspection result normal?

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

5. CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-292, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace power window and door lock/unlock switch (passenger side). Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

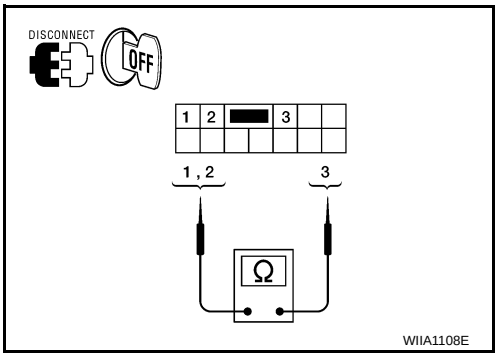
>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001530498

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check continuity between power window and door lock/unlock switch (passenger side) terminals.



Door lock and unlock switch	Terminals		Condition	Continuity
D105	1	3	LOCK	Yes
			NEUTRAL/UNLOCK	No
	2		UNLOCK	Yes
			NEUTRAL/LOCK	No

Is the inspection result normal?

YES >> Power window and door lock/unlock switch (passenger side) is OK.
NO >> Replace power window and door lock/unlock switch (passenger side). Refer to XX-XX, "*****".

INSTRUMENT PANEL WARNING LAMP ASSEMBLY

Description

INFOID:0000000001396732

The door lock and unlock switch indicates door lock status. The indicator will illuminate when a lock operation is accomplished, and during this status, if any door is opened, the indicator will turn OFF.

Component Function Check

INFOID:0000000001396733

1.CHECK FUNCTION

With CONSULT-III

Check “DOOR LOCK IND” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK IND	:ON	Illuminated
	:OFF	Not illuminated

Is the inspection result normal?

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

Diagnosis Procedure

INFOID:0000000001396734

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

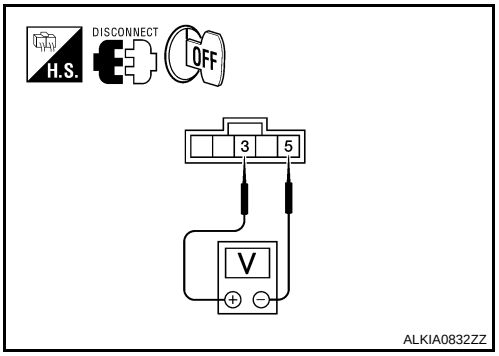
Lock and unlock the door lock system using the main power window and door lock/unlock switch.

Does the door lock system operate properly?

YES >> GO TO 2.
NO >> Repair the power door lock system. Refer to DLK-286, "DRIVER SIDE : Component Function Check".

2.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Open and keep the driver door open for the duration of this test.
3. Disconnect instrument panel warning lamp assembly.
4. Check voltage between instrument panel warning lamp assembly connector M37 terminals 3 and 5.



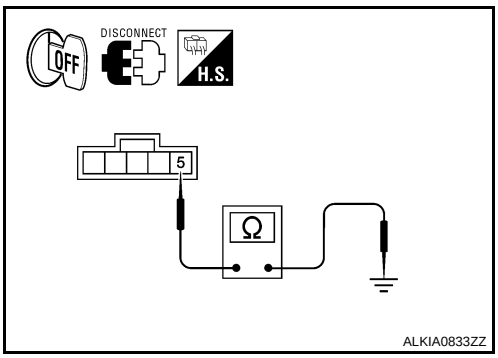
Instrument panel warning lamp assembly connector		Condition	Voltage (Approx.)
Terminals			
3 (+)	5(-)	Press the door lock switch to the LOCK position	Battery voltage
		Press the door lock switch to the UNLOCK position	0

Is the inspection result normal?

YES >> Replace instrument panel warning lamp.
NO >> GO TO 3.

3.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

Check continuity between instrument panel warning lamp assembly connector M37 terminal 5 and ground.



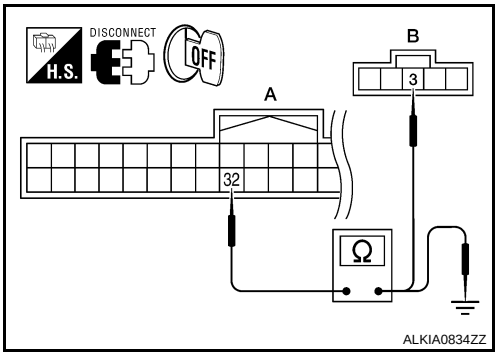
instrument panel warning lamp assembly connector	Terminal	Ground	Continuity
M37	5		Yes

Is the inspection result normal?

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

4.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Disconnect BCM.
2. Check continuity between BCM connector (A) M18 terminal 32 and instrument panel warning lamp assembly connector (B) M37 terminal 3.



BCM connector	Terminal	Instrument panel warning lamp assembly connector	Terminal	Continuity
M18	32	M37	3	Yes

3. Check continuity between BCM connector (A) M18 terminal 32 and ground.

BCM connector	Terminal	Ground	Continuity
M18	32		No

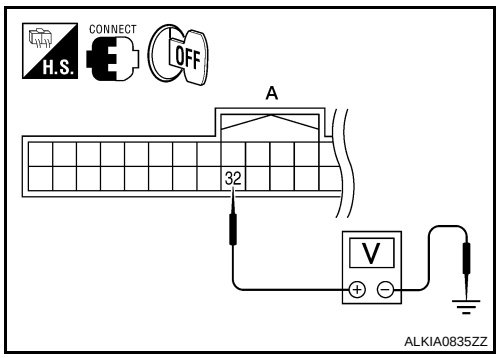
Is the inspection result normal?

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

5.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM connector and ground.



Terminal			Condition	Voltage (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	32	Ground	Press the door lock switch to the LOCK position	Battery voltage
			Press the door lock switch to the UNLOCK position	0

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace BCM. Refer to BCS-57, "Removal and Installation of BCM".

6. CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

DOOR SWITCH
DRIVER SIDE
DRIVER SIDE : Description

INFOID:0000000001530275

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001530276

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-DR” in “Data Monitor” mode with CONSULT-III.

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

Is the inspection result normal?

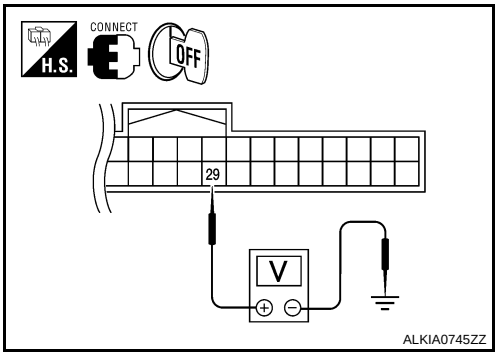
YES >> Door switch is OK.
NO >> Refer to DLK-296, "DRIVER SIDE : Diagnosis Procedure".

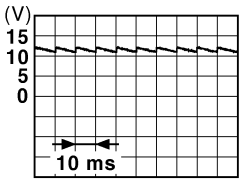
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530277

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			
M18	29	Ground	OPEN	0
			CLOSE	

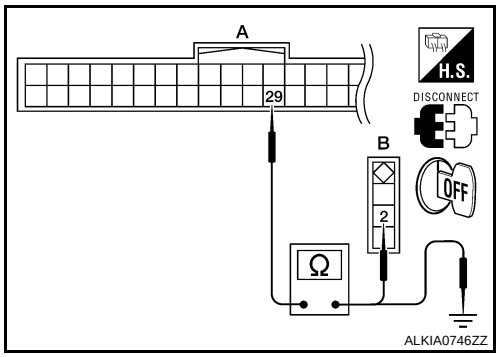
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Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM and driver door switch connectors.
2. Check continuity between BCM connector (A) M18 terminal 29 and door switch connector (B) B34 terminal 2.



BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	29	B34	2	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M18	29		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-297, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (driver side). Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

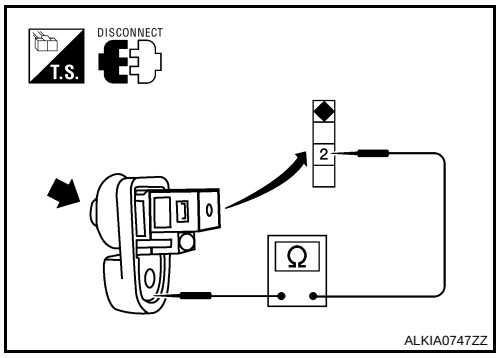
>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001530278

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check door switch.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace front door switch (driver side). Refer to XX-XX, "*****".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530279

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530280

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-AS” in “Data Monitor” mode with CONSULT-III.

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

Is the inspection result normal?

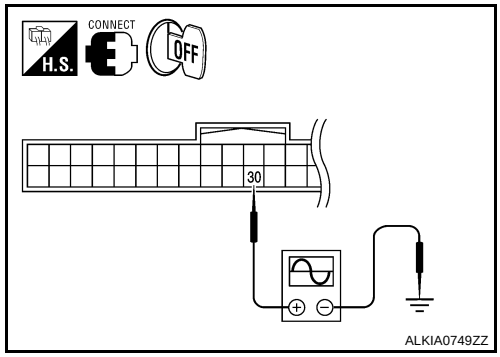
YES >> Door switch is OK.
NO >> Refer to DLK-298, "PASSENGER SIDE : Diagnosis Procedure".

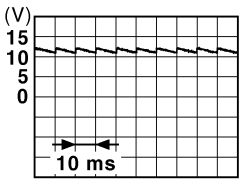
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530281

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			
M18	30	Ground	OPEN	0
			CLOSE	

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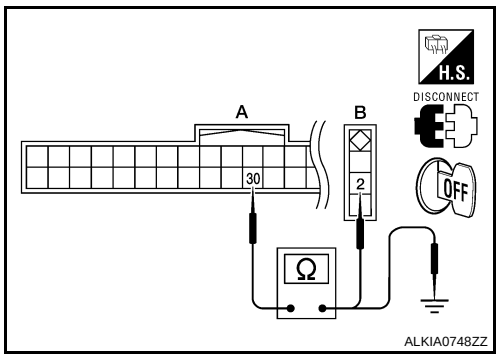
Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM and passenger door switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 30 and passenger door switch connector (B) B27 terminal 2.



BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	30	B27	2	Yes

3. Check continuity between BCM connector (A) M18 terminal 30 and ground.

BCM connector	Terminal	Ground	Continuity
M18	30		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-299, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (passenger side). Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

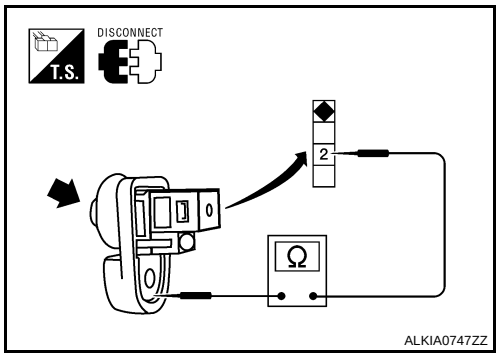
>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001530282

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check passenger door switch.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace front door switch (passenger side). Refer to XX-XX, "*****".

REAR LH

REAR LH : Description

INFOID:0000000001530283

Detects door open/closed condition.

REAR LH : Component Function Check

INFOID:0000000001530284

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RL” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RL	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

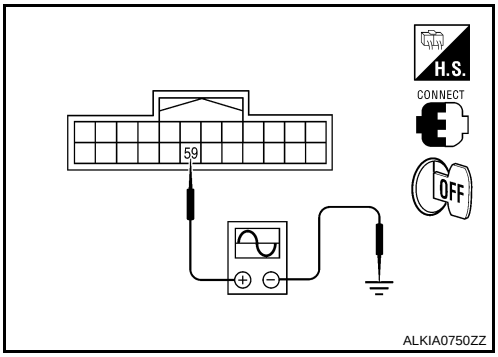
YES >> Door switch is OK.
NO >> Refer to DLK-300, "REAR LH : Diagnosis Procedure".

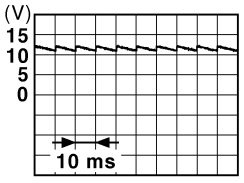
REAR LH : Diagnosis Procedure

INFOID:0000000001530285

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			
M19	59	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

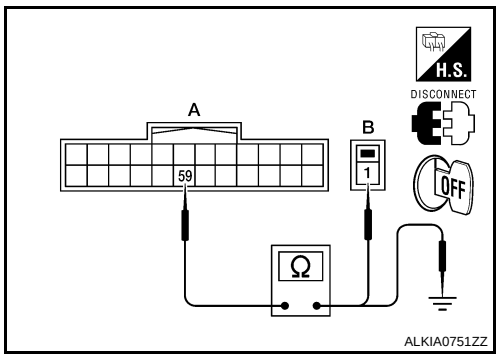
YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector and rear door switch LH.

2. Check continuity between BCM connector (A) M19 terminal 59 and rear door switch LH connector (B) B71 terminal 1.

BCM connector	Terminal	Rear door switch LH connector	Terminal	Continuity
M19	59	B71	1	Yes



3. Check continuity between BCM connector (A) M19 terminal 59 and ground.

BCM connector	Terminal	Ground	Continuity
M19	59		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-301, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch LH. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

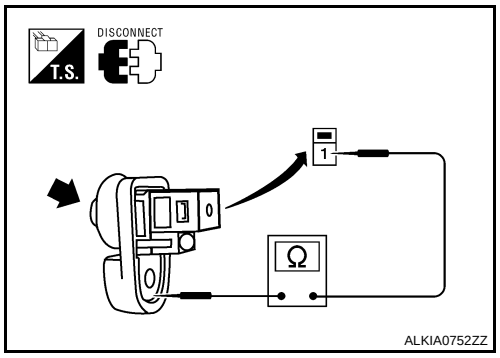
>> INSPECTION END

REAR LH : Component Inspection

INFOID:0000000001530286

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check rear door switch LH.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace rear door switch LH. Refer to XX-XX, "*****".

REAR RH

REAR RH : Description

INFOID:0000000001530287

Detects door open/close condition.

REAR RH : Component Function Check

INFOID:0000000001530288

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

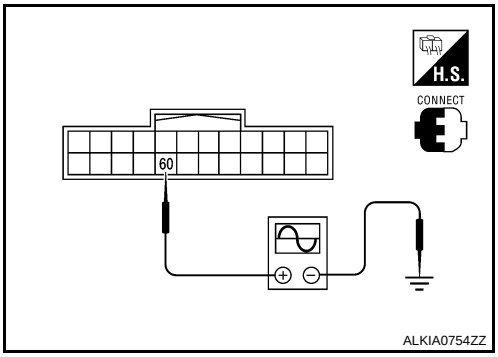
YES >> Door switch is OK.
NO >> Refer to DLK-302, "REAR RH : Diagnosis Procedure".

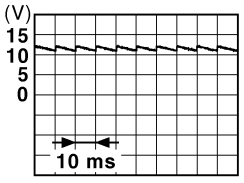
REAR RH : Diagnosis Procedure

INFOID:0000000001530289

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			
M19	60	Ground	OPEN	0
			CLOSE	

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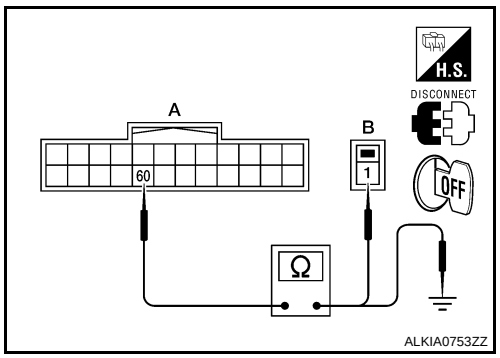
Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM connector (A) M19 terminal 60 and rear door switch RH connector (B) B53 terminal 1.



BCM connector	Terminal	Rear door switch RH connector	Terminal	Continuity
M19	60	B53	1	Yes

3. Check continuity between BCM connector (A) M19 terminal 60 and ground.

BCM connector	Terminal	Ground	Continuity
M19	60		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-303, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch RH. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

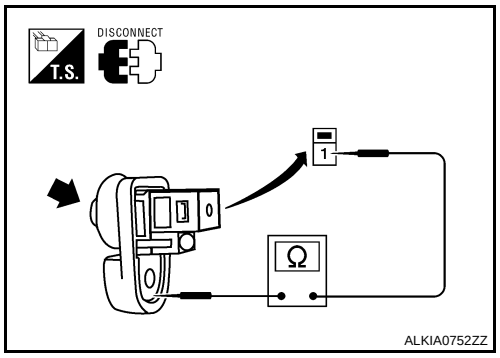
>> INSPECTION END

REAR RH : Component Inspection

INFOID:0000000001530290

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check rear door switch RH.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace rear door switch RH. Refer to XX-XX, "*****".

BACK DOOR

BACK DOOR : Description

INFOID:0000000001530291

Detects back door open condition.

BACK DOOR : Component Function Check

INFOID:0000000001530292

1.CHECK FUNCTION

With CONSULT-III

Check “BACK DOOR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
BACK DOOR SW	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

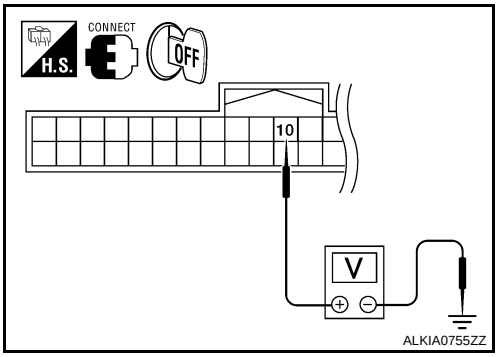
YES >> Back door lock assembly (door switch) is OK.
NO >> Refer to DLK-304, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001530293

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) INPUT SIGNAL

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



Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	10	Ground	OPEN	0
			CLOSE	Battery voltage

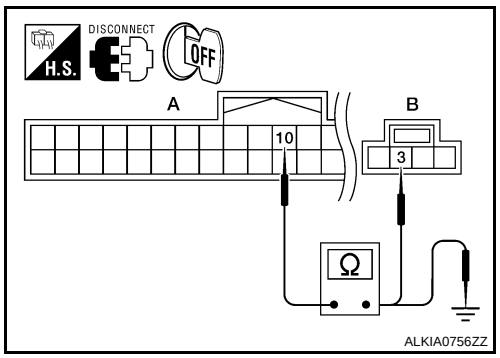
Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) CIRCUIT

1. Disconnect BCM connector and back door lock assembly.

2. Check continuity between BCM connector (A) M18 terminal 10 and back door lock assembly (door switch) connector (B) D405 terminal 3.



BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M18	10	D405	3	Yes

3. Check continuity between BCM connector and ground.

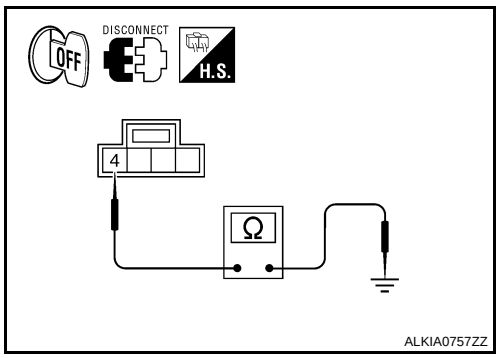
BCM connector	Terminal	Ground	Continuity
M18	10		No

Is the inspection result normal?

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

3. CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.



Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D405	4		Yes

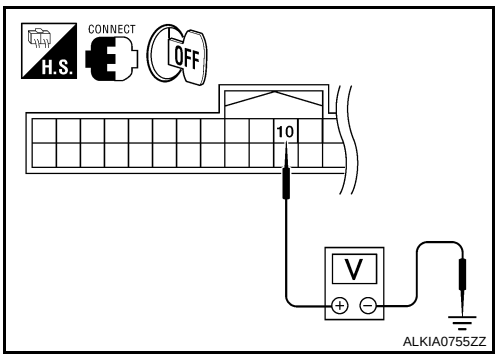
Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door lock assembly 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		
M18	10	Ground	Battery voltage

Is the inspection result normal?

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

5.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-306, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly (door switch). Refer to XX-XX, "*****" and XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

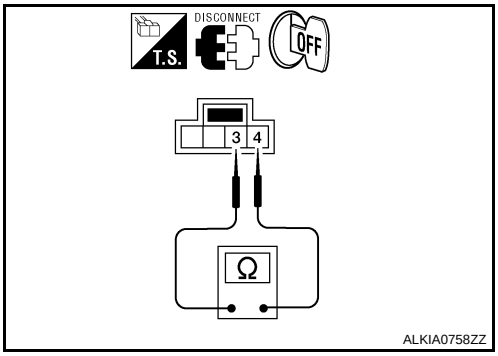
>> INSPECTION END

BACK DOOR : Component Inspection

INFOID:0000000001530294

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

1. Turn ignition switch OFF.
2. Check back door lock assembly (door switch).



Terminal		Back door condition	Continuity
Back door lock assembly (door switch)			
3	4	OPEN	Yes
		CLOSE	No

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Replace back door lock assembly (door switch). Refer to XX-XX, "*****" and XX-XX, "*****".

KEY SWITCH

Description

INFOID:0000000001530295

Key switch detects that mechanical key is inserted into the key cylinder, and then transmits the signal to Intelligent Key unit.

Component Function Check

INFOID:0000000001530296

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch (“KEY SW”) in “Data Monitor” mode with CONSULT-III. Refer to DLK-50, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
KEY SW	Insert mechanical key into key cylinder	: ON
	Remove mechanical key from key cylinder	: OFF

Is the inspection result normal?

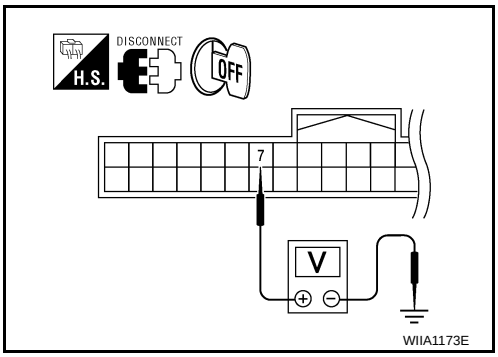
YES >> Key switch is OK.
NO >> Refer to DLK-308, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530297

1.CHECK KEY SWITCH INPUT SIGNAL

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



Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	7	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

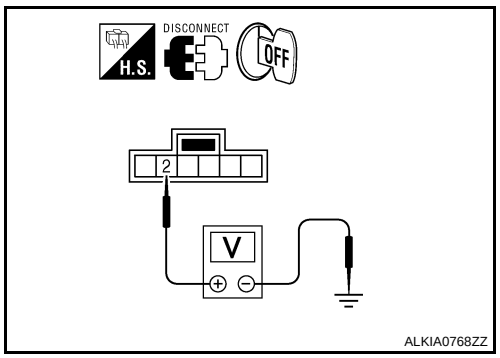
Is the inspection result normal?

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

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove mechanical key from key cylinder.
2. Disconnect key switch and ignition knob switch connector.

3. Check voltage between key switch and ignition knob switch connector and ground.



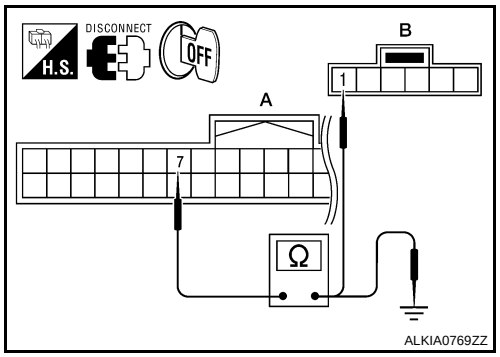
Terminals			Voltage (V) (Approx.)
(+)		(–)	
key switch and ignition knob switch connector	Terminal		
M32	2	Ground	Battery voltage

Is the inspection result normal?

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

3. CHECK KEY SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 7 and key switch and ignition knob switch connector (B) M32 terminal 1.



Intelligent Key unit connector	Terminal	key switch and ignition knob switch connector	Terminal	Continuity
M52	7	M32	1	Yes

2. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 7 and ground.

Intelligent Key unit harness connector	Terminal	Ground	Continuity
M52	7	Ground	No

Is the inspection result normal?

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

4. CHECK KEY SWITCH

Check key switch function.
Refer to DLK-310, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace key switch and ignition knob switch.

5. CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

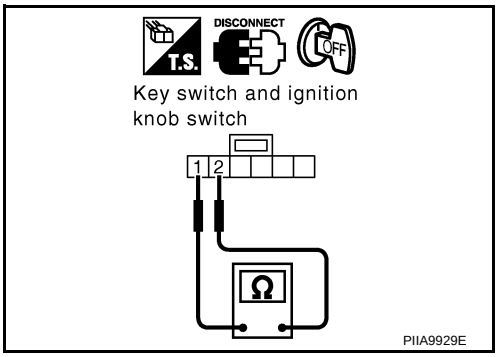
Component Inspection

INFOID:0000000001530298

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch and ignition knob switch terminals.



Terminals		Condition	Continuity
key switch and ignition knob switch			
1	2	Insert mechanical key into key cylinder	Yes
		Remove mechanical key from key cylinder	No

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Replace key cylinder assembly.

IGNITION KNOB SWITCH

Description

INFOID:0000000001530299

Ignition knob switch detects that ignition knob is pressed, and then transmits the signal to Intelligent Key unit.

Component Function Check

INFOID:0000000001530300

1. CHECK IGNITION KNOB SWITCH INPUT SIGNAL

Check ignition knob switch (“PUSH SW”) in “Data Monitor” mode with CONSULT-III. Refer to DLK-50, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
PUSH SW	Ignition knob switch is pressed	: ON
	Ignition knob switch is released	: OFF

Is the inspection result normal?

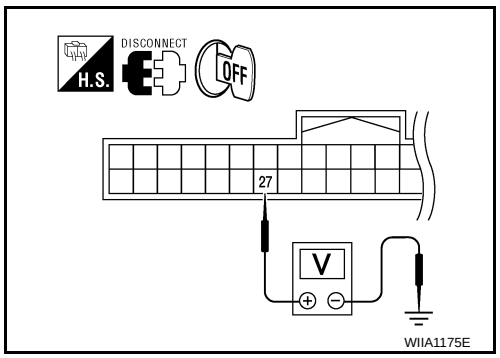
YES >> Ignition knob switch is OK.
NO >> Refer to XX-XX, "*****".

Diagnosis Procedure

INFOID:0000000001530301

1. CHECK IGNITION KNOB SWITCH INPUT SIGNAL

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



Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	27	Ground	Ignition knob switch is pressed	Battery voltage
			Ignition knob switch is released	0

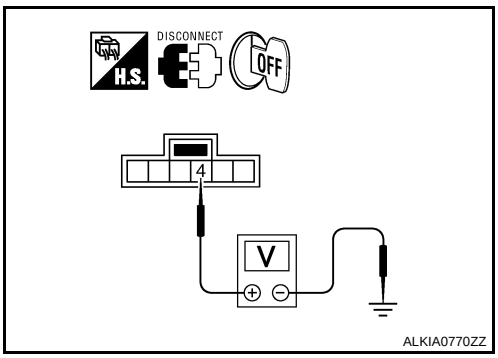
Is the inspection result normal?

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

2. CHECK IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT

1. Disconnect key switch and ignition knob switch connector.

2. Check voltage between key switch and ignition knob switch harness connector and ground.



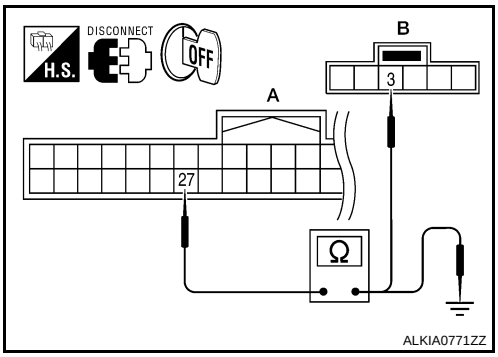
Terminals			Voltage (V) (Approx.)
(+)		(–)	
key switch and ignition knob switch connector	Terminal		
M52	4	Ground	Battery voltage

Is the inspection result normal?

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

3. CHECK IGNITION KNOB SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 27 and key switch and ignition knob switch connector (B) M32 terminal 3.



Intelligent Key unit connector	Terminal	key switch and ignition knob switch connector	Terminal	Continuity
M52	27	M32	3	Yes

2. Check continuity between Intelligent Key unit connector (A) M52 terminal 27 and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M52	27		No

Is the inspection result normal?

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

4. CHECK IGNITION KNOB SWITCH

Check ignition knob switch function.
Refer to XX-XX, "*****".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace key switch and ignition knob switch.

5. CHECK INTERMITTENT INCIDENT

Refer to @@@.

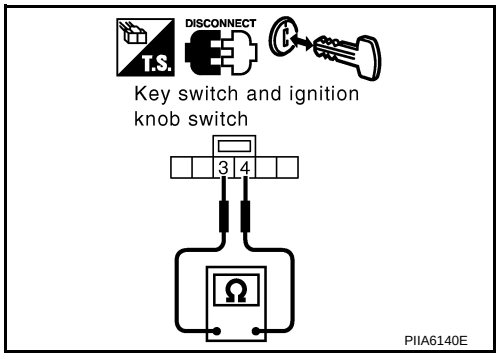
>> INSPECTION END

Component Inspection

INFOID:0000000001530302

1.CHECK IGNITION KNOB SWITCH

1. Turn ignition switch OFF.
2. Check continuity between key switch and ignition knob switch terminals under the following conditions.



key switch and ignition knob switch		Condition	Continuity
Terminals			
3	4	Ignition knob switch is pressed	Yes
		Ignition knob switch is released	No

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace key switch and ignition knob switch.

DOOR REQUEST SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001530303

Transmits lock/unlock operation to Intelligent Key unit.

DRIVER SIDE : Component Function Check

INFOID:0000000001530304

1.CHECK FUNCTION

With CONSULT-III

Check door request switch “DR REQ SW” in “Data Monitor” mode.

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

Is the inspection result normal?

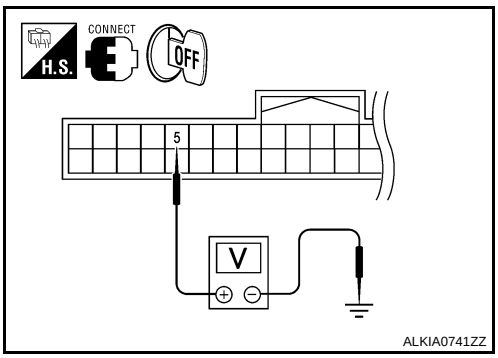
YES >> Door request switch is OK.
NO >> Refer to DLK-314, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530305

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.



Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	5	Ground	Pressed	0
			Released	5

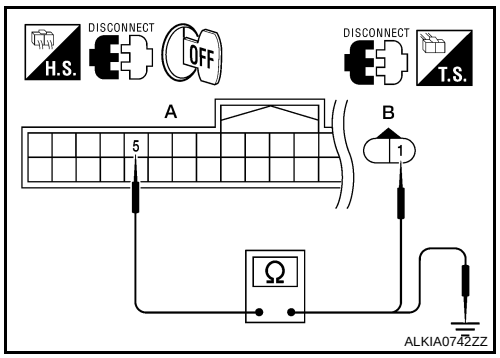
Is the inspection result normal?

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

2.CHECK FRONT DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit and driver door request switch.

2. Check continuity between Intelligent Key unit connector (A) M52 terminal 5 and front door request switch (driver side) connector (B) D5 terminal 1.



Intelligent Key unit connector	Terminal	Front door request switch (driver side)	Terminal	Continuity
M52	5	D5	1	Yes

3. Check continuity between Intelligent Key unit connector (A) M52 terminal 5 and ground.

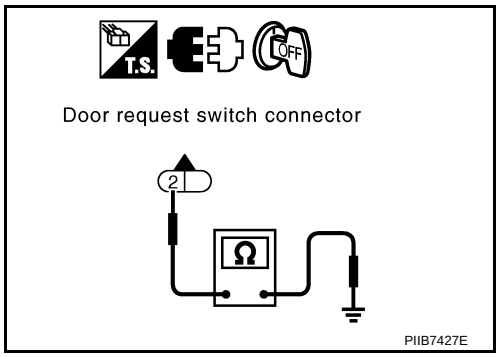
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	5		No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and front door request switch (driver side).

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front door request switch (driver side) connector and ground.



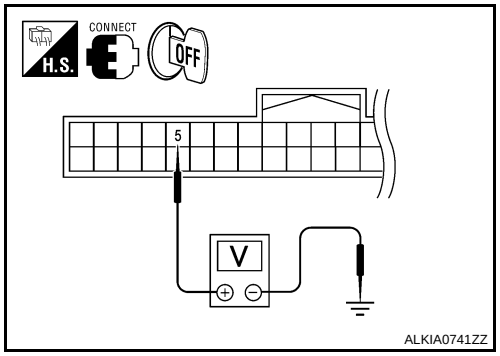
Front door request switch (driver side) connector	Terminal	Ground	Continuity
D5	2		Yes

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace front door request switch (driver side) ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.



Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M52	5		5

Is the inspection result normal?

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

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-316, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace front outside handle (driver side). Refer to XX-XX, "*****" and XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

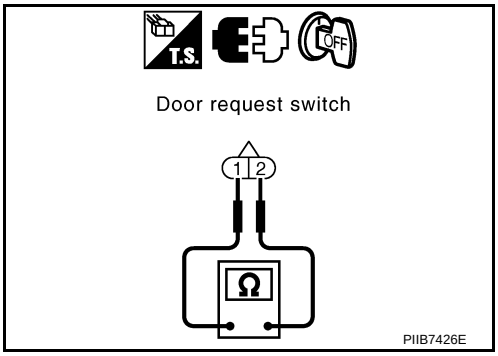
>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001530306

1.CHECK DOOR REQUEST SWITCH

Check door request switch.



Terminal		Door request switch condition	Continuity
front door request switch (driver side)			
1	2	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace front outside handle (driver side). Refer to XX-XX, "*****" and XX-XX, "*****".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530307

Transmits lock/unlock operation to Intelligent Key unit.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530308

1.CHECK FUNCTION

With CONSULT-III
Check door request switch “AS REQ SW” in “Data Monitor” mode.

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

Is the inspection result normal?

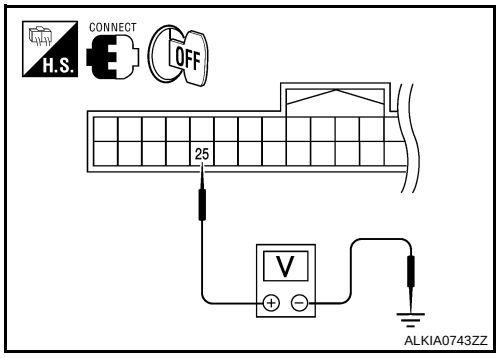
YES >> Door request switch is OK.
NO >> Refer to DLK-322, "Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530309

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.



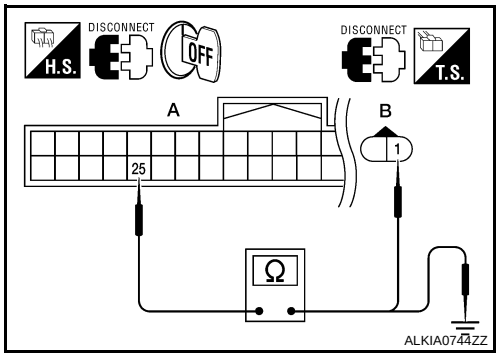
Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	25	Ground	Pressed	0
			Released	5

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit and passenger door request switch.
2. Check continuity between Intelligent Key unit connector (A) M52 terminal 25 and front door request switch (passenger side) connector (B) D103 terminal 1.



Intelligent Key unit connector	Terminal	Front door request switch (passenger side) connector	Terminal	Continuity
M52	25	D103	1	Yes

3. Check continuity between Intelligent Key unit connector (A) M52 terminal 25 and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M52	25		No

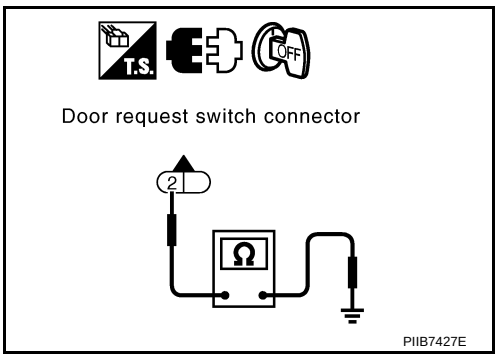
Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and front door request switch (passenger side).

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between front door request switch (passenger side) connector and ground.

Front door request switch (passenger side) connector	Terminal	Ground	Continuity
D103	2		Yes



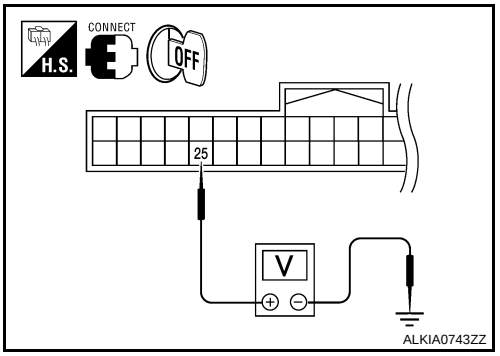
Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace front door request switch (passenger side) ground circuit.

4. CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M52	25		5



Is the inspection result normal?

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

5. CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-324, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace front outside handle (passenger side). Refer to XX-XX, "*****" and XX-XX, "*****".

6. CHECK INTERMITTENT INCIDENT

Refer to @@@.

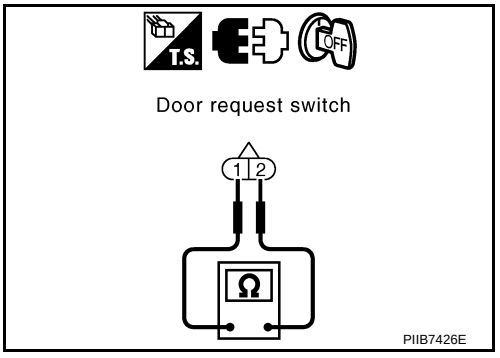
>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001530310

1. CHECK DOOR REQUEST SWITCH

Check door request switch.



Terminal	Door request switch condition	Continuity
Front door request switch (passenger side)		

1	2	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace front outside handle (passenger side). Refer to XX-XX, "*****" and XX-XX, "*****".

BACK DOOR

BACK DOOR : Description

INFOID:0000000001530311

Transmits lock/unlock operation to Intelligent Key unit.

BACK DOOR : Component Function Check

INFOID:0000000001530312

1.CHECK FUNCTION

With CONSULT-III

Check door request switch “BD/TR REQ SW” in “Data Monitor” mode.

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

Is the inspection result normal?

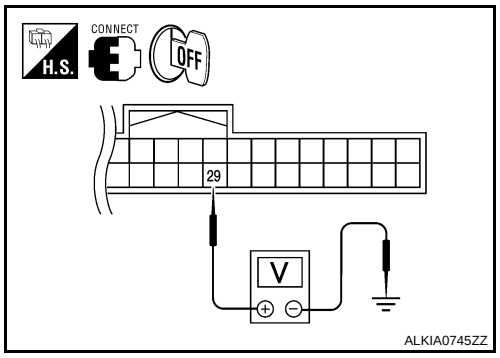
YES >> Door request switch is OK.
NO >> Refer to DLK-319, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001530313

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.



Terminal			Door request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	29	Ground	Pressed	0
			Released	5

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

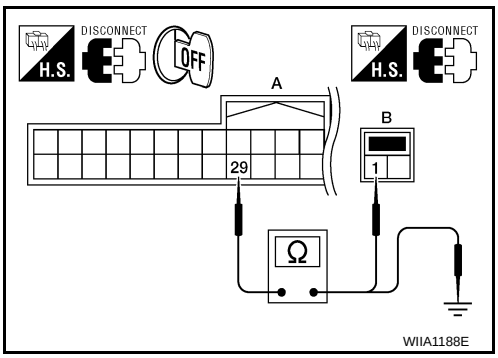
1. Disconnect Intelligent Key unit and back door request switch.

2. Check continuity between Intelligent Key unit connector (A) M52 terminal 29 and back door request switch connector (B) D406 terminal 1.

Intelligent Key unit connector	Terminal	Back door request switch connector	Terminal	Continuity
M52	29	D406	1	Yes

3. Check continuity between Intelligent Key unit connector (A) M52 terminal 29 and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M52	29		No



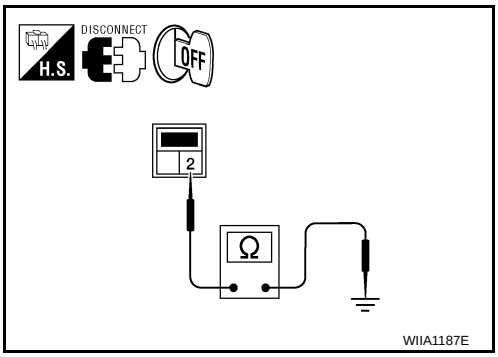
Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and back door request switch.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between back door request switch connector and ground.

Back door request switch connector	Terminal	Ground	Continuity
D406	2		Yes



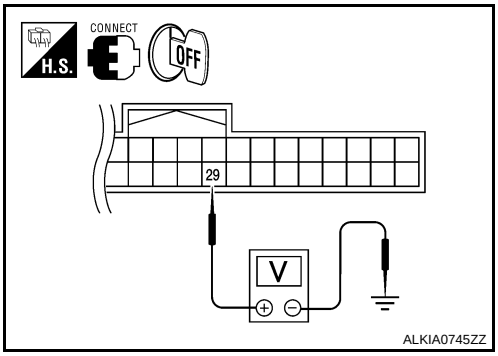
Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door request switch ground circuit.

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.

Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M52	29		5



Is the inspection result normal?

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

5.CHECK DOOR REQUEST SWITCH

Check door request switch.
Refer to DLK-321, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door request switch. Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

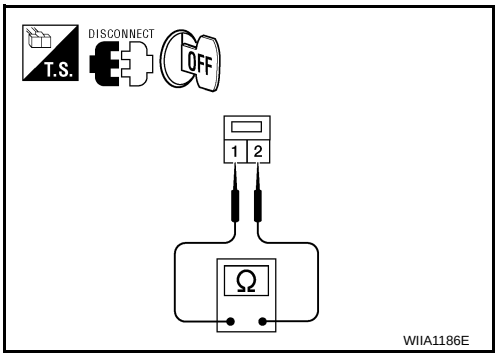
>> INSPECTION END

BACK DOOR : Component Inspection

INFOID:0000000001530314

1.CHECK DOOR REQUEST SWITCH

Check door request switch.



Terminal		Door request switch condition	Continuity
Door request switch			
1	2	Pressed	Yes
		Released	No

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace back door request switch. Refer to XX-XX, "*****".

TRUNK REQUEST SWITCH

Description

INFOID:0000000001530315

Transmits lock/unlock operation to Intelligent Key unit.

Component Function Check

INFOID:0000000001530316

1.CHECK FUNCTION

With CONSULT-III

Check door request switch “BD/TR REQ SW” in “Data Monitor” mode.

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

Is the inspection result normal?

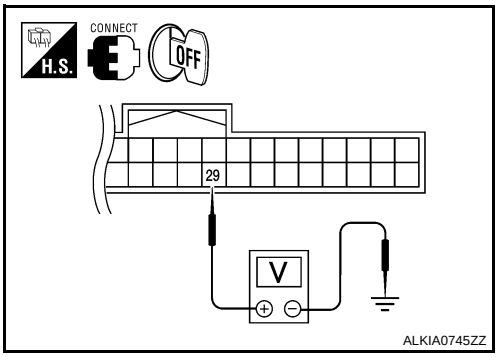
YES >> Door request switch is OK.
NO >> Refer to DLK-322, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530317

1.CHECK INTELLIGENT KEY UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between Intelligent Key unit harness connector and ground.



Terminal			trunk request switch condition	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	29	Ground	Pressed	0
			Released	5

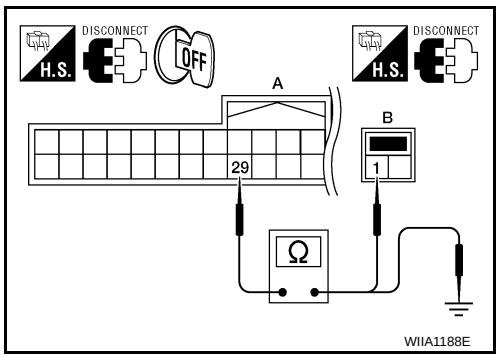
Is the inspection result normal?

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

2.CHECK TRUNK REQUEST SWITCH CIRCUIT

1. Disconnect Intelligent Key unit and trunk request switch.

2. Check continuity between Intelligent Key unit connector (A) M52 terminal 29 and trunk request switch connector (B) B67 terminal 1.



Intelligent Key unit connector	Terminal	trunk request switch connector	Terminal	Continuity
M52	29	B67	1	Yes

3. Check continuity between Intelligent Key unit connector (A) M52 terminal 29 and ground.

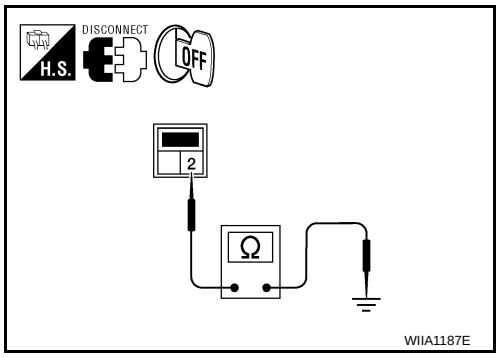
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	29		No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and trunk request switch.

3.CHECK TRUNK REQUEST SWITCH GROUND CIRCUIT

Check continuity between trunk request switch connector and ground.



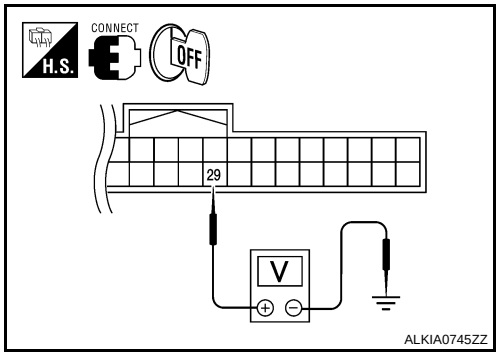
Trunk request switch connector	Terminal	Ground	Continuity
B67	2		Yes

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect Intelligent Key unit connector.
2. Check voltage between Intelligent Key unit connector and ground.



Intelligent Key unit connector	Terminal	Ground	Voltage (V) (Approx.)
M52	29		5

Is the inspection result normal?

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

5.CHECK TRUNK REQUEST SWITCH

Check trunk request switch.
Refer to DLK-324, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back trunk request switch. Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

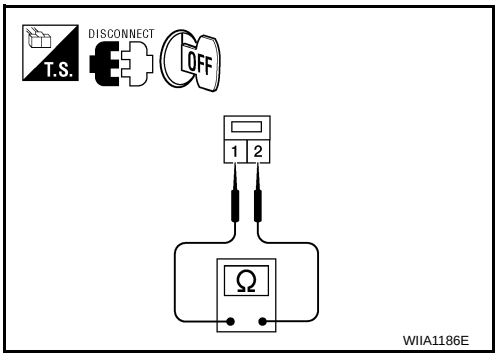
>> INSPECTION END

Component Inspection

INFOID:0000000001530318

1.CHECK TRUNK REQUEST SWITCH

Check trunk request switch.



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

Is the inspection result normal?

YES >> Door request switch is OK.
NO >> Replace trunk request switch. Refer to XX-XX, "*****".

BACK DOOR OPENER SWITCH

Description

INFOID:0000000001530337

Sends the back door opening signal to BCM.

Component Function Check

INFOID:0000000001530338

1.CHECK FUNCTION

With CONSULT-III

Check “TR/BD OPNR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
TR/BD OPNR SW	Back door opener switch is pressed	:ON
	Back door opener switch is released	:OFF

Is the inspection result normal?

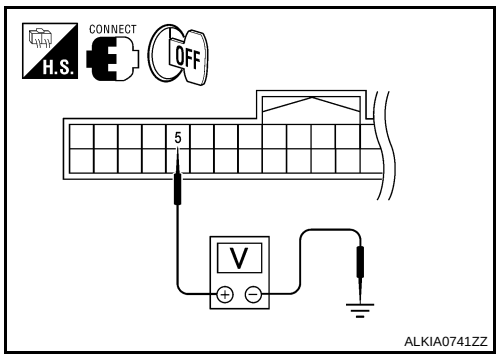
YES >> Back door opener switch is OK.
NO >> Refer to XX-XX, "*****".

Diagnosis Procedure

INFOID:0000000001530339

1.CHECK BACK DOOR OPENER SWITCH INPUT SIGNAL

Check voltage between BCM connector and ground.



Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	5	Ground	ON (press and hold)	0
			OFF (release)	Battery voltage

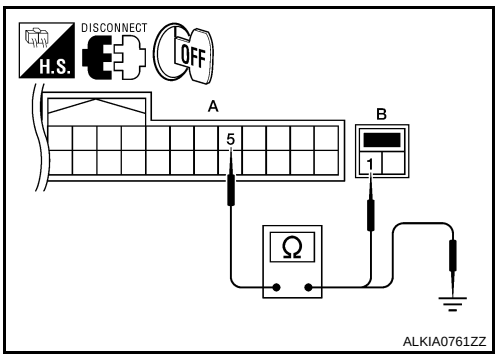
Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

1. Disconnect BCM and back door opener switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 5 and back door opener switch connector (B) D408 terminal 1.



BCM connector	Terminal	back door opener switch connector	Terminal	Continuity
M18	5	D408	1	Yes

3. Check continuity between BCM connector (A) M18 terminal 5 and ground.

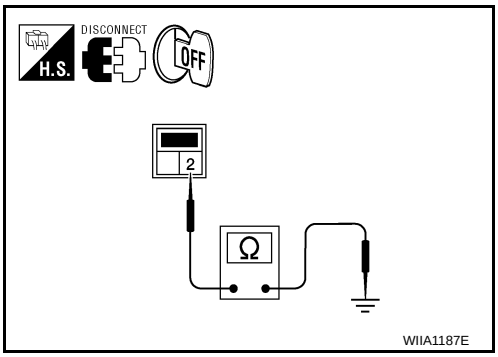
BCM connector	Terminal	Ground	Continuity
M18	5		No

Is the inspection result normal?

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

3.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch connector and ground.



back door opener switch	Terminal	Ground	Continuity
D408	2		Yes

Is the inspection result normal?

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

4.CHECK BACK DOOR OPENER SWITCH

Refer to DLK-327, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace back door opener switch.

5.CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

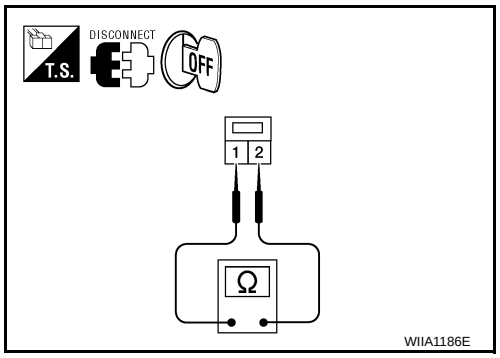
>> INSPECTION END.

Component Inspection

INFOID:0000000001530340

1. CHECK BACK DOOR OPENER SWITCH

1. Turn ignition switch OFF.
2. Check continuity between back door opener switch terminals.



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

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace back door opener switch.

TRUNK LID OPENER SWITCH

Description

INFOID:0000000001530341

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000001530342

1.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 pressed.

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?

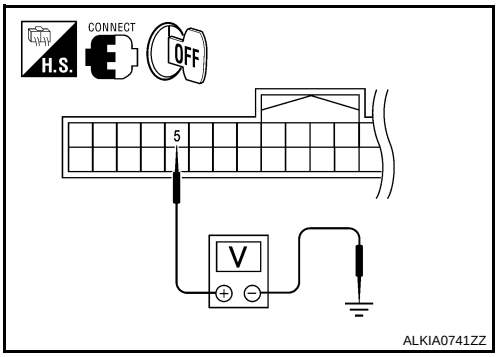
YES >> Trunk lid opener switch is OK.
NO >> Refer to DLK-328, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530343

1.CHECK TRUNK LID OPEN INPUT SIGNAL

Check voltage between BCM connector and ground.



Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	5	Ground	ON (press and hold)	0
			OFF (release)	Battery voltage

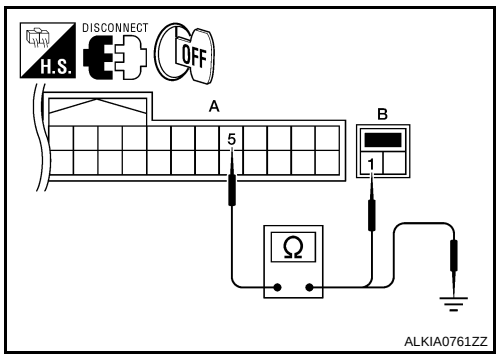
Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

1. Disconnect BCM and trunk lid opener switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 5 and trunk lid opener switch connector (B) B61 terminal 1.



BCM connector	Terminal	Trunk lid opener switch connector	Terminal	Continuity
M18	5	B61	1	Yes

3. Check continuity between BCM connector (A) M18 terminal 5 and ground.

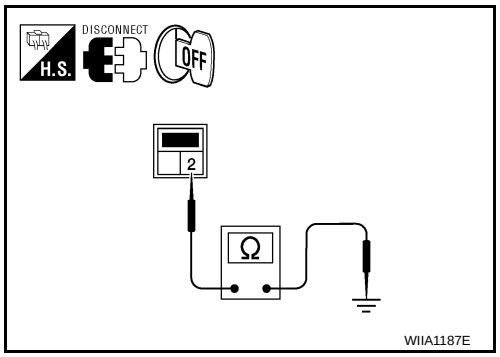
BCM connector	Terminal	Ground	Continuity
M18	5		No

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
B61	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-330, "Component Inspection".

Is the inspection result normal?

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

5. CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

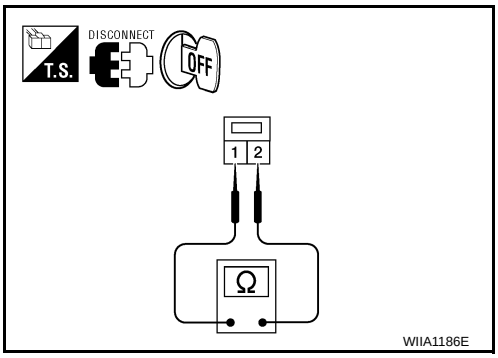
>> INSPECTION END.

Component Inspection

INFOID:0000000001530344

1. CHECK TRUNK LID OPENER SWITCH

1. Turn ignition switch OFF.
2. Check continuity between trunk lid opener switch terminals.



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.

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001530320

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001530321

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?

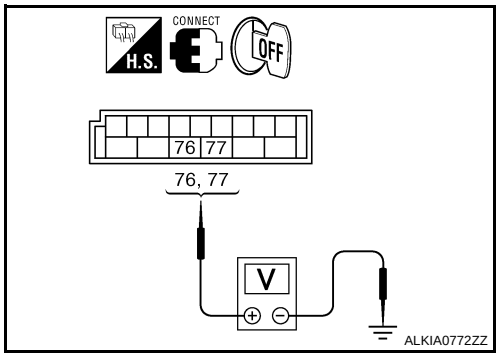
YES >> Door lock actuator is OK.
NO >> Refer to DLK-331, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530322

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 76, 77 and ground.



Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	76	Ground	Driver door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0
	77		Driver door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0

Is the inspection result normal?

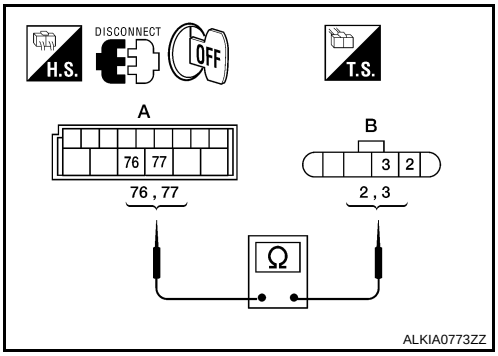
YES >> GO TO 2.
NO >> GO TO 3.

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).

2. Check continuity between BCM connector (A) M20 terminals 76, 77 and front door lock actuator (driver side) connector (B) D14 terminals 2, 3.

Connector	Terminals	Connector	Terminals	Continuity
M20	76	D14	2	Yes
	77		3	Yes



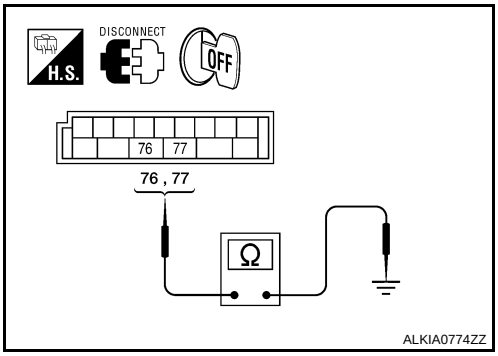
Is the inspection result normal?

YES >> Replace front door lock actuator (driver side).
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).
2. Check continuity between BCM connector M20 terminals 76, 77 and ground.

Connector	Terminals		Continuity
M20	76	Ground	No
	77		No



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530323

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530324

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-332, "PASSENGER SIDE : Diagnosis Procedure".

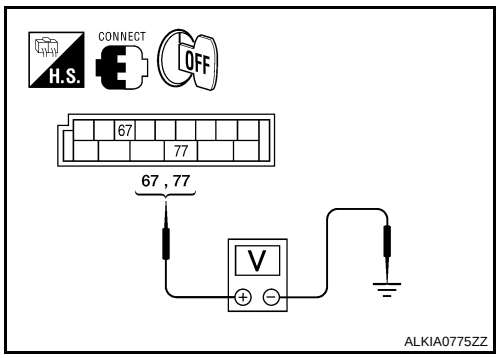
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530325

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) SIGNAL

1. Turn ignition switch OFF.

2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



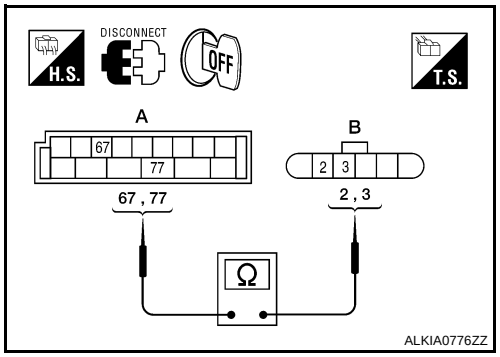
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and front door lock actuator (passenger side) (B) D114 terminals 2, 3.



BCM connector	Terminal	Front door lock actuator (passenger side) connector	Terminal	Continuity
M20	67	D114	2	Yes
	77		3	

Is the inspection result normal?

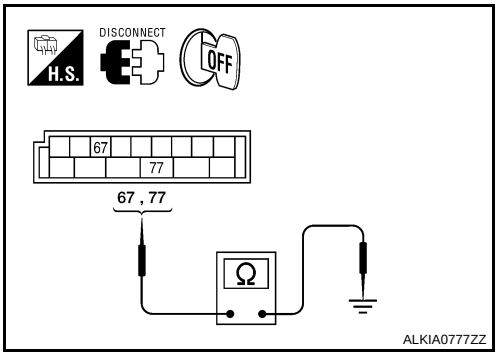
YES >> Replace front door lock actuator (passenger side). Refer to XX-XX, "*****".
NO >> Repair or replace harness.

3. CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).

2. Check continuity between BCM connector M19 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR LH

REAR LH : Description

INFOID:0000000001530326

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001530327

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?

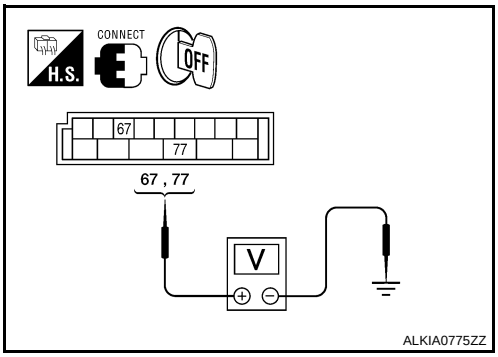
YES >> Door lock actuator is OK.
NO >> Refer to DLK-334, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001530328

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



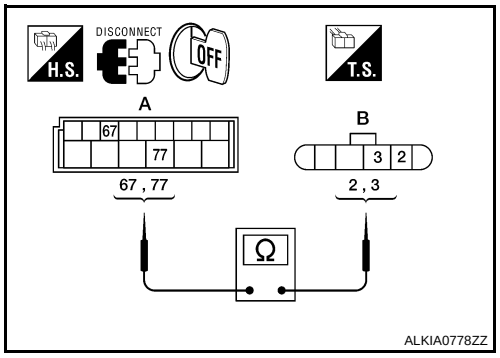
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator LH.
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and rear door lock actuator LH connector (B) D205 terminals 2, 3.



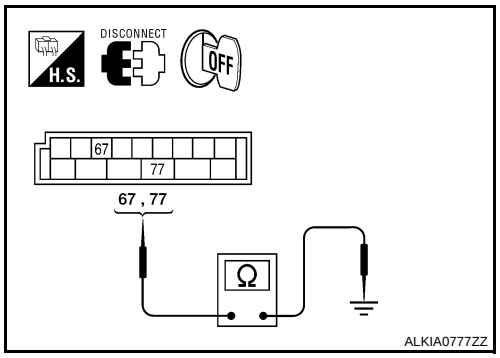
BCM connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M20	67	D205	2	Yes
	77		3	

Is the inspection result normal?

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

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and each door lock actuator.
2. Check continuity between BCM connector M20 terminals 67, 77 and ground.



BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		

Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR RH

REAR RH : Description

INFOID:0000000001530329

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001530330

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?

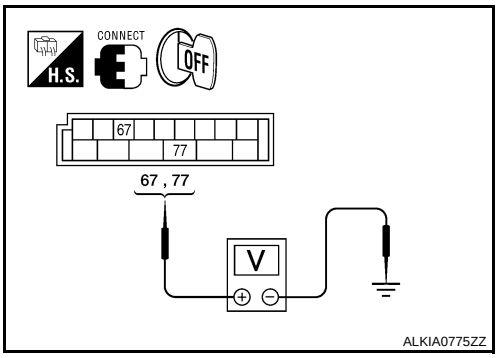
YES >> Door lock actuator is OK.
NO >> Refer to XX-XX, "*****".

REAR RH : Diagnosis Procedure

INFOID:0000000001530331

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



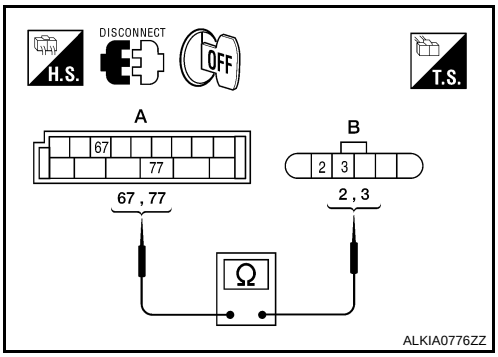
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and rear door lock actuator RH connector (B) D305 terminals 2, 3.



BCM connector	Terminal	Rear door lock actuator RH connector	Terminal	Continuity
M20	67	D305	2	Yes
	77		3	

Is the inspection result normal?

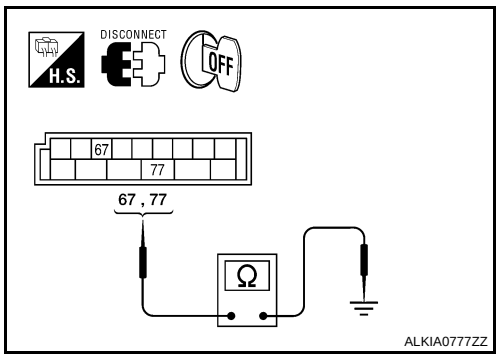
YES >> Replace rear door lock actuator RH.
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.

2. Check continuity between BCM connector (A) M20 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

BACK DOOR

BACK DOOR : Description

INFOID:0000000001530332

Locks/unlocks the door with the signal from BCM.

BACK DOOR : Component Function Check

INFOID:0000000001530333

1.CHECK FUNCTION

1. Unlock all doors using main power window and door lock/unlock switch.
2. Press the back door opener switch.

Does the back door open?

YES >> Door lock actuator is OK.
NO >> GO TO 2.

2.CHECK FUNCTION

With CONSULT-III

Check back door opener request switch “BK DOOR OPNR SW” in “Data Monitor” mode.

Monitor item	Condition	
BD/TR OPNR SW	Back door opener request switch is pressed	:ON
	Back door opener request switch is released	:OFF

Is the inspection result normal?

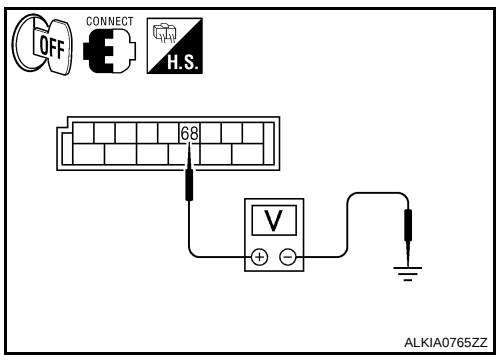
YES >> Refer to DLK-337, "BACK DOOR : Diagnosis Procedure".
NO >> Refer to XX-XX, "*****".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001530334

1.CHECK BACK DOOR LOCK ACTUATOR SIGNAL

1. Ensure the door lock system is in the unlock position.
2. Turn ignition switch OFF.
3. Press the back door opener switch while checking voltage between BCM connector M20 terminals 68 and ground.



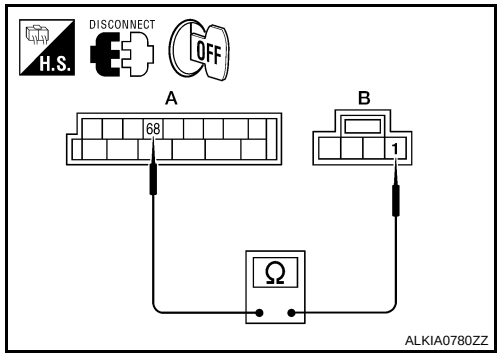
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	68	Ground	Door lock opener switch is pressed	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and back door lock assembly.
2. Check continuity between BCM connector (A) M20 terminal 68 and back door lock assembly connector (B) D405 terminal 1.



BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M20	68	D405	1	Yes

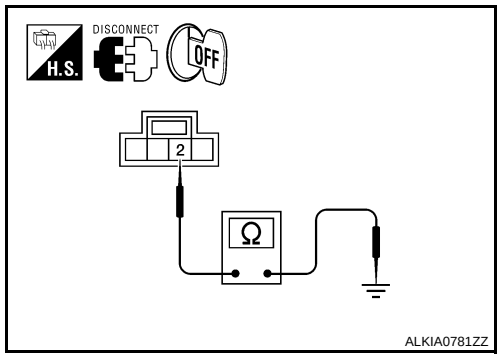
Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ACTUATOR GROUND CIRCUIT

Check continuity between back door lock assembly connector D405 terminal 2 and ground.

Terminals		Continuity
2	Ground	Yes



Is the inspection result normal?

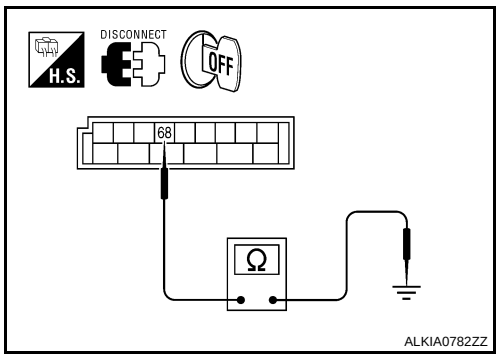
YES >> Replace back door lock assembly.
NO >> Repair or replace harness.

4.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and back door lock actuator.

2. Check continuity between BCM connector M20 terminals 68 and ground.

Terminals		Continuity
68	Ground	No



Is the inspection result normal?

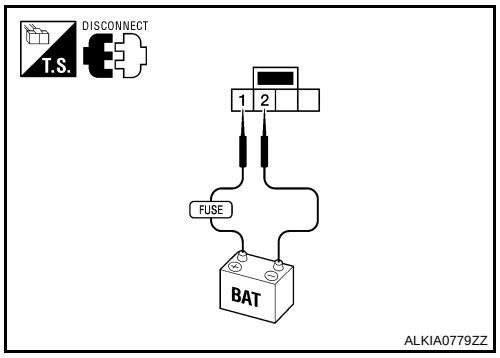
YES >> Harness is OK. Refer to DLK-339, "BACK DOOR : Component Inspection".
NO >> Repair or replace harness.

BACK DOOR : Component Inspection

INFOID:0000000001530335

1. CHECK TRUNK LAMP SWITCH

Momentarily, connect battery power supply to back door lock assembly terminals and check for actuator operation.



Terminal		Back door condition
Back door lock assembly (actuator)		
1 BAT (+)	2 BAT (-)	Actuator operates

Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Replace back door lock assembly.

SUPER LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001530411

The super lock system is controlled by the BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001530412

1.CHECK FUNCTION

1. Use CONSULT-III to perform Active Test "SUPER LOCK".
2. Touch “LOCK” or “UNLOCK” to check that it works normally.

Is the inspection result normal?

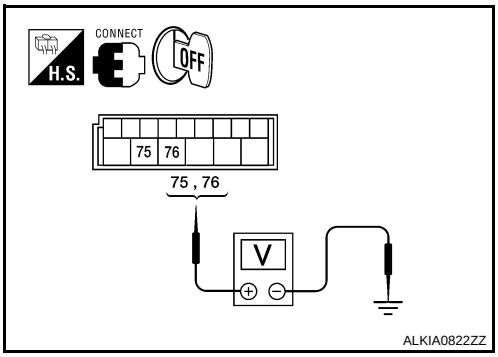
YES >> Front super lock actuator (driver side) is OK.
NO >> Refer to DLK-340, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530413

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 75, 76 and ground.



Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	75	Ground	Driver door lock/unlock switch is turned to LOCK	0 → Battery voltage→ 0
	76		Driver door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

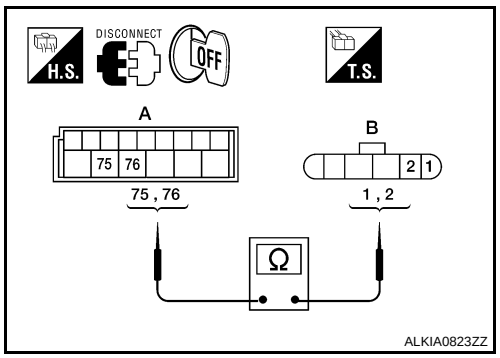
YES >> GO TO 2.
NO >> GO TO 3.

2.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).

2. Check continuity between BCM connector (A) M20 terminals 75, 76 and front door lock actuator (driver side) connector (B) D14 terminals 1, 2.

Connector	Terminals	Connector	Terminals	Continuity
M20	75	D14	1	Yes
	76		2	Yes



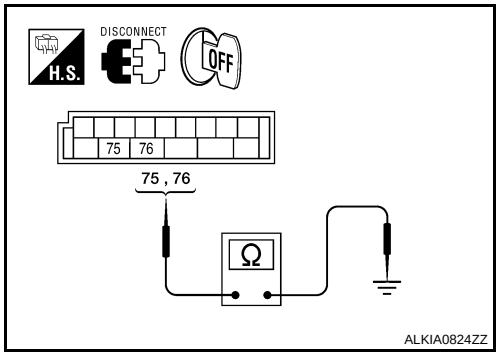
Is the inspection result normal?

YES >> Replace super lock actuator (driver side).
NO >> Repair or replace harness.

3.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).
2. Check continuity between BCM connector M20 terminals 75, 76 and ground.

Connector	Terminals		Continuity
M20	75	Ground	No
	76		No



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530414

The super lock system is controlled by the BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530415

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Front super lock actuator (passenger side) is OK.
NO >> Refer to DLK-341, "PASSENGER SIDE : Diagnosis Procedure".

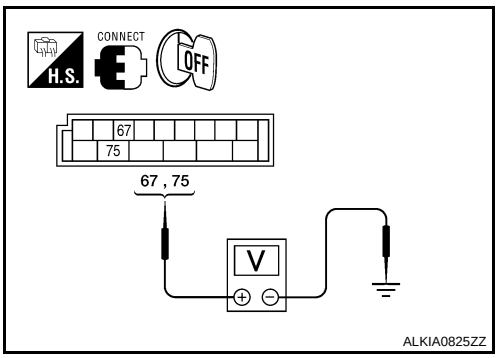
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530416

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) SIGNAL

1. Turn ignition switch OFF.

2. Check voltage between BCM connector M20 terminals 67, 75 and ground.



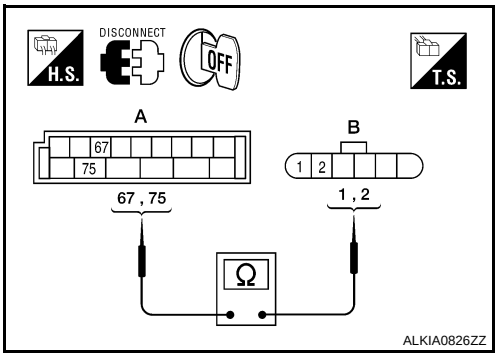
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	75	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).
2. Check continuity between BCM connector (A) M20 terminals 67, 75 and front door lock actuator (passenger side) (B) D114 terminals 1, 2.



BCM connector	Terminal	Front door lock actuator (passenger side) connector	Terminal	Continuity
M20	67	D114	2	Yes
	75		1	

Is the inspection result normal?

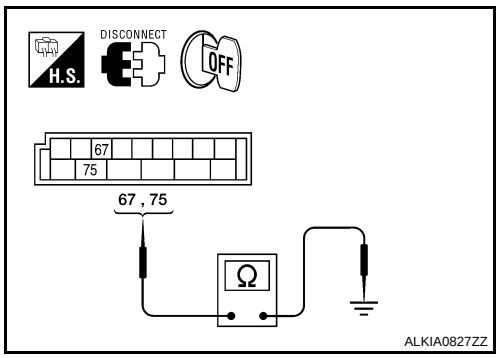
YES >> Replace super lock actuator (passenger side). Refer to XX-XX, "*****".
NO >> Repair or replace harness.

3.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).

2. Check continuity between BCM connector M19 terminals 67, 75 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	75		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR LH

REAR LH : Description

INFOID:0000000001530417

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001530418

1.CHECK FUNCTION

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

Is the inspection result normal?

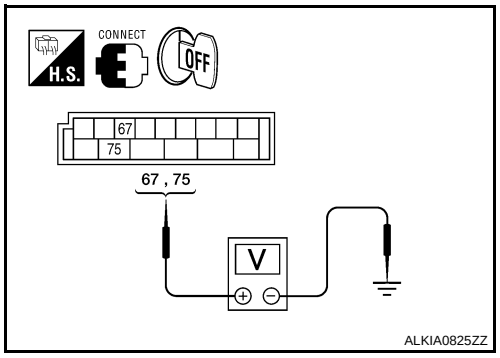
YES >> Rear super lock actuator LH is OK.
NO >> Refer to DLK-343, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001530419

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 75 and ground.



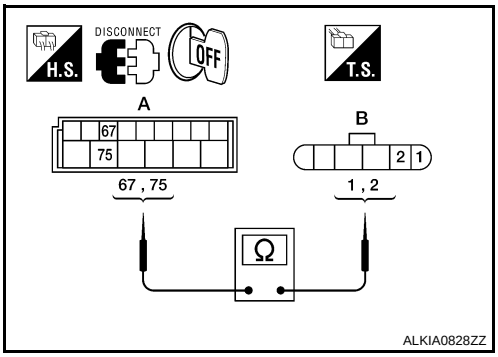
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	75	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator LH.
2. Check continuity between BCM connector (A) M20 terminals 67, 75 and rear door lock actuator LH connector (B) D205 terminals 1, 2.



BCM connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M20	67	D205	2	Yes
	75		1	

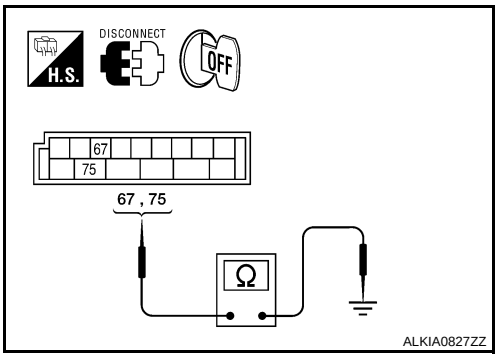
Is the inspection result normal?

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

3.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and each door lock actuator.
2. Check continuity between BCM connector M20 terminals 67, 75 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	75		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR RH

REAR RH : Description

INFOID:0000000001530420

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001530421

1.CHECK FUNCTION

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

Is the inspection result normal?

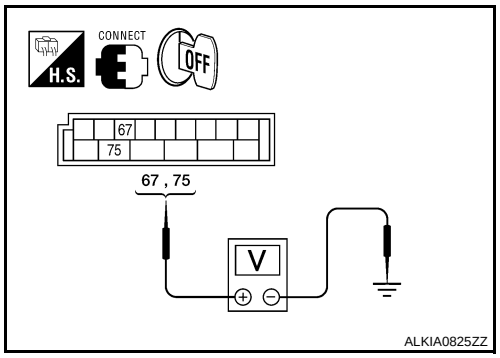
YES >> Rear super lock actuator RH is OK.
NO >> Refer to XX-XX, "*****".

REAR RH : Diagnosis Procedure

INFOID:0000000001530422

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 75 and ground.



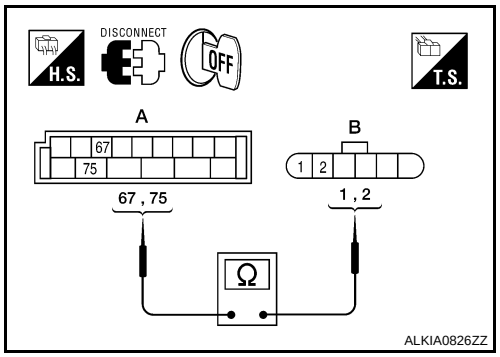
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	75	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.
2. Check continuity between BCM connector (A) M20 terminals 67, 75 and rear door lock actuator RH connector (B) D305 terminals 2, 1.



BCM connector	Terminal	Rear door lock actuator RH connector	Terminal	Continuity
M20	67	D305	2	Yes
	75		1	

Is the inspection result normal?

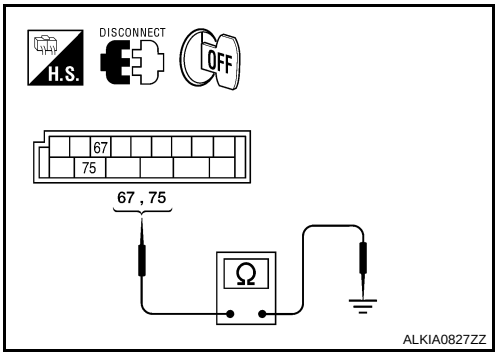
YES >> Replace rear super lock actuator RH.
NO >> Repair or replace harness.

3.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.

2. Check continuity between BCM connector (A) M20 terminals 67, 75 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	75		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

TRUNK LID OPENER ACTUATOR

Description

INFOID:0000000001530345

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000001530346

1.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?

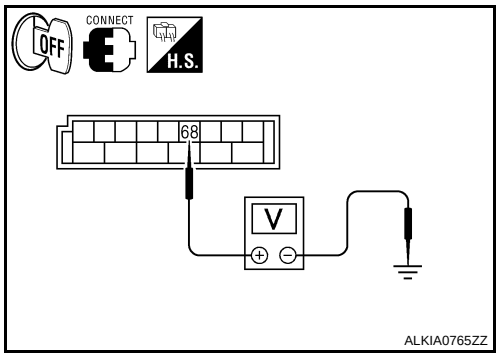
YES >> Trunk lid opener actuator is OK.
NO >> Refer to DLK-347, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530347

1.CHECK OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Ensure door lock system is unlocked.
3. Check voltage between BCM connector and ground.



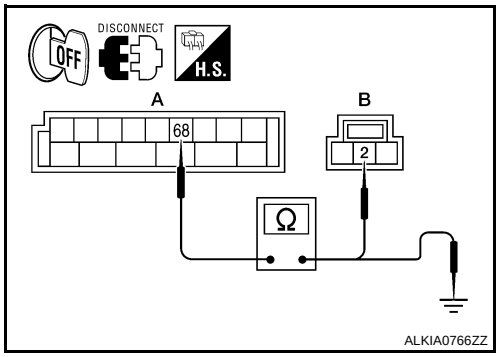
Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M20	68	Ground	ON	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM and trunk lamp switch and trunk release solenoid connectors.
2. Check continuity between BCM connector (A) M20 terminal 68 and trunk lamp switch and trunk release solenoid connector (B) B66 terminal 2.



BCM connector	Terminal	trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
M20	68	B66	2	Yes

3. Check continuity between BCM connector (A) M20 terminal 68 and ground.

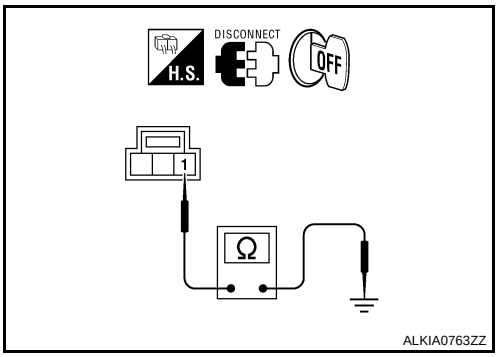
BCM connector	Terminal		Continuity
M20	68	Ground	No

Is the inspection result normal?

YES >> Refer to DLK-348, "Component Inspection".
NO >> Repair or replace harness.

3.CHECK TRUNK LID OPENER ACTUATOR GROUND CIRCUIT

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



Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B66	1		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 INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

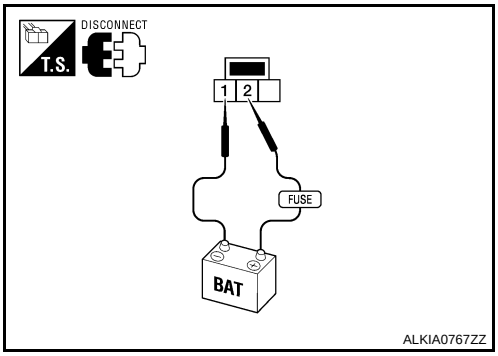
>> INSPECTION END.

Component Inspection

INFOID:0000000001530348

1.CHECK TRUNK LAMP SWITCH

Momentarily, connect battery power supply to trunk lamp switch and trunk release solenoid terminals and check for solenoid operation.



Terminal		Trunk condition
Trunk lamp switch and trunk release solenoid		
1 BAT (-)	2 BAT (+)	Solenoid operates

Is the inspection result normal?

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

INSIDE KEY ANTENNA
INSTRUMENT CENTER

INSTRUMENT CENTER : Description

INFOID:0000000001530349

Detects whether Intelligent Key is inside the vehicle.

INSTRUMENT CENTER : Component Function Check

INFOID:0000000001530350

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ROOM ANT 2”.
3. When Intelligent Key is in inside key antenna (instrument panel) detection area, hazard lamp flashes.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 2	Inside key antenna (instrument panel)

Is the inspection result normal?

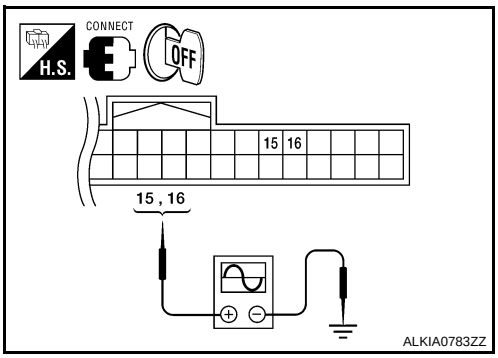
YES >> Inside key antenna (instrument panel) is OK.
NO >> Refer to DLK-350, "INSTRUMENT CENTER : Diagnosis Procedure".

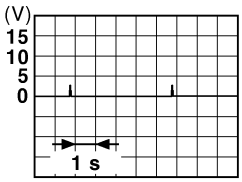
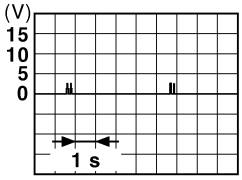
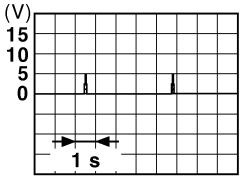
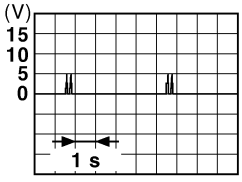
INSTRUMENT CENTER : Diagnosis Procedure

INFOID:0000000001530351

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.



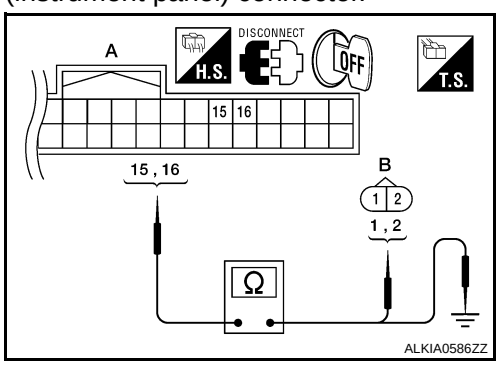
Terminals				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M52	Instrument panel (+)	15	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Instrument panel (-)	16			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

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

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (instrument panel) connector.
2. Check continuity between Intelligent Key unit connector (A) M52 terminals 15, 16 and instrument panel antenna connector (B) M10 terminals 1, 2.



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Intelligent Key unit connector	Terminal	Instrument panel antenna connector	Terminal	Continuity
M52	15	M10	1	Yes
	16		2	

3. Check continuity between Intelligent Key unit connector and ground.

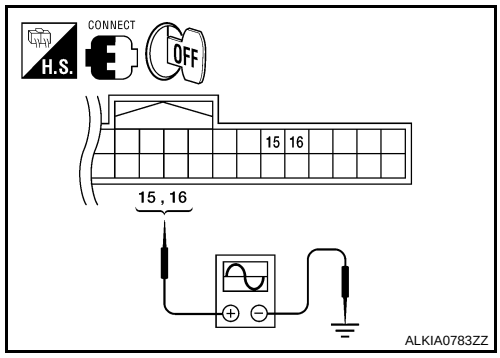
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	15		No
	16		

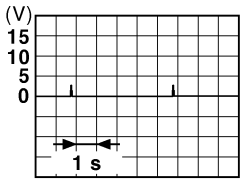
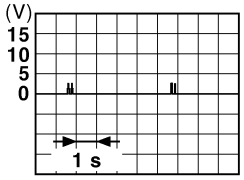
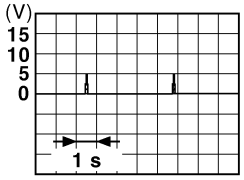
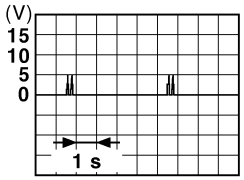
Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace instrument panel antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and instrument panel antenna connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.



Terminals				Condition		Signal (Reference value)
(+)			(–)			
Intelligent Key unit connector		Terminal				
M52	Instrument panel (+)	15	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Instrument panel (-)	16			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace instrument panel antenna. Refer to XX-XX, "*****" (instrument panel).
NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

CONSOLE

CONSOLE : Description

INFOID:0000000001530352

Detects whether Intelligent Key is inside the vehicle.

CONSOLE : Component Function Check

INFOID:0000000001530353

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ROOM ANT 1”.
3. When Intelligent Key is in inside front console antenna detection area, hazard lamps flash.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 1	Front console antenna

Is the inspection result normal?

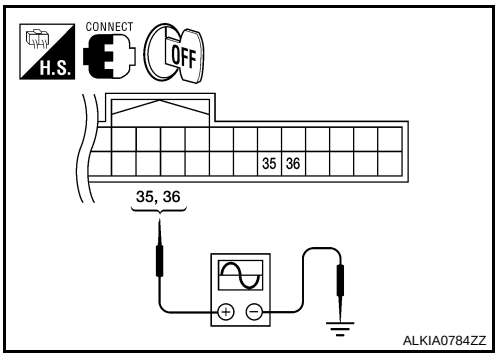
YES >> Front console antenna is OK.
NO >> Refer to DLK-354, "CONSOLE : Diagnosis Procedure".

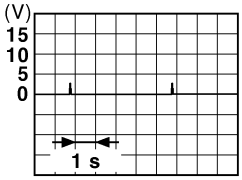
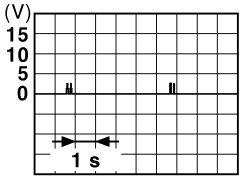
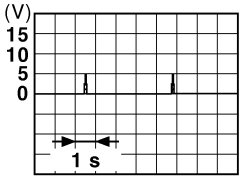
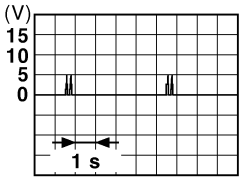
CONSOLE : Diagnosis Procedure

INFOID:0000000001530354

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.



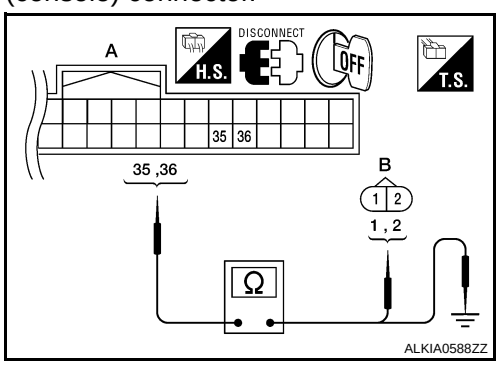
Terminal (+)		Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector	Terminal				
M52	Console (+) 35	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Console (-) 36			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

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

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (console) connector.
2. Check continuity between Intelligent Key unit connector (A) M52 terminals 35, 36 and inside key antenna (console) connector (B) M45 terminals 1, 2.



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Intelligent Key unit connector	Terminal	Inside key antenna (console) connector	Terminal	Continuity
M52	35	B45	1	Yes
	36		2	

3. Check continuity between Intelligent Key unit connector and ground.

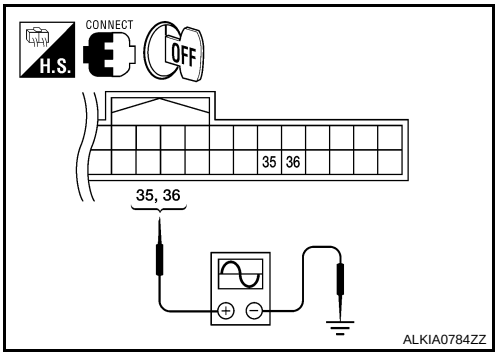
Intelligent Key unit connector	Terminal	Ground	Continuity
M52	35		No
	36		

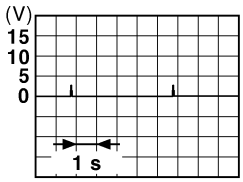
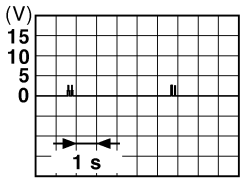
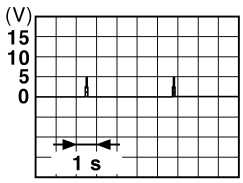
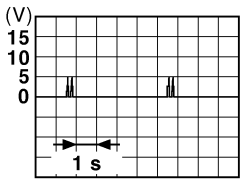
Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna (console).

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna (console) connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.



Terminal (+)		Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector	Terminal				
M52	Console (+) 35	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Console (-) 36			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
				When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to XX-XX, "*****" (console).
NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

REAR FLOOR

REAR FLOOR : Description

INFOID:0000000001530355

Detects whether Intelligent Key is inside the vehicle.

REAR FLOOR : Component Function Check

INFOID:0000000001530356

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL

With CONSULT-III

1. Check “ANTENNA” in “Active Test” mode with CONSULT-III.
2. Touch “ROOM ANT 2”.
3. When Intelligent Key is in inside key antenna (rear floor) detection area, hazard lamps flash.

Test Item		Inside Antenna
ANTENNA	:ROOM ANT 2	Rear floor antenna

Is the inspection result normal?

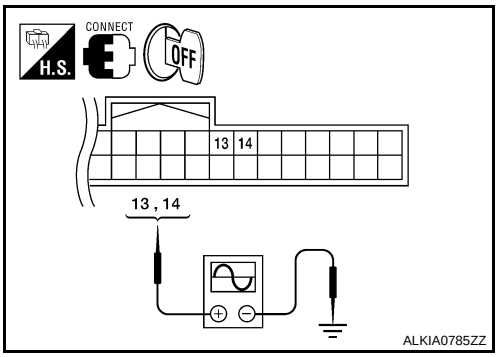
YES >> Rear floor antenna is OK.
NO >> Refer to DLK-358, "REAR FLOOR : Diagnosis Procedure".

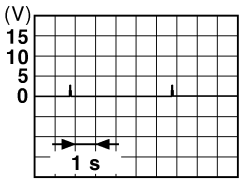
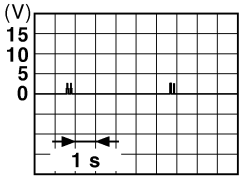
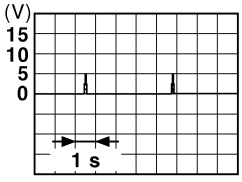
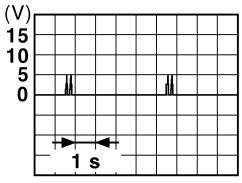
REAR FLOOR : Diagnosis Procedure

INFOID:0000000001530357

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector and ground with oscilloscope.



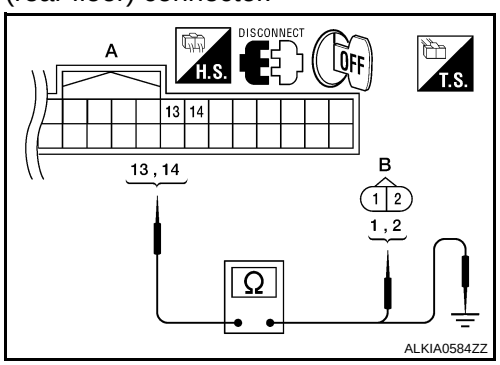
Terminal (+)		Terminal (+)	Terminal (–)	Condition		Signal (Reference value)
Intelligent Key unit connector						
M40	Rear floor (+)	13	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Rear floor (-)	14			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

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

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and inside key antenna (rear floor) connector.
2. Check continuity between Intelligent Key unit connector and inside key antenna (rear floor) connector.



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Intelligent Key unit connector	Terminal	Inside key antenna (rear floor) connector	Terminal	Continuity
M40	13	B45	1	Exists
	14		2	

3. Check continuity between Intelligent Key unit connector and ground.

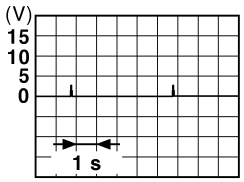
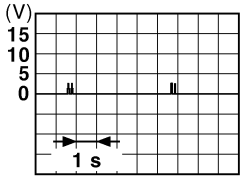
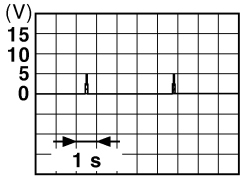
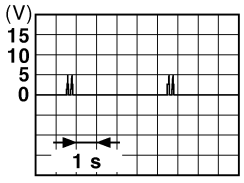
Intelligent Key unit connector	Terminal	Ground	Continuity
M40	13		Does not exist
	14		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key unit and inside key antenna (rear floor).

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and inside key antenna (rear floor) connector.
3. Check signal between Intelligent Key connector and ground with oscilloscope.

Terminal (+) Intelligent Key unit connector	Terminal (+) Terminal	Terminal (–)	Condition		Signal (Reference value)
M40	Rear floor (+)	13	Ground	• All doors are closed • Ignition knob switch is pressed	When Intelligent Key is in the antenna detection area.	 JMKIA0393ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0391ZZ
	Rear floor (-)	14			When Intelligent Key is in the antenna detection area.	 JMKIA0392ZZ
					When Intelligent Key is not in the antenna detection area.	 JMKIA0390ZZ

Is the inspection result normal?

YES >> Replace inside key antenna (rear floor). Refer to XX-XX, "*****" (rear floor).
NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

OUTSIDE KEY ANTENNA

Description

INFOID:0000000001530358

Detects whether the Intelligent Key is in the operating range of the outside antennas.
Front outside antennas are integrated in front outside door handles (driver side, passenger side) to allow locking and unlocking of door locks including back door (hatchback) and trunk lid (sedan) when the Intelligent Key is present.
Rear bumper antenna is mounted on the rear bumper and is used to allow the locking and unlocking of door locks including back door (hatchback) and trunk lid (sedan) when the Intelligent Key is present.

Component Function Check

INFOID:0000000001530359

1.CHECK DOOR REQUEST SWITCH

Check that door request switches operate normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Inspect door request switches. Refer to XX-XX, "*****".

2.CHECK FRONT ANTENNAS FUNCTION

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

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

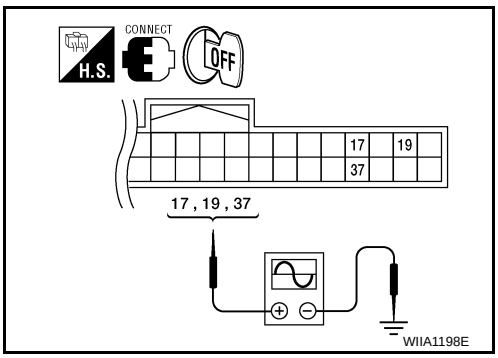
YES >> Outside key antenna is OK.
NO >> Refer to DLK-362, "Diagnosis Procedure".

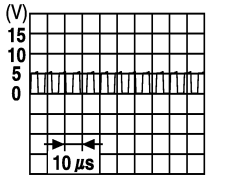
Diagnosis Procedure

INFOID:0000000001530360

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check signal between Intelligent Key unit connector M52 terminals 17, 19, 37 and ground with an oscilloscope.



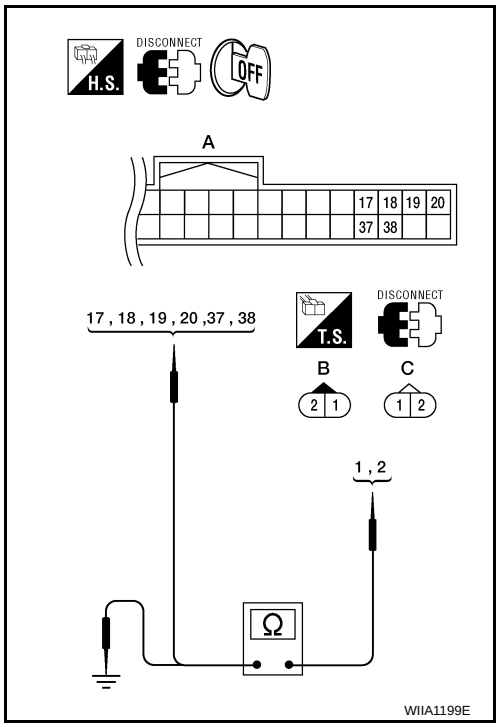
Connector	Item	Terminals (+)	Terminals (-)	Condition	Signal (Reference value)
M52	Rear bumper antenna	17	Ground	Request switch is pushed	
	Front outside antenna (driver side)	19			
	Front outside antenna (passenger side)	37			

Is the inspection result normal?

YES >> Outside key antenna is OK.
NO >> GO TO 2.

2. CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect Intelligent Key unit connector and outside key antenna connector.
2. Check continuity between each outside key antenna harness connector (B) D10 (driver side) or D106 (passenger side), rear bumper antenna connector (C) B81 terminals 1, 2 and Intelligent Key unit harness connector (A) M52 terminals 17, 18, 19, 20, 37, and 38.



Item	Connector	Terminal	Connector	Terminal	Continuity
Rear bumper antenna	C: B81	1	A: M52	17	Yes
		2		18	
Front outside antenna (driver side)	B: D10	1		19	
		2		20	
Front outside antenna (passenger side)	B: D106	1		37	
		2		38	

3. Check continuity between each outside key antenna harness connector terminals 1, 2 and ground.

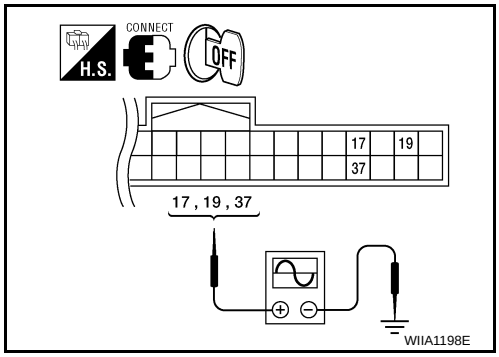
Item	Connector		Terminal	Continuity
Rear bumper antenna	C: B81	1	Ground	No
		2		
Front outside antenna (driver side)	B: D10	1		
		2		
Front outside antenna (passenger side)	B: D106	1		
		2		

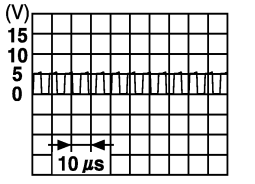
Is the inspection result normal?

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

3. CHECK OUTSIDE KEY ANTENNA POWER SUPPLY

1. Replace outside key antenna. (New antenna or other antenna)
2. Connect Intelligent Key unit connector and outside key antenna connector.
3. Check signal between Intelligent Key unit connector terminals 17, 19, 37 and ground with an oscilloscope.



Connector	Item	Terminals (+)	Terminals (-)	Condition	Signal (Reference value)
M52	Rear bumper	17	Ground	Request switch is pushed	
	Driver side	19			
	Pas-senger side	37			

SIIA1910J

Is the inspection result normal?

YES >> Replace outside key antenna.
NO >> Replace Intelligent Key unit. Refer to XX-XX, "*****".

STEERING LOCK SOLENOID

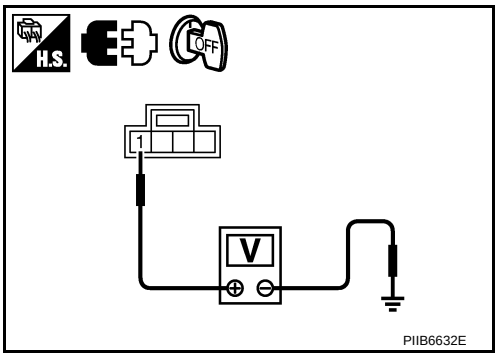
Diagnosis Procedure

INFOID:0000000001530365

1.CHECK STEERING LOCK SOLENOID POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect steering lock solenoid connector.
3. Check voltage between steering lock solenoid and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Steering lock solenoid	Terminal		
M6	1	Ground	Battery voltage



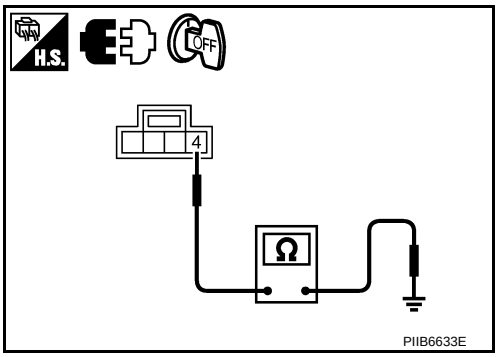
Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace steering lock solenoid power supply circuit.

2.CHECK STEERING LOCK SOLENOID GROUND CIRCUIT

Check continuity between steering lock solenoid and ground.

Steering lock solenoid connector	Terminal	Ground	Continuity
M6	4		Yes



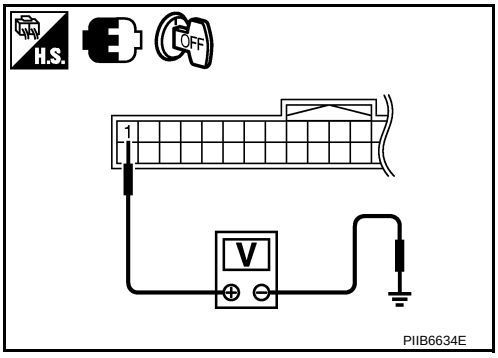
Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 6.

3.CHECK INTELLIGENT KEY UNIT OUTPUT SIGNAL

1. Connect steering lock solenoid connector.
2. Check voltage between Intelligent Key unit and ground.

Terminals			Voltage (V) (Approx.)
(+)		(–)	
Intelligent Key unit connector	Terminal		
M52	1	Ground	5

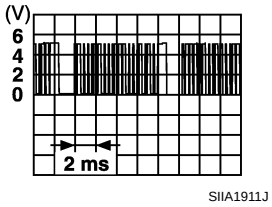


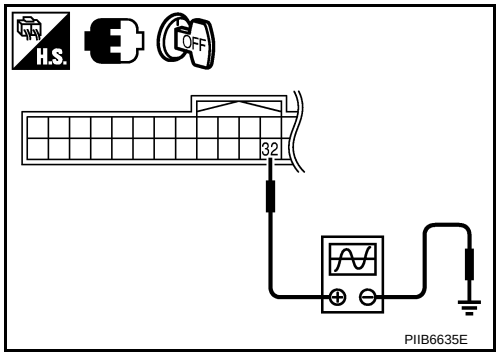
Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace Intelligent Key unit. Refer to SEC-79, "Removal and Installation".

4.CHECK STEERING LOCK COMMUNICATION SIGNAL

Check signal between Intelligent Key unit and ground with oscilloscope.

Terminals			Condition of key switch	Voltage (V) (Approx.)
(+)		(–)		
Intelligent Key unit connector	Terminal			
M52	32	Ground	Ignition switch is pressed, when Intelligent Key is into the vehicle.	 SIIA1911J
			Other than above	5



PIIB6635E

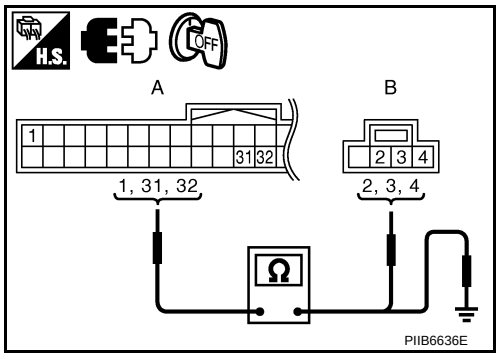
Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace Intelligent Key unit. Refer to SEC-79, "Removal and Installation".

5. CHECK STEERING LOCK SOLENOID COMMUNICATION CIRCUIT

1. Disconnect Intelligent Key unit and steering lock solenoid connectors.
2. Check continuity between Intelligent Key unit and steering lock solenoid.

A		B		Continuity
Intelligent Key unit connector	Terminal	Steering lock solenoid connector	Terminal	
M52	1	M6	2	Yes
	31		4	
	32		3	



PIIB6636E

3. Check continuity between steering lock solenoid and ground.

A		Ground	Continuity
Intelligent Key unit connector	Terminal		
M52	1		No
	31		
	32		

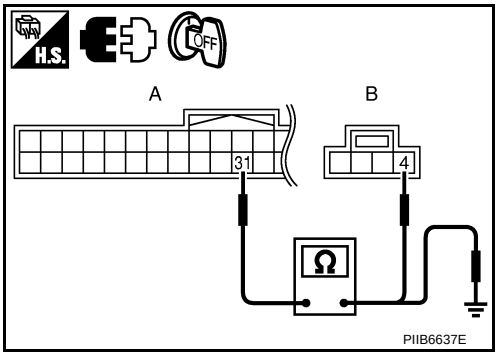
Is the inspection result normal?

YES >> Replace steering lock solenoid.
NO >> Repair or replace harness between steering lock solenoid and Intelligent Key unit.

6. CHECK STEERING LOCK SOLENOID GROUND CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit and steering lock solenoid.

A		B		Continuity
Intelligent Key unit connector	Terminal	Steering lock solenoid connector	Terminal	
M52	31	M6	4	Yes



3. Check continuity between steering lock solenoid connector and ground.

A		Ground	Continuity
Intelligent Key unit connector	Terminal		
M52	31		No

Is the inspection result normal?

YES >> Check the following.
- Intelligent Key unit ground circuit.
- Intelligent Key unit.

NO >> Repair or replace harness between steering lock solenoid and Intelligent Key unit.

KEY INTERLOCK SOLENOID (M/T)

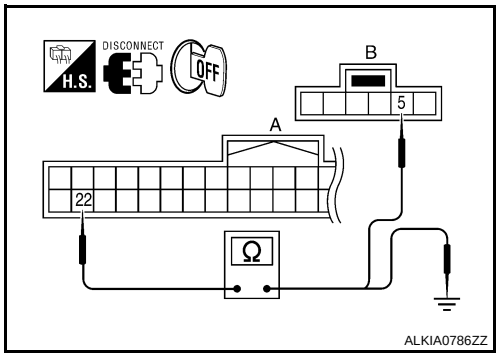
Diagnosis Procedure

INFOID:0000000001530366

1.CHECK INTERLOCK SOLENOID POWER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit and key switch and ignition knob switch connector.
3. Check continuity between Intelligent Key unit connector M52 (A) terminal 22 and key switch and ignition knob switch connector M32 (B) terminal 5.

A		B		Continuity
Intelligent Key unit connector	Terminal	Key switch and ignition knob switch connector	Terminal	
M52	22	M32	5	Yes



4. Check continuity between Intelligent Key unit connector (A) terminal 22 and ground.

A		Ground	Continuity
Intelligent Key unit connector	Terminal		
M52	22		No

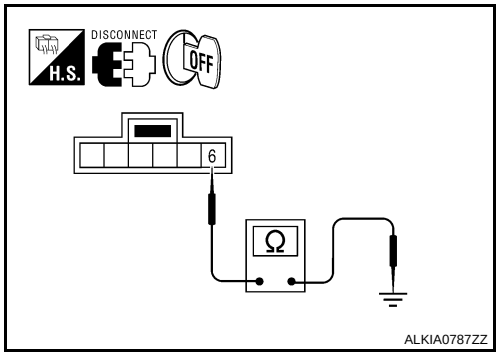
OK or NG

OK >> GO TO 2.
NG >> Repair or replace harness between Intelligent Key unit and key switch and ignition knob switch.

2.CHECK INTERLOCK SOLENOID GROUND CIRCUIT

Check continuity between key switch and ignition knob switch connector M32 terminal 6 and ground.

Key switch and ignition knob switch connector	Terminal	Ground	Continuity
M32	6		Yes



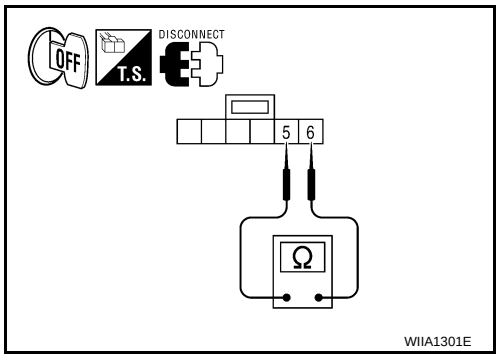
OK or NG

OK >> GO TO 3.
NG >> Repair or replace harness.

3.CHECK INTELLIGENT KEY SOLENOID RESISTANCE

Check resistance between key switch and ignition knob switch terminals 5 and 6.

Key switch and ignition knob switch	Terminal	Terminal	Resistance
	5	6	1-10 Ω



OK or NG

OK >> Key switch and ignition knob switch is OK.
NG >> Replace key switch and ignition knob switch.

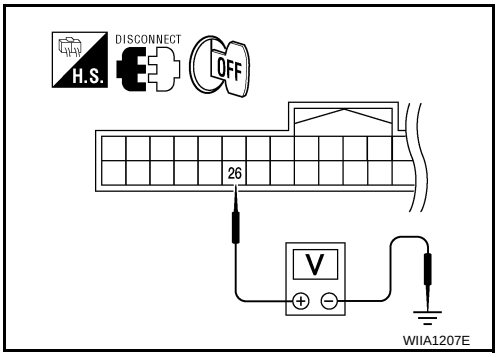
STOP LAMP SWITCH (A/T)

Diagnosis Procedure

INFOID:0000000001530367

1.CHECK STOP LAMP SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit connector.
3. Check voltage between Intelligent Key unit harness connector M52 terminal 26 and ground.



WIIA1207E

Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M52	26	Ground	Brake pedal depressed	Battery voltage
			Brake pedal released	0

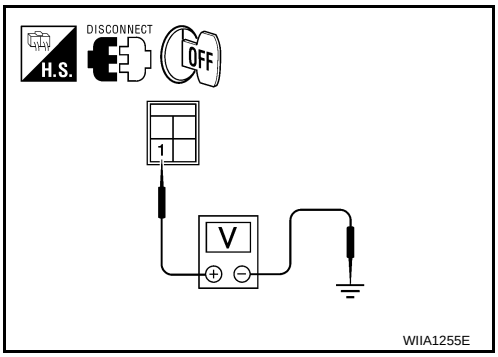
Is the inspection result normal?

YES >> Stop lamp switch is OK.
NO >> GO TO 2.

2.CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

1. Disconnect stop lamp switch connector.
2. Check voltage between stop lamp switch harness connector E13 terminal 1 and ground.

1 - Ground : Battery voltage



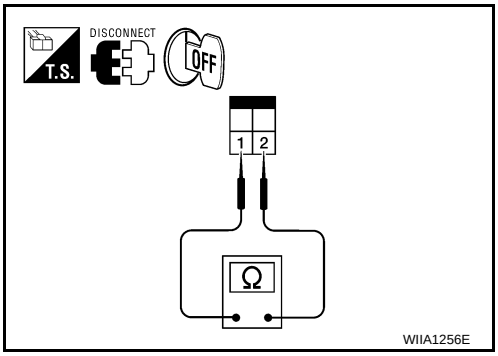
WIIA1255E

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between stop lamp switch power supply circuit and fuse.

3.CHECK STOP LAMP SWITCH OPERATION

Check continuity between stop lamp switch terminals 1 and 2.



WIIA1256E

Component	Terminals		Condition	Continuity
Stop lamp switch	1	2	Brake pedal depressed	Yes
			Brake pedal released	No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace stop lamp switch.

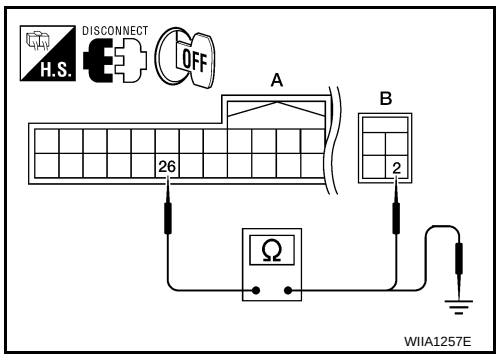
4.CHECK STOP LAMP SWITCH CIRCUIT

1. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 26 and stop lamp switch harness connector (B) E13 terminal 2.

26 - 2 : Continuity should exist.

2. Check continuity between Intelligent Key unit harness connector M52 terminal 26 and ground.

26 - Ground : Continuity should not exist.



Is the inspection result normal?

YES >> Check condition of harness and connector.
NO >> Repair or replace harness.

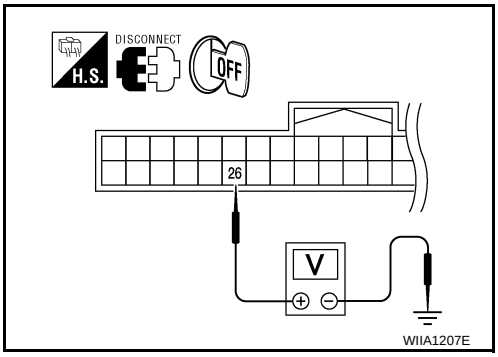
STOP LAMP SWITCH (M/T)

Diagnosis Procedure

INFOID:0000000001530368

1.CHECK STOP LAMP SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key unit connector.
3. Check voltage between Intelligent Key unit harness connector M52 terminal 26 and ground.



Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M52	26	Ground	Brake pedal depressed	Battery voltage
			Brake pedal released	0

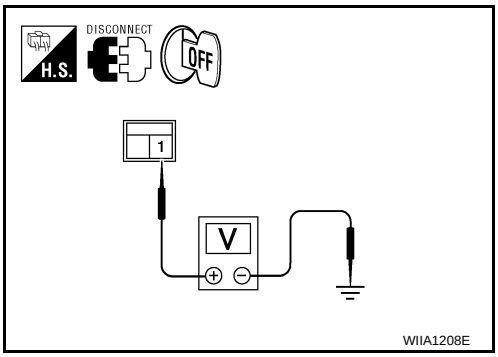
Is the inspection result normal?

YES >> Stop lamp switch is OK.
NO >> GO TO 2.

2.CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

1. Disconnect stop lamp switch connector.
2. Check voltage between stop lamp switch harness connector M203 terminal 1 and ground.

1 - Ground : Battery voltage

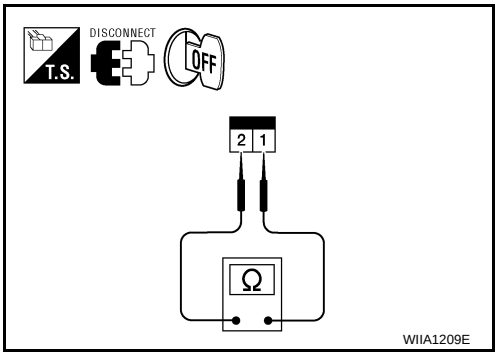


Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between stop lamp switch power supply circuit and fuse.

3.CHECK STOP LAMP SWITCH OPERATION

Check continuity between stop lamp switch terminals 1 and 2.



Component	Terminals		Condition	Continuity
Stop lamp switch	1	2	Brake pedal depressed	Yes
			Brake pedal released	No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace stop lamp switch.

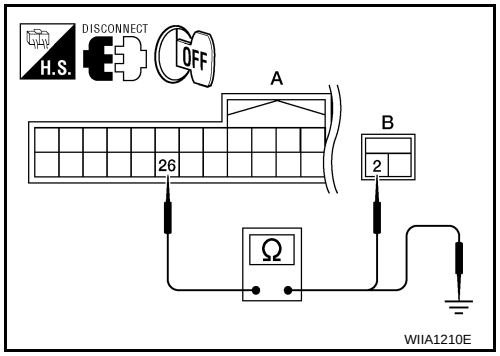
4.CHECK STOP LAMP SWITCH CIRCUIT

1. Check continuity between Intelligent Key unit harness connector (A) M52 terminal 26 and stop lamp switch harness connector (B) M203 terminal 2.

26 - 2 : Continuity should exist.

2. Check continuity between Intelligent Key unit harness connector M52 terminal 26 and ground.

26 - Ground : Continuity should not exist.



Is the inspection result normal?

YES >> Check condition of harness and connector.
NO >> Repair or replace harness.

INTELLIGENT KEY WARNING BUZZER

Description

INFOID:0000000001530361

Answers back and warns about an inappropriate operation. Hatchback vehicles are equipped with a warning buzzer located inside the driver door. In addition to this buzzer, the sedan vehicles are equipped with a second buzzer located in the trunk area.

Component Function Check

INFOID:0000000001530362

1.CHECK FUNCTION

With CONSULT-III

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

Does the warning buzzer(s) sound?

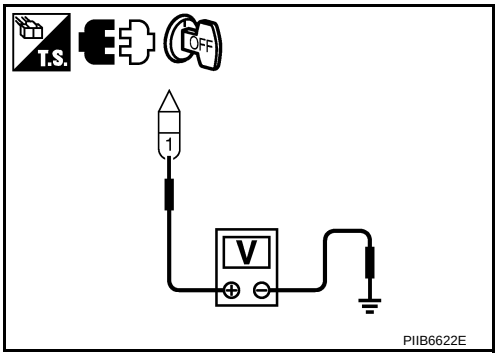
YES >> Intelligent Key warning buzzer(s) is OK.
NO >> Refer to DLK-372, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530363

1.CHECK INTELLIGENT KEY WARNING BUZZER(S) 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.



Terminal			Voltage (V) (Approx.)
(+)		(–)	
Intelligent Key warning buzzer connector	Terminal		
D6 (driver door)	1	Ground	Battery voltage
B82 (trunk)*			

*: Sedan only

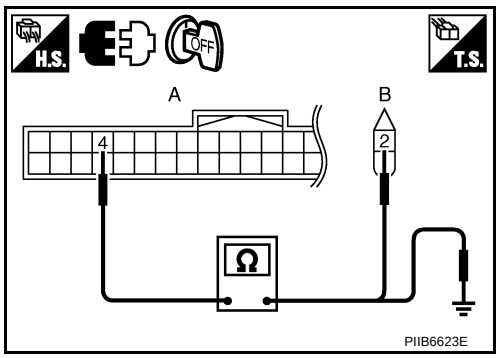
Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace Intelligent Key warning buzzer power supply circuit.

2.CHECK HARNESS CONTINUITY

NOTE:
For sedan vehicles, ensure both Intelligent Key warning buzzers are disconnected before proceeding.
1. Disconnect Intelligent Key unit connector.

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



Intelligent Key unit connector	Terminal	Intelligent Key warning buzzer connector		Terminal	Continuity
M52	4	Driver door	D6	2	Yes
		Trunk*	B82		

*: Sedan only

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

Intelligent Key unit connector	Terminal	Ground	Continuity
M52	4		No

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness between Intelligent Key warning buzzer and Intelligent Key unit.

3.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-373, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace Intelligent Key warning buzzer. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

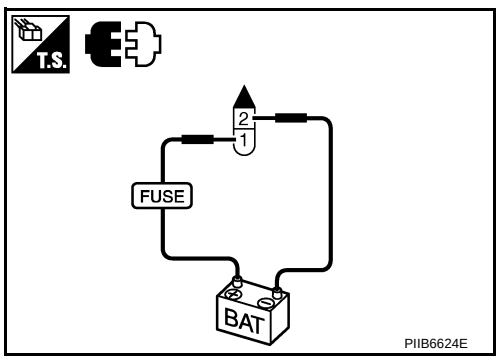
>> INSPECTION END

Component Inspection

INFOID:0000000001530364

1.CHECK INTELLIGENT KEY WARNING BUZZER

Connect battery power supply to Intelligent Key warning buzzer terminals 1 and 2, and check the operation.



Intelligent Key warning buzzer connector	Terminal		Operation
	(+)	(-)	
D6 (driver door)	1	2	Buzzer sounds
B82 (trunk)*			

*: Sedan only

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.
NO >> Replace Intelligent Key warning buzzer. Refer to XX-XX, "*****".

BUZZER (COMBINATION METER)

Description

INFOID:0000000001396846

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000001396847

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INSIDE BUZZER” in “Active Test”.

Test item	Condition	
INSIDE BUZZER	:TAKE OUT	Take away warning chime sounds
	:KNOB	Ignition knob switch warning chime sounds
	:KEY	Key warning chime sounds

Is the inspection result normal?

Yes >> Warning buzzer in combination meter is OK.
No >> Refer to DLK-375, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001396848

1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to XX-XX, "*****".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

KEY WARNING LAMP

Description

INFOID:0000000001530369

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000001530370

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INDICATOR” in “Active Test” mode.

Test item	Condition	
INDICATOR	:BLUE ON	Key warning lamp (green) illuminates
	:RED ON	Key warning lamp (red) illuminates
	:BLUE IND	Key warning lamp (green) flashes
	:RED IND	Key warning lamp (red) flashes

Is the inspection result normal?

Yes >> Key warning lamp in combination meter is OK.
No >> Refer to DLK-376, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530371

1.CHECK KEY WARNING LAMP CIRCUIT

Refer to XX-XX, "*****".

Is the inspection result normal?

Yes >> GO TO 2.
No >> Repair or replace key warning lamp circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

LOCK WARNING LAMP

Description

INFOID:0000000001530372

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000001530373

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INDICATOR” in “Active Test” mode.

Test item	Condition	
INDICATOR	:KNOB ON	Lock warning lamp illuminates
	:KNOB IND	Lock warning lamp flashes

Is the inspection result normal?

Yes >> Lock warning lamp in combination meter is OK.
No >> Refer to DLK-377, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530374

1.CHECK COMBINATION METER OPERATION

Check the operation of the combination meter.

Does the combination meter operate normally?

Yes >> GO TO 2.
No >> Refer to MWI-3, "Work Flow".

2.CHECK LOCK WARNING LAMP CIRCUIT

1. Engage the parking brake.
2. Turn ignition switch ON.
3. Depress the brake pedal and take the shift lever out of park.
4. With the shift lever out of park, attempt to turn ignition switch to the LOCK position.

Does the "LOCK" indicator illuminate?

Yes >> GO TO 3.
No >> Refer to MWI-3, "Work Flow" in combination meter to diagnose the park/neutral position indicator circuit.

3.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

HAZARD WARNING LAMPS

Description

INFOID:0000000001530375

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

Component Function Check

INFOID:0000000001530376

1.CHECK FUNCTION

With CONSULT-III

Check hazard warning lamp “FLASHER” in “Active Test” mode.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-378, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530377

1.CHECK HAZARD SWITCH CIRCUIT

Use the hazard warning switch circuit.

Do the hazard warning lamps operate normally?

YES >> GO TO 2.
NO >> Repair hazard warning lamps. Refer to BCS-9, "System Diagram".

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

VEHICLE SPEED SIGNAL CIRCUIT

Description

INFOID:0000000001530378

Displays the vehicle speed signal received from combination meter as a numerical value (km/h).

Component Function Check

INFOID:0000000001530379

1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 12 km/h (7 MPH).

Is the inspection result normal?

YES >> Vehicle speed signal circuit is OK.
NO >> Refer to DLK-379, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530380

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal “VEHICLE SPEED” in “Data Monitor” mode.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace vehicle speed signal circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

INTELLIGENT KEY BATTERY AND FUNCTION

Description

INFOID:0000000001530384

The following functions are available when having and carrying the Intelligent Key.
- Door lock/unlock
- Back door open (hatchback)
- Trunk lid release (sedan)
- Engine start

Remote control entry function is available when operating the remote buttons.

Component Function Check

INFOID:0000000001530385

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 the Intelligent Key.

Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Refer to DLK-380, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530386

1.CHECK INTELLIGENT KEY FUNCTION

Do doors lock and unlock when using the Intelligent Key buttons?

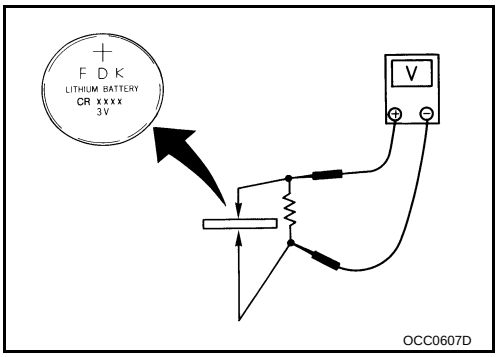
YES or NO?

YES >> Intelligent Key is OK.
NO >> GO TO 2.

2.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.
NO >> Replace Intelligent Key battery.

Component Inspection

INFOID:0000000001530387

For battery removal and installation, refer to XX-XX, "*****".

Special Repair Requirement

INFOID:0000000001530388

Refer to CONSULT-III Operation Manual.

ECU DIAGNOSIS

INTELLIGENT KEY UNIT

Reference Value

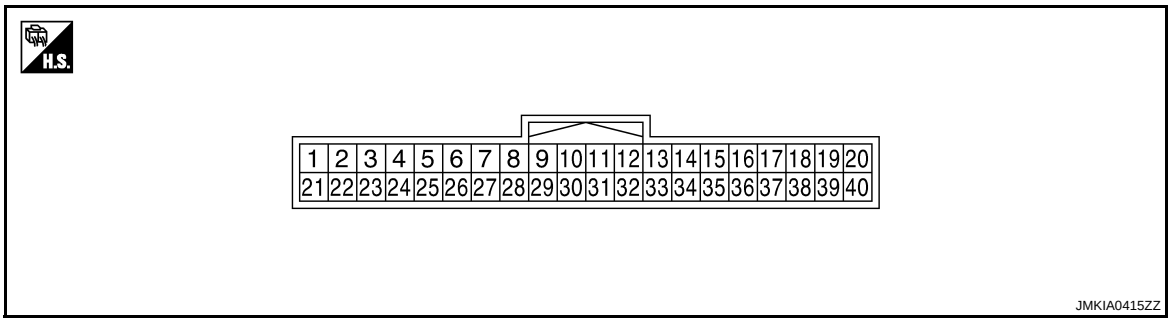
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VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

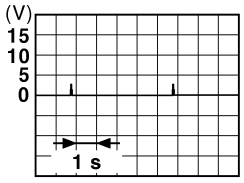
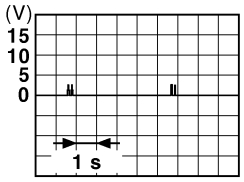
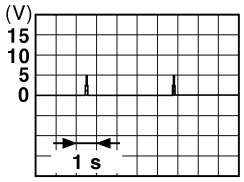
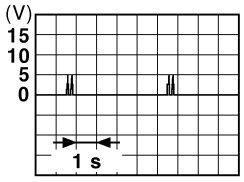
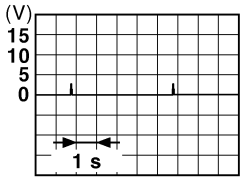
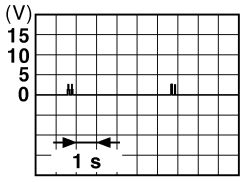
Monitor Item	Condition		Value/Status
PUSH SW	Ignition knob	Release	OFF
		Press	ON
KEY ON SW	Mechanical key	Removed	OFF
		Inserted	ON
DR REQ SW	Door request switch (driver)	Release	OFF
		Press	ON
AS REQ SW	Door request switch (passenger)	Release	OFF
		Press	ON
BD/TR REQ SW	Door request switch (back door)	Release	OFF
		Press	ON
IGN SW	Ignition switch	Other than ON position	OFF
		ON position	ON
ACC SW	Ignition switch	Other than ACC or ON position	OFF
		ACC or ON position	ON
STOP LAMP SW	Brake pedal	Press	OFF
		Release	ON
DOOR LOCK SIG	Lock button of Intelligent Key	Release	OFF
		Press	ON
DOOR UNLOCK SIG	Unlock button of Intelligent Key	Release	OFF
		Press	ON
DOOR SW DR	Door (driver side)	Close	OFF
		Open	ON
DOOR SW AS	Door (passenger side)	Close	OFF
		Open	ON
DOOR SW RR	Door (rear RH)	Close	OFF
		Open	ON
DOOR SW RL	Door (rear LH)	Close	OFF
		Open	ON
DOOR BK SW	Back door	Close	OFF
		Open	ON
VEHICLE SPEED	While driving		Equivalent to speedometer reading

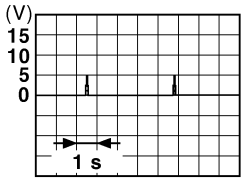
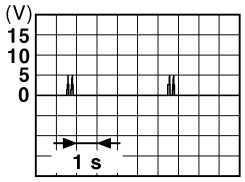
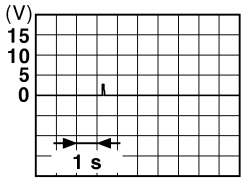
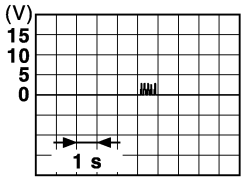
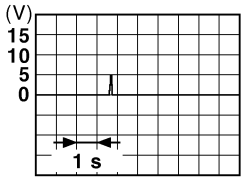
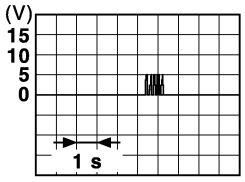
TERMINAL LAYOUT

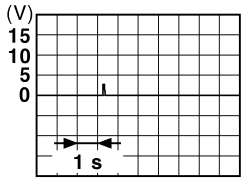
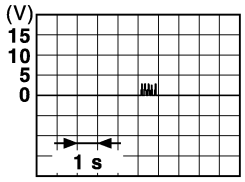
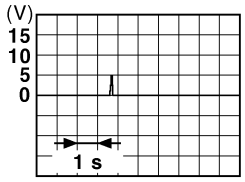
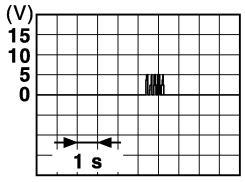


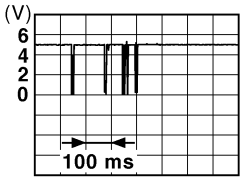
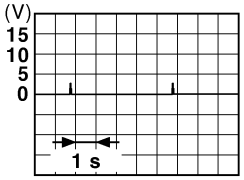
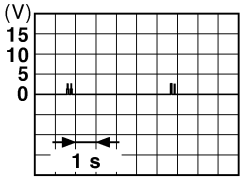
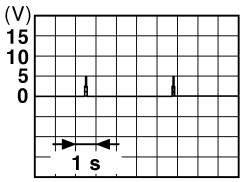
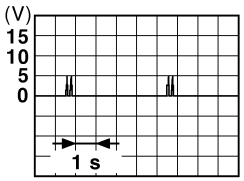
PHYSICAL VALUES

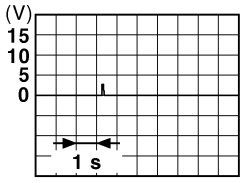
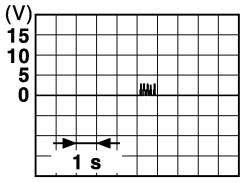
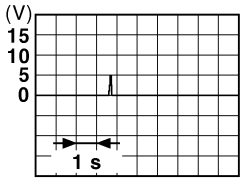
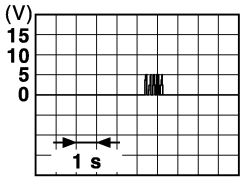
Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
1	Ground	R	Steering lock unit power supply	Output	—		5
2	Ground	L	CAN - H	Input/ Output	—		—
3	Ground	P	CAN - L	Input/ Output	—		—
4	Ground	O	Intelligent Key warning buzzer	Output	Intelligent Key warning buzzer	Sounding	0
						Not sounding	Battery voltage
5	Ground	G	Front door request switch (driver side)	Input	Front door request switch (driver side)	ON (Pressed)	0
						OFF (Released)	5
6	Ground	Y	Ignition switch power supply	Input	Ignition switch	OFF or ACC	0
						ON or START	Battery voltage
7	Ground	LG	Key switch	Input	When ignition key is inserted into ignition key cylinder		Battery voltage
					When ignition key is not inserted into ignition key cylinder		0
8	Ground	W	Imm-	Input	—		—
9	Ground	O	Imm-	Output	—		—
10	Ground	V	Battery power supply	Input	Ignition switch OFF		Battery voltage
11	Ground	SB	Battery power supply	Input	Ignition switch OFF		Battery voltage
12	Ground	B	Ground	—	Ignition switch ON		0

Terminal No. +	Terminal No. –	Wire color	Description: Signal name	Description: Input/ Output	Condition		Value [V] (Approx.)
13	Ground	R	Inside key antenna (+) (rear floor)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ
14	Ground	G	Inside key antenna (-) (rear floor)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ
15	Ground	LG	Instrument panel antenna (+)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ

Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
16	Ground	V	Instrument panel antenna (-)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ
17	Ground	W	Outside key antenna (+) (rear bumper)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0514ZZ
18	Ground	B	Outside key antenna (-) (rear bumper)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ

Terminal No. +	Terminal No. –	Wire color	Description Signal name	Description Input/ Output	Condition		Value [V] (Approx.)
19	Ground	V	Outside key antenna (+) (driver side)	Output	When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0514ZZ
20	Ground	P	Outside key antenna (-) (driver side)	Output	When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ
22*1	Ground	BR	Key lock solenoid	Output	Key lock solenoid	LOCK*2	Battery voltage
						UNLOCK*2	0
25	Ground	L	Front door request switch (passenger side)	Input	Front door request switch (passenger side)	ON (Pressed)	0
						OFF (Released)	5
26	Ground	SB	Stop lamp switch	Input	Depress the brake pedal		Battery voltage
					Release the brake pedal		0
27	Ground	W	Ignition knob switch	Input	Ignition switch OFF	When ignition knob switch is pressed	Battery voltage
						When ignition knob switch is released	0
28	Ground	Y	Door lock status switch	Input	Lock (ON)		5
					Unlock (OFF)		0
29*2	Ground	V	Back door request switch	Input	Back door request switch	ON (Pressed)	0
						OFF (Released)	5

Terminal No.		Wire color	Description		Condition		Value [V] (Approx.)
+	–		Signal name	Input/ Output			
29*3	Ground	V	Trunk opener request switch	Input	Trunk opener request switch	ON (Pressed)	0
						OFF (Released)	5
30	Ground	GR	Security indicator lamp	Output	Ignition switch OFF	When security indicator lamp is ON	0
						When security indicator lamp is OFF	Battery voltage
31	Ground	BR	Steering lock unit ground	—	—	—	0
32	Ground	GR	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	5
						LOCK or UNLOCK	 JMKIA0433ZZ
35	Ground	L	Front console antenna (+)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0393ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0391ZZ
36	Ground	P	Front console antenna (-)	Output	Ignition knob is pressed.	When Intelligent Key is in the antenna detection area	 JMKIA0392ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0390ZZ

Terminal No. +	Terminal No. –	Wire color	Description: Signal name	Description: Input/ Output	Condition		Value [V] (Approx.)
37	Ground	BR	Outside key antenna (+) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0397ZZ
						When Intelligent Key is in the antenna detection area	 JMKIA0514ZZ
38	Ground	Y	Outside key antenna (-) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0395ZZ
						When Intelligent Key is not in the antenna detection area	 JMKIA0515ZZ

*1:M/T models.

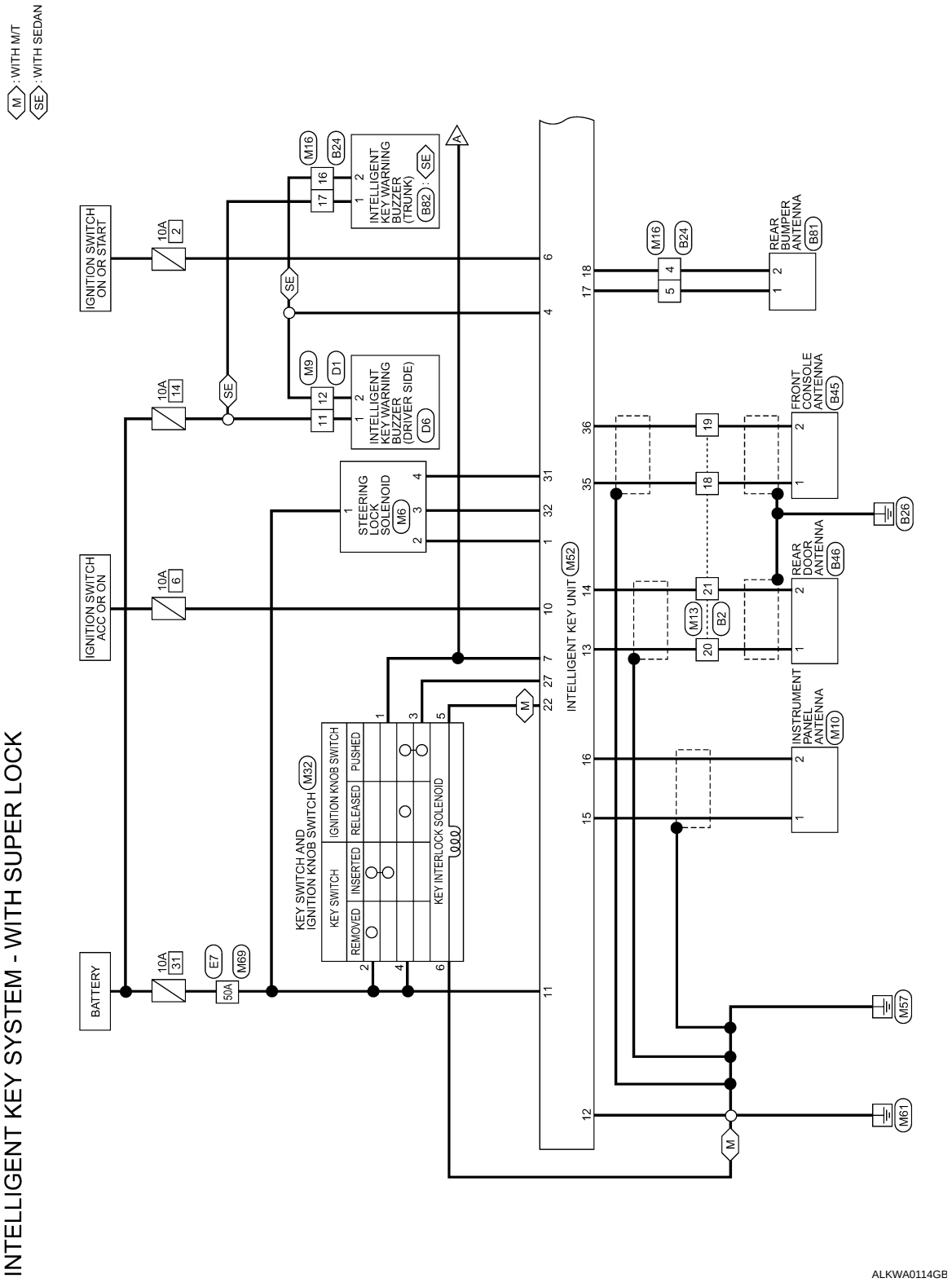
*2: Hatchback models.

*3: Sedan models.

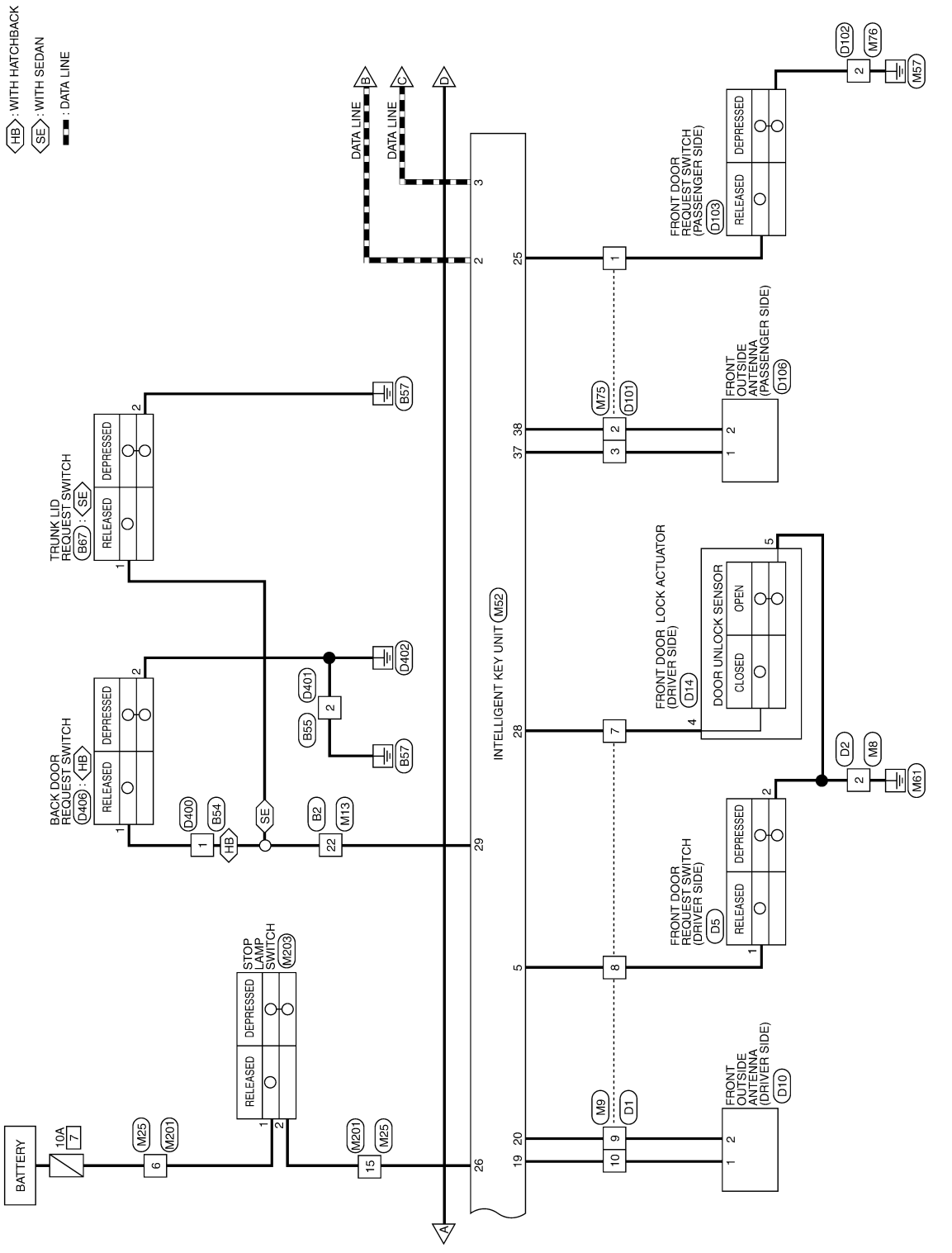
Wiring Diagram - INTELLIGENT KEY SYSTEM -

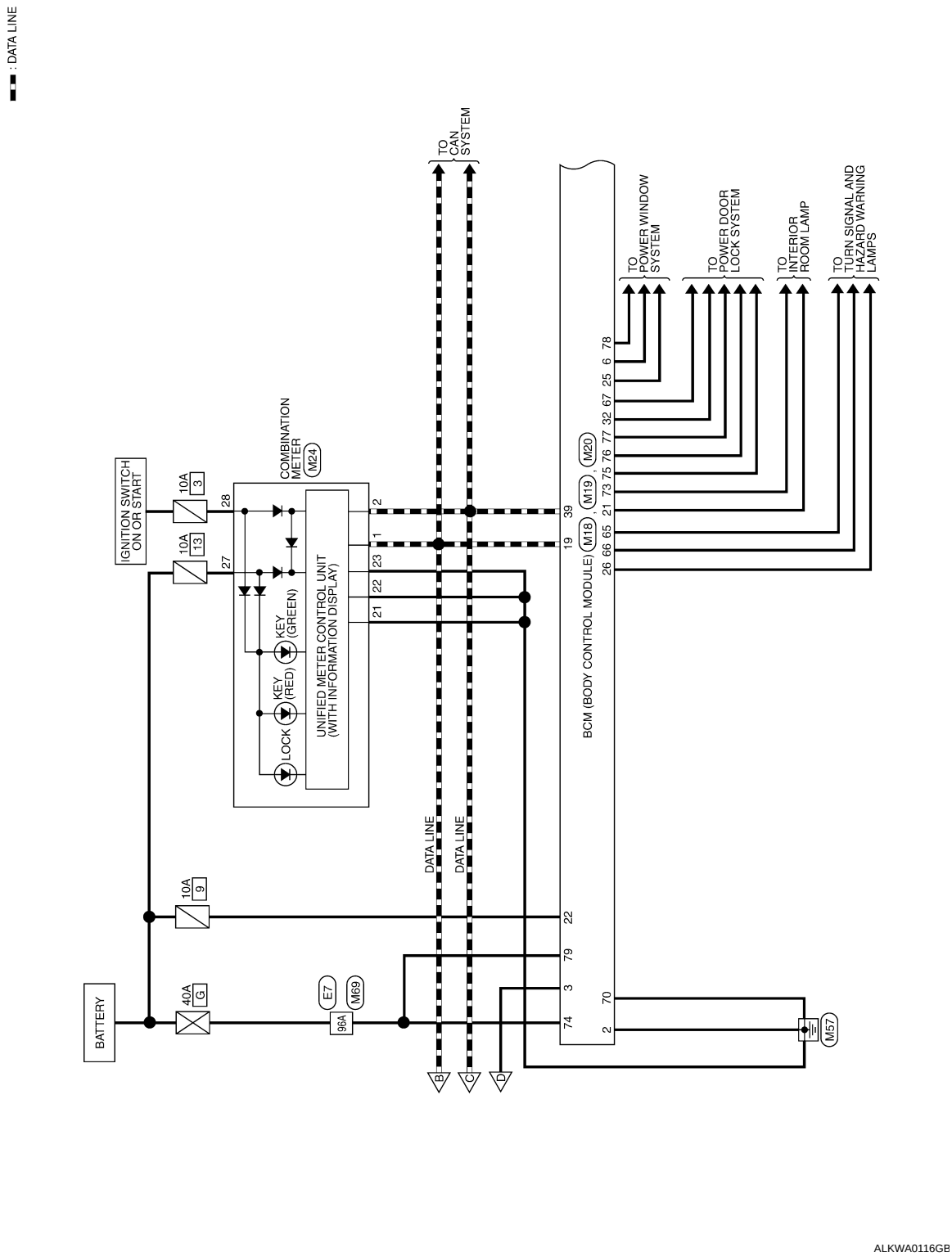
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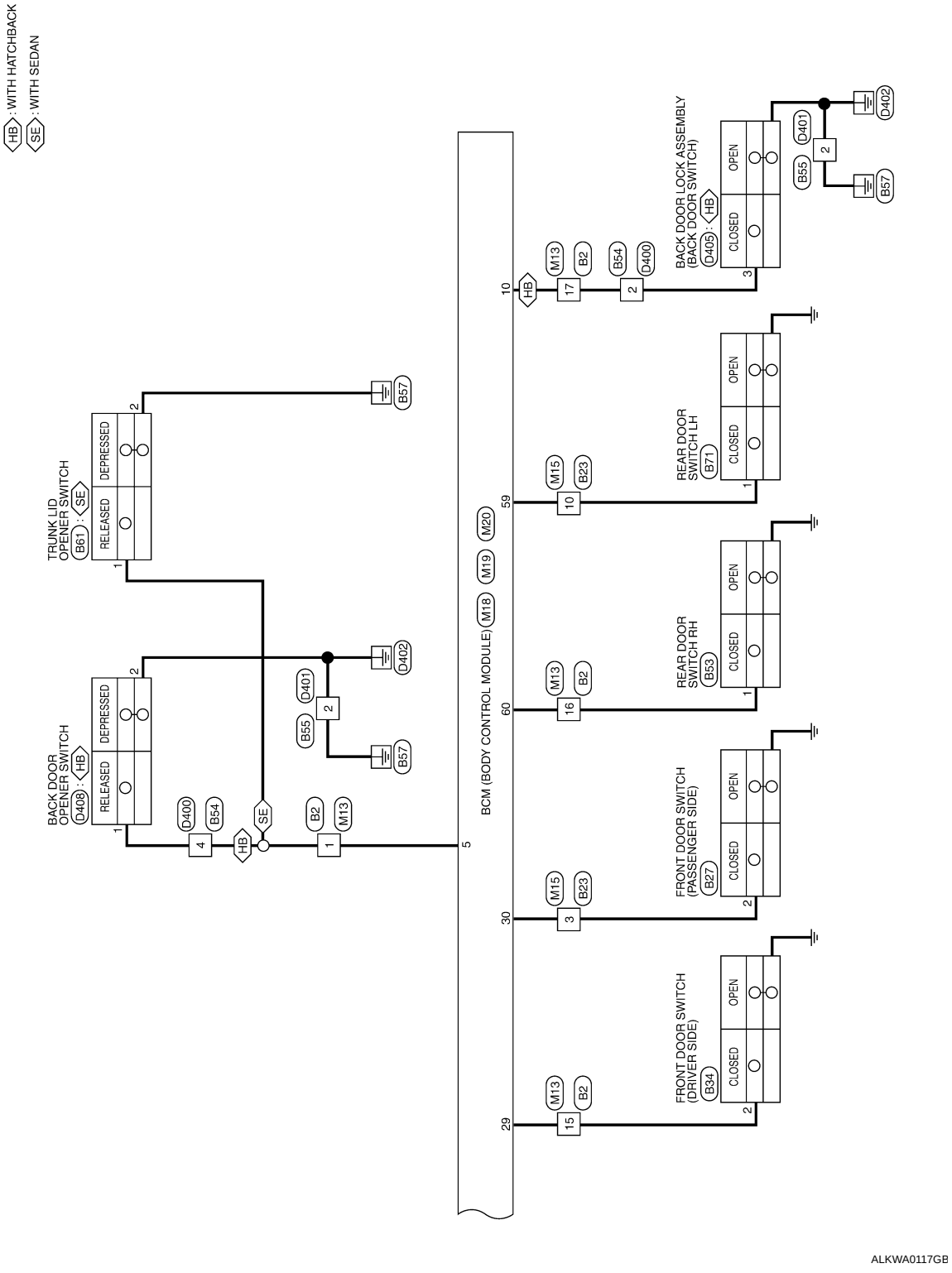
INTELLIGENT KEY SYSTEM - WITH SUPER LOCK



ALKWA0114GB

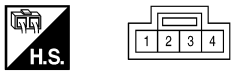

HB : WITH HATCHBACK
SE : WITH SEDAN
: DATA LINE
DATA LINE
DATA LINE
INTELLIGENT KEY UNIT M52
FRONT DOOR REQUEST SWITCH (PASSENGER SIDE) D103
FRONT OUTSIDE ANTENNA (PASSENGER SIDE) D106
FRONT DOOR LOCK ACTUATOR (DRIVER SIDE) D14
DOOR UNLOCK SENSOR
FRONT DOOR REQUEST SWITCH (DRIVER SIDE) D5
FRONT OUTSIDE ANTENNA (DRIVER SIDE) D10
TRUNK LID REQUEST SWITCH B67 : SE
BACK DOOR REQUEST SWITCH D406 : HB
STOP LAMP SWITCH M203
BATTERY
10A
DEPRESSED
RELEASED
OPEN
CLOSED
ALKWA0115GB


: DATA LINE
TO CAN SYSTEM
TO POWER WINDOW SYSTEM
TO POWER DOOR LOCK SYSTEM
TO INTERIOR ROOM LAMP
TO TURN SIGNAL AND HAZARD WARNING LAMPS
IGNITION SWITCH ON OR START
10A 3
10A 13
10A 9
40A G
BATTERY
COMBINATION METER M24
UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY)
KEY (GREEN)
KEY (RED)
LOCK
BCM (BODY CONTROL MODULE) M18, M19, M20
DATA LINE
DATA LINE
E7
M69
96A
E2
M57
B
C
D
ALKWA0116GB


HB : WITH HATCHBACK
SE : WITH SEDAN
BCM (BODY CONTROL MODULE)
M18
M19
M20
5
29
30
59
60
10
TRUNK LID OPENER SWITCH
B61 : SE
RELEASED
DEPRESSED
BACK DOOR OPENER SWITCH
D408 : HB
RELEASED
DEPRESSED
D400
B54
4
HB
SE
B2
M13
1
D401
B55
2
D402
B57
M15
B23
10
REAR DOOR SWITCH LH
B71
CLOSED
OPEN
M13
B2
16
REAR DOOR SWITCH RH
B53
CLOSED
OPEN
M15
B23
3
FRONT DOOR SWITCH (PASSENGER SIDE)
B27
CLOSED
OPEN
M13
B2
15
FRONT DOOR SWITCH (DRIVER SIDE)
B34
CLOSED
OPEN
M13
B2
17
B54
D400
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH)
D405 : HB
CLOSED
OPEN
D401
B55
D402
B57
ALKWA0117GB

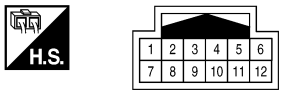
INTELLIGENT KEY SYSTEM WITH SUPER LOCK

Connector No.	M6
Connector Name	STEERING LOCK SOLENOID
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	P	B+
2	R	5V+
3	GR	SIGNAL
4	BR	GND

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE



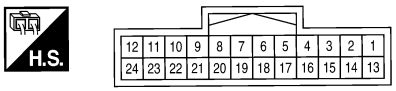
Terminal No.	Color of Wire	Signal Name
7	Y	–
8	G	–
9	P	–
10	V	–
11	LG	–
12	O	–

Connector No.	M10
Connector Name	INSTRUMENT PANEL ANTENNA
Connector Color	GRAY



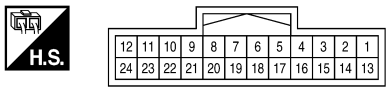
Terminal No.	Color of Wire	Signal Name
1	LG	–
2	V	–

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE



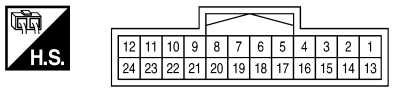
Terminal No.	Color of Wire	Signal Name
15	SB	–
16	GR	–
18	L	–
19	P	–
20	R	–
21	G	–
22	V	–

Connector No.	M15 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	BR	–
10	O	–

Connector No.	M16 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	B	–
5	W	–
16	O	–
17	LG	–

ALKIA1144GB

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

H.S.

32	51	50	49	48	47	46	45	44	43	42	41
64	63	62	61	60	59	58	57	56	55	54	53

Terminal No.	Color of Wire	Signal Name
59	O	DOOR SW RL
60	GR	DOOR SW DR

Terminal No.	Color of Wire	Signal Name
19	L	CAN-H
21	BR	LOGICAL LIGHTING CONTROL
22	P	BATT SAFETY LINE
25	L	CENTRAL UNLOCK SW
26	L	HAZARD SW
29	BR	DOOR SW DR
30	SB	DOOR SW AS
32	LG	DOOR LOCK STATUS INDICATOR/ALARM TX
39	P	CAN-L

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	L	–
15	R	–

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
21	B	GND 1(ILL)
22	B	GND2 (POWER)
23	B	GND3
27	G	BAT
28	SB	IGN

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND
3	G	KEY IN SW
6	GR	CENTRAL LOCK SW
10	Y	DOOR SW BACK

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

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

ALKIA1145GB

Connector No.	M32 (AUTOMATIC TRANS)
Connector Name	KEY SWITCH AND IGNITION KNOB SWITCH
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	L	–
3	W	–
4	P	–

Connector No.	M32 (MANUAL TRANS)
Connector Name	KEY SWITCH AND IGNITION KNOB SWITCH
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	L	–
3	W	–
4	P	–
5	B	–
6	BR	–

Connector No.	M52
Connector Name	INTELLIGENT KEY UNIT
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	R	5V
2	L	CAN-H
3	P	CAN-L
4	O	BUZZER DR O/P
7	LG	KEY SW I/P
8	W	IMM ANT RX
10	V	ACC SW I/P
11	SB	BATT
12	B	GND
13	R	LUGG(+)
14	G	LUGG(-)
15	LG	ROOM ANT 1(+)
16	V	ROOM ANT 1(-)
17	W	RR OUTSIDE ANT (+)
18	B	RR OUTSIDE ANT (-)
19	V	DR ANT(+)
20	P	DR ANT(-)
22	BR	SOL UNLOCK
25	L	AS LOCK/UNLOCK SW
26	SB	STOP LAMP SW
27	W	PUSH SW I/P
28	Y	DR LOCK STATE SW I/P
29	V	TRUNK LOCK/ UNLOCK SW
31	BR	GND
32	GR	–
35	L	ROOM ANT 3(+)
36	P	ROOM ANT 3(-)
37	BR	AS ANT (+)
38	Y	AS ANT (-)

ALKIA1146GB

Connector No.	M75
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4

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

Terminal No.	Color of Wire	Signal Name
7A	L	–
50A	P	–
84A	L	–
96A	Y	–

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Connector No.	M203 (AUTOMATIC TRANS)
Connector Name	STOP LAMP SWITCH
Connector Color	WHITE

H.S.

3	4
1	2

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

Connector No.	M201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
6	L	–
15	R	–

Connector No.	M76 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	–

ALKIA1147GB

Connector No.	M203 (MANUAL TRANS)
Connector Name	STOP LAMP SWITCH
Connector Color	BLACK

H.S.

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

Connector No.	M203 (DIESEL)
Connector Name	STOP LAMP SWITCH
Connector Color	WHITE

H.S.

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

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
7A	L	–
50A	Y	–
84A	??	–
96A	Y	–

Connector No.	E13 (AUTOMATIC TRANS)
Connector Name	STOP LAMP SWITCH
Connector Color	WHITE

H.S.

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

Connector No.	E13 (MANUAL TRANS)
Connector Name	STOP LAMP SWITCH
Connector Color	BLACK

H.S.

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

Connector No.	E13 (DIESEL)
Connector Name	STOP LAMP SWITCH
Connector Color	WHITE

H.S.

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

ALKIA1148GB

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
15	SB	–
16	GR	–
18	L	–
19	R	–
20	R	–
21	G	–
22	Y	–

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	LG	–
10	W	–

Connector No.	B24 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
4	R	–
5	L	–
16	GR	–
17	Y	–

Connector No.	B27 (RHD)
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Color	WHITE

H.S.

◇	1
	2
	3

Terminal No.	Color of Wire	Signal Name
2	LG	–

Connector No.	B34 (RHD)
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Color	WHITE

H.S.

◇	1
	2
	3

Terminal No.	Color of Wire	Signal Name
2	SB	–

Connector No.	B45
Connector Name	FRONT CONSOLE ANTENNA
Connector Color	GRAY

H.S.

2	1

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

ALKIA1149GB

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

H.S.

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

Connector No.	B53
Connector Name	REAR DOOR SWITH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	GR	–

Connector No.	B67
Connector Name	TRUNK LID REQUEST SWITCH
Connector Color	GRAY

H.S.

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

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–

Connector No.	B81
Connector Name	REAR BUMPER ANTENNA
Connector Color	GRAY

H.S.

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

Connector No.	B82
Connector Name	INTELLIGENT KEY WARNING BUZZER (TRUNK)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	GR	–

ALKIA1150GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
7	Y	–
8	W	–
9	P	–
10	V	–
11	LG	–
12	BR	–

Connector No.	D5
Connector Name	FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	SW(+)
2	B	SW(-)

Connector No.	D6
Connector Name	INTELLIGENT KEY WARNING BUZZER (DRIVER SIDE)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	BR	–

Connector No.	D10
Connector Name	FRONT OUTSIDE ANTENNA (DRIVER SIDE)
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	V	ANT(+)
2	P	ANT(-)

Connector No.	D14 (RHD)
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
4	V	??
5	B	??

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	P	–
3	O	–

ALKIA1151GB

Fail Safe

INFOID:0000000001530546

Display contents of CONSULT-III	Fail-safe	Cancellation
B2013: STRG COMM 1	• Inhibits steering look unlocking	Erase DTC
B2552: INTELLIGENT KEY	• Inhibits steering look unlocking • Inhibits engine cranking (BCM) • Fuel cut (ECM)	Erase DTC
B2590: NATS MALFUNCTION	• Inhibits steering look unlocking • Inhibits engine cranking (BCM) • Fuel cut (ECM)	Erase DTC

DTC Inspection Priority Chart

INFOID:0000000001530547

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

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN) • B2552: INTELIGENT KEY
2	• B2013: STRG COMM 1 • B2590: NATS MALFUNCTION

DTC Index

INFOID:0000000001530548

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	Detection condition	Fail-safe	Diagnosis
No DTC is detected. further testing may be required.	—	—	—
U1000: CAN COMM CIRCUIT	Intelligent Key unit cannot receive CAN communication signal continuously for 2 seconds or more.	—	Check CAN communication system. Refer to DLK-56
U1010: CONTROL UNIT (CAN)	Intelligent Key unit detects internal CAN communication circuit malfunction.	—	Replace Intelligent Key unit.
B2013: STRG COMM 1	The ID verification result between Intelligent key unit and steering lock unit are NG. Or Intelligent Key unit cannot communicate with steering lock unit.	×	Perform steering lock unit ID registration with CONSULT-III
B2552: INTELLIGENT KEY	Intelligent Key unit internal malfunction.	×	Replace Intelligent Key unit.
B2590: NATS MALFUNCTION	The ID verification result between Intelligent key unit and BCM are NG. Or Intelligent Key unit cannot communicate with BCM.	×	Check NATS Refer to XX-XX, "*****"

BCM (BODY CONTROL MODULE)

Reference Value

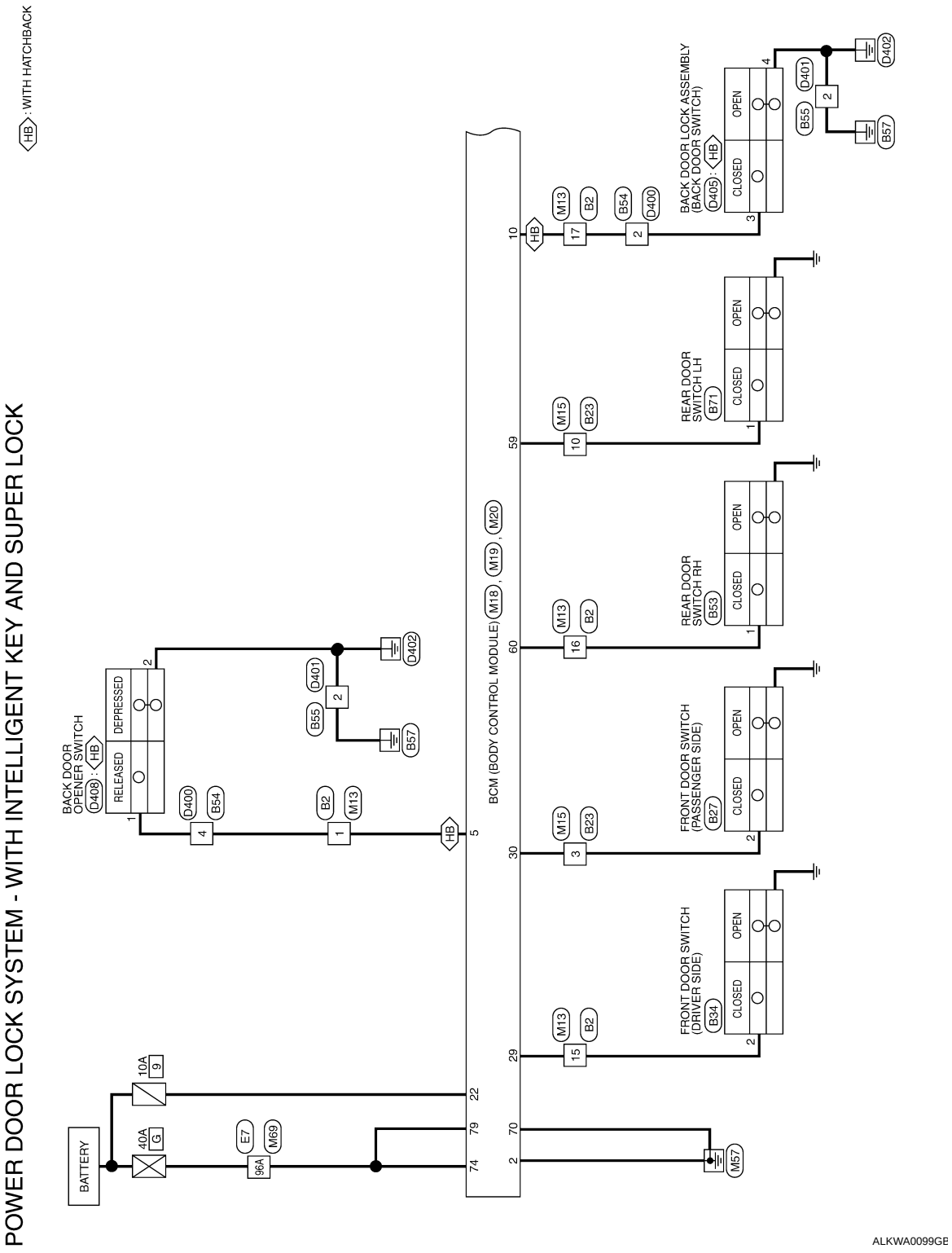
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VALUES ON THE DIAGNOSIS TOOL

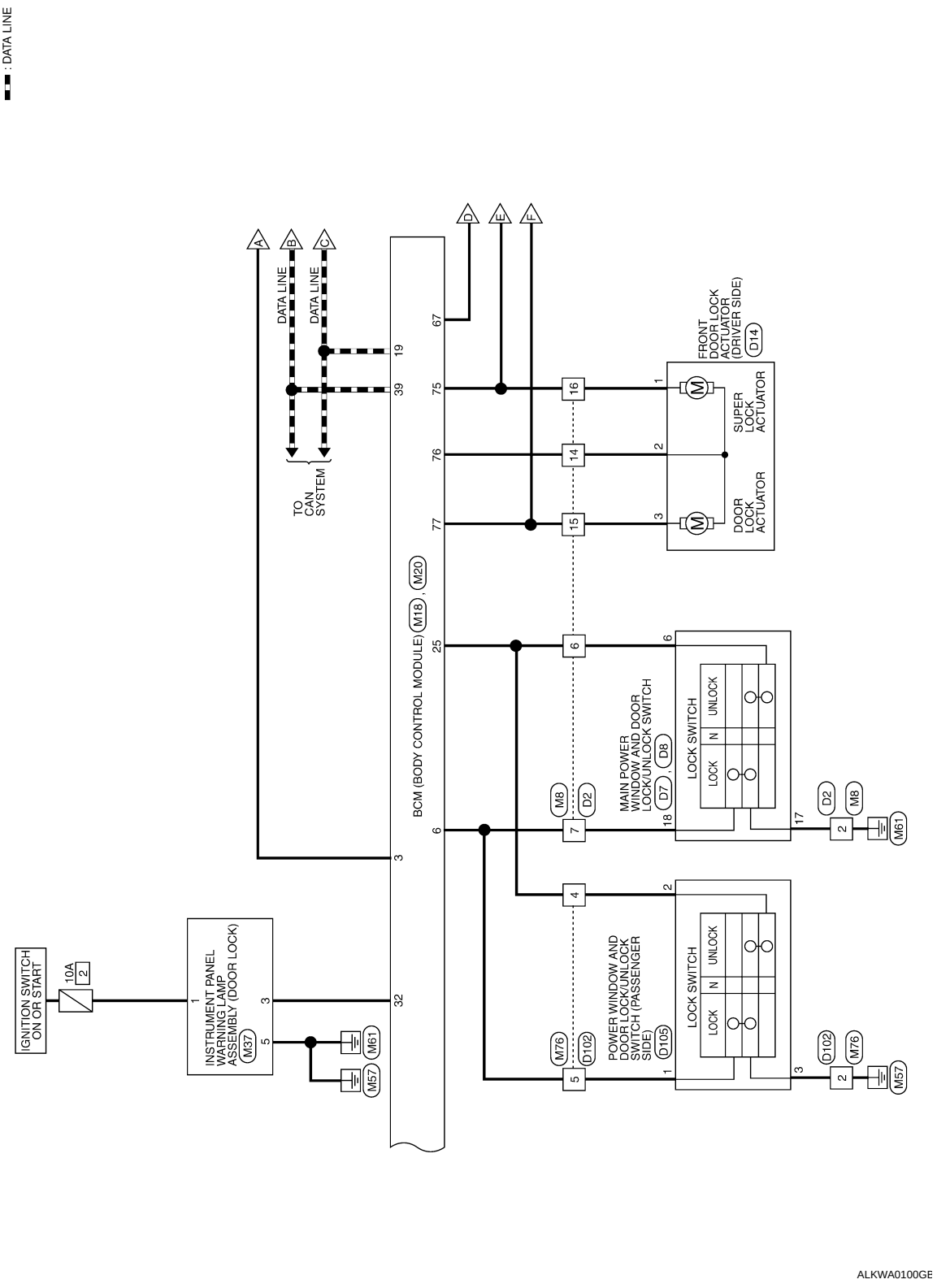
Refer to BCS-35, "Reference Value".

Wiring Diagram - POWER DOOR LOCK SYSTEM -

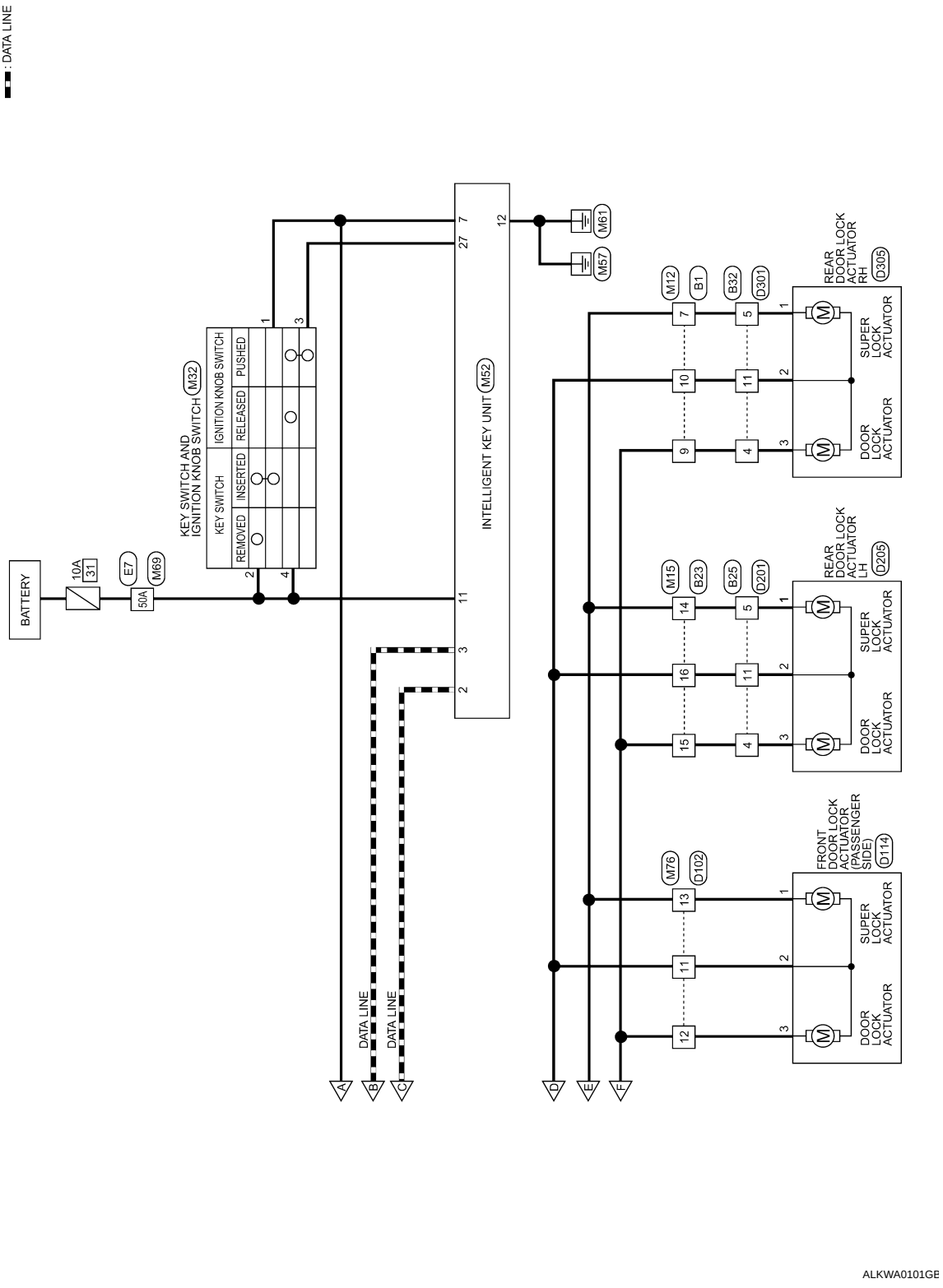
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ALKWA0099GE

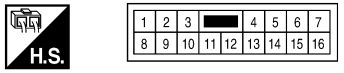


ALKWA0100GE


: DATA LINE
BATTERY
10A
31
E7
50A
M69
KEY SWITCH AND
IGNITION KNOB SWITCH M32
KEY SWITCH
IGNITION KNOB SWITCH
REMOVED
INSERTED
RELEASED
PUSHED
INTELLIGENT KEY UNIT M52
M61
M57
DATA LINE
DATA LINE
REAR DOOR LOCK ACTUATOR RH D305
REAR DOOR LOCK ACTUATOR LH D205
FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) D114
M12
B1
B32
D301
M15
B23
B25
D201
M76
D102
SUPER LOCK ACTUATOR
DOOR LOCK ACTUATOR
ALKWA0101GE

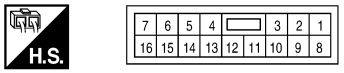
POWER DOOR LOCK SYSTEM - WITH INTELLIGENT KEY AND SUPER LOCK CONNECTORS

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Color	WHITE



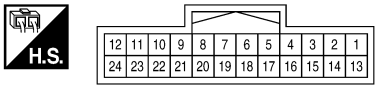
Terminal No.	Color of Wire	Signal Name
2	B	—
6	L	—
7	GR	—
14	G	—
15	SB	—
16	V	—

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



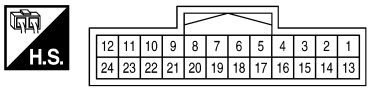
Terminal No.	Color of Wire	Signal Name
7	V	—
9	SB	—
10	G	—

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE



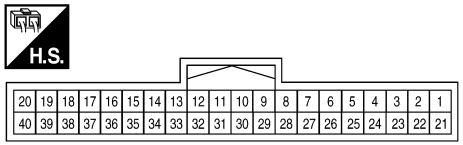
Terminal No.	Color of Wire	Signal Name
1	V	—
15	SB	—
16	GR	—
17	Y	—

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



Terminal No.	Color of Wire	Signal Name
3	BR	—
10	O	—
14	V	—
15	SB	—
16	G	—

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



Terminal No.	Color of Wire	Signal Name
2	B	GND
3	G	KEY IN SW
5	V	TRUNK OPENER SWITCH
6	GR	CENTRAL LOCK SW
10	Y	DOOR SW BACK
19	L	CAN-H
22	P	BATT SAFETY LINE
25	L	CENTRAL UNLOCK SW
29	BR	DOOR SW DR
30	SB	DOOR SW AS
32	LG	DOOR LOCK STATUS INDICATOR/ALARM TX
39	P	CAN-L

ALKIA1108GB

Terminal No.	Color of Wire	Signal Name
67	G	DOORLOCK2 COMMON
70	B	POWER GND
74	Y	BATT BCM
75	V	SUPERLOCK OUT
76	G	DOORLOCK1 COMMON
77	SB	CDL OUT
79	Y	BATT PW

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

H.S.

65	66	67	68	69	70	71	72	73						
1	74	75	76	77	78	79								

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

H.S.

52	51	50	49	48	47	46	45	44	43	42	41			
64	63	62	61	60	59	58	57	56	55	54	53			

Terminal No.	Color of Wire	Signal Name
59	O	DOOR SW RL
60	GR	DOOR SW DR

Connector No.	M52
Connector Name	INTELLIGENT KEY UNIT
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	L	CAN-H
3	P	CAN-L
7	LG	KEY SW I/P
11	SB	BATT
12	B	GND
27	W	PUSH SW I/P

Connector No.	M37
Connector Name	INSTRUMENT PANEL WARNING LAMP ASSEMBLY
Connector Color	BLACK

H.S.

1	2	3	4	5

Terminal No.	Color of Wire	Signal Name
3	LG	DOOR LOCK IND
5	B	GND

Connector No.	M32
Connector Name	KEY SWITCH AND IGNITION KNOB SWITCH
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	LG	—
2	L	—
3	W	—
4	P	—

ALKIA1109GB

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
50A	Y	—
96A	Y	—

Connector No.	M76
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	—
4	L	—
5	GR	—
11	G	—
12	SB	—
13	V	—

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
50A	P	—
96A	Y	—

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	LG	—
10	W	—
14	V	—
15	SB	—
16	G	—

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	—
15	SB	—
16	GR	—
17	P	—

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

H.S.

Terminal No.	Color of Wire	Signal Name
7	V	—
9	SB	—
10	G	—

ALKIA1110GB

Connector No.	B32
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	SB	—
5	V	—
11	G	—

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Color	WHITE

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name
2	LG	—

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	—
4	L	—

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

H.S.

1

Terminal No.	Color of Wire	Signal Name
1	GR	—

Connector No.	B25
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	SB	—
5	V	—
11	G	—

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Color	WHITE

H.S.

1
2
3

Terminal No.	Color of Wire	Signal Name
2	SB	—

ALKIA1111GB

Connector No.	B55
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	—

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

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	—
6	V	—
7	GR	—
14	G	—
15	GR	—
16	V	—

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
6	V	DOOR LOCK UNLOCK

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

H.S.

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

Connector No.	D14
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	V	
2	G	
3	GR	

ALKIA1112GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	—
4	V	—
5	GR	—
11	G	—
12	O	—
13	V	—

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

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	V	
2	G	
3	SB	

Connector No.	D114
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Color	BLACK

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	V	QQ
2	G	QQ
3	O	QQ

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

H.S.

1		2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
4	SB	—
5	V	—
11	G	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
4	SB	—
5	V	—
11	G	—

Connector No.	D305
Connector Name	REAR DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Color	BLACK

H.S.

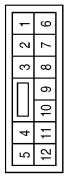
6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	V	QQ
2	G	QQ
3	SB	QQ

ALKIA1113GB

Connector No.	D400
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	W	—
4	W	—

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

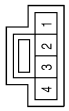
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	D405
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	W	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D408
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	BROWN

H.S.



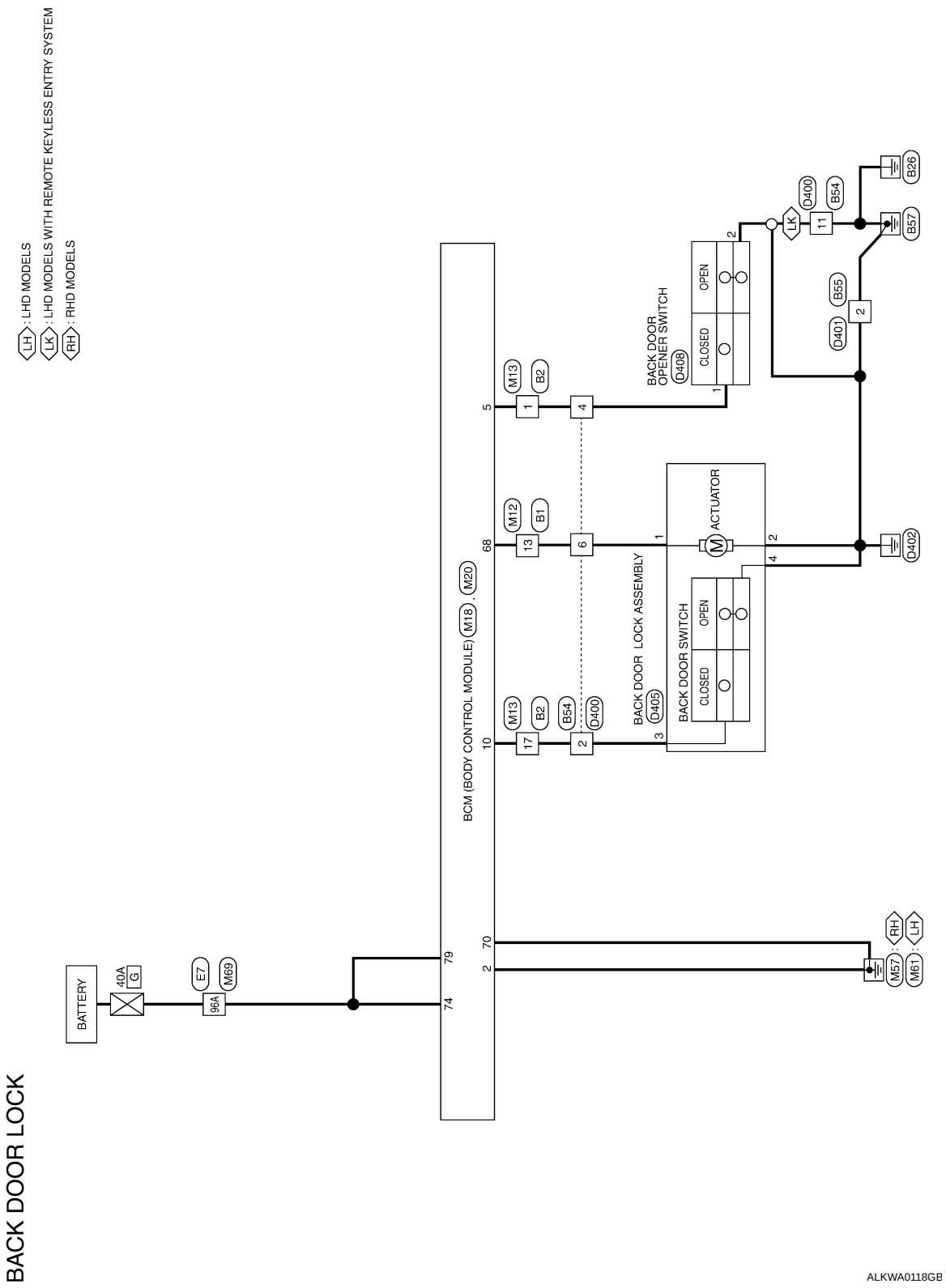
Terminal No.	Color of Wire	Signal Name
1	W	—
2	B	—

ALKIA1114GB

Wiring Diagram - BACK DOOR OPENER SYSTEM -

INFOID:0000000001530551

BACK DOOR LOCK



BACK DOOR LOCK

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	R	–

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
1	V	–
17	Y	–

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

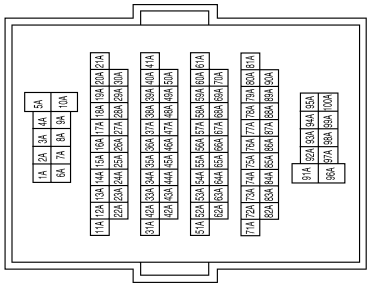
H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND
5	V	TRUNK OPENER SWITCH
10	Y	DOOR SW BACK

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
96A	Y	–

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

H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
68	R	TRUNK LID ACTUATOR
70	B	POWER GND
74	Y	BATT BCM
79	Y	BATT PW

ALKIA1152GB

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
1	L	–
17	P	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	O	–

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	–

Connector No.	B55
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
2	B	–

Connector No.	B54 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	B54 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

ALKIA1153GB

Connector No.	D400 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	D400 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	W	–
4	W	–
6	W	–
11	B	–

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
2	B	–

Connector No.	D405 (LHD)
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	B	–
3	O	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D405 (RHD)
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	W	–
2	B	–
3	W	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D408 (LHD)
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	BROWN

H.S.

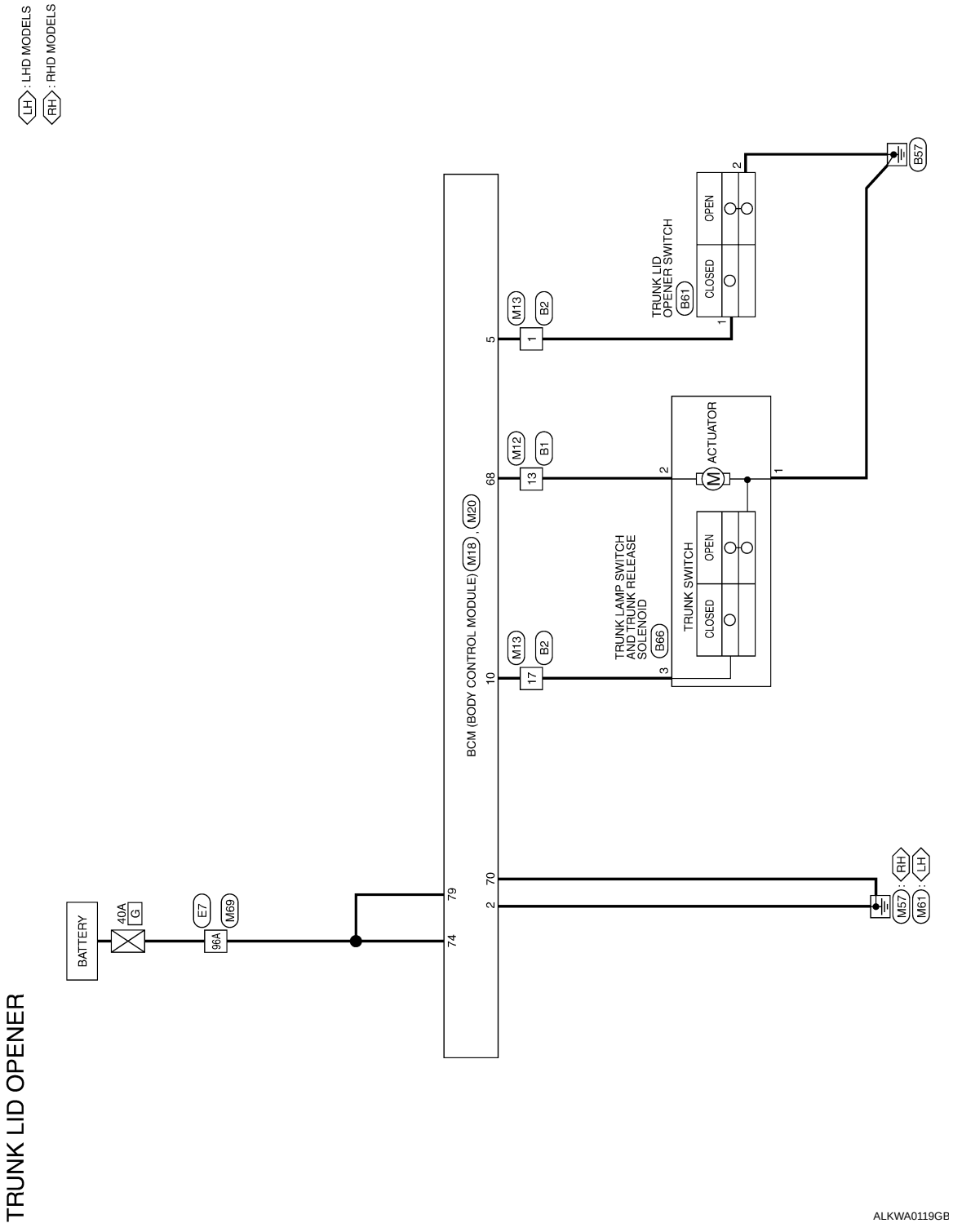
1	2

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

ALKIA1154GB

Wiring Diagram - TRUNK LID OPENER SYSTEM -

INFOID:0000000001530552



TRUNK LID OPENER CONNECTORS

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

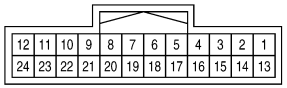
H.S.



Terminal No.	Color of Wire	Signal Name
13	R	—

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

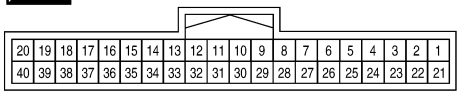
H.S.



Terminal No.	Color of Wire	Signal Name
1	V	—
17	Y	—

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

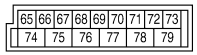
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	GND
5	V	TRUNK OPENER SWITCH
10	Y	DOOR SW BACK

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

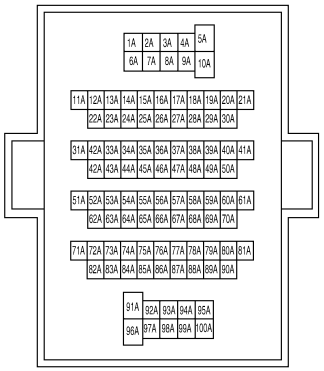
H.S.



Terminal No.	Color of Wire	Signal Name
68	R	TRUNK LID ACTUATOR
70	B	POWER GND
74	Y	BATT BCM
79	Y	BATT PW

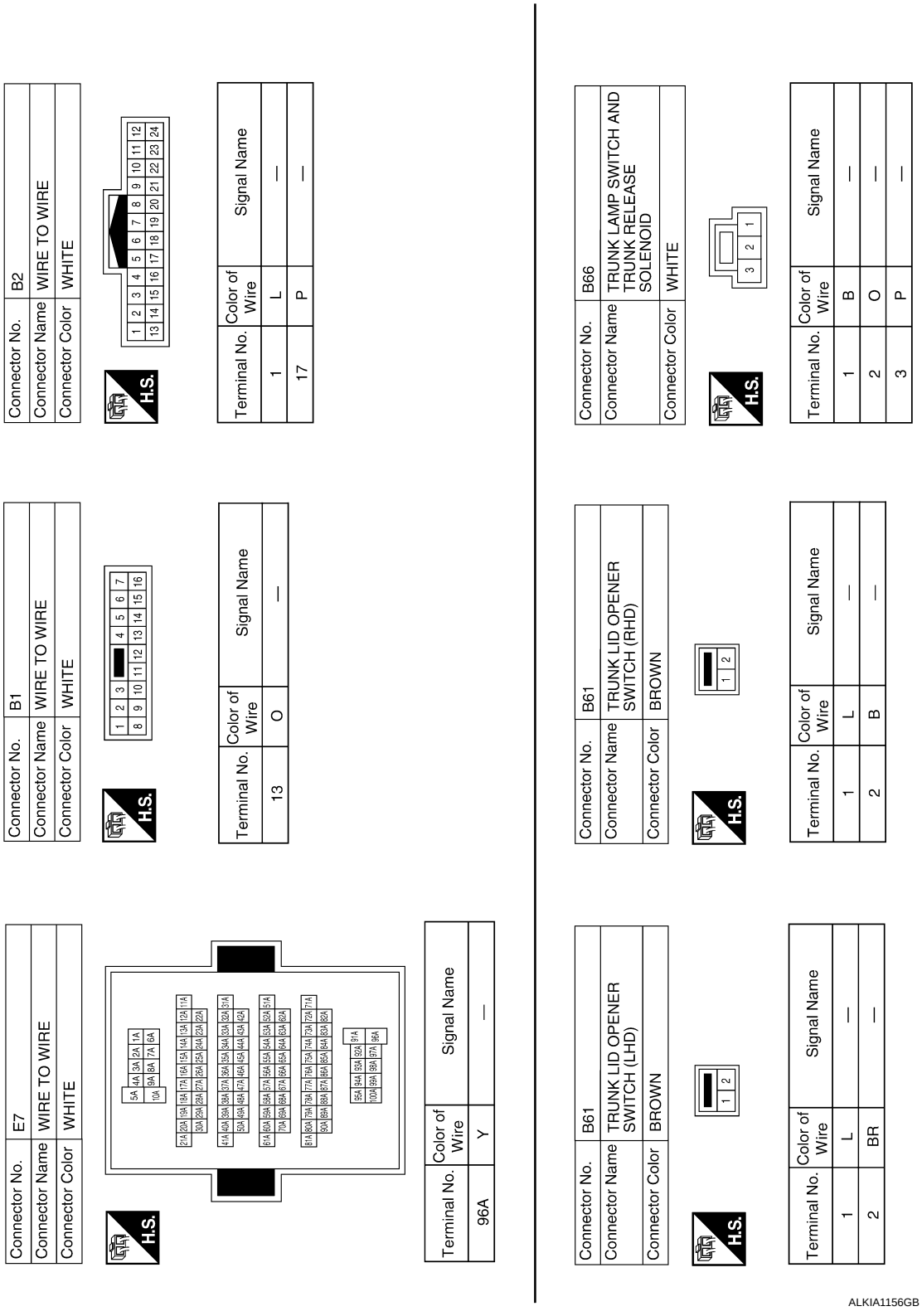
Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
96A	Y	—

ALKIA1155GB



Fail Safe

INFOID:0000000001530553

Fail-safe index

BCM performs fail-safe control when any DTC listed below is detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2191: DIFFERENCE OF KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2195: ANTI SCANNING	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC
B2196: DONGLE NG	• Inhibits engine cranking • Inhibits steering lock unlocking (Intelligent Key unit) • Fuel cut (ECM)	Erase DTC

TURN SIGNAL LAMP CONTROL

BCM detects the turn signal lamp circuit status from the terminal voltage.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

LIGHT & RAIN SENSOR MALFUNCTION DETECTION FUNCTION

BCM controls the following items when LIGHT & RAIN sensor has a malfunction.

Auto Light Control
Headlamp is turned ON.

Front Wiper Control
The condition just before the activation of Fail-safe is maintained until the front wiper switch is turned OFF.

DTC Inspection Priority Chart

INFOID:0000000001530554

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
2	• B2190: NATS ANTENNA AMP • B2191: DIFFERNCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2194: DISCORD BCM-I-KEY • B2195: ANTI SCANNING • B2196: DONGLE NG

DTC Index

INFOID:0000000001530555

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.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 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	TIME		Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	0	1 - 39	—	XX-XX, "*****"
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	XX-XX, "*****"
B2190: NATS ANTENNA AMP	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	XX-XX, "*****"
B2195: ANTI SCANNING	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"
B2196: DONGLE NG	CRNT	PAST	×	• With Intelligent Key system XX-XX, "*****" • Without Intelligent Key system XX-XX, "*****"

SYMPTOM DIAGNOSIS

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000001530556

DOOR LOCK AND UNLOCK SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Except driver side, doors are closed.
- Doors are not locked by Intelligent Key or door request switch.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Power door lock does not operate with door lock and unlock switch.	1. BCM Power supply and ground circuit check.	BCS-30
	2. Door lock and unlock switch check.	DLK-61
	3. Door lock actuator (driver side) check	DLK-108
	4. Intermittent Incident check.	GI
Specific door lock actuator does not operate.	1a. Driver side door lock actuator check.	DLK-108
	1b. Passenger side door lock actuator check.	DLK-109
	1c. Rear LH side door lock actuator check.	DLK-111
	1d. Rear RH side door lock actuator check.	DLK-113
	1e. Back door lock actuator (hatchback) check.	DLK-114
	2. Intermittent Incident check.	GI
Specific door does not open from inside the vehicle.	1a. Driver side super lock actuator check.	DLK-108
	1b. Passenger side super lock actuator check.	DLK-109
	1c. Rear LH side super lock actuator check.	DLK-111
	1d. Rear RH side super lock actuator check.	DLK-113
	2. Intermittent Incident check.	GI
Instrument panel warning lamp indicator does not operate.	1. Instrument panel warning lamp assembly check.	DLK-293
	2. Intermittent Incident check.	GI
Door lock/unlock do not operate by request switch.	1a. Driver side door switch check.	DLK-65
	1b. Passenger side door switch check.	DLK-67
	1c. Rear LH side door switch check.	DLK-69
	1d. Rear RH side door switch check.	DLK-71
	1e. Back door switch (hatchback) check.	DLK-73
	2. Ignition knob switch check.	DLK-80
	3. Replace Intelligent Key unit.	SEC-79
Door lock/unlock does not operate by request switch (driver side).	1. Front door request switch (driver side) check.	DLK-83
	2. Front outside antenna (driver side) check.	DLK-132
	3. Replace Intelligent Key unit.	SEC-79

Symptom	Diagnosis/service procedure	Reference page
Door lock/unlock does not operate by request switch (passenger side).	1. Front door request switch (passenger side) check.	DLK-86
	2. Front outside antenna (passenger side) check.	DLK-132
	3. Replace Intelligent Key unit.	SEC-79
Auto relock function does not operate properly.	1. Check “AUTO RELOCK TIMER” setting in “WORK SUPPORT”.	DLK-50
	2. Key switch check.	DLK-77
	3. Ignition knob switch check.	DLK-80
	4a. Driver side door switch check.	DLK-65
	4b. Passenger side door switch check.	DLK-67
	4c. Rear LH side door switch check.	DLK-69
	4d. Rear RH side door switch check.	DLK-71
	4e. Back door switch (hatchback) check.	DLK-73
	5. Replace Intelligent Key unit.	SEC-79
Key reminder function does not operate properly.	1. Check “ANTI KEY LOCK IN FUNCTION” setting in “WORK SUPPORT”.	DLK-50
	2a. Driver side door switch check.	DLK-65
	2b. Passenger side door switch check.	DLK-67
	2c. Rear LH side door switch check.	DLK-69
	2d. Rear RH side door switch check.	DLK-71
	2e. Back door switch (hatchback) check.	DLK-73
	3a. Inside key antenna (instrument panel) check.	DLK-120
	3b. Inside key antenna (front console) check.	DLK-124
	3c. Inside key antenna (rear floor) check.	DLK-128
	4. Front door lock actuator LH (door unlock sensor) check.	DLK-104
	5. Intelligent Key battery and function inspection.	DLK-150
	6. Replace Intelligent Key unit.	SEC-79

INTELLIGENT KEY

INTELLIGENT KEY : Symptom Table

INFOID:0000000001530557

INTELLIGENT KEY OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock and unlock operation are normal.
- Emergency key is removed from ignition key cylinder.
- All doors are closed.
- Ignition knob is not pressed.
- No Intelligent Keys are inside the vehicle.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
All of the Intelligent Key functions do not operate.	1. Check Intelligent Key power supply and ground circuit.	DLK-59
	2. Check driver side door switch.	DLK-65
	3. Check key switch.	DLK-77
	4. Check ignition knob switch.	DLK-80
	5. Check Intelligent Key battery.	XX-XX, "*****"
	6. Check intermittent incident.	XX-XX, "*****"

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Symptom Table

INFOID:0000000001530558

DOOR REQUEST SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 operation is normal.
- “LOCK/UNLOCK BY I-KEY” is ON when setting on CONSULT-III.
- Emergency key is removed from ignition key cylinder.
- Ignition switch is in OFF position.
- Intelligent Keys are not inside the vehicle.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Door lock and unlock do not operate by door request switch.	1. Check “LOCK/UNLOCK BY I-KEY” setting in “WORK SUPPORT”.	DLK-53
	2. Check intermittent incident.	XX-XX, "*****"
Door lock/unlock does not operate by request switch (driver side).	1. Check door request switch (driver side).	DLK-83
	2. Check outside key antenna (driver side).	XX-XX, "*****"
	3. Check intermittent incident.	XX-XX, "*****"
Door lock/unlock does not operate by request switch (passenger side).	1. Check door request switch (passenger side).	DLK-85
	2. Check outside key antenna (passenger side).	XX-XX, "*****"
	3. Check intermittent incident.	XX-XX, "*****"
Door lock/unlock does not operate by request switch (back door).	1. Check door request switch (back door).	DLK-91
	2. Check outside key antenna (rear bumper).	XX-XX, "*****"
	3. Check intermittent incident.	XX-XX, "*****"

KEY REMINDER

KEY REMINDER : Symptom Table

INFOID:0000000001530559

KEY REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "Work Flow".
- To understand the operation when it does work, refer to DLK-31, "KEY REMINDER : System Description".
- 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)

- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Key reminder operation does not operate.	1. Check door switch (driver side).		DLK-65
	2. Check inside key antenna.	Instrument panel	DLK-120
		Front console	DLK-123
		Rear floor	DLK-127
	3. Check intermittent incident.		XX-XX, "*****"

AUTO RELOCK

AUTO RELOCK : Symptom Table

INFOID:0000000001530560

AUTO RELOCK OPERATION MALFUNCTION

NOTE:

- “AUTO RELOCK TIMER” is not OFF when setting on CONSULT-III.
- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "Work Flow".
- To understand the operation when it does work, refer to XX-XX, "*****"“
- 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)

- Request switch operation and door lock and unlock switch operation are normal.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Auto relock operation does not operate.	1. Check “AUTO RELOCK TIMER” setting in “WORK SUPPORT”.		DLK-53
	2. Check door switch.	Driver side	DLK-65
		Passenger side	DLK-67
		Rear LH	DLK-69
		Rear RH	DLK-71
		Back door	DLK-73
	3. Check ignition knob switch.		DLK-80
	4. Check key switch.		DLK-77
	5. Check intermittent incident.		XX-XX, "*****"

BACK DOOR OPEN FUNCTION SYMPTOMS
BACK DOOR OPENER SWITCH
BACK DOOR OPENER SWITCH : Symptom Table

INFOID:0000000001530562

BACK DOOR OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3 MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door opener function does not operate by back door opener switch.	1. Check back door opener switch.	DLK-98
	2. Check vehicle speed signal.	DLK-149
	3. Check back door opener actuator.	XX-XX, "*****"
	4. Check intermittent incident.	XX-XX, "*****"

TRUNK OPEN FUNCTION SYMPTOMS
TRUNK LID OPENER SWITCH
TRUNK LID OPENER SWITCH : Symptom Table

INFOID:0000000001530563

TRUNK LID OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3 MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Trunk lid opener function does not operate by trunk lid opener switch.	1. Check trunk lid opener switch.	DLK-101
	2. Check vehicle speed signal.	DLK-149
	3. Check trunk lid opener actuator.	DLK-117
	4. Check intermittent incident.	XX-XX, "*****"
Trunk room lamp switch inoperative.	1. Check trunk room lamp switch.	DLK-94

WARNING FUNCTION SYMPTOMS

BUZZER (COMBINATION METER)

BUZZER (COMBINATION METER) : Symptom Table

INFOID:0000000001530564

BUZZER (COMBINATION METER) OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 conditions are extremely complicated. During operation confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-39, "System Description".
- Door lock function is normal.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
Ignition knob return forgotten warning does not operate properly.		1. Check buzzer (combination meter).	DLK-145
		2. Check intermittent incident.	XX-XX, "*****"
Ignition key warning does not operate properly.		1. Check buzzer (combination meter).	DLK-145
		2. Check intermittent incident.	XX-XX, "*****"
OFF position warning does not operate properly.		1. Check buzzer (combination meter).	DLK-145
		2. Check intermittent incident.	XX-XX, "*****"
Take away warning does not operate properly.	Take away through window	1. Check buzzer (combination meter).	DLK-145
		2. Check intermittent incident.	XX-XX, "*****"

INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER : Symptom Table

INFOID:0000000001530565

INTELLIGENT KEY WARNING BUZZER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 conditions are extremely complicated. During operation confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-39, "System Description".

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
Take away warning does not operate properly.	Any door open to all doors closed.	1. Check “TAKE OUT FROM WINDOW WARN” setting in “WORK SUPPORT”.	DLK-53
		2. Check Intelligent Key warning buzzer.	DLK-142
		3. Check intermittent incident.	XX-XX, "*****"

Symptom		Diagnosis/service procedure	Reference page
Door lock operation warning chime does not operate properly.	Request switch operation	1. Check Intelligent Key warning buzzer.	DLK-142
		2. Check intermittent incident.	XX-XX, "*****"
	Intelligent Key button operation	1. Check Intelligent Key warning buzzer.	DLK-142
		2. Check intermittent incident.	XX-XX, "*****"

IGNITION KNOB SWITCH DOES NOT TURN ON

IGNITION KNOB SWITCH DOES NOT TURN ON : Symptom Table

INFOID:0000000001530566

WARNING LAMP OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 registered.
- Key is not inserted in ignition switch.
- One or more registered Intelligent Keys are in the vehicle.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
OFF position warning does not operate properly.		1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
Take away warning does not operate properly.	Any door open to all doors closed.	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
	Door is open	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
	Take away through window	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
Intelligent Key low battery warning does not operate properly.		1. Check “LOW BAT OF KEY FOB WARN” setting in “WORK SUPPORT”.	DLK-53
		2. Check Intelligent Key battery.	XX-XX, "*****"
		3. Check KEY warning lamp. (GREEN blinking)	DLK-146
		4. Check intermittent incident.	XX-XX, "*****"

KEY WARNING LAMP (GREEN) ILLUMINATES

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is registered.
- Key is not inserted in ignition switch.
- One or more registered Intelligent Keys are in the vehicle.

Symptom	Diagnosis/service procedure	Reference page
Ignition switch does not turn on with Intelligent Key. [KEY warning lamp (green) illuminates].	1. Check steering lock solenoid.	DLK-134
	2. Replace Intelligent Key unit.	SEC-79

KEY WARNING LAMP (RED) ILLUMINATES

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is registered.
- Key is not inserted in ignition switch.
- One or more registered Intelligent Keys are in the vehicle.

Symptom	Diagnosis/service procedure	Reference page
Ignition switch does not turn on with Intelligent Key. [KEY warning lamp (red) illuminates].	1a. Check instrument panel inside key antenna.	DLK-120
	1b. Check front console inside key antenna.	DLK-123
	1c. Check rear floor inside key antenna.	DLK-127
	2. Replace Intelligent Key unit.	SEC-79

KEY WARNING LAMP DOES NOT ILLUMINATE

Conditions of Vehicle (Operating Conditions)
- Intelligent Key is registered.
- Mechanical key is out of ignition switch.
- One or more registered Intelligent Keys are in the vehicle.

Symptom	Diagnosis/service procedure	Reference page
Ignition switch does not turn on with Intelligent Key. [GREEN key warning lamp does not illuminate].	1. Check Intelligent Key unit power supply and ground circuit.	DLK-59
	2. Check ignition knob switch.	DLK-80
	3. Check key switch.	DLK-77
	4. Check "KEY" warning lamp (GREEN).	DLK-146
	5. Replace Intelligent Key unit.	SEC-79
RED key warning lamp does not illuminate [Without Intelligent Key].	1. Check "KEY" warning lamp (RED).	DLK-146
	2. Replace Intelligent Key unit.	SEC-79

ENGINE START CONDITION CHECK (LOCKED IGNITION KNOB)

NOTE:
- Before performing the diagnosis in the following table, check “Trouble Diagnosis Procedure”. Refer to DLK-16, "Work Flow".
- If the following “symptoms” are detected, check systems shown in the ”Diagnoses/service procedure” column in this order.

Symptom	Diagnosis/service procedure	Reference page
Engine start condition check	1. Check park/neutral position switch in combination meter (A/T)	MWI-3
	2. Check key interlock solenoid (M/T)	DLK-137
	3. Check stop lamp switch (A/T)	DLK-138
	4. Check stop lamp switch (M/T)	DLK-140

WARNING LAMP

WARNING LAMP : Symptom Table

INFOID:0000000001530567

WARNING LAMP OPERATION MALFUNCTION

NOTE:
- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 conditions are extremely complicated. During operation confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-39, "System Description".
- Door lock function is normal.

Symptom Table

Symptom		Diagnosis/service procedure	Reference page
OFF position warning does not operate properly.		1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
Take away warning does not operate properly.	Any door open to all doors closed.	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
	Door is open	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
	Take away through window	1. Check LOCK warning lamp. (RED blinking)	DLK-147
		2. Check intermittent incident.	XX-XX, "*****"
Intelligent Key low battery warning does not operate properly.		1. Check “LOW BAT OF KEY FOB WARN” setting in “WORK SUPPORT”.	DLK-53
		2. Check Intelligent Key battery.	XX-XX, "*****"
		3. Check KEY warning lamp. (GREEN blinking)	DLK-146
		4. Check intermittent incident.	XX-XX, "*****"

BACK DOOR

BACK DOOR : Symptom Table

INFOID:0000000001530568

BACK DOOR OPEN WARNING OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock function and back door opener function is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door open warning does not operate properly.	1. Check back door opener switch.	DLK-98
	2. Check intermittent incident.	XX-XX, "*****"

HAZARD AND BUZZER REMINDER FUNCTION SYMPTOMS

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Symptom Table

INFOID:0000000001530569

BUZZER REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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 WITH I-KEY LOCK”, “ANSWER BACK WITH I-KEY UNLOCK” and “ANSWER BACK FUNCTION” are ON when setting on CONSULT-III.
- Door lock function is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Buzzer reminder operation does not operate properly.	1. Check setting of buzzer reminder with CONSULT-III.	DLK-53
	2. Check intermittent incident.	XX-XX, "*****"

INTELLIGENT KEY WARNING BUZZER

INTELLIGENT KEY WARNING BUZZER : Symptom Table

INFOID:0000000001530570

HAZARD REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- “HAZARD ANSWER BACK” is ON when setting on CONSULT-III.
- Door lock function is normal.

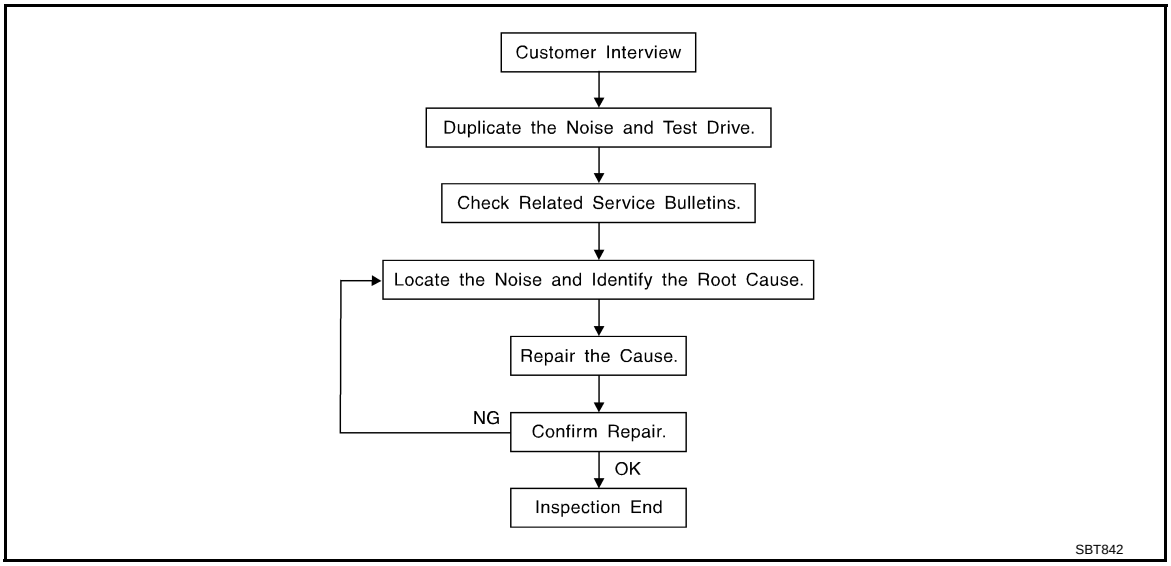
Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Hazard reminder operation does not operate properly.	1. Check setting of hazard reminder with CONSULT-III.	DLK-53
	2. Check intermittent incident.	XX-XX, "*****"

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001396891



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to XX-XX, "*****". 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 a test drive 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 (TSB) 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 (Engine Ear or 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 XX-XX, "*****".

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 are 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:

- URETHANE PADS
  Insulates connectors, harness, etc.
- INSULATOR (Foam blocks)
  Insulates components from contact. Can be used to fill space behind a panel.
- INSULATOR (Light foam block)
- FELT CLOTHTAPE
  Used to insulate where movement does not occur. Ideal for instrument panel applications.
  The following materials, not available through NISSAN Parts Department, 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.
  Note: Will only last a few months.
- SILICONE SPRAY
  Use when grease cannot be applied.
- DUCT TAPE
  Use to eliminate movement.

CONFIRM THE REPAIR

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

Inspection Procedure

INFOID:0000000001396892

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. 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 to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.
In addition look for:

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment
3. 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 is 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. 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.

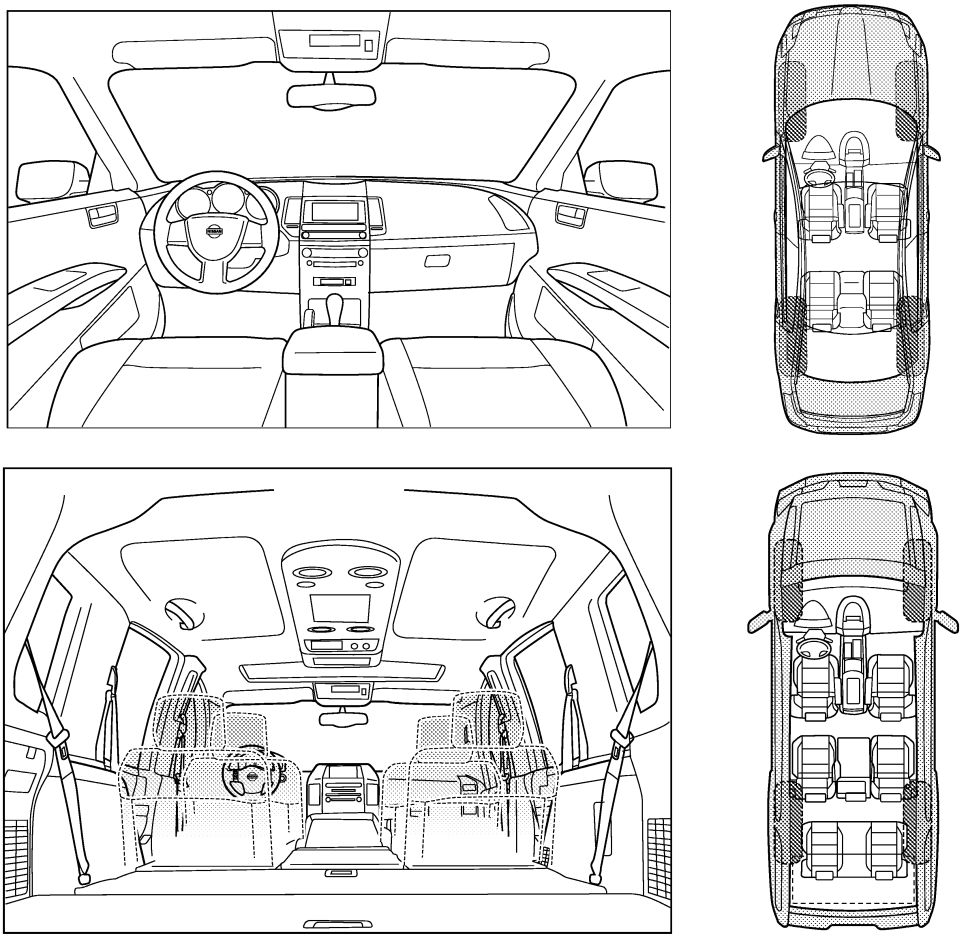
Diagnostic Worksheet

INFOID:0000000001396893

SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

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

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



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

PIIB8740E

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

PIIB8742E

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001530406

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. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

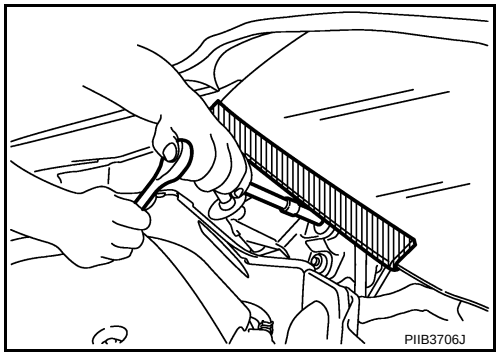
WARNING:

- **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:0000000001396895

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



Steering Wheel Rotation after Battery Disconnect

INFOID:0000000001396896

NOTE:

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

This vehicle is equipped with a push-button ignition switch and a steering lock unit.
If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.
If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.

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

Work

INFOID:0000000001396897

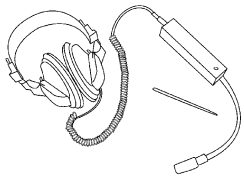
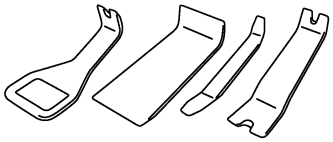
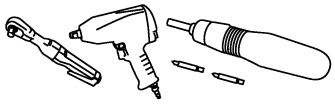
- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operational.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.

PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000001396898

Tool name	Description
Engine ear  SIIA0995E	Locating the noise
Remover tool  PIIB7923J	Remove the clips, pawls, and metal clips
Power tool  PIIB1407E	Removing nuts and bolts

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

INFOID:0000000001396899

BASIC INSPECTION

1.CHECK POWER DOOR LOCK AND UNLOCK SWITCH OPERATION

Check door lock and unlock operation by operating door lock and unlock switch.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to XX-XX, "*****".

2.CHECK INTELLIGENT KEY OPERATION

Check door lock and unlock operation by operating the Intelligent Key remote control button.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to XX-XX, "*****".

3.CHECK DOOR REQUEST SWITCH OPERATION

Check door lock and unlock operation by operating door request switch.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to XX-XX, "*****".

4.CHECK KEY REMINDER OPERATION

Check key reminder operation. Refer to DLK-255, "KEY REMINDER : System Description".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to XX-XX, "*****".

5.CHECK AUTO DOOR LOCK OPERATION

Check auto door lock operation. Refer to XX-XX, "*****".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Refer to XX-XX, "*****".

6.CHECK VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

Check vehicle speed sensing auto door lock operation. Refer to XX-XX, "*****".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Refer to XX-XX, "*****".

7.CHECK BACK DOOR OPENER OPERATION

Check back door opener operation by operating the back door opener switch.

Is the inspection result normal?

YES >> GO TO 8.
NO >> Refer to XX-XX, "*****".

8.CHECK WARNING FUNCTION

Check warning function. Refer to DLK-264, "System Description".

Is the inspection result normal?

YES >> GO TO 9.
NO [Buzzer (combination meter)]>> Refer to XX-XX, "*****".
NO (Intelligent Key warning buzzer)>> Refer to XX-XX, "*****".

NO (Warning lamp)>> Refer to XX-XX, "*****".
NO (Back door open warning)>> Refer to XX-XX, "*****".

9. CHECK HAZARD AND BUZZER REMINDER FUNCTION

Check hazard and buzzer reminder function by Intelligent Key or request switch. Refer to DLK-270, "System Description".

Is the inspection result normal?

YES >> GO TO 10.
NO (Hazard warning lamp)>> Refer to XX-XX, "*****".
NO (Intelligent Key warning buzzer)>> Refer to XX-XX, "*****".

10. CHECK OUT

CHECK OUT.

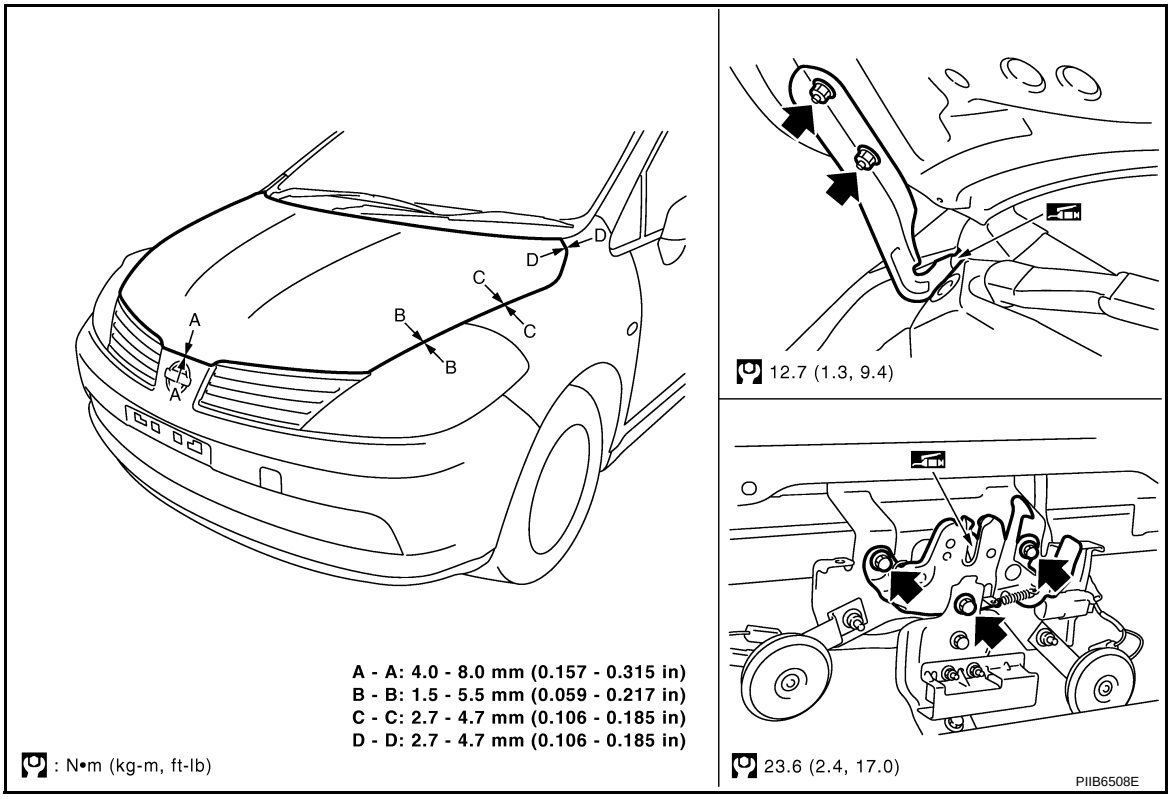
>> INSPECTION END

REMOVAL AND INSTALLATION

HOOD

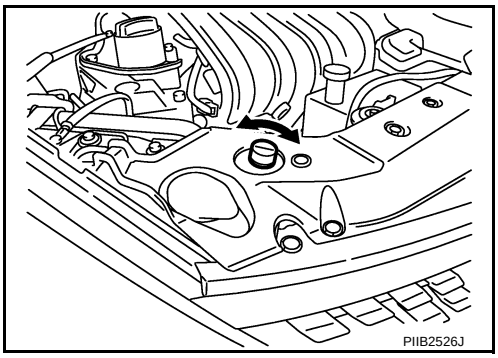
Fitting Adjustment

INFOID:0000000001732017



FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDINAL CLEARANCE ADJUSTMENT

1. Remove the front grille. Refer to EXT-19, "Removal and Installation".
2. Remove hood lock. Rotate bumper rubber to adjust height until hood becomes 1.0 to 1.5 mm lower than the fender.
3. Position hood lock and engage striker. Check hood lock and striker for looseness. Tighten lock bolts to the specified torque.
4. Install the front grille. Refer to EXT-19, "Removal and Installation".



CAUTION:

Adjust the clearance between hood and other parts so that the dimensional difference left and right is as follows.

Hood and headlamp (B - B) : Less than 2.0 mm (0.08 in)
Hood and fender (C - C) : Less than 1.5 mm (0.06 in)
Hood and fender (D - D) : Less than 1.5 mm (0.06 in)

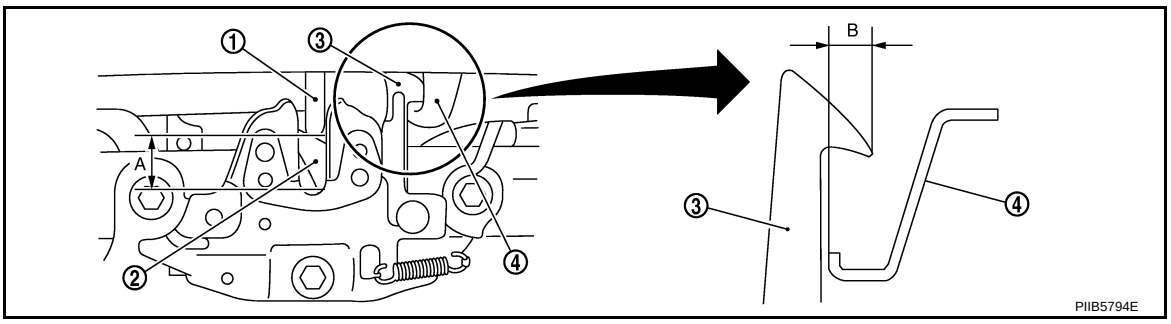
SURFACE MISMATCH ADJUSTMENT

1. Remove the front grille. Refer to EXT-19, "Removal and Installation".
2. Release hood lock, and adjust surface level difference of hood, fender, and headlamp according to the fitting standard dimension, using RH and LH bumper rubbers.

Hood and front bumper (A - A) : -1.3 - 2.7 mm (-0.05 - 0.11 in)
Hood and fender (D - D) : -0.4 - 1.7 mm (-0.16 - 0.07 in)

3. Install and align the hood lock until the center of the striker and the hood lock are vertically aligned.

4. Press the hood lightly with [approx. 29 N (3 kg] of force and adjust A and B as shown.



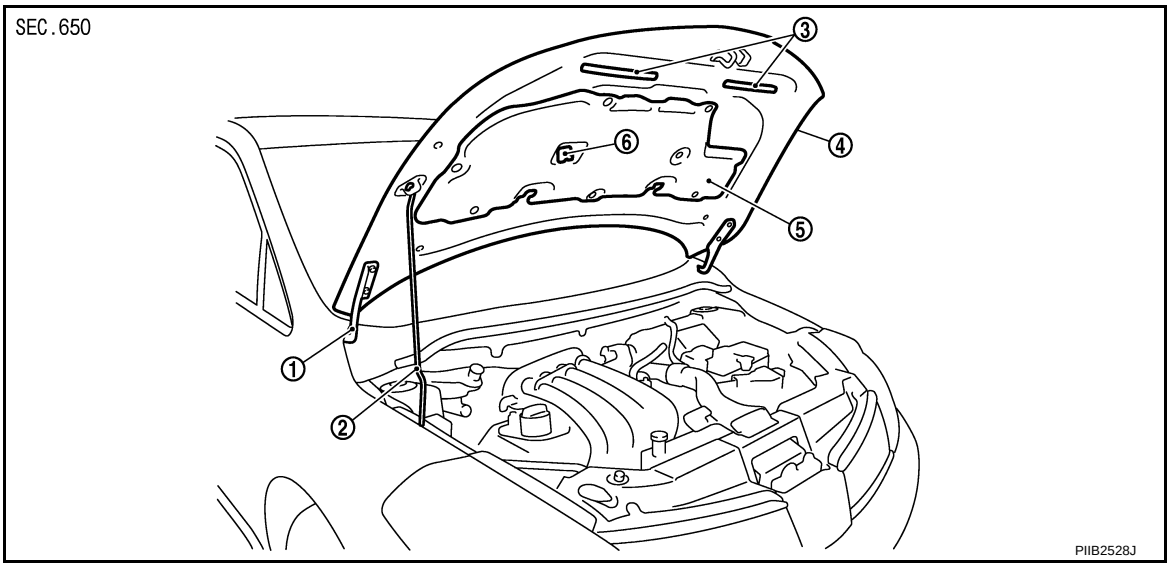
1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

A : 20 mm (0.79 in)
B : 6.8 mm (0.268 in) min.

5. After adjustment tighten lock bolts to the specified torque.
6. Install the front grille. Refer to EXT-19, "Removal and Installation".

Removal and Installation

INFOID:0000000001732018



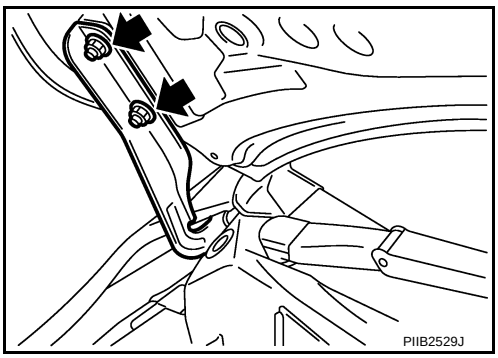
1. Hood hinge
2. Hood stay
3. Radiator core seal rubber
4. Hood assembly
5. Hood insulator
6. Hood stay holder

HOOD ASSEMBLY

Removal

1. Remove hinge nuts on hood and remove hood assembly.
   CAUTION:
   Two technicians should be used to avoid damaging the hood during removal.

   12.7 N·m (1.3 kg-m, 9.4 ft-lb)



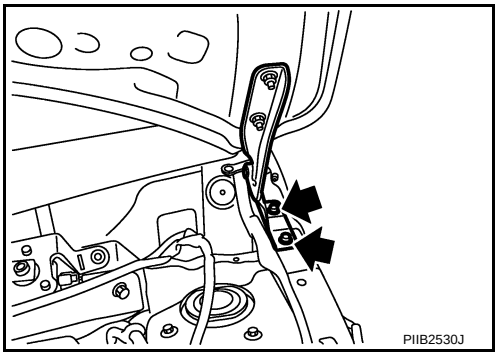
Installation
Installation is in the reverse order of removal.
CAUTION:
- **Before installing hood hinge, apply anticorrosive agent onto the surfaces that make contact with the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-442, "Fitting Adjustment".**

HOOD HINGE

Removal

1. Remove hood assembly. Refer to DLK-443, "Removal and Installation".
2. Remove front fender. Refer to DLK-450, "Removal and Installation".
3. Remove bolts and the hood hinge.

   12.7 N·m (1.3 kg-m, 9.4 ft-lb)

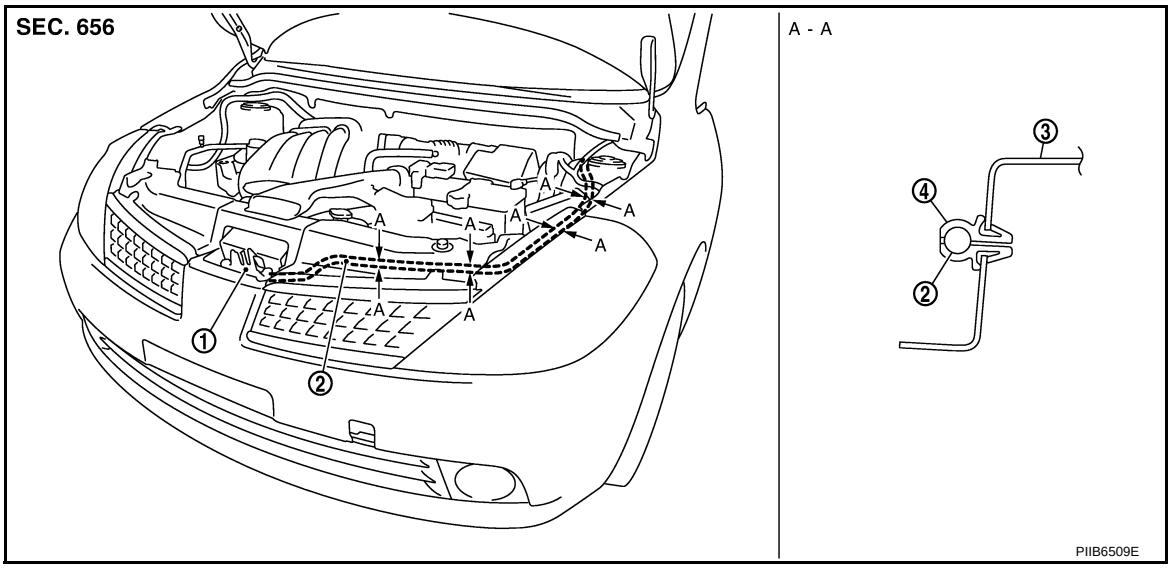


Installation
Installation is in the reverse order of removal.

Removal and Installation of Hood Lock Control

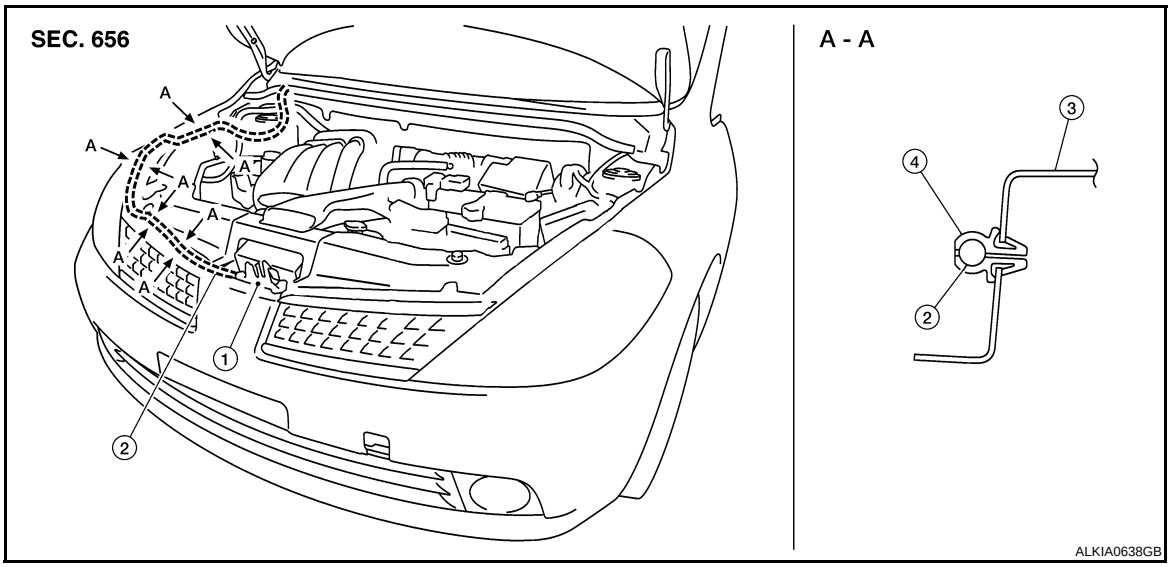
INFOID:0000000001732019

LH Drive



1. Hood lock
2. Hood lock cable
3. Hood ledge upper front
4. Clip

RH Drive



1. Hood lock
2. Hood lock cable
3. Hood ledge upper front
4. Clip

REMOVAL

Hood Lock

1. Remove front grille (LH or RH as necessary). Refer to EXT-19, "Removal and Installation".
2. Remove hood lock bolts.

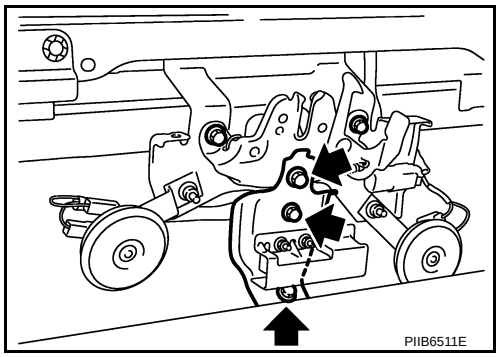
23.6 N·m (2.4 kg-m, 17 ft-lb)

3. Remove hood lock from hood lock cable.

Hood Lock Reinforcement

1. Remove front bumper. Refer to EXT-15, "Removal and Installation - Hatchback" or EXT-17, "Removal and Installation - Sedan".
2. Remove crash zone sensor.
3. Remove bolts, and the hood lock reinforcement.

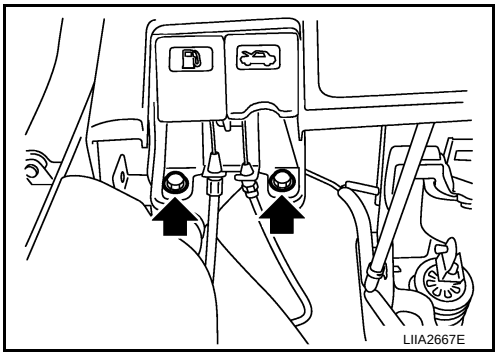
23.6 N·m (2.4 kg-m, 17 ft-lb)



Hood Lock Cable

1. Remove front grille (LH/RH). Refer to EXT-19, "Removal and Installation".
2. Remove fender protector (LH or RH as necessary). Refer to EXT-22, "Removal and Installation".
3. Remove hood lock, and remove hood lock cable from hood lock.
4. Remove radiator core upper support, hood ledge, and then remove hood lock cable.

5. Remove hood opener on bottom left of instrument panel, and then remove hood lock cable.
6. Remove grommet on lower dashboard, and pull out hood lock cable from passenger room side.
   CAUTION:
   While pulling the cable, be careful not to damage (peel) hood opener cable outer surface on edges of body through hole.



INSTALLATION

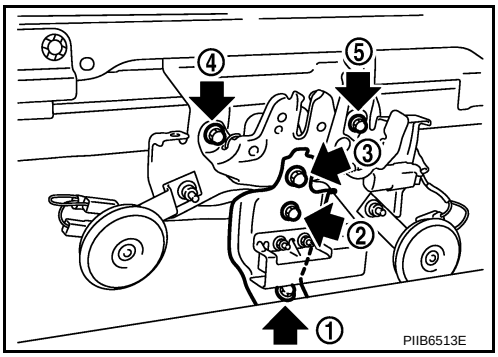
Installation is in the reverse order of removal.

- Perform hood fitting adjustment. Refer to DLK-442, "Fitting Adjustment".

Hood Lock Reinforcement

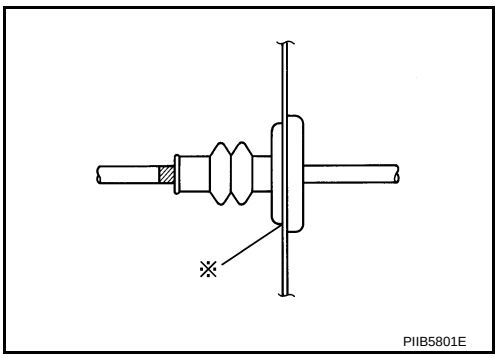
When installing hood lock reinforcement, loosen hood bolts, and then tighten bolts in the order as shown.

23.6 N·m (2.4 kg-m, 17 ft-lb)

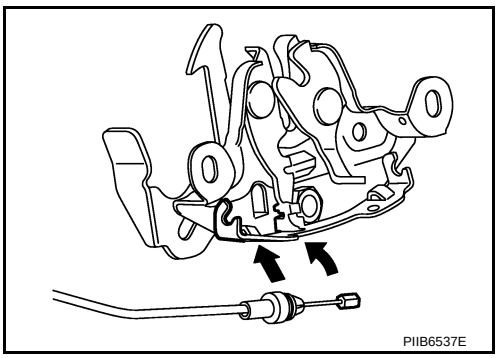


Hood Lock Cable

1. Pull the hood lock cable through the panel hole to the engine compartment.
   CAUTION:
   Be careful not to bend the cable too much, keeping the radius 100 mm (3.94 in) or more.
2. Check that the cable is not offset from the positioning grommet, and push the grommet into the panel hole securely.
3. Apply the sealant around the grommet (at * mark).



4. Install cable securely to lock.
5. After installing, check hood lock adjustment and hood opener operation.

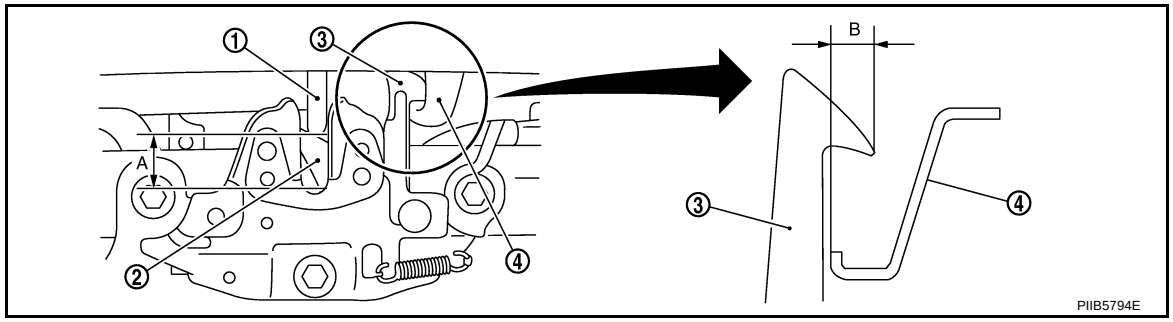


Hood Lock Control Inspection

INFOID:0000000001732020

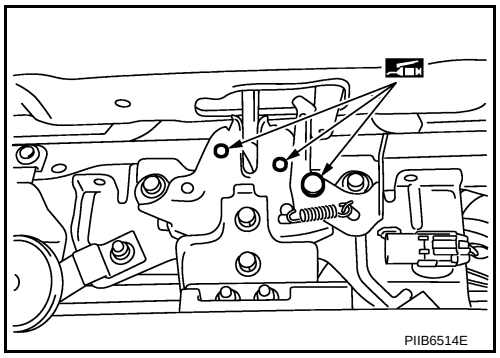
CAUTION:
If the hood lock cable is bent or deformed, replace it.

1. Check that the secondary latch is properly engaged with the secondary striker (B: 6.8 mm (0.268 in) with hood's own weight.



1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

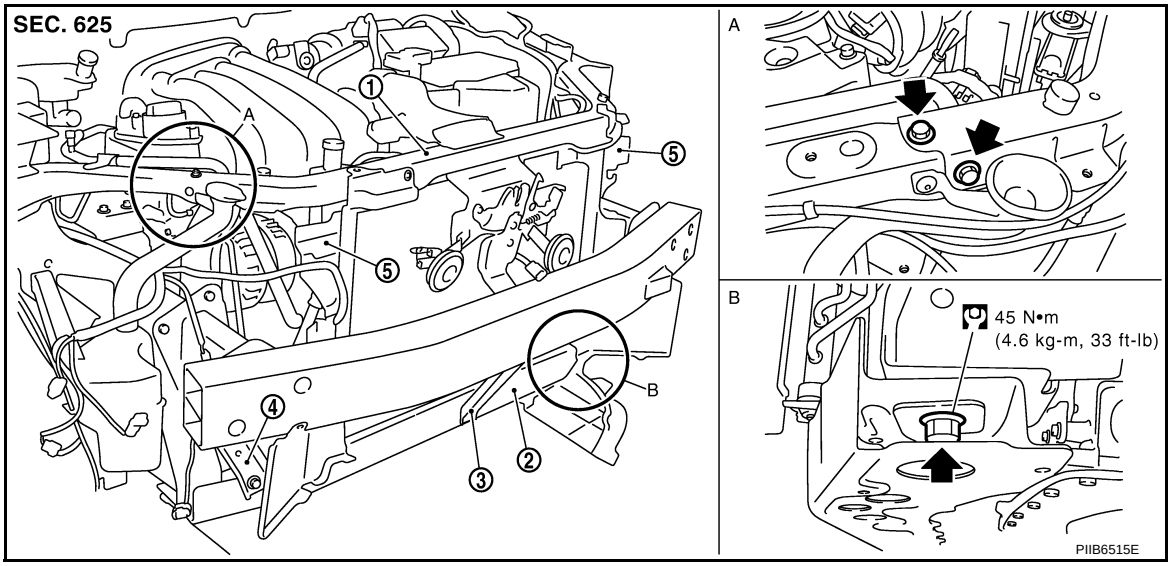
2. While operating the hood release handle, carefully check that the front end of the hood is raised by approx. 20 mm (0.79 in). Also check that the hood release handle returns to the original position.
3. Check that the secondary hood release operates at 29.4 N (3.0 kg) or below.
4. Confirm static closing force of the hood is 343 – 441 N·m (35 – 44 kg-m).
5. Check the hood lock lubrication condition. If necessary, apply “body grease” to the points as shown.



RADIATOR CORE SUPPORT

Removal and Installation

INFOID:0000000001732021



1. Radiator core support upper
2. Radiator core support lower
3. Radiator core support lower stay
4. Radiator core support side stay
5. Air guide

REMOVAL

Radiator Core Support Upper

1. Remove the air duct. Refer to EM-27, "Removal and Installation" (HR16DE), EM-154, "Removal and Installation" (MR18DE), or EM-269, "Removal and Installation" (K9K).
2. Remove the headlamp (LH/RH). Refer to EXL-84, "Removal and Installation" .
3. Remove the hood lock assembly, and remove hood lock cable. Refer to DLK-444 .
4. Remove the air guide and hood lock cable clip.
5. Remove the washer tank inlet. Refer to WW-64, "Removal and Installation" .
6. Remove the radiator core support upper.

Radiator Core Support Lower

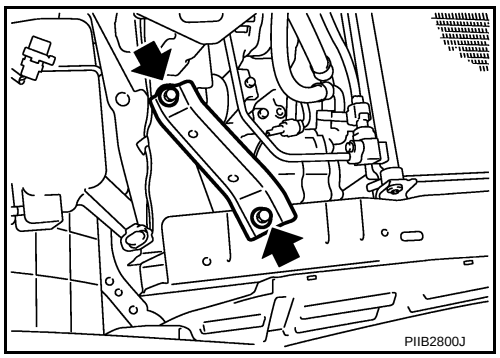
1. Remove the air duct. Refer to EM-27, "Removal and Installation" (HR16DE), EM-154, "Removal and Installation" (MR18DE), or EM-269, "Removal and Installation" (K9K).
2. Remove the front bumper. Refer to EXT-13, "Removal and Installation" .
3. Remove the headlamp (LH/RH). Refer to EXL-84, "Removal and Installation" .
4. Remove the hood lock assembly, and remove hood lock cable. Refer to DLK-444 .
5. Remove the air guide and hood lock cable mounting clip.
6. Remove the front bumper reinforcement. Refer to EXT-13, "Removal and Installation".
7. Remove the radiator core lower stay.

24.5 N·m (2.5 kg-m, 18 ft-lb)

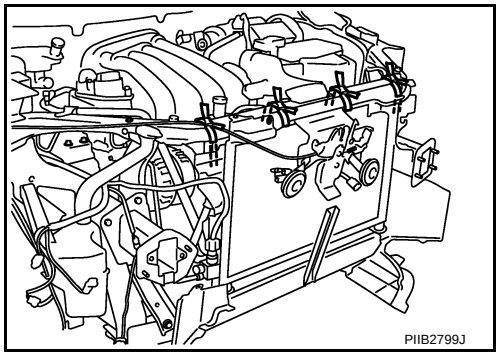
8. Remove the undercover.

9. Remove radiator core support lower side stay.

55.0 N·m (5.6 kg-m, 41 ft-lb)



10. Tie a cord to all radiator core upper supports of the radiator and condenser.
NOTE:
To prevent the compressor and radiator from being dropped when the radiator core lower support is removed.
11. Remove the bolts, and lower radiator core lower supports.
12. Remove the radiator core lower supports.



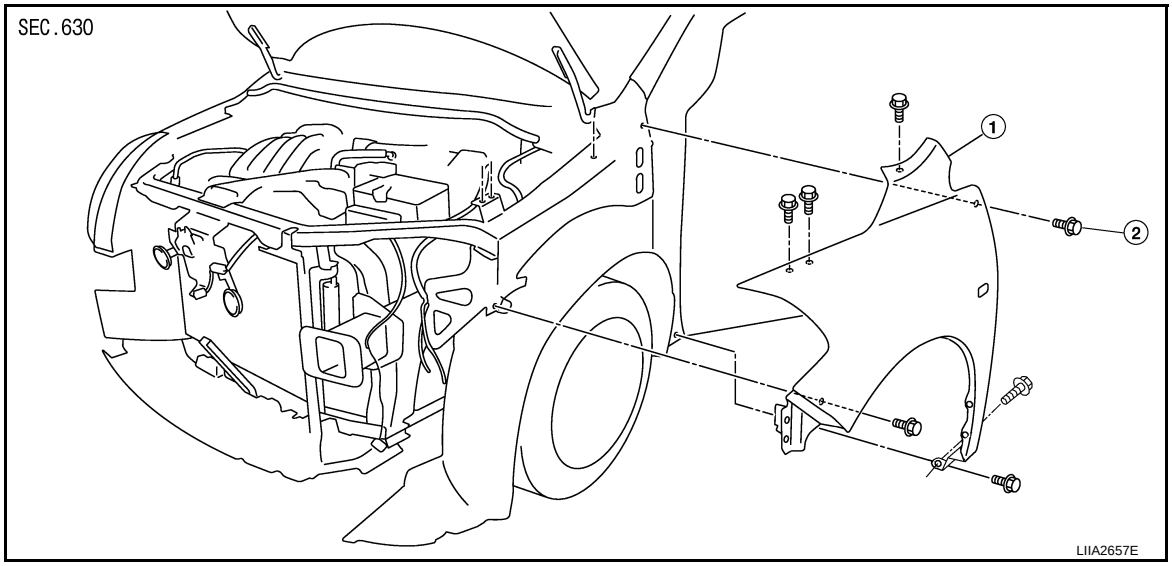
INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

Removal and Installation

INFOID:0000000001732022



1. Front fender
2. Bolt (LH 7 bolts required) (RH 8 bolts required)

REMOVAL

1. Remove the headlamp assemblies. Refer to EXL-84, "Removal and Installation".
2. Remove the cowl top cover (LH/RH). Refer to EXT-20, "Removal and Installation".
3. Remove the front fender protector. Refer to DLK-450, "Removal and Installation".
4. Remove the bolt and the front fender.

CAUTION:
While removing use a shop cloth to protect the vechicle body from damage.

INSTALLATION

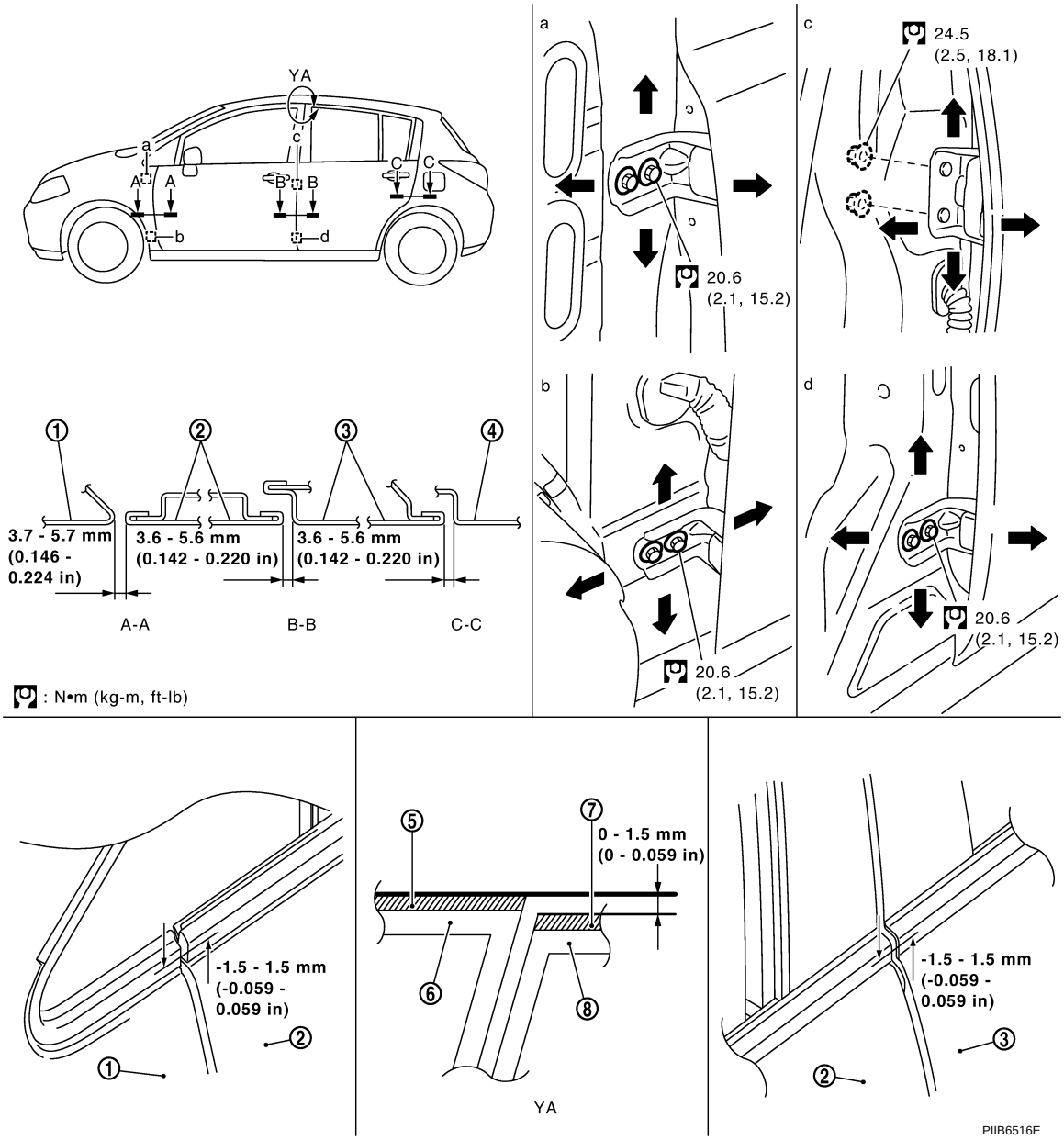
Installation is in the reverse order of removal.

CAUTION:
- **After installing, apply touch-up paint onto the head of the front fender bolts.**
- **After installing, check front fender adjustment. Refer to DLK-442, "Fitting Adjustment" and DLK-451, "Fitting Adjustment".**

DOOR

Fitting Adjustment

INFOID:0000000001732023



1. Front fender
2. Front door outer
3. Rear door outer
4. Rear fender
5. Front door weatherstrip
6. Front door sash
7. Rear door weatherstrip
8. Rear door sash

FRONT DOOR

Longitudinal Clearance and Surface Height Adjustment at Front End

Access from inside the fender to loosen the hinge bolts. Raise the front door at rear end to adjust.

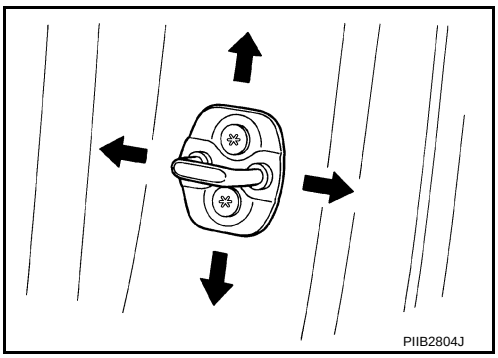
Surface Height Adjustment

Loosen the front door bolts, and adjust the surface height difference of fender and front door according to the fitting standard dimension.

Striker Adjustment

1.

16.7 N·m (1.7 kg-m, 12 ft-lb)



REAR DOOR

Longitudinal Clearance and Surface Height Adjustment at Front End

1. Remove the center pillar upper and lower garnishes. Refer to INT-20, "Removal and Installation".
2. Access from inside the vehicle to loosen the hinge nuts. Open the rear door, and raise the rear door at rear end to adjust.

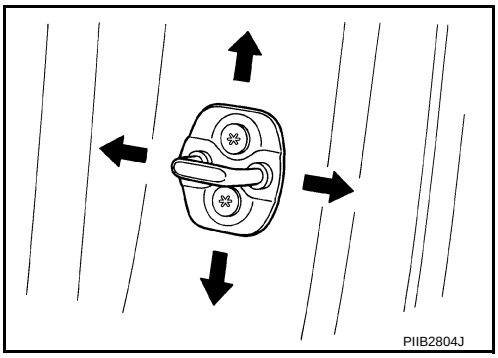
Surface Height Adjustment

Loosen the front door striker bolts and rear door hinge nuts, and adjust the surface height difference of front and rear doors according to the fitting standard dimension.

Striker Adjustment

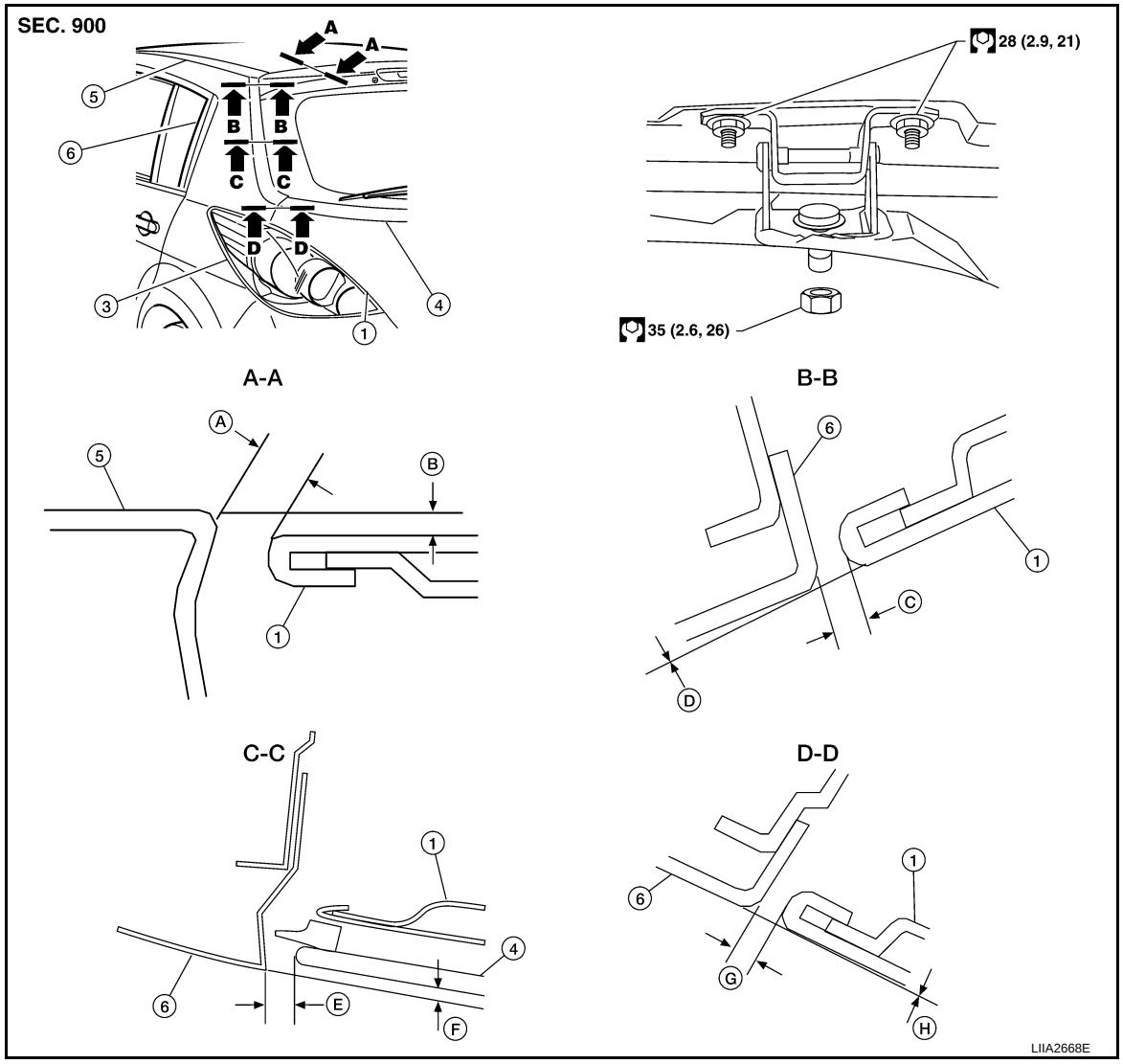
1.

16.7 N·m (1.7 kg-m, 12 ft-lb)



BACK DOOR

Longitudinal Clearance and Surface Height Adjustment



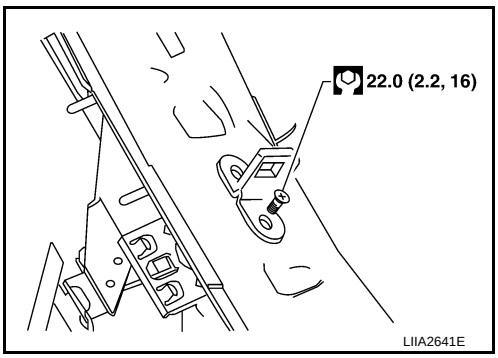
1. Back door assembly
2. Back door hinge
3. Tail lamp assembly
4. Back window glass
5. Roof
6. Rear pillar
A. 6.0 ± 1.0 mm (0.24 ± 0.04 in)
B. -0.5 ± 1.0 mm (-0.02 ± 0.04 in)
C. 5.0 ± 1.2 mm (0.20 ± 0.05 in)
D. 0.0 ± 1.5 mm (0.0 ± 0.06 in)
E. 5.0 ± 2.3 mm (0.20 ± 0.9 in)
F. 2.7 +1.6 -2.1 mm (0.11 + 0.06 - 0.08 in)
G. 5.0 ± 1.2 mm (0.20 ± 0.05 in)
H. 0.0 ± 1.5 mm (0.0 ± 0.06 in)

1. Open and support the back door.
2. Slightly loosen the hinge nuts.
3. Reposition the door as necessary and tighten the nuts.
4. Confirm the adjustment. Repeat as necessary to obtain the desired fit.

Striker Adjustment

1.

Striker bolts **20 N·m (2.2 kg-m, 16 ft-lb)**



Removal and Installation

INFOID:0000000001732024

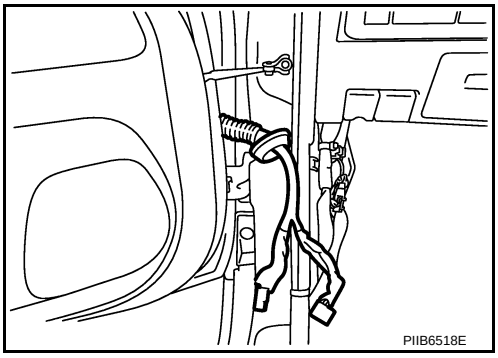
FRONT DOOR

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-451, "Fitting Adjustment".**
- **After installing, apply touch-up paint onto the head of the hinge nuts.**
- **Check the hinge rotating part for lubrication. If necessary, apply “body grease”.**
- **Operate with two workers, because of its heavy weight.**
- **Check front door open/close operation after installation.**

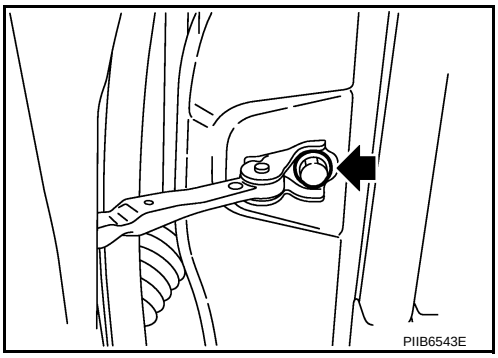
Removal

1. Remove dash side finisher. Refer to INT-20, "Removal and Installation".
2. Disconnect the front door harness connectors.
3. Remove the front door harness grommet, and then remove the harness from the vehicle.



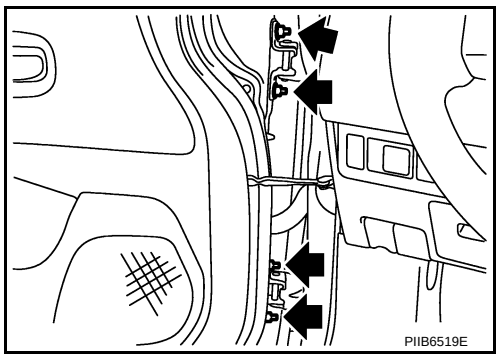
4. Remove the check link bolt.

14.7 N·m (1.5 kg-m, 11 ft-lb)



5. Remove the hinge nuts and then the door assembly.

24.5 N·m (2.5 kg-m, 18 ft-lb)



Installation

Installation is in the reverse order of removal.

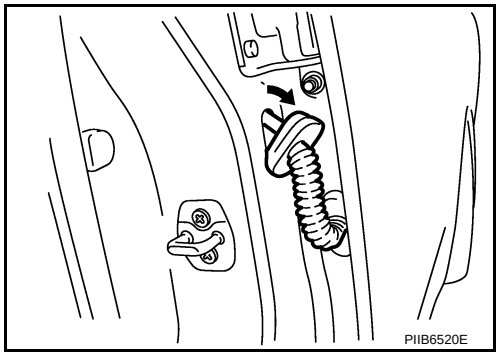
REAR DOOR

CAUTION:

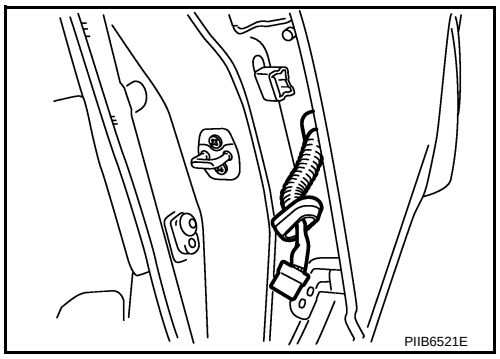
- **When removing and installing the rear door assembly, support the door with a jack and cloth to protect the door and body.**
- **When removing and installing rear door assembly, be sure to carry out the fitting adjustment. Refer to DLK-451, "Fitting Adjustment".**
- **After installing, apply touch-up paint onto the head of the hinge nuts.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply “body grease”.**
- **Operate with two workers, because of its heavy weight.**
- **Check rear door open/close operation after installation.**

Removal

1. Remove the rear door harness grommet.

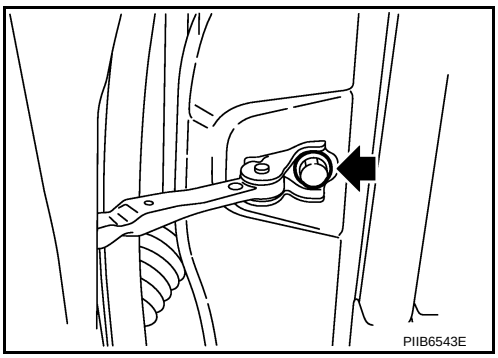


2. Disconnect the rear door harness connector.



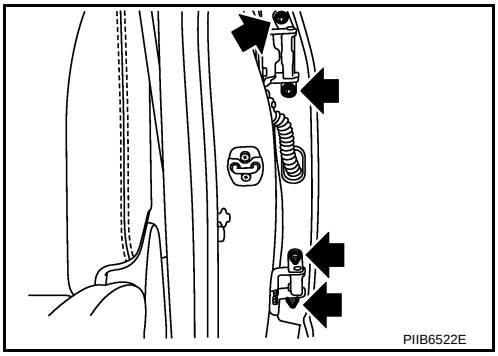
3. Remove the check link bolt.

14.7 N·m (1.5 kg-m, 11 ft-lb)



4. Remove the hinge nuts and the door assembly.

24.5 N·m (2.5 kg-m, 18 ft-lb)

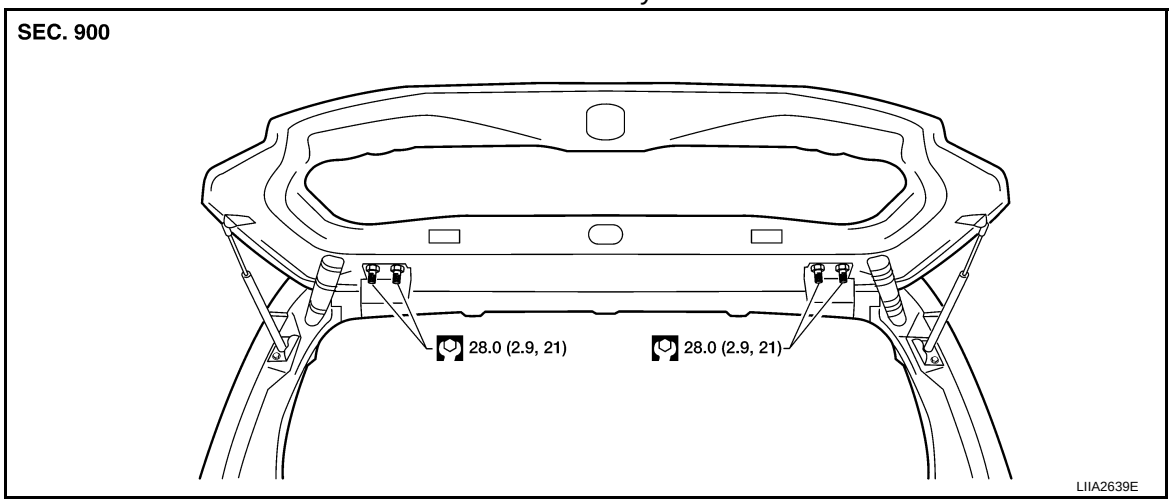


Installation
Installation is in the reverse order of removal.

BACK DOOR

Removal

1. Remove the back door glass. Refer to GW-18, "Removal and Installation".
2. Remove the back door lock assembly. Refer to DLK-465, "Removal and Installation".
3. Remove the back door wire harness.
4. Remove the rear washer nozzle and hose from the back door. Refer to WW-80, "Removal and Installation".
5. Support the back door.
   CAUTION:
   Two technicians should be used to avoid damaging the back door during removal.
6. Remove the back door stays.
7. Remove the door side nuts and the back door assembly.



Installation
Installation is in the reverse order of removal.
- Align the back door. Refer to DLK-451, "Fitting Adjustment".

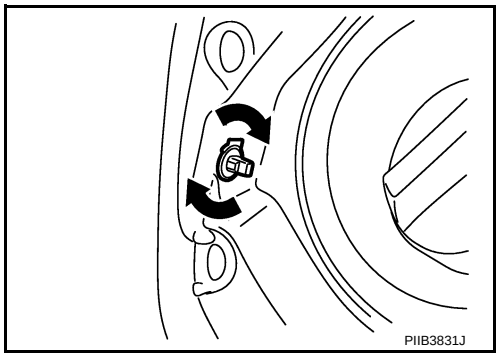
FUEL FILLER LID OPENER

Removal and Installation of Fuel Filler Lid Opener

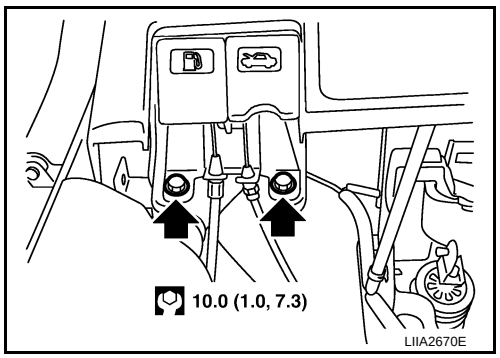
INFOID:0000000001732025

REMOVAL

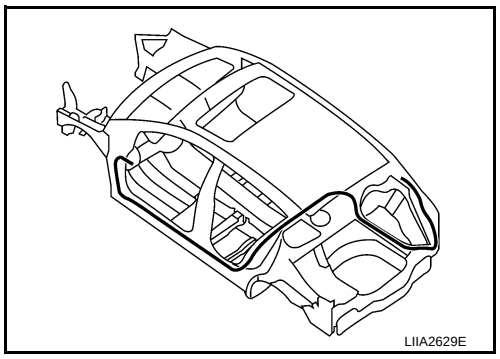
1. Remove trunk side finisher (RH). Refer to XX-XX, "*****".
2. Remove fuel filler lid opener cable lock ring.



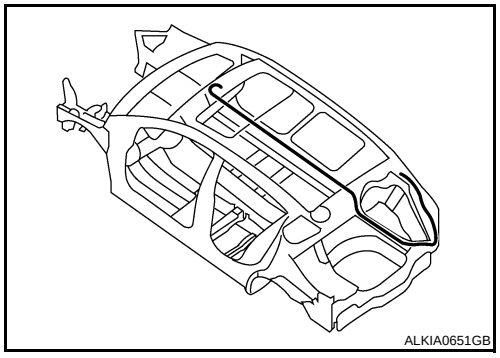
3. Remove front and rear kicking plates. Refer to XX-XX, "*****".
4. Remove rear cushion assembly. Refer to XX-XX, "*****".
5. Remove the bolts and the fuel filler lid opener handle.



6. Remove fuel filler lid opener cable clips from the vehicle.
7. Remove the fuel filler lid opener cable (LH drive).



8. Remove the fuel filler lid opener cable (RH drive).



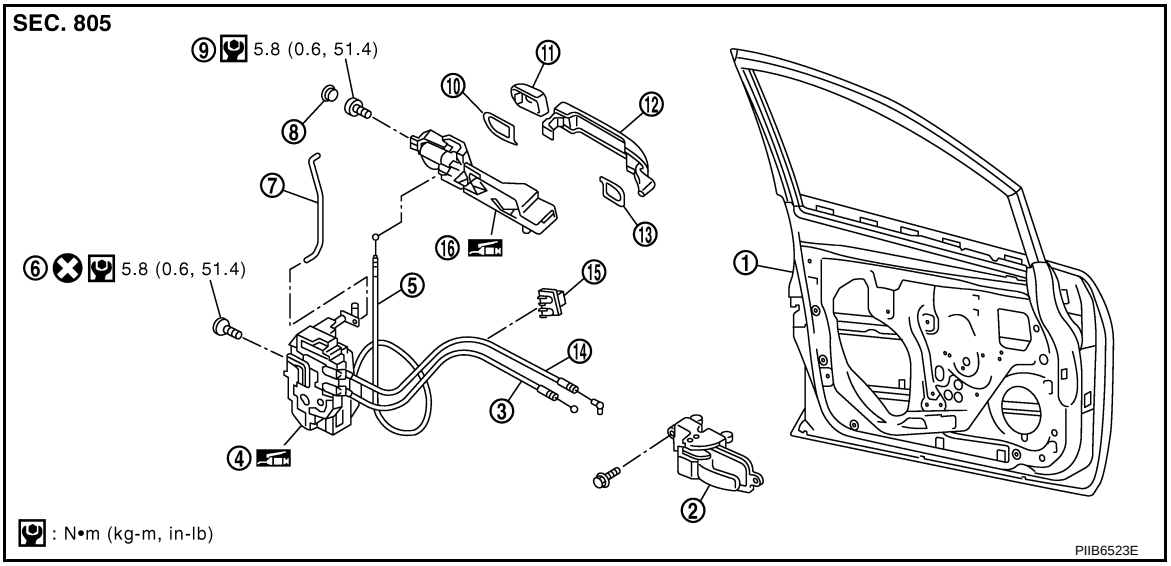
INSTALLATION

Installation is in the reverse order of removal.

FRONT DOOR LOCK

Component Parts Location

INFOID:0000000001732026



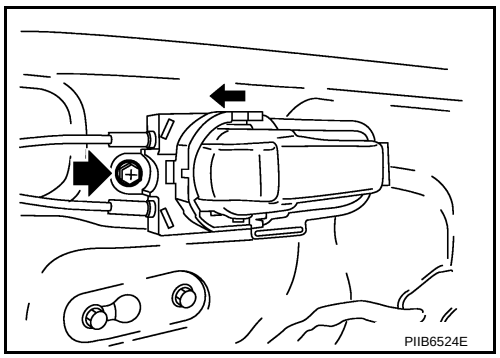
1. Front door
2. Inside handle
3. Inside handle cable
4. Door lock assembly
5. Outside handle cable
6. TORX bolt (T30)
7. Key cylinder connecting rod
8. Grommet
9. TORX bolt (T30)
10. Rear gasket
11. Door key cylinder assembly (Driver's side) Outside handle escutcheon (passenger's side)
12. Outside handle
13. Front gasket
14. Lock knob cable
15. Holder
16. Outside handle bracket

Removal and Installation

INFOID:0000000001732027

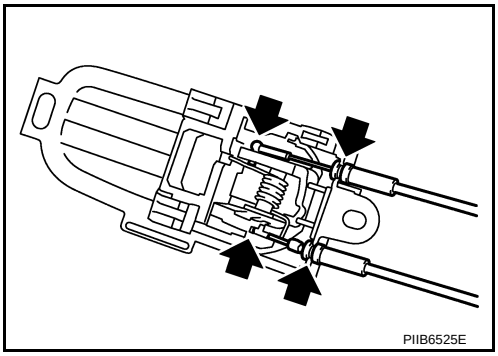
REMOVAL

1. Remove front door finisher. Refer to XX-XX, "*****" .
2. Fully close front door window.
3. Remove the front door sealing screen.
   NOTE:
   If sealing screen is reused, cut butyl tape in a way that leaves it on the sealing screen.
4. Remove front door rear glass run channel. Refer to XX-XX, "*****" .
5. Remove the cables from the holder.
6. Remove inside handle bolt, and slide the handle toward the rear of the vehicle. disengage the handle from the door panel, and remove the inside handle.

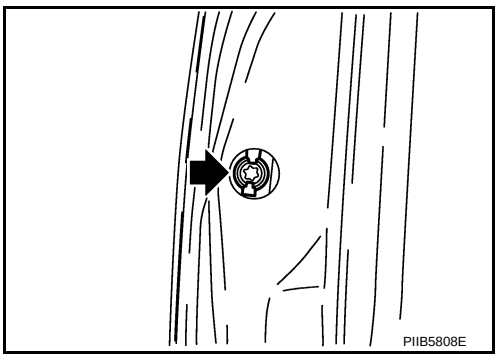


7. Disengage the handle from the door panel, and remove the inside handle.

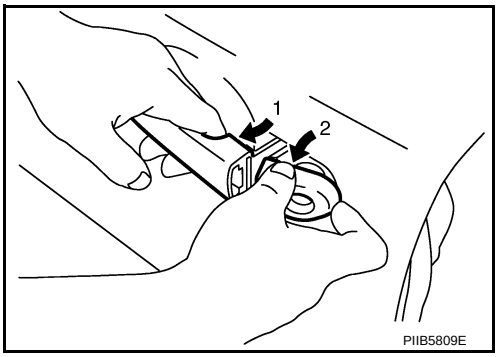
8. Disconnect the inside handle cable and lock knob cable from the inside handle.
CAUTION:
During removal and installation, work so as not to bend the ends of the lock knob cable and inside handle cable.



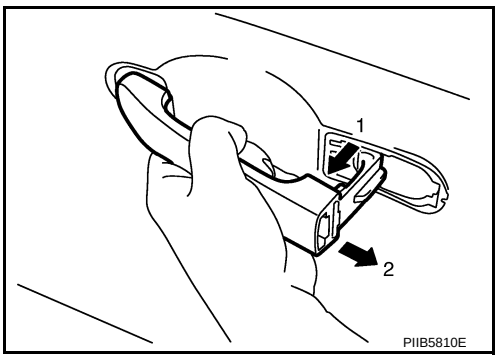
9. Remove the door side grommet, and the door key cylinder assembly (escutcheon) bolt.
10. Remove the key cylinder connecting rod (key cylinder side).
11. If equipped, disconnect the door antenna, the door request switch connector and remove the harness clamp. (Vehicle with intelligent key systems only).



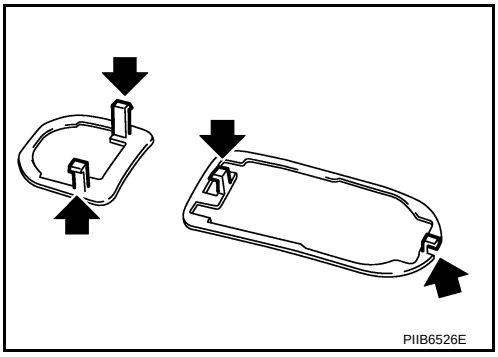
12. Remove the door cylinder assembly while pulling the outside handle forward.



13. Pull the outside door handle forward and then slide it toward the rear of the vehicle to remove.

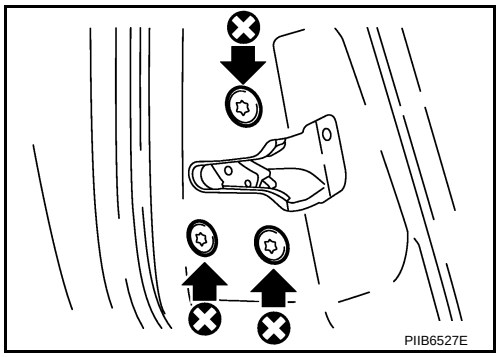


14. Remove the front and rear gaskets.

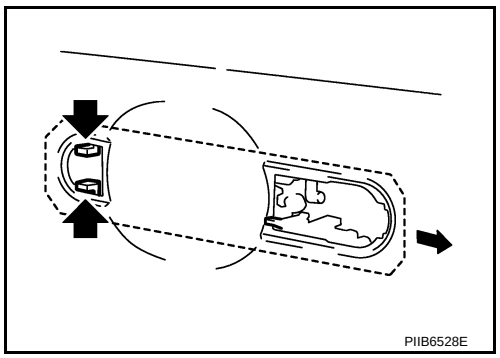


15. Remove the door lock assembly bolts.

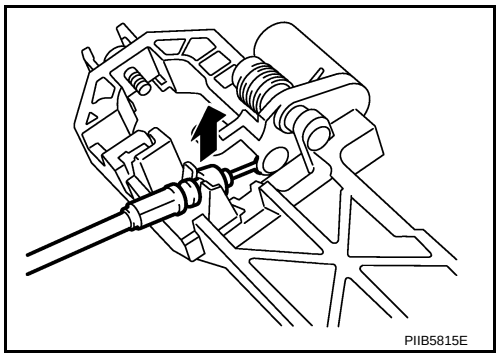
5.8 N·m (0.6 kg-m, 51.4 in-lb)



16. Slide the outside handle bracket toward the rear of the vehicle, and remove the assembly.



17. If equipped, disconnect the door lock assembly electrical connector.
18. Separate the outside handle cable from the outside handle bracket.

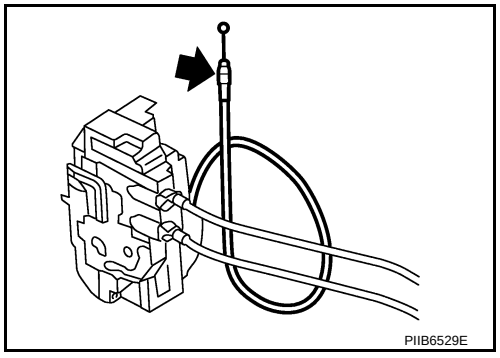


INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

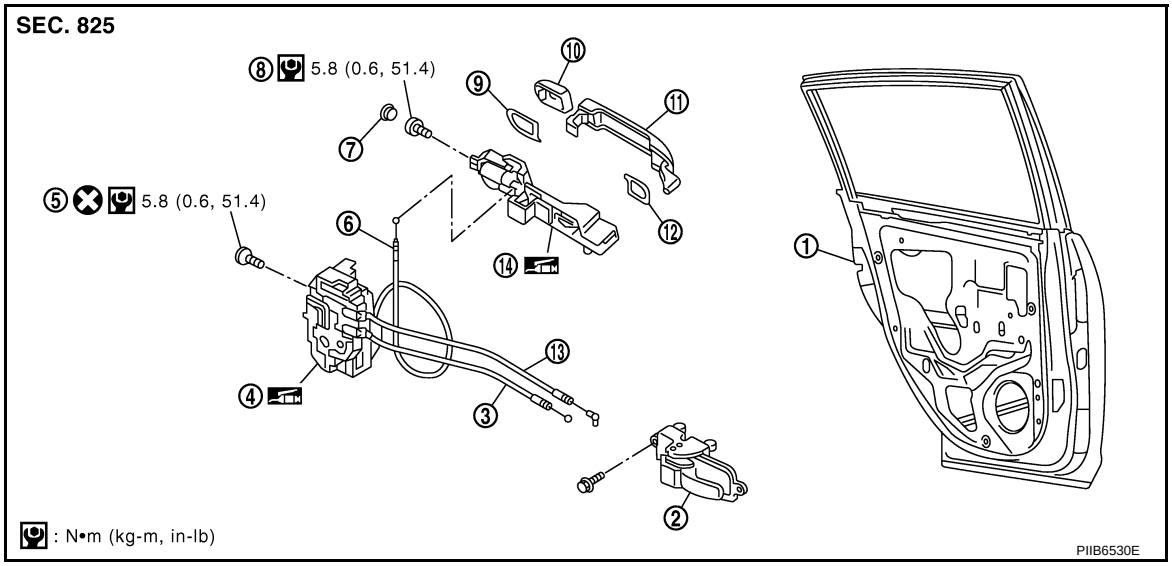
- **To install each rod, be sure to rotate the rod holder until a click is felt.**
- **When installing door lock assembly, be careful when rotating the outside handle cable as shown in the figure.**
  - **Place the outside handle bracket cable on the inside of door lock assembly before installing.**



REAR DOOR LOCK

Component Parts Location

INFOID:0000000001732028



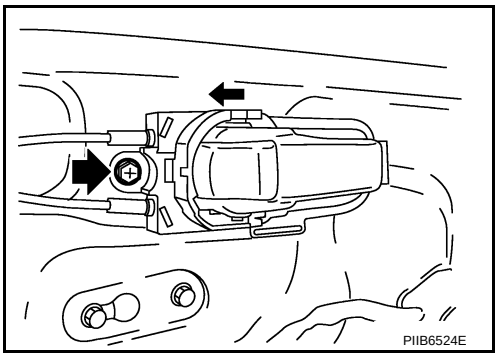
1. Rear door
2. Inside handle
3. Inside handle cable
4. Door lock assembly
5. TORX bolt (T30)
6. Outside handle cable
7. Grommet
8. TORX bolt (T30)
9. Rear gasket
10. Outside handle escutcheon
11. Outside handle
12. Front gasket
13. Lock knob cable
14. Outside handle bracket

Removal and Installation

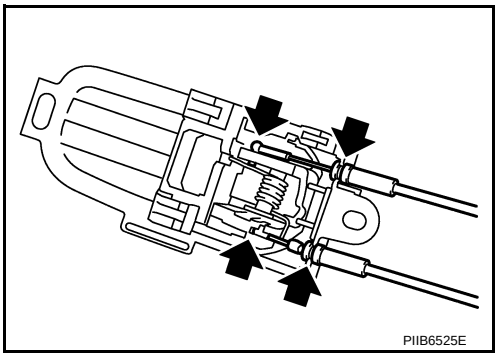
INFOID:0000000001732029

REMOVAL

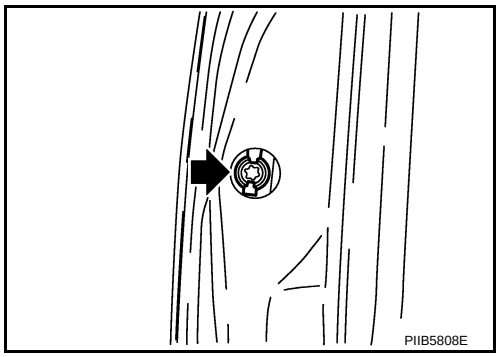
1. Remove the partition glass. Refer to XX-XX, "*****".
2. Support door glass while lifting it up to the door window completely closed position.
3. Remove inside handle bolt, slide handle toward rear of vehicle, disconnect it from the door panel, and remove the inside handle.



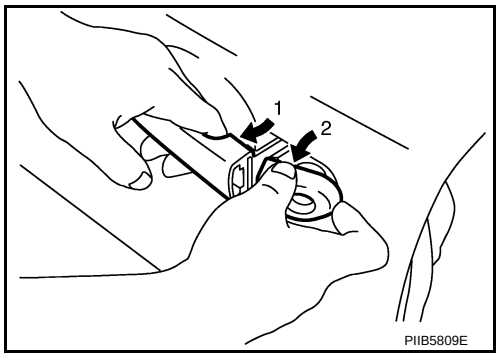
4. Disconnect the inside handle and lock knob cables from the inside handle.
   CAUTION:
   During removal and installation, do not to bend the ends of the lock knob cable and inside handle cable.



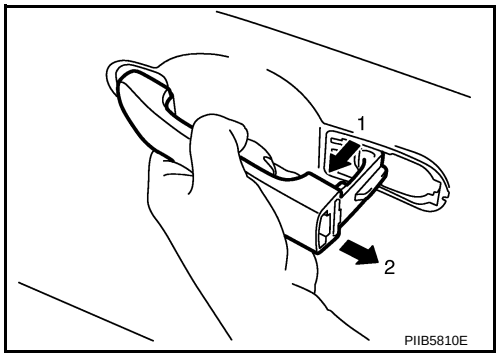
5. Remove the door side grommet, and the outside handle escutcheon screw.



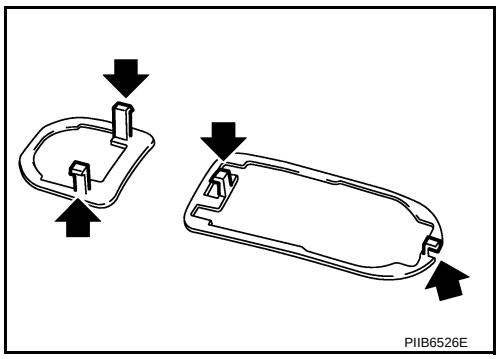
6. Pull the outside handle forward (1), while removing outside handle escutcheon (2).



7. Pull outside door handle forward (1), and slide it toward the rear of the vehicle to remove (2).

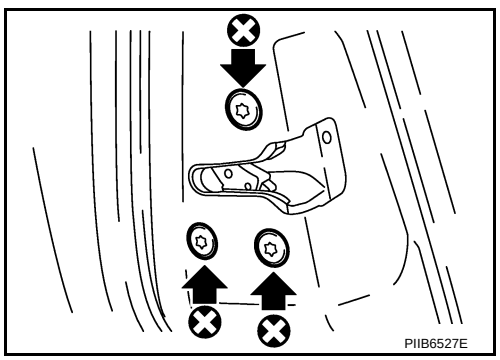


8. Remove the front and rear gaskets.

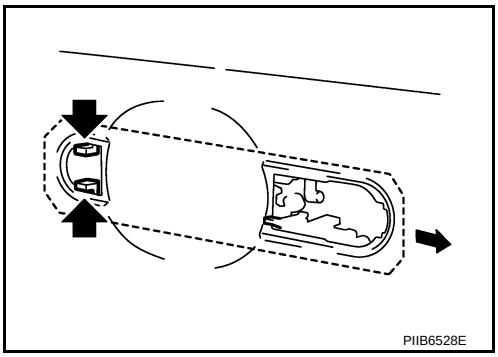


9. Remove the door lock assembly screws.

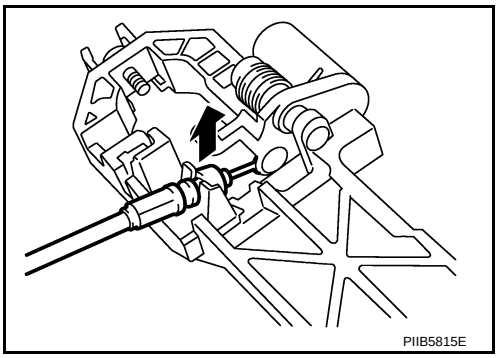
: 5.8 N·m (0.6 kg-m, 51.4 in-lb)



10. Slide the outside handle bracket toward the rear of vehicle, remove the outside handle bracket and the door lock assembly.



11. If equipped, disconnect the door lock assembly electrical connector.
12. Disconnect the outside handle cable from the outside handle bracket.

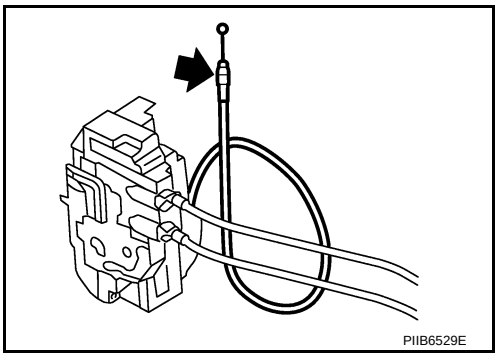


INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **To install each rod, be sure to rotate the rod holder until a click is felt.**
- **When installing door lock assembly, be careful when rotating the outside handle cable as shown.**
- **Place the outside handle bracket cable on the inside of door lock assembly before installing.**



BACK DOOR LOCK

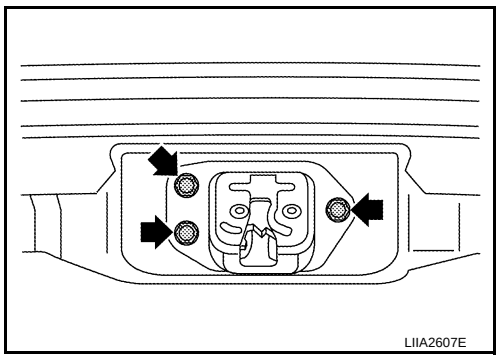
Removal and Installation

INFOID:0000000001732030

BACK DOOR LOCK

Removal

1. Remove the back door finisher lower. Refer to XX-XX, "*****".
2. Remove the bolts, disconnect the electrical connector and separate the lock from the door.



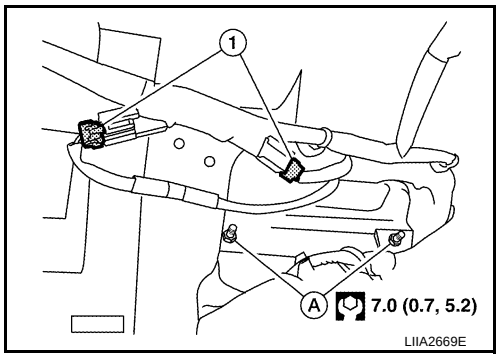
Installation

Installation is in the reverse order of removal.

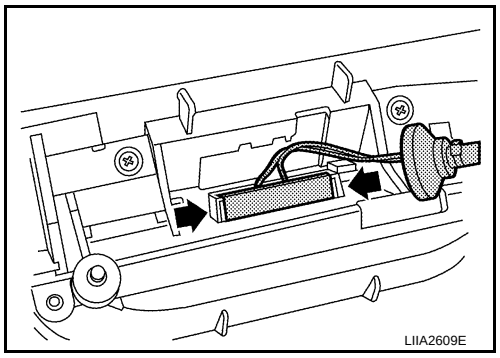
BACK DOOR HANDLE

Removal

1. Remove the back door finisher lower. Refer to XX-XX, "*****".
2. Disconnect the harness connectors (1), remove the nuts and the back door handle (A).



3. Release the clips and remove the switch from the housing.



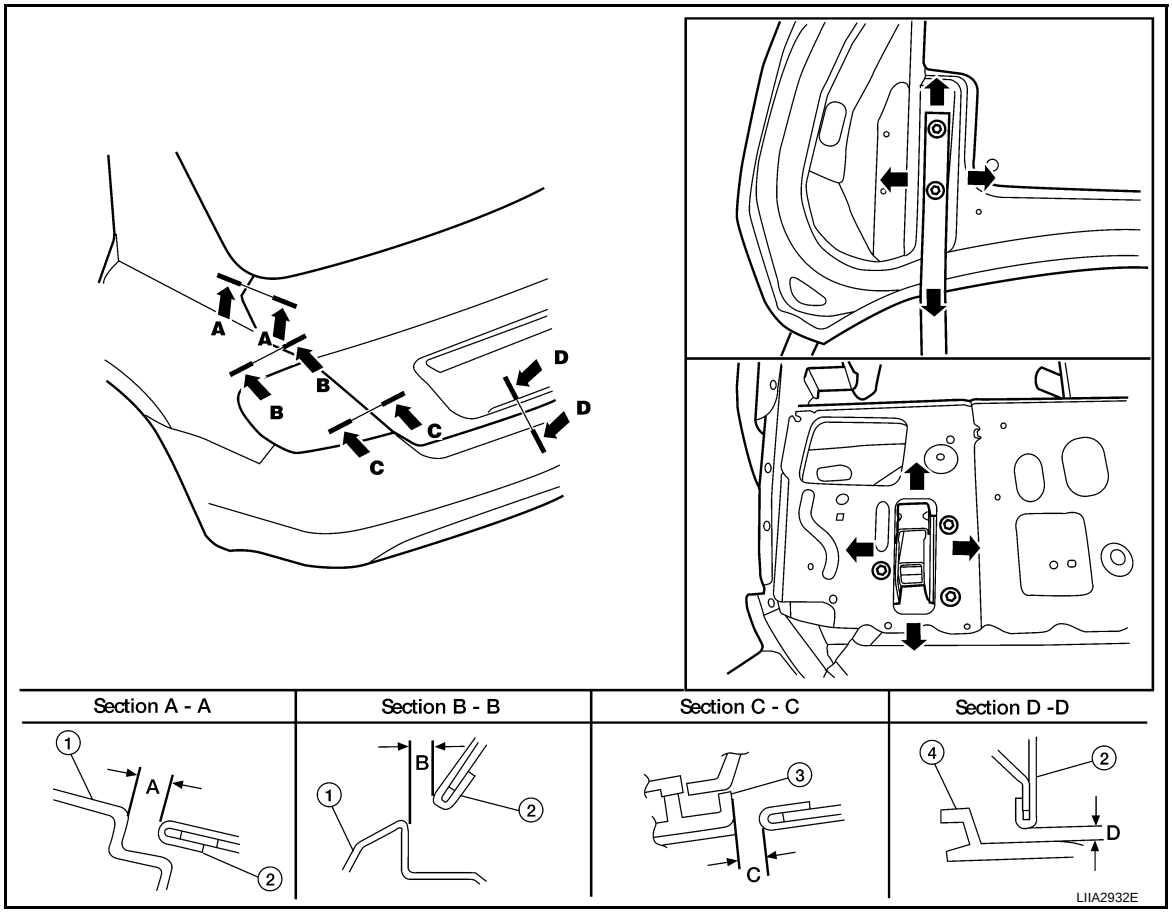
Installation

Installation is in the reverse order of removal.

TRUNK LID

Fitting Adjustment

INFOID:0000000001732031



1. Rear fender
2. Trunk lid
3. Rear combination lamp
4. Rear bumper fascia
a. 4.0 ± 1.0 mm (0.16 ± 0.04 in)
b. 3.5 ± 1.0 mm (0.14 ± 0.04 in)
c. 4.5 ± 1.7 mm (0.03 ± 0.06 in)
d. 7.0 ± 2.2 mm (0.28 ± 0.09 in)

Longitudinal and lateral clearance adjustment

1. With the striker released, loosen the trunk lid hinge nuts and close the trunk lid.
2. Make the lateral clearance and the clearance to the rear window glass equal. Then open the trunk lid to tighten the nuts.

Surface height adjustment

1. Loosen the striker bolts. Raise the striker to the top position, and temporarily tighten the upper bolt.
2. Close the trunk lid lightly and adjust the surface height. Then open the trunk lid and tighten the striker bolts.

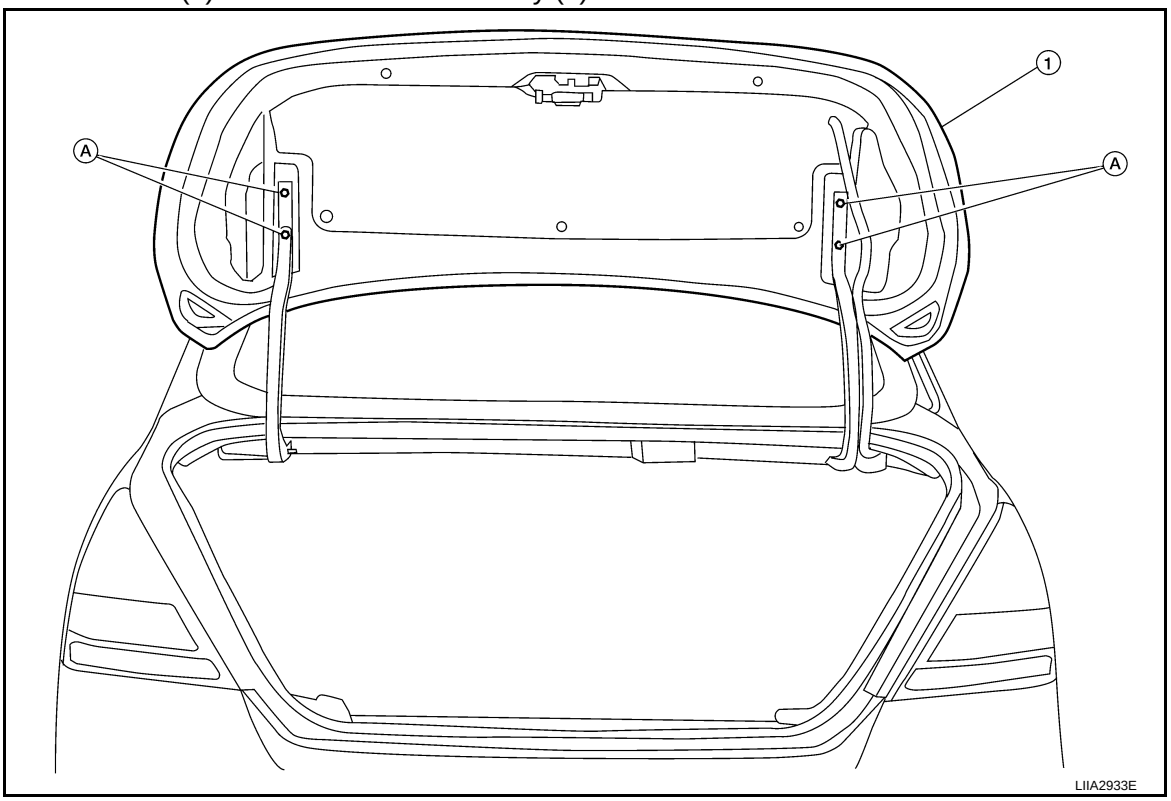
Trunk Lid Assembly

INFOID:0000000001732032

REMOVAL

1. Remove the trunk lid finisher. Refer to XX-XX, "*****" .
2. Remove the trunk lid wire harness.

3. Remove the nuts (a) and the trunk lid assembly (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

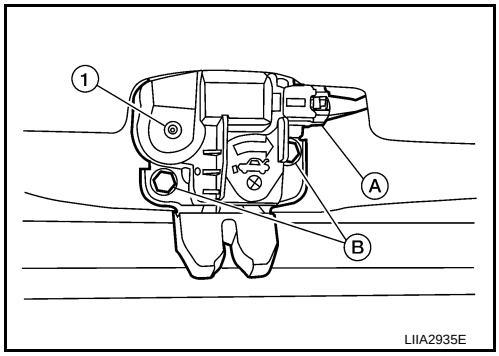
After installing, apply touch-up paint (body color) to the head of the hinge nuts.

Trunk Lid Lock

INFOID:0000000001732033

REMOVAL

1. Remove the trunk lid finisher. Refer to XX-XX, "*****".
2. If equipped, disconnect the trunk lid lock cylinder rod.
3. Remove the release cable.
4. Disconnect the electrical connector (a), remove the bolts (b) and the trunk lid lock (1).



INSTALLATION

Installation is in the reverse order of removal.

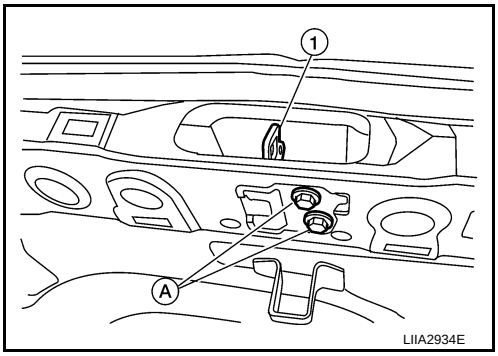
Trunk Lid Striker

INFOID:0000000001732034

REMOVAL

1. Remove the trunk rear plate and trunk rear finisher. Refer to XX-XX, "*****".
2. Remove the bolts, disconnect the electrical connector and remove the trunk lock actuator.
3. Remove the bolt and disconnect the trunk lid release cable.

4. Remove the bolts (a) and the trunk lid striker (1).



INSTALLATION

Installation is in the reverse order of removal.

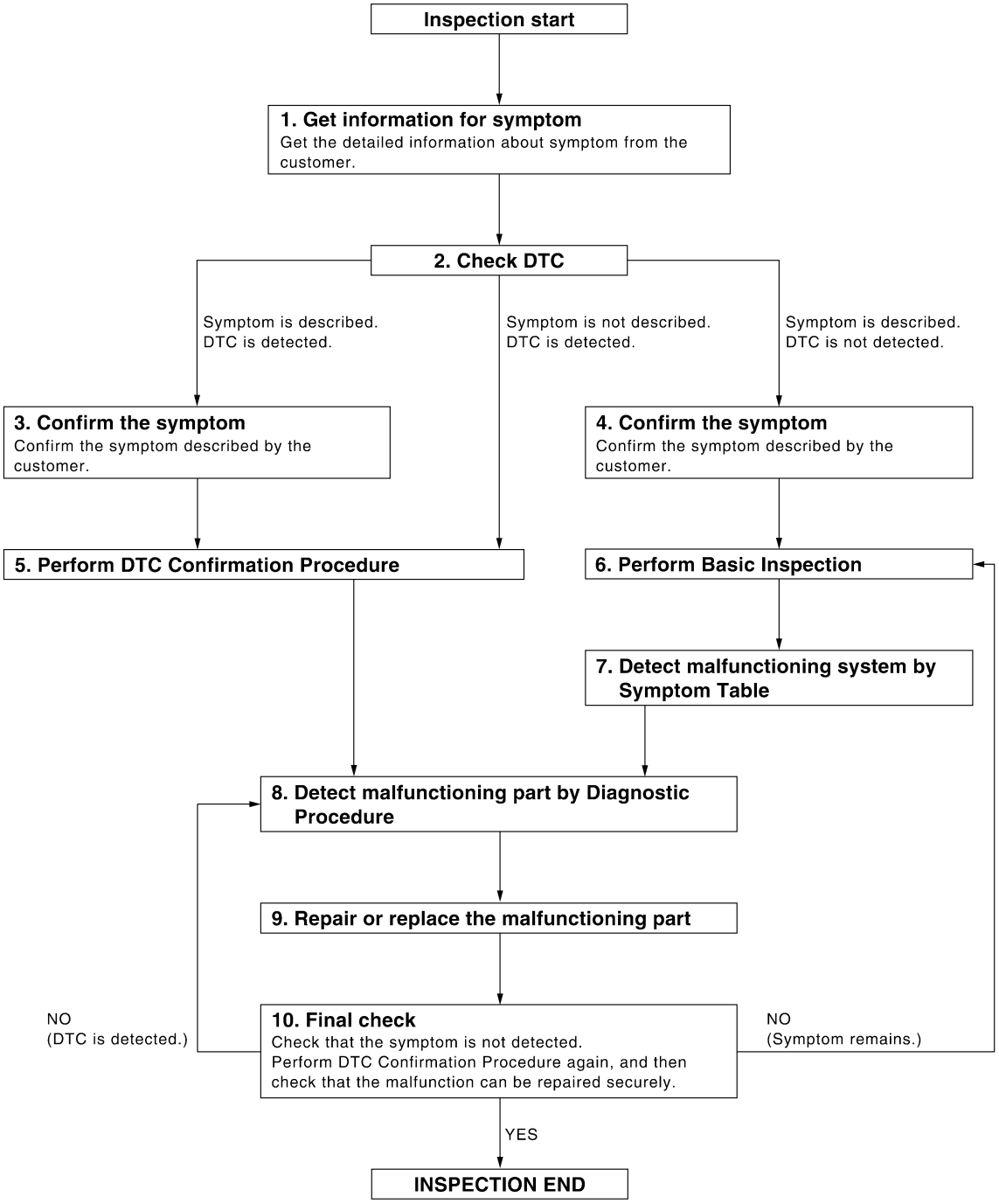
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001396985

OVERALL SEQUENCE



ALKIA0246GB

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 for BCM.
2. Perform the following procedure if DTC is displayed.

- 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.
If two or more DTCs are detected, refer to DLK-565, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 8.
NO >> Refer to XX-XX, "*****".

6.PERFORM BASIC INSPECTION

Perform Basic Inspection, refer to DLK-582, "Basic Inspection".

Inspection End>>GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.
NOTE:
The Diagnostic Procedure described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

>> GO TO 9.

9.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 10.

10.FINAL CHECK

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

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8.
YES (Symptom remains)>>GO TO 6.
NO >> **INSPECTION END**

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001396986

Perform the system initialization when replacing or registering Keyfob and ignition key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000001396987

Refer to the CONSULT-III Operation Manual-NATS.

FUNCTION DIAGNOSIS

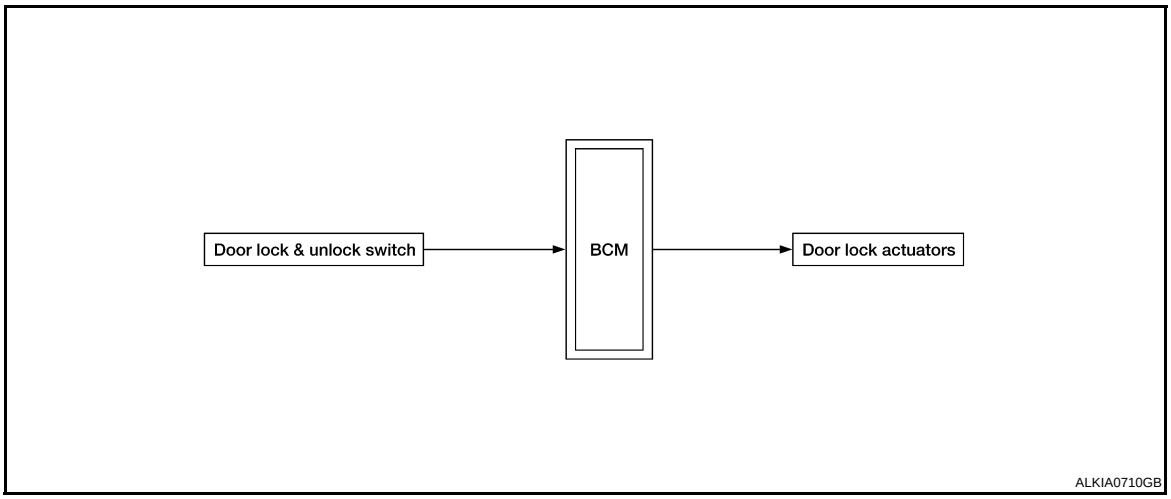
DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001396988

DOOR LOCK AND UNLOCK SWITCH OPERATION



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001396989

DOOR LOCK AND UNLOCK SWITCH OPERATION

Functions are available by operating the door lock and unlock switch on center console. Interlocked with the lock/unlock operation of door lock and unlock switch, door lock actuators of all doors are locked/unlocked.

Operation Condition

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

Door lock and unlock switch	Operation condition
Lock operation	All the following conditions are satisfied. • Except driver side, doors are closed. • Doors are not locked with keyfob.
Unlock operation	All the following all conditions are satisfied. • Doors are not locked with keyfob.

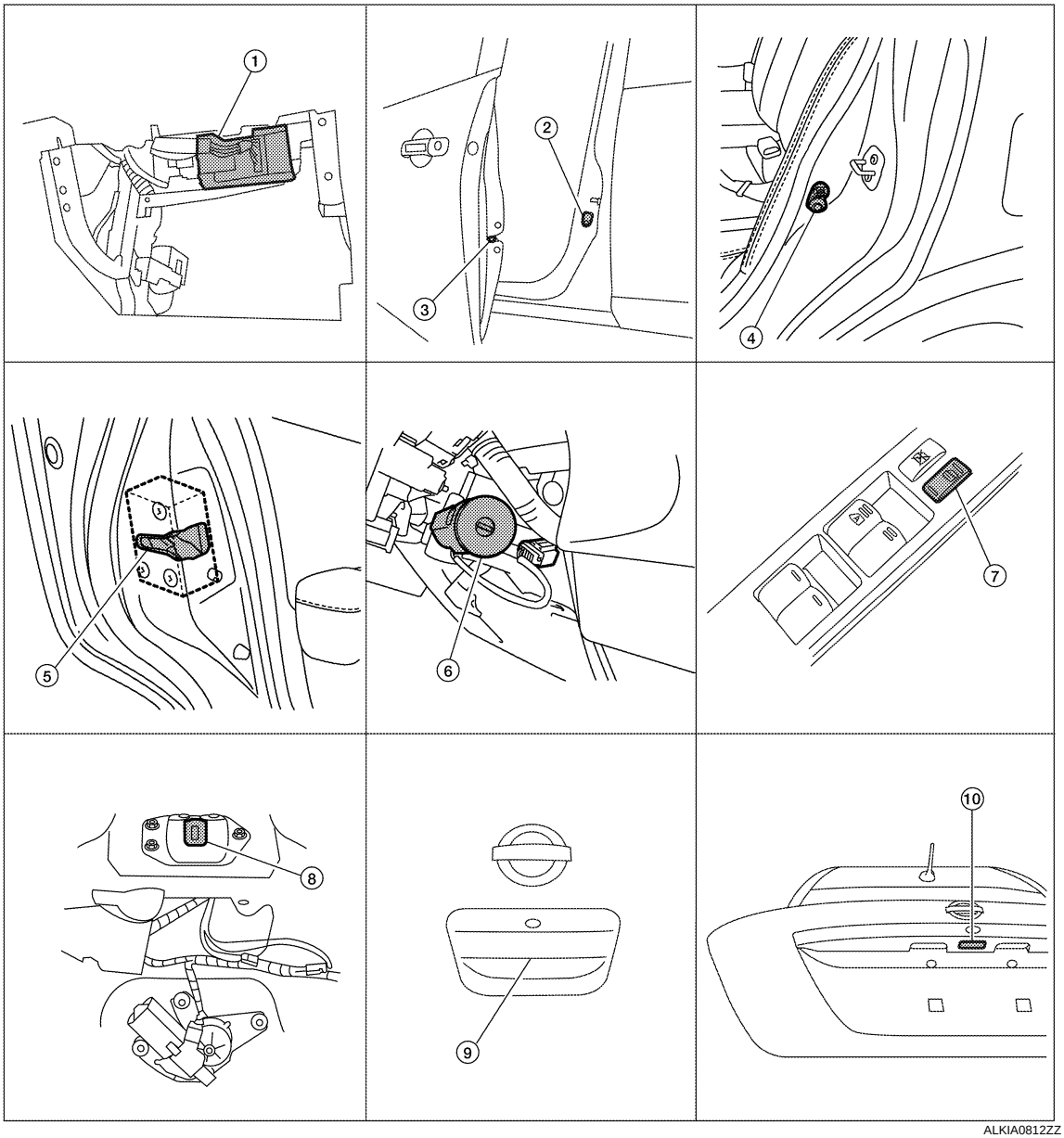
NOTE:

When the door lock is locked with keyfob, door lock and unlock switch operation will be invalid until either of the following conditions is satisfied.

- Turn ignition switch ON.
- Unlock operation by keyfob.

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:0000000001396990



ALKIA0812ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Front door switch (driver side) B34 (Passenger side) B27
3. Front door lock actuator (driver side) D14 (Passenger side) D114 Door unlock sensor (driver side) D14
4. Rear door switch LH B71 RH B53
5. Rear door lock actuator LH D205 RH D305
6. Key switch and key lock solenoid M27
7. Main power window and door lock/unlock switch D7, D8
8. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
9. Back door opener switch (hatchback) D408
10. Trunk lid opener switch (sedan) B61

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000001396991

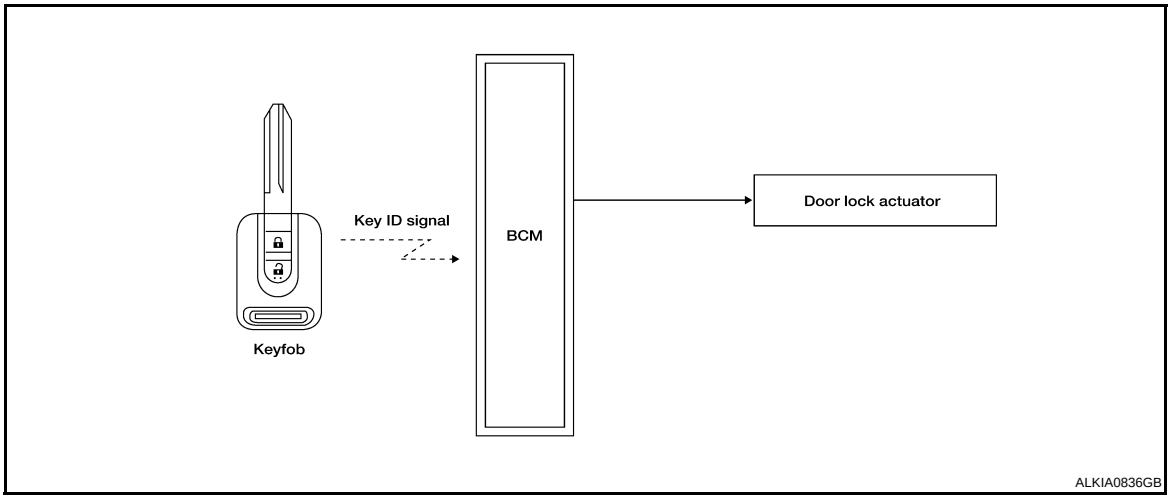
Item	Function
BCM	Controls the door lock and unlock function.
Door switch	Detects door state (open or closed).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM. Door lock and unlock switch indicator is built in door lock and unlock switch.
Door lock actuator	Receives door lock and unlock signal from BCM and locks and unlocks each door.

REMOTE KEYLESS ENTRY

REMOTE KEYLESS ENTRY : System Diagram

INFOID:0000000001396992

KEYFOB OPERATION



REMOTE KEYLESS ENTRY : System Description

INFOID:0000000001396993

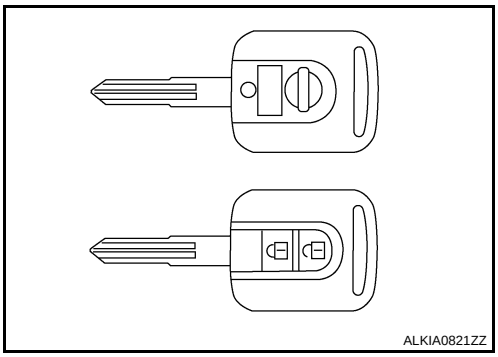
KEYFOB OPERATION

The multi remote control 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. When BCM receives the door lock and unlock signal, it operates door lock actuator.

1. Integrated door lock keyfob.
2. Integrated ignition key/emergency key.
3. Key number plate.



OPERATION CONDITION

Remote controller operation	Operation condition
Lock/unlock	Key switch is OFF (key is removed from ignition key cylinder).

OPERATION AREA

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

ANTI-HIJACK MODE

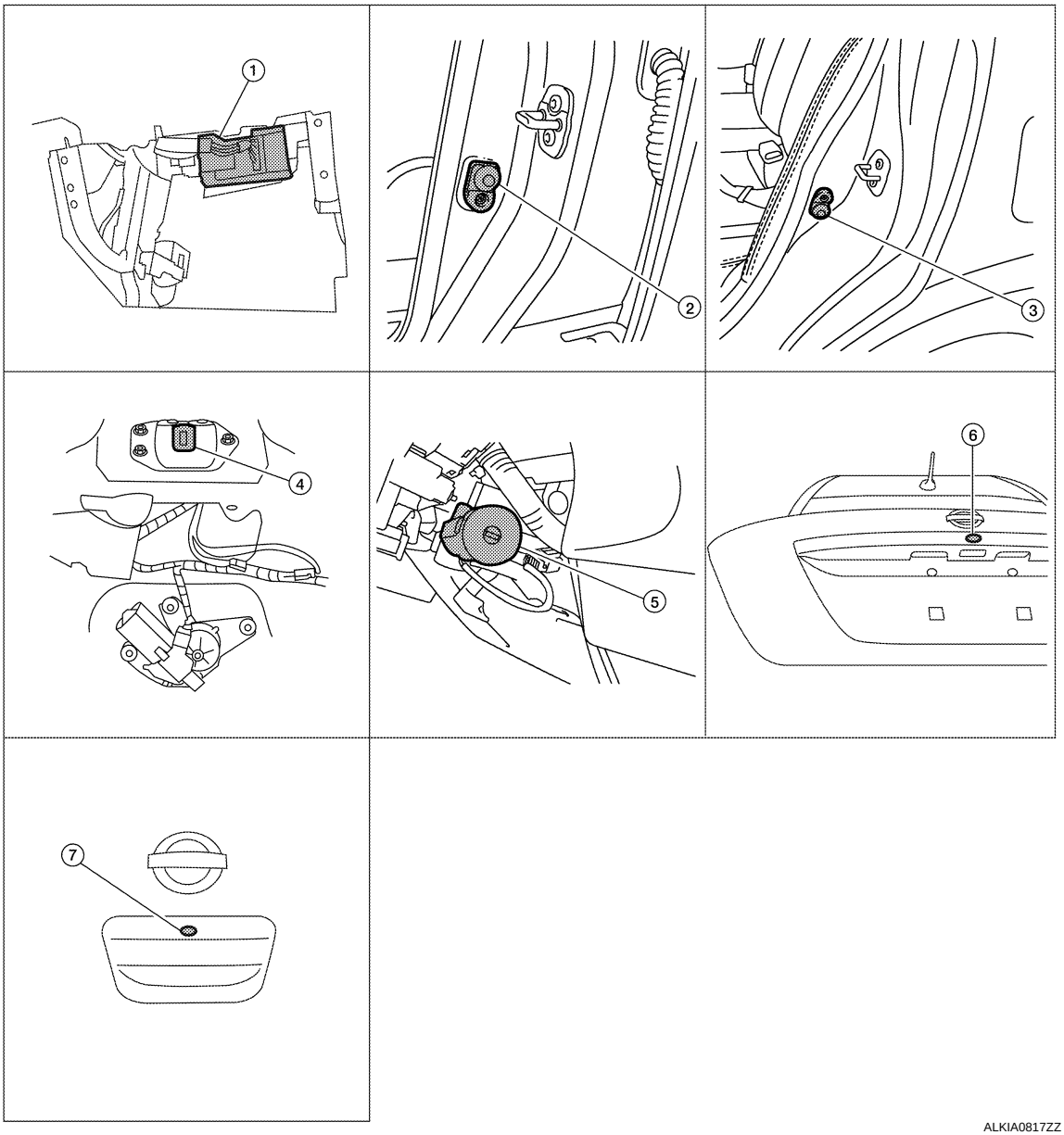
When door lock is unlocked, pressing LOCK button on keyfob once will lock all doors. When door lock is locked, pressing UNLOCK button on keyfob will unlock driver side door. Pressing UNLOCK button on keyfob second time within 5 seconds from the first time will unlock all doors and back door can be opened with back door opener switch.

NOTE:

Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-490, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

REMOTE KEYLESS ENTRY : Component Parts Location

INFOID:0000000001396994



ALKIA0817ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Front door switch (driver side) B34 (Passenger side) B27
3. Rear door switch LH B71 RH B53
4. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
5. Key switch and key lock solenoid M27
6. Trunk lid opener switch (sedan) B61
7. Back door opener switch (hatchback) D408

REMOTE KEYLESS ENTRY : Component Description

INFOID:0000000001396995

Item	Function
BCM	Controls the door lock function.
Key switch	Detects that ignition key is inserted into ignition key cylinder.
Door lock actuator	Receives lock and unlock signal from BCM and locks and unlocks each door.

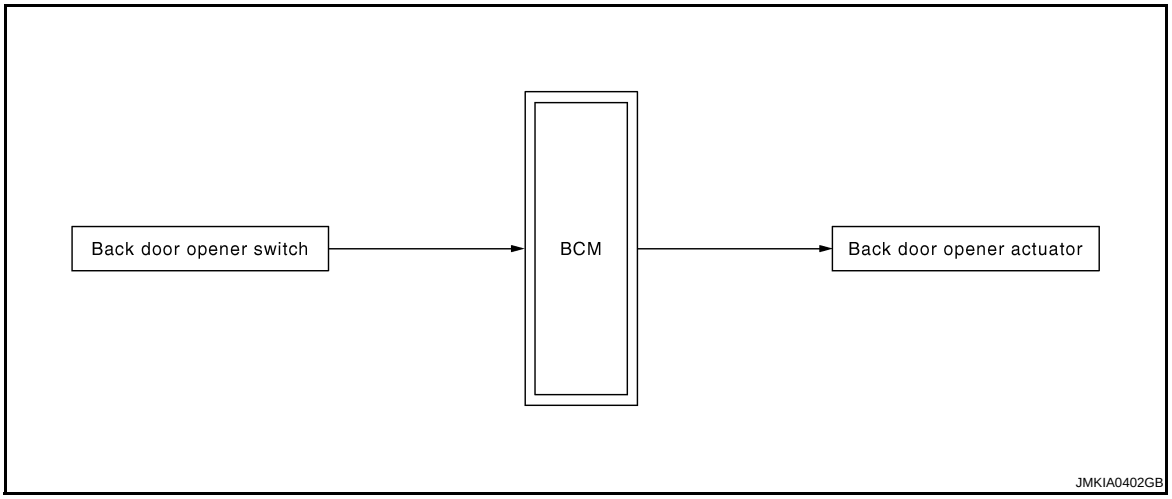
BACK DOOR OPENER FUNCTION

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001530579

BACK DOOR OPENER OPERATION



BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001530580

BACK DOOR OPENER OPERATION

When back door opener switch is pressed, BCM opens back door opener actuator.

NOTE:

Back door opener actuator is not for locking the back door. The function is only to open the back door.

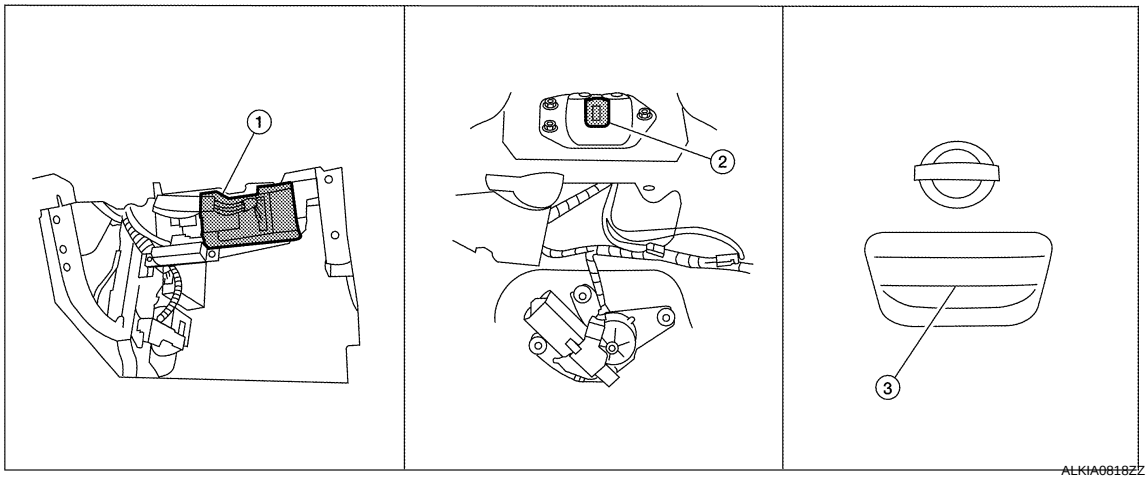
OPERATION CONDITION

If the following conditions are not satisfied, back door opener operation is not performed.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

BACK DOOR OPENER SWITCH : Component Parts Location

INFOID:0000000001530581



1. BCM M18, M20
2. Back door lock assembly (back door switch) D405
3. Back door opener switch D408

(hatchback view with back door open)

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001530582

Item	Function
BCM	Controls the back door opener function.
Back door opener switch	Transmits back door opener switch operation signal to BCM.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

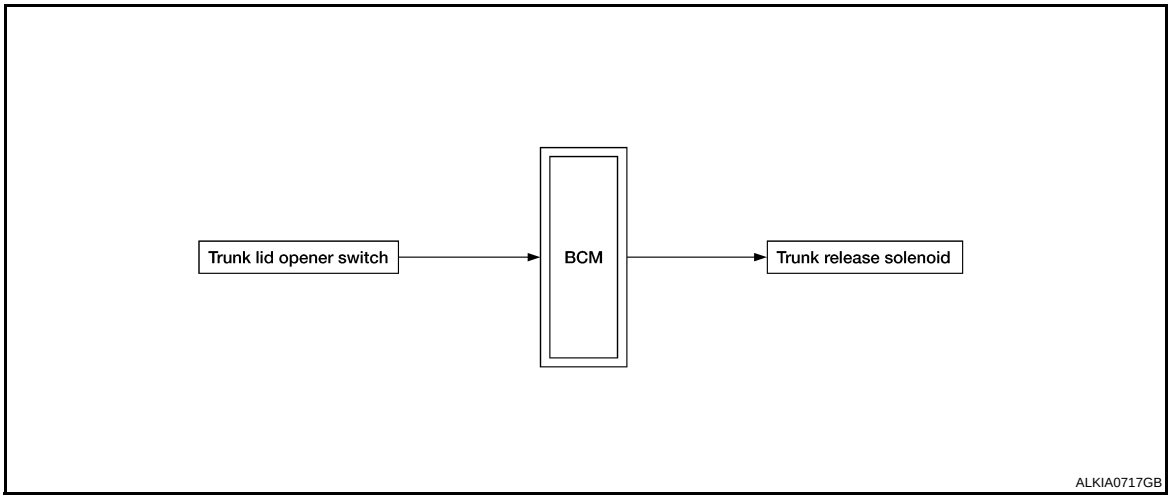
TRUNK LID OPENER

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : System Diagram

INFOID:0000000001530583

TRUNK LID OPENER OPERATION



TRUNK LID OPENER SWITCH : System Description

INFOID:0000000001530584

TRUNK LID OPENER OPERATION

When trunk lid opener switch is pressed, BCM opens trunk release solenoid.

NOTE:

Trunk release solenoid is not for locking the back door. The function is only to open the trunk.

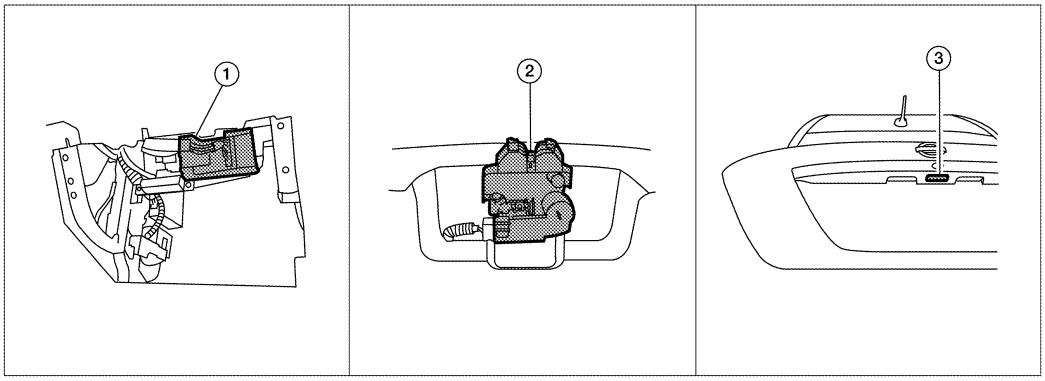
OPERATION CONDITION

If the following conditions are not satisfied, trunk release operation is not performed.

Trunk lid opener switch operation	Operation condition
Trunk release solenoid	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

TRUNK LID OPENER SWITCH : Component Parts Location

INFOID:0000000001530585



1. BCM
   M18, M20
2. Trunk lamp switch and trunk release solenoid
   B66
3. Trunk lid opener switch B61

TRUNK LID OPENER SWITCH : Component Description

INFOID:0000000001530586

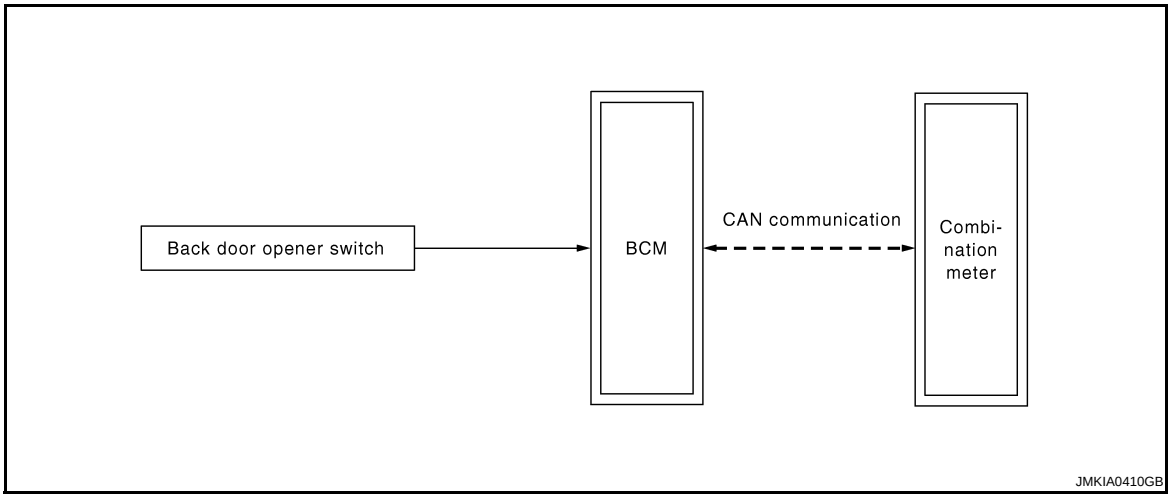
Item	Function
BCM	Controls the trunk lid opener switch function.
Trunk lid opener switch	Transmits trunk lid opener switch operation signal to BCM.
Trunk release solenoid	Opens the trunk with the trunk release solenoid signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

WARNING FUNCTION

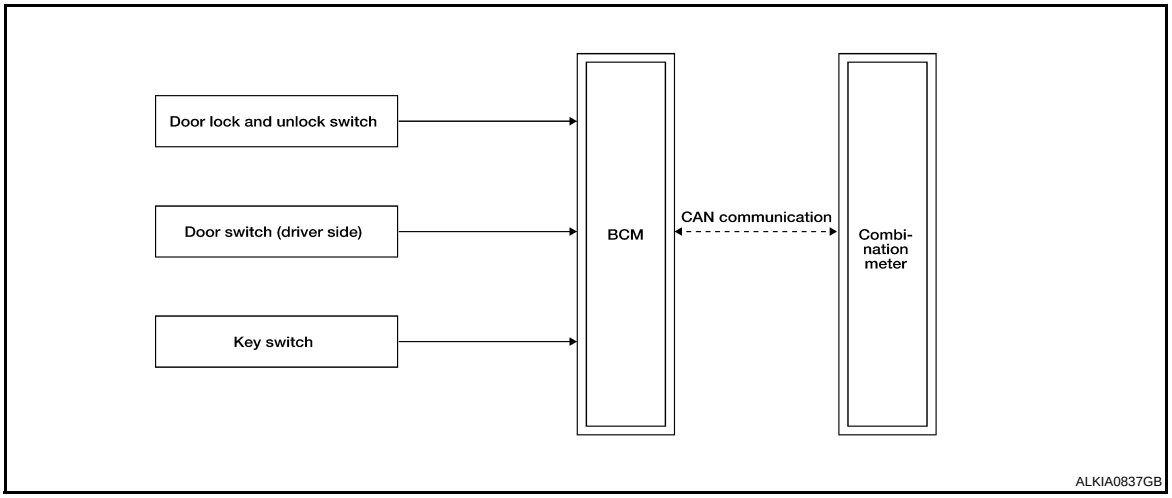
System Diagram

INFOID:0000000001397012

BACK DOOR OPEN WARNING



KEY REMINDER OPERATION



System Description

INFOID:0000000001397013

BACK DOOR OPEN WARNING OPERATION

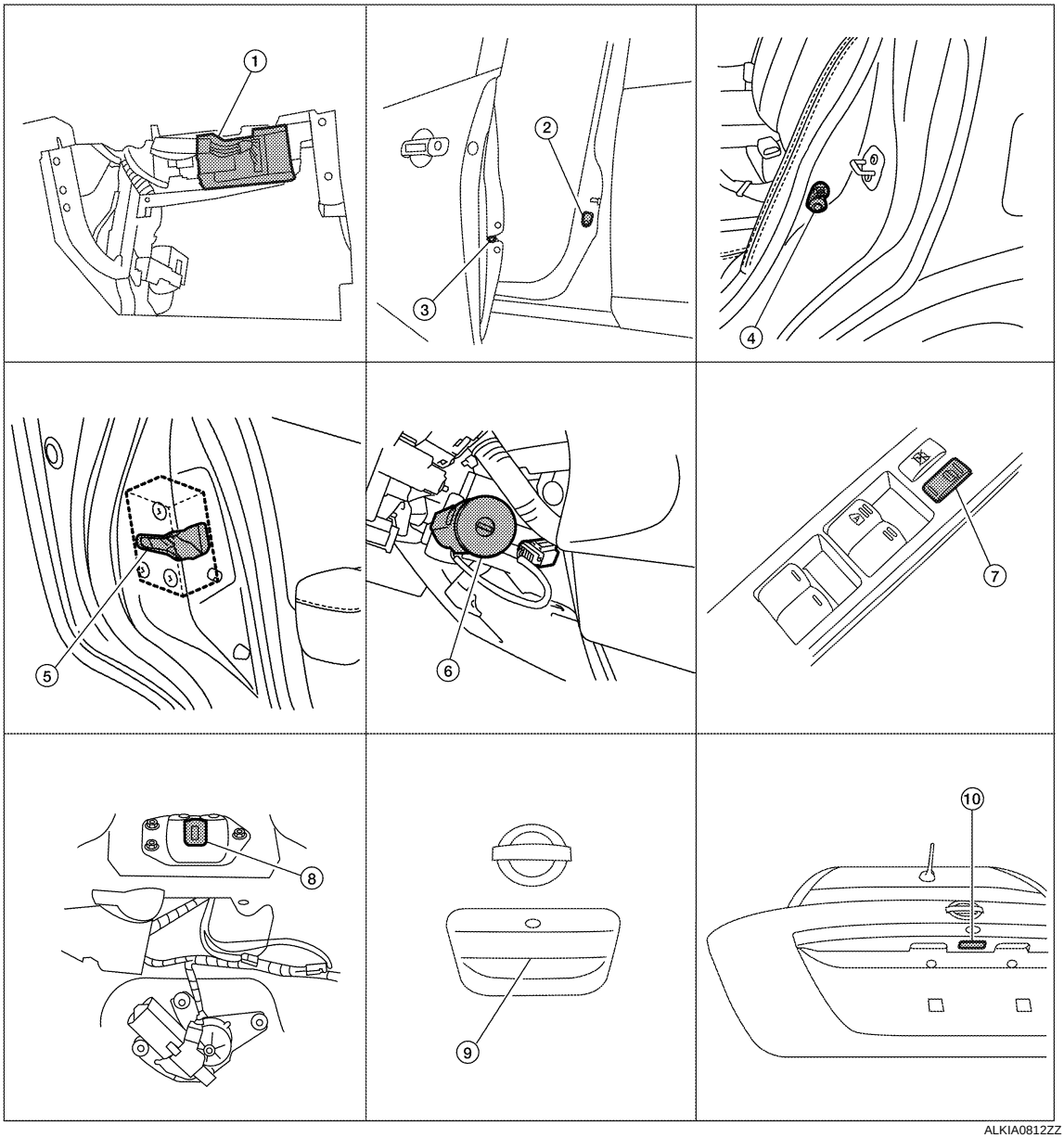
Back door opener switch is operated, when door lock is locked with door lock and unlock switch, by speed sensing lock or when only the driver side is unlocked by the anti-hijack function, the buzzer (built in combination meter) will sound.

KEY REMINDER OPERATION

- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while the driver door is open and mechanical key is inserted ignition key cylinder.
- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while any door other than the driver door is open.

Component Parts Location

INFOID:0000000001397014



ALKIA0812ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Front door switch (driver side) B34 (Passenger side) B27
3. Front door lock actuator (driver side) D14 (Passenger side) D114 Door unlock sensor (driver side) D14
4. Rear door switch LH B71 RH B53
5. Rear door lock actuator LH D205 RH D305
6. Key switch and key lock solenoid M27
7. Main power window and door lock/unlock switch D7, D8
8. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
9. Back door opener switch (hatchback) D408
10. Trunk lid opener switch (sedan) B61

Component Description

INFOID:0000000001397015

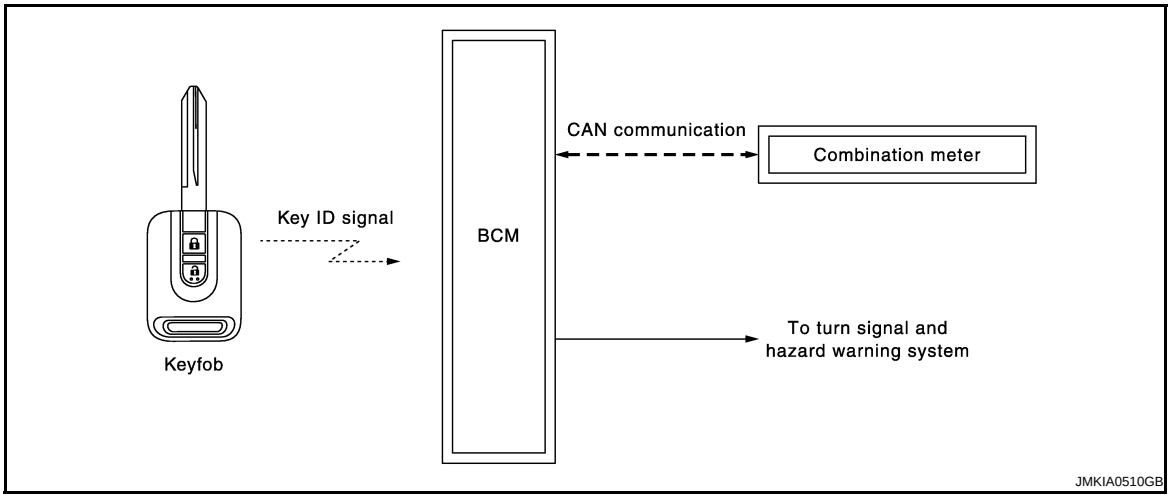
Item	Function
BCM	Controls the warning function.
Combination meter	Sounds the buzzer by the request signal from BCM via CAN communication.
Back door opener switch	Transmit back door open signal to BCM

HAZARD REMINDER FUNCTION

System Diagram

INFOID:0000000001397016

HAZARD REMINDER FUNCTION



System Description

INFOID:0000000001397017

HAZARD REMINDER OPERATION

When door is locked or unlocked by keyfob, then BCM flashes hazard warning lamp as a reminder.

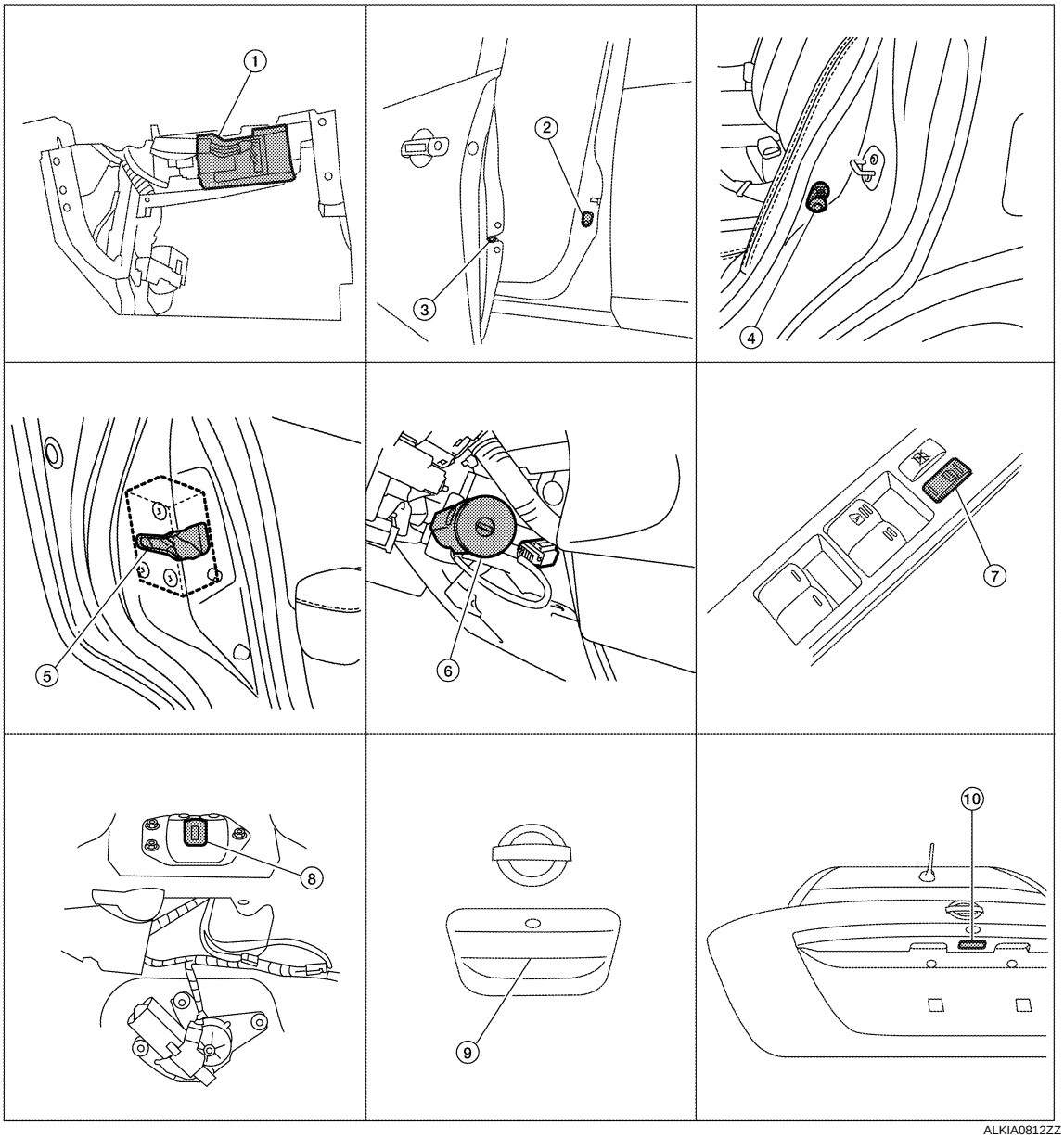
NOTE:

Hazard reminder mode can be changed with CONSULT-III. Refer to DLK-490, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

Hazard reminder setting (With CONSULT-III)		Door lock operation (with keyfob)	Hazard warning lamp flash
HAZARD LAMP SET	MODE 1	—	—
	MODE 2	Lock	Once
		Unlock	—
	MODE 3	Lock	—
		Unlock	Twice
	MODE 4	Lock	Once
		Unlock	Twice

Component Parts Location

INFOID:0000000001397018



ALKIA0812ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Front door switch (driver side) B34 (Passenger side) B27
3. Front door lock actuator (driver side) D14 (Passenger side) D114 Door unlock sensor (driver side) D14
4. Rear door switch LH B71 RH B53
5. Rear door lock actuator LH D205 RH D305
6. Key switch and key lock solenoid M27
7. Main power window and door lock/unlock switch D7, D8
8. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
9. Back door opener switch (hatchback) D408
10. Trunk lid opener switch (sedan) B61

Component Description

INFOID:0000000001397019

Item	Function
BCM	Controls the hazard reminder system.
Combination meter	Turns ON the turn signal indicator (built in combination meter) by the request from BCM via CAN communication.
Keyfob	Transmits key ID to BCM when lock and unlock button is pressed.

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

INFOID:0000000001397020

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to XX-XX, "*****".
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	• Enables to read and save the vehicle specification. • Enables to write the vehicle specification when replacing BCM.

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
—	BCM	×		
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
PTC heater system	PTC HEATER		×	×

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

INFOID:0000000001397021

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
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.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
BACK DOOR OPNR SW	Indicates [ON/OFF] condition of back door opener switch.
KEYLESS LOCK	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK	Indicates [ON/OFF] condition of unlock signal from key fob.
UNLOCK WITH DR	This item is indicated, but not monitored.
UNLOCK SHOCK	Indicates [ON/OFF] condition of signal from air bag diagnosis unit. • ON: During the unlock operation interlock with air bag. • OFF: Other than above.
SHOCK SENSOR	Indicates [NOMAL/ON/OFF] condition of circuit between BCM and air bag diagnosis sensor unit. • NORMAL: Ignition switch ON. (BCM is receiving normal condition signal from air bag diagnosis sensor unit.) • ON: During the receiving of air bag deployment signal from air bag diagnosis sensor unit. • OFF: After the receiving of air bag deployment signal from air bag diagnosis sensor unit.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
DOOR LOCK IND	This test is able to check door lock indicator (built in door lock and unlock switch on center console) operation [ON/OFF].
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].

WORK SUPPORT

Test item	Description
SECURITY DOOR LOCK SET	Anti hijack function mode can be changed in this mode. • ON: Anti hijack mode is active. • OFF: Anti hijack mode is inactive.

MULTIREMOTE ENT

MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)

INFOID:0000000001397022

BCM CONSULT-III FUNCTION

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
KEYKESS LOCK	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK	Indicates [ON/OFF] condition of unlock signal from key fob.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
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 AND UNLOCK	This item is indicated, but not monitored.
KEYFOB 1	Indicates [ON/OFF] condition of remote controller ID code registration.
KEYFOB 2	Indicates [ON/OFF] condition of remote controller ID code registration.
KEYFOB 3	Indicates [ON/OFF] condition of remote controller ID code registration.
KEYFOB 4	Indicates [ON/OFF] condition of remote controller ID code registration.
KEYFOB 5	Indicates [ON/OFF] condition of remote controller ID code registration.

ACTIVE TEST

Test item	Description
DOOR LOCK	This test is able to check warning chime in combination meter operation. [ALL LOCK/ALL UNLOCK/DR UNLOCK/OTHER UNLOCK]
INT LAMP	This test is able to check interior lamp operation [ON/OFF].
FLASHER	This test is able to check flasher operation [LH/RH/OFF].

WORK SUPPORT

Test item	Description
HAZARD LAMP SET	Answer back function (hazard) mode can be changed in this mode. For the detail of the setting, refer to DLK-485, "System Description".
AUTO LOCK SET	Auto relock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 2 minutes • MODE 3: 3 minutes • MODE 4: 4 minutes • MODE 5: 5 minutes

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000001397023

APPLICATION ITEM

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of back door/trunk opener switch.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
TRUNK/GLASS HATCH	This test is able to check back door/trunk opener operation [ON/OFF].

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001397024

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 XX-XX, "*****".

DTC Logic

INFOID:0000000001397025

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When Intelligent Key unit 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 (BCM) • Receiving (ECM) • Receiving (METER/M&A)

Diagnosis Procedure

INFOID:0000000001397026

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 XX-XX, "*****".
NO >> Refer to XX-XX, "*****".

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000001397027

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 XX-XX, "*****".

DTC Logic

INFOID:0000000001397028

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of BCM	BCM

Diagnosis Procedure

INFOID:0000000001397029

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

>> Replace BCM. Refer to BCS-57, "Removal and Installation of BCM".

Special Repair Requirement

INFOID:0000000001397030

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Configure BCM. Refer to CONSULT-III operation manual.

>> Work end.

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000001530617

Refer to BCS-30, "Diagnosis Procedure".

DOOR LOCK AND UNLOCK SWITCH

Description

INFOID:0000000001530618

Transmits door lock/unlock operation to BCM.

Component Function Check

INFOID:0000000001530619

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “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?

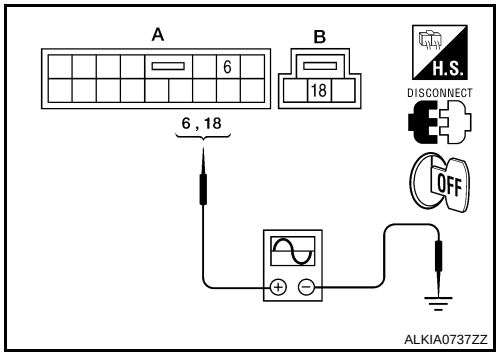
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-495, "Diagnosis Procedure".

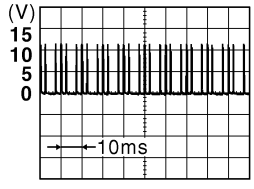
Diagnosis Procedure

INFOID:0000000001530620

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect door lock and unlock switch connector.
3. Using an oscilloscope, check voltage between door lock and unlock switch harness connector (A) D7 terminal 6, connector (B) D8 terminal 18 and ground.



Terminal			Signal (Reference value)
(+)		(–)	
Door lock and unlock switch connector	Terminal		
D7	6	Ground	
D8	18		

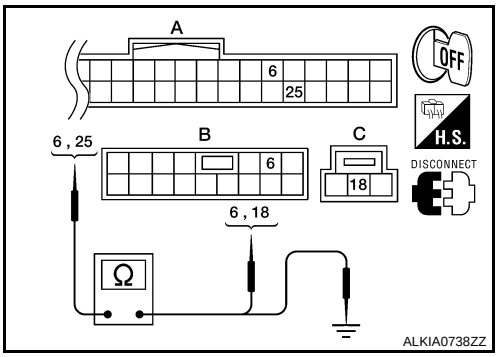
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Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector (A) M18 terminals 6, 25 and door lock and unlock switch connector (B) D7 terminal 6, connector (C) D8 terminal 18.



BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M18	6	D8	18	Yes
	25	D7	6	

4. Check continuity between BCM connector (A) M18 terminals 6, 25 and ground.

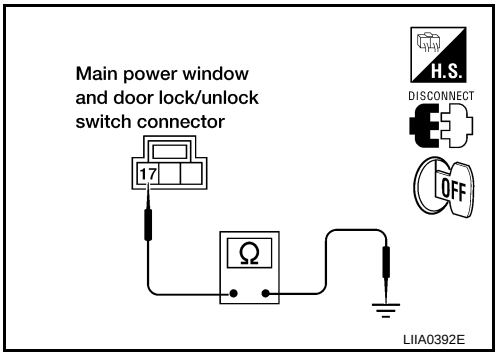
BCM connector	Terminal	Ground	Continuity
M18	6		No
	25		

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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



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

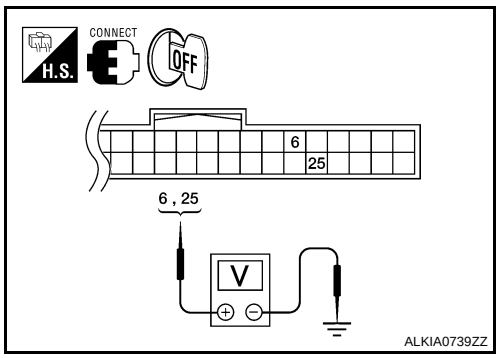
Is the inspection result normal?

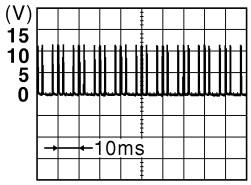
YES >> GO TO 5.
NO >> Repair or replace harness.

4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check signal between BCM connector and ground.



Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M18	6	Ground	
	25		

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Is the inspection result normal?

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

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-497, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace door lock and unlock switch. Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

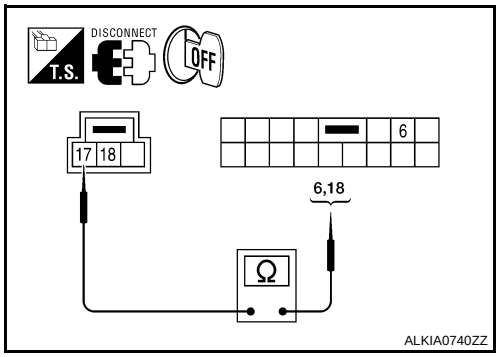
>> INSPECTION END

Component Inspection

INFOID:0000000001530621

1.CHECK DOOR LOCK AND UNLOCK SWITCH

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



Door lock and unlock switch	Terminals		Condition	Continuity
D7, D8	6	17	UNLOCK	Yes
			NEUTRAL/LOCK	No
	18		LOCK	Yes
			NEUTRAL/UNLOCK	No

Is the inspection result normal?

YES >> Main power window and door lock/unlock switch is OK.
NO >> Replace main power window and door lock/unlock switch. Refer to XX-XX, "*****".

DOOR SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001530622

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001530623

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-DR” in “Data Monitor” mode with CONSULT-III.

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

Is the inspection result normal?

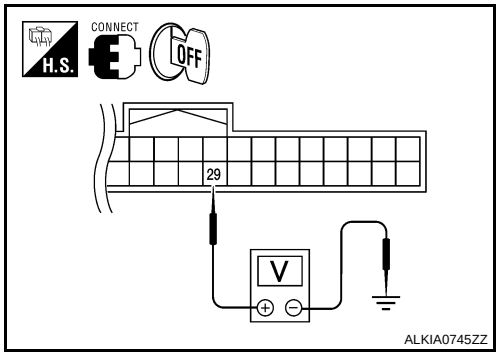
YES >> Door switch is OK.
NO >> Refer to DLK-499, "DRIVER SIDE : Diagnosis Procedure".

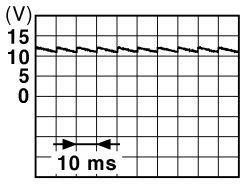
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530624

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			
M18	29	Ground	OPEN	0
			CLOSE	

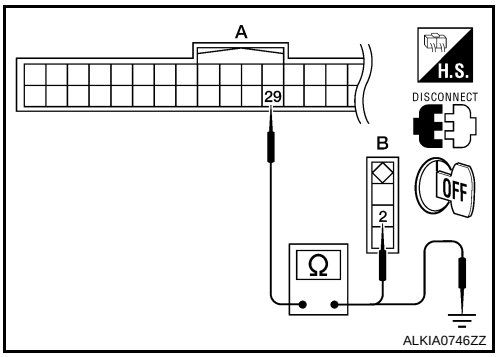
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Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM and driver door switch connectors.
2. Check continuity between BCM connector (A) M18 terminal 29 and door switch connector (B) B34 terminal 2.



BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	29	B34	2	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M18	29		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-500, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (driver side). Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

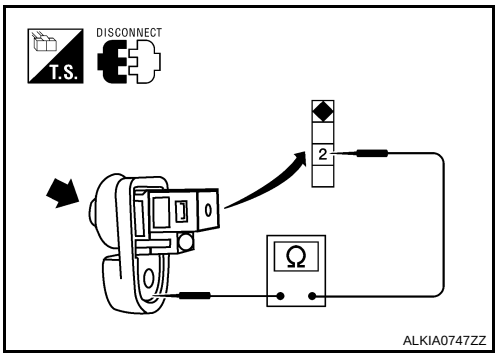
>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001530625

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check door switch.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace front door switch (driver side). Refer to XX-XX, "*****".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530626

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530627

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-AS” in “Data Monitor” mode with CONSULT-III.

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

Is the inspection result normal?

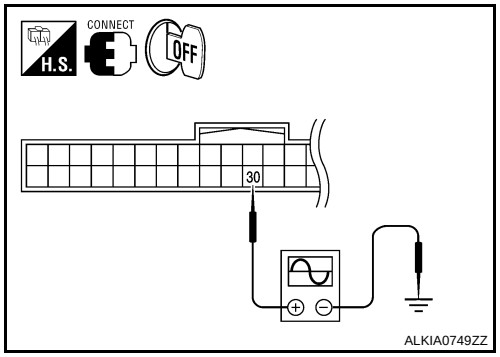
YES >> Door switch is OK.
NO >> Refer to DLK-501, "PASSENGER SIDE : Diagnosis Procedure".

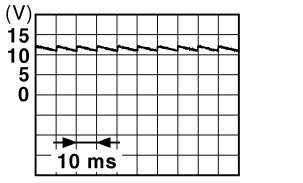
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530628

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			
M18	30	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

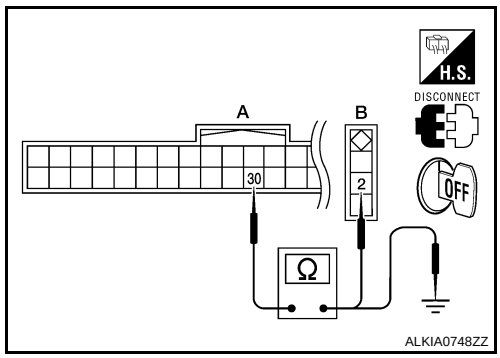
YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM and passenger door switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 30 and passenger door switch connector (B) B27 terminal 2.

BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	30	B27	2	Yes



3. Check continuity between BCM connector (A) M18 terminal 30 and ground.

BCM connector	Terminal	Ground	Continuity
M18	30		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-502, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (passenger side). Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

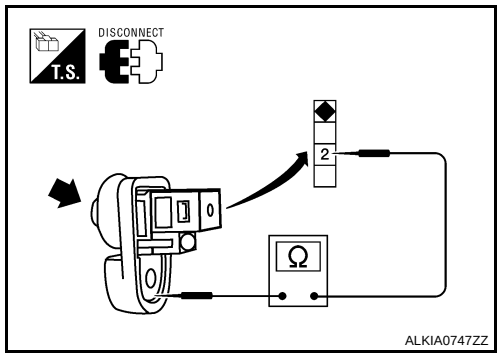
>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001530629

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check passenger door switch.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace front door switch (passenger side). Refer to XX-XX, "*****".

REAR LH

REAR LH : Description

INFOID:0000000001530630

Detects door open/closed condition.

REAR LH : Component Function Check

INFOID:0000000001530631

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RL” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RL	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

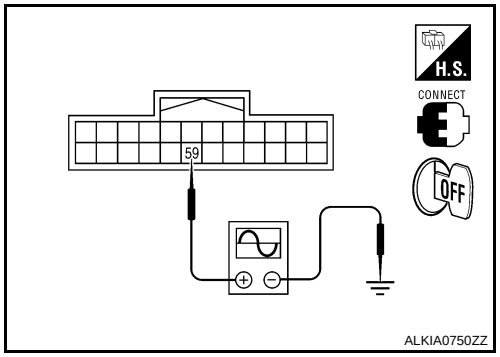
YES >> Door switch is OK.
NO >> Refer to DLK-503, "REAR LH : Diagnosis Procedure".

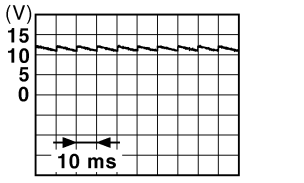
REAR LH : Diagnosis Procedure

INFOID:0000000001530632

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			
M19	59	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

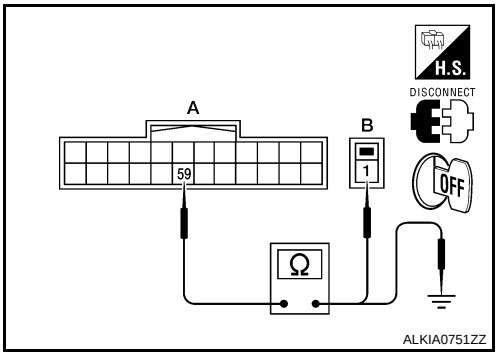
YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector and rear door switch LH.

2. Check continuity between BCM connector (A) M19 terminal 59 and rear door switch LH connector (B) B71 terminal 1.

BCM connector	Terminal	Rear door switch LH connector	Terminal	Continuity
M19	59	B71	1	Yes



3. Check continuity between BCM connector (A) M19 terminal 59 and ground.

BCM connector	Terminal	Ground	Continuity
M19	59		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-504, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch LH. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

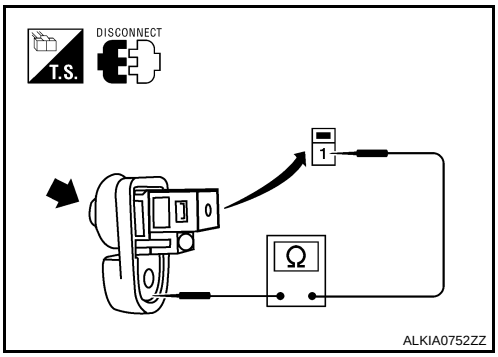
>> INSPECTION END

REAR LH : Component Inspection

INFOID:0000000001530633

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check rear door switch LH.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace rear door switch LH. Refer to XX-XX, "*****".

REAR RH

REAR RH : Description

INFOID:0000000001530634

Detects door open/close condition.

REAR RH : Component Function Check

INFOID:0000000001530635

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

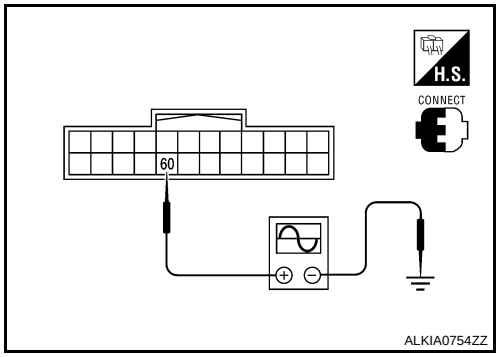
YES >> Door switch is OK.
NO >> Refer to DLK-505, "REAR RH : Diagnosis Procedure".

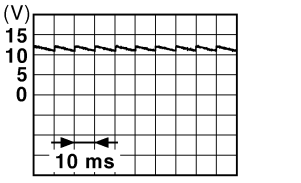
REAR RH : Diagnosis Procedure

INFOID:0000000001530636

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			
M19	60	Ground	OPEN	0
			CLOSE	

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Is the inspection result normal?

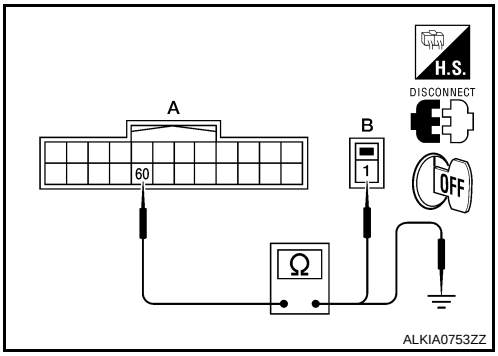
YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM connector (A) M19 terminal 60 and rear door switch RH connector (B) B53 terminal 1.

BCM connector	Terminal	Rear door switch RH connector	Terminal	Continuity
M19	60	B53	1	Yes



3. Check continuity between BCM connector (A) M19 terminal 60 and ground.

BCM connector	Terminal	Ground	Continuity
M19	60		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-506, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch RH. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

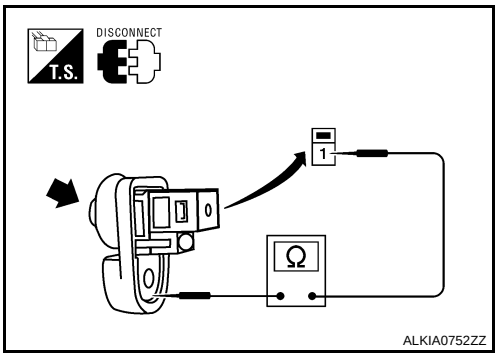
>> INSPECTION END

REAR RH : Component Inspection

INFOID:0000000001530637

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check rear door switch RH.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace rear door switch RH. Refer to XX-XX, "*****".

BACK DOOR

BACK DOOR : Description

INFOID:0000000001530638

Detects back door open condition.

BACK DOOR : Component Function Check

INFOID:0000000001530639

1.CHECK FUNCTION

With CONSULT-III

Check “BACK DOOR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
BACK DOOR SW	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

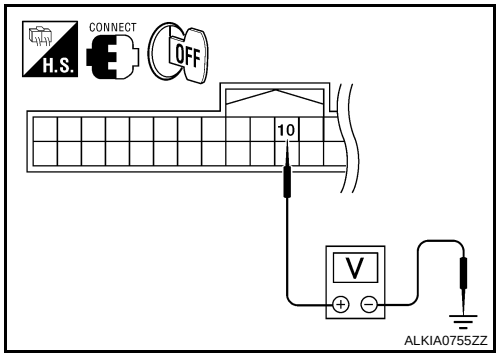
YES >> Back door lock assembly (door switch) is OK.
NO >> Refer to DLK-507, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001530640

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) INPUT SIGNAL

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



Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	10	Ground	OPEN	0
			CLOSE	Battery voltage

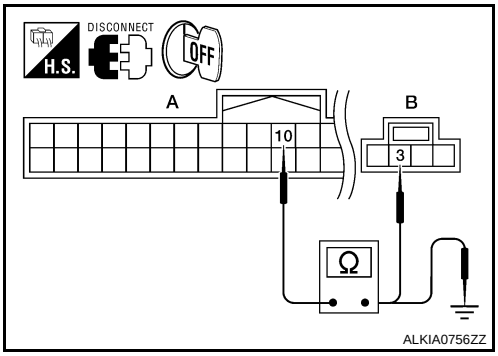
Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) CIRCUIT

1. Disconnect BCM connector and back door lock assembly.

2. Check continuity between BCM connector (A) M18 terminal 10 and back door lock assembly (door switch) connector (B) D405 terminal 3.



BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M18	10	D405	3	Yes

3. Check continuity between BCM connector and ground.

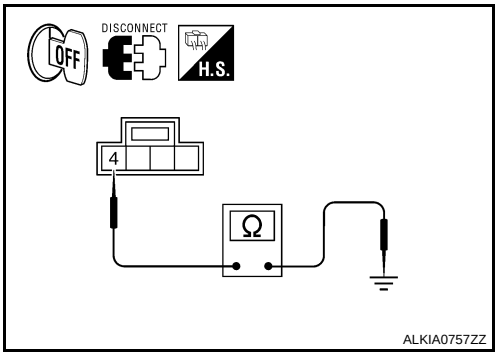
BCM connector	Terminal	Ground	Continuity
M18	10		No

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.



Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D405	4		Yes

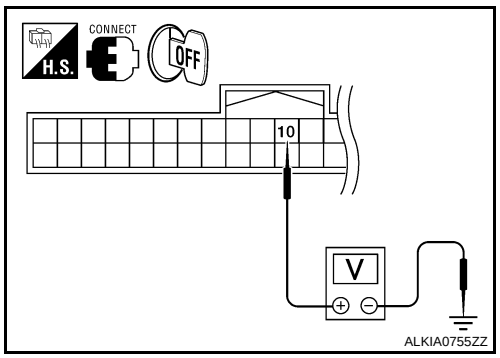
Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door lock assembly 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		
M18	10	Ground	Battery voltage

Is the inspection result normal?

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

5. CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-509, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly (door switch). Refer to XX-XX, "*****" and XX-XX, "*****".

6. CHECK INTERMITTENT INCIDENT

Refer to @@@.

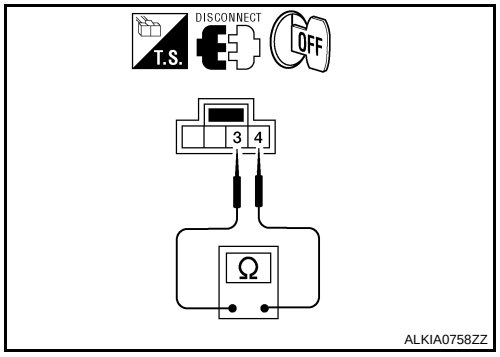
>> INSPECTION END

BACK DOOR : Component Inspection

INFOID:0000000001530641

1. CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

1. Turn ignition switch OFF.
2. Check back door lock assembly (door switch).



Terminal		Back door condition	Continuity
Back door lock assembly (door switch)			
3	4	OPEN	Yes
		CLOSE	No

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Replace back door lock assembly (door switch). Refer to XX-XX, "*****" and XX-XX, "*****".

KEY SWITCH

Description

INFOID:0000000001530642

Key switch detects that mechanical key is inserted into the key cylinder, and then transmits the signal to BCM.

Component Function Check

INFOID:0000000001530643

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch (“KEY SW”) in “Data Monitor” mode with CONSULT-III. Refer to DLK-50, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
KEY SW	Insert mechanical key into key cylinder	: ON
	Remove mechanical key from key cylinder	: OFF

Is the inspection result normal?

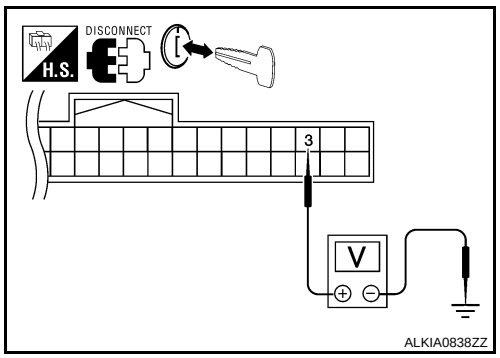
YES >> Key switch is OK.
NO >> Refer to DLK-511, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530644

1.CHECK KEY SWITCH INPUT SIGNAL

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



Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	3	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

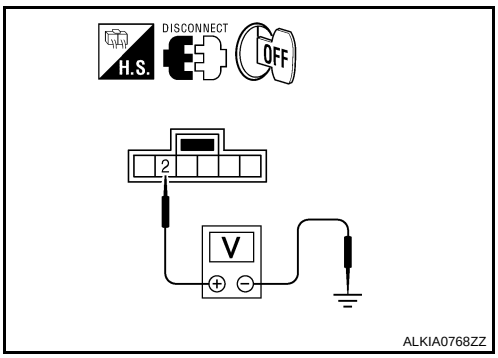
Is the inspection result normal?

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

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove mechanical key from key cylinder.
2. Disconnect key switch connector.

3. Check voltage between key switch connector M27 terminal 2 and ground.



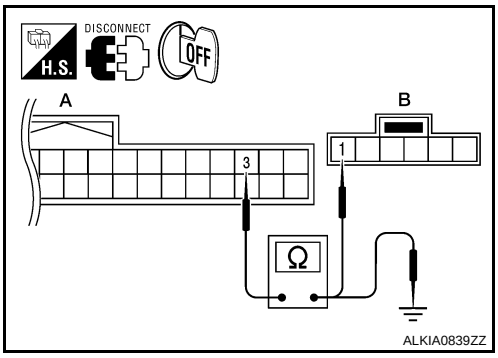
Terminals			Voltage (V) (Approx.)
(+)		(–)	
key switch connector	Terminal		
M27	2	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK KEY SWITCH SIGNAL CIRCUIT

1. Check continuity BCM harness connector (A) M18 terminal 3 and key switch connector (B) M27 terminal 1.



BCM connector	Terminal	key switch connector	Terminal	Continuity
M18	3	M27	1	Yes

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

BCM harness connector	Terminal	Ground	Continuity
M18	3		No

Is the inspection result normal?

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

4.CHECK KEY SWITCH

Check key switch function.
Refer to DLK-513, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

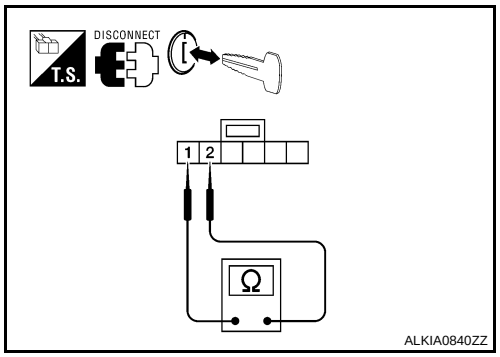
Component Inspection

INFOID:0000000001530645

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.



Terminals		Condition	Continuity
key switch			
1	2	Insert mechanical key into key cylinder	Yes
		Remove mechanical key from key cylinder	No

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Replace key cylinder assembly.

TRUNK LID UNLOCK SWITCH

Description

INFOID:0000000001530667

Detects trunk open/close condition.

Component Function Check

INFOID:0000000001530668

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?

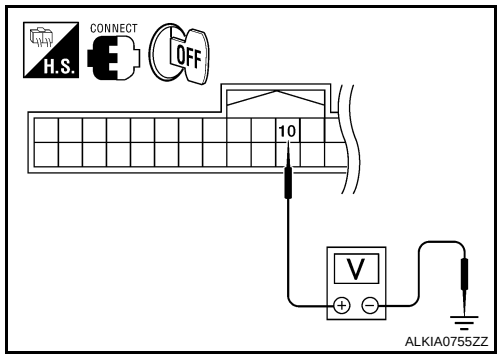
YES >> Trunk lamp switch is OK.
NO >> Refer to DLK-514, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530669

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			
M18	10	Ground	OPEN	0
			CLOSE	Battery voltage

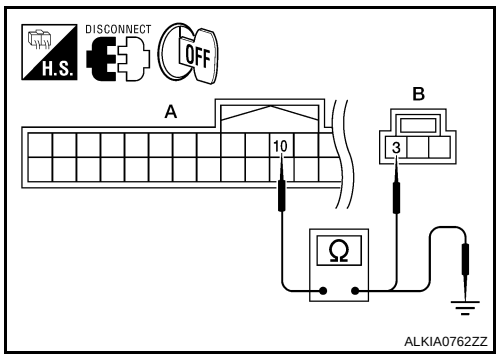
Is the inspection result normal?

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 (A) M18 terminals10 and trunk lamp switch and trunk release solenoid connector (B) B66 terminal 3.



BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
M18	10	B66	3	Yes

3. Check continuity between BCM connector and ground.

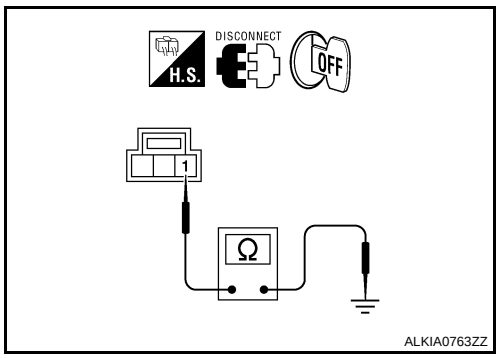
BCM connector	Terminal	Ground	Continuity
M18	10		No

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 lamp switch and trunk release solenoid connector and ground.



Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B66	1		Yes

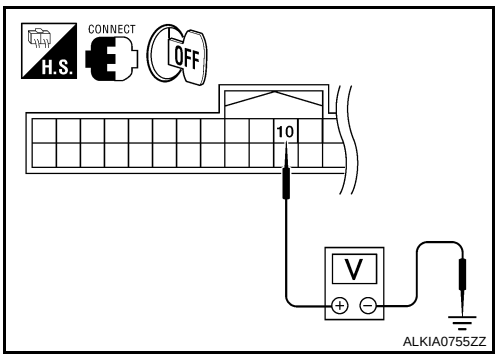
Is the inspection result normal?

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

4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM connector and ground.



Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M18	10	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to XX-XX, "*****".

5.CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-516, "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 XX-XX, "*****".

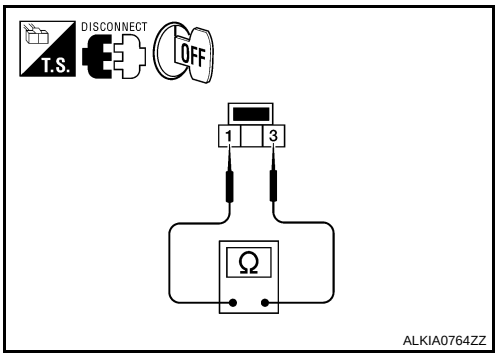
>> INSPECTION END.

Component Inspection

INFOID:0000000001530670

1.CHECK TRUNK LAMP SWITCH

1. Turn ignition switch OFF.
2. Check trunk lamp switch.



Terminal		Trunk condition	Continuity
Trunk lamp switch and trunk release solenoid			
1	3	OPEN	Yes
		CLOSE	No

Is the inspection result normal?

YES >> INSPECTION END.

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

BACK DOOR OPENER SWITCH

Description

INFOID:0000000001530671

Sends the back door opening signal to BCM.

Component Function Check

INFOID:0000000001530672

1.CHECK FUNCTION

With CONSULT-III

Check “TR/BD OPNR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
TR/BD OPNR SW	Back door opener switch is pressed	:ON
	Back door opener switch is released	:OFF

Is the inspection result normal?

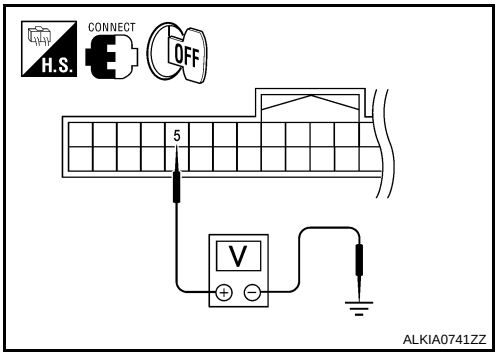
YES >> Back door opener switch is OK.
NO >> Refer to XX-XX, "*****".

Diagnosis Procedure

INFOID:0000000001530673

1.CHECK BACK DOOR OPENER SWITCH INPUT SIGNAL

Check voltage between BCM connector and ground.



Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	5	Ground	ON (press and hold)	0
			OFF (release)	Battery voltage

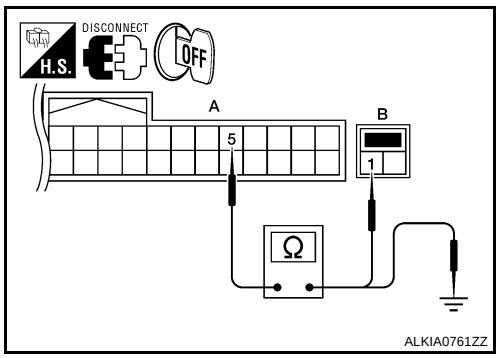
Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

1. Disconnect BCM and back door opener switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 5 and back door opener switch connector (B) D408 terminal 1.



BCM connector	Terminal	back door opener switch connector	Terminal	Continuity
M18	5	D408	1	Yes

3. Check continuity between BCM connector (A) M18 terminal 5 and ground.

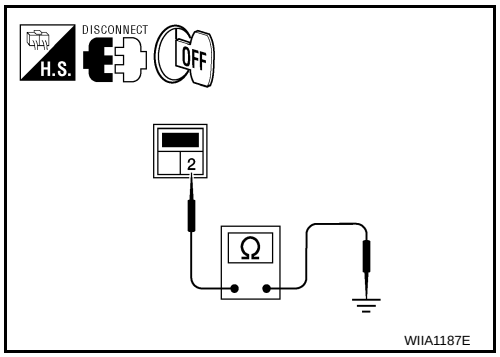
BCM connector	Terminal	Ground	Continuity
M18	5		No

Is the inspection result normal?

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

3. CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch connector and ground.



back door opener switch	Terminal	Ground	Continuity
D408	2		Yes

Is the inspection result normal?

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

4. CHECK BACK DOOR OPENER SWITCH

Refer to DLK-520, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace back door opener switch.

5. CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

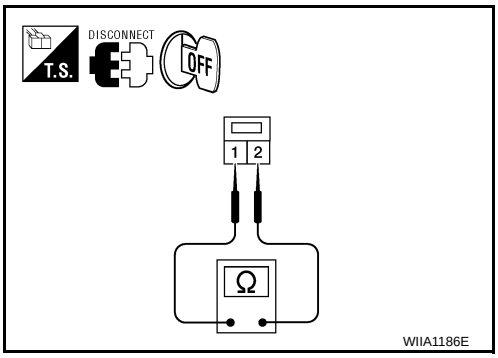
>> INSPECTION END.

Component Inspection

INFOID:0000000001530674

1. CHECK BACK DOOR OPENER SWITCH

1. Turn ignition switch OFF.
2. Check continuity between back door opener switch terminals.



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

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace back door opener switch.

TRUNK LID OPENER SWITCH

Description

INFOID:0000000001530675

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000001530676

1.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 pressed.

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.

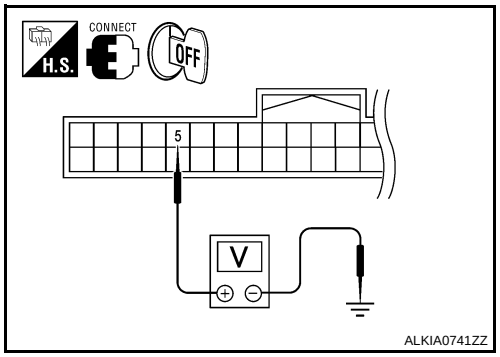
NO >> Refer to DLK-521, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530677

1.CHECK TRUNK LID OPEN INPUT SIGNAL

Check voltage between BCM connector and ground.



Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	5	Ground	ON (press and hold)	0
			OFF (release)	Battery voltage

Is the inspection result normal?

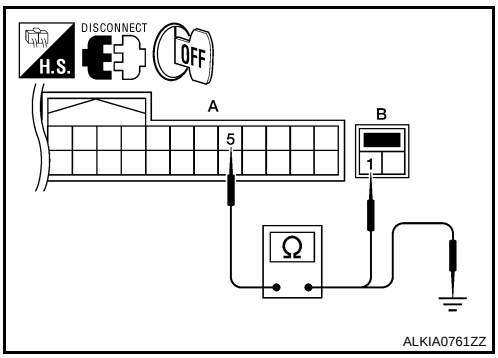
YES >> GO TO 5

NO >> GO TO 2

2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

1. Disconnect BCM and trunk lid opener switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 5 and trunk lid opener switch connector (B) B61 terminal 1.



BCM connector	Terminal	Trunk lid opener switch connector	Terminal	Continuity
M18	5	B61	1	Yes

3. Check continuity between BCM connector (A) M18 terminal 5 and ground.

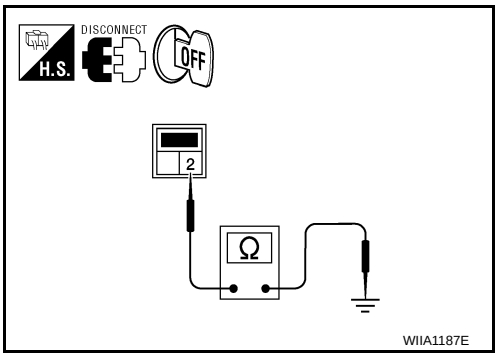
BCM connector	Terminal	Ground	Continuity
M18	5		No

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
B61	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-523, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

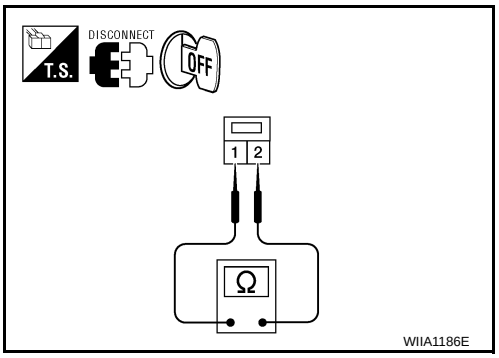
>> INSPECTION END.

Component Inspection

INFOID:0000000001530678

1. CHECK TRUNK LID OPENER SWITCH

1. Turn ignition switch OFF.
2. Check continuity between trunk lid opener switch terminals.



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.

UNLOCK SENSOR

Description

INFOID:0000000001530834

Detects door lock condition of driver door.

Component Function Check

INFOID:0000000001530835

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?

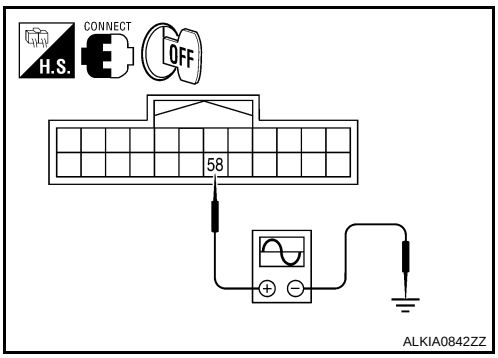
YES >> Unlock sensor is OK.
NO >> Refer to DLK-524, "Diagnosis Procedure".

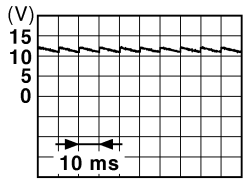
Diagnosis Procedure

INFOID:0000000001530836

1.CHECK UNLOCK SENSOR POWER SUPPLY

Check signal between BCM connector and ground with oscilloscope.



Terminals			Front door lock actuator (driver side) consition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M19	58	Ground	Locked	 JPMIA0011GB
			Unlocked	0

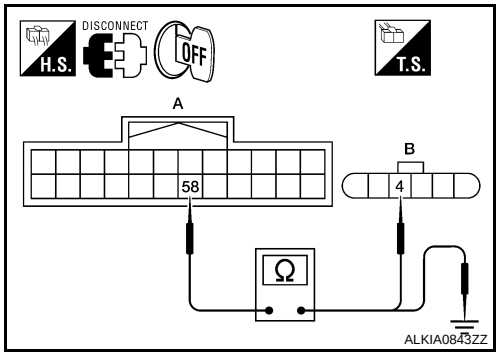
Is the inspection result normal?

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 actuator (driver side) connectors.

3. Check continuity between BCM connector (A) M19 terminal 58 and front door lock actuator (driver side) connector (B) D14 terminal 4.



BCM connector	Terminal	Front door lock actuator (driver side) connector	Terminal	Continuity
M19	58	D14	4	Yes

4. Check continuity between BCM connector and ground.

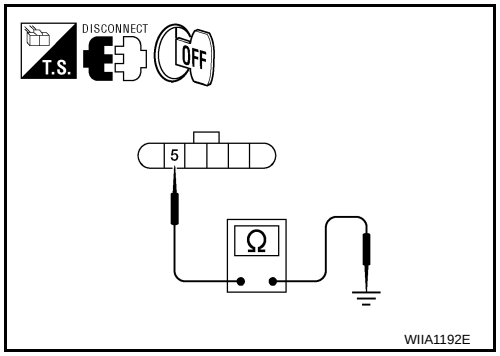
BCM connector	Terminal	Ground	Continuity
M19	58		No

Is the inspection result normal?

YES >> GO TO 3
NO >> Repair or replace harness between BCM and front door lock actuator (driver side).

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

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



Front door lock actuator (driver side) connector	Terminal	Ground	Continuity
D14	5		Yes

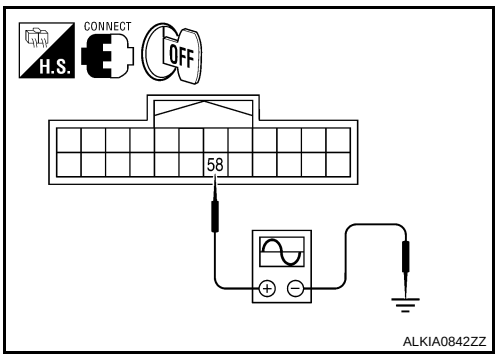
Is the inspection result normal?

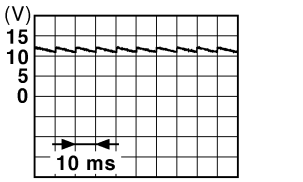
YES >> GO TO 4
NO >> Repair or replace harness.

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		
M19	58	Ground	

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. XX-XX, "*****"

5.CHECK UNLOCK SENSOR

Refer to DLK-526, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6
NO >> Replace front door lock actuator (driver side). Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

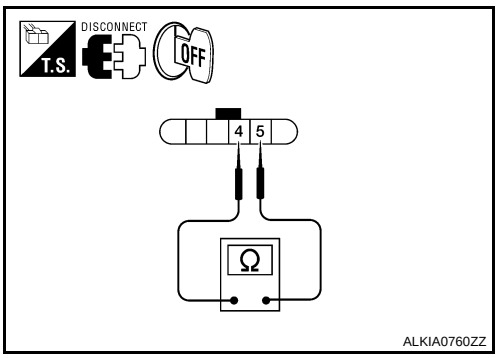
>> INSPECTION END.

Component Inspection

INFOID:0000000001530837

1.CHECK UNLOCK SENSOR

Check unlock sensor.



Terminal		Front door lock actuator (driver side) condition	Continuity
Front door lock actuator (driver side)			
4	5	Unlock	Yes
		Lock	No

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace front lock assembly (driver side). Refer to XX-XX, "*****".

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001530646

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001530647

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?

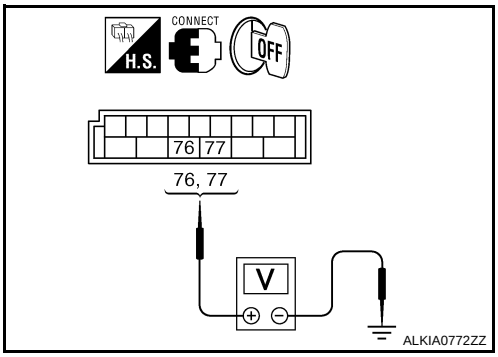
YES >> Door lock actuator is OK.
NO >> Refer to DLK-528, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530648

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 76, 77 and ground.



Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	76	Ground	Driver door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0
	77		Driver door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0

Is the inspection result normal?

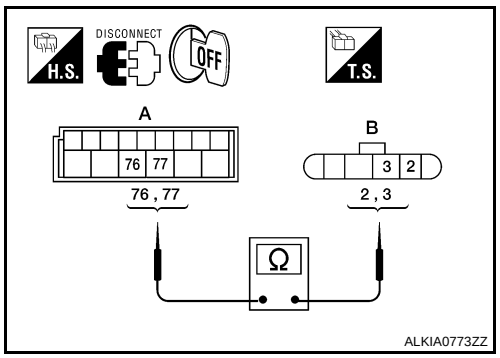
YES >> GO TO 2.
NO >> GO TO 3.

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).

2. Check continuity between BCM connector (A) M20 terminals 76, 77 and front door lock actuator (driver side) connector (B) D14 terminals 2, 3.

Connector	Terminals	Connector	Terminals	Continuity
M20	76	D14	2	Yes
	77		3	Yes



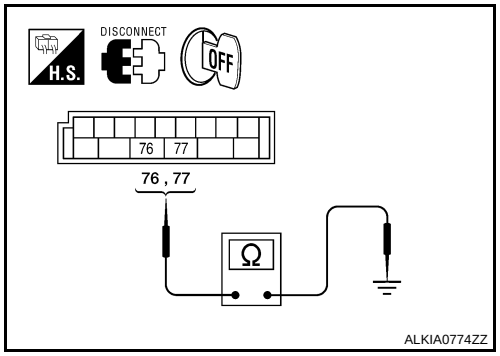
Is the inspection result normal?

YES >> Replace front door lock actuator (driver side).
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).
2. Check continuity between BCM connector M20 terminals 76, 77 and ground.

Connector	Terminals		Continuity
M20	76	Ground	No
	77		No



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530649

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530650

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-529, "PASSENGER SIDE : Diagnosis Procedure".

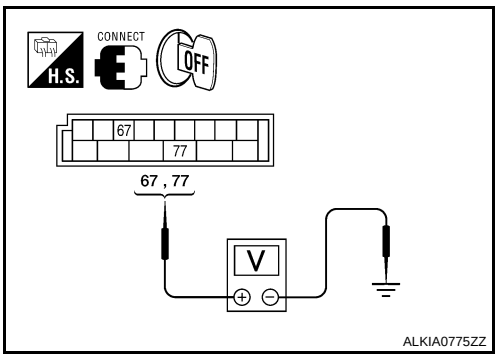
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530651

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) SIGNAL

1. Turn ignition switch OFF.

2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



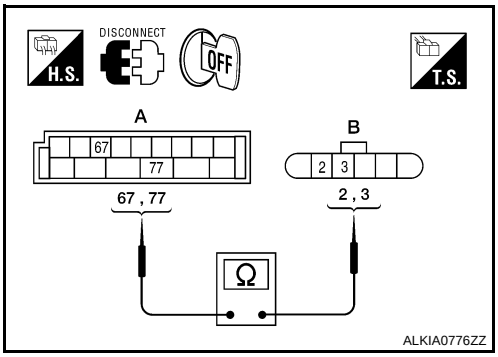
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and front door lock actuator (passenger side) (B) D114 terminals 2, 3.



BCM connector	Terminal	Front door lock actuator (passenger side) connector	Terminal	Continuity
M20	67	D114	2	Yes
	77		3	

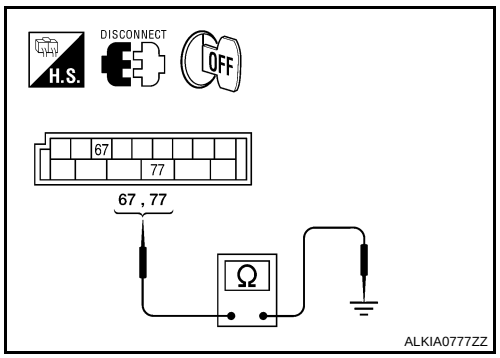
Is the inspection result normal?

YES >> Replace front door lock actuator (passenger side). Refer to XX-XX, "*****".
NO >> Repair or replace harness.

3. CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).

2. Check continuity between BCM connector M19 terminals 67, 77 and ground.



BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		

Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR LH

REAR LH : Description

INFOID:0000000001530652

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001530653

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?

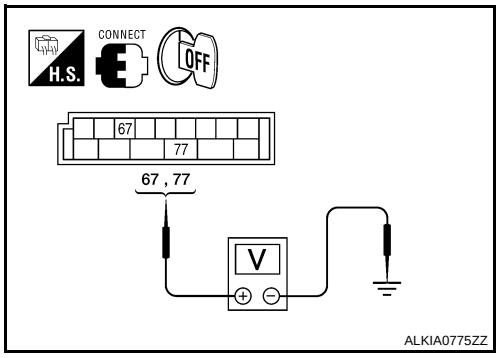
YES >> Door lock actuator is OK.
NO >> Refer to DLK-531, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001530654

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



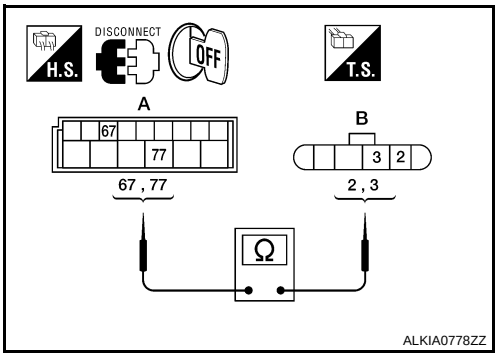
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator LH.
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and rear door lock actuator LH connector (B) D205 terminals 2, 3.



BCM connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M20	67	D205	2	Yes
	77		3	

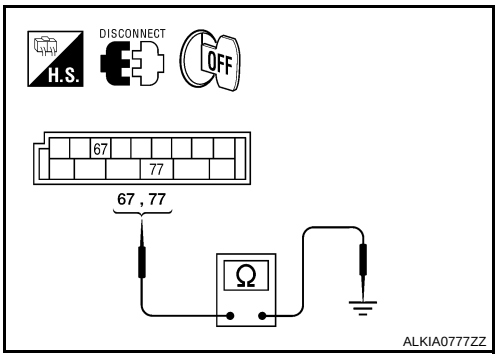
Is the inspection result normal?

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

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and each door lock actuator.
2. Check continuity between BCM connector M20 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR RH

REAR RH : Description

INFOID:0000000001530655

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001530656

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?

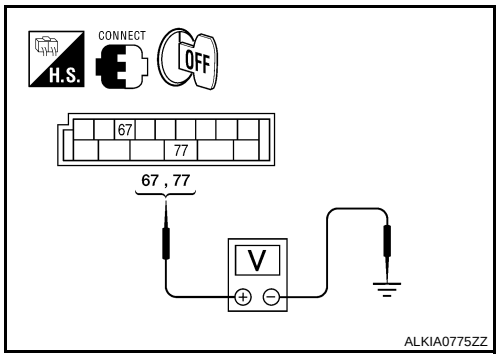
YES >> Door lock actuator is OK.
NO >> Refer to XX-XX, "*****".

REAR RH : Diagnosis Procedure

INFOID:0000000001530657

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



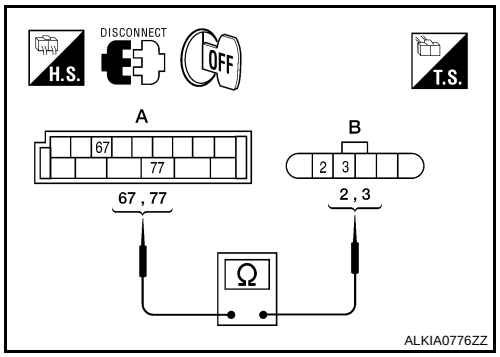
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and rear door lock actuator RH connector (B) D305 terminals 2, 3.



BCM connector	Terminal	Rear door lock actuator RH connector	Terminal	Continuity
M20	67	D305	2	Yes
	77		3	

Is the inspection result normal?

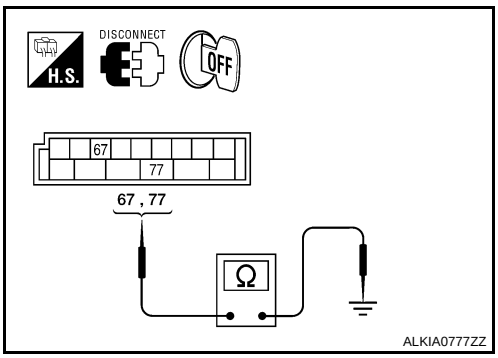
YES >> Replace rear door lock actuator RH.
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.

2. Check continuity between BCM connector (A) M20 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

BACK DOOR

BACK DOOR : Description

INFOID:0000000001530658

Locks/unlocks the door with the signal from BCM.

BACK DOOR : Component Function Check

INFOID:0000000001530659

1.CHECK FUNCTION

1. Unlock all doors using main power window and door lock/unlock switch.
2. Press the back door opener switch.

Does the back door open?

YES >> Door lock actuator is OK.
NO >> GO TO 2.

2.CHECK FUNCTION

With CONSULT-III

Check back door opener request switch “BK DOOR OPNR SW” in “Data Monitor” mode.

Monitor item	Condition	
BD/TR OPNR SW	Back door opener request switch is pressed	:ON
	Back door opener request switch is released	:OFF

Is the inspection result normal?

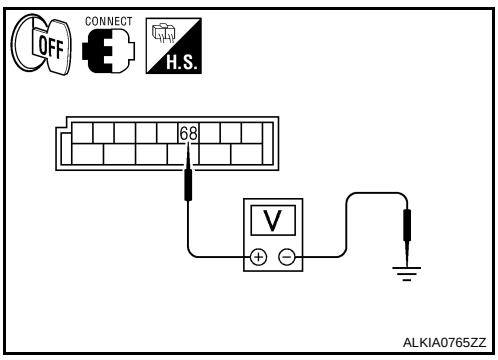
YES >> Refer to DLK-534, "BACK DOOR : Diagnosis Procedure".
NO >> Refer to XX-XX, "*****".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001530660

1.CHECK BACK DOOR LOCK ACTUATOR SIGNAL

1. Ensure the door lock system is in the unlock position.
2. Turn ignition switch OFF.
3. Press the back door opener switch while checking voltage between BCM connector M20 terminals 68 and ground.



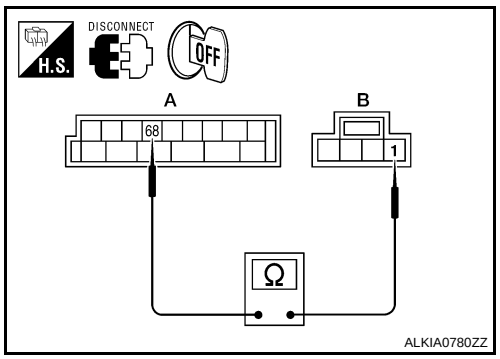
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	68	Ground	Door lock opener switch is pressed	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and back door lock assembly.
2. Check continuity between BCM connector (A) M20 terminal 68 and back door lock assembly connector (B) D405 terminal 1.



BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M20	68	D405	1	Yes

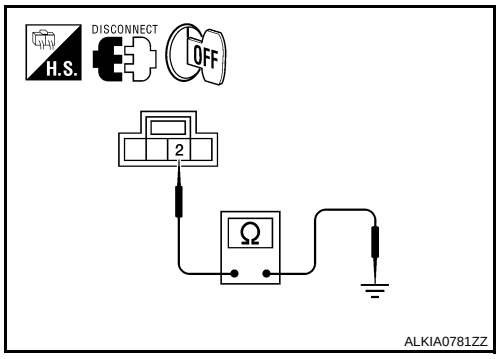
Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ACTUATOR GROUND CIRCUIT

Check continuity between back door lock assembly connector D405 terminal 2 and ground.

Terminals		Continuity
2	Ground	Yes



Is the inspection result normal?

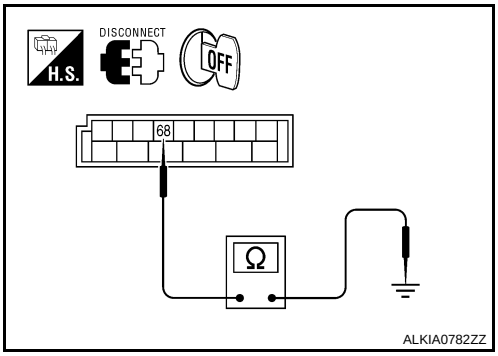
YES >> Replace back door lock assembly.
NO >> Repair or replace harness.

4.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and back door lock actuator.

2. Check continuity between BCM connector M20 terminals 68 and ground.

Terminals		Continuity
68	Ground	No



Is the inspection result normal?

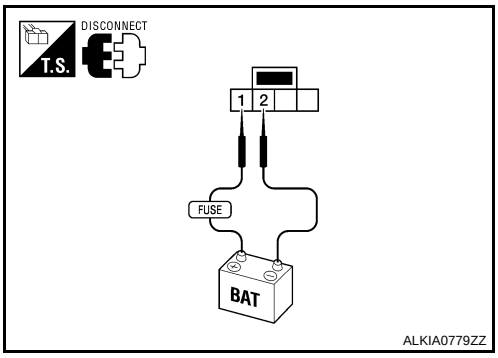
YES >> Harness is OK. Refer to DLK-536, "BACK DOOR : Component Inspection".
NO >> Repair or replace harness.

BACK DOOR : Component Inspection

INFOID:0000000001530661

1. CHECK TRUNK LAMP SWITCH

Momentarily, connect battery power supply to back door lock assembly terminals and check for actuator operation.



Terminal		Back door condition
Back door lock assembly (actuator)		
1 BAT (+)	2 BAT (-)	Actuator operates

Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Replace back door lock assembly.

TRUNK LID OPENER ACTUATOR

Description

INFOID:0000000001530662

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000001530663

1.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?

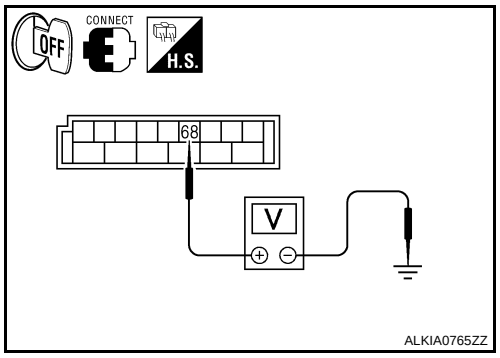
YES >> Trunk lid opener actuator is OK.
NO >> Refer to DLK-537, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530664

1.CHECK OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Ensure door lock system is unlocked.
3. Check voltage between BCM connector and ground.



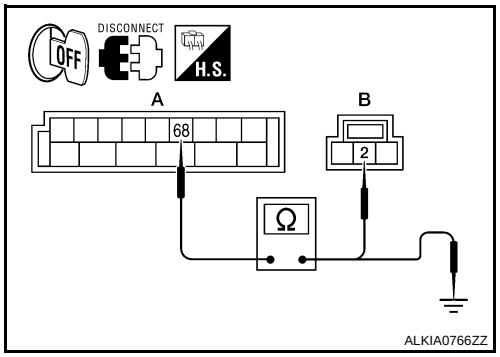
Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M20	68	Ground	ON	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM and trunk lamp switch and trunk release solenoid connectors.
2. Check continuity between BCM connector (A) M20 terminal 68 and trunk lamp switch and trunk release solenoid connector (B) B66 terminal 2.



BCM connector	Terminal	trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
M20	68	B66	2	Yes

3. Check continuity between BCM connector (A) M20 terminal 68 and ground.

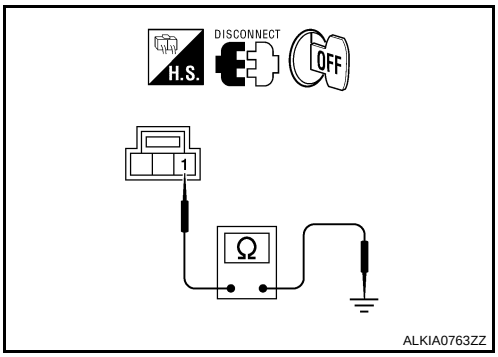
BCM connector	Terminal		Continuity
M20	68	Ground	No

Is the inspection result normal?

YES >> Refer to DLK-538, "Component Inspection".
NO >> Repair or replace harness.

3.CHECK TRUNK LID OPENER ACTUATOR GROUND CIRCUIT

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



Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B66	1		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 INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

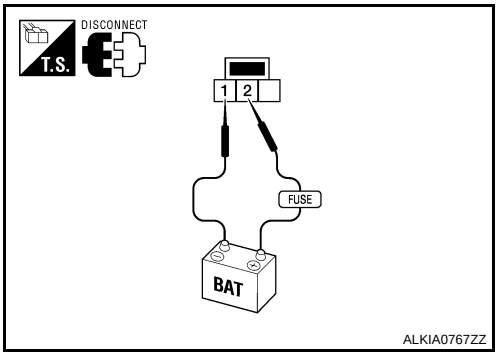
>> INSPECTION END.

Component Inspection

INFOID:0000000001530665

1.CHECK TRUNK LAMP SWITCH

Momentarily, connect battery power supply to trunk lamp switch and trunk release solenoid terminals and check for solenoid operation.



Terminal		Trunk condition
Trunk lamp switch and trunk release solenoid		
1 BAT (-)	2 BAT (+)	Solenoid operates

Is the inspection result normal?

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

BUZZER (COMBINATION METER)

Description

INFOID:0000000001397088

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000001397089

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INSIDE BUZZER” in “Active Test”.

Test item	Condition	
INSIDE BUZZER	:TAKE OUT	Take away warning chime sounds
	:KNOB	Ignition knob switch warning chime sounds
	:KEY	Key warning chime sounds

Is the inspection result normal?

Yes >> Warning buzzer in combination meter is OK.
No >> Refer to DLK-540, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001397090

1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to XX-XX, "*****".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

HAZARD WARNING LAMPS

Description

INFOID:0000000001397091

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

Component Function Check

INFOID:0000000001397092

1.CHECK FUNCTION

With CONSULT-III

Check hazard warning lamp “FLASHER” in “Active Test” mode.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-541, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001397093

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to XX-XX, "*****".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

VEHICLE SPEED SIGNAL CIRCUIT

Description

INFOID:0000000001397094

Displays the vehicle speed signal received from combination meter as a numerical value (km/h).

Component Function Check

INFOID:0000000001397095

1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 12 km/h (7 MPH).

Is the inspection result normal?

YES >> Vehicle speed signal circuit is OK.
NO >> Refer to DLK-542, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001397096

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal “VEHICLE SPEED” in “Data Monitor” mode.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace vehicle speed signal circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

KEYFOB BATTERY AND FUNCTION

Description

INFOID:0000000001530682

The following functions are available when having and carrying the keyfob.
- Door lock/unlock
- Back door unlock (hatchback)
- Trunk lid unlock (sedan)

Remote control entry function is available when operating the remote buttons.

Component Function Check

INFOID:0000000001530683

1.CHECK FUNCTION

With CONSULT-III

Check BCM "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 the keyfob.

Is the inspection result normal?

YES >> Keyfob is OK.
NO >> Refer to DLK-543, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530684

1.CHECK KEYFOB FUNCTION

Do doors lock and unlock when using the keyfob buttons?

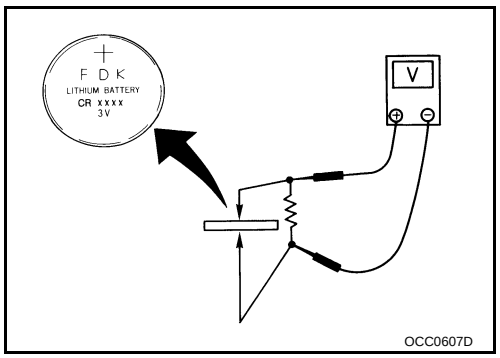
YES or NO?

YES >> Keyfob is OK.
NO >> GO TO 2.

2.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 >> Key fob battery is OK.
NO >> Replace keyfob battery.

Component Inspection

INFOID:0000000001530685

For battery removal and installation, refer to XX-XX, "*****".

Special Repair Requirement

INFOID:0000000001530686

Refer to CONSULT-III Operation Manual.

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

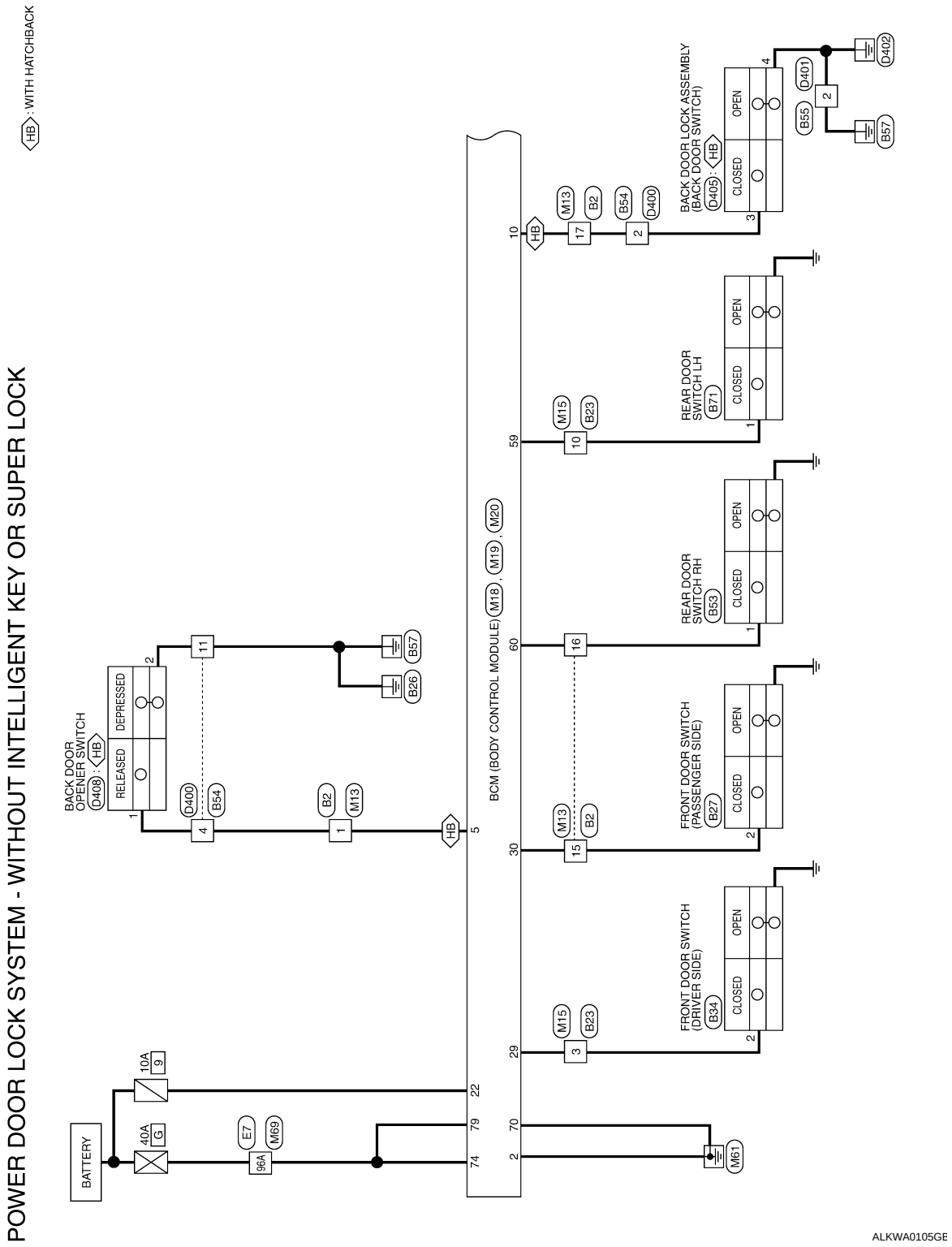
Reference Value

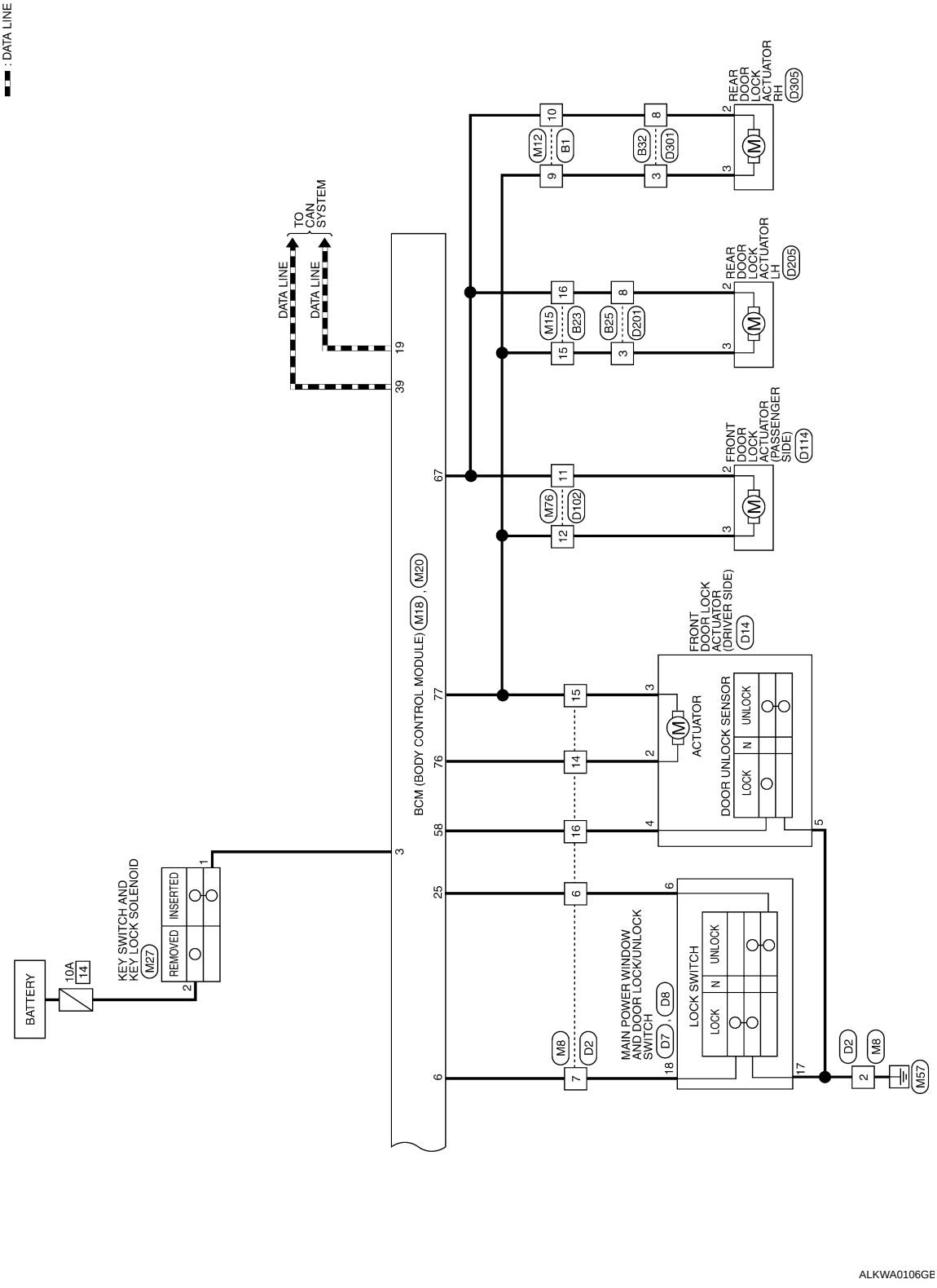
INFOID:0000000001397100

Refer to BCS-35, "Reference Value".

Wiring Diagram - POWER DOOR LOCK SYSTEM -

INFOID:0000000001397101




: DATA LINE
BATTERY
10A
14
KEY SWITCH AND KEY LOCK SOLENOID
M27
REMOVED
INSERTED
BCM (BODY CONTROL MODULE) M18 , M20
TO CAN SYSTEM
DATA LINE
DATA LINE
REAR DOOR LOCK ACTUATOR RH D305
REAR DOOR LOCK ACTUATOR LH D205
FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) D114
FRONT DOOR LOCK ACTUATOR (DRIVER SIDE) D14
ACTUATOR
DOOR UNLOCK SENSOR
LOCK
N
UNLOCK
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH D7 , D8
LOCK SWITCH
LOCK
N
UNLOCK
M57
ALKWA0106GB

POWER DOOR LOCK SYSTEM - WITHOUT INTELLIGENT KEY OR SUPER LOCK

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	—
6	L	—
7	GR	—
14	G	—
15	SB	—
16	V	—

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
7	Y	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
9	SB	—
10	G	—

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	—
15	SB	—
16	GR	—
17	Y	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	BR	—
10	O	—
14	G	—
15	SB	—
16	G	—

ALKIA1122GB

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

H.S.

52	51	50	49	48	47	46	45	44	43	42	41
64	63	62	61	60	59	58	57	56	55	54	53

Terminal No.	Color of Wire	Signal Name
59	O	DOOR SW RL
60	GR	DOOR SW DR

Connector No.	M52
Connector Name	INTELLIGENT KEY UNIT
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	L	CAN-H
3	P	CAN-L
7	LG	KEY SW I/P
11	SB	BATT
12	B	GND
27	W	PUSH SW I/P
28	Y	DR LOCK STATE SW I/P

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND
3	G	KEY IN SW
5	V	TRUNK OPENER SWITCH
6	GR	CENTRAL LOCK SW
10	Y	DOOR SW BACK
19	L	CAN-H
22	P	BATT SAFETY LINE
25	L	CENTRAL UNLOCK SW
29	BR	DOOR SW DR
30	SB	DOOR SW AS
39	P	CAN-L

Connector No.	M27
Connector Name	KEY SWITCH AND KEY LOCK SOLENOID
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	G	—
2	LG	—

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

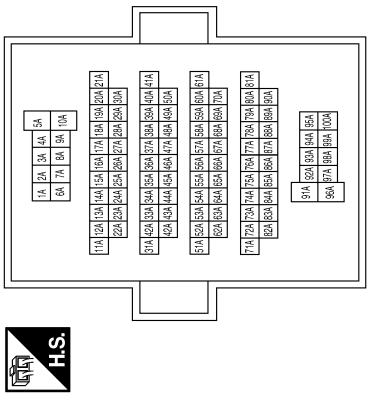
H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
67	G	DOORLOCK2 COMMON
70	B	POWER GND
74	Y	BATT BCM
76	G	DOORLOCK1 COMMON
77	SB	CDL OUT
79	Y	BATT PW

ALKIA1123GB

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

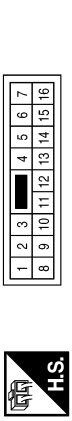


Terminal No.	Color of Wire	Signal Name
50A	P	—
96A	Y	—

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

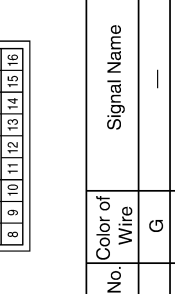
Terminal No.	Color of Wire	Signal Name
9	SB	—
10	G	—

Connector No.	M76
Connector Name	WIRE TO WIRE
Connector Color	WHITE



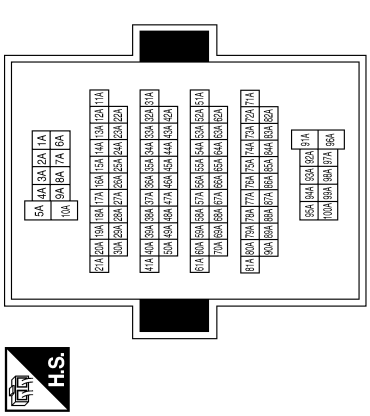
Terminal No.	Color of Wire	Signal Name
11	G	—
12	SB	—

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



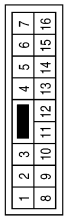
Terminal No.	Color of Wire	Signal Name
1	L	—
15	SB	—
16	GR	—
17	P	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
50A	Y	—
96A	Y	—

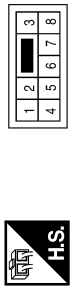
Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	LG	—
10	W	—
14	G	—
15	SB	—
16	G	—

ALKIA1124GB

Connector No.	B32
Connector Name	WIRE TO WIRE
Connector Color	WHITE



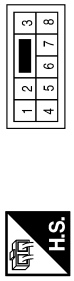
Terminal No.	Color of Wire	Signal Name
3	SB	—
8	G	—

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Color	WHITE



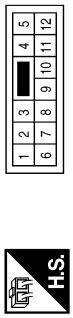
Terminal No.	Color of Wire	Signal Name
2	SB	—

Connector No.	B25
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3	SB	—
8	G	—

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	P	—
4	L	—

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	GR	—

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	LG	—

ALKIA1125GB

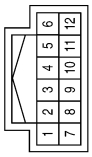
Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	—

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

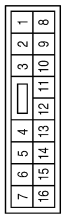
H.S.



Terminal No.	Color of Wire	Signal Name
7	Y	—

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

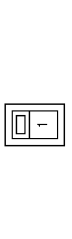
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	—
6	V	—
7	GR	—
14	G	—
15	GR	—
16	Y	—

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

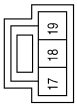
H.S.



Terminal No.	Color of Wire	Signal Name
6	V	DOOR LOCK UNLOCK

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

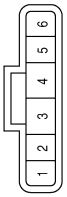
H.S.



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

Connector No.	D14
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
2	G	—
3	GR	—
4	Y	—
5	B	—

ALKIA1126GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	G	—
12	SB	—

Connector No.	D114
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Color	BLACK

H.S.

6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
2	G	
3	O	

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	SB	—
8	G	—

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

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
2	G	
3	SB	

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

H.S.

1		2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
3	SB	—
8	G	—

Connector No.	D305
Connector Name	REAR DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Color	BLACK

H.S.

6	5	4	3	2	1

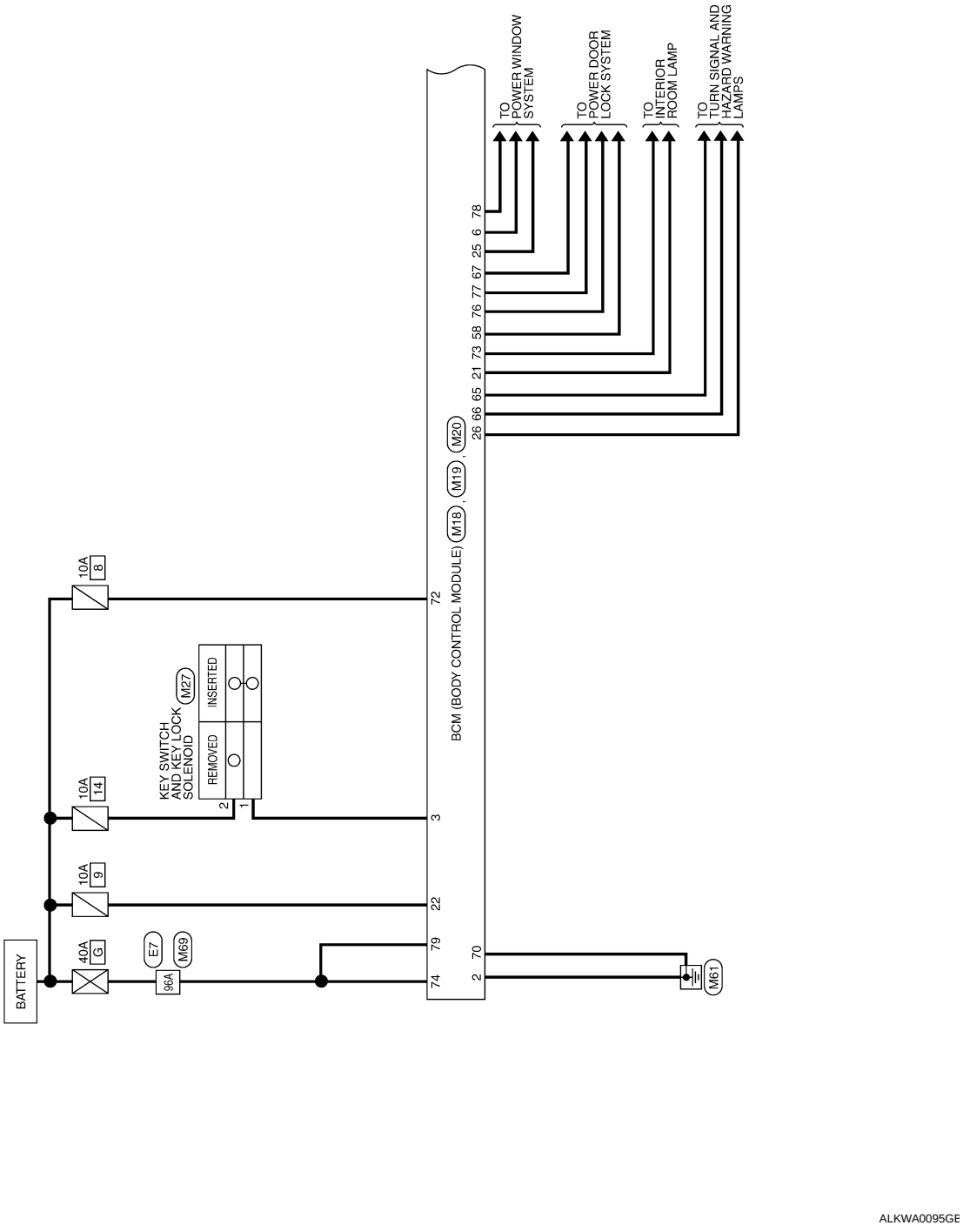
Terminal No.	Color of Wire	Signal Name
2	G	
3	SB	

ALKIA1127GB

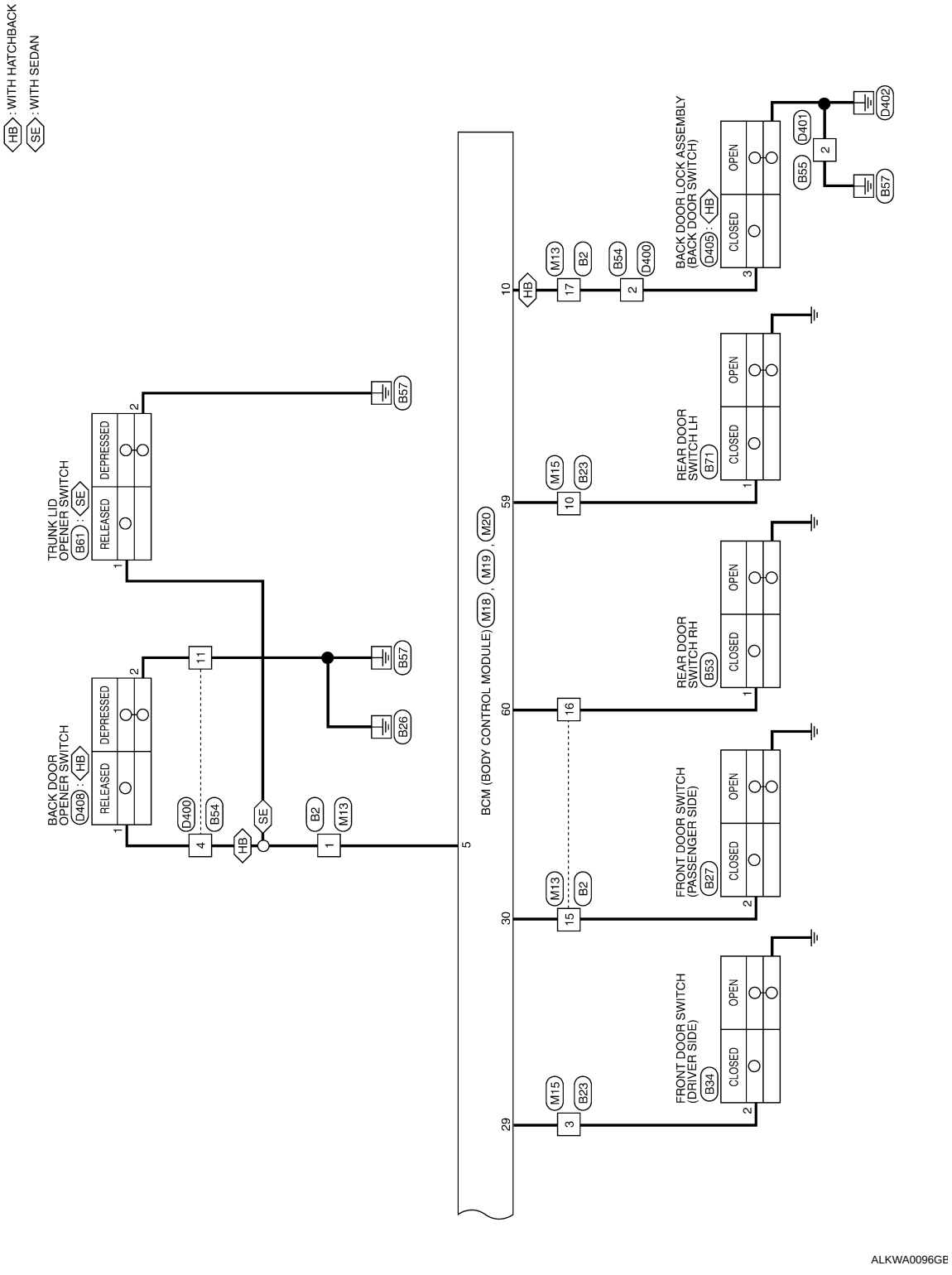
Wiring Diagram - REMOTE KEYLESS ENTRY SYSTEM -

INFOID:0000000001397102

REMOTE KEYLESS ENTRY SYSTEM - WITHOUT SUPER LOCK

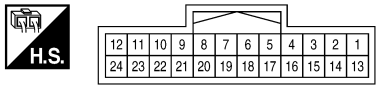


ALKWA0095GE


HB : WITH HATCHBACK
SE : WITH SEDAN
BCM (BODY CONTROL MODULE) (M18), (M19), (M20)
BACK DOOR OPENER SWITCH (D408) : HB
TRUNK LID OPENER SWITCH (B61) : SE
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH) (D405) : HB
REAR DOOR SWITCH LH (B71)
REAR DOOR SWITCH RH (B53)
FRONT DOOR SWITCH (PASSENGER SIDE) (B27)
FRONT DOOR SWITCH (DRIVER SIDE) (B34)
RELEASED
DEPRESSED
CLOSED
OPEN
ALKWA0096GE

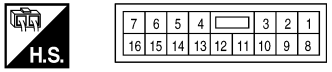
REMOTE KEYLESS ENTRY - WITHOUT SUPER LOCK CONNECTORS

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE



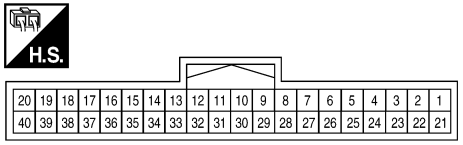
Terminal No.	Color of Wire	Signal Name
1	V	—
15	SB	—
16	GR	—
17	Y	—

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



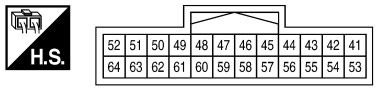
Terminal No.	Color of Wire	Signal Name
3	BR	—
10	O	—

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



Terminal No.	Color of Wire	Signal Name
2	B	GND
3	G	KEY IN SW
5	V	TRUNK OPENER SWITCH
6	GR	CENTRAL LOCK SW
10	Y	DOOR SW BACK
21	BR	LOGICAL LIGHTING CONTROL
22	P	BATT SAFETY LINE
25	L	CENTRAL UNLOCK SW
26	L	HAZARD SW
29	BR	DOOR SW DR
30	SB	DOOR SW AS

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



Terminal No.	Color of Wire	Signal Name
58	Y	LOCK KNOB SWITCH
59	O	DOOR SW RL
60	GR	DOOR SW DR

ALKIA1100GB

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

H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
65	V	TURN LAMP LH
66	W	TURN LAMP RH
67	G	DOORLOCK2 COMMON
70	B	POWER GND
72	LG	BATT RL
73	R	ROOM LAMP POWER
74	Y	BATT BCM
76	G	DOORLOCK1 COMMON
77	SB	CDL OUT
78	L	POWER WINDOW SUPPLY
79	Y	BATT PW

Connector No.	M27
Connector Name	KEY SWITCH AND KEY LOCK SOLENOID
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	G	—
2	LG	—

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	—

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
1	L	—
15	SB	—
16	GR	—
17	P	—

ALKIA1101GB



AWKIA1102GB

Connector No.	B61
Connector Name	TRUNK LID OPENER SWITCH
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	—
2	BR	—

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	—

Connector No.	D400
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	P	—
4	L	—
11	B	—

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	D405
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	O	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D408
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	BROWN

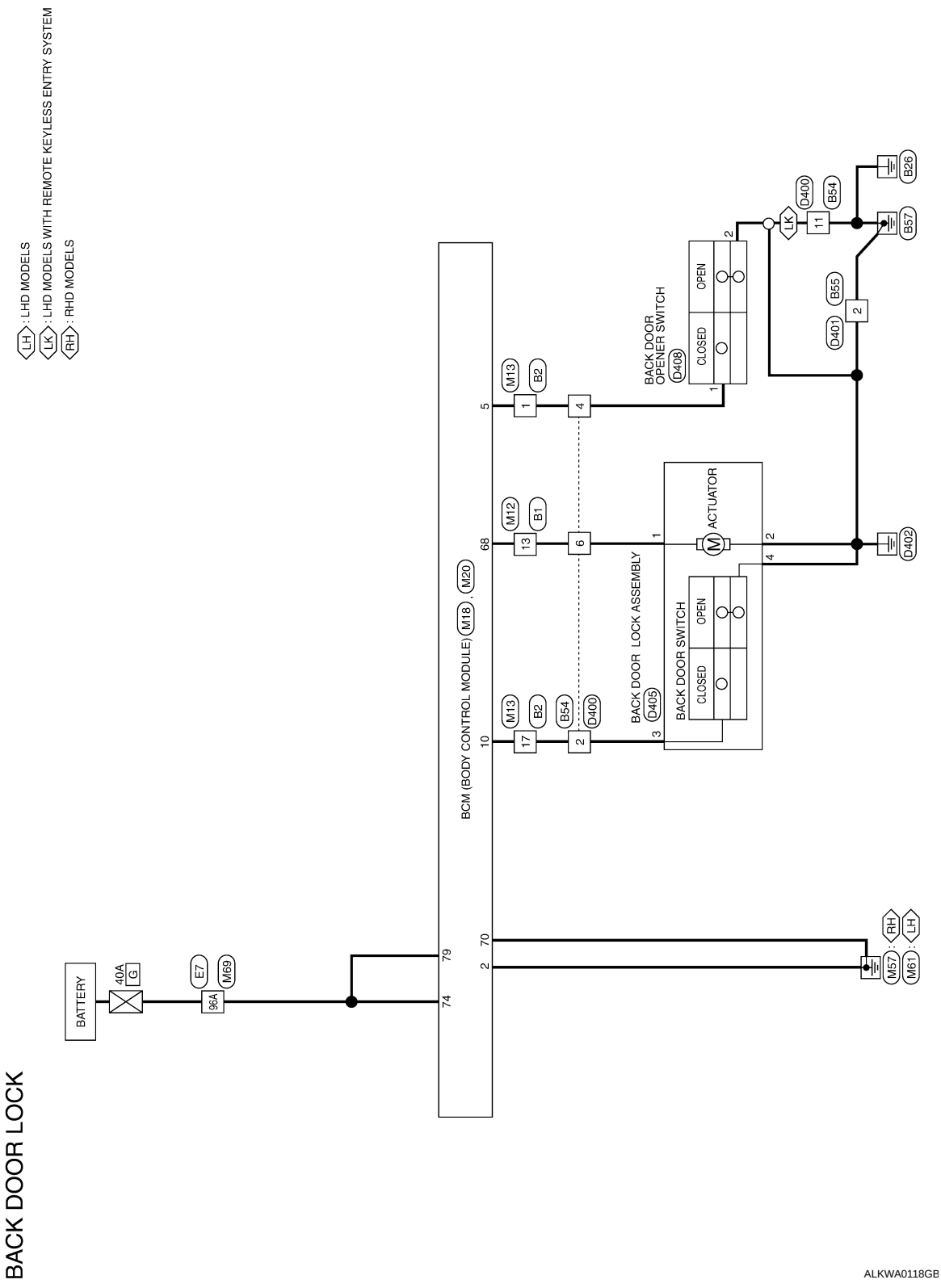
H.S.

Terminal No.	Color of Wire	Signal Name
1	L	—
2	BR	—

ALKIA1103GB

Wiring Diagram - BACK DOOR OPENER SYSTEM -

INFOID:0000000001530838



BACK DOOR LOCK

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	R	–

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
1	V	–
17	Y	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND
5	V	TRUNK OPENER SWITCH
10	Y	DOOR SW BACK

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	–

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

H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
68	R	TRUNK LID ACTUATOR
70	B	POWER GND
74	Y	BATT BCM
79	Y	BATT PW

ALKIA1152GB

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	–

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	O	–

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

Terminal No.	Color of Wire	Signal Name
1	L	–
17	P	–

Connector No.	B54 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	B54 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	B55
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
2	B	–

ALKIA1153GB

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

Connector No.	D400 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	W	–
4	W	–
6	W	–
11	B	–

Connector No.	D400 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	D408 (LHD)
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	BROWN

H.S.

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

Connector No.	D405 (RHD)
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–
2	B	–
3	W	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D405 (LHD)
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

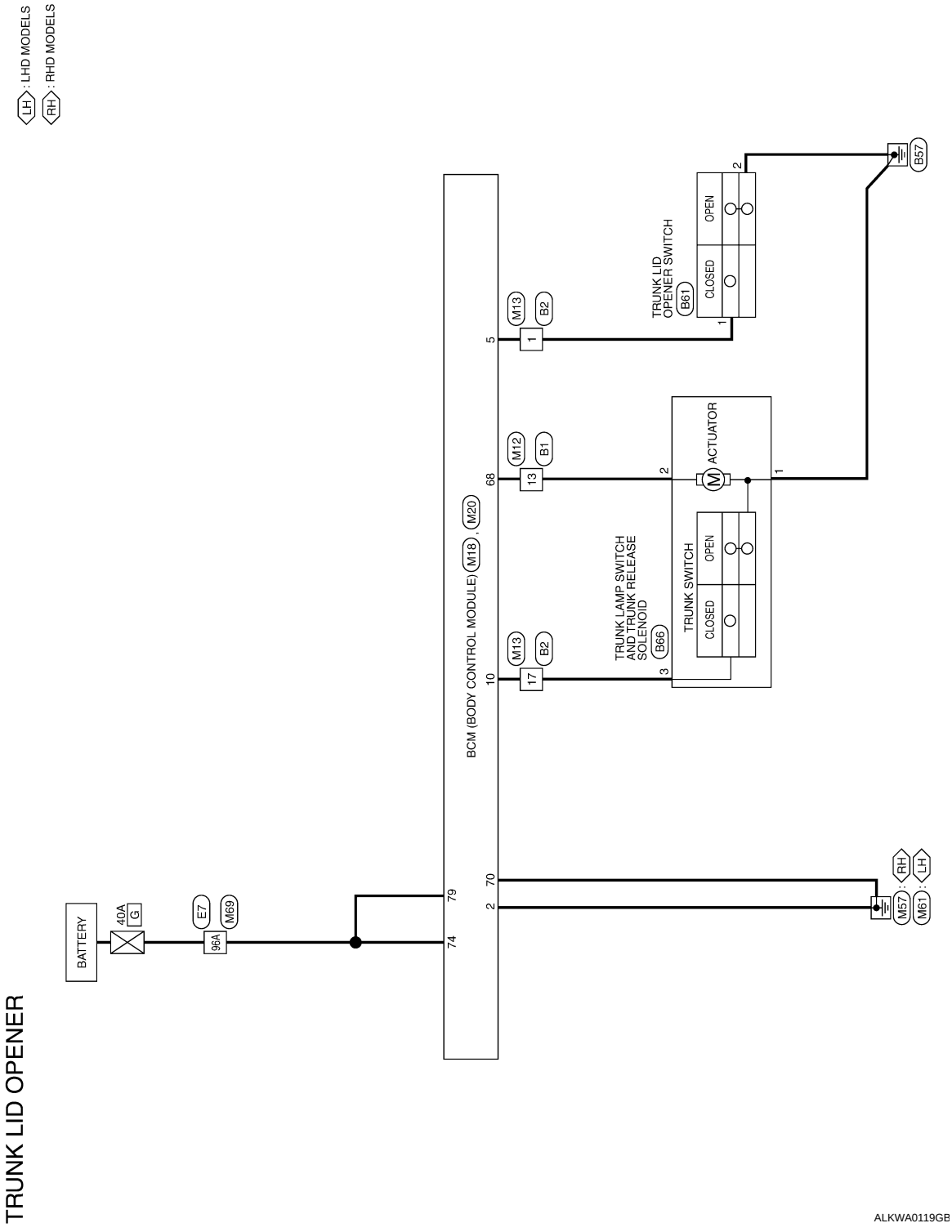
H.S.

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	B	–
3	O	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

ALKIA1154GB

Wiring Diagram - TRUNK LID OPENER SYSTEM -

INFOID:0000000001530839



TRUNK LID OPENER CONNECTORS

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

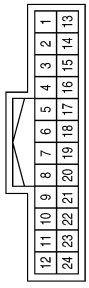
H.S.



Terminal No.	Color of Wire	Signal Name
13	R	—

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

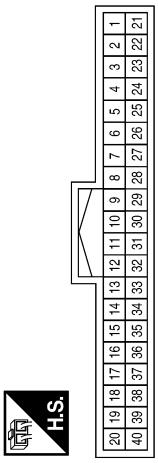
H.S.



Terminal No.	Color of Wire	Signal Name
1	V	—
17	Y	—

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

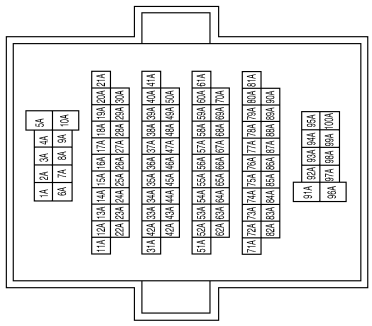
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	GND
5	V	TRUNK OPENER SWITCH
10	Y	DOOR SW BACK

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
96A	Y	—

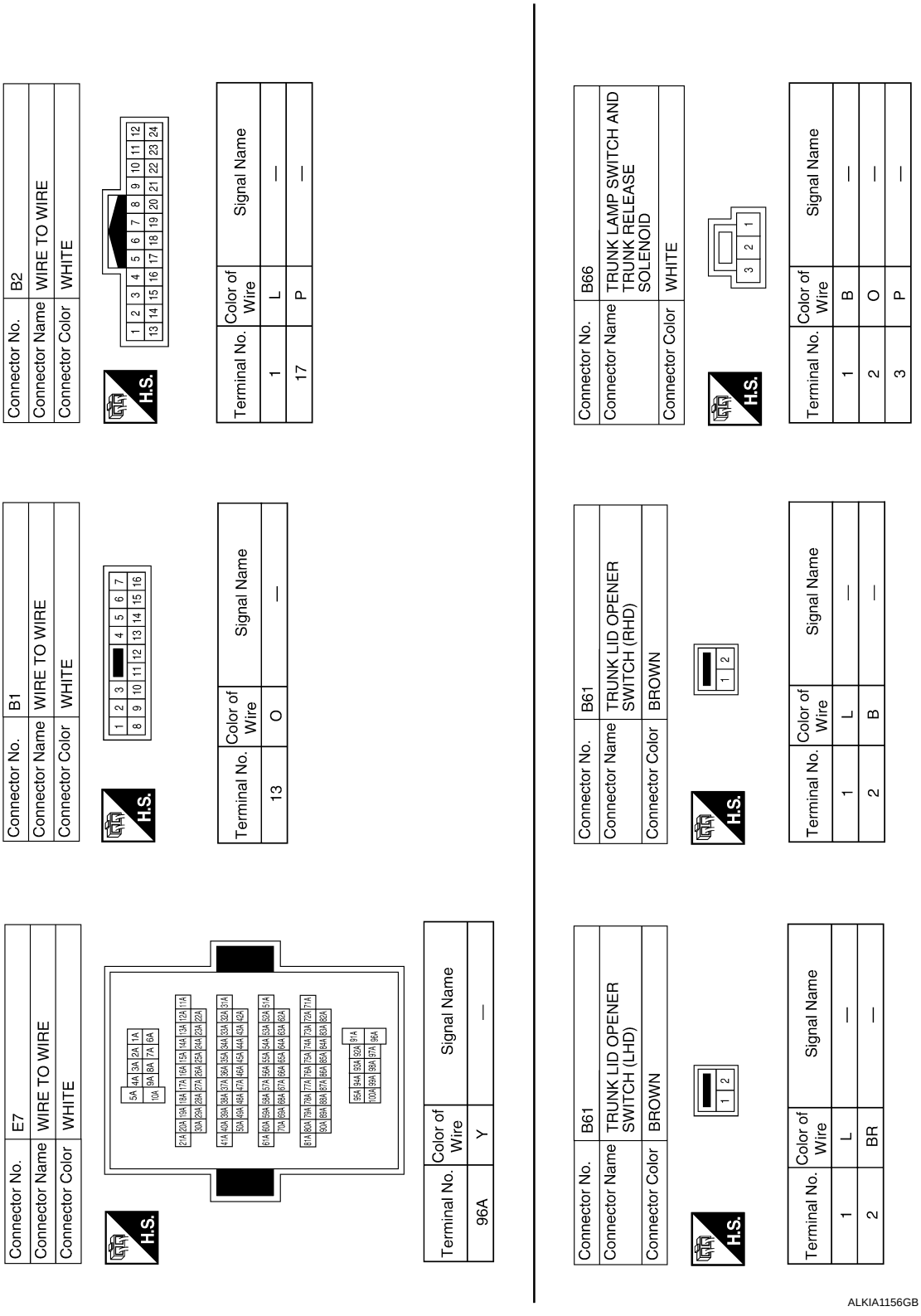
Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
68	R	TRUNK LID ACTUATOR
70	B	POWER GND
74	Y	BATT BCM
79	Y	BATT PW

ALKIA1155GB



ALKIA1156GB

Fail Safe

INFOID:0000000001397104

Fail-safe index

BCM performs fail-safe control when any DTC listed below is detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC
B2191: DIFFERENCE OF KEY	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC
B2195: ANTI SCANNING	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC
B2196: DONGLE NG	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC

TURN SIGNAL LAMP CONTROL

BCM detects the turn signal lamp circuit status from the terminal voltage.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

DTC Inspection Priority Chart

INFOID:0000000001397105

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
2	• B2190: NATS ANTENNA AMP • B2191: DIFFERNCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2194: DISCORD BCM-I-KEY • B2195: ANTI SCANNING • B2196: DONGLE NG

DTC Index

INFOID:0000000001397106

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.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 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	TIME		Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	0	1 - 39	—	XX-XX, "*****"
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	XX-XX, "*****"
B2190: NATS ANTENNA AMP	CRNT	PAST	×	XX-XX, "*****"
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	XX-XX, "*****"
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	XX-XX, "*****"

CONSULT display	TIME		Fail-safe	Refer to
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	XX-XX, "*****"
B2195: ANTI SCANNING	CRNT	PAST	×	XX-XX, "*****"
B2196: DONGLE NG	CRNT	PAST	×	XX-XX, "*****"

SYMPTOM DIAGNOSIS

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000001397107

DOOR LOCK AND UNLOCK SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-469, "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)

- Except driver side, doors are closed.
- Doors are not locked by keyfob.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Door lock and unlock function does not operate with door lock and unlock switch.	1. Check BCM power supply and ground circuit.		XX-XX, "*****"
	2. Check door lock and unlock switch.		XX-XX, "*****"
	3. Check door switch.	Passenger side	XX-XX, "*****"
		Rear LH	XX-XX, "*****"
		Rear RH	XX-XX, "*****"
		Back door	XX-XX, "*****"
	4. Check intermittent incident.		XX-XX, "*****"
Specific door lock actuator does not operate.	1. Check door lock actuator.	Driver side	XX-XX, "*****"
		Passenger side	XX-XX, "*****"
		Rear LH	XX-XX, "*****"
		Rear RH	XX-XX, "*****"
	2. Check intermittent incident.		XX-XX, "*****"

KEYFOB

KEYFOB : Symptom Table

INFOID:0000000001397108

KEYFOB OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “WORK FLOW”. Refer to DLK-469, "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)

- Mechanical key is removed from ignition key cylinder.
- Door lock and unlock operation is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
All of the keyfob operations do not operate.	1. Check keyfob battery inspection.	XX-XX, "*****"
	2. Check key switch	XX-XX, "*****"
	3. Check intermittent incident.	XX-XX, "*****"

BACK DOOR OPEN FUNCTION SYMPTOMS
BACK DOOR OPENER SWITCH
BACK DOOR OPENER SWITCH : Symptom Table

INFOID:0000000001397111

BACK DOOR OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-469, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3 MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door opener function does not operate by back door opener switch.	1. Check back door opener switch.	XX-XX, "*****"
	2. Check vehicle speed signal.	XX-XX, "*****"
	3. Check back door opener actuator.	XX-XX, "*****"
	4. Check intermittent incident.	XX-XX, "*****"

TRUNK OPEN FUNCTION SYMPTOMS
TRUNK LID OPENER SWITCH
TRUNK LID OPENER SWITCH : Symptom Table

INFOID:0000000001530698

TRUNK LID OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3 MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Trunk lid opener function does not operate by trunk lid opener switch.	1. Check trunk lid opener switch.	DLK-101
	2. Check vehicle speed signal.	DLK-149
	3. Check trunk lid opener actuator.	DLK-117
	4. Check intermittent incident.	XX-XX, "*****"
Trunk room lamp switch inoperative.	1. Check trunk room lamp switch.	DLK-94

WARNING FUNCTION SYMPTOMS
BACK DOOR

BACK DOOR : Symptom Table

INFOID:0000000001397112

BACK DOOR OPEN WARNING OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-469, "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)

- Door lock function and back door opener function are normal.

Symptom	Diagnosis/service procedure	Reference page
Back door open warning does not operate properly.	1. Check back door opener switch.	XX-XX, "*****"
	2. Check intermittent incident.	XX-XX, "*****"

HAZARD REMINDER FUNCTION
HAZARD WARNING LAMP
HAZARD WARNING LAMP : Symptom Table

INFOID:0000000001397113

HAZARD REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-469, "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)

- Door lock function is normal.
- “HAZARD LAMP SET” is active when setting on CONSULT-III.

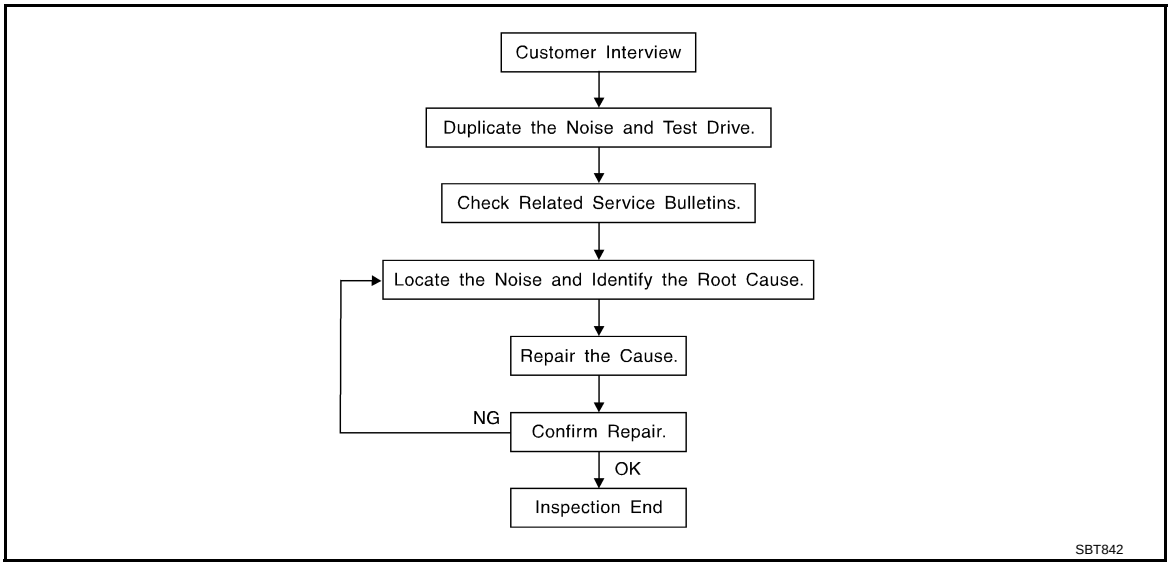
Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Hazard reminder operation does not operate properly.	1. Check setting of “HAZARD LAMP SET” with CONSULT-III.	DLK-490
	2. Check intermittent incident.	XX-XX, "*****"

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001397114



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to XX-XX, "*****". 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 a test drive 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 (TSB) 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 (Engine Ear or 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 XX-XX, "*****".

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 are 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:

- URETHANE PADS
  Insulates connectors, harness, etc.
- INSULATOR (Foam blocks)
  Insulates components from contact. Can be used to fill space behind a panel.
- INSULATOR (Light foam block)
- FELT CLOTHTAPE
  Used to insulate where movement does not occur. Ideal for instrument panel applications.
  The following materials, not available through NISSAN Parts Department, 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.
  Note: Will only last a few months.
- SILICONE SPRAY
  Use when grease cannot be applied.
- DUCT TAPE
  Use to eliminate movement.

CONFIRM THE REPAIR

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

Inspection Procedure

INFOID:0000000001397115

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. 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 to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.
In addition look for:

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment
3. 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 is 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. 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.

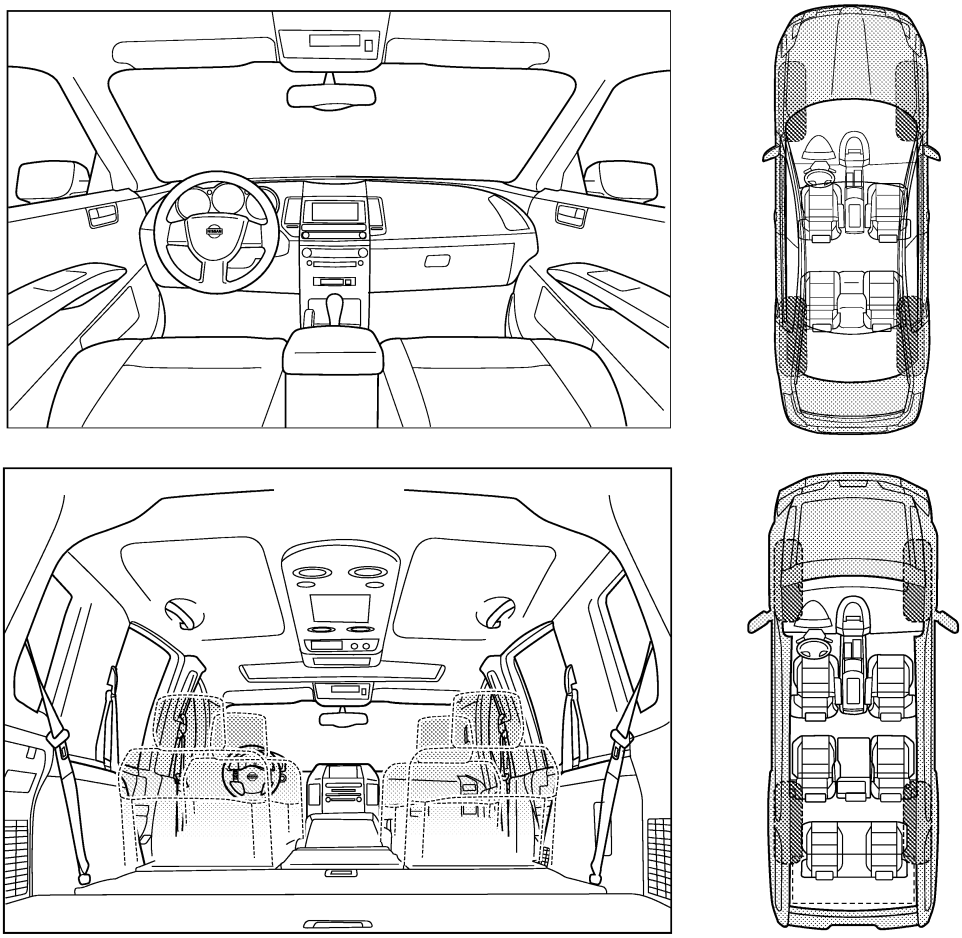
Diagnostic Worksheet

INFOID:0000000001397116

SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

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

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



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

PIIB8740E

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

PIIB8742E

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001530407

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. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

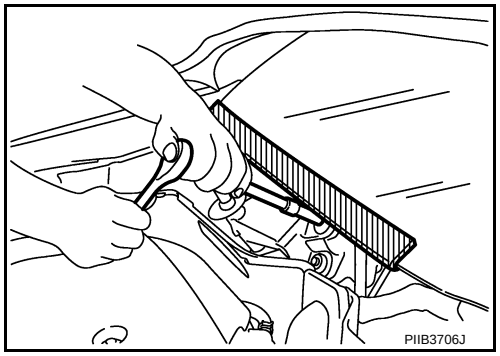
WARNING:

- **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:0000000001397118

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



Steering Wheel Rotation after Battery Disconnect

INFOID:0000000001397119

NOTE:

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

This vehicle is equipped with a push-button ignition switch and a steering lock unit.
If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.
If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.

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

Work

INFOID:0000000001397120

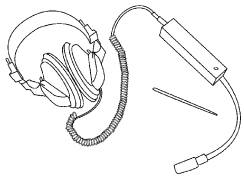
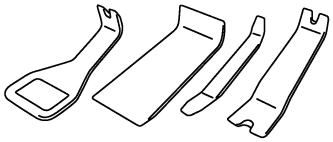
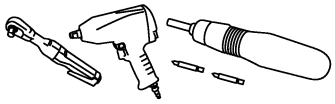
- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operational.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.

PREPARATION

PREPARATION

Commercial Service Tool

INFOID:0000000001536764

Tool name	Description
Engine ear  SIIA0995E	Locating the noise
Remover tool  PIIB7923J	Remove the clips, pawls, and metal clips
Power tool  PIIB1407E	Removing nuts and bolts

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

INFOID:0000000001397122

BASIC INSPECTION

1.CHECK DOOR LOCK AND UNLOCK SWITCH OPERATION

Check door lock and unlock operation by operating door lock and unlock switch.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-567, "DOOR LOCK AND UNLOCK SWITCH : Symptom Table".

2.CHECK KEYFOB OPERATION

Check door lock and unlock operation by operationg lock and unlock button of keyfob.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-567, "KEYFOB : Symptom Table".

3.CHECK AUTO DOOR LOCK OPERATION

Check auto door lock operation. Refer to XX-XX, "*****".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to XX-XX, "*****".

4.CHECK VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

Check vehicle speed sensing auto door lock. Refer to XX-XX, "*****"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to XX-XX, "*****".

5.CHECK BACK DOOR OPENER SWITCH OPERATION

Check back door opener operation by operating back door opener switch.

Is the inspection result normal?

YES >> GO TO 6.
NO >> Refer to DLK-569, "BACK DOOR OPENER SWITCH : Symptom Table".

6.CHECK HAZARD REMINDER FUNCTION

Check hazard reminder function by operating the following switches.
- Lock and unlock button of keyfob.

Is the inspection result normal?

YES >> GO TO 7.
NO >> Refer to DLK-572, "HAZARD WARNING LAMP : Symptom Table".

7.CHECK WARNING FUNCTION

Check that warning function operate properly. Refer to DLK-482, "System Description".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Refer to DLK-571, "BACK DOOR : Symptom Table".

8.CHECK OUT

CHECK OUT.

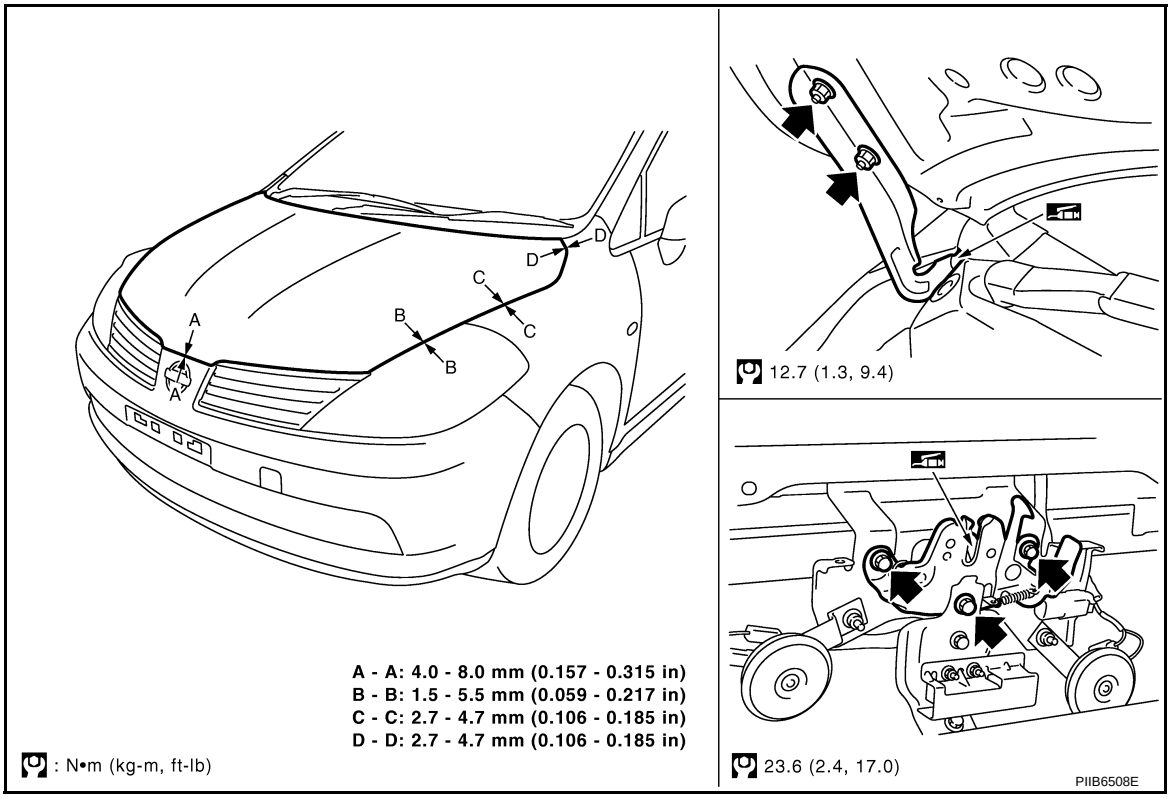
>> INSPECTION END

REMOVAL AND INSTALLATION

HOOD

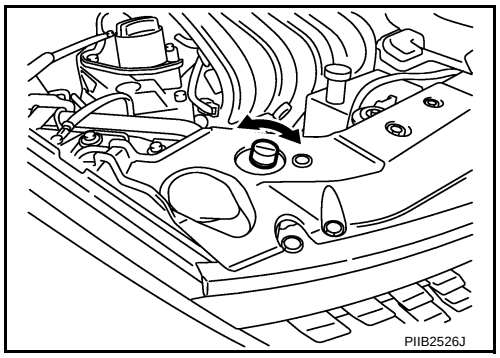
Fitting Adjustment

INFOID:0000000001732035



FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDINAL CLEARANCE ADJUSTMENT

1. Remove the front grille. Refer to EXT-19, "Removal and Installation".
2. Remove hood lock. Rotate bumper rubber to adjust height until hood becomes 1.0 to 1.5 mm lower than the fender.
3. Position hood lock and engage striker. Check hood lock and striker for looseness. Tighten lock bolts to the specified torque.
4. Install the front grille. Refer to EXT-19, "Removal and Installation".



CAUTION:

Adjust the clearance between hood and other parts so that the dimensional difference left and right is as follows.

Hood and headlamp (B - B) : Less than 2.0 mm (0.08 in)
Hood and fender (C - C) : Less than 1.5 mm (0.06 in)
Hood and fender (D - D) : Less than 1.5 mm (0.06 in)

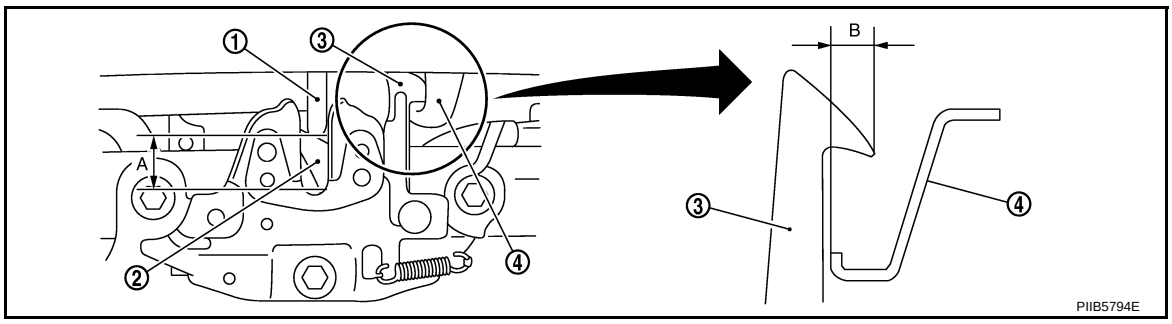
SURFACE MISMATCH ADJUSTMENT

1. Remove the front grille. Refer to EXT-19, "Removal and Installation".
2. Release hood lock, and adjust surface level difference of hood, fender, and headlamp according to the fitting standard dimension, using RH and LH bumper rubbers.

Hood and front bumper (A - A) : -1.3 - 2.7 mm (-0.05 - 0.11 in)
Hood and fender (D - D) : -0.4 - 1.7 mm (-0.16 - 0.07 in)

3. Install and align the hood lock until the center of the striker and the hood lock are vertically aligned.

4. Press the hood lightly with [approx. 29 N (3 kg] of force and adjust A and B as shown.



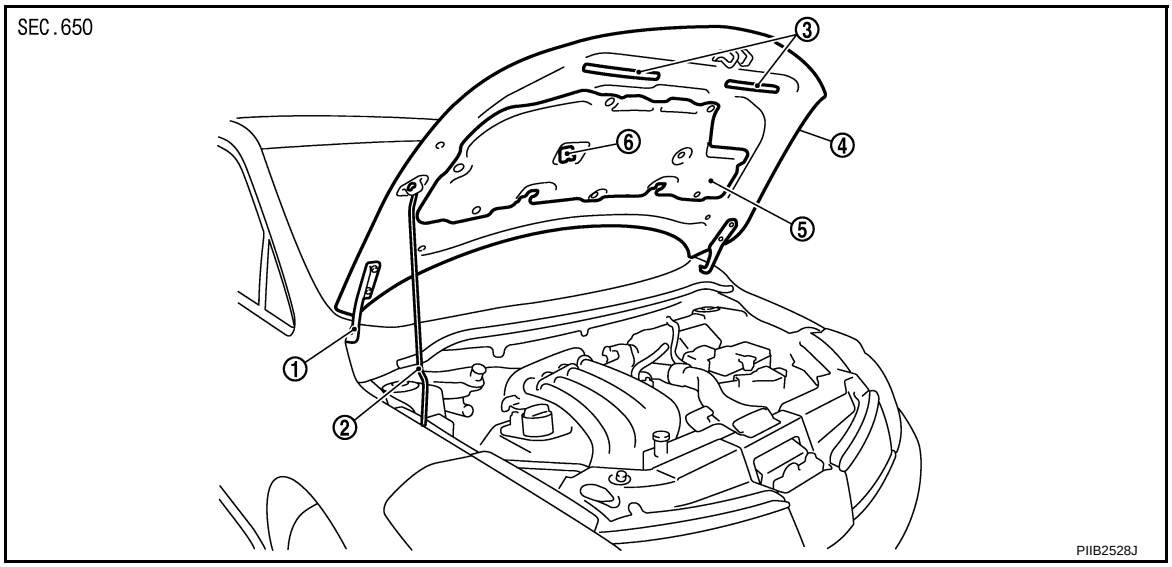
1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

A : 20 mm (0.79 in)
B : 6.8 mm (0.268 in) min.

5. After adjustment tighten lock bolts to the specified torque.
6. Install the front grille. Refer to EXT-19, "Removal and Installation".

Removal and Installation

INFOID:0000000001732036



1. Hood hinge
2. Hood stay
3. Radiator core seal rubber
4. Hood assembly
5. Hood insulator
6. Hood stay holder

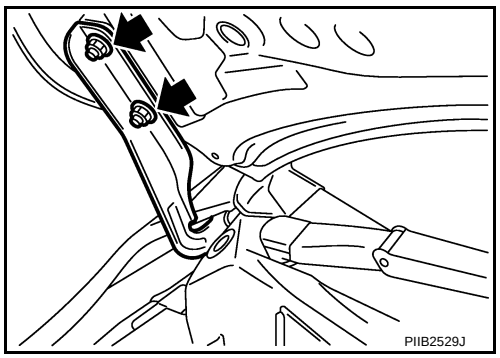
HOOD ASSEMBLY

Removal

1. Remove hinge nuts on hood and remove hood assembly.

CAUTION:
Two technicians should be used to avoid damaging the hood during removal.

12.7 N·m (1.3 kg-m, 9.4 ft-lb)



Installation

Installation is in the reverse order of removal.

CAUTION:

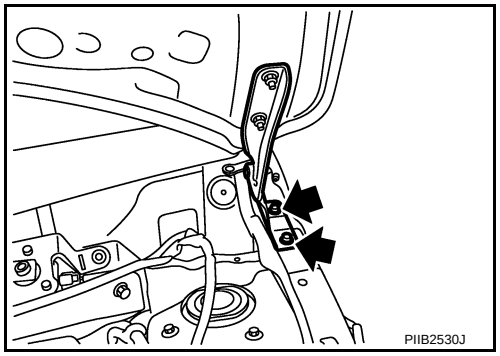
- **Before installing hood hinge, apply anticorrosive agent onto the surfaces that make contact with the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-583, "Fitting Adjustment".**

HOOD HINGE

Removal

1. Remove hood assembly. Refer to DLK-584, "Removal and Installation".
2. Remove front fender. Refer to DLK-591, "Removal and Installation".
3. Remove bolts and the hood hinge.

12.7 N·m (1.3 kg-m, 9.4 ft-lb)



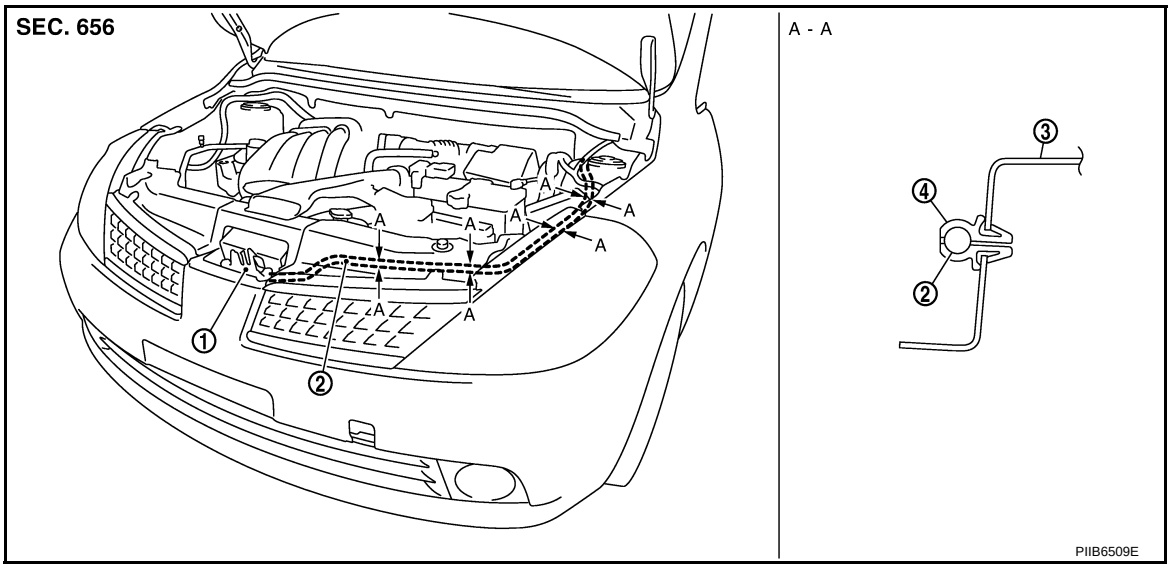
Installation

Installation is in the reverse order of removal.

Removal and Installation of Hood Lock Control

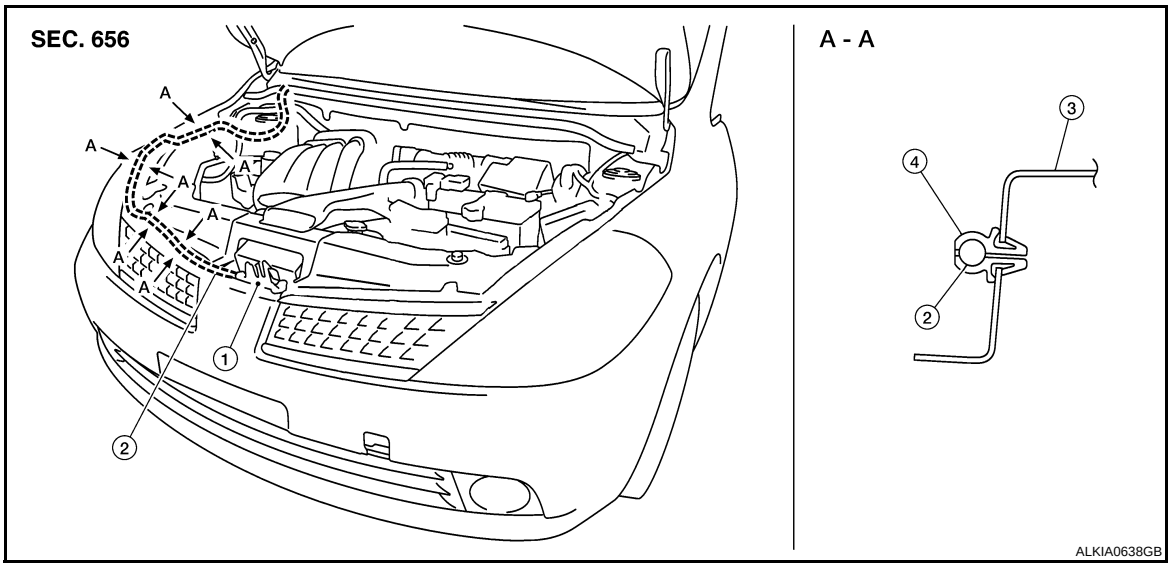
INFOID:0000000001732037

LH Drive



1. Hood lock
2. Hood lock cable
3. Hood ledge upper front
4. Clip

RH Drive



1. Hood lock
2. Hood lock cable
3. Hood ledge upper front
4. Clip

REMOVAL

Hood Lock

1. Remove front grille (LH or RH as necessary). Refer to EXT-19, "Removal and Installation".
2. Remove hood lock bolts.

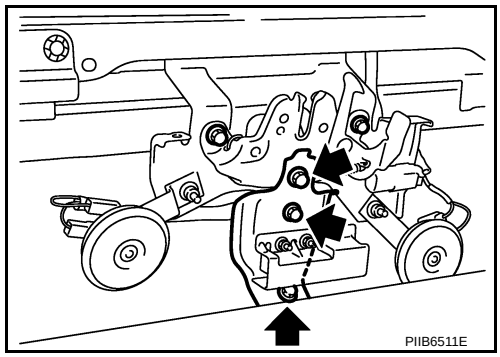
23.6 N·m (2.4 kg-m, 17 ft-lb)

3. Remove hood lock from hood lock cable.

Hood Lock Reinforcement

1. Remove front bumper. Refer to EXT-15, "Removal and Installation - Hatchback" or EXT-17, "Removal and Installation - Sedan".
2. Remove crash zone sensor.
3. Remove bolts, and the hood lock reinforcement.

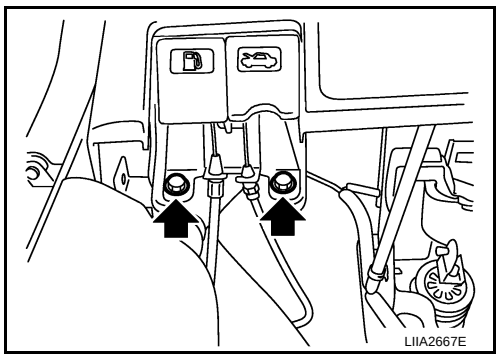
23.6 N·m (2.4 kg-m, 17 ft-lb)



Hood Lock Cable

1. Remove front grille (LH/RH). Refer to EXT-19, "Removal and Installation".
2. Remove fender protector (LH or RH as necessary). Refer to EXT-22, "Removal and Installation".
3. Remove hood lock, and remove hood lock cable from hood lock.
4. Remove radiator core upper support, hood ledge, and then remove hood lock cable.

5. Remove hood opener on bottom left of instrument panel, and then remove hood lock cable.
6. Remove grommet on lower dashboard, and pull out hood lock cable from passenger room side.
   CAUTION:
   While pulling the cable, be careful not to damage (peel) hood opener cable outer surface on edges of body through hole.



INSTALLATION

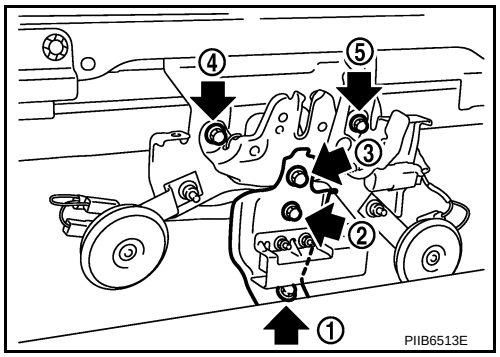
Installation is in the reverse order of removal.

- Perform hood fitting adjustment. Refer to DLK-583, "Fitting Adjustment".

Hood Lock Reinforcement

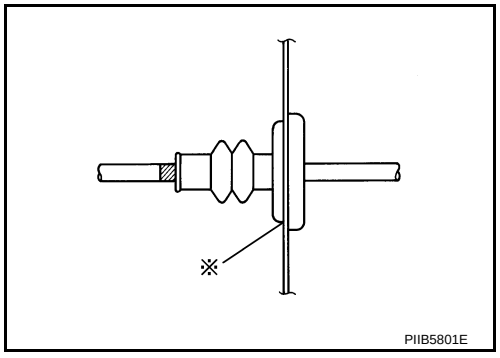
When installing hood lock reinforcement, loosen hood bolts, and then tighten bolts in the order as shown.

23.6 N·m (2.4 kg-m, 17 ft-lb)

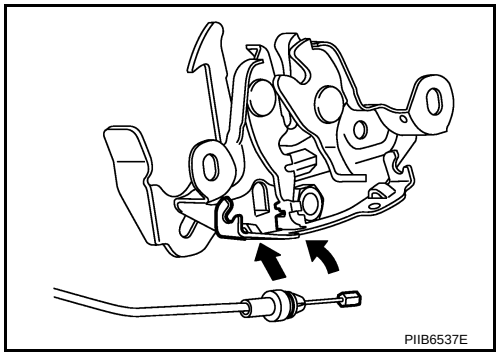


Hood Lock Cable

1. Pull the hood lock cable through the panel hole to the engine compartment.
   CAUTION:
   Be careful not to bend the cable too much, keeping the radius 100 mm (3.94 in) or more.
2. Check that the cable is not offset from the positioning grommet, and push the grommet into the panel hole securely.
3. Apply the sealant around the grommet (at * mark).



4. Install cable securely to lock.
5. After installing, check hood lock adjustment and hood opener operation.

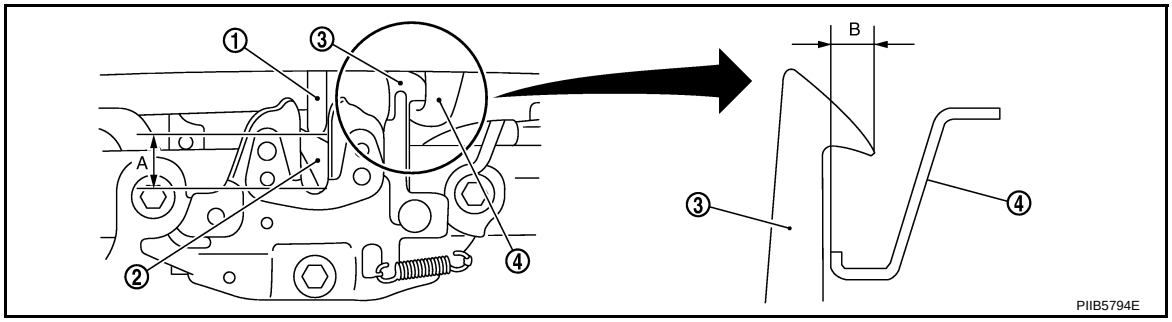


Hood Lock Control Inspection

INFOID:0000000001732038

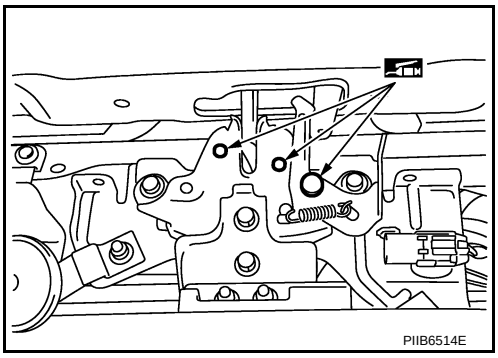
CAUTION:
If the hood lock cable is bent or deformed, replace it.

1. Check that the secondary latch is properly engaged with the secondary striker (B: 6.8 mm (0.268 in) with hood's own weight.



1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

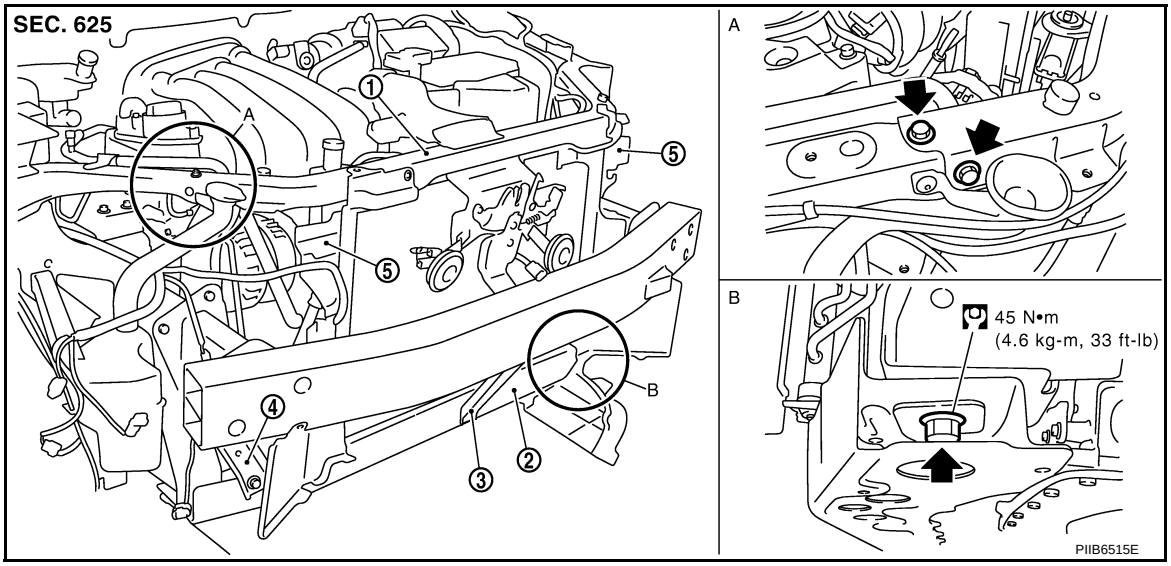
2. While operating the hood release handle, carefully check that the front end of the hood is raised by approx. 20 mm (0.79 in). Also check that the hood release handle returns to the original position.
3. Check that the secondary hood release operates at 29.4 N (3.0 kg) or below.
4. Confirm static closing force of the hood is 343 – 441 N·m (35 – 44 kg-m).
5. Check the hood lock lubrication condition. If necessary, apply “body grease” to the points as shown.



RADIATOR CORE SUPPORT

Removal and Installation

INFOID:0000000001732039



1. Radiator core support upper
2. Radiator core support lower
3. Radiator core support lower stay
4. Radiator core support side stay
5. Air guide

REMOVAL

Radiator Core Support Upper

1. Remove the air duct. Refer to EM-27, "Removal and Installation" (HR16DE), EM-154, "Removal and Installation" (MR18DE), or EM-269, "Removal and Installation" (K9K).
2. Remove the headlamp (LH/RH). Refer to EXL-84, "Removal and Installation" .
3. Remove the hood lock assembly, and remove hood lock cable. Refer to DLK-585 .
4. Remove the air guide and hood lock cable clip.
5. Remove the washer tank inlet. Refer to WW-64, "Removal and Installation" .
6. Remove the radiator core support upper.

Radiator Core Support Lower

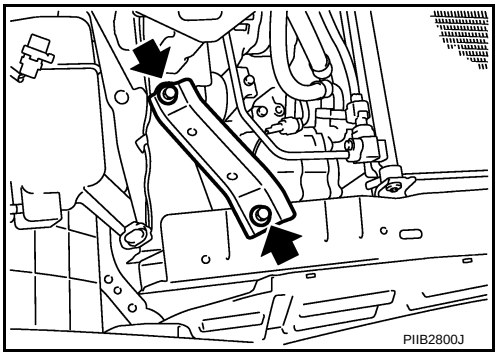
1. Remove the air duct. Refer to EM-27, "Removal and Installation" (HR16DE), EM-154, "Removal and Installation" (MR18DE), or EM-269, "Removal and Installation" (K9K).
2. Remove the front bumper. Refer to EXT-13, "Removal and Installation" .
3. Remove the headlamp (LH/RH). Refer to EXL-84, "Removal and Installation" .
4. Remove the hood lock assembly, and remove hood lock cable. Refer to DLK-585 .
5. Remove the air guide and hood lock cable mounting clip.
6. Remove the front bumper reinforcement. Refer to EXT-13, "Removal and Installation".
7. Remove the radiator core lower stay.

24.5 N·m (2.5 kg-m, 18 ft-lb)

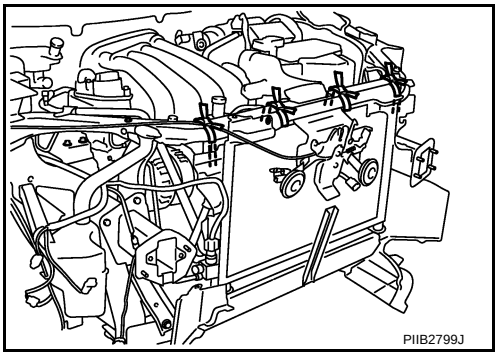
8. Remove the undercover.

9. Remove radiator core support lower side stay.

55.0 N·m (5.6 kg-m, 41 ft-lb)



10. Tie a cord to all radiator core upper supports of the radiator and condenser.
    NOTE:
    To prevent the compressor and radiator from being dropped when the radiator core lower support is removed.
11. Remove the bolts, and lower radiator core lower supports.
12. Remove the radiator core lower supports.



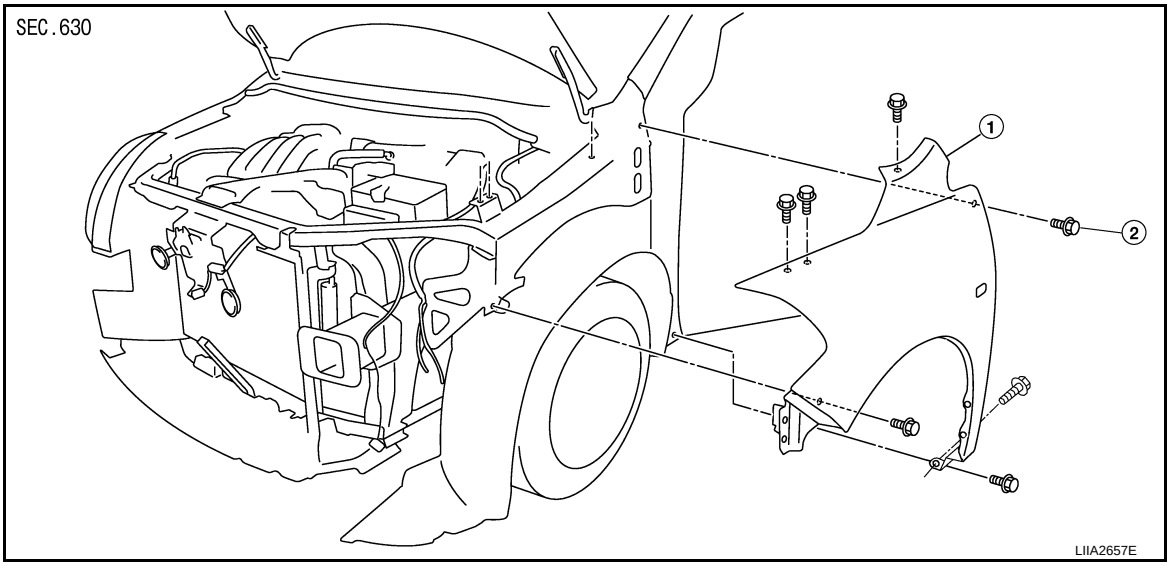
INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

Removal and Installation

INFOID:0000000001732040



1. Front fender
2. Bolt (LH 7 bolts required) (RH 8 bolts required)

REMOVAL

1. Remove the headlamp assemblies. Refer to EXL-84, "Removal and Installation".
2. Remove the cowl top cover (LH/RH). Refer to EXT-20, "Removal and Installation".
3. Remove the front fender protector. Refer to DLK-591, "Removal and Installation".
4. Remove the bolt and the front fender.

CAUTION:
While removing use a shop cloth to protect the vechicle body from damage.

INSTALLATION

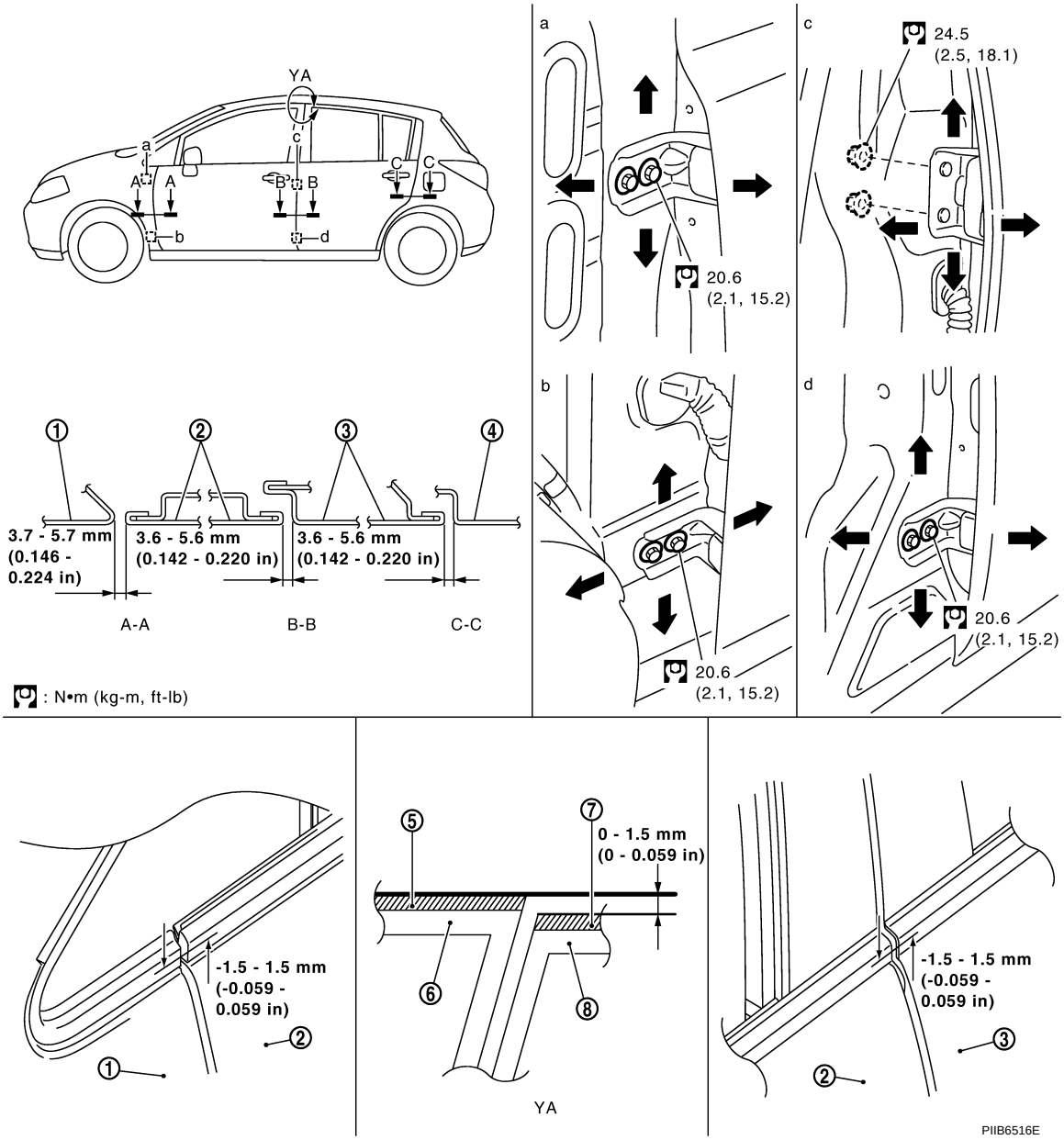
Installation is in the reverse order of removal.

CAUTION:
- **After installing, apply touch-up paint onto the head of the front fender bolts.**
- **After installing, check front fender adjustment. Refer to DLK-583, "Fitting Adjustment" and DLK-592, "Fitting Adjustment".**

DOOR

Fitting Adjustment

INFOID:0000000001732041



1. Front fender
2. Front door outer
3. Rear door outer
4. Rear fender
5. Front door weatherstrip
6. Front door sash
7. Rear door weatherstrip
8. Rear door sash

FRONT DOOR

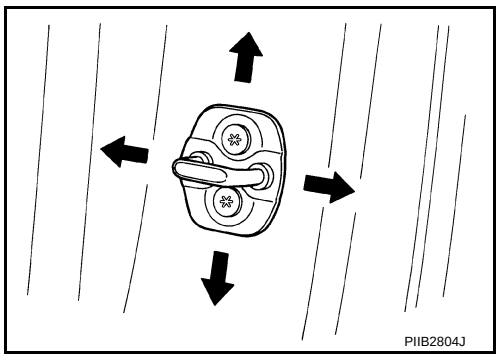
Longitudinal Clearance and Surface Height Adjustment at Front End
Access from inside the fender to loosen the hinge bolts. Raise the front door at rear end to adjust.

Surface Height Adjustment
Loosen the front door bolts, and adjust the surface height difference of fender and front door according to the fitting standard dimension.

Striker Adjustment

1.

16.7 N·m (1.7 kg-m, 12 ft-lb)



REAR DOOR

Longitudinal Clearance and Surface Height Adjustment at Front End

1. Remove the center pillar upper and lower garnishes. Refer to INT-20, "Removal and Installation".
2. Access from inside the vehicle to loosen the hinge nuts. Open the rear door, and raise the rear door at rear end to adjust.

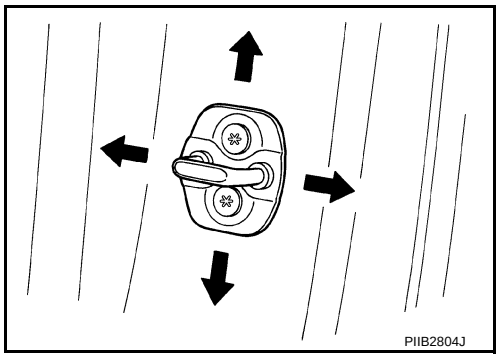
Surface Height Adjustment

Loosen the front door striker bolts and rear door hinge nuts, and adjust the surface height difference of front and rear doors according to the fitting standard dimension.

Striker Adjustment

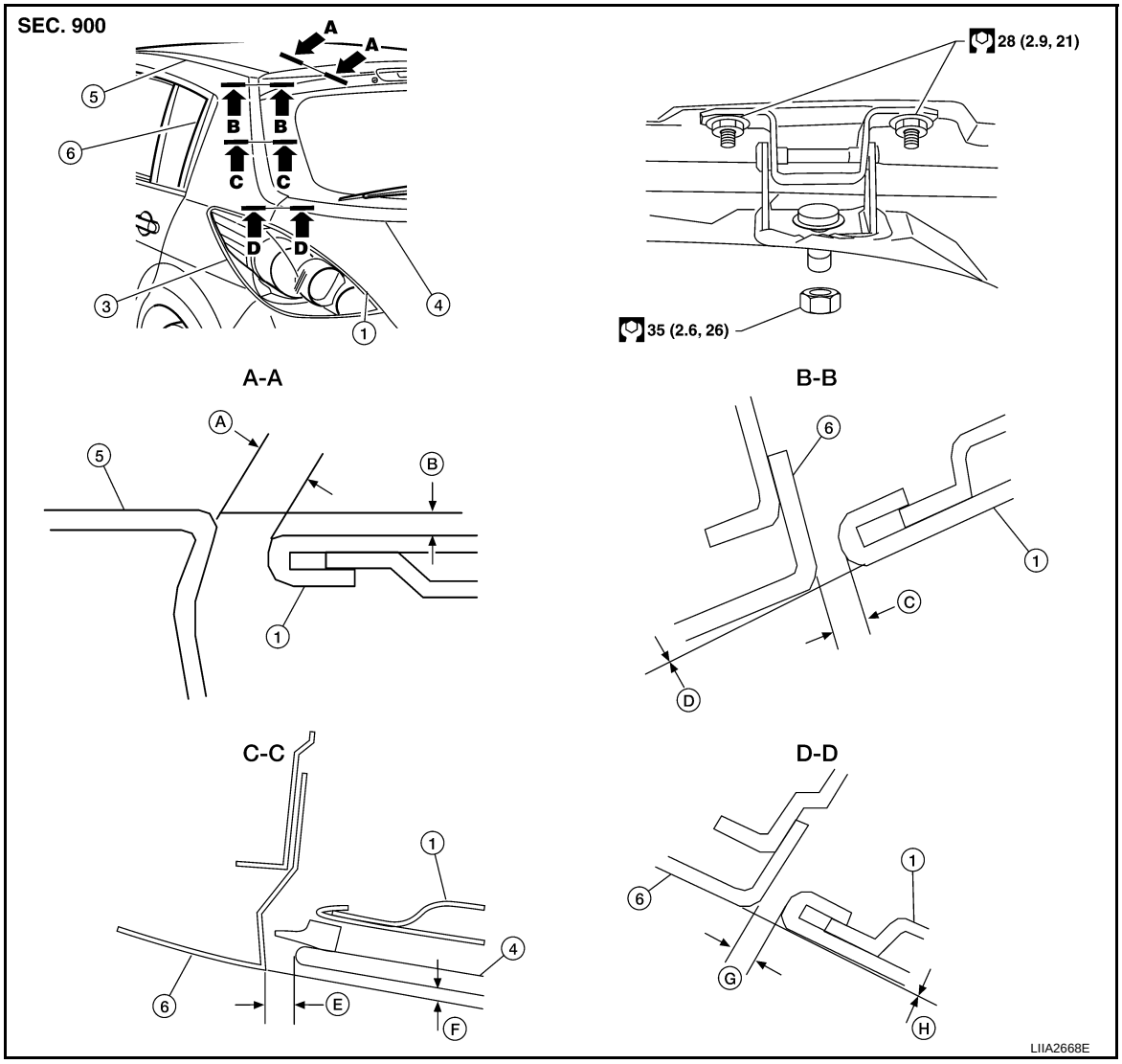
1.

16.7 N·m (1.7 kg-m, 12 ft-lb)



BACK DOOR

Longitudinal Clearance and Surface Height Adjustment



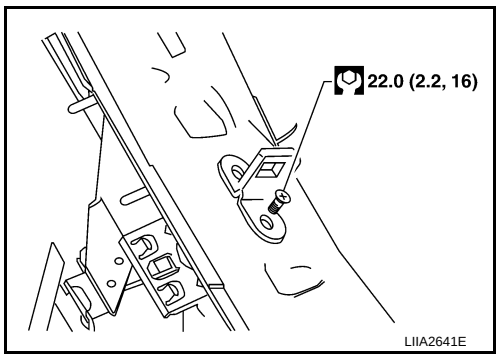
1. Back door assembly	2. Back door hinge	3. Tail lamp assembly
4. Back window glass	5. Roof	6. Rear pillar
A. 6.0 ± 1.0 mm (0.24 ± 0.04 in)	B. -0.5 ± 1.0 mm (-0.02 ± 0.04 in)	C. 5.0 ± 1.2 mm (0.20 ± 0.05 in)
D. 0.0 ± 1.5 mm (0.0 ± 0.06 in)	E. 5.0 ± 2.3 mm (0.20 ± 0.9 in)	F. 2.7 +1.6 -2.1 mm (0.11 + 0.06 - 0.08 in)
G. 5.0 ± 1.2 mm (0.20 ± 0.05 in)	H. 0.0 ± 1.5 mm (0.0 ± 0.06 in)	

1. Open and support the back door.
2. Slightly loosen the hinge nuts.
3. Reposition the door as necessary and tighten the nuts.
4. Confirm the adjustment. Repeat as necessary to obtain the desired fit.

Striker Adjustment

1.

Striker bolts **20 N·m (2.2 kg-m, 16 ft-lb)**



Removal and Installation

INFOID:0000000001732042

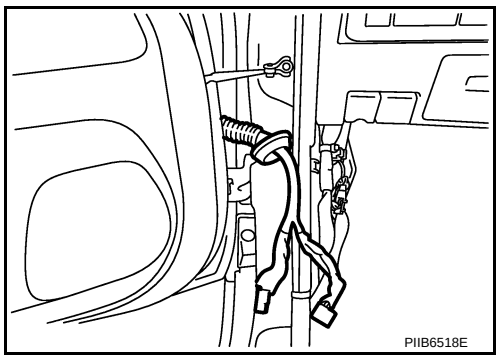
FRONT DOOR

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-592, "Fitting Adjustment".**
- **After installing, apply touch-up paint onto the head of the hinge nuts.**
- **Check the hinge rotating part for lubrication. If necessary, apply “body grease”.**
- **Operate with two workers, because of its heavy weight.**
- **Check front door open/close operation after installation.**

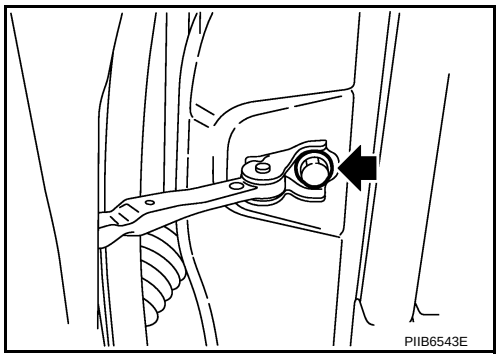
Removal

1. Remove dash side finisher. Refer to INT-20, "Removal and Installation".
2. Disconnect the front door harness connectors.
3. Remove the front door harness grommet, and then remove the harness from the vehicle.



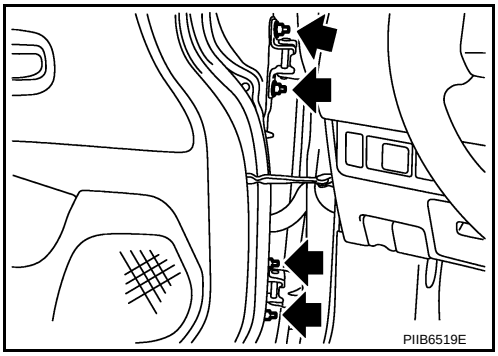
4. Remove the check link bolt.

14.7 N·m (1.5 kg-m, 11 ft-lb)



5. Remove the hinge nuts and then the door assembly.

24.5 N·m (2.5 kg-m, 18 ft-lb)



Installation
Installation is in the reverse order of removal.

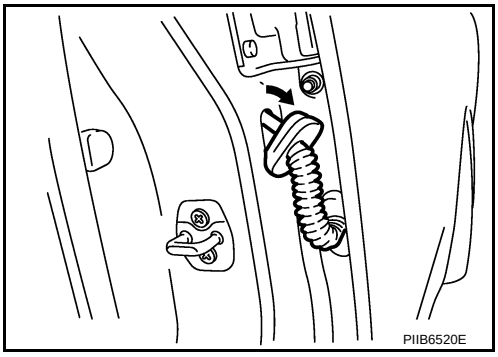
REAR DOOR

CAUTION:

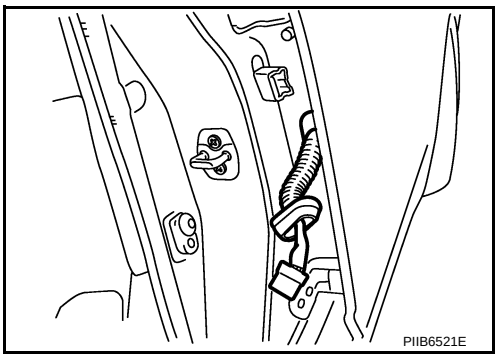
- **When removing and installing the rear door assembly, support the door with a jack and cloth to protect the door and body.**
- **When removing and installing rear door assembly, be sure to carry out the fitting adjustment. Refer to DLK-592, "Fitting Adjustment".**
- **After installing, apply touch-up paint onto the head of the hinge nuts.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply “body grease”.**
- **Operate with two workers, because of its heavy weight.**
- **Check rear door open/close operation after installation.**

Removal

1. Remove the rear door harness grommet.

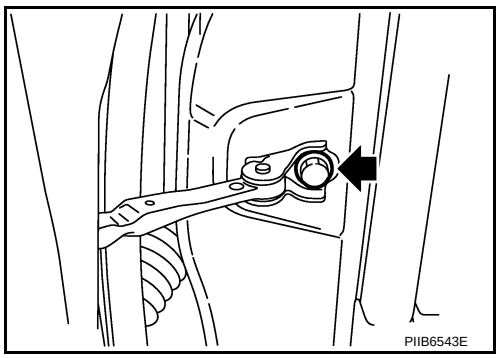


2. Disconnect the rear door harness connector.



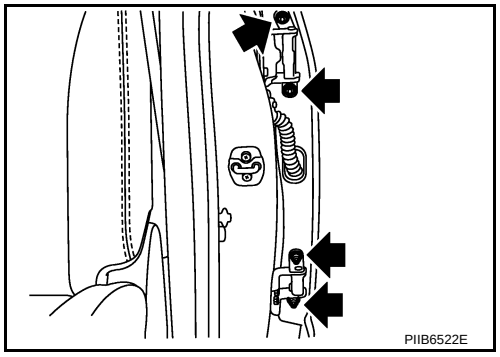
3. Remove the check link bolt.

14.7 N·m (1.5 kg-m, 11 ft-lb)



4. Remove the hinge nuts and the door assembly.

24.5 N·m (2.5 kg-m, 18 ft-lb)

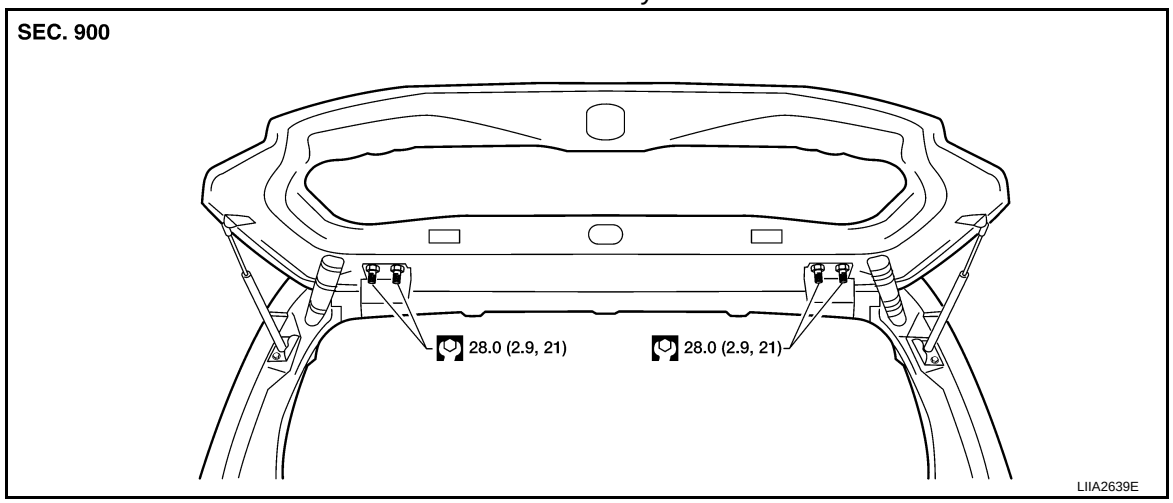


Installation
Installation is in the reverse order of removal.

BACK DOOR

Removal

1. Remove the back door glass. Refer to GW-18, "Removal and Installation".
2. Remove the back door lock assembly. Refer to DLK-606, "Removal and Installation".
3. Remove the back door wire harness.
4. Remove the rear washer nozzle and hose from the back door. Refer to WW-80, "Removal and Installation".
5. Support the back door.
   CAUTION:
   Two technicians should be used to avoid damaging the back door during removal.
6. Remove the back door stays.
7. Remove the door side nuts and the back door assembly.



Installation
Installation is in the reverse order of removal.
- Align the back door. Refer to DLK-592, "Fitting Adjustment".

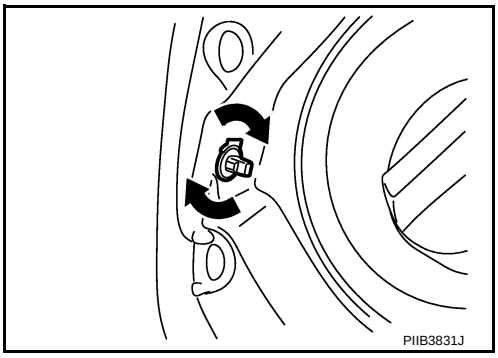
FUEL FILLER LID OPENER

Removal and Installation of Fuel Filler Lid Opener

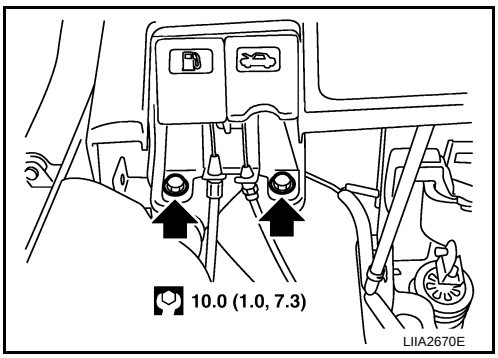
INFOID:0000000001732043

REMOVAL

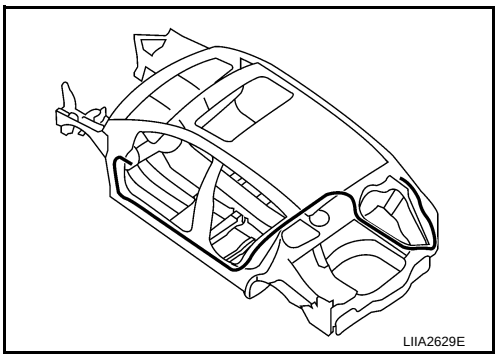
1. Remove trunk side finisher (RH). Refer to XX-XX, "*****".
2. Remove fuel filler lid opener cable lock ring.



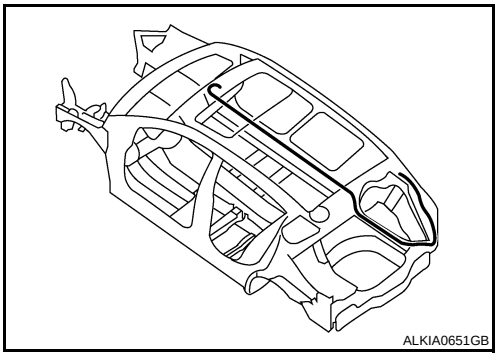
3. Remove front and rear kicking plates. Refer to XX-XX, "*****".
4. Remove rear cushion assembly. Refer to XX-XX, "*****".
5. Remove the bolts and the fuel filler lid opener handle.



6. Remove fuel filler lid opener cable clips from the vehicle.
7. Remove the fuel filler lid opener cable (LH drive).



8. Remove the fuel filler lid opener cable (RH drive).



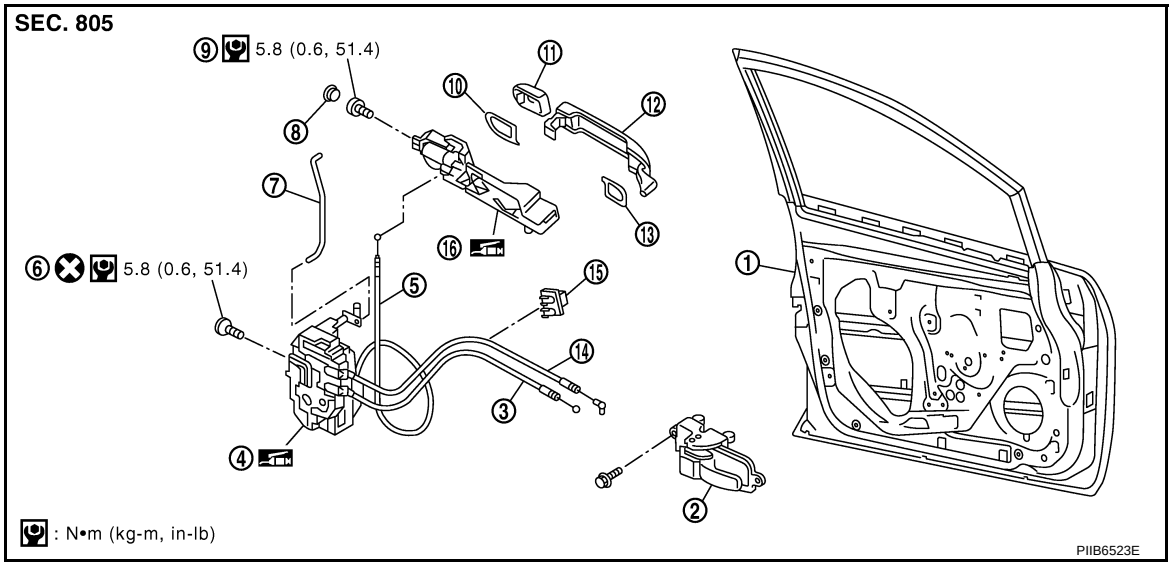
INSTALLATION

Installation is in the reverse order of removal.

FRONT DOOR LOCK

Component Parts Location

INFOID:0000000001732044



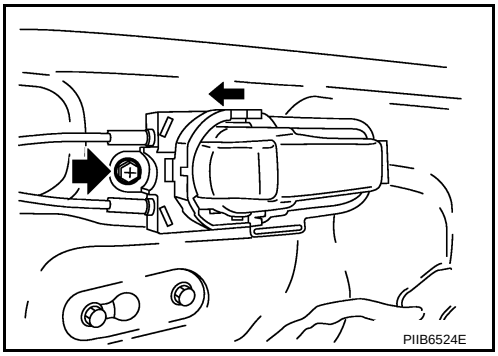
1. Front door
2. Inside handle
3. Inside handle cable
4. Door lock assembly
5. Outside handle cable
6. TORX bolt (T30)
7. Key cylinder connecting rod
8. Grommet
9. TORX bolt (T30)
10. Rear gasket
11. Door key cylinder assembly (Driver's side) Outside handle escutcheon (passenger's side)
12. Outside handle
13. Front gasket
14. Lock knob cable
15. Holder
16. Outside handle bracket

Removal and Installation

INFOID:0000000001732045

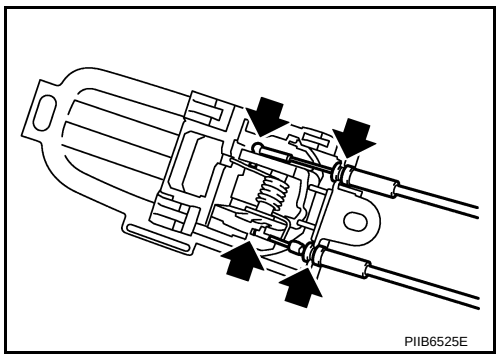
REMOVAL

1. Remove front door finisher. Refer to XX-XX, "*****" .
2. Fully close front door window.
3. Remove the front door sealing screen.
   NOTE:
   If sealing screen is reused, cut butyl tape in a way that leaves it on the sealing screen.
4. Remove front door rear glass run channel. Refer to XX-XX, "*****" .
5. Remove the cables from the holder.
6. Remove inside handle bolt, and slide the handle toward the rear of the vehicle. disengage the handle from the door panel, and remove the inside handle.

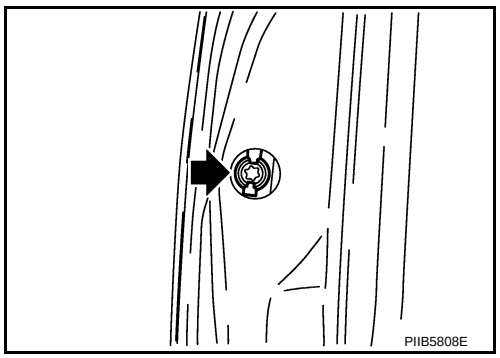


7. Disengage the handle from the door panel, and remove the inside handle.

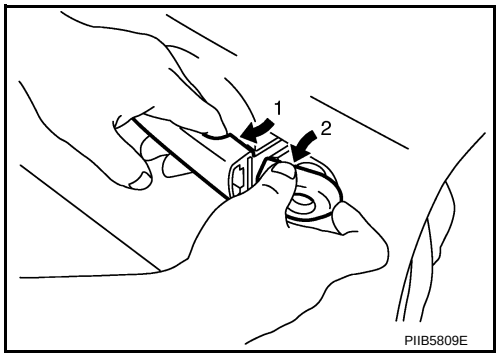
8. Disconnect the inside handle cable and lock knob cable from the inside handle.
CAUTION:
During removal and installation, work so as not to bend the ends of the lock knob cable and inside handle cable.


PIIB6525E

9. Remove the door side grommet, and the door key cylinder assembly (escutcheon) bolt.
10. Remove the key cylinder connecting rod (key cylinder side).
11. If equipped, disconnect the door antenna, the door request switch connector and remove the harness clamp. (Vehicle with intelligent key systems only).

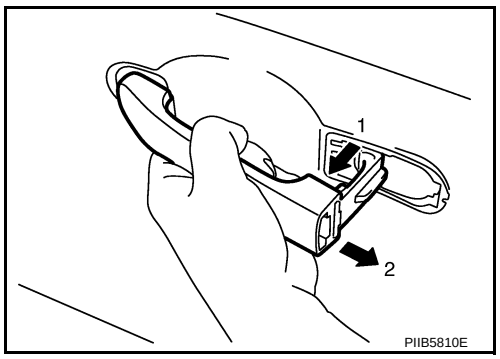

PIIB5808E

12. Remove the door cylinder assembly while pulling the outside handle forward.



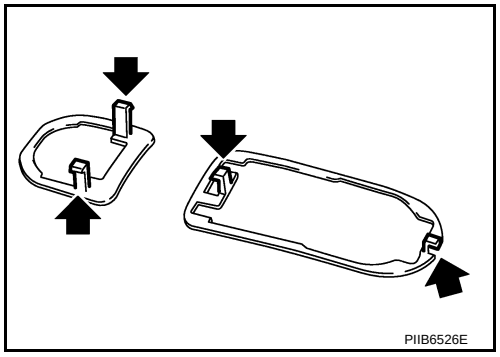
PIIB5809E

13. Pull the outside door handle forward and then slide it toward the rear of the vehicle to remove.



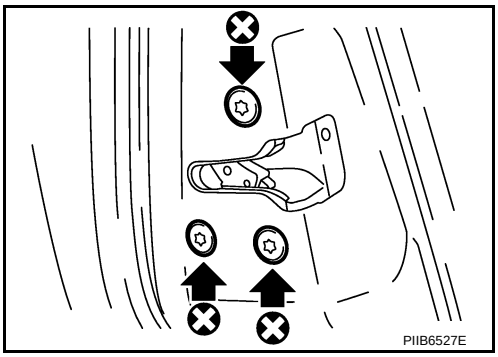
PIIB5810E

14. Remove the front and rear gaskets.

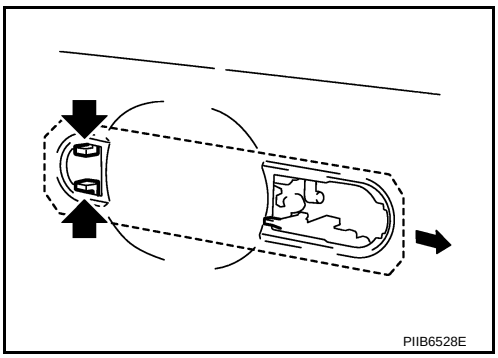

PIIB6526E

15. Remove the door lock assembly bolts.

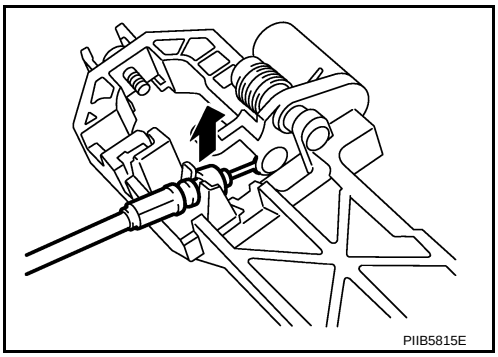
5.8 N·m (0.6 kg-m, 51.4 in-lb)



16. Slide the outside handle bracket toward the rear of the vehicle, and remove the assembly.



17. If equipped, disconnect the door lock assembly electrical connector.
18. Separate the outside handle cable from the outside handle bracket.

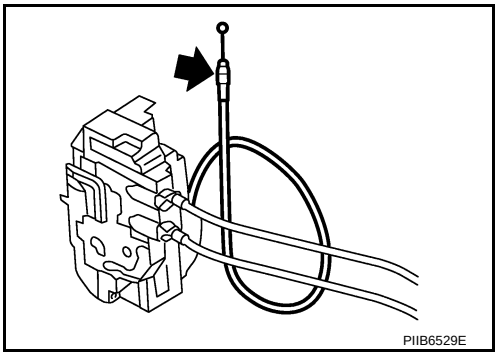


INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

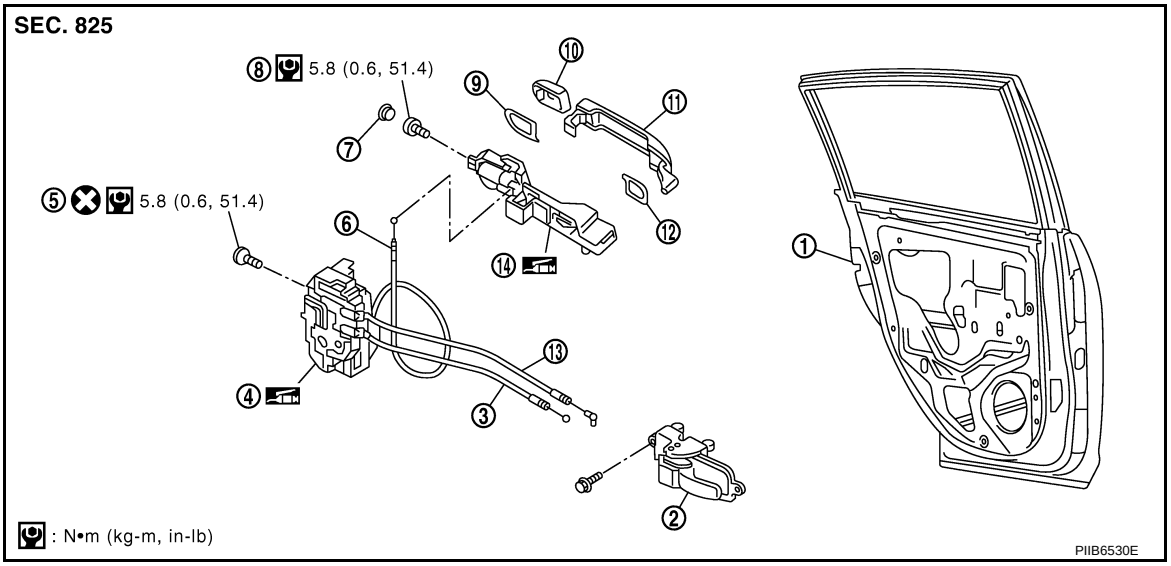
- **To install each rod, be sure to rotate the rod holder until a click is felt.**
- **When installing door lock assembly, be careful when rotating the outside handle cable as shown in the figure.**
  - **Place the outside handle bracket cable on the inside of door lock assembly before installing.**



REAR DOOR LOCK

Component Parts Location

INFOID:0000000001732046



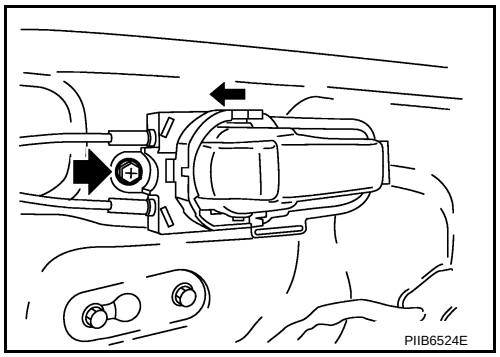
1. Rear door
2. Inside handle
3. Inside handle cable
4. Door lock assembly
5. TORX bolt (T30)
6. Outside handle cable
7. Grommet
8. TORX bolt (T30)
9. Rear gasket
10. Outside handle escutcheon
11. Outside handle
12. Front gasket
13. Lock knob cable
14. Outside handle bracket

Removal and Installation

INFOID:0000000001732047

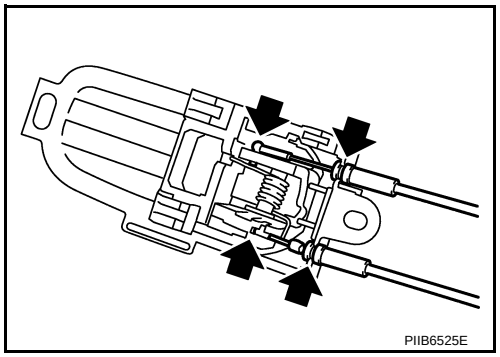
REMOVAL

1. Remove the partition glass. Refer to XX-XX, "*****".
2. Support door glass while lifting it up to the door window completely closed position.
3. Remove inside handle bolt, slide handle toward rear of vehicle, disconnect it from the door panel, and remove the inside handle.

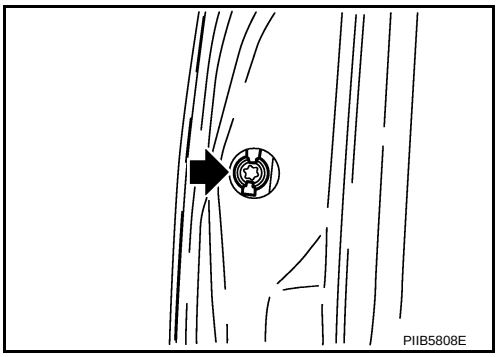


4. Disconnect the inside handle and lock knob cables from the inside handle.

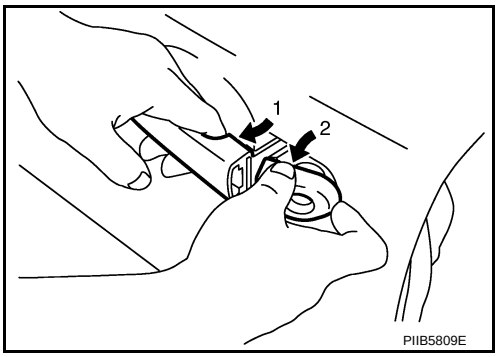
CAUTION:
During removal and installation, do not to bend the ends of the lock knob cable and inside handle cable.



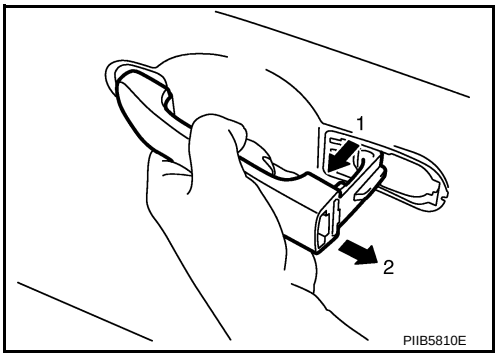
5. Remove the door side grommet, and the outside handle escutcheon screw.



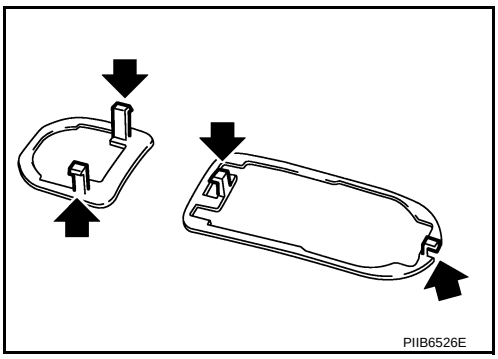
6. Pull the outside handle forward (1), while removing outside handle escutcheon (2).



7. Pull outside door handle forward (1), and slide it toward the rear of the vehicle to remove (2).

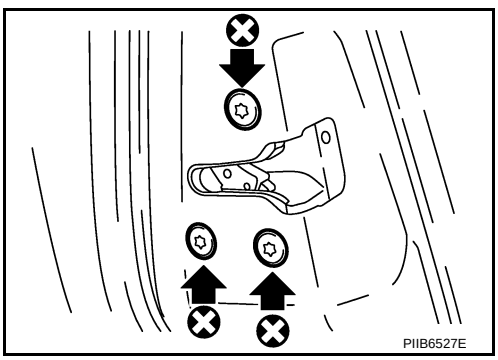


8. Remove the front and rear gaskets.

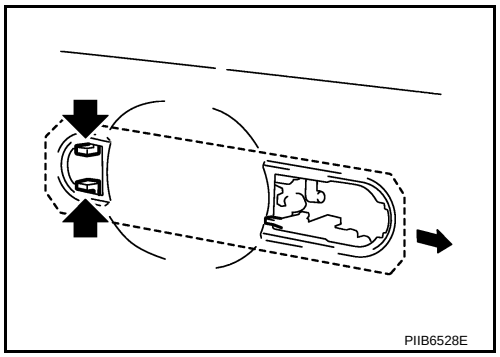


9. Remove the door lock assembly screws.

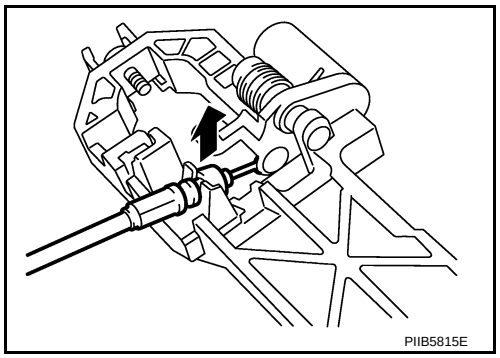
: **5.8 N·m (0.6 kg-m, 51.4 in-lb)**



10. Slide the outside handle bracket toward the rear of vehicle, remove the outside handle bracket and the door lock assembly.


PIIB6528E

11. If equipped, disconnect the door lock assembly electrical connector.
12. Disconnect the outside handle cable from the outside handle bracket.

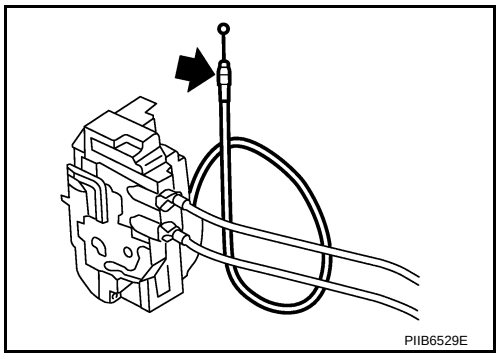

PIIB5815E

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **To install each rod, be sure to rotate the rod holder until a click is felt.**
- **When installing door lock assembly, be careful when rotating the outside handle cable as shown.**
- **Place the outside handle bracket cable on the inside of door lock assembly before installing.**


PIIB6529E

BACK DOOR LOCK

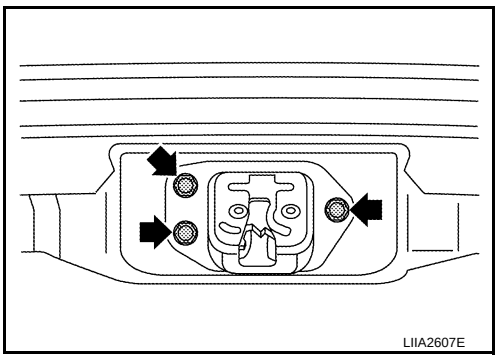
Removal and Installation

INFOID:0000000001732048

BACK DOOR LOCK

Removal

1. Remove the back door finisher lower. Refer to XX-XX, "*****".
2. Remove the bolts, disconnect the electrical connector and separate the lock from the door.

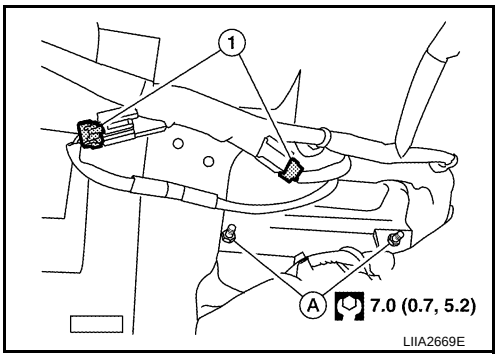


Installation
Installation is in the reverse order of removal.

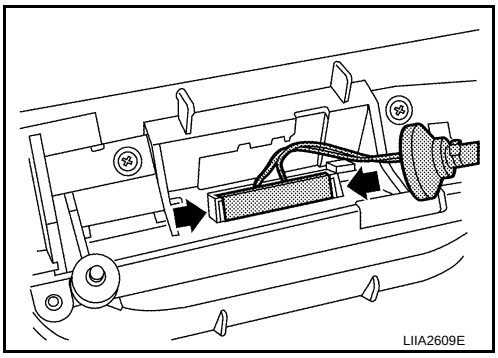
BACK DOOR HANDLE

Removal

1. Remove the back door finisher lower. Refer to XX-XX, "*****".
2. Disconnect the harness connectors (1), remove the nuts and the back door handle (A).



3. Release the clips and remove the switch from the housing.

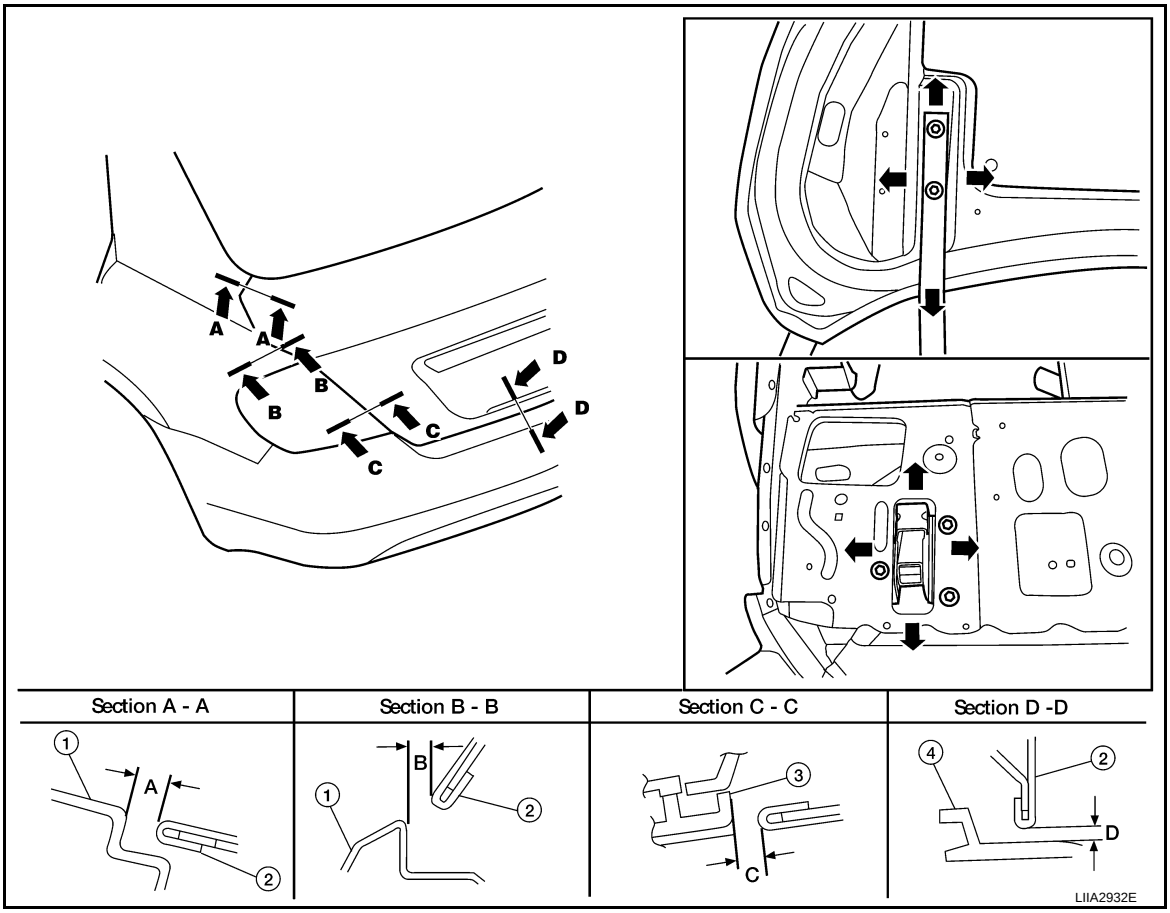


Installation
Installation is in the reverse order of removal.

TRUNK LID

Fitting Adjustment

INFOID:0000000001732049



1. Rear fender
2. Trunk lid
3. Rear combination lamp
4. Rear bumper fascia
a. 4.0 ± 1.0 mm (0.16 ± 0.04 in)
b. 3.5 ± 1.0 mm (0.14 ± 0.04 in)
c. 4.5 ± 1.7 mm (0.03 ± 0.06 in)
d. 7.0 ± 2.2 mm (0.28 ± 0.09 in)

Longitudinal and lateral clearance adjustment

1. With the striker released, loosen the trunk lid hinge nuts and close the trunk lid.
2. Make the lateral clearance and the clearance to the rear window glass equal. Then open the trunk lid to tighten the nuts.

Surface height adjustment

1. Loosen the striker bolts. Raise the striker to the top position, and temporarily tighten the upper bolt.
2. Close the trunk lid lightly and adjust the surface height. Then open the trunk lid and tighten the striker bolts.

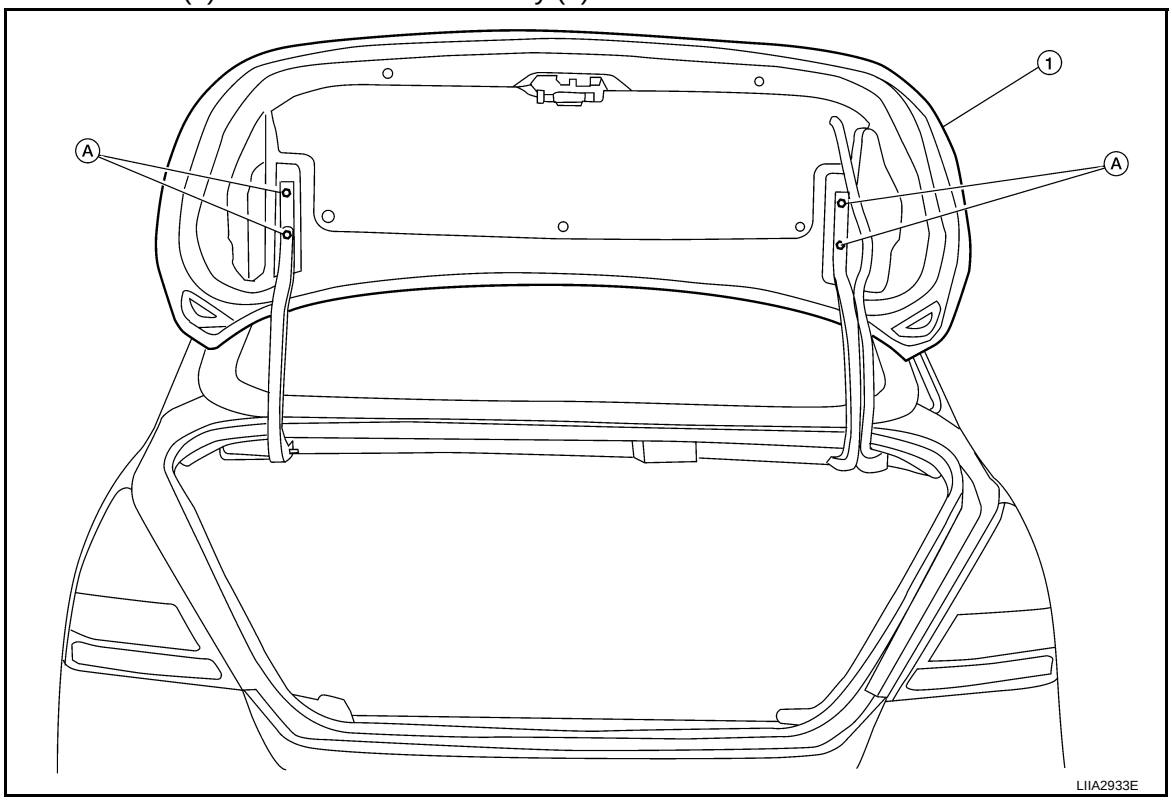
Trunk Lid Assembly

INFOID:0000000001732050

REMOVAL

1. Remove the trunk lid finisher. Refer to XX-XX, "*****" .
2. Remove the trunk lid wire harness.

3. Remove the nuts (a) and the trunk lid assembly (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

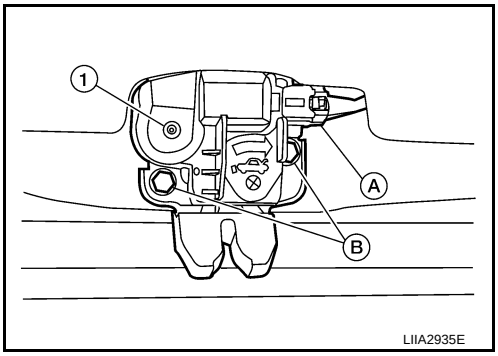
After installing, apply touch-up paint (body color) to the head of the hinge nuts.

Trunk Lid Lock

INFOID:0000000001732051

REMOVAL

1. Remove the trunk lid finisher. Refer to XX-XX, "*****".
2. If equipped, disconnect the trunk lid lock cylinder rod.
3. Remove the release cable.
4. Disconnect the electrical connector (a), remove the bolts (b) and the trunk lid lock (1).



INSTALLATION

Installation is in the reverse order of removal.

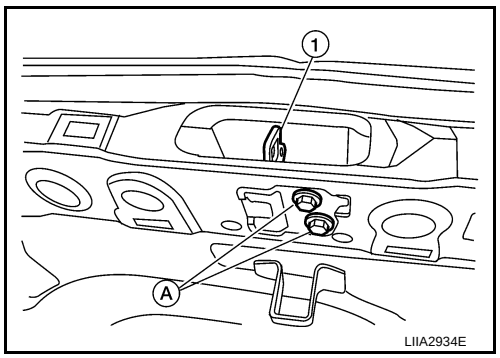
Trunk Lid Striker

INFOID:0000000001732052

REMOVAL

1. Remove the trunk rear plate and trunk rear finisher. Refer to XX-XX, "*****".
2. Remove the bolts, disconnect the electrical connector and remove the trunk lock actuator.
3. Remove the bolt and disconnect the trunk lid release cable.

4. Remove the bolts (a) and the trunk lid striker (1).



INSTALLATION

Installation is in the reverse order of removal.

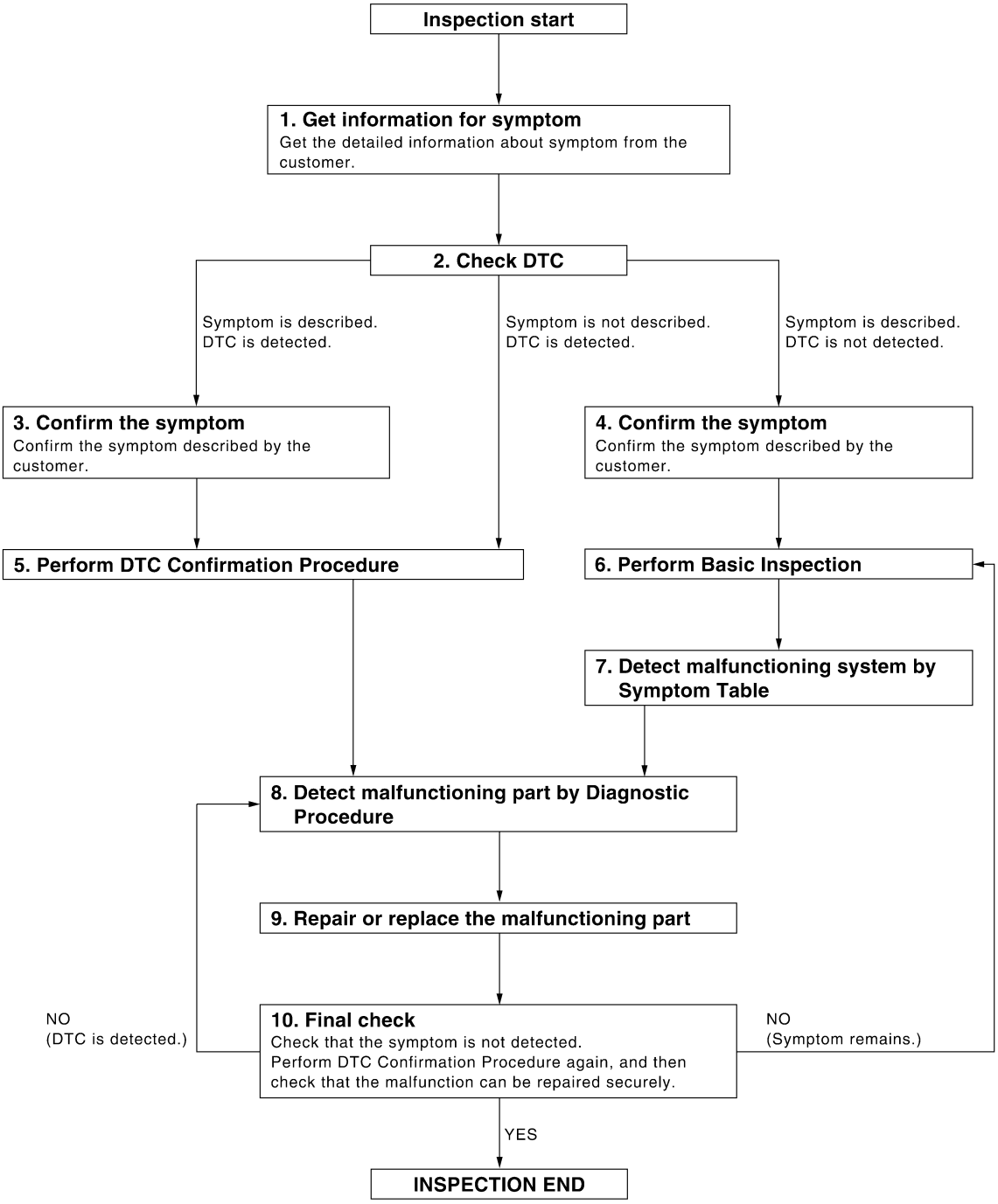
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000001397190

OVERALL SEQUENCE



ALKIA0246GB

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 for BCM.
2. Perform the following procedure if DTC is displayed.

- 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.
If two or more DTCs are detected, refer to DLK-716, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

Is DTC detected?

YES >> GO TO 8.
NO >> Refer to XX-XX, "*****".

6.PERFORM BASIC INSPECTION

Perform Basic Inspection, refer to DLK-733, "Basic Inspection".

Inspection End>>GO TO 7.

7.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

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

>> GO TO 9.

9.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 10.

10.FINAL CHECK

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

Does the symptom reappear?

YES (DTC is detected)>>GO TO 8.
YES (Symptom remains)>>GO TO 6.
NO >> **INSPECTION END**

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000001397191

Perform the system initialization when replacing or registering Keyfob and ignition key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:0000000001397192

Refer to the CONSULT-III Operation Manual-NATS.

FUNCTION DIAGNOSIS

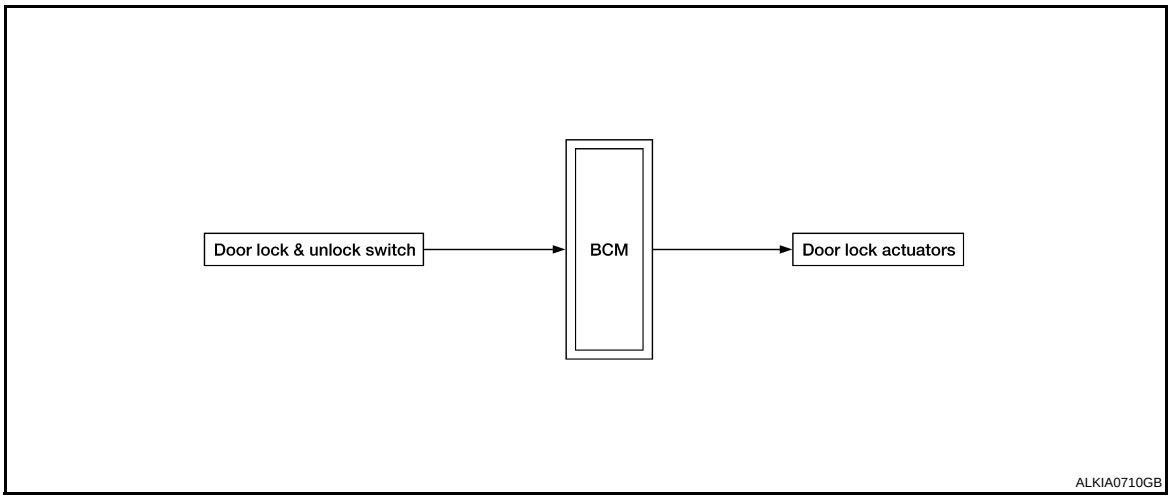
DOOR LOCK FUNCTION

DOOR LOCK AND UNLOCK SWITCH

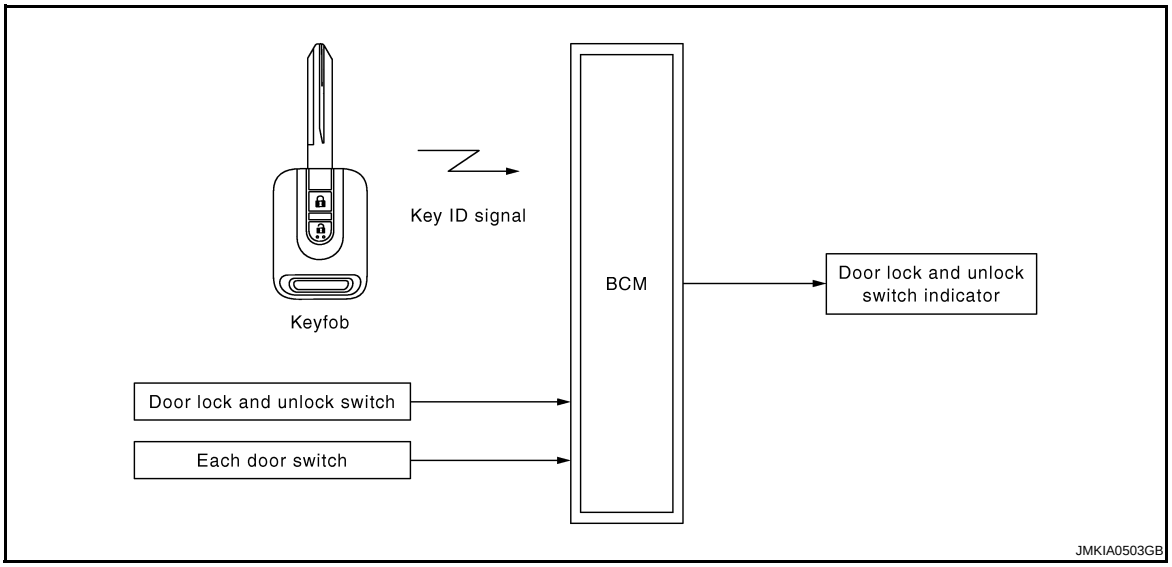
DOOR LOCK AND UNLOCK SWITCH : System Diagram

INFOID:0000000001397193

DOOR LOCK AND UNLOCK SWITCH OPERATION



DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION



DOOR LOCK AND UNLOCK SWITCH : System Description

INFOID:0000000001397194

DOOR LOCK AND UNLOCK SWITCH OPERATION

Functions are available by operating the door lock and unlock switch on center console. Interlocked with the lock/unlock operation of door lock and unlock switch, door lock actuators of all doors are locked/unlocked.

OPERATION CONDITION

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

Door lock and unlock switch	Operation condition
Lock operation	All the following conditions are satisfied. • Except driver side, doors are closed. • Doors are not locked with keyfob.
Unlock operation	All the following all conditions are satisfied. • Doors are not locked with keyfob.

NOTE:
When the door is locked with keyfob, door lock and unlock switch operation will be invalid until either of the following conditions is satisfied.
- Turn ignition switch ON.
- Unlock operation by keyfob.

DOOR LOCK AND UNLOCK SWITCH INDICATOR OPERATION

Door lock and unlock switch indicator indicates door lock status. The indicator turn ON while ignition switch is ON and door is locked. If any door is opened, the indicator will turn OFF.
Door lock and unlock switch indicator have the following 2 functions.

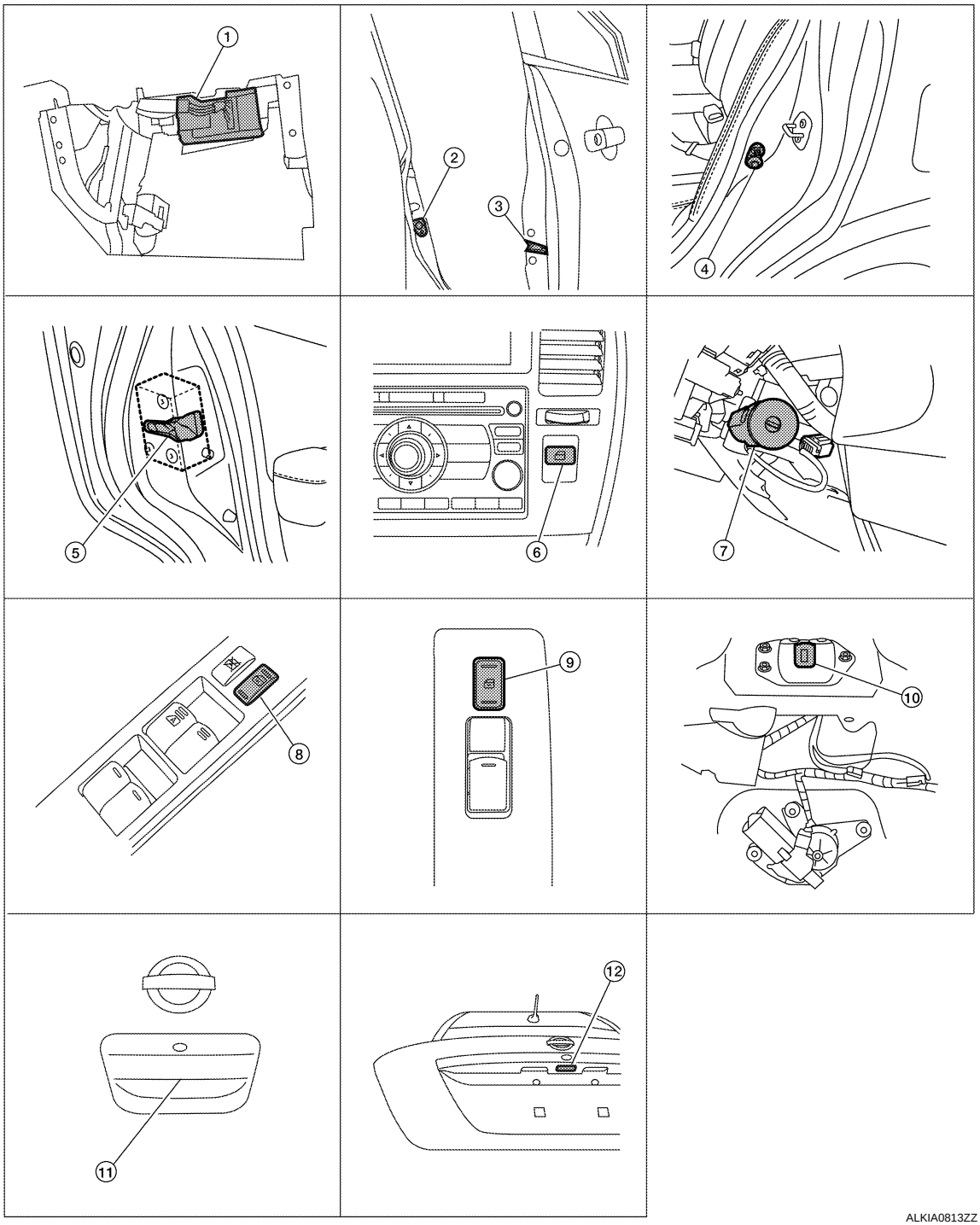
1 Minute Timer
A timer must be running to turn OFF the indicator. The timer will run for 1 minute after locking with keyfob or auto door lock.

30 Minutes Timer
A timer must be running to turn OFF the indicator. The timer will run for 30 minutes after locking with door lock and unlock switch.

NOTE:
1 minute timer condition is satisfied while 30 minutes timer is active, however 30 minutes timer does not change when 1 minutes timer is active.

DOOR LOCK AND UNLOCK SWITCH : Component Parts Location

INFOID:0000000001397195



ALKIA0813ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Front door switch (driver side) B34 (Passenger side) B27
3. Front door lock actuator (driver side) D14 (Passenger side) D114
4. Rear door switch LH B71 RH B53
5. Rear door lock actuator LH D205 RH D305
6. Instrument panel warning lamp assembly M37
7. Key switch and key lock solenoid M27
8. Main power window and door lock/unlock switch D7, D8
9. Power window and door lock/unlock switch (passenger side) D105
10. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
11. Back door opener switch (hatchback) D408
12. Trunk lid opener switch (sedan) B61

DOOR LOCK AND UNLOCK SWITCH : Component Description

INFOID:0000000001397196

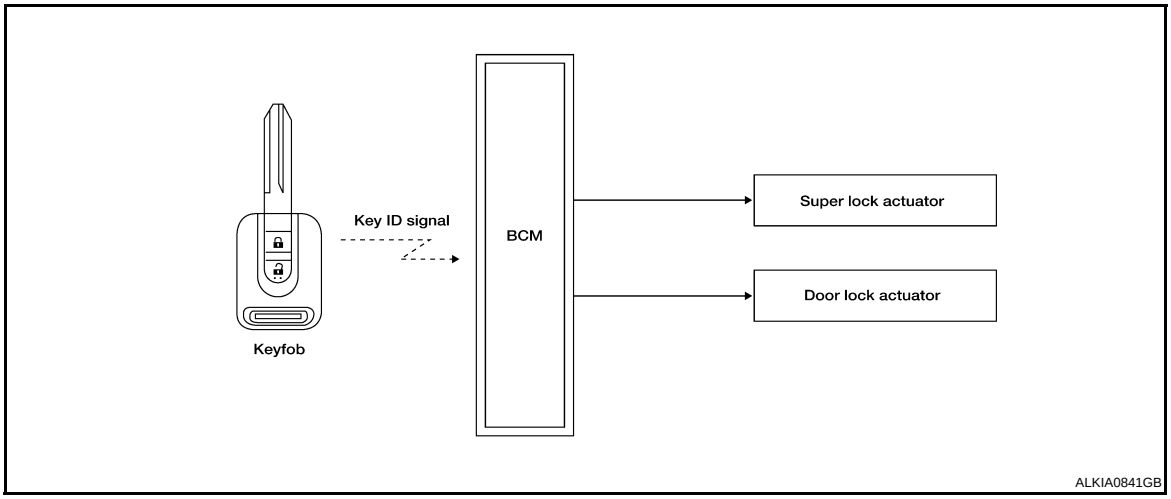
Item	Function
BCM	Controls the door lock and unlock function.
Door switch	Detects door state (open or closed).
Door lock and unlock switch	Transmits door lock and unlock signal to BCM. Door lock and unlock switch indicator is built in door lock and unlock switch.
Door lock actuator	Receives door lock and unlock signal from BCM and locks and unlocks each door.

REMOTE KEYLESS ENTRY

REMOTE KEYLESS ENTRY : System Diagram

INFOID:0000000001397197

KEYFOB OPERATION



REMOTE KEYLESS ENTRY : System Description

INFOID:0000000001397198

KEYFOB OPERATION

The the multi remote control system can be locked and unlocked pressing door lock and unlock button of keyfob.

OPERATION CONDITION

Remote controller operation	Operation condition
Lock/unlock	Key switch is OFF (key is removed from ignition key cylinder).

OPERATION AREA

To ensure that the keyfob works effectively, use within 10 m (33 ft) range of each door, however the operable range may differ according to surroundings.

DOOR LOCK AND UNLOCK CONTROL

When door lock and unlock button of keyfob is pressed, door lock and unlock signal transmits from keyfob to BCM. When BCM receives the door lock and unlock signal, it operates door lock actuator.

SUPER LOCK OPERATION

Super lock provides a higher anti-theft performance than a conventional power door lock system. The super lock system is controlled by BCM.
When super lock is set, all doors cannot be opened from inside.

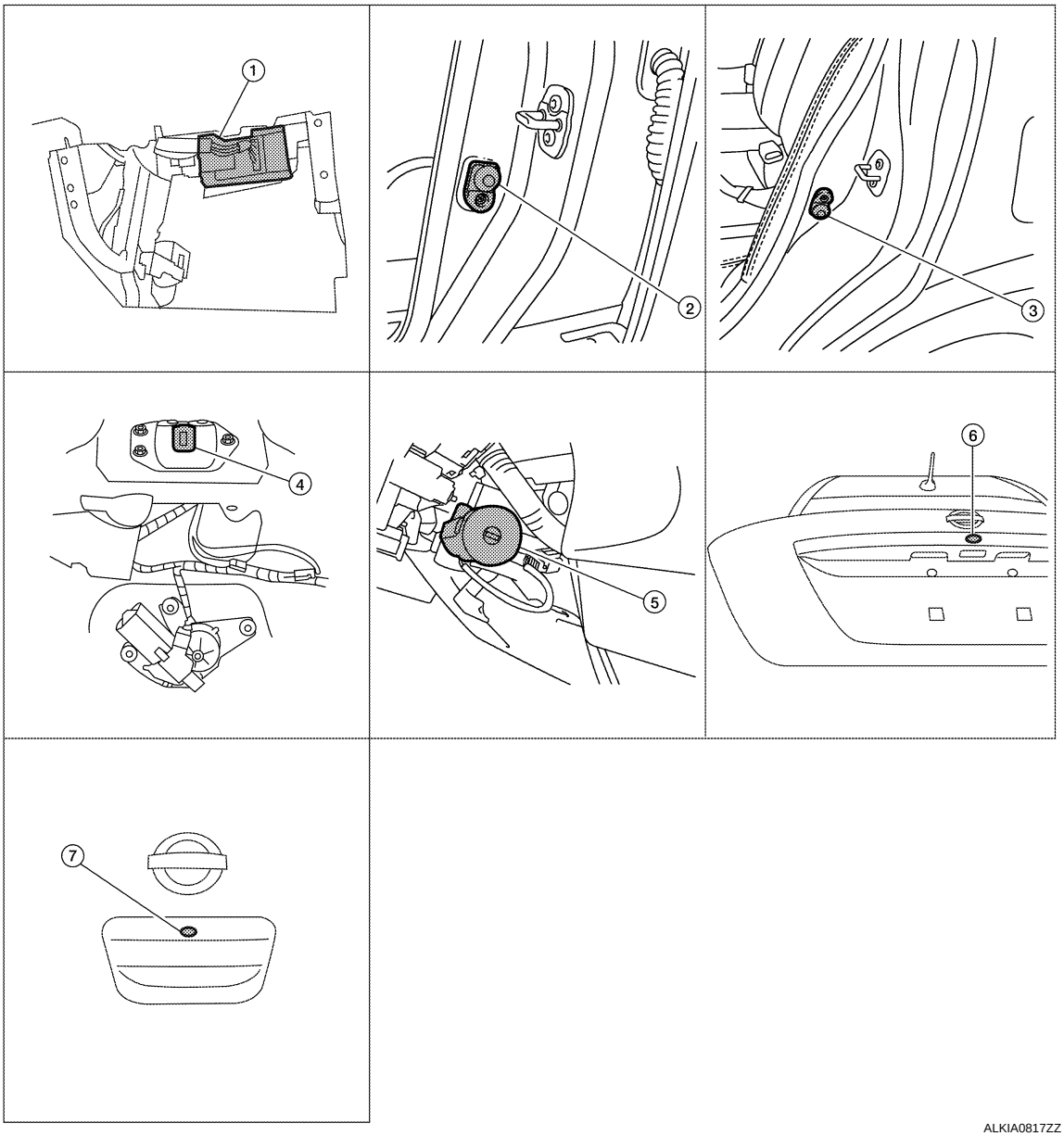
ANTI-HIJACK MODE

When door lock is unlocked, pressing LOCK button on keyfob will lock all doors. When door lock is locked, pressing UNLOCK button on keyfob will unlock all doors and back door (hatchback) can be opened with back door opener switch or the trunk can be opened with trunk lid opener switch.
NOTE:

Anti-hijack mode can be set to ON or OFF with CONSULT-III. For the setting information, refer to DLK-490, "MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)".

REMOTE KEYLESS ENTRY : Component Parts Location

INFOID:0000000001397199



ALKIA0817ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Front door switch (driver side) B34 (Passenger side) B27
3. Rear door switch LH B71 RH B53
4. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
5. Key switch and key lock solenoid M27
6. Trunk lid opener switch (sedan) B61
7. Back door opener switch (hatchback) D408

REMOTE KEYLESS ENTRY : Component Description

INFOID:0000000001397200

Item	Function
BCM	Controls the door lock function.
Key switch	Detect that ignition key is inserted into ignition key cylinder.
Door lock actuator	Receives lock and unlock signal from BCM and locks and unlocks each door.

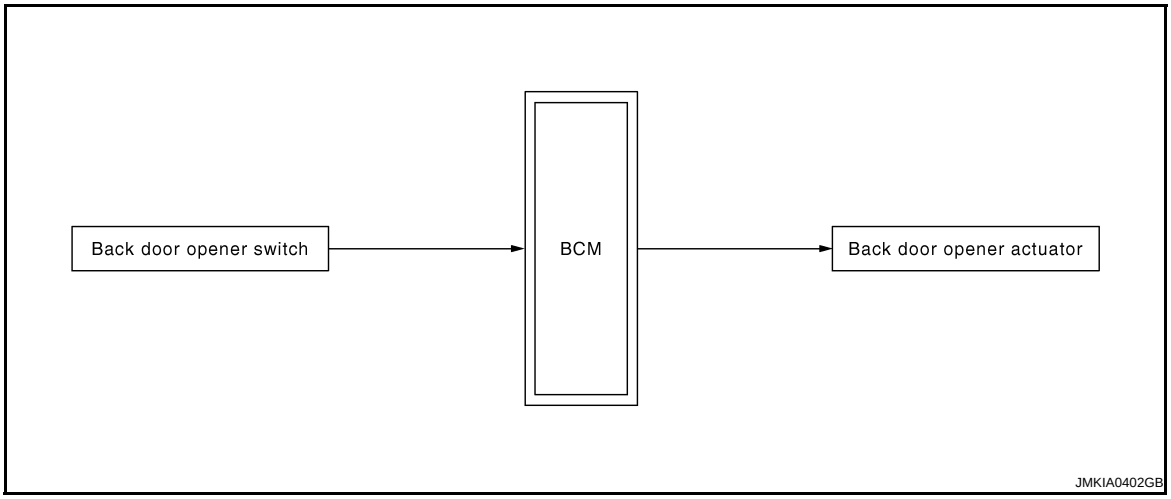
BACK DOOR OPENER FUNCTION

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : System Diagram

INFOID:0000000001397213

BACK DOOR OPENER OPERATION



BACK DOOR OPENER SWITCH : System Description

INFOID:0000000001397214

BACK DOOR OPENER OPERATION

When back door opener switch is pressed, BCM opens back door opener actuator.

NOTE:

Back door opener actuator is not for locking the back door. The function is only to open the back door.

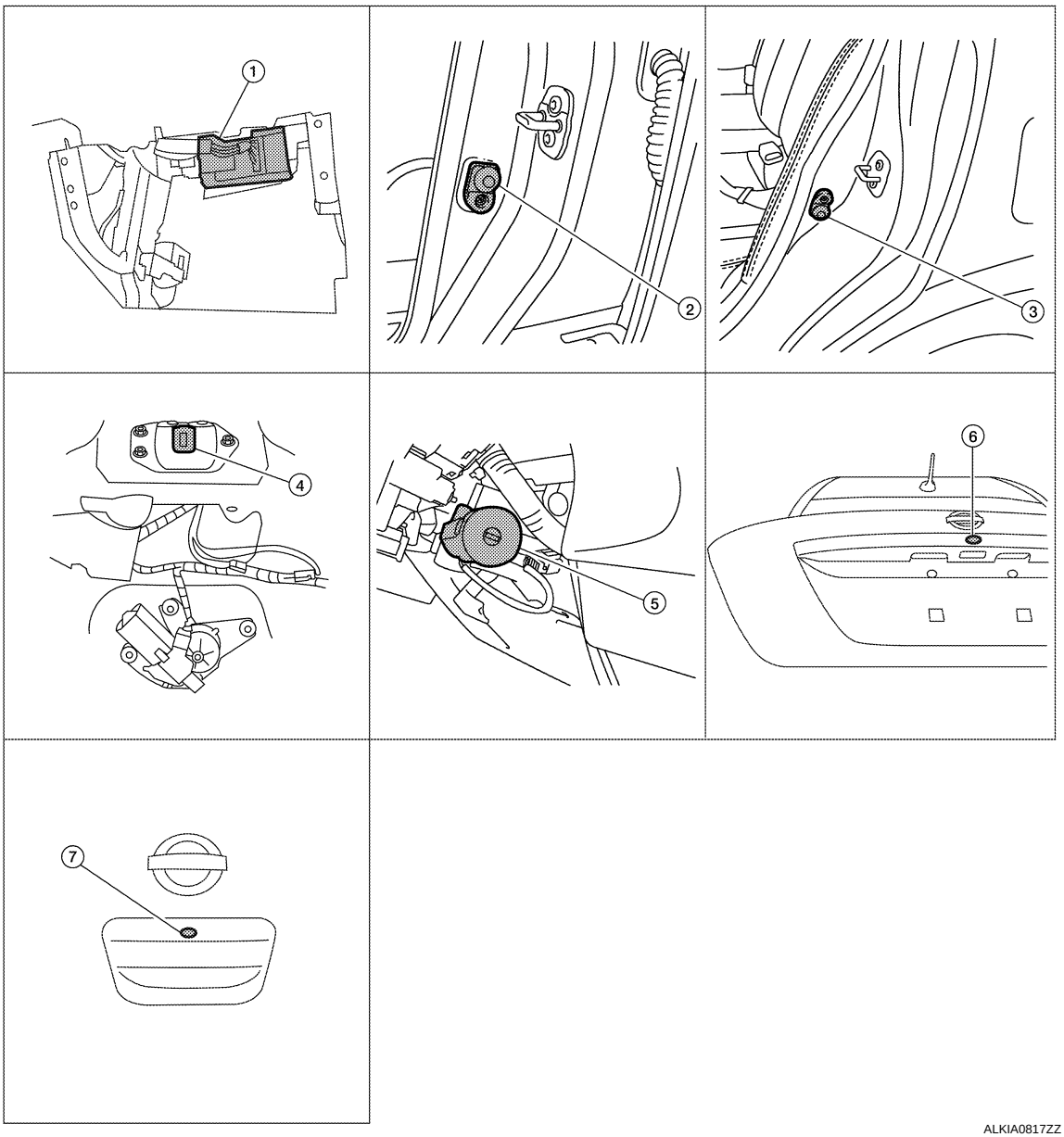
OPERATION CONDITION

If the following conditions are not satisfied, back door opener operation is not performed.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

BACK DOOR OPENER SWITCH : Component Parts Location

INFOID:0000000001397215



ALKIA0817ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Front door switch (driver side) B34 (Passenger side) B27
3. Rear door switch LH B71 RH B53
4. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
5. Key switch and key lock solenoid M27
6. Trunk lid opener switch (sedan) B61
7. Back door opener switch (hatchback) D408

BACK DOOR OPENER SWITCH : Component Description

INFOID:0000000001397216

Item	Function
BCM	Controls the back door opener function.
Back door opener switch	Transmits back door opener switch operation signal to BCM.
Back door opener actuator	Opens the back door with the back door open signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

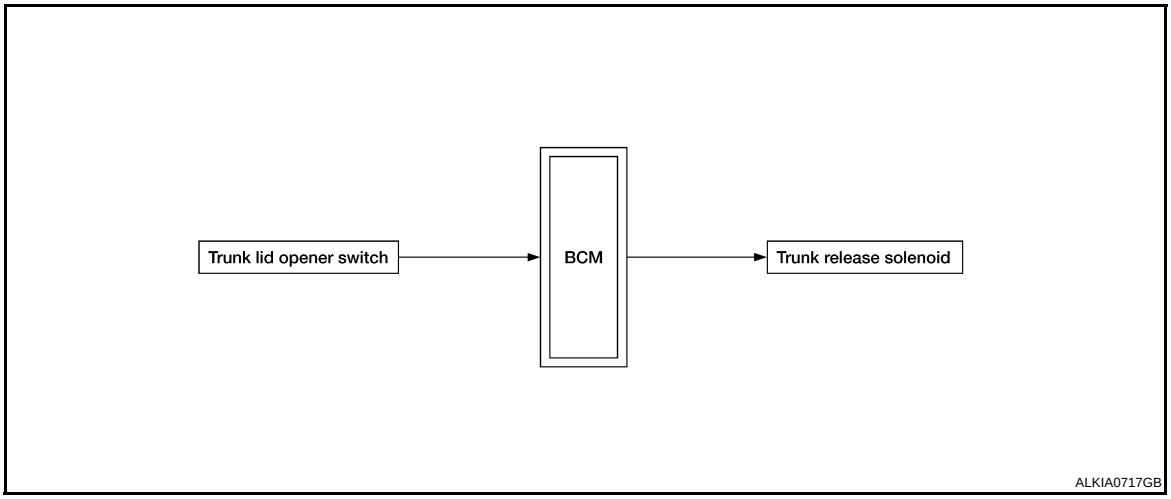
TRUNK LID OPENER

TRUNK LID OPENER SWITCH

TRUNK LID OPENER SWITCH : System Diagram

INFOID:0000000001534729

TRUNK LID OPENER OPERATION



TRUNK LID OPENER SWITCH : System Description

INFOID:0000000001534730

TRUNK LID OPENER OPERATION

When trunk lid opener switch is pressed, BCM opens trunk release solenoid.

NOTE:

Trunk release solenoid is not for locking the back door. The function is only to open the trunk.

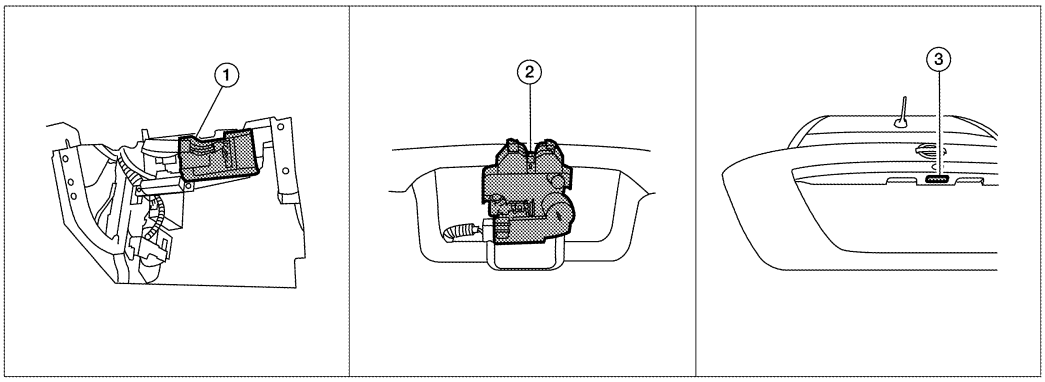
OPERATION CONDITION

If the following conditions are not satisfied, trunk release operation is not performed.

Trunk lid opener switch operation	Operation condition
Trunk release solenoid	• Vehicle speed is less than 5 km/h (3 MPH). • All doors are unlocked.

TRUNK LID OPENER SWITCH : Component Parts Location

INFOID:0000000001534731



1. BCM
   M18, M20
2. Trunk lamp switch and trunk release solenoid
   B66
3. Trunk lid opener switch B61

TRUNK LID OPENER SWITCH : Component Description

INFOID:0000000001534732

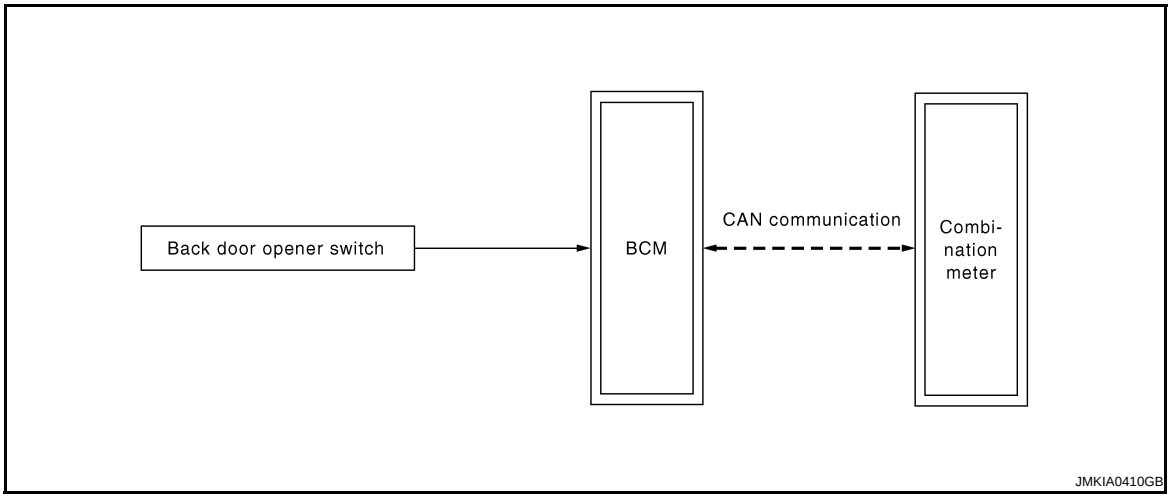
Item	Function
BCM	Controls the trunk lid opener switch function.
Trunk lid opener switch	Transmits trunk lid opener switch operation signal to BCM.
Trunk release solenoid	Opens the trunk with the trunk release solenoid signal from BCM.
Combination meter	Transmits vehicle speed signal to BCM via CAN communication.

WARNING FUNCTION

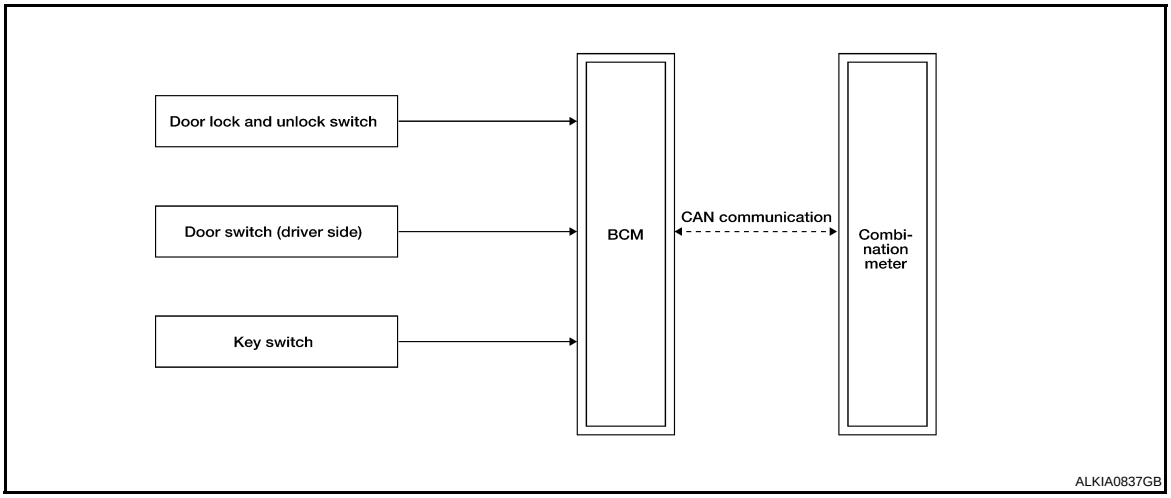
System Diagram

INFOID:0000000001397217

BACK DOOR OPEN WARNING



KEY REMINDER OPERATION



System Description

INFOID:0000000001397218

BACK DOOR OPEN WARNING OPERATION

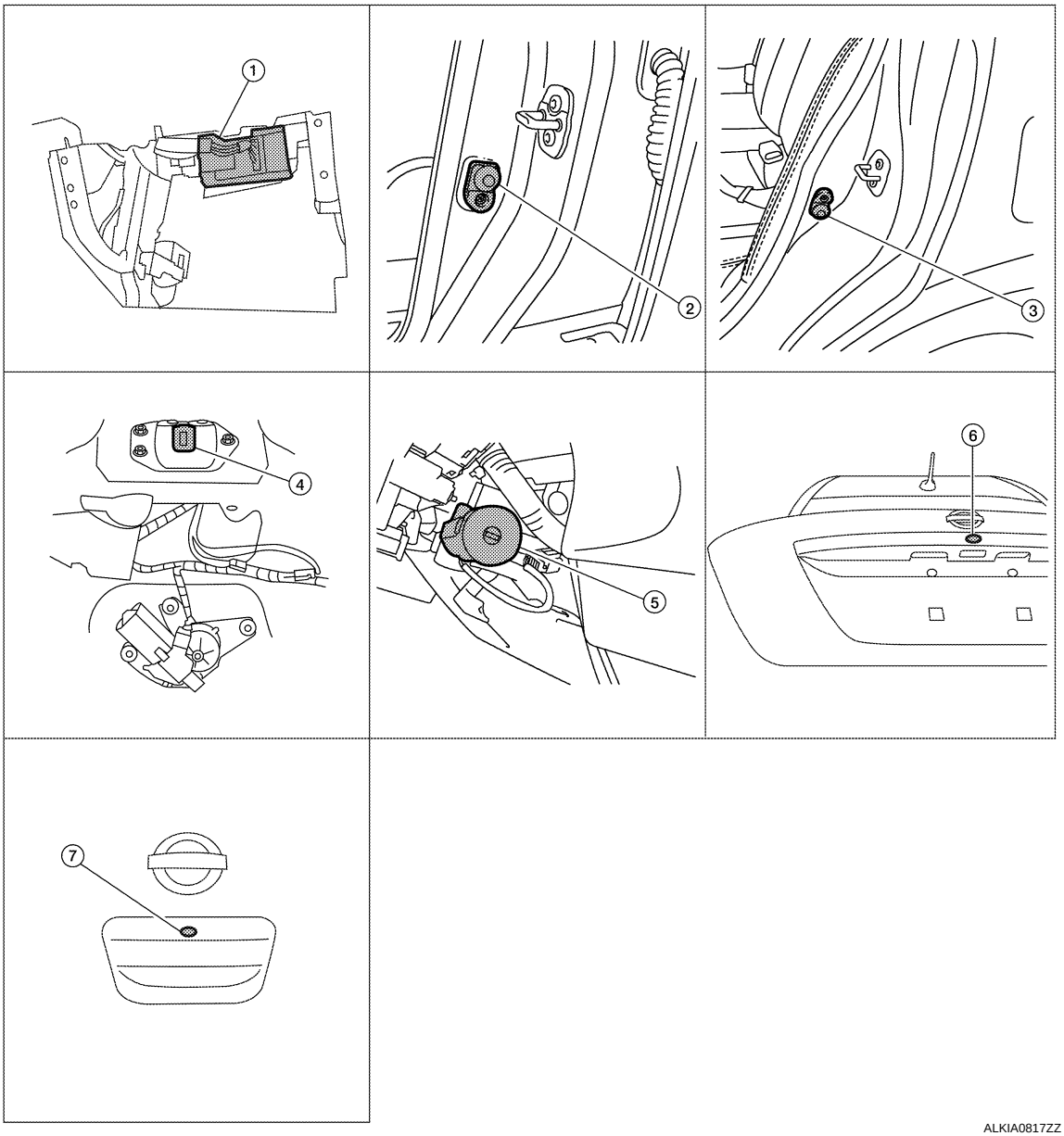
Back door opener switch is operated, when door is locked with door lock and unlock switch, by speed sensing lock or when only the driver side is unlocked by the anti-hijack function, the buzzer (built in combination meter) will sound.

KEY REMINDER OPERATION

- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while the driver door is open and mechanical key is inserted ignition key cylinder.
- The buzzer (combination meter) will sound and the doors will not lock if the door lock and unlock switch is pressed while any door other than the driver door is open.

Component Parts Location

INFOID:0000000001397219



ALKIA0817ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Front door switch (driver side) B34 (Passenger side) B27
3. Rear door switch LH B71 RH B53
4. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
5. Key switch and key lock solenoid M27
6. Trunk lid opener switch (sedan) B61
7. Back door opener switch (hatchback) D408

Component Description

INFOID:0000000001397220

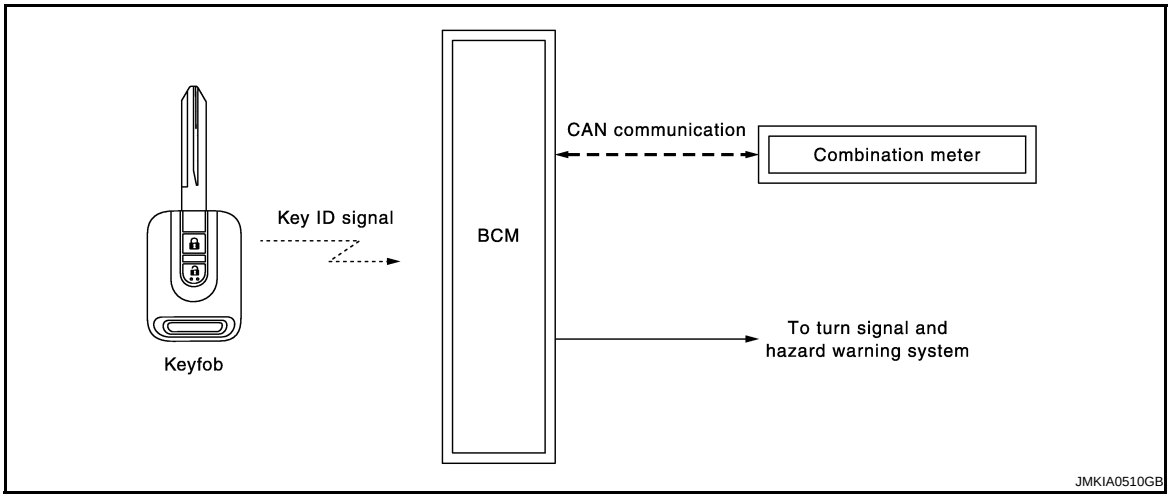
Item	Function
BCM	Controls the warning function.
Combination meter	Sounds the buzzer by the request signal from BCM via CAN communication.
Back door opener switch	Transmit back door open signal to BCM

HAZARD REMINDER FUNCTION

System Diagram

INFOID:0000000001397221

HAZARD REMINDER FUNCTION



System Description

INFOID:0000000001397222

HAZARD REMINDER OPERATION

When door is locked or unlocked by keyfob, then BCM flashes hazard warning lamp as a reminder.

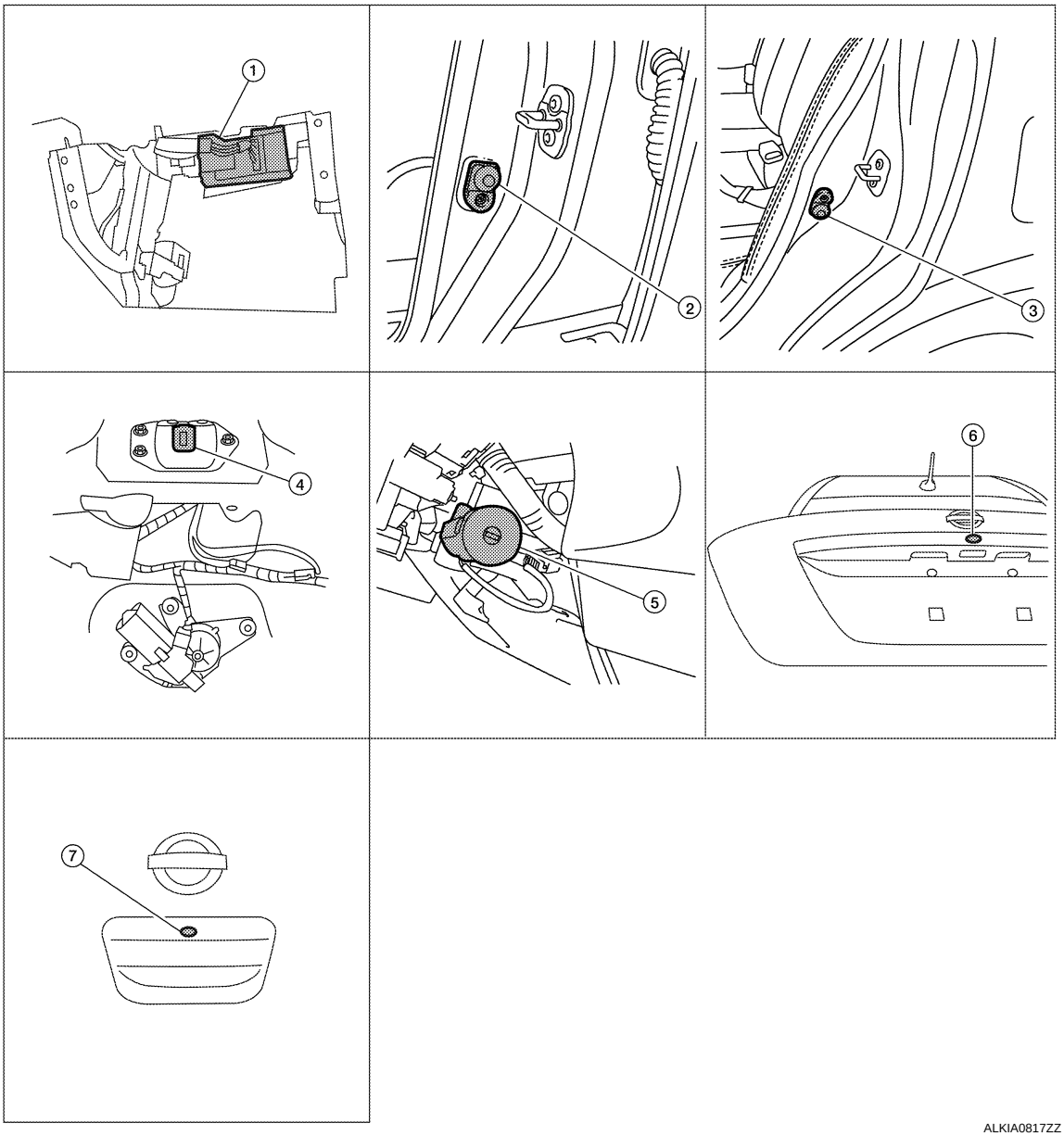
NOTE:

Hazard reminder mode can be changed with CONSULT-III. Refer to DLK-627, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Hazard reminder setting (With CONSULT-III)		Door lock operation (with keyfob)	Hazard warning lamp flash
HAZARD LAMP SET	MODE 1	—	—
	MODE 2	Lock	Once
		Unlock	—
	MODE 3	Lock	—
		Unlock	Twice
	MODE 4	Lock	Once
		Unlock	Twice

Component Parts Location

INFOID:0000000001397223



ALKIA0817ZZ

1. BCM M18, M19, M20 (view with glove box removed)
2. Front door switch (driver side) B34 (Passenger side) B27
3. Rear door switch LH B71 RH B53
4. Back door lock assembly (back door switch) D405 (hatchback view with back door open)
5. Key switch and key lock solenoid M27
6. Trunk lid opener switch (sedan) B61
7. Back door opener switch (hatchback) D408

Component Description

INFOID:0000000001397224

Item	Function
BCM	Controls the hazard reminder system.
Combination meter	Turns ON the turn signal indicator (built in combination meter) by the request from BCM via CAN communication.
Keyfob	Transmits key ID to BCM when lock and unlock button is pressed.

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000001397225

APPLICATION ITEM

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

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to XX-XX, "*****".
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	• Enables to read and save the vehicle specification. • Enables to write the vehicle specification when replacing BCM.

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
—	BCM	×		
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
PTC heater system	PTC HEATER		×	×

DOOR LOCK

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

INFOID:0000000001397226

BCM CONSULT-III FUNCTION

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
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.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
KEYLESS LOCK	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK	Indicates [ON/OFF] condition of unlock signal from key fob.
UNLOCK WITH DR	This item is indicated, but not monitored.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
SUPER LOCK	This test is able to check super lock operation [LOCK (SET)/UNLOCK (RELEASE)].
DOOR LOCK IND	This test is able to check door lock indicator (built in door lock and unlock switch on center console) operation [ON/OFF].
DOOR LOCK	This test is able to check door lock operation [ALL LOCK/ALL UNLOCK/DR UNLOCK/ OTHER UNLOCK].

:

WORK SUPPORT

Test item	Description
SECURITY DOOR LOCK SET	Anti hijack function mode can be changed in this mode. • ON: Anti hijack mode is active. • OFF: Anti hijack mode is inactive.

MULTIREMOTE ENT

MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTIREMOTE ENT)

INFOID:0000000001397227

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.

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
KEYKESS LOCK	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK	Indicates [ON/OFF] condition of unlock signal from key fob.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
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 AND UNLOCK	This item is indicated, but not monitored.

ACTIVE TEST

Test item	Description
DOOR LOCK	This test is able to check warning chime in combination meter operation. [ALL LOCK/ALL UNLOCK/DR UNLOCK/OTHER UNLOCK]
INT LAMP	This test is able to check interior lamp operation [ON/OFF].
FLASHER	This test is able to check flasher operation [LH/RH/OFF].

WORK SUPPORT

Test item	Description
HAZARD LAMP SET	Answer back function (hazard) mode can be changed in this mode. For the detail of the setting, refer to DLK-625, "System Description".
AUTO LOCK SET	Auto relock time can be changed in this mode. • MODE 1: 1 minute • MODE 2: 2 minutes • MODE 3: 3 minutes • MODE 4: 4 minutes • MODE 5: 5 minutes

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:0000000001397228

APPLICATION ITEM

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

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

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of back door opener switch.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
TRUNK/GLASS HATCH	This test is able to check back door opener operation [ON/OFF].

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000001397229

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 XX-XX, "*****".

DTC Logic

INFOID:0000000001397230

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When Intelligent Key unit 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 (BCM) • Receiving (ECM) • Receiving (METER/M&A)

Diagnosis Procedure

INFOID:0000000001397231

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 XX-XX, "*****".
NO >> Refer to XX-XX, "*****".

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000001397232

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 XX-XX, "*****".

DTC Logic

INFOID:0000000001397233

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of BCM.	BCM

Diagnosis Procedure

INFOID:0000000001397234

1.REPLACE BCM

When DTC [U1010] is detected, replace BCM.

>> Replace BCM. Refer to BCS-57, "Removal and Installation of BCM".

Special Repair Requirement

INFOID:0000000001397235

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual.

>> Work end.

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000001530747

Refer to BCS-30, "Diagnosis Procedure".

DOOR LOCK AND UNLOCK SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001530748

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001530749

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “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?

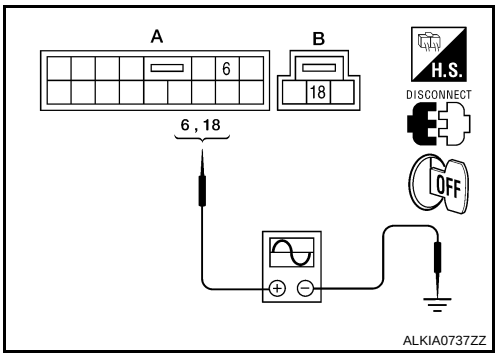
YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-634, "DRIVER SIDE : Diagnosis Procedure".

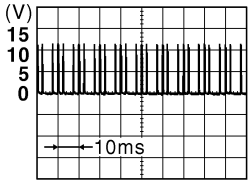
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530750

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect door lock and unlock switch connector.
3. Using an oscilloscope, check voltage between door lock and unlock switch harness connector (A) D7 terminal 6, connector (B) D8 terminal 18 and ground.



Terminal			Signal (Reference value)
(+)		(–)	
Door lock and unlock switch connector	Terminal		
D7	6	Ground	
D8	18		

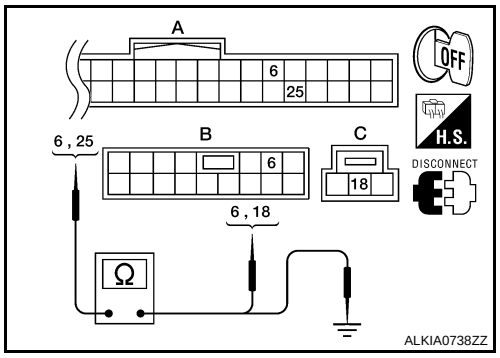
Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector (A) M18 terminals 6, 25 and door lock and unlock switch connector (B) D7 terminal 6, connector (C) D8 terminal 18.



BCM connector	Terminal	Door lock and unlock switch connector	Terminal	Continuity
M18	6	D8	18	Yes
	25	D7	6	

4. Check continuity between BCM connector (A) M18 terminals 6, 25 and ground.

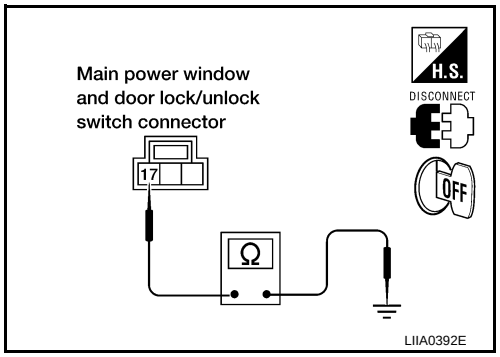
BCM connector	Terminal	Ground	Continuity
M18	6		No
	25		

Is the inspection result normal?

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

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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



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

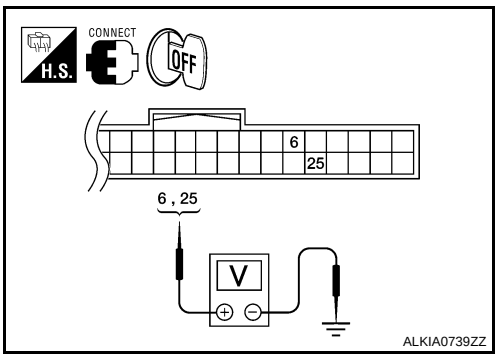
Is the inspection result normal?

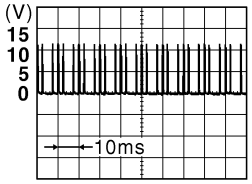
YES >> GO TO 5.
NO >> Repair or replace harness.

4.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check signal between BCM connector and ground.



Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M18	6	Ground	
	25		

Is the inspection result normal?

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

5.CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-636, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace door lock and unlock switch. Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

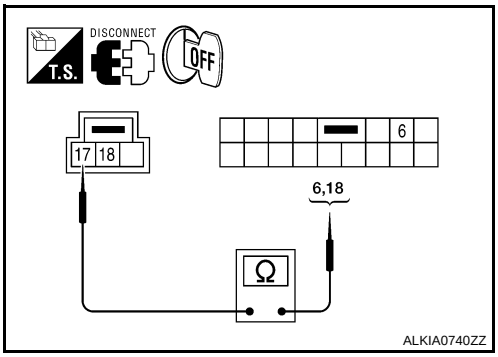
>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001530751

1.CHECK DOOR LOCK AND UNLOCK SWITCH

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



Door lock and unlock switch	Terminals		Condition	Continuity
D7, D8	6	17	UNLOCK	Yes
			NEUTRAL/LOCK	No
	18		LOCK	Yes
			NEUTRAL/UNLOCK	No

Is the inspection result normal?

YES >> Main power window and door lock/unlock switch is OK.
NO >> Replace main power window and door lock/unlock switch. Refer to XX-XX, "*****".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530752

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530753

1.CHECK FUNCTION

With CONSULT-III

Check “CDL LOCK SW ”and “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?

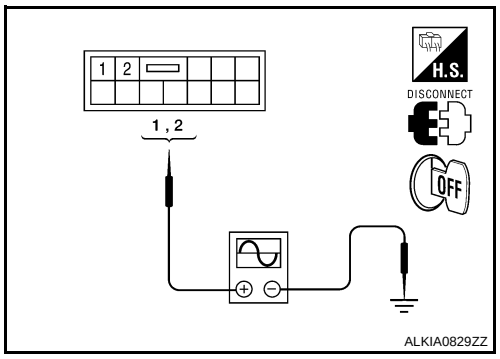
YES >> Power window and door lock/unlock switch (passenger side) is OK.
NO >> Refer to DLK-637, "PASSENGER SIDE : Diagnosis Procedure".

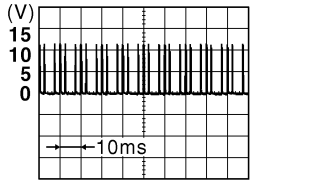
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530754

1.CHECK DOOR LOCK AND UNLOCK INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch (passenger side) connector.
3. Using an oscilloscope, check voltage between passenger door lock and unlock switch harness connector (A) D105 terminals 1, 2 and ground.



Terminal			Signal (Reference value)
(+)		(–)	
Power window and door lock/ unlock switch (passenger side) connector	Terminal		
D105	1	Ground	
	2		

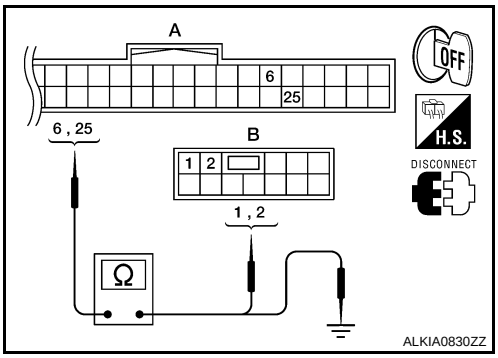
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Is the inspection result normal?

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

2.CHECK PASSENGER DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector (A) M18 terminals 6, 25 and passenger door lock/unlock switch connector (B) D105 terminals 1, 2.



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BCM connector	Terminal	Passenger door lock and unlock switch connector	Terminal	Continuity
M18	6	D105	1	Yes
	25		2	

4. Check continuity between BCM connector (A) M18 terminals 6, 25 and ground.

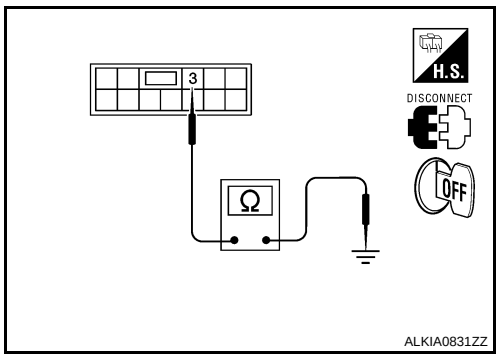
BCM connector	Terminal	Ground	Continuity
M18	6		No
	25		

Is the inspection result normal?

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

3.CHECK PASSENGER DOOR LOCK AND UNLOCK SWITCH GROUND

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



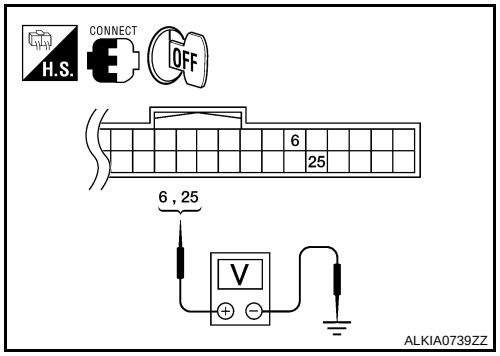
Power window and door lock/unlock switch (passenger side) connector	Terminal	Ground	Continuity
D105	3		Yes

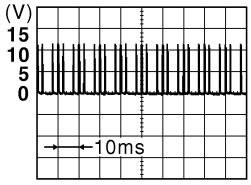
Is the inspection result normal?

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

4. CHECK BCM OUTPUT SIGNAL

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



Terminal			Signal (Reference value)
(+)		(–)	
BCM connector	Terminal		
M18	6	Ground	
	25		

Is the inspection result normal?

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

5. CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch
Refer to DLK-640, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace power window and door lock/unlock switch (passenger side). Refer to XX-XX, "*****".

6.CHECK INTERMITTENT INCIDENT

Refer to @@@.

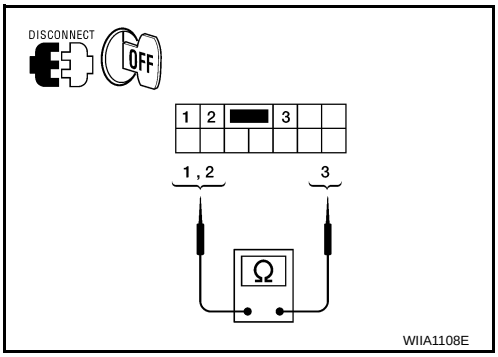
>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001530755

1.CHECK DOOR LOCK AND UNLOCK SWITCH

Check continuity between power window and door lock/unlock switch (passenger side) terminals.



Door lock and unlock switch	Terminals		Condition	Continuity
D105	1	3	LOCK	Yes
			NEUTRAL/UNLOCK	No
	2		UNLOCK	Yes
			NEUTRAL/LOCK	No

Is the inspection result normal?

YES >> Power window and door lock/unlock switch (passenger side) is OK.
NO >> Replace power window and door lock/unlock switch (passenger side). Refer to XX-XX, "*****".

INSTRUMENT PANEL WARNING LAMP ASSEMBLY

Description

INFOID:0000000001530756

The door lock and unlock switch indicates door lock status. The indicator will illuminate when a lock operation is accomplished, and during this status, if any door is opened, the indicator will turn OFF.

Component Function Check

INFOID:0000000001530757

1.CHECK FUNCTION

With CONSULT-III

Check “DOOR LOCK IND” in “Active Test” mode with CONSULT-III.

Test item		Condition
DOOR LOCK IND	:ON	Illuminated
	:OFF	Not illuminated

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-641, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530758

1.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

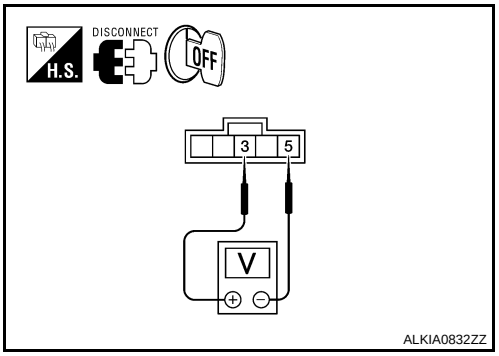
Lock and unlock the door lock system using the main power window and door lock/unlock switch.

Does the door lock system operate properly?

YES >> GO TO 2.
NO >> Repair the power door lock system. Refer to DLK-634, "DRIVER SIDE : Component Function Check".

2.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Open and keep the driver door open for the duration of this test.
3. Disconnect instrument panel warning lamp assembly.
4. Check voltage between instrument panel warning lamp assembly connector M37 terminals 3 and 5.



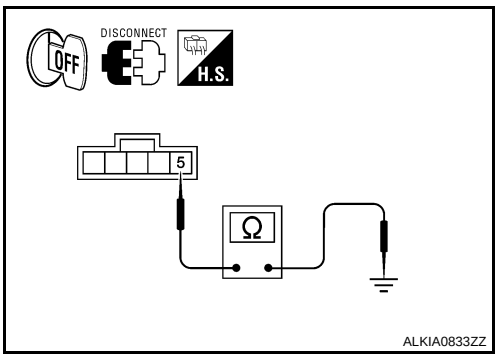
Instrument panel warning lamp assembly connector		Condition	Voltage (Approx.)
Terminals			
3 (+)	5(-)	Press the door lock switch to the LOCK position	Battery voltage
		Press the door lock switch to the UNLOCK position	0

Is the inspection result normal?

YES >> Replace instrument panel warning lamp.
NO >> GO TO 3.

3.CHECK DOOR LOCK AND UNLOCK SWITCH INDICATOR INPUT SIGNAL

Check continuity between instrument panel warning lamp assembly connector M37 terminal 5 and ground.



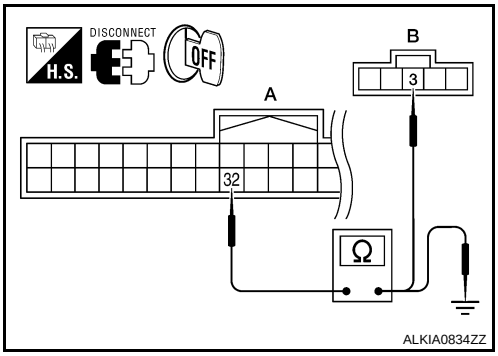
instrument panel warning lamp assembly connector	Terminal	Ground	Continuity
M37	5		Yes

Is the inspection result normal?

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

4.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Disconnect BCM.
2. Check continuity between BCM connector (A) M18 terminal 32 and instrument panel warning lamp assembly connector (B) M37 terminal 3.



BCM connector	Terminal	Instrument panel warning lamp assembly connector	Terminal	Continuity
M18	32	M37	3	Yes

3. Check continuity between BCM connector (A) M18 terminal 32 and ground.

BCM connector	Terminal	Ground	Continuity
M18	32		No

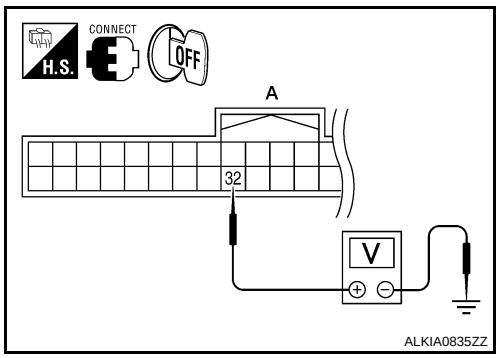
Is the inspection result normal?

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

5.CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM connector and ground.



Terminal			Condition	Voltage (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	32	Ground	Press the door lock switch to the LOCK position	Battery voltage
			Press the door lock switch to the UNLOCK position	0

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace BCM. Refer to BCS-57, "Removal and Installation of BCM".

6. CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

DOOR SWITCH
DRIVER SIDE
DRIVER SIDE : Description

INFOID:0000000001530759

Detects door open/closed condition.

DRIVER SIDE : Component Function Check

INFOID:0000000001530760

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-DR” in “Data Monitor” mode with CONSULT-III.

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

Is the inspection result normal?

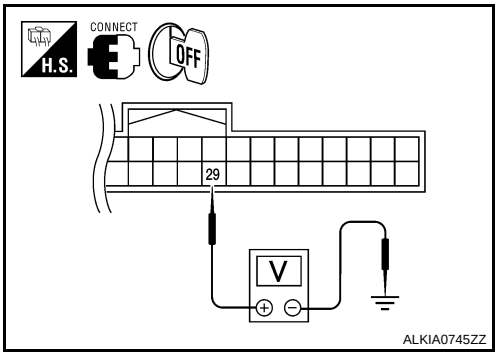
YES >> Door switch is OK.
NO >> Refer to DLK-644, "DRIVER SIDE : Diagnosis Procedure".

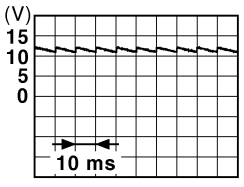
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530761

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			
M18	29	Ground	OPEN	0
			CLOSE	

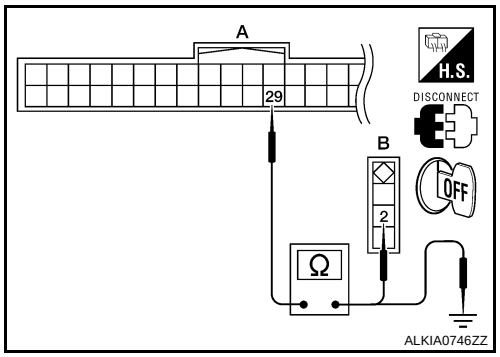
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Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM and driver door switch connectors.
2. Check continuity between BCM connector (A) M18 terminal 29 and door switch connector (B) B34 terminal 2.



BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	29	B34	2	Yes

3. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M18	29		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-645, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (driver side). Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

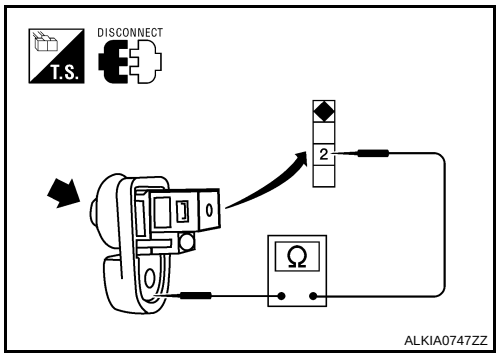
>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:0000000001530762

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check door switch.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace front door switch (driver side). Refer to XX-XX, "*****".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530763

Detects door open/closed condition.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530764

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-AS” in “Data Monitor” mode with CONSULT-III.

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

Is the inspection result normal?

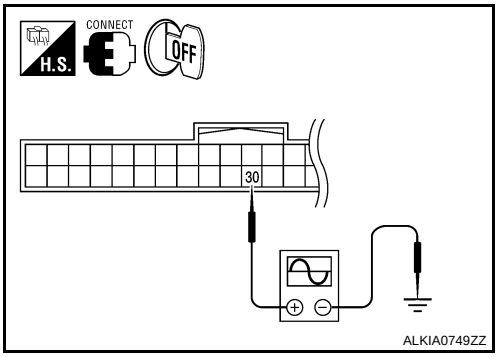
YES >> Door switch is OK.
NO >> Refer to DLK-646, "PASSENGER SIDE : Diagnosis Procedure".

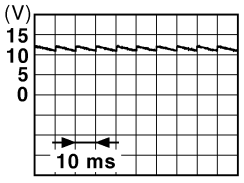
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530765

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			
M18	30	Ground	OPEN	0
			CLOSE	

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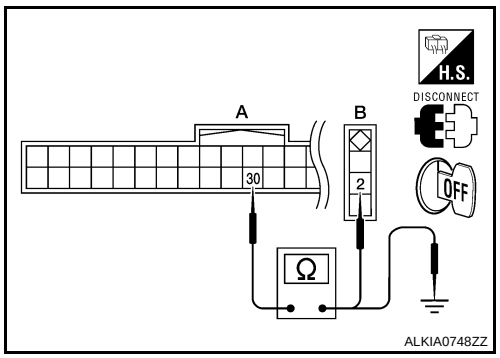
Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM and passenger door switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 30 and passenger door switch connector (B) B27 terminal 2.



BCM connector	Terminal	Door switch connector	Terminal	Continuity
M18	30	B27	2	Yes

3. Check continuity between BCM connector (A) M18 terminal 30 and ground.

BCM connector	Terminal	Ground	Continuity
M18	30		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-647, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (passenger side). Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

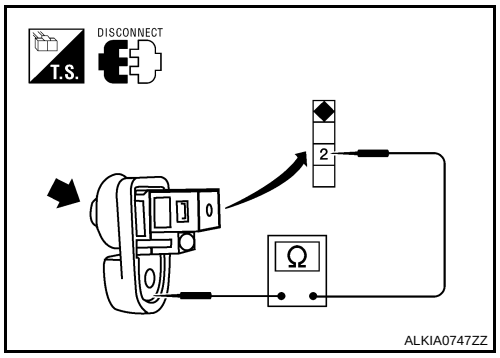
>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:0000000001530766

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check passenger door switch.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace front door switch (passenger side). Refer to XX-XX, "*****".

REAR LH

REAR LH : Description

INFOID:0000000001530767

Detects door open/closed condition.

REAR LH : Component Function Check

INFOID:0000000001530768

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RL” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RL	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

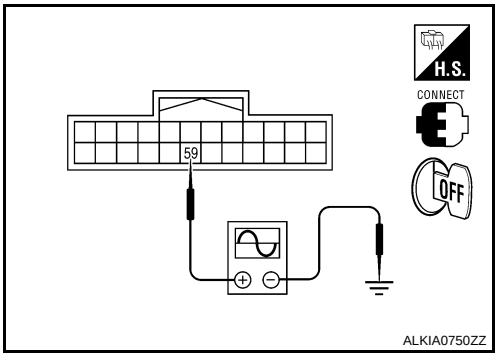
YES >> Door switch is OK.
NO >> Refer to DLK-648, "REAR LH : Diagnosis Procedure".

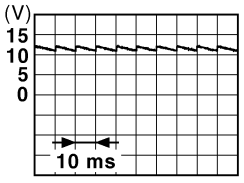
REAR LH : Diagnosis Procedure

INFOID:0000000001530769

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			
M19	59	Ground	OPEN	0
			CLOSE	

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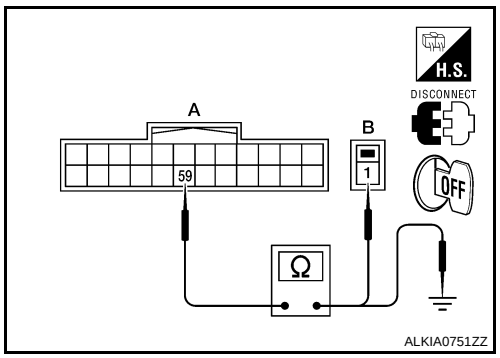
Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector and rear door switch LH.

2. Check continuity between BCM connector (A) M19 terminal 59 and rear door switch LH connector (B) B71 terminal 1.



BCM connector	Terminal	Rear door switch LH connector	Terminal	Continuity
M19	59	B71	1	Yes

3. Check continuity between BCM connector (A) M19 terminal 59 and ground.

BCM connector	Terminal	Ground	Continuity
M19	59		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-649, "REAR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch LH. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

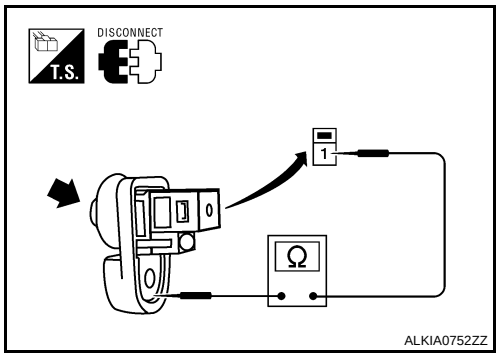
>> INSPECTION END

REAR LH : Component Inspection

INFOID:0000000001530770

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check rear door switch LH.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace rear door switch LH. Refer to XX-XX, "*****".

REAR RH

REAR RH : Description

INFOID:0000000001530771

Detects door open/close condition.

REAR RH : Component Function Check

INFOID:0000000001530772

1.CHECK FUNCTION

With CONSULT-III

Check door switches “DOOR SW-RR” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
DOOR SW-RR	OPEN	:ON
	CLOSE	:OFF

Is the inspection result normal?

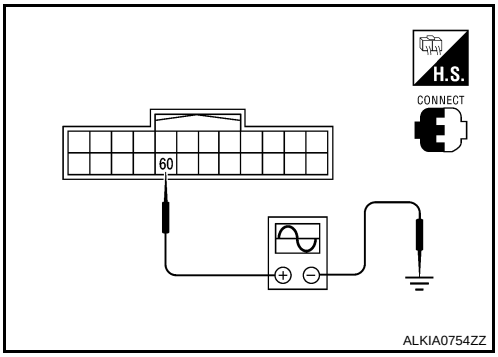
YES >> Door switch is OK.
NO >> Refer to DLK-650, "REAR RH : Diagnosis Procedure".

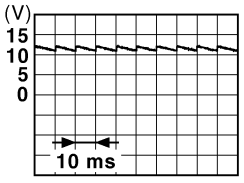
REAR RH : Diagnosis Procedure

INFOID:0000000001530773

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			
M19	60	Ground	OPEN	0
			CLOSE	

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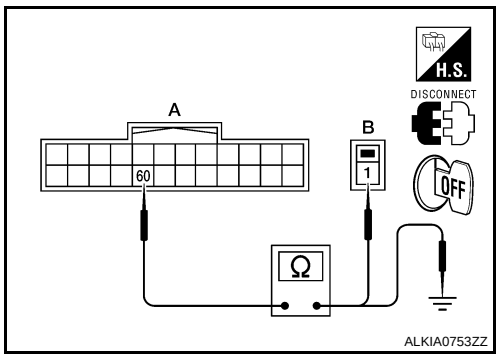
Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM connector (A) M19 terminal 60 and rear door switch RH connector (B) B53 terminal 1.



BCM connector	Terminal	Rear door switch RH connector	Terminal	Continuity
M19	60	B53	1	Yes

3. Check continuity between BCM connector (A) M19 terminal 60 and ground.

BCM connector	Terminal	Ground	Continuity
M19	60		No

Is the inspection result normal?

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

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-651, "REAR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace rear door switch RH. Refer to XX-XX, "*****".

4.CHECK INTERMITTENT INCIDENT

Refer to @@@.

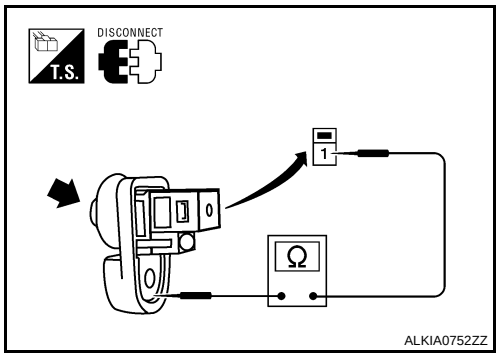
>> INSPECTION END

REAR RH : Component Inspection

INFOID:0000000001530774

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Check rear door switch RH.



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

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Replace rear door switch RH. Refer to XX-XX, "*****".

BACK DOOR

BACK DOOR : Description

INFOID:0000000001530775

Detects back door open condition.

BACK DOOR : Component Function Check

INFOID:0000000001530776

1.CHECK FUNCTION

With CONSULT-III

Check “BACK DOOR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
BACK DOOR SW	OPEN	: ON
	CLOSE	: OFF

Is the inspection result normal?

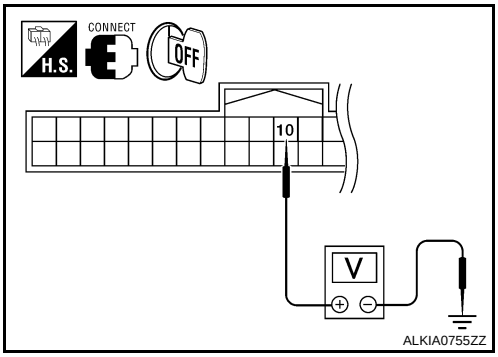
YES >> Back door lock assembly (door switch) is OK.
NO >> Refer to DLK-652, "BACK DOOR : Diagnosis Procedure".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001530777

1.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) INPUT SIGNAL

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



Terminals			Back door condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	10	Ground	OPEN	0
			CLOSE	Battery voltage

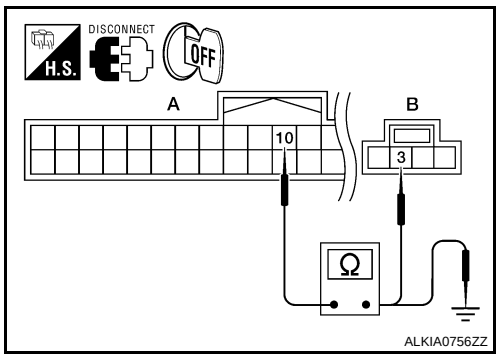
Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH) CIRCUIT

1. Disconnect BCM connector and back door lock assembly.

2. Check continuity between BCM connector (A) M18 terminal 10 and back door lock assembly (door switch) connector (B) D405 terminal 3.



BCM connector	Terminal	Back door lock assembly (door switch) connector	Terminal	Continuity
M18	10	D405	3	Yes

3. Check continuity between BCM connector and ground.

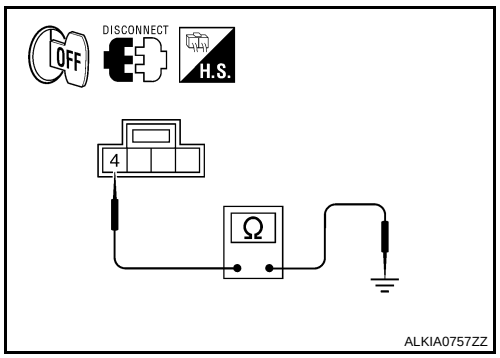
BCM connector	Terminal	Ground	Continuity
M18	10		No

Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ASSEMBLY GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.



Back door lock assembly (door switch) connector	Terminal	Ground	Continuity
D405	4		Yes

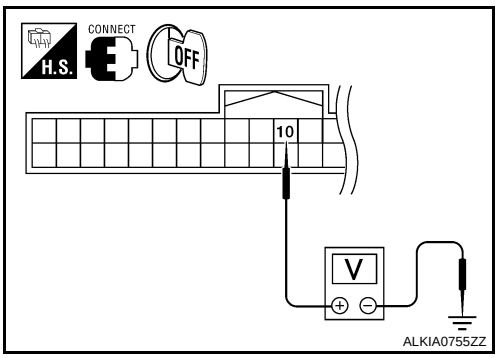
Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door lock assembly 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		
M18	10	Ground	Battery voltage

Is the inspection result normal?

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

5. CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

Check back door lock assembly (door switch).
Refer to DLK-654, "BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly (door switch). Refer to XX-XX, "*****" and XX-XX, "*****".

6. CHECK INTERMITTENT INCIDENT

Refer to @@@.

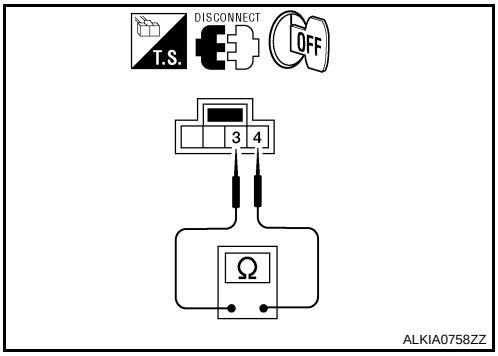
>> INSPECTION END

BACK DOOR : Component Inspection

INFOID:0000000001530778

1. CHECK BACK DOOR LOCK ASSEMBLY (DOOR SWITCH)

1. Turn ignition switch OFF.
2. Check back door lock assembly (door switch).



Terminal		Back door condition	Continuity
Back door lock assembly (door switch)			
3	4	OPEN	Yes
		CLOSE	No

Is the inspection result normal?

YES >> Back door lock assembly (door switch) is OK.
NO >> Replace back door lock assembly (door switch). Refer to XX-XX, "*****" and XX-XX, "*****".

KEY SWITCH

Description

INFOID:0000000001530779

Key switch detects that mechanical key is inserted into the key cylinder, and then transmits the signal to BCM.

Component Function Check

INFOID:0000000001530780

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch (“KEY SW”) in “Data Monitor” mode with CONSULT-III. Refer to DLK-50, "DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)".

Monitor item	Condition	
KEY SW	Insert mechanical key into key cylinder	: ON
	Remove mechanical key from key cylinder	: OFF

Is the inspection result normal?

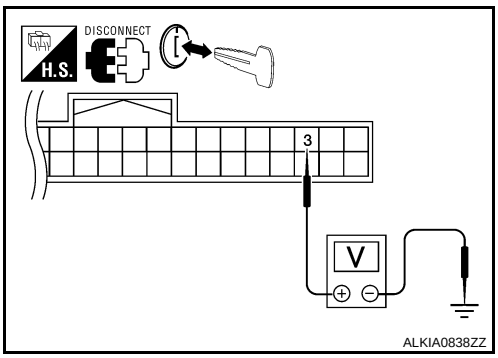
YES >> Key switch is OK.
NO >> Refer to DLK-656, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530781

1.CHECK KEY SWITCH INPUT SIGNAL

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



Terminals			Condition	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	3	Ground	Insert mechanical key into key cylinder	Battery voltage
			Remove mechanical key from key cylinder	0

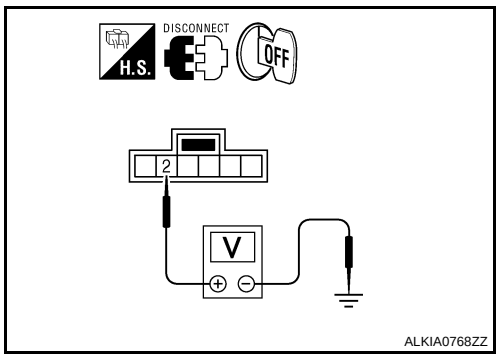
Is the inspection result normal?

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

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove mechanical key from key cylinder.
2. Disconnect key switch connector.

3. Check voltage between key switch connector M27 terminal 2 and ground.



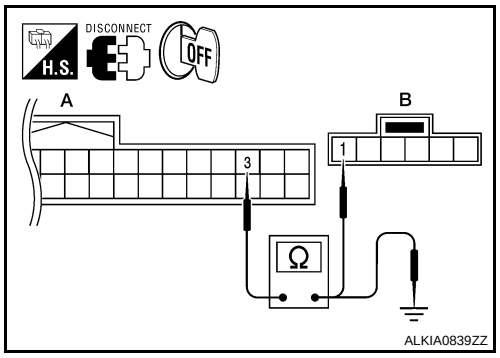
Terminals			Voltage (V) (Approx.)
(+)		(–)	
key switch connector	Terminal		
M27	2	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK KEY SWITCH SIGNAL CIRCUIT

1. Check continuity BCM harness connector (A) M18 terminal 3 and key switch connector (B) M27 terminal 1.



BCM connector	Terminal	key switch connector	Terminal	Continuity
M18	3	M27	1	Yes

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

BCM harness connector	Terminal	Ground	Continuity
M18	3		No

Is the inspection result normal?

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

4.CHECK KEY SWITCH

Check key switch function.
Refer to DLK-658, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

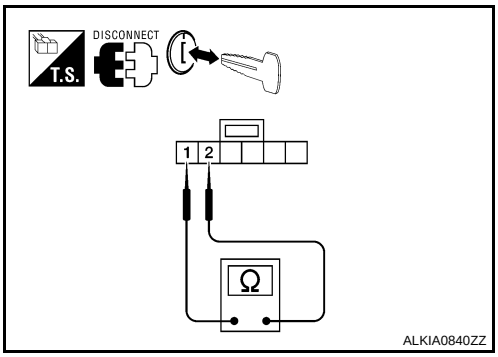
Component Inspection

INFOID:0000000001530782

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.



Terminals		Condition	Continuity
key switch			
1	2	Insert mechanical key into key cylinder	Yes
		Remove mechanical key from key cylinder	No

Is the inspection result normal?

YES >> Key switch is OK.
NO >> Replace key cylinder assembly.

TRUNK LID UNLOCK SWITCH

Description

INFOID:0000000001530785

Detects trunk open/close condition.

Component Function Check

INFOID:0000000001530786

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?

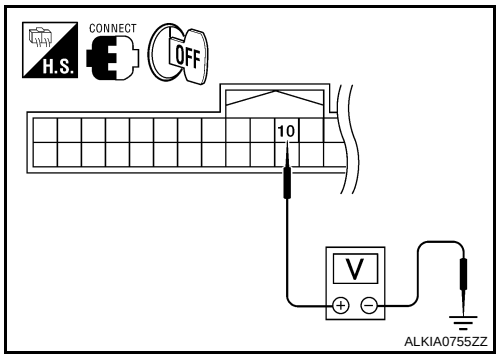
YES >> Trunk lamp switch is OK.
NO >> Refer to DLK-659, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530787

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			
M18	10	Ground	OPEN	0
			CLOSE	Battery voltage

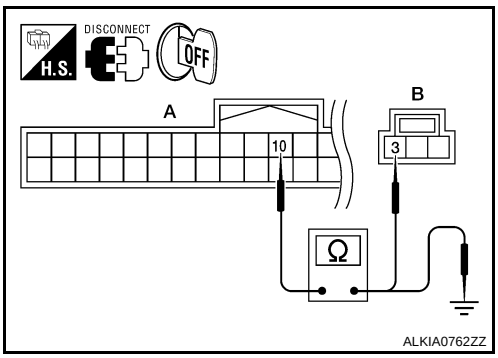
Is the inspection result normal?

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 (A) M18 terminals10 and trunk lamp switch and trunk release solenoid connector (B) B66 terminal 3.



BCM connector	Terminal	Trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
M18	10	B66	3	Yes

3. Check continuity between BCM connector and ground.

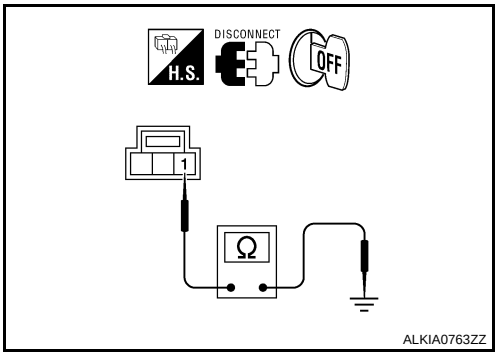
BCM connector	Terminal	Ground	Continuity
M18	10		No

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 lamp switch and trunk release solenoid connector and ground.



Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B66	1		Yes

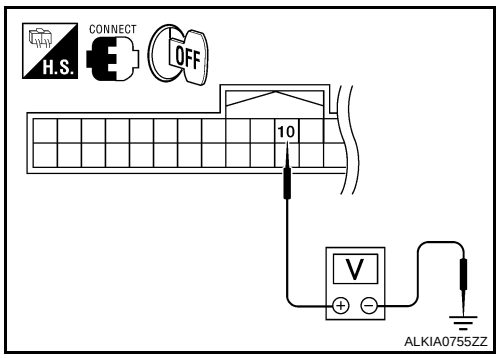
Is the inspection result normal?

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

4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.

2. Check voltage between BCM connector and ground.



Terminals			Voltage (V) (Approx.)
(+)		(–)	
BCM connector	Terminal		
M18	10	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace BCM. Refer to XX-XX, "*****".

5.CHECK TRUNK ROOM LAMP SWITCH

Refer to DLK-661, "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 XX-XX, "*****".

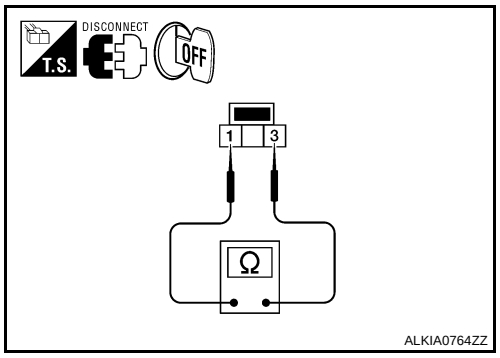
>> INSPECTION END.

Component Inspection

INFOID:0000000001530788

1.CHECK TRUNK LAMP SWITCH

1. Turn ignition switch OFF.
2. Check trunk lamp switch.



Terminal		Trunk condition	Continuity
Trunk lamp switch and trunk release solenoid			
1	3	OPEN	Yes
		CLOSE	No

Is the inspection result normal?

YES >> INSPECTION END.

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

BACK DOOR OPENER SWITCH

Description

INFOID:0000000001530789

Sends the back door opening signal to BCM.

Component Function Check

INFOID:0000000001530790

1.CHECK FUNCTION

With CONSULT-III

Check “TR/BD OPNR SW” in “Data Monitor” mode with CONSULT-III.

Monitor item	Condition	
TR/BD OPNR SW	Back door opener switch is pressed	:ON
	Back door opener switch is released	:OFF

Is the inspection result normal?

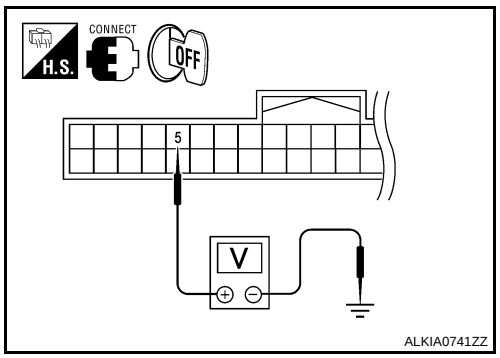
YES >> Back door opener switch is OK.
NO >> Refer to XX-XX, "*****".

Diagnosis Procedure

INFOID:0000000001530791

1.CHECK BACK DOOR OPENER SWITCH INPUT SIGNAL

Check voltage between BCM connector and ground.



Terminals			Condition of back door opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	5	Ground	ON (press and hold)	0
			OFF (release)	Battery voltage

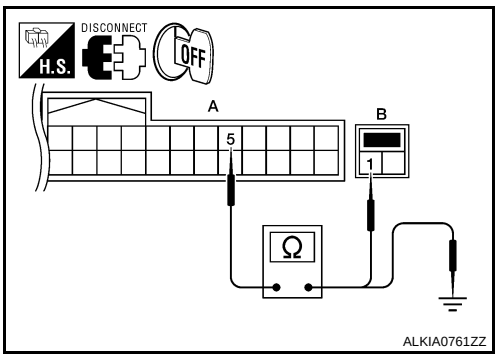
Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

1. Disconnect BCM and back door opener switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 5 and back door opener switch connector (B) D408 terminal 1.



BCM connector	Terminal	back door opener switch connector	Terminal	Continuity
M18	5	D408	1	Yes

3. Check continuity between BCM connector (A) M18 terminal 5 and ground.

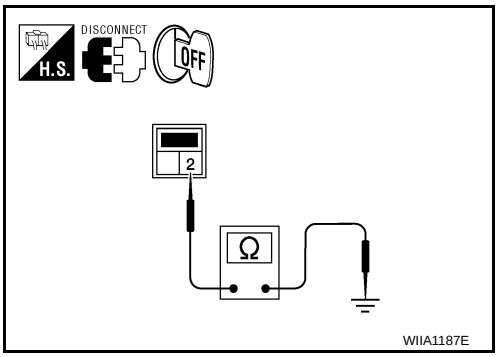
BCM connector	Terminal	Ground	Continuity
M18	5		No

Is the inspection result normal?

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

3.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch connector and ground.



back door opener switch	Terminal	Ground	Continuity
D408	2		Yes

Is the inspection result normal?

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

4.CHECK BACK DOOR OPENER SWITCH

Refer to DLK-665, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace back door opener switch.

5.CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

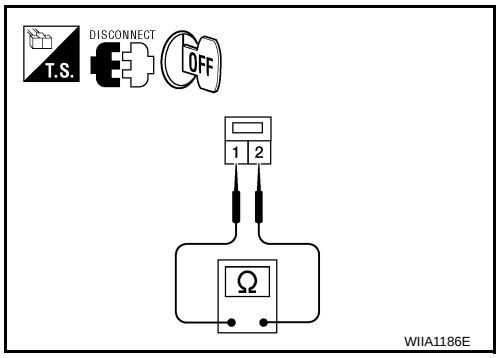
>> INSPECTION END.

Component Inspection

INFOID:0000000001530792

1. CHECK BACK DOOR OPENER SWITCH

1. Turn ignition switch OFF.
2. Check continuity between back door opener switch terminals.



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

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace back door opener switch.

TRUNK LID OPENER SWITCH

Description

INFOID:0000000001530793

Transmits trunk lid open signal to BCM.

Component Function Check

INFOID:0000000001530794

1.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 pressed.

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?

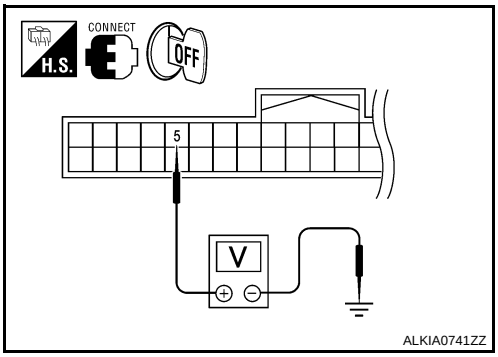
YES >> Trunk lid opener switch is OK.
NO >> Refer to DLK-666, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530795

1.CHECK TRUNK LID OPEN INPUT SIGNAL

Check voltage between BCM connector and ground.



Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M18	5	Ground	ON (press and hold)	0
			OFF (release)	Battery voltage

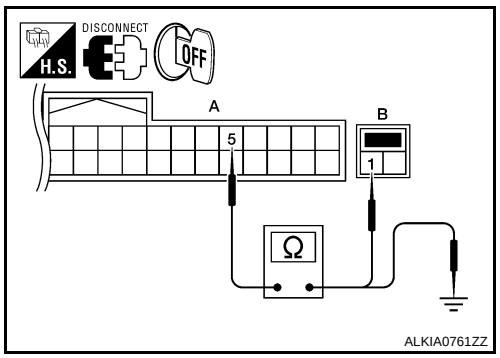
Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER SWITCH CIRCUIT

1. Disconnect BCM and trunk lid opener switch connectors.

2. Check continuity between BCM connector (A) M18 terminal 5 and trunk lid opener switch connector (B) B61 terminal 1.



BCM connector	Terminal	Trunk lid opener switch connector	Terminal	Continuity
M18	5	B61	1	Yes

3. Check continuity between BCM connector (A) M18 terminal 5 and ground.

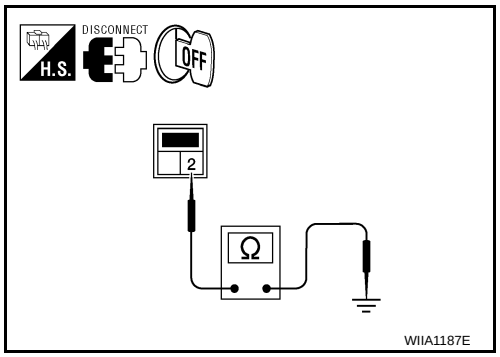
BCM connector	Terminal	Ground	Continuity
M18	5		No

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
B61	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-668, "Component Inspection".

Is the inspection result normal?

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

5. CHECK INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

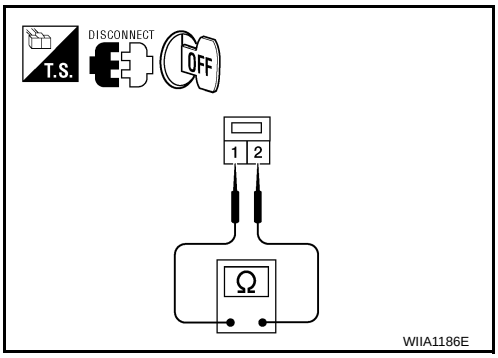
>> INSPECTION END.

Component Inspection

INFOID:0000000001530796

1. CHECK TRUNK LID OPENER SWITCH

1. Turn ignition switch OFF.
2. Check continuity between trunk lid opener switch terminals.



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.

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001530797

Locks/unlocks the door with the signal from BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001530798

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?

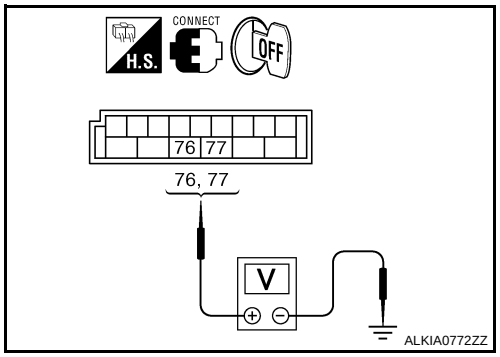
YES >> Door lock actuator is OK.
NO >> Refer to DLK-669, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530799

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 76, 77 and ground.



Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	76	Ground	Driver door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0
	77		Driver door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0

Is the inspection result normal?

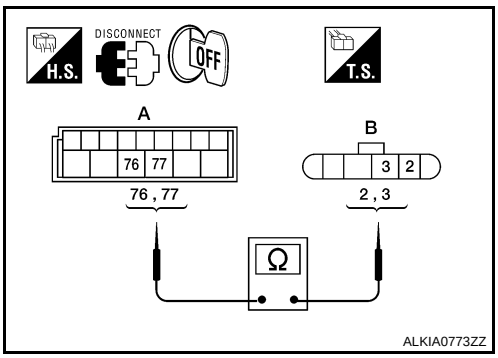
YES >> GO TO 2.
NO >> GO TO 3.

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).

2. Check continuity between BCM connector (A) M20 terminals 76, 77 and front door lock actuator (driver side) connector (B) D14 terminals 2, 3.

Connector	Terminals	Connector	Terminals	Continuity
M20	76	D14	2	Yes
	77		3	Yes



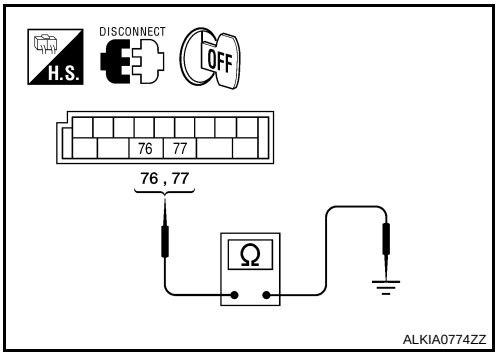
Is the inspection result normal?

YES >> Replace front door lock actuator (driver side).
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).
2. Check continuity between BCM connector M20 terminals 76, 77 and ground.

Connector	Terminals		Continuity
M20	76	Ground	No
	77		No



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530800

Locks/unlocks the door with the signal from BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530801

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-670, "PASSENGER SIDE : Diagnosis Procedure".

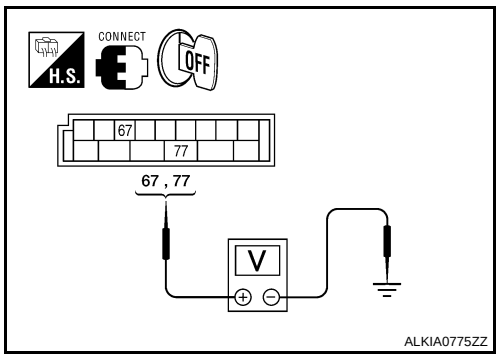
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530802

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) SIGNAL

1. Turn ignition switch OFF.

2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



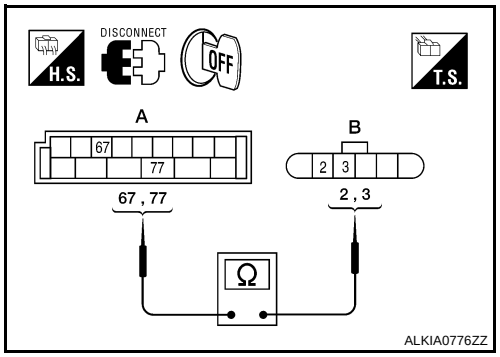
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2. CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and front door lock actuator (passenger side) (B) D114 terminals 2, 3.



BCM connector	Terminal	Front door lock actuator (passenger side) connector	Terminal	Continuity
M20	67	D114	2	Yes
	77		3	

Is the inspection result normal?

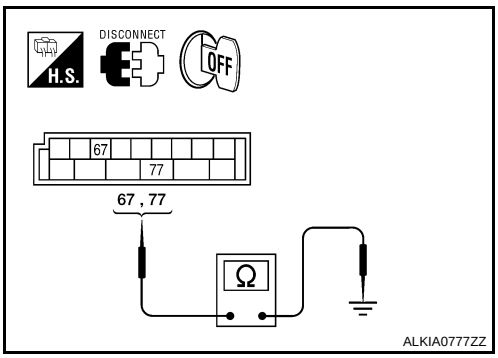
YES >> Replace front door lock actuator (passenger side). Refer to XX-XX, "*****".
NO >> Repair or replace harness.

3. CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).

2. Check continuity between BCM connector M19 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR LH

REAR LH : Description

INFOID:0000000001530803

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001530804

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?

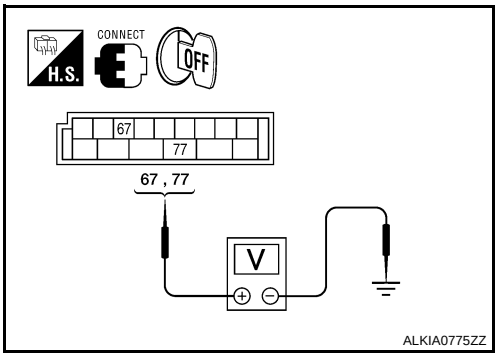
YES >> Door lock actuator is OK.
NO >> Refer to DLK-672, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001530805

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



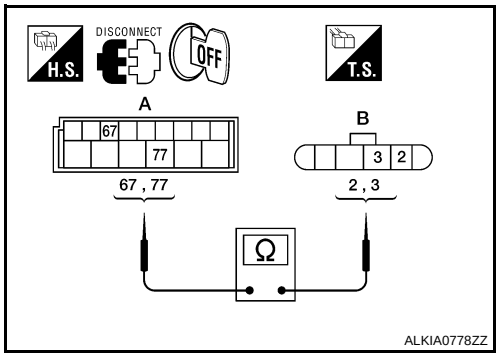
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator LH.
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and rear door lock actuator LH connector (B) D205 terminals 2, 3.



BCM connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M20	67	D205	2	Yes
	77		3	

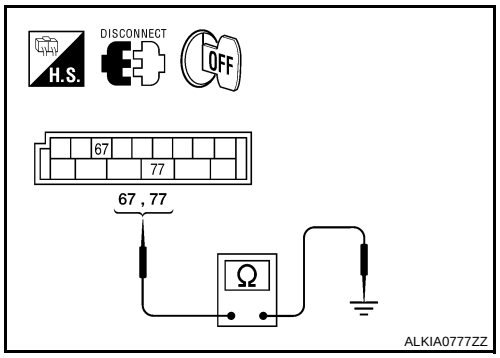
Is the inspection result normal?

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

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and each door lock actuator.
2. Check continuity between BCM connector M20 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR RH

REAR RH : Description

INFOID:0000000001530806

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001530807

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?

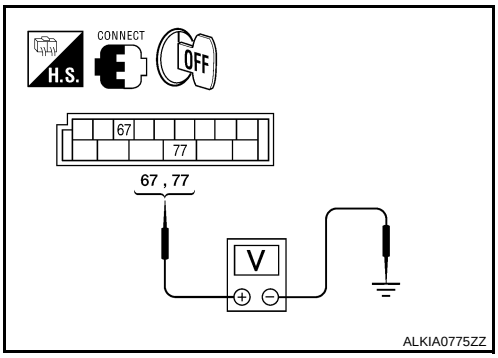
YES >> Door lock actuator is OK.
NO >> Refer to XX-XX, "*****".

REAR RH : Diagnosis Procedure

INFOID:0000000001530808

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 77 and ground.



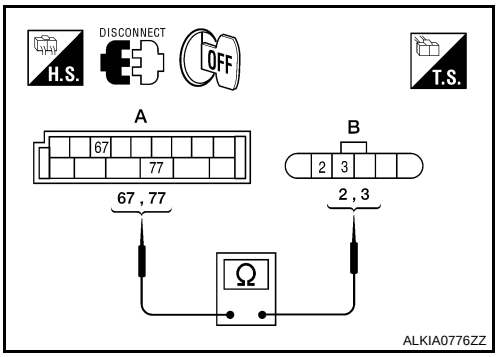
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	77	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.
2. Check continuity between BCM connector (A) M20 terminals 67, 77 and rear door lock actuator RH connector (B) D305 terminals 2, 3.



BCM connector	Terminal	Rear door lock actuator RH connector	Terminal	Continuity
M20	67	D305	2	Yes
	77		3	

Is the inspection result normal?

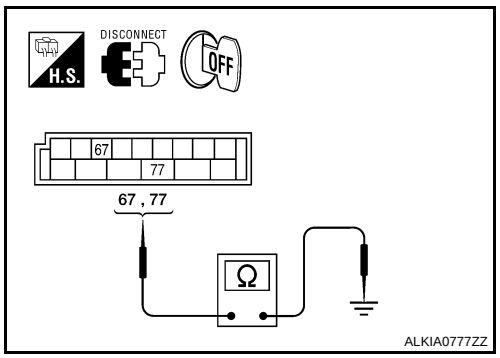
YES >> Replace rear door lock actuator RH.
NO >> Repair or replace harness.

3.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.

2. Check continuity between BCM connector (A) M20 terminals 67, 77 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	77		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

BACK DOOR

BACK DOOR : Description

INFOID:0000000001530809

Locks/unlocks the door with the signal from BCM.

BACK DOOR : Component Function Check

INFOID:0000000001530810

1.CHECK FUNCTION

1. Unlock all doors using main power window and door lock/unlock switch.
2. Press the back door opener switch.

Does the back door open?

YES >> Door lock actuator is OK.
NO >> GO TO 2.

2.CHECK FUNCTION

With CONSULT-III

Check back door opener request switch “BK DOOR OPNR SW” in “Data Monitor” mode.

Monitor item	Condition	
BD/TR OPNR SW	Back door opener request switch is pressed	:ON
	Back door opener request switch is released	:OFF

Is the inspection result normal?

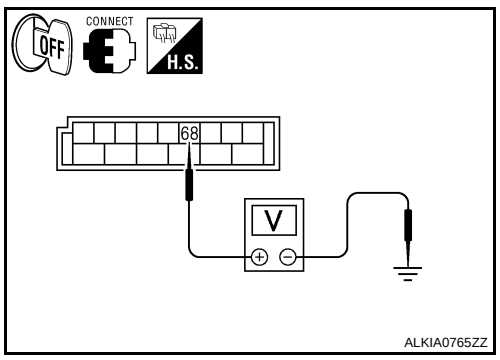
YES >> Refer to DLK-675, "BACK DOOR : Diagnosis Procedure".
NO >> Refer to XX-XX, "*****".

BACK DOOR : Diagnosis Procedure

INFOID:0000000001530811

1.CHECK BACK DOOR LOCK ACTUATOR SIGNAL

1. Ensure the door lock system is in the unlock position.
2. Turn ignition switch OFF.
3. Press the back door opener switch while checking voltage between BCM connector M20 terminals 68 and ground.



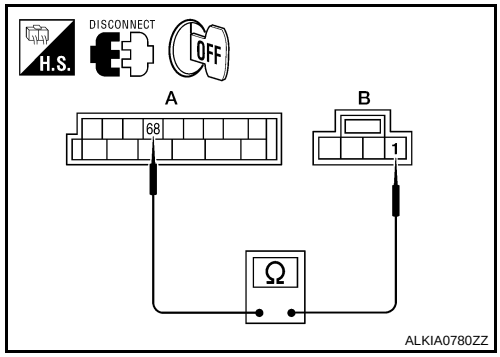
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	68	Ground	Door lock opener switch is pressed	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK BACK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and back door lock assembly.
2. Check continuity between BCM connector (A) M20 terminal 68 and back door lock assembly connector (B) D405 terminal 1.



BCM connector	Terminal	Back door lock assembly connector	Terminal	Continuity
M20	68	D405	1	Yes

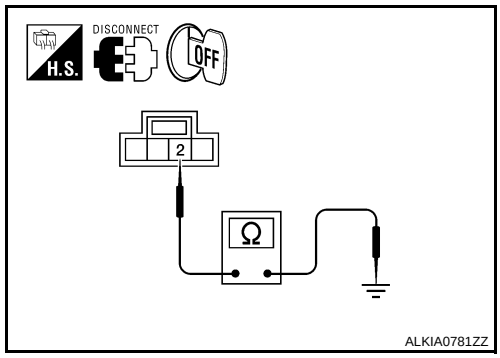
Is the inspection result normal?

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

3.CHECK BACK DOOR LOCK ACTUATOR GROUND CIRCUIT

Check continuity between back door lock assembly connector D405 terminal 2 and ground.

Terminals		Continuity
2	Ground	Yes



Is the inspection result normal?

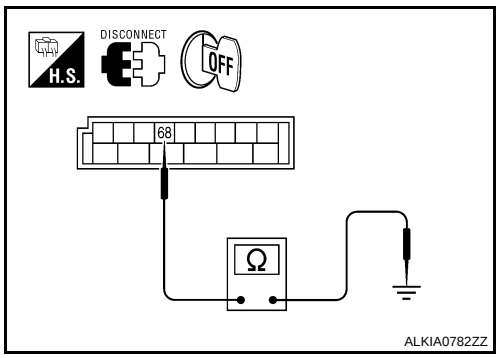
YES >> Replace back door lock assembly.
NO >> Repair or replace harness.

4.CHECK DOOR LOCK ACTUATOR HARNESS

1. Disconnect BCM and back door lock actuator.

2. Check continuity between BCM connector M20 terminals 68 and ground.

Terminals		Continuity
68	Ground	No



Is the inspection result normal?

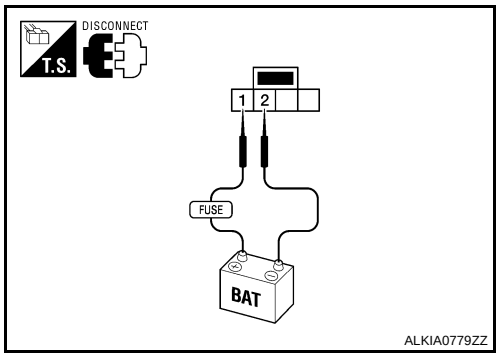
YES >> Harness is OK. Refer to DLK-677, "BACK DOOR : Component Inspection".
NO >> Repair or replace harness.

BACK DOOR : Component Inspection

INFOID:0000000001530812

1. CHECK TRUNK LAMP SWITCH

Momentarily, connect battery power supply to back door lock assembly terminals and check for actuator operation.



Terminal		Back door condition
Back door lock assembly (actuator)		
1 BAT (+)	2 BAT (-)	Actuator operates

Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Replace back door lock assembly.

SUPER LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000001530817

The super lock system is controlled by the BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000001530818

1.CHECK FUNCTION

1. Use CONSULT-III to perform Active Test "SUPER LOCK".
2. Touch “LOCK” or “UNLOCK” to check that it works normally.

Is the inspection result normal?

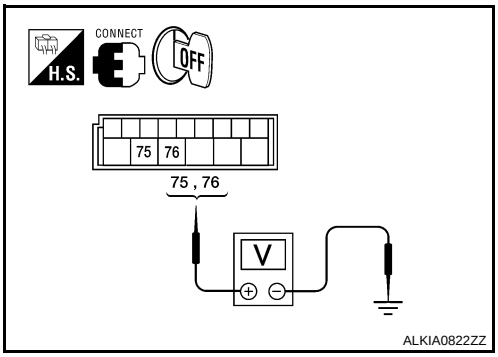
YES >> Front super lock actuator (driver side) is OK.
NO >> Refer to DLK-678, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000001530819

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 75, 76 and ground.



Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	75	Ground	Driver door lock/unlock switch is turned to LOCK	0 → Battery voltage→ 0
	76		Driver door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

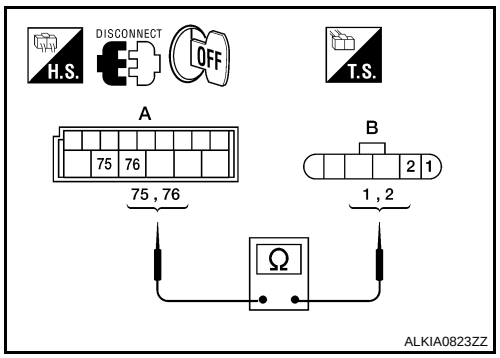
YES >> GO TO 2.
NO >> GO TO 3.

2.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).

2. Check continuity between BCM connector (A) M20 terminals 75, 76 and front door lock actuator (driver side) connector (B) D14 terminals 1, 2.

Connector	Terminals	Connector	Terminals	Continuity
M20	75	D14	1	Yes
	76		2	Yes



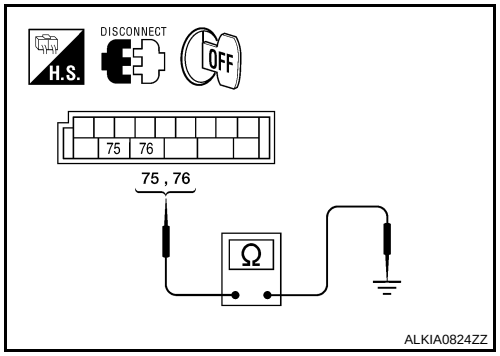
Is the inspection result normal?

YES >> Replace super lock actuator (driver side).
NO >> Repair or replace harness.

3.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (driver side).
2. Check continuity between BCM connector M20 terminals 75, 76 and ground.

Connector	Terminals		Continuity
M20	75	Ground	No
	76		No



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000001530820

The super lock system is controlled by the BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000001530821

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Front super lock actuator (passenger side) is OK.
NO >> Refer to DLK-679, "PASSENGER SIDE : Diagnosis Procedure".

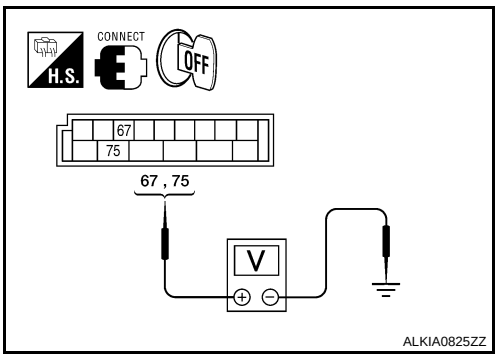
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000001530822

1.CHECK FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE) SIGNAL

1. Turn ignition switch OFF.

2. Check voltage between BCM connector M20 terminals 67, 75 and ground.



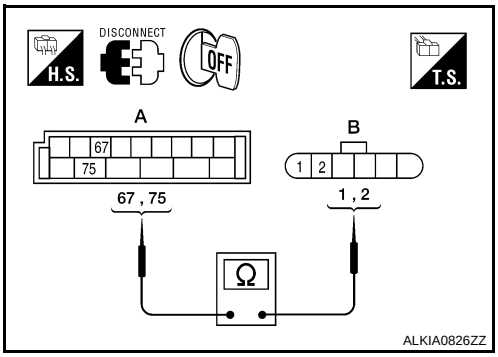
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	75	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).
2. Check continuity between BCM connector (A) M20 terminals 67, 75 and front door lock actuator (passenger side) (B) D114 terminals 1, 2.



BCM connector	Terminal	Front door lock actuator (passenger side) connector	Terminal	Continuity
M20	67	D114	2	Yes
	75		1	

Is the inspection result normal?

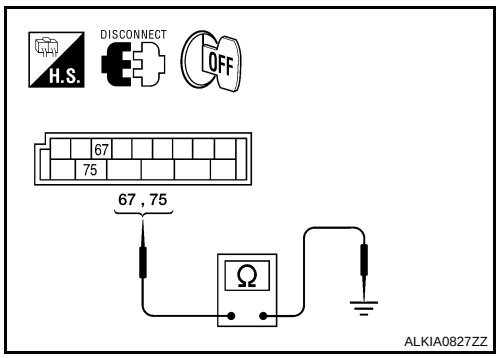
YES >> Replace super lock actuator (passenger side). Refer to XX-XX, "*****".
NO >> Repair or replace harness.

3.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and front door lock actuator (passenger side).

2. Check continuity between BCM connector M19 terminals 67, 75 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	75		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR LH

REAR LH : Description

INFOID:0000000001530823

Locks/unlocks the door with the signal from BCM.

REAR LH : Component Function Check

INFOID:0000000001530824

1.CHECK FUNCTION

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

Is the inspection result normal?

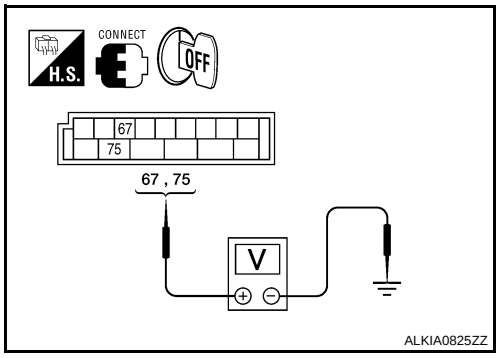
YES >> Rear super lock actuator LH is OK.
NO >> Refer to DLK-681, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000001530825

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 75 and ground.



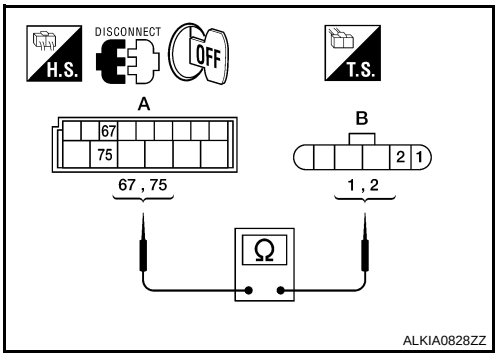
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	75	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator LH.
2. Check continuity between BCM connector (A) M20 terminals 67, 75 and rear door lock actuator LH connector (B) D205 terminals 1, 2.



BCM connector	Terminal	Rear door lock actuator LH connector	Terminal	Continuity
M20	67	D205	2	Yes
	75		1	

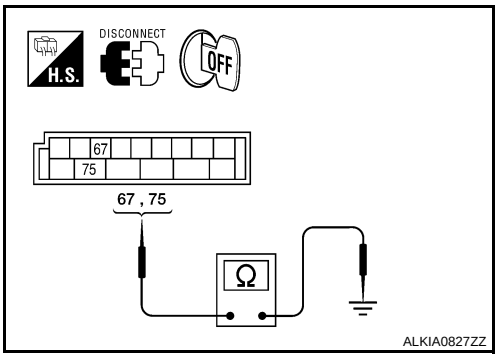
Is the inspection result normal?

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

3.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and each door lock actuator.
2. Check continuity between BCM connector M20 terminals 67, 75 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	75		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

REAR RH

REAR RH : Description

INFOID:0000000001530826

Locks/unlocks the door with the signal from BCM.

REAR RH : Component Function Check

INFOID:0000000001530827

1.CHECK FUNCTION

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

Is the inspection result normal?

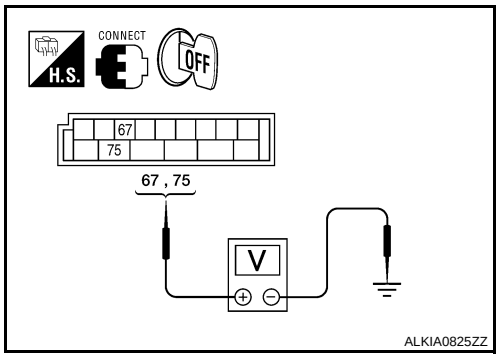
YES >> Rear super lock actuator RH is OK.
NO >> Refer to XX-XX, "*****".

REAR RH : Diagnosis Procedure

INFOID:0000000001530828

1.CHECK DOOR LOCK ACTUATOR SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M20 terminals 67, 75 and ground.



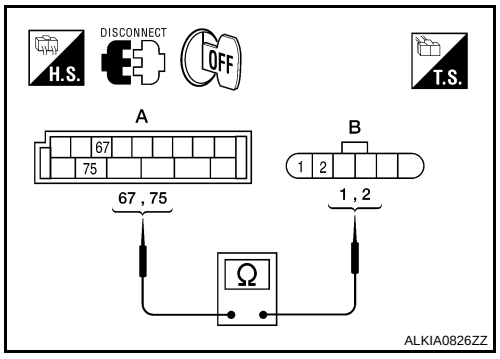
Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M20	75	Ground	Door lock/unlock switch is turned to LOCK	0 → Battery voltage → 0
	67		Door lock/unlock switch is turned to UNLOCK	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.
2. Check continuity between BCM connector (A) M20 terminals 67, 75 and rear door lock actuator RH connector (B) D305 terminals 2, 1.



BCM connector	Terminal	Rear door lock actuator RH connector	Terminal	Continuity
M20	67	D305	2	Yes
	75		1	

Is the inspection result normal?

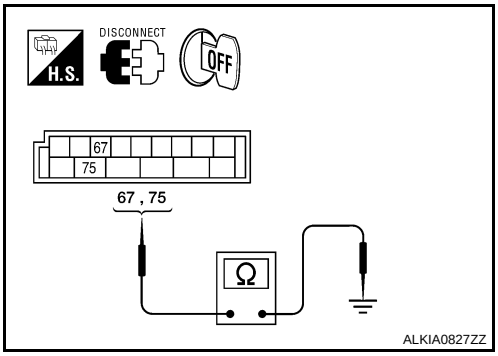
YES >> Replace rear super lock actuator RH.
NO >> Repair or replace harness.

3.CHECK SUPER LOCK ACTUATOR HARNESS

1. Disconnect BCM and rear door lock actuator RH.

2. Check continuity between BCM connector (A) M20 terminals 67, 75 and ground.

BCM connector	Terminals		Continuity
M20	67	Ground	No
	75		



Is the inspection result normal?

YES >> Replace BCM. Refer to XX-XX, "*****".
NO >> Repair or replace harness.

TRUNK LID OPENER ACTUATOR

Description

INFOID:0000000001530813

Performs trunk lid open with signal from BCM.

Component Function Check

INFOID:0000000001530814

1.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?

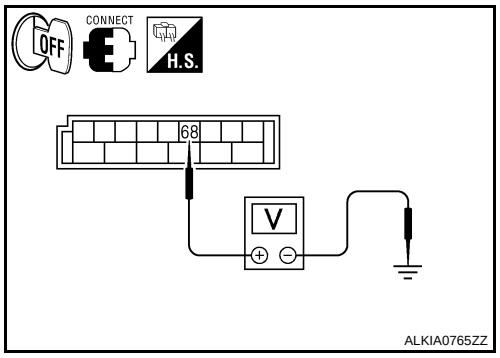
YES >> Trunk lid opener actuator is OK.
NO >> Refer to DLK-685, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530815

1.CHECK OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Ensure door lock system is unlocked.
3. Check voltage between BCM connector and ground.



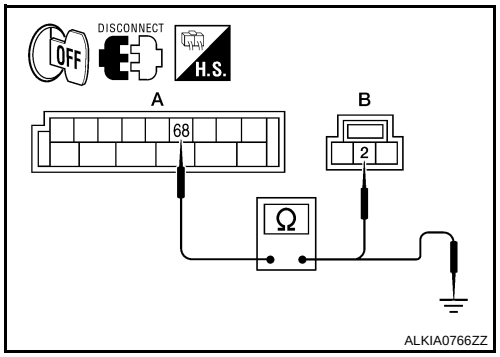
Terminals			Condition of trunk lid opener switch	Voltage (V) (Approx.)
(+)		(–)		
BCM connector	Terminal			
M20	68	Ground	ON	0 → Battery voltage → 0

Is the inspection result normal?

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

2.CHECK TRUNK LID OPENER ACTUATOR CIRCUIT

1. Disconnect BCM and trunk lamp switch and trunk release solenoid connectors.
2. Check continuity between BCM connector (A) M20 terminal 68 and trunk lamp switch and trunk release solenoid connector (B) B66 terminal 2.



BCM connector	Terminal	trunk lamp switch and trunk release solenoid connector	Terminal	Continuity
M20	68	B66	2	Yes

3. Check continuity between BCM connector (A) M20 terminal 68 and ground.

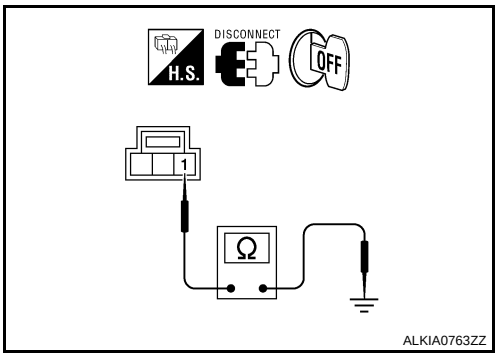
BCM connector	Terminal		Continuity
M20	68	Ground	No

Is the inspection result normal?

YES >> Refer to DLK-686, "Component Inspection".
NO >> Repair or replace harness.

3.CHECK TRUNK LID OPENER ACTUATOR GROUND CIRCUIT

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



Trunk lamp switch and trunk release solenoid connector	Terminal	Ground	Continuity
B66	1		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 INTERMITTENT INCIDENT

Refer to XX-XX, "*****".

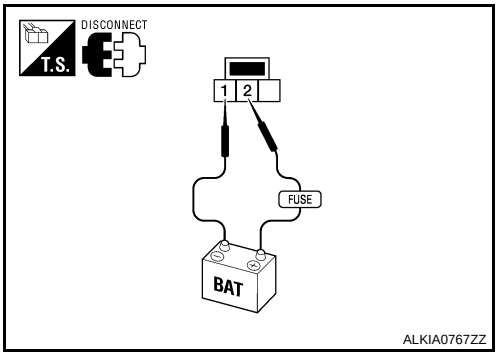
>> INSPECTION END.

Component Inspection

INFOID:0000000001530816

1.CHECK TRUNK LAMP SWITCH

Momentarily, connect battery power supply to trunk lamp switch and trunk release solenoid terminals and check for solenoid operation.



Terminal		Trunk condition
Trunk lamp switch and trunk release solenoid		
1 BAT (-)	2 BAT (+)	Solenoid operates

Is the inspection result normal?

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

BUZZER (COMBINATION METER)

Description

INFOID:0000000001397313

Performs operation method guide and warning with buzzer.

Component Function Check

INFOID:0000000001397314

1.CHECK FUNCTION

With CONSULT-III

Check the operation with “INSIDE BUZZER” in “Active Test”.

Test item	Condition	
INSIDE BUZZER	:TAKE OUT	Take away warning chime sounds
	:KNOB	Ignition knob switch warning chime sounds
	:KEY	Key warning chime sounds

Is the inspection result normal?

Yes >> Warning buzzer in combination meter is OK.
No >> Refer to DLK-688, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001397315

1.CHECK BUZZER (COMBINATION METER) CIRCUIT

Refer to XX-XX, "*****".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

HAZARD WARNING LAMPS

Description

INFOID:0000000001397316

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

Component Function Check

INFOID:0000000001397317

1.CHECK FUNCTION

With CONSULT-III

Check hazard warning lamp “FLASHER” in “Active Test” mode.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-689, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001397318

1.CHECK HAZARD SWITCH CIRCUIT

Check hazard switch circuit.
Refer to XX-XX, "*****".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

VEHICLE SPEED SIGNAL CIRCUIT

Description

INFOID:0000000001397319

Displays the vehicle speed signal received from combination meter as a numerical value (km/h).

Component Function Check

INFOID:0000000001397320

1.CHECK FUNCTION

Check that all doors are automatically locked at the vehicle speed of more than 12 km/h (7 MPH).

Is the inspection result normal?

YES >> Vehicle speed signal circuit is OK.
NO >> Refer to DLK-690, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001397321

1.CHECK VEHICLE SPEED SIGNAL CIRCUIT

Check vehicle speed signal “VEHICLE SPEED” in “Data Monitor” mode.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace vehicle speed signal circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to @@@.

>> INSPECTION END

KEYFOB BATTERY AND FUNCTION

Description

INFOID:0000000001530829

The following functions are available when having and carrying the keyfob.
- Door lock/unlock
- Back door unlock (hatchback)
- Trunk lid unlock (sedan)

Remote control entry function is available when operating the remote buttons.

Component Function Check

INFOID:0000000001530830

1.CHECK FUNCTION

With CONSULT-III

Check BCM "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 the keyfob.

Is the inspection result normal?

YES >> Keyfob is OK.
NO >> Refer to DLK-691, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000001530831

1.CHECK KEYFOB FUNCTION

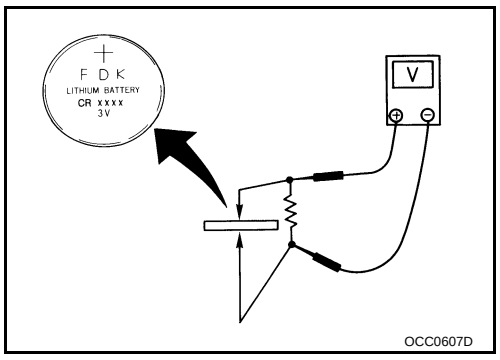
Do doors lock and unlock when using the keyfob buttons?

YES or NO?

YES >> Keyfob is OK.
NO >> GO TO 2.

2.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 >> Key fob battery is OK.
NO >> Replace keyfob battery.

Component Inspection

INFOID:0000000001530832

For battery removal and installation, refer to XX-XX, "*****".

Special Repair Requirement

INFOID:0000000001530833

Refer to CONSULT-III Operation Manual.

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

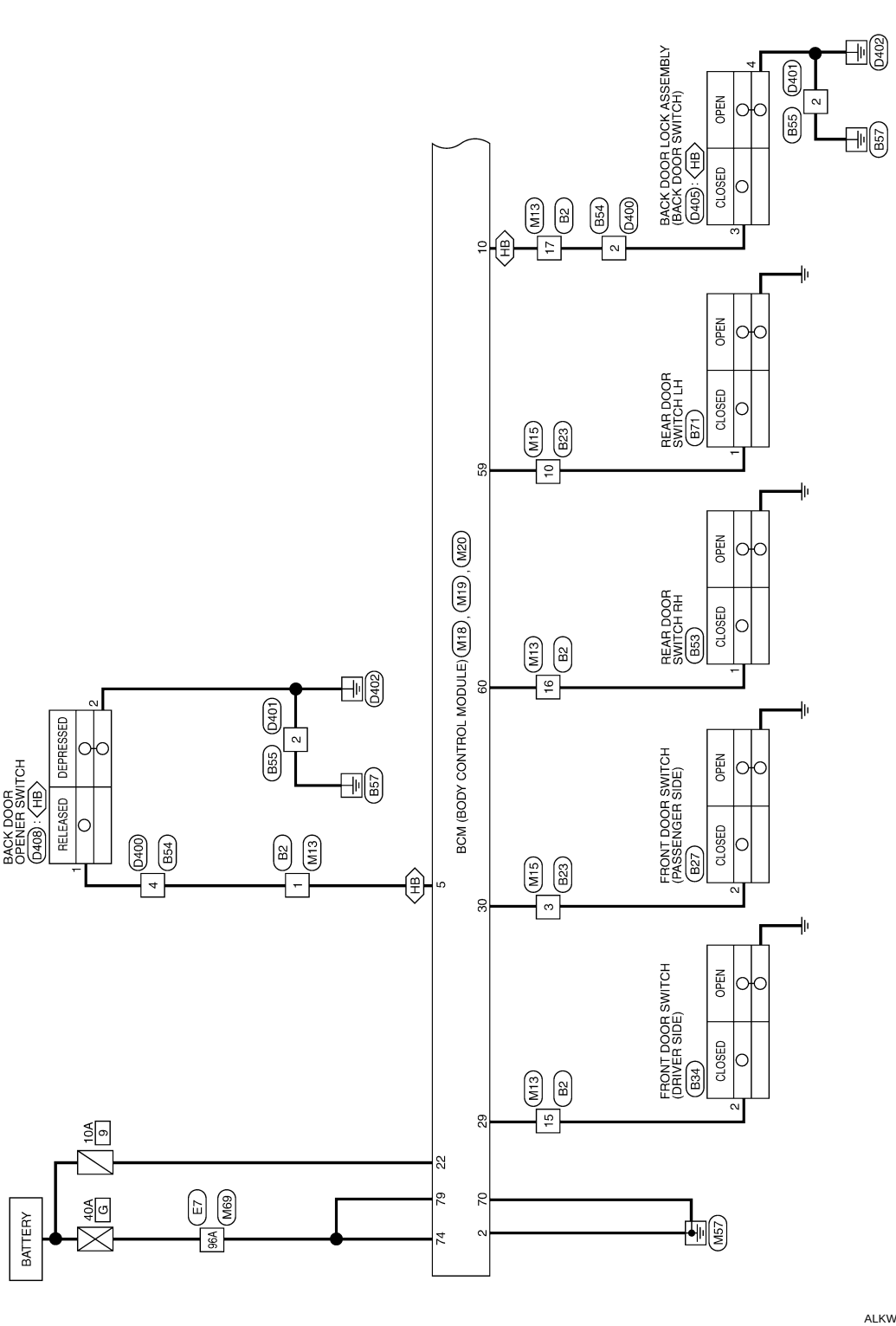
INFOID:0000000001397325

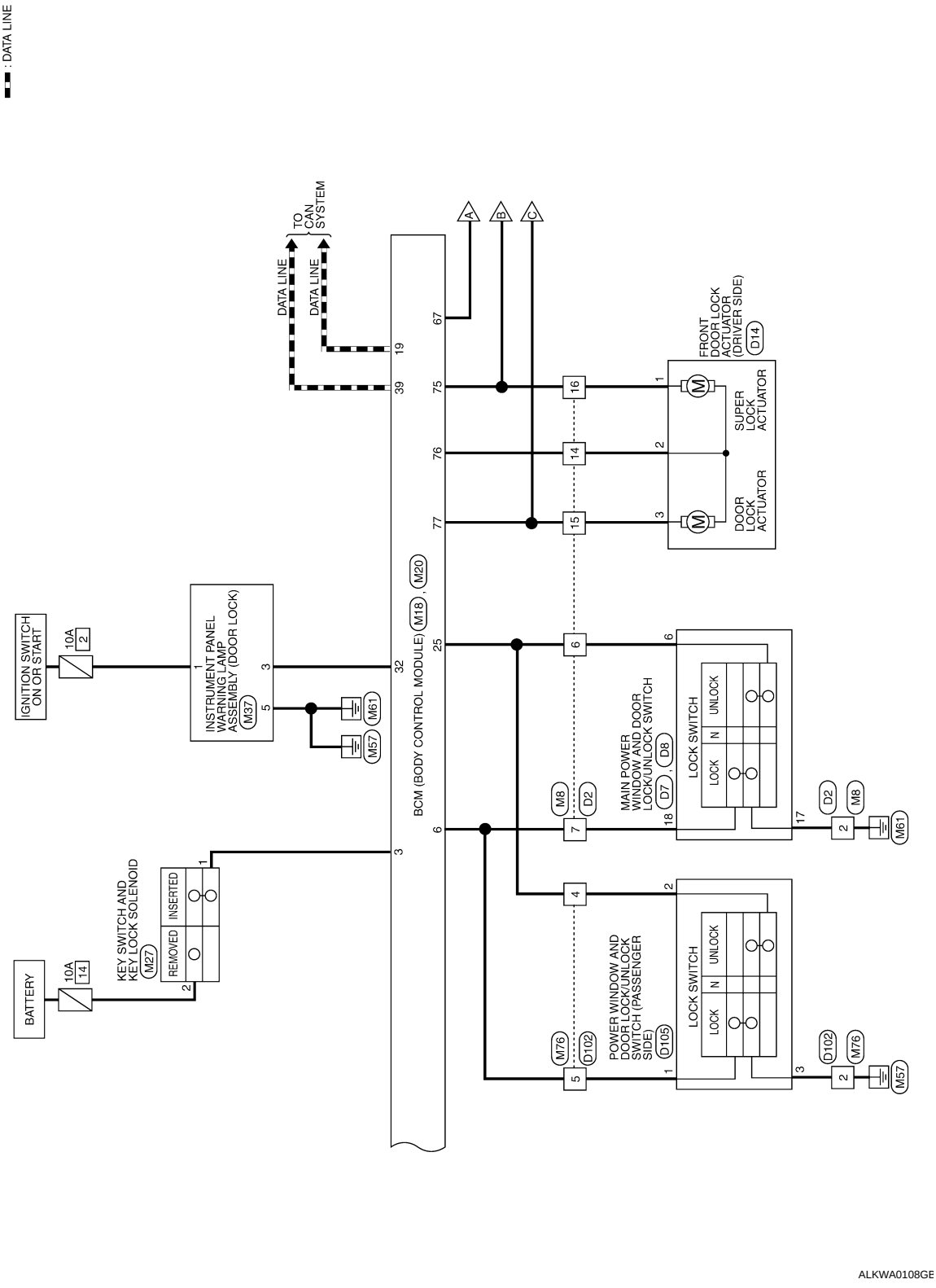
Refer to BCS-35, "Reference Value".

Wiring Diagram - POWER DOOR LOCK SYSTEM -

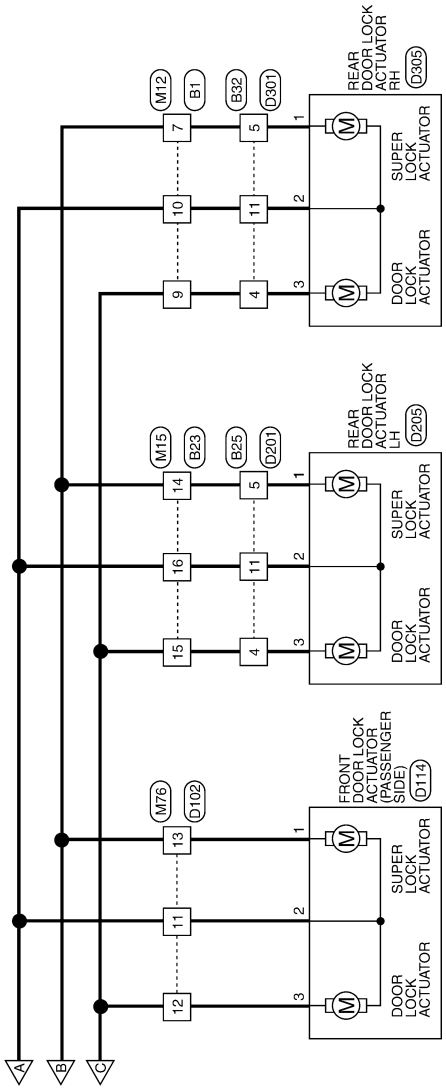
INFOID:0000000001397326

POWER DOOR LOCK SYSTEM - WITHOUT INTELLIGENT KEY, WITH SUPER LOCK





ALKWA0108GE



ALKWA0109GE

POWER DOOR LOCK SYSTEM - WITHOUT INTELLIGENT KEY, WITH SUPER LOCK

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	—
6	L	—
7	GR	—
14	G	—
15	SB	—
16	V	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
7	V	—
9	SB	—
10	G	—

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	—
15	SB	—
16	GR	—
17	Y	—

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

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
3	BR	—
10	O	—
14	V	—
15	SB	—
16	G	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND
3	G	KEY IN SW
5	V	TRUNK OPENER SWITCH
6	GR	CENTRAL LOCK SW
10	Y	DOOR SW BACK
19	L	CAN-H
22	P	BATT SAFETY LINE
25	L	CENTRAL UNLOCK SW
29	BR	DOOR SW DR
30	SB	DOOR SW AS
32	LG	DOOR LOCK STATUS INDICATOR/ALARM TX
39	P	CAN-L

ALKIA1128GB

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

H.S.

52	51	50	49	48	47	46	45	44	43	42	41
64	63	62	61	60	59	58	57	56	55	54	53

Terminal No.	Color of Wire	Signal Name
59	O	DOOR SW RL
60	GR	DOOR SW DR

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

H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
67	G	DOORLOCK2 COMMON
70	B	POWER GND
74	Y	BATT BCM
75	V	SUPERLOCK OUT
76	G	DOORLOCK1 COMMON
77	SB	CDL OUT
79	Y	BATT PW

Connector No.	M27
Connector Name	KEY SWITCH AND KEY LOCK SOLENOID
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	G	—
2	LG	—

Connector No.	M37
Connector Name	INSTRUMENT PANEL WARNING LAMP ASSEMBLY
Connector Color	BLACK

H.S.

1	2	3	4	5

Terminal No.	Color of Wire	Signal Name
1	O	IGN
3	LG	DOOR LOCK IND
5	B	GND

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	—

ALKIA1129GB

Connector No.	M76
Connector Name	WIRE TO WIRE
Connector Color	WHITE

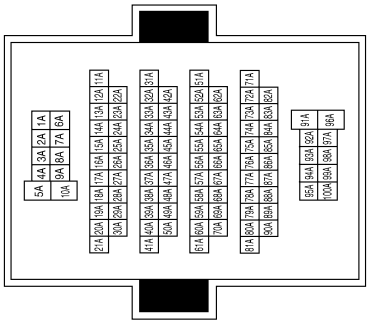
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	—
4	L	—
5	GR	—
11	G	—
12	SB	—
13	V	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
96A	Y	—

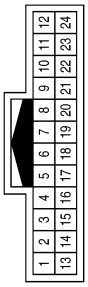
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
7	V	—
9	SB	—
10	G	—

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

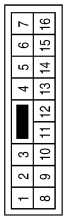
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	—
15	SB	—
16	GR	—
17	P	—

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

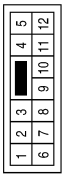


Terminal No.	Color of Wire	Signal Name
3	LG	—
10	W	—
14	V	—
15	SB	—
16	G	—

ALKIA1130GB

Connector No.	B25
Connector Name	WIRE TO WIRE
Connector Color	WHITE

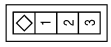
H.S.



Terminal No.	Color of Wire	Signal Name
4	SB	—
5	V	—
11	G	—

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Color	WHITE

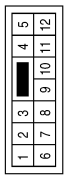
H.S.



Terminal No.	Color of Wire	Signal Name
2	LG	—

Connector No.	B32
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
4	SB	—
5	V	—
11	G	—

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	SB	—

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

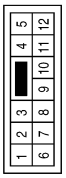
H.S.



Terminal No.	Color of Wire	Signal Name
1	GR	—

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	P	—
4	L	—

ALKIA1131GB

Connector No.	B55
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

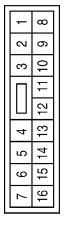
H.S.



Terminal No.	Color of Wire	Signal Name
1	W	—

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

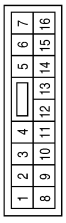
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	—
6	V	—
7	GR	—
14	G	—
15	GR	—
16	V	—

Connector No.	D7
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

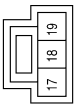
H.S.



Terminal No.	Color of Wire	Signal Name
6	V	DOOR LOCK UNLOCK

Connector No.	D8
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Color	WHITE

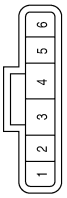
H.S.



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

Connector No.	D14
Connector Name	FRONT DOOR LOCK ACTUATOR (DRIVER SIDE)
Connector Color	BLACK

H.S.

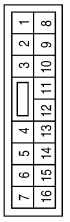


Terminal No.	Color of Wire	Signal Name
1	V	—
2	G	—
3	GR	—

ALKIA1132GB

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

H.S.



Terminal No.	Color of Wire	Signal Name
2	B	—
4	V	—
5	GR	—
11	G	—
12	O	—
13	V	—

Connector No.	D105
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (PASSENGER SIDE)
Connector Color	WHITE

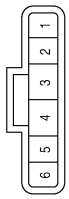
H.S.



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

Connector No.	D114
Connector Name	FRONT DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	V	QQ
2	G	QQ
3	O	QQ

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

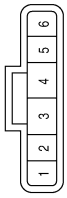
H.S.



Terminal No.	Color of Wire	Signal Name
4	SB	—
5	V	—
11	G	—

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

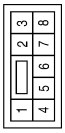
H.S.



Terminal No.	Color of Wire	Signal Name
1	V	QQ
2	G	QQ
3	SB	QQ

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

H.S.

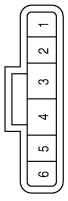


Terminal No.	Color of Wire	Signal Name
4	SB	—
5	V	—
11	G	—

ALKIA1133GB

Connector No.	D305
Connector Name	REAR DOOR LOCK ACTUATOR (PASSENGER SIDE)
Connector Color	BLACK

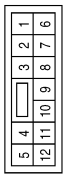
H.S.



Terminal No.	Color of Wire	Signal Name
1	V	QQ
2	G	QQ
3	SB	QQ

Connector No.	D400
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	W	—
4	W	—

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

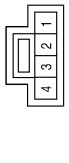
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	D405
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	W	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D408
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	BROWN

H.S.



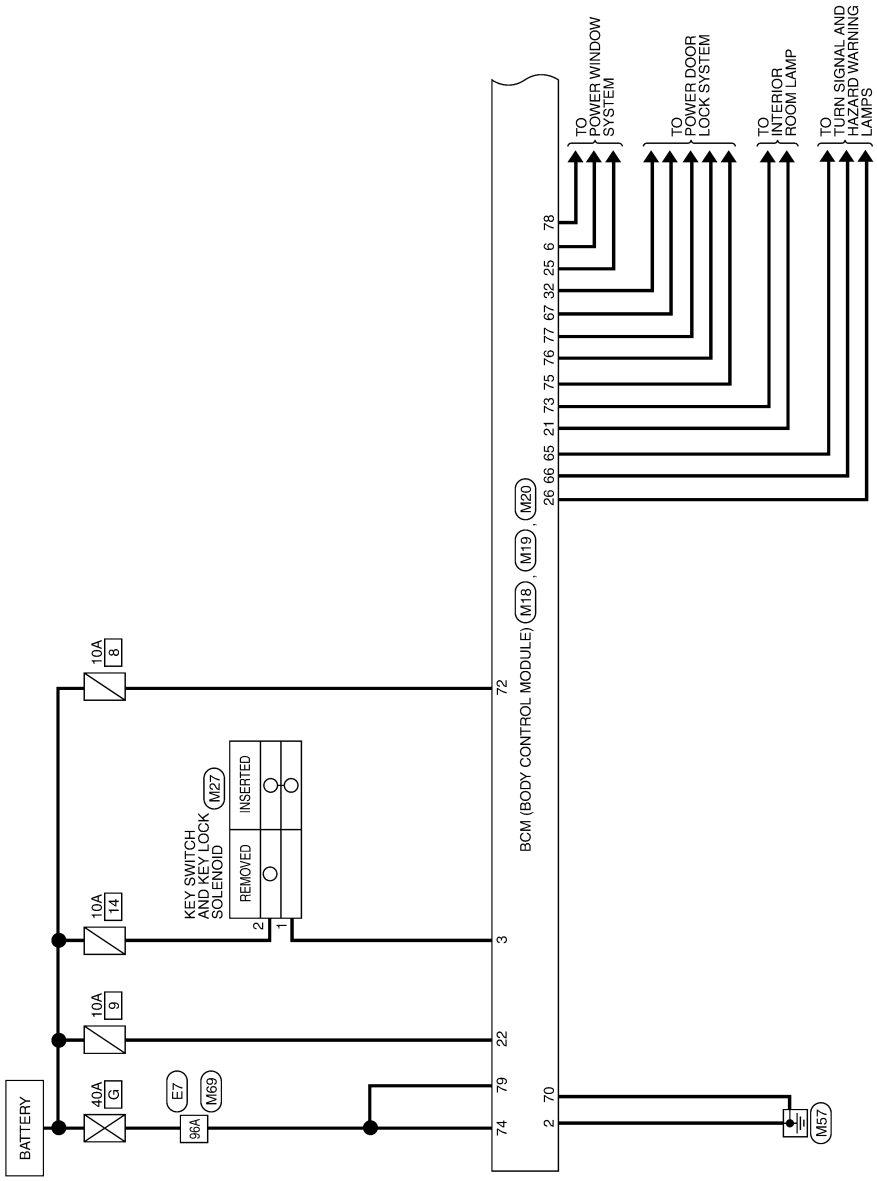
Terminal No.	Color of Wire	Signal Name
1	W	—
2	B	—

ALKIA1134GB

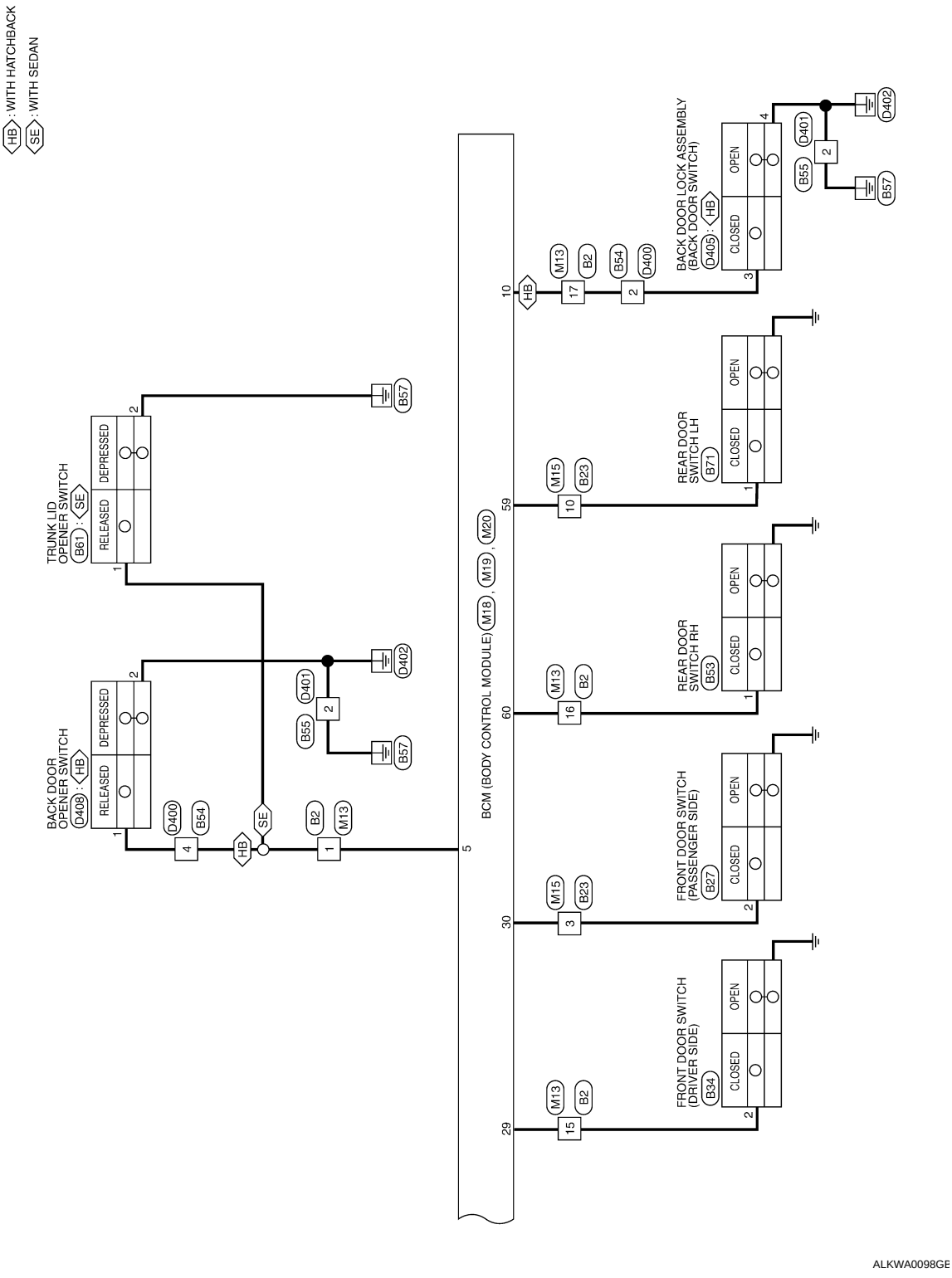
Wiring Diagram - REMOTE KEYLESS ENTRY SYSTEM -

INFOID:0000000001397327

REMOTE KEYLESS ENTRY SYSTEM - WITH SUPER LOCK



ALKWA0097GE


HB : WITH HATCHBACK
SE : WITH SEDAN
BCM (BODY CONTROL MODULE) M18 , M19 , M20
BACK DOOR OPENER SWITCH D408 : HB
TRUNK LID OPENER SWITCH B61 : SE
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH) D409 : HB
REAR DOOR SWITCH LH B71
REAR DOOR SWITCH RH B53
FRONT DOOR SWITCH (PASSENGER SIDE) B27
FRONT DOOR SWITCH (DRIVER SIDE) B34
RELEASED
DEPRESSED
CLOSED
OPEN
ALKWA0098GE

REMOTE KEYLESS ENTRY - WITH SUPER LOCK CONNECTORS

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
1	V	—
15	SB	—
16	GR	—
17	Y	—

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

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
3	BR	—
10	O	—

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND
3	G	KEY IN SW
5	V	TRUNK OPENER SWITCH
6	GR	CENTRAL LOCK SW
10	Y	DOOR SW BACK
21	BR	LOGICAL LIGHTING CONTROL
22	P	BATT SAFETY LINE
25	L	CENTRAL UNLOCK SW
26	L	HAZARD SW
29	BR	DOOR SW DR
30	SB	DOOR SW AS
32	LG	DOOR LOCK STATUS INDICATOR/ALARM TX

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

H.S.

52	51	50	49	48	47	46	45	44	43	42	41
64	63	62	61	60	59	58	57	56	55	54	53

Terminal No.	Color of Wire	Signal Name
59	O	DOOR SW RL
60	GR	DOOR SW DR

ALKIA1104GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
65	V	TURN LAMP LH
66	W	TURN LAMP RH
67	G	DOORLOCK2 COMMON
70	B	POWER GND
72	LG	BATT RL
73	R	ROOM LAMP POWER
74	Y	BATT BCM
76	G	DOORLOCK1 COMMON
77	SB	CDL OUT
78	L	POWER WINDOW SUPPLY
79	Y	BATT PW

Connector No.	M27
Connector Name	KEY SWITCH AND KEY LOCK SOLENOID
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	—
2	LG	—

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	—

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	—

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	—
15	SB	—
16	GR	—
17	P	—

ALKIA1105GB

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Color	WHITE



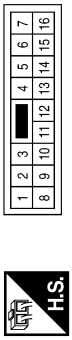
Terminal No.	Color of Wire	Signal Name
2	SB	—

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	LG	—

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE



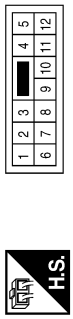
Terminal No.	Color of Wire	Signal Name
3	LG	—
10	W	—

Connector No.	B55
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	P	—
4	L	—

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	GR	—

ALKIA1106GB

Connector No.	B61
Connector Name	TRUNK LID OPENER SWITCH
Connector Color	BROWN

H.S.



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

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

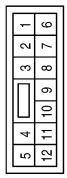
H.S.



Terminal No.	Color of Wire	Signal Name
1	W	—

Connector No.	D400
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
2	W	—
4	W	—

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

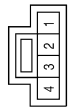
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	—

Connector No.	D405
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	W	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D408
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	BROWN

H.S.



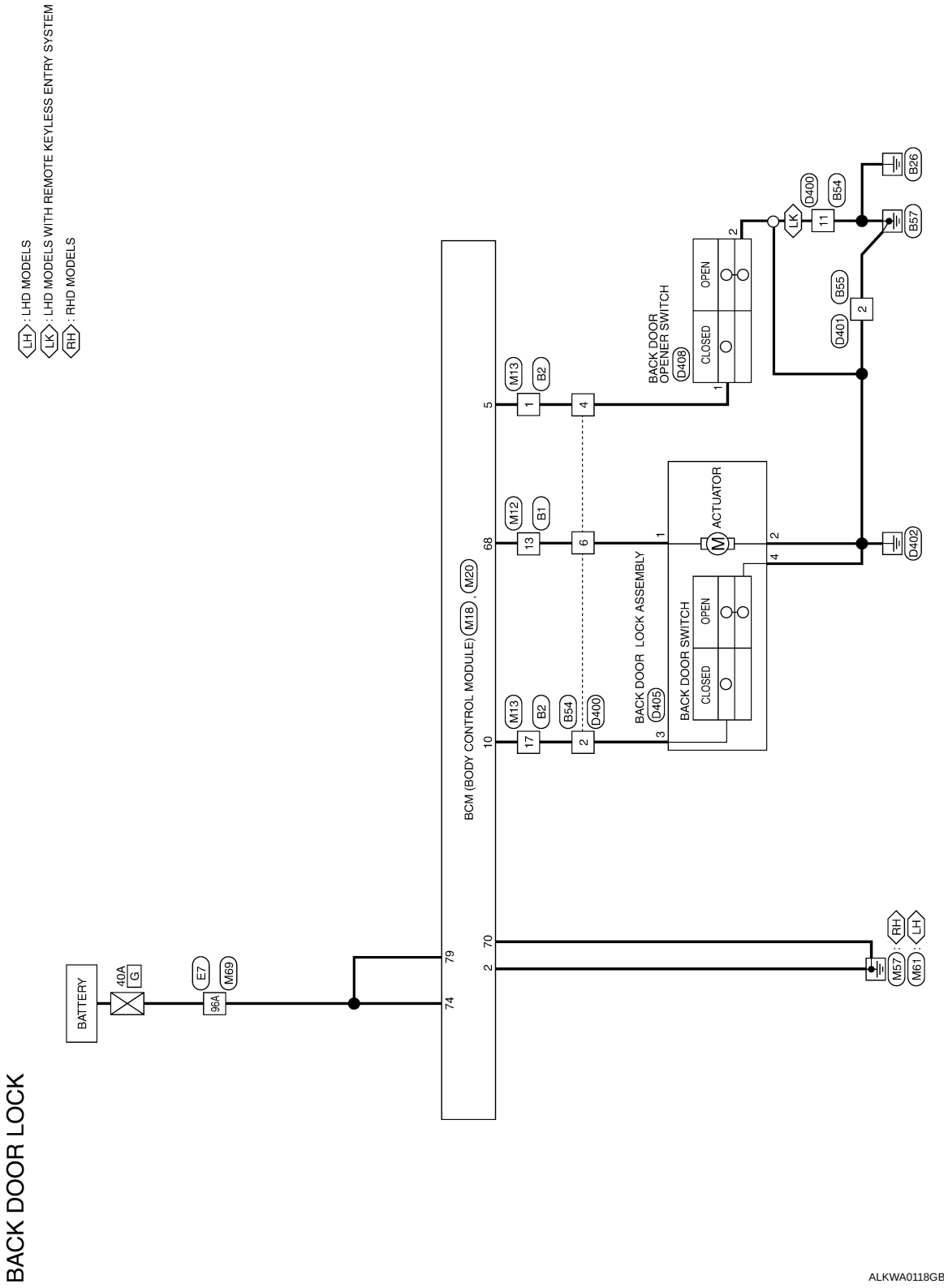
Terminal No.	Color of Wire	Signal Name
1	W	—
2	B	—

ALKIA1107GB

Wiring Diagram - BACK DOOR OPENER SYSTEM -

INFOID:0000000001530840

BACK DOOR LOCK



BACK DOOR LOCK

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	R	–

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1	13
24	23	22	21	20	19	18	17	16	15	14		

Terminal No.	Color of Wire	Signal Name
1	V	–
17	Y	–

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

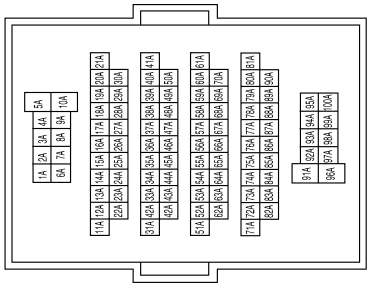
H.S.

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

Terminal No.	Color of Wire	Signal Name
2	B	GND
5	V	TRUNK OPENER SWITCH
10	Y	DOOR SW BACK

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
96A	Y	–

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

H.S.

65	66	67	68	69	70	71	72	73
74	75	76	77	78	79			

Terminal No.	Color of Wire	Signal Name
68	R	TRUNK LID ACTUATOR
70	B	POWER GND
74	Y	BATT BCM
79	Y	BATT PW

ALKIA1152GB

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
96A	Y	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
13	O	–

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	–
17	P	–

Connector No.	B54 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	B54 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	B55
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

ALKIA1153GB

Connector No.	D400 (LHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	P	–
4	L	–
6	O	–
11	B	–

Connector No.	D400 (RHD)
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	W	–
4	W	–
6	W	–
11	B	–

Connector No.	D401
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
2	B	–

Connector No.	D405 (LHD)
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	B	–
3	O	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D405 (RHD)
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	W	–
2	B	–
3	W	BACK DOOR SWITCH
4	B	BACK DOOR SWITCH

Connector No.	D408 (LHD)
Connector Name	BACK DOOR OPENER SWITCH
Connector Color	BROWN

H.S.

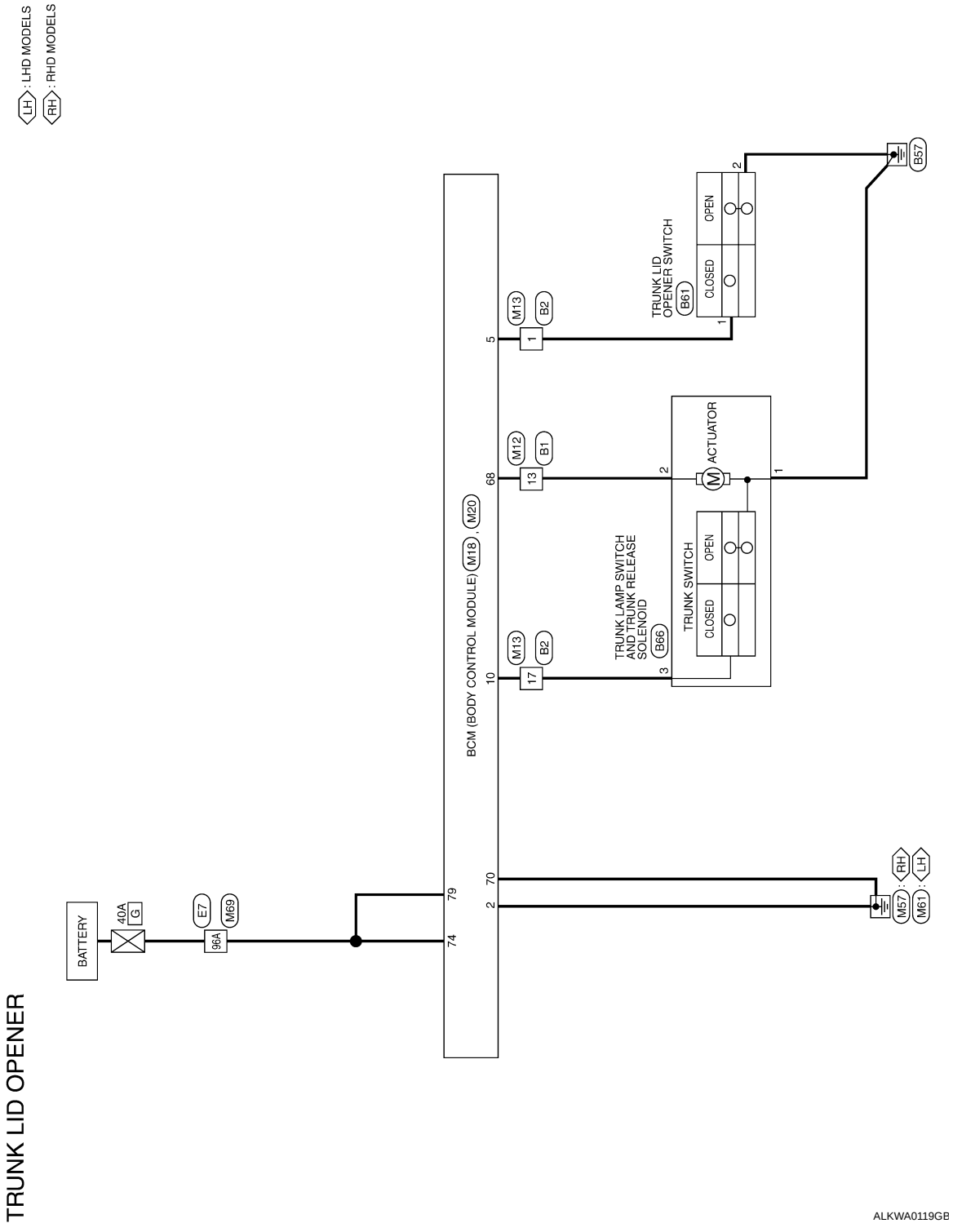
1	2

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

ALKIA1154GB

Wiring Diagram - TRUNK LID OPENER SYSTEM -

INFOID:0000000001530841



TRUNK LID OPENER CONNECTORS

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

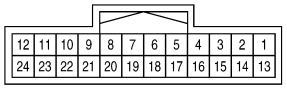
H.S.



Terminal No.	Color of Wire	Signal Name
13	R	—

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Color	WHITE

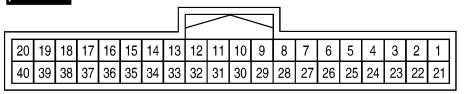
H.S.



Terminal No.	Color of Wire	Signal Name
1	V	—
17	Y	—

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

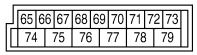
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	GND
5	V	TRUNK OPENER SWITCH
10	Y	DOOR SW BACK

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

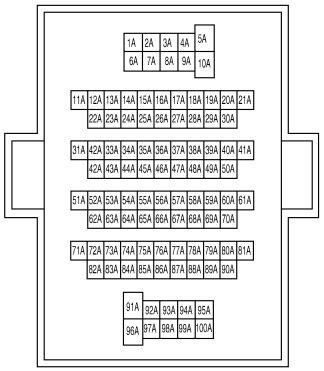
H.S.



Terminal No.	Color of Wire	Signal Name
68	R	TRUNK LID ACTUATOR
70	B	POWER GND
74	Y	BATT BCM
79	Y	BATT PW

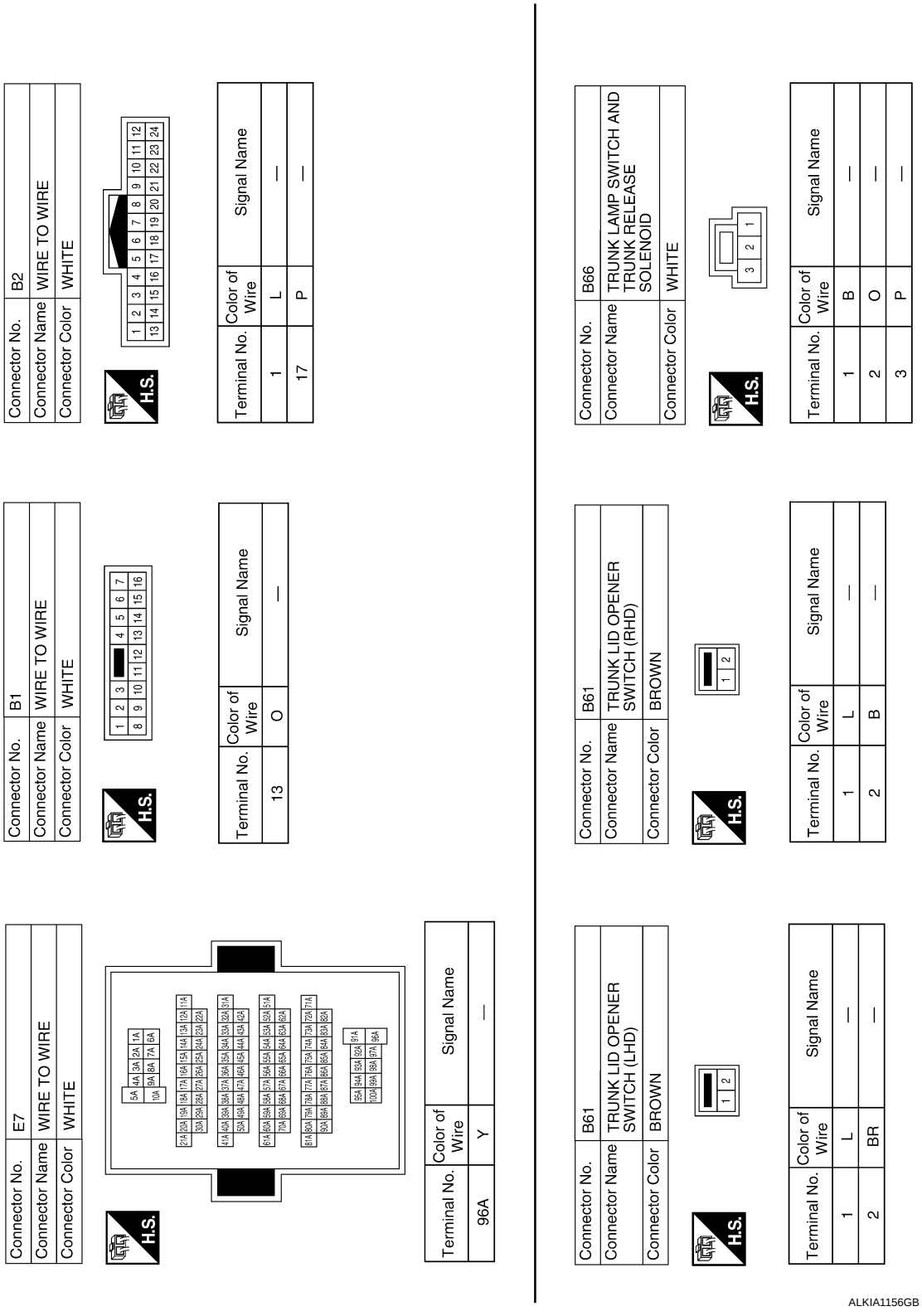
Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
96A	Y	—

ALKIA1155GB



ALKIA1156GB

Fail Safe

INFOID:0000000001397329

Fail-safe index

BCM performs fail-safe control when any DTC listed below is detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC
B2191: DIFFERENCE OF KEY	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC
B2195: ANTI SCANNING	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC
B2196: DONGLE NG	• Inhibits engine cranking • Fuel cut (ECM)	Erase DTC

TURN SIGNAL LAMP CONTROL

BCM detects the turn signal lamp circuit status from the terminal voltage.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

DTC Inspection Priority Chart

INFOID:0000000001397330

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
2	• B2190: NATS ANTENNA AMP • B2191: DIFFERNCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2194: DISCORD BCM-I-KEY • B2195: ANTI SCANNING • B2196: DONGLE NG

DTC Index

INFOID:0000000001397331

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.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 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	TIME		Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	0	1 - 39	—	XX-XX, "*****"
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	XX-XX, "*****"
B2190: NATS ANTENNA AMP	CRNT	PAST	×	XX-XX, "*****"
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	XX-XX, "*****"
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	XX-XX, "*****"

CONSULT display	TIME		Fail-safe	Refer to
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	XX-XX, "*****"
B2195: ANTI SCANNING	CRNT	PAST	×	XX-XX, "*****"
B2196: DONGLE NG	CRNT	PAST	×	XX-XX, "*****"

SYMPTOM DIAGNOSIS

DOOR LOCK FUNCTION SYMPTOMS

DOOR LOCK AND UNLOCK SWITCH

DOOR LOCK AND UNLOCK SWITCH : Symptom Table

INFOID:0000000001397332

DOOR LOCK AND UNLOCK SWITCH OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-610, "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)

- Except driver side, doors are closed.
- Doors are not locked by keyfob.

Symptom Table

Symptom	Diagnosis/service procedure		Reference page
Power door lock does not operate with door lock and unlock switch.	1.	BCM Power supply and ground circuit check.	BCS-30
	2.	Door lock and unlock switch check.	DLK-61
	3.	Door lock actuator (driver side) check	DLK-108
	4.	Intermittent Incident check.	GI
Specific door lock actuator does not operate.	1a.	Driver side door lock actuator check.	DLK-108
	1b.	Passenger side door lock actuator check.	DLK-109
	1c.	Rear LH side door lock actuator check.	DLK-111
	1d.	Rear RH side door lock actuator check.	DLK-113
	1e.	Back door lock actuator (hatchback) check.	DLK-114
	2.	Intermittent Incident check.	GI
Specific door does not open from inside the vehicle.	1a.	Driver side super lock actuator check.	DLK-108
	1b.	Passenger side super lock actuator check.	DLK-109
	1c.	Rear LH side super lock actuator check.	DLK-111
	1d.	Rear RH side super lock actuator check.	DLK-113
	2.	Intermittent Incident check.	GI
Instrument panel warning lamp indicator does not operate.	1.	Instrument panel warning lamp assembly check.	DLK-293
	2.	Intermittent Incident check.	GI
Key reminder function does not operate properly.	1.	Check “ANTI KEY LOCK IN FUNCTION” setting in “WORK SUPPORT”.	DLK-50
	2a.	Driver side door switch check.	DLK-65
	2b.	Passenger side door switch check.	DLK-67
	2c.	Rear LH side door switch check.	DLK-69
	2d.	Rear RH side door switch check.	DLK-71
	2e.	Back door switch (hatchback) check.	DLK-73
	3.	Front door lock actuator LH (door unlock sensor) check.	DLK-104
	4.	Replace BCM.	BCS-57

KEYFOB

KEYFOB : Symptom Table

INFOID:0000000001397333

KEYFOB OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-610, "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)

- Mechanical key is removed from ignition key cylinder.
- Door lock and unlock operation is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
All of the keyfob operations do not operate.	1. Check keyfob battery inspection.	XX-XX, "*****"
	2. Check intermittent incident.	XX-XX, "*****"
Anti-hijack operation does not operate.	1. Check “SECURITY DOOR LOCK SET” setting in “WORK SUPPORT”.	DLK-628
	2. Check Intermittent Incident.	XX-XX, "*****"

BACK DOOR OPEN FUNCTION SYMPTOMS
BACK DOOR OPENER SWITCH
BACK DOOR OPENER SWITCH : Symptom Table

INFOID:0000000001397336

BACK DOOR OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-610, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door opener function does not operate by back door opener switch.	1. Check back door opener switch.	XX-XX, "*****"
	2. Check vehicle speed signal.	XX-XX, "*****"
	3. Check back door opener actuator.	XX-XX, "*****"
	4. Check Intermittent Incident.	XX-XX, "*****"

TRUNK OPEN FUNCTION SYMPTOMS
TRUNK LID OPENER SWITCH
TRUNK LID OPENER SWITCH : Symptom Table

INFOID:0000000001530719

TRUNK LID OPENER FUNCTION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-16, "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)

- Door lock function is normal.
- Vehicle speed is less than 5 km/h (3 MPH).
- All doors are unlocked.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Trunk lid opener function does not operate by trunk lid opener switch.	1. Check trunk lid opener switch.	DLK-101
	2. Check vehicle speed signal.	DLK-149
	3. Check trunk lid opener actuator.	DLK-117
	4. Check intermittent incident.	XX-XX, "*****"
Trunk room lamp switch inoperative.	1. Check trunk room lamp switch.	DLK-94

WARNING FUNCTION SYMPTOMS
BACK DOOR

BACK DOOR : Symptom Table

INFOID:0000000001397337

BACK DOOR OPEN WARNING OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-610, "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)

- Door lock function and back door opener function is normal.

Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Back door open warning does not operate properly.	1. Check back door opener switch.	XX-XX, "*****"
	2. Check intermittent incident.	XX-XX, "*****"

HAZARD REMINDER FUNCTION
HAZARD WARNING LAMP
HAZARD WARNING LAMP : Symptom Table

INFOID:0000000001397338

HAZARD REMINDER OPERATION MALFUNCTION

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to DLK-610, "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)

- “HAZARD LAMP SET” is ON when setting on CONSULT-III.
- Door lock function is normal.

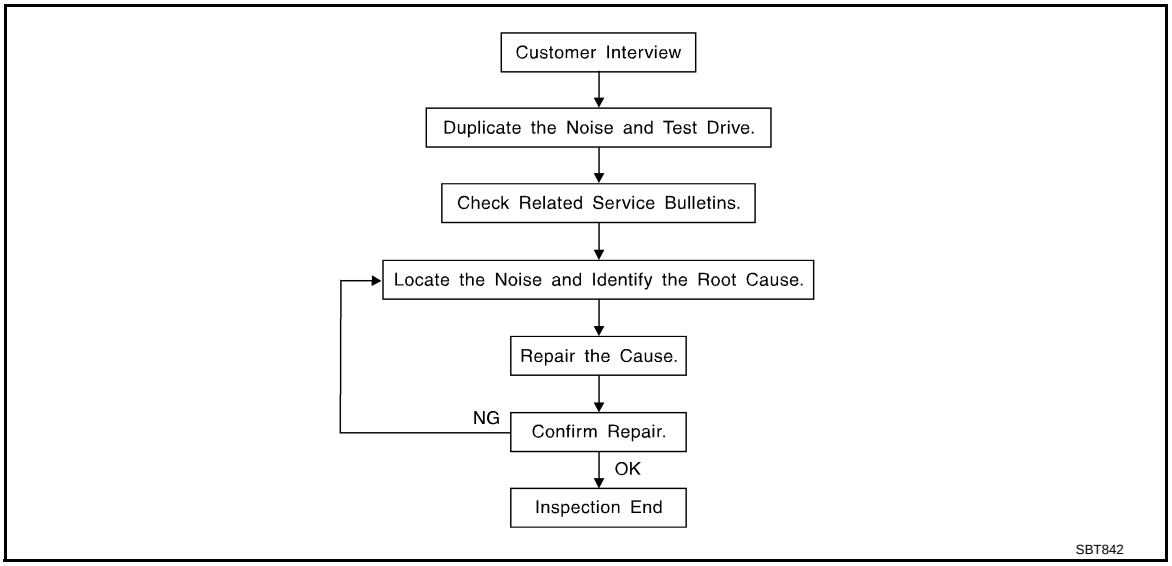
Symptom Table

Symptom	Diagnosis/service procedure	Reference page
Buzzer reminder operation dose not operate properly.	1. Check setting of “HAZARD LAMP SET” with CONSULT-III.	DLK-628
	2. Check intermittent incident.	XX-XX, "*****"

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000001397339



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of the customer's comments; refer to XX-XX, "*****". 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 a test drive 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 (TSB) 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 (Engine Ear or 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 XX-XX, "*****".

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 are 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:

- URETHANE PADS
  Insulates connectors, harness, etc.
- INSULATOR (Foam blocks)
  Insulates components from contact. Can be used to fill space behind a panel.
- INSULATOR (Light foam block)
- FELT CLOTHTAPE
  Used to insulate where movement does not occur. Ideal for instrument panel applications.
  The following materials, not available through NISSAN Parts Department, 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.
  Note: Will only last a few months.
- SILICONE SPRAY
  Use when grease cannot be applied.
- DUCT TAPE
  Use to eliminate movement.

CONFIRM THE REPAIR

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

Inspection Procedure

INFOID:0000000001397340

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. 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 to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.
In addition look for:

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment
3. 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 is 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. 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.

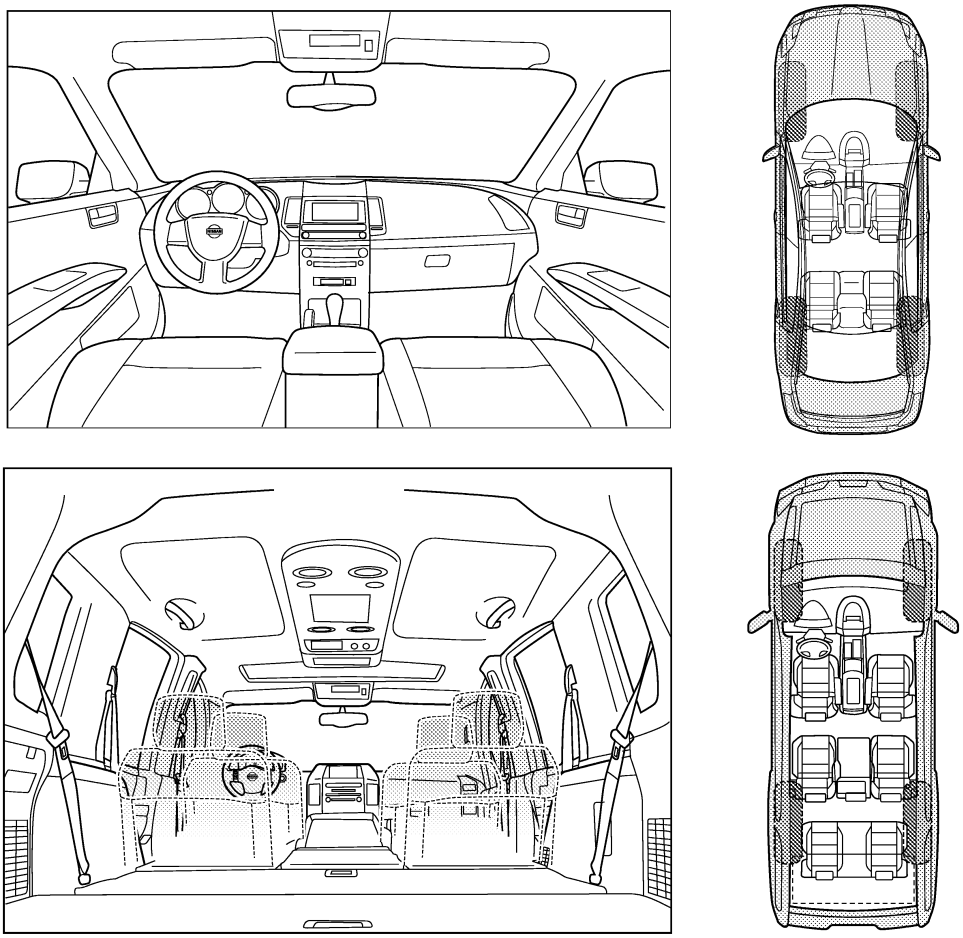
Diagnostic Worksheet

INFOID:0000000001397341

SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

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

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



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

PIIB8740E

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

PIIB8742E

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001530409

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. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

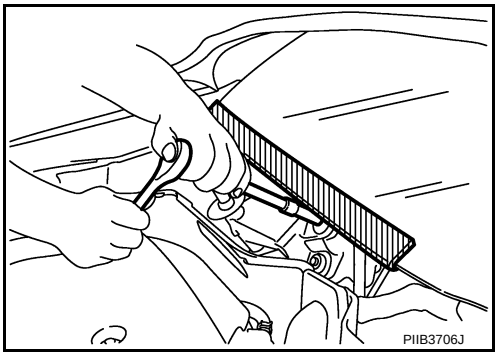
WARNING:

- **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:0000000001397343

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



Steering Wheel Rotation after Battery Disconnect

INFOID:0000000001397344

NOTE:

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

This vehicle is equipped with a push-button ignition switch and a steering lock unit.
If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.
If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.

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

Work

INFOID:0000000001397345

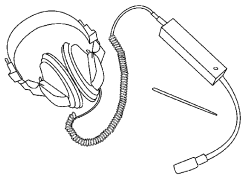
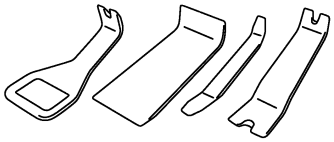
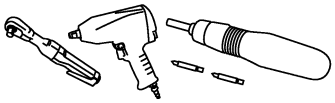
- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operational.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.

PREPARATION

PREPARATION

Commercial Service Tool

INFOID:0000000001536766

Tool name	Description
Engine ear  SIIA0995E	Locating the noise
Remover tool  PIIB7923J	Remove the clips, pawls, and metal clips
Power tool  PIIB1407E	Removing nuts and bolts

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

INFOID:0000000001397347

BASIC INSPECTION

1. CHECK DOOR LOCK AND UNLOCK SWITCH OPERATION

Check door lock and unlock operation by operating door lock and unlock switch.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-718, "DOOR LOCK AND UNLOCK SWITCH : Symptom Table".

2. CHECK KEYFOB OPERATION

Check door lock and unlock operation by operationg lock and unlock button of keyfob.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-719, "KEYFOB : Symptom Table".

3. CHECK AUTO DOOR LOCK OPERATION

Check auto door lock operation. Refer to XX-XX, "*****".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to XX-XX, "*****".

4. CHECK VEHICLE SPEED SENSING AUTO DOOR LOCK OPERATION

Check vehicle speed sensing auto door lock. Refer to XX-XX, "*****"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to XX-XX, "*****".

5. CHECK BACK DOOR OPENER SWITCH OPERATION

Check back door opener operation by operating back door opener switch.

Is the inspection result normal?

YES >> GO TO 6.
NO >> Refer to DLK-720, "BACK DOOR OPENER SWITCH : Symptom Table".

6. CHECK HAZARD REMINDER FUNCTION

Check hazard reminder function by operating the following switches.
- Lock and unlock button of keyfob.

Is the inspection result normal?

YES >> GO TO 7.
NO >> Refer to DLK-723, "HAZARD WARNING LAMP : Symptom Table".

7. CHECK WARNING FUNCTION

Check that warning function operate properly. Refer to DLK-623, "System Description".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Refer to DLK-723, "HAZARD WARNING LAMP : Symptom Table".

8. CHECK OUT

CHECK OUT.

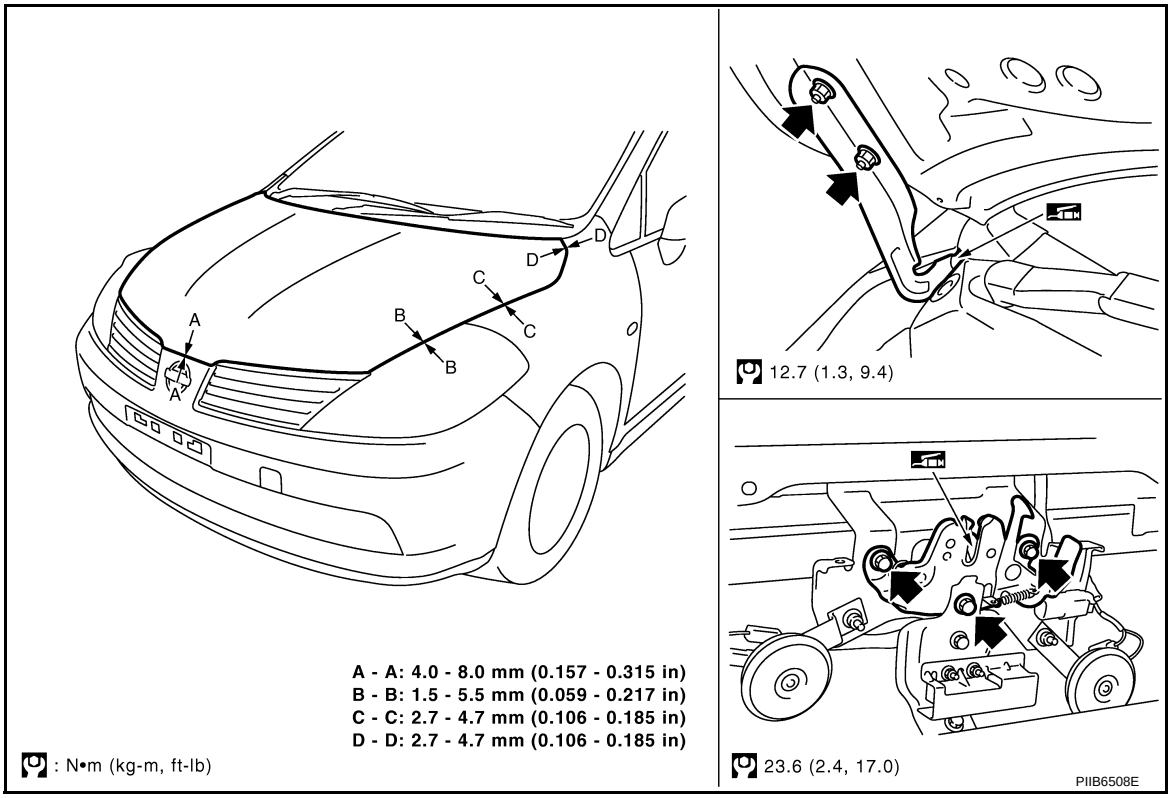
>> INSPECTION END

REMOVAL AND INSTALLATION

HOOD

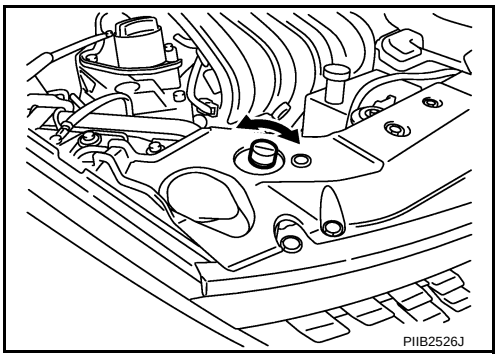
Fitting Adjustment

INFOID:0000000001732053



FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDINAL CLEARANCE ADJUSTMENT

1. Remove the front grille. Refer to EXT-19, "Removal and Installation".
2. Remove hood lock. Rotate bumper rubber to adjust height until hood becomes 1.0 to 1.5 mm lower than the fender.
3. Position hood lock and engage striker. Check hood lock and striker for looseness. Tighten lock bolts to the specified torque.
4. Install the front grille. Refer to EXT-19, "Removal and Installation".



CAUTION:

Adjust the clearance between hood and other parts so that the dimensional difference left and right is as follows.

Hood and headlamp (B - B) : Less than 2.0 mm (0.08 in)
Hood and fender (C - C) : Less than 1.5 mm (0.06 in)
Hood and fender (D - D) : Less than 1.5 mm (0.06 in)

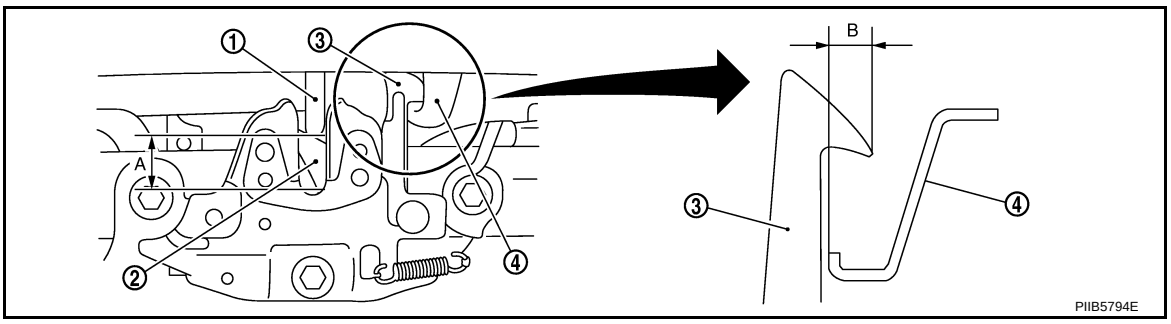
SURFACE MISMATCH ADJUSTMENT

1. Remove the front grille. Refer to EXT-19, "Removal and Installation".
2. Release hood lock, and adjust surface level difference of hood, fender, and headlamp according to the fitting standard dimension, using RH and LH bumper rubbers.

Hood and front bumper (A - A) : -1.3 - 2.7 mm (-0.05 - 0.11 in)
Hood and fender (D - D) : -0.4 - 1.7 mm (-0.16 - 0.07 in)

3. Install and align the hood lock until the center of the striker and the hood lock are vertically aligned.

4. Press the hood lightly with [approx. 29 N (3 kg] of force and adjust A and B as shown.



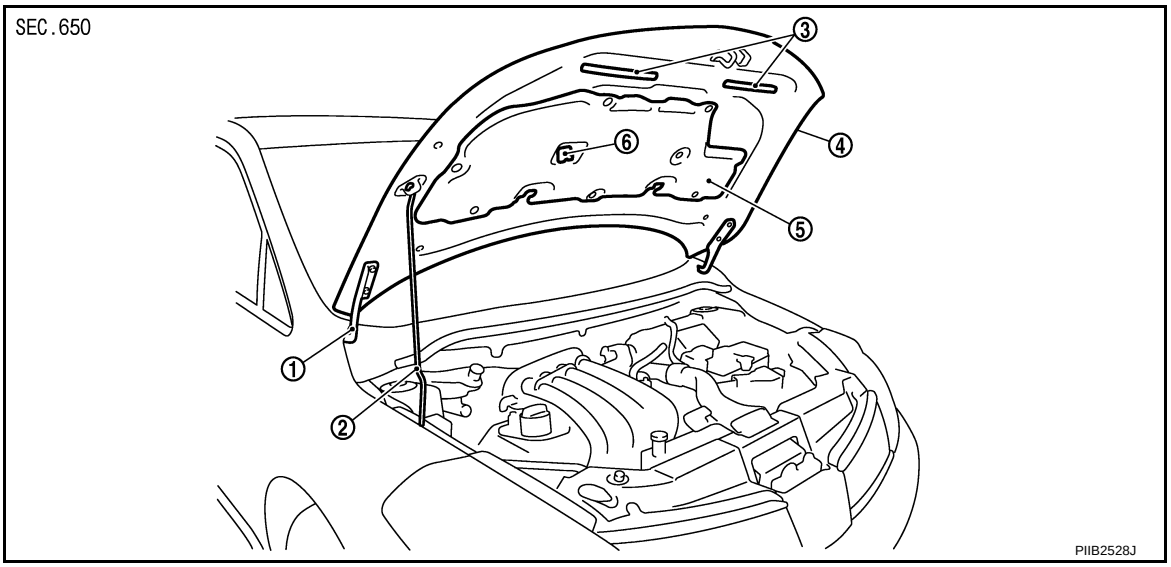
1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

A : 20 mm (0.79 in)
B : 6.8 mm (0.268 in) min.

5. After adjustment tighten lock bolts to the specified torque.
6. Install the front grille. Refer to EXT-19, "Removal and Installation".

Removal and Installation

INFOID:0000000001732054



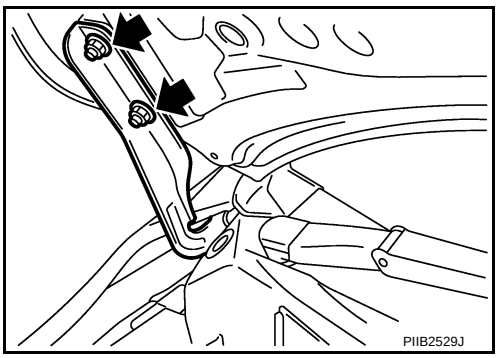
1. Hood hinge
2. Hood stay
3. Radiator core seal rubber
4. Hood assembly
5. Hood insulator
6. Hood stay holder

HOOD ASSEMBLY

Removal

1. Remove hinge nuts on hood and remove hood assembly.
   CAUTION:
   Two technicians should be used to avoid damaging the hood during removal.

   12.7 N·m (1.3 kg-m, 9.4 ft-lb)



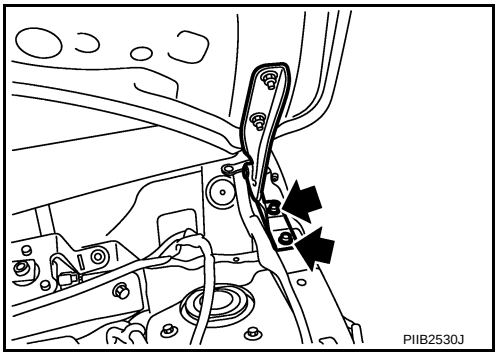
Installation
Installation is in the reverse order of removal.
CAUTION:
- **Before installing hood hinge, apply anticorrosive agent onto the surfaces that make contact with the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-734, "Fitting Adjustment".**

HOOD HINGE

Removal

1. Remove hood assembly. Refer to DLK-735, "Removal and Installation".
2. Remove front fender. Refer to DLK-742, "Removal and Installation".
3. Remove bolts and the hood hinge.

   12.7 N·m (1.3 kg-m, 9.4 ft-lb)

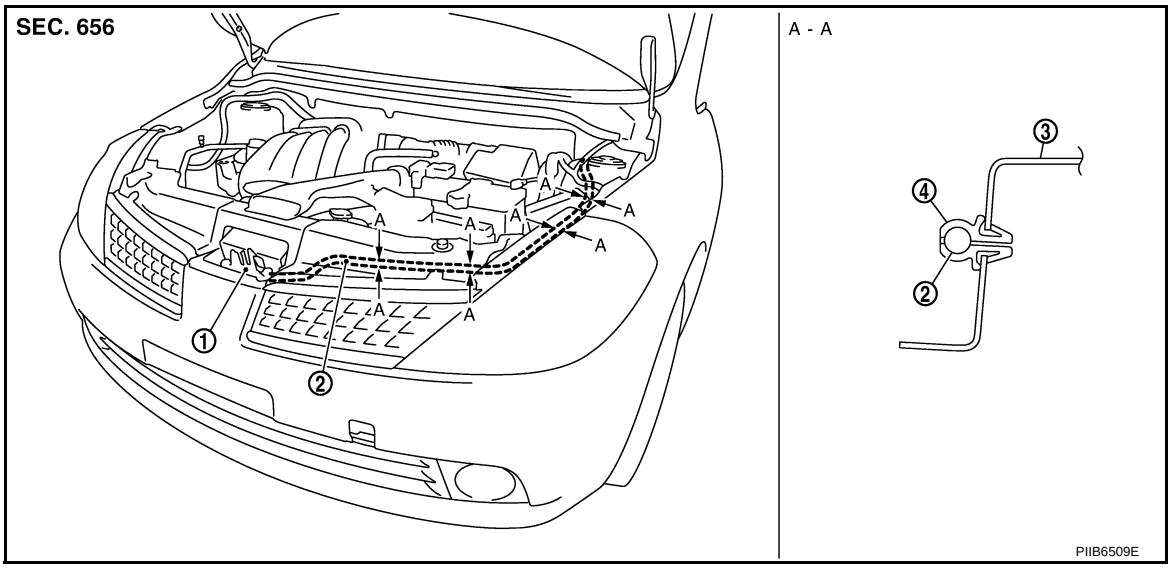


Installation
Installation is in the reverse order of removal.

Removal and Installation of Hood Lock Control

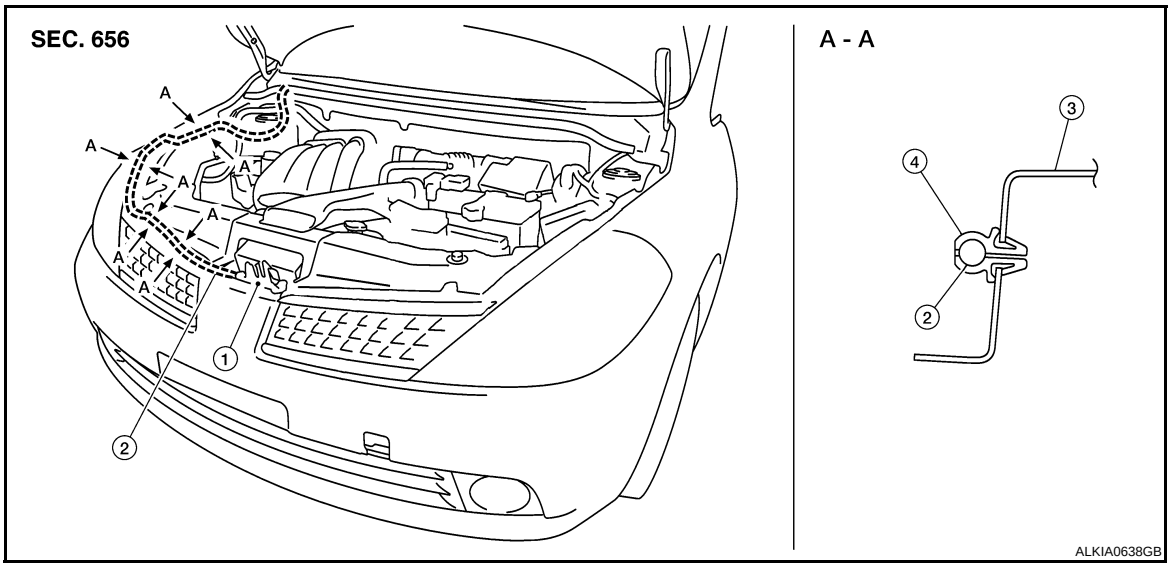
INFOID:0000000001732055

LH Drive



1. Hood lock
2. Hood lock cable
3. Hood ledge upper front
4. Clip

RH Drive



1. Hood lock
2. Hood lock cable
3. Hood ledge upper front
4. Clip

REMOVAL

Hood Lock

1. Remove front grille (LH or RH as necessary). Refer to EXT-19, "Removal and Installation".
2. Remove hood lock bolts.

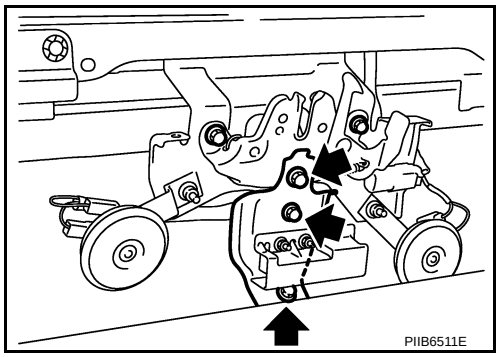
23.6 N·m (2.4 kg-m, 17 ft-lb)

3. Remove hood lock from hood lock cable.

Hood Lock Reinforcement

1. Remove front bumper. Refer to EXT-15, "Removal and Installation - Hatchback" or EXT-17, "Removal and Installation - Sedan".
2. Remove crash zone sensor.
3. Remove bolts, and the hood lock reinforcement.

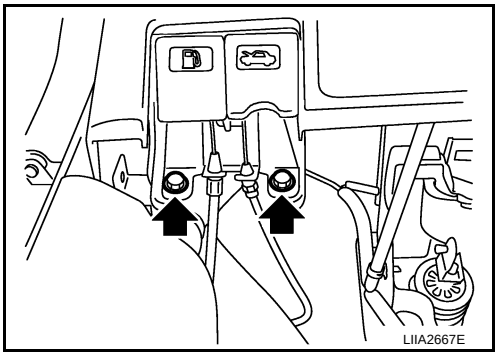
23.6 N·m (2.4 kg-m, 17 ft-lb)



Hood Lock Cable

1. Remove front grille (LH/RH). Refer to EXT-19, "Removal and Installation".
2. Remove fender protector (LH or RH as necessary). Refer to EXT-22, "Removal and Installation".
3. Remove hood lock, and remove hood lock cable from hood lock.
4. Remove radiator core upper support, hood ledge, and then remove hood lock cable.

5. Remove hood opener on bottom left of instrument panel, and then remove hood lock cable.
6. Remove grommet on lower dashboard, and pull out hood lock cable from passenger room side.
   CAUTION:
   While pulling the cable, be careful not to damage (peel) hood opener cable outer surface on edges of body through hole.



INSTALLATION

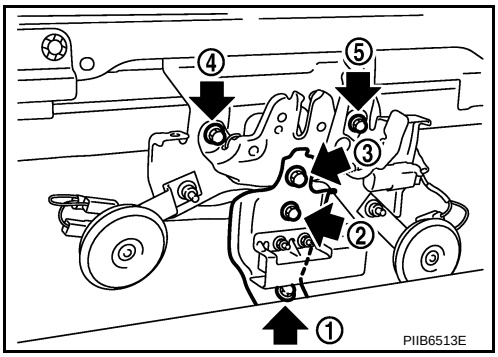
Installation is in the reverse order of removal.

- Perform hood fitting adjustment. Refer to DLK-734, "Fitting Adjustment".

Hood Lock Reinforcement

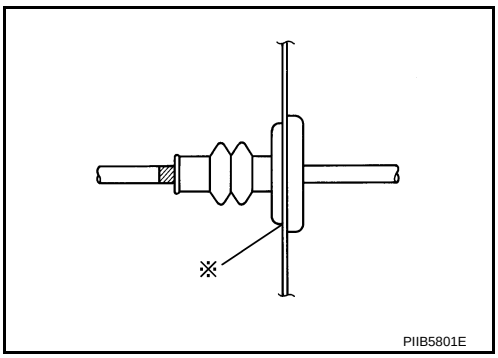
When installing hood lock reinforcement, loosen hood bolts, and then tighten bolts in the order as shown.

23.6 N·m (2.4 kg-m, 17 ft-lb)

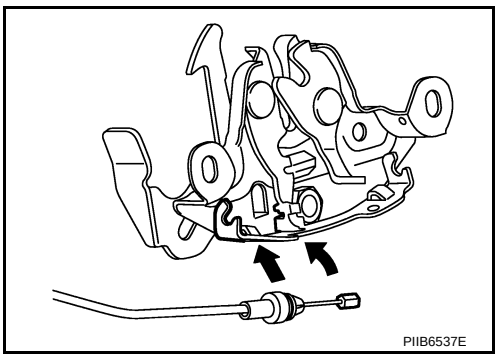


Hood Lock Cable

1. Pull the hood lock cable through the panel hole to the engine compartment.
   CAUTION:
   Be careful not to bend the cable too much, keeping the radius 100 mm (3.94 in) or more.
2. Check that the cable is not offset from the positioning grommet, and push the grommet into the panel hole securely.
3. Apply the sealant around the grommet (at * mark).



4. Install cable securely to lock.
5. After installing, check hood lock adjustment and hood opener operation.

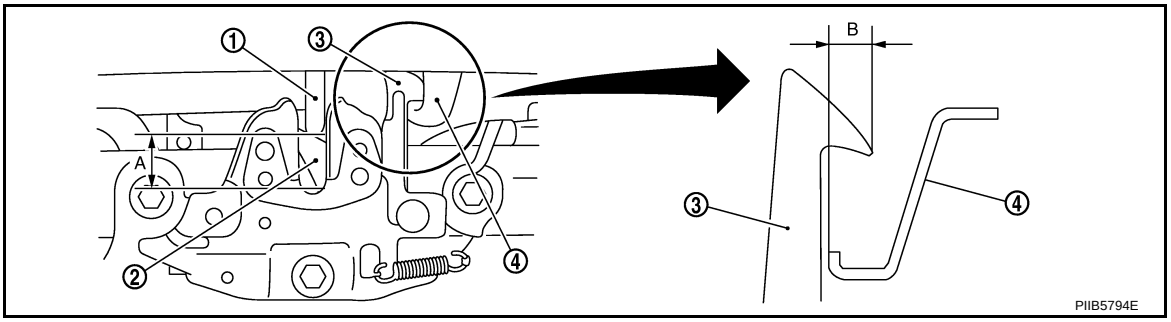


Hood Lock Control Inspection

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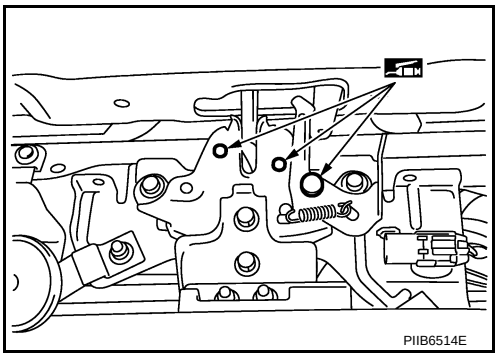
CAUTION:
If the hood lock cable is bent or deformed, replace it.

1. Check that the secondary latch is properly engaged with the secondary striker (B: 6.8 mm (0.268 in) with hood's own weight.



1. Hood striker
2. Primary latch
3. Secondary striker
4. Secondary latch

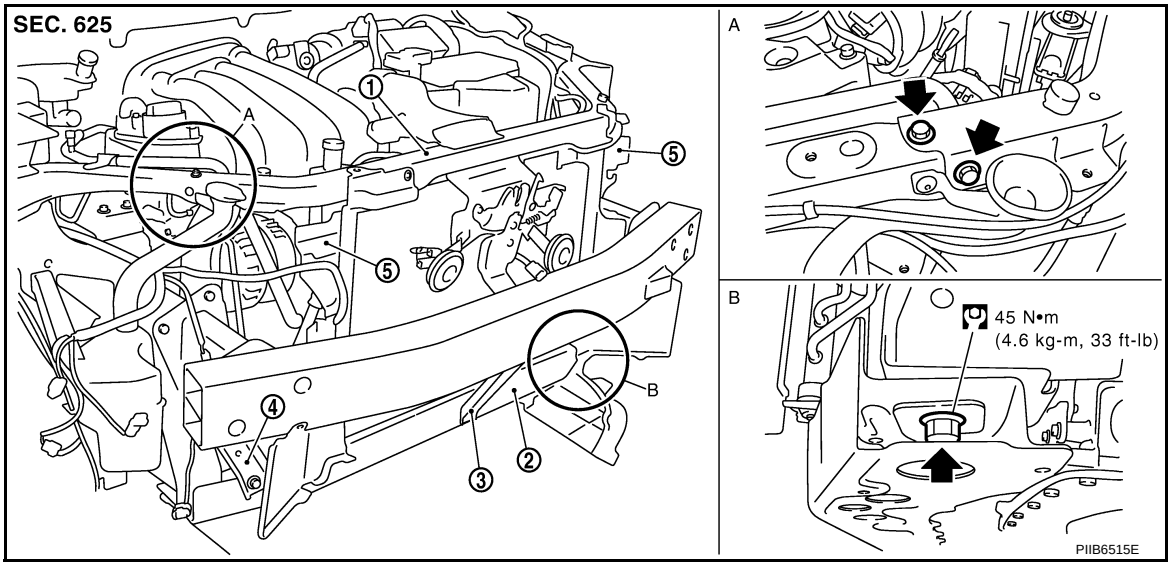
2. While operating the hood release handle, carefully check that the front end of the hood is raised by approx. 20 mm (0.79 in). Also check that the hood release handle returns to the original position.
3. Check that the secondary hood release operates at 29.4 N (3.0 kg) or below.
4. Confirm static closing force of the hood is 343 – 441 N·m (35 – 44 kg-m).
5. Check the hood lock lubrication condition. If necessary, apply “body grease” to the points as shown.



RADIATOR CORE SUPPORT

Removal and Installation

INFOID:0000000001732057



1. Radiator core support upper
2. Radiator core support lower
3. Radiator core support lower stay
4. Radiator core support side stay
5. Air guide

REMOVAL

Radiator Core Support Upper

1. Remove the air duct. Refer to EM-27, "Removal and Installation" (HR16DE), EM-154, "Removal and Installation" (MR18DE), or EM-269, "Removal and Installation" (K9K).
2. Remove the headlamp (LH/RH). Refer to EXL-84, "Removal and Installation" .
3. Remove the hood lock assembly, and remove hood lock cable. Refer to DLK-736 .
4. Remove the air guide and hood lock cable clip.
5. Remove the washer tank inlet. Refer to WW-64, "Removal and Installation" .
6. Remove the radiator core support upper.

Radiator Core Support Lower

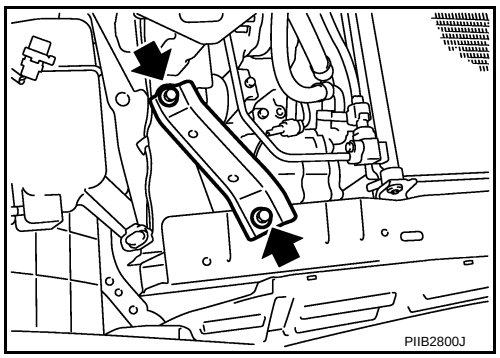
1. Remove the air duct. Refer to EM-27, "Removal and Installation" (HR16DE), EM-154, "Removal and Installation" (MR18DE), or EM-269, "Removal and Installation" (K9K).
2. Remove the front bumper. Refer to EXT-13, "Removal and Installation" .
3. Remove the headlamp (LH/RH). Refer to EXL-84, "Removal and Installation" .
4. Remove the hood lock assembly, and remove hood lock cable. Refer to DLK-736 .
5. Remove the air guide and hood lock cable mounting clip.
6. Remove the front bumper reinforcement. Refer to EXT-13, "Removal and Installation".
7. Remove the radiator core lower stay.

24.5 N·m (2.5 kg-m, 18 ft-lb)

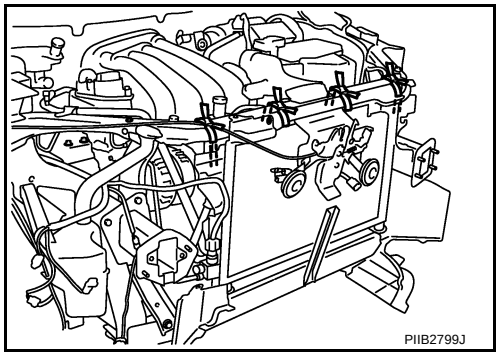
8. Remove the undercover.

9. Remove radiator core support lower side stay.

55.0 N·m (5.6 kg-m, 41 ft-lb)



10. Tie a cord to all radiator core upper supports of the radiator and condenser.
NOTE:
To prevent the compressor and radiator from being dropped when the radiator core lower support is removed.
11. Remove the bolts, and lower radiator core lower supports.
12. Remove the radiator core lower supports.



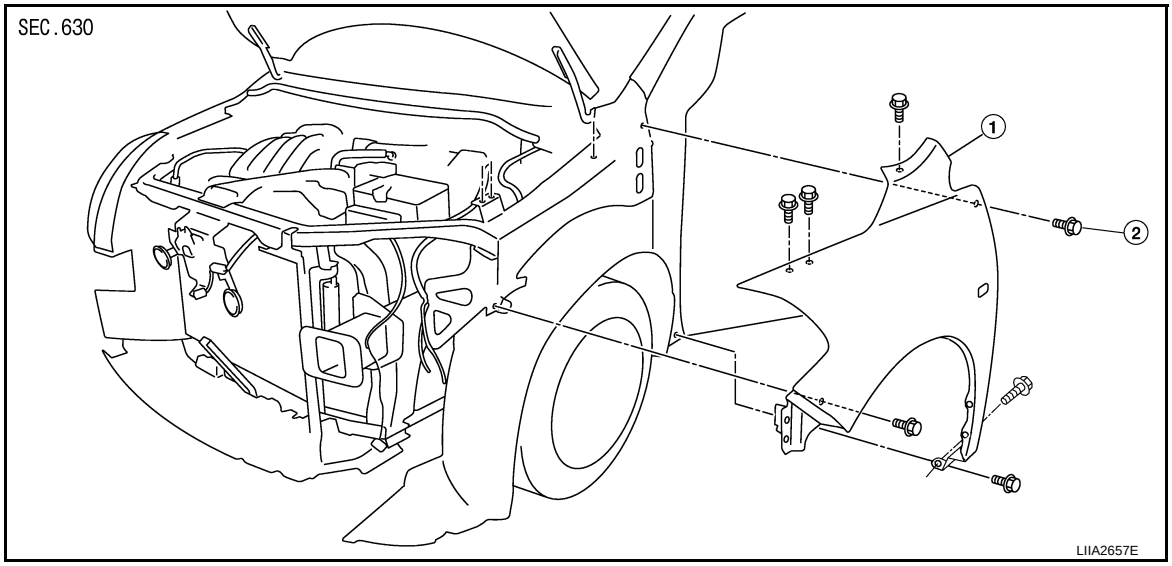
INSTALLATION

Installation is in the reverse order of removal.

FRONT FENDER

Removal and Installation

INFOID:0000000001732058



1. Front fender
2. Bolt (LH 7 bolts required) (RH 8 bolts required)

REMOVAL

1. Remove the headlamp assemblies. Refer to EXL-84, "Removal and Installation".
2. Remove the cowl top cover (LH/RH). Refer to EXT-20, "Removal and Installation".
3. Remove the front fender protector. Refer to DLK-742, "Removal and Installation".
4. Remove the bolt and the front fender.

CAUTION:
While removing use a shop cloth to protect the vechicle body from damage.

INSTALLATION

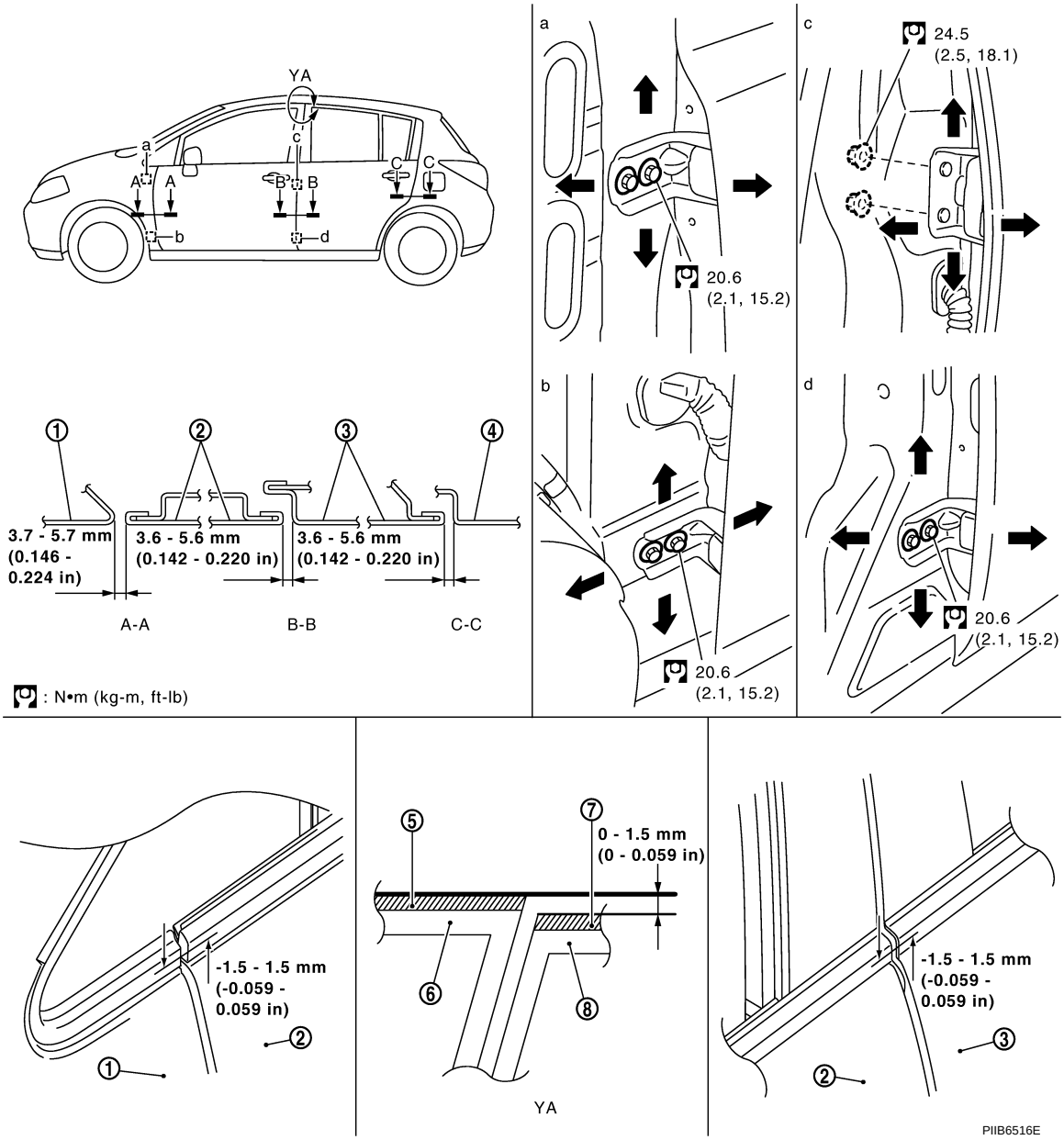
Installation is in the reverse order of removal.

CAUTION:
- **After installing, apply touch-up paint onto the head of the front fender bolts.**
- **After installing, check front fender adjustment. Refer to DLK-734, "Fitting Adjustment" and DLK-743, "Fitting Adjustment".**

DOOR

Fitting Adjustment

INFOID:0000000001732059



1. Front fender
2. Front door outer
3. Rear door outer
4. Rear fender
5. Front door weatherstrip
6. Front door sash
7. Rear door weatherstrip
8. Rear door sash

FRONT DOOR

Longitudinal Clearance and Surface Height Adjustment at Front End

Access from inside the fender to loosen the hinge bolts. Raise the front door at rear end to adjust.

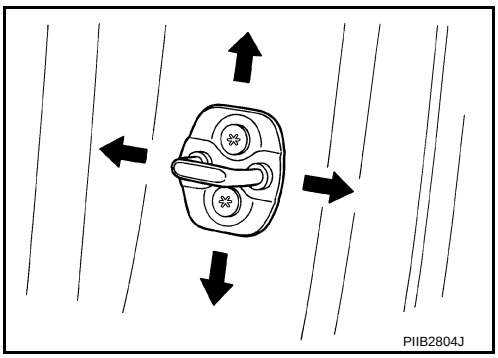
Surface Height Adjustment

Loosen the front door bolts, and adjust the surface height difference of fender and front door according to the fitting standard dimension.

Striker Adjustment

1.

16.7 N·m (1.7 kg-m, 12 ft-lb)



REAR DOOR

Longitudinal Clearance and Surface Height Adjustment at Front End

1. Remove the center pillar upper and lower garnishes. Refer to INT-20, "Removal and Installation".
2. Access from inside the vehicle to loosen the hinge nuts. Open the rear door, and raise the rear door at rear end to adjust.

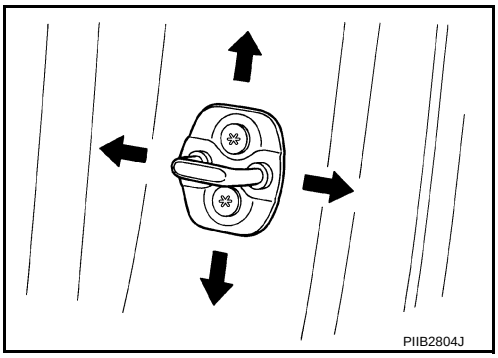
Surface Height Adjustment

Loosen the front door striker bolts and rear door hinge nuts, and adjust the surface height difference of front and rear doors according to the fitting standard dimension.

Striker Adjustment

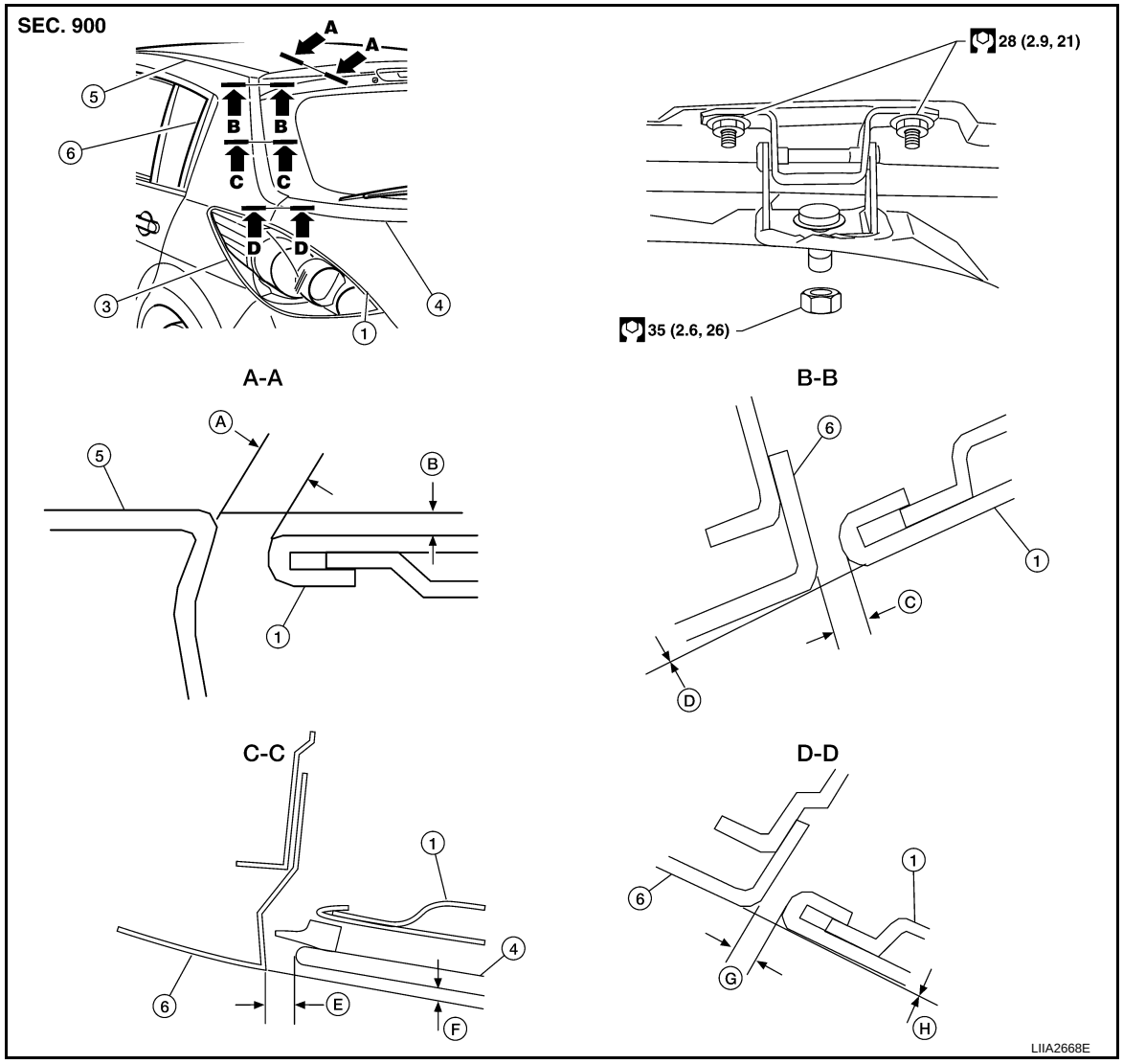
1.

16.7 N·m (1.7 kg-m, 12 ft-lb)



BACK DOOR

Longitudinal Clearance and Surface Height Adjustment



1. Back door assembly
2. Back door hinge
3. Tail lamp assembly
4. Back window glass
5. Roof
6. Rear pillar

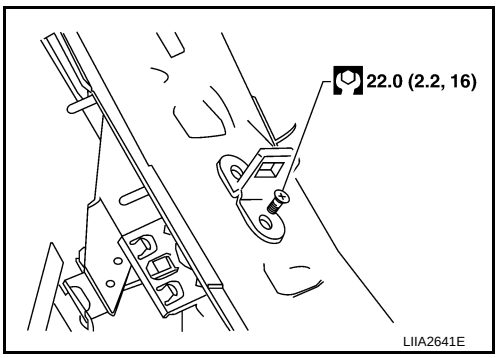
A. 6.0 ± 1.0 mm (0.24 ± 0.04 in)
B. -0.5 ± 1.0 mm (-0.02 ± 0.04 in)
C. 5.0 ± 1.2 mm (0.20 ± 0.05 in)
D. 0.0 ± 1.5 mm (0.0 ± 0.06 in)
E. 5.0 ± 2.3 mm (0.20 ± 0.9 in)
F. 2.7 +1.6 -2.1 mm (0.11 + 0.06 - 0.08 in)
G. 5.0 ± 1.2 mm (0.20 ± 0.05 in)
H. 0.0 ± 1.5 mm (0.0 ± 0.06 in)

1. Open and support the back door.
2. Slightly loosen the hinge nuts.
3. Reposition the door as necessary and tighten the nuts.
4. Confirm the adjustment. Repeat as necessary to obtain the desired fit.

Striker Adjustment

1.

Striker bolts **20 N·m (2.2 kg-m, 16 ft-lb)**



Removal and Installation

INFOID:0000000001732060

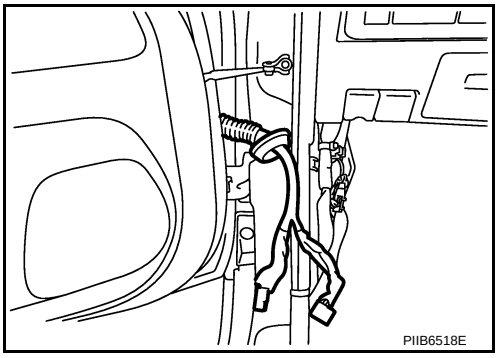
FRONT DOOR

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-743, "Fitting Adjustment".**
- **After installing, apply touch-up paint onto the head of the hinge nuts.**
- **Check the hinge rotating part for lubrication. If necessary, apply “body grease”.**
- **Operate with two workers, because of its heavy weight.**
- **Check front door open/close operation after installation.**

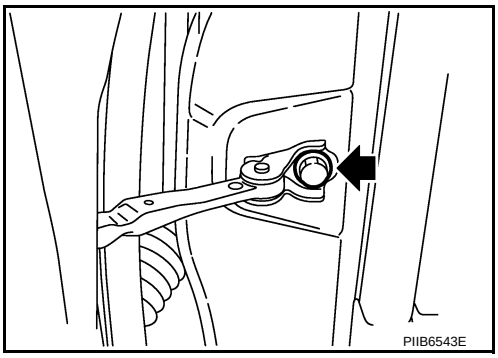
Removal

1. Remove dash side finisher. Refer to INT-20, "Removal and Installation".
2. Disconnect the front door harness connectors.
3. Remove the front door harness grommet, and then remove the harness from the vehicle.



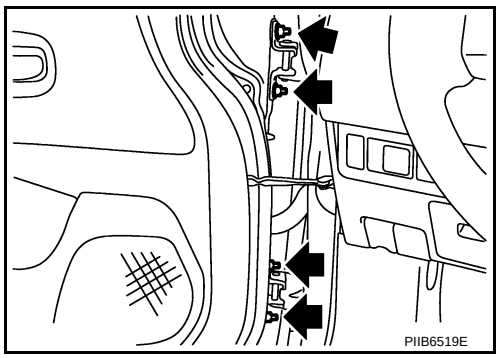
4. Remove the check link bolt.

14.7 N·m (1.5 kg-m, 11 ft-lb)



5. Remove the hinge nuts and then the door assembly.

24.5 N·m (2.5 kg-m, 18 ft-lb)



Installation

Installation is in the reverse order of removal.

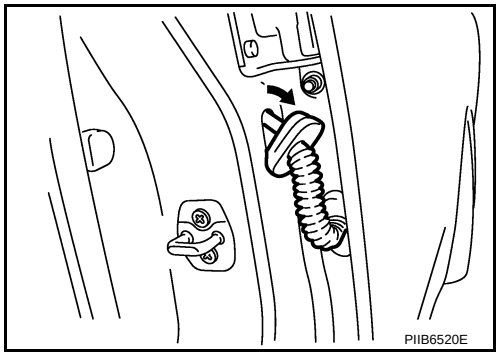
REAR DOOR

CAUTION:

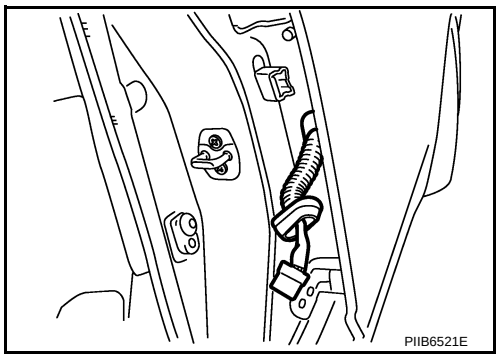
- **When removing and installing the rear door assembly, support the door with a jack and cloth to protect the door and body.**
- **When removing and installing rear door assembly, be sure to carry out the fitting adjustment. Refer to DLK-743, "Fitting Adjustment".**
- **After installing, apply touch-up paint onto the head of the hinge nuts.**
- **Check the hinge rotating part for poor lubrication. If necessary, apply “body grease”.**
- **Operate with two workers, because of its heavy weight.**
- **Check rear door open/close operation after installation.**

Removal

1. Remove the rear door harness grommet.

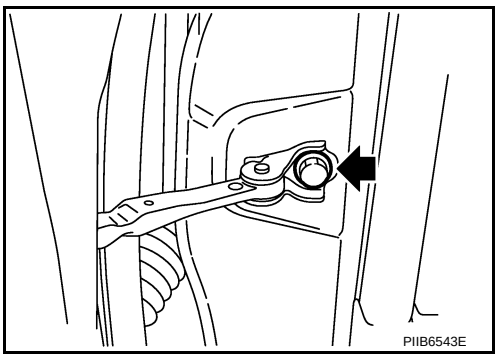


2. Disconnect the rear door harness connector.



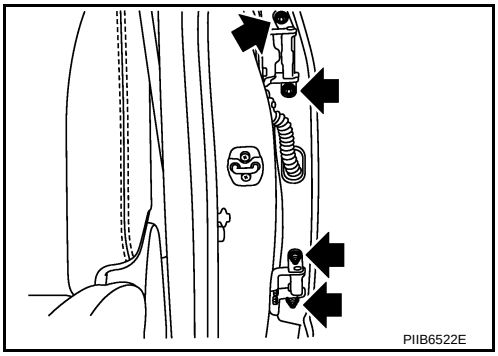
3. Remove the check link bolt.

14.7 N·m (1.5 kg-m, 11 ft-lb)



4. Remove the hinge nuts and the door assembly.

24.5 N·m (2.5 kg-m, 18 ft-lb)

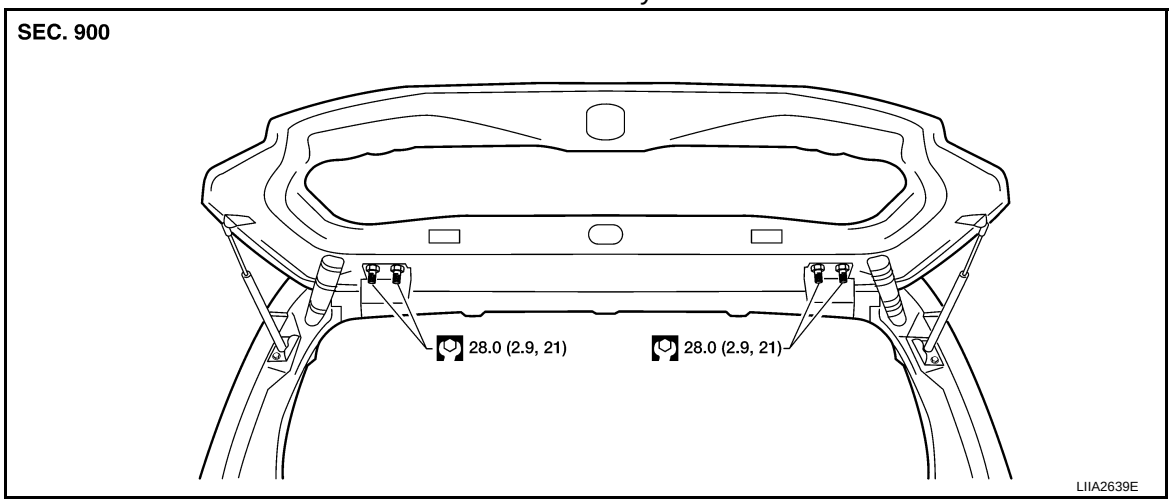


Installation
Installation is in the reverse order of removal.

BACK DOOR

Removal

1. Remove the back door glass. Refer to GW-18, "Removal and Installation".
2. Remove the back door lock assembly. Refer to DLK-757, "Removal and Installation".
3. Remove the back door wire harness.
4. Remove the rear washer nozzle and hose from the back door. Refer to WW-80, "Removal and Installation".
5. Support the back door.
   CAUTION:
   Two technicians should be used to avoid damaging the back door during removal.
6. Remove the back door stays.
7. Remove the door side nuts and the back door assembly.



Installation
Installation is in the reverse order of removal.
- Align the back door. Refer to DLK-743, "Fitting Adjustment".

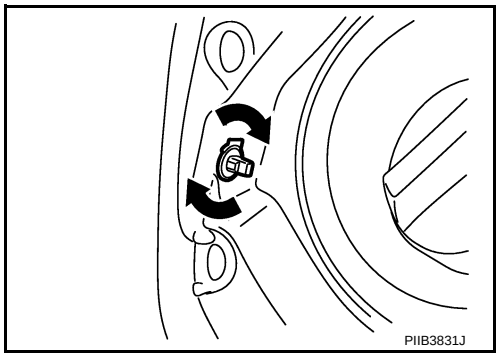
FUEL FILLER LID OPENER

Removal and Installation of Fuel Filler Lid Opener

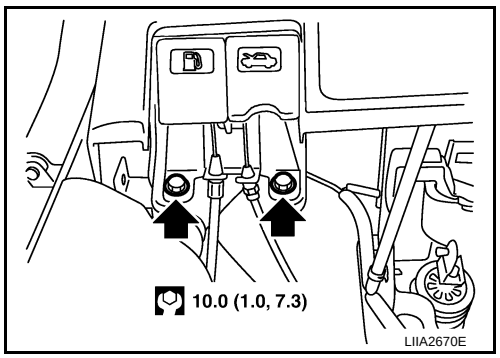
INFOID:0000000001732061

REMOVAL

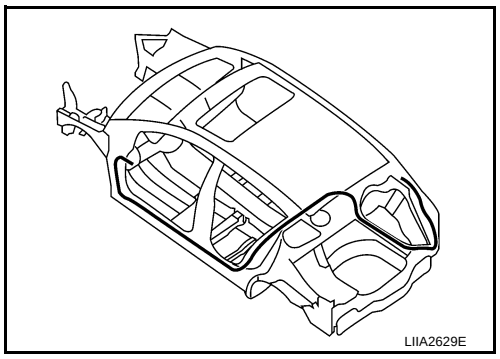
1. Remove trunk side finisher (RH). Refer to XX-XX, "*****".
2. Remove fuel filler lid opener cable lock ring.



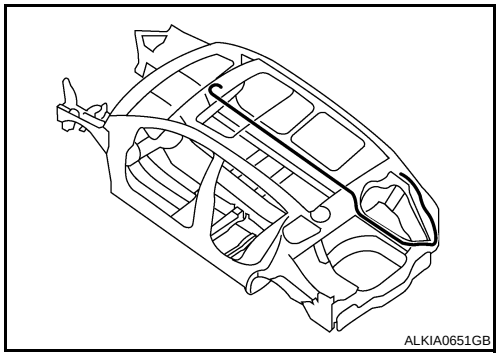
3. Remove front and rear kicking plates. Refer to XX-XX, "*****".
4. Remove rear cushion assembly. Refer to XX-XX, "*****".
5. Remove the bolts and the fuel filler lid opener handle.



6. Remove fuel filler lid opener cable clips from the vehicle.
7. Remove the fuel filler lid opener cable (LH drive).



8. Remove the fuel filler lid opener cable (RH drive).



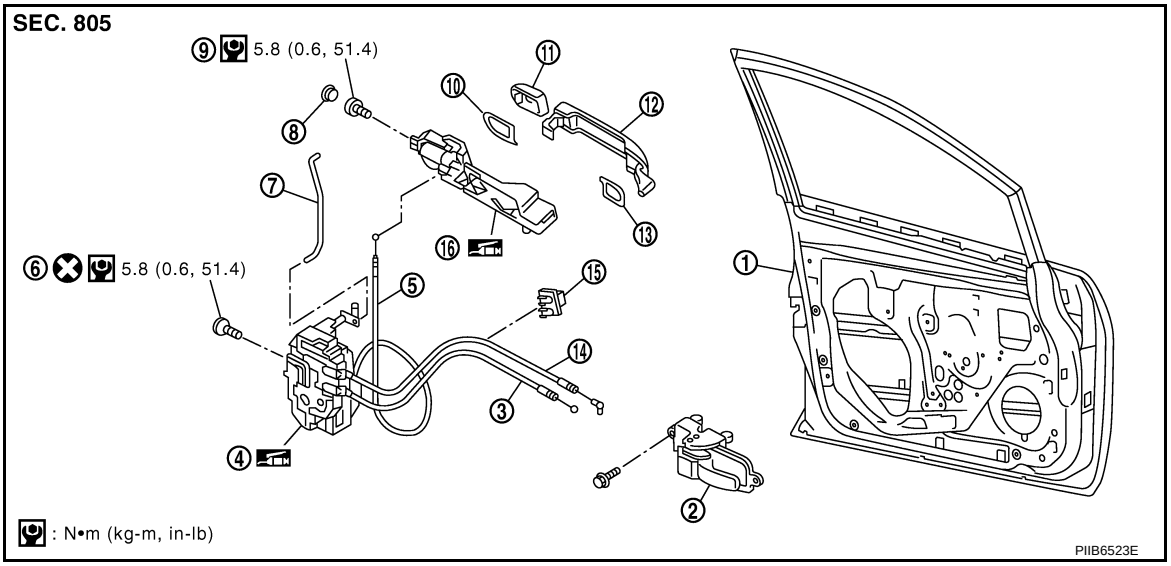
INSTALLATION

Installation is in the reverse order of removal.

FRONT DOOR LOCK

Component Parts Location

INFOID:0000000001732062



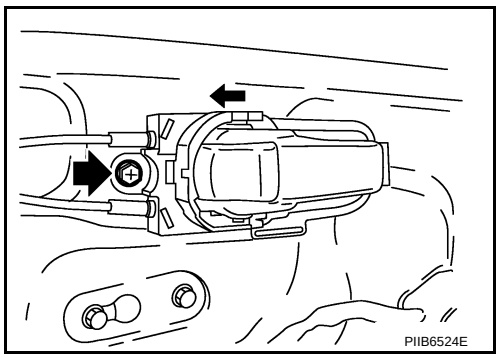
1. Front door
2. Inside handle
3. Inside handle cable
4. Door lock assembly
5. Outside handle cable
6. TORX bolt (T30)
7. Key cylinder connecting rod
8. Grommet
9. TORX bolt (T30)
10. Rear gasket
11. Door key cylinder assembly (Driver's side) Outside handle escutcheon (passenger's side)
12. Outside handle
13. Front gasket
14. Lock knob cable
15. Holder
16. Outside handle bracket

Removal and Installation

INFOID:0000000001732063

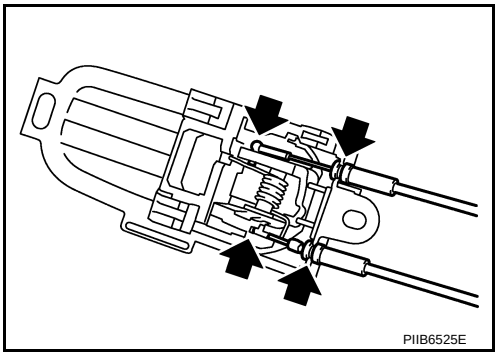
REMOVAL

1. Remove front door finisher. Refer to XX-XX, "*****" .
2. Fully close front door window.
3. Remove the front door sealing screen.
   NOTE:
   If sealing screen is reused, cut butyl tape in a way that leaves it on the sealing screen.
4. Remove front door rear glass run channel. Refer to XX-XX, "*****" .
5. Remove the cables from the holder.
6. Remove inside handle bolt, and slide the handle toward the rear of the vehicle. disengage the handle from the door panel, and remove the inside handle.

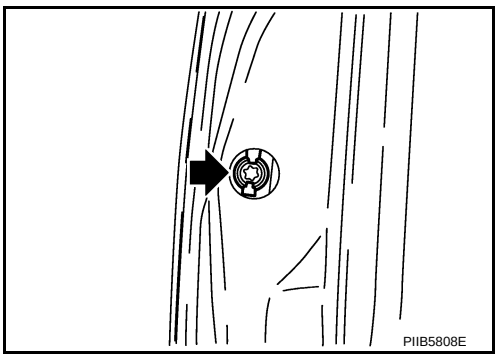


7. Disengage the handle from the door panel, and remove the inside handle.

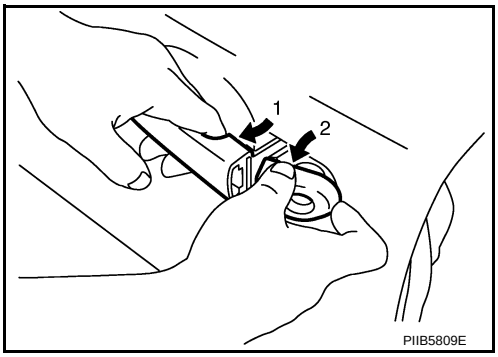
8. Disconnect the inside handle cable and lock knob cable from the inside handle.
CAUTION:
During removal and installation, work so as not to bend the ends of the lock knob cable and inside handle cable.



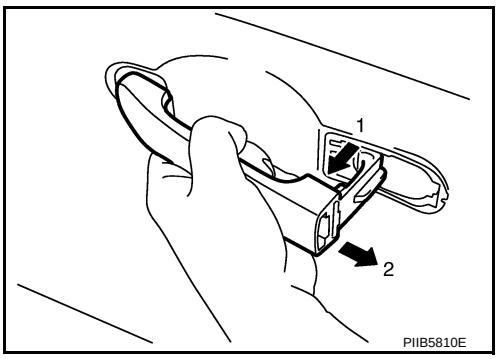
9. Remove the door side grommet, and the door key cylinder assembly (escutcheon) bolt.
10. Remove the key cylinder connecting rod (key cylinder side).
11. If equipped, disconnect the door antenna, the door request switch connector and remove the harness clamp. (Vehicle with intelligent key systems only).



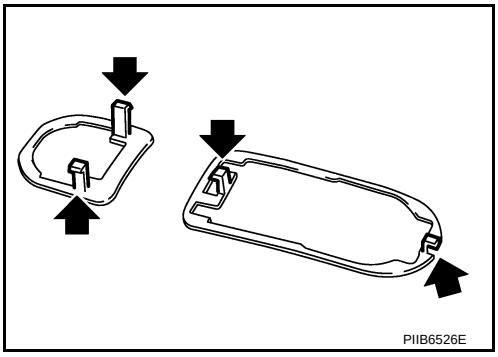
12. Remove the door cylinder assembly while pulling the outside handle forward.



13. Pull the outside door handle forward and then slide it toward the rear of the vehicle to remove.

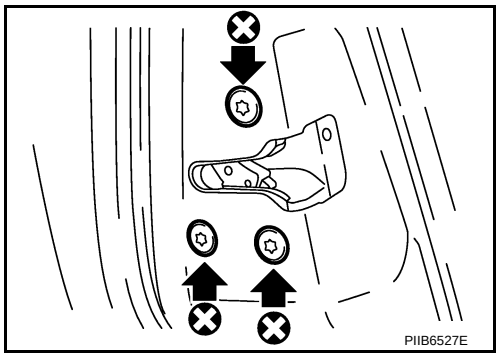


14. Remove the front and rear gaskets.

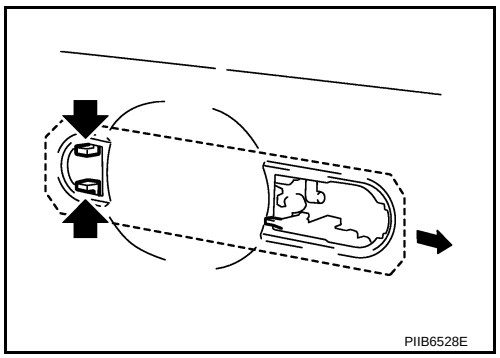


15. Remove the door lock assembly bolts.

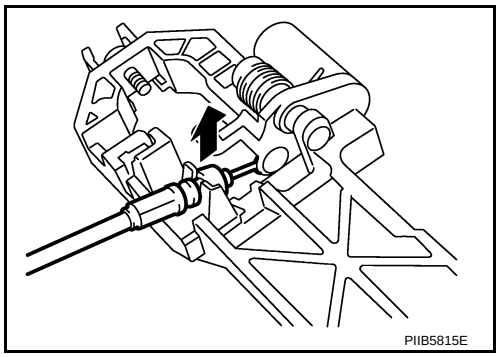
5.8 N·m (0.6 kg-m, 51.4 in-lb)



16. Slide the outside handle bracket toward the rear of the vehicle, and remove the assembly.



17. If equipped, disconnect the door lock assembly electrical connector.
18. Separate the outside handle cable from the outside handle bracket.

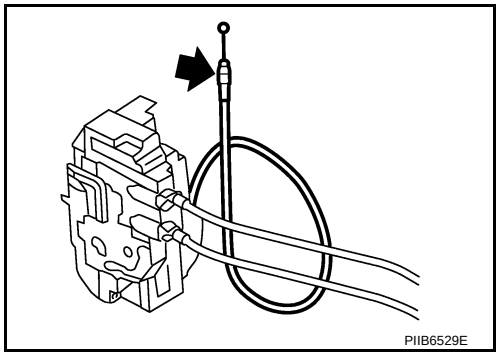


INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

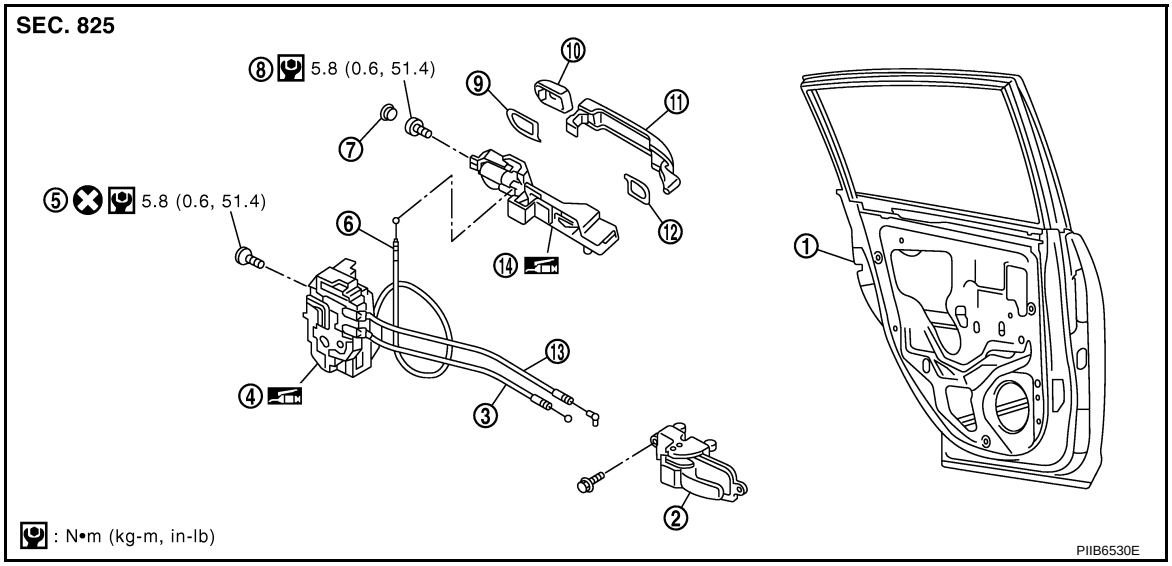
- **To install each rod, be sure to rotate the rod holder until a click is felt.**
- **When installing door lock assembly, be careful when rotating the outside handle cable as shown in the figure.**
  - **Place the outside handle bracket cable on the inside of door lock assembly before installing.**



REAR DOOR LOCK

Component Parts Location

INFOID:0000000001732064



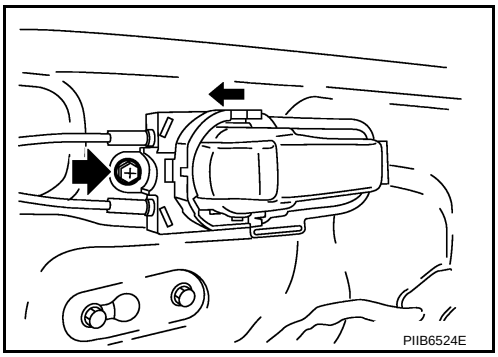
1. Rear door
2. Inside handle
3. Inside handle cable
4. Door lock assembly
5. TORX bolt (T30)
6. Outside handle cable
7. Grommet
8. TORX bolt (T30)
9. Rear gasket
10. Outside handle escutcheon
11. Outside handle
12. Front gasket
13. Lock knob cable
14. Outside handle bracket

Removal and Installation

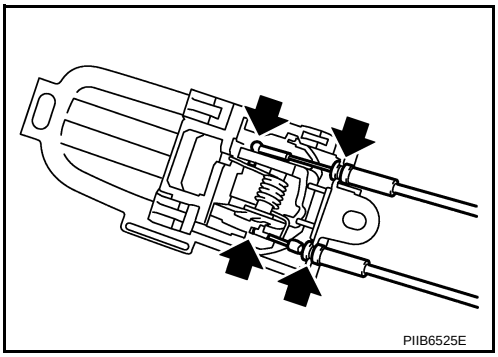
INFOID:0000000001732065

REMOVAL

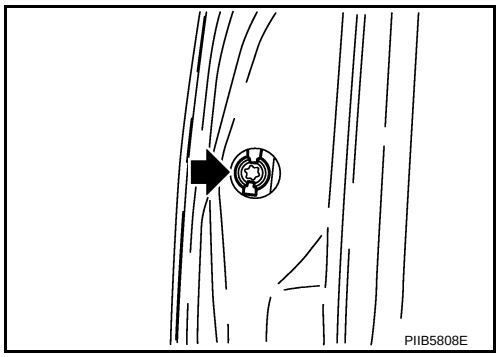
1. Remove the partition glass. Refer to XX-XX, "*****".
2. Support door glass while lifting it up to the door window completely closed position.
3. Remove inside handle bolt, slide handle toward rear of vehicle, disconnect it from the door panel, and remove the inside handle.



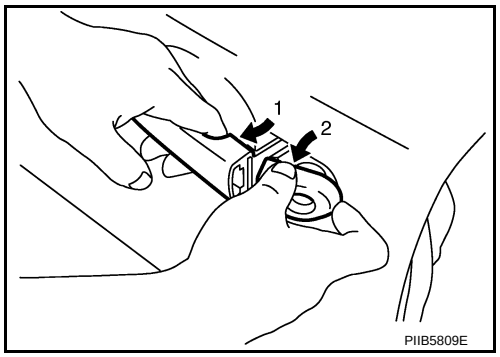
4. Disconnect the inside handle and lock knob cables from the inside handle.
   CAUTION:
   During removal and installation, do not to bend the ends of the lock knob cable and inside handle cable.



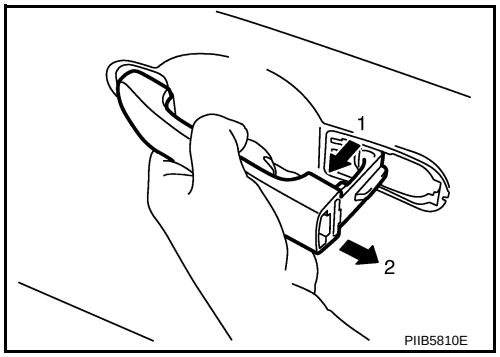
5. Remove the door side grommet, and the outside handle escutcheon screw.



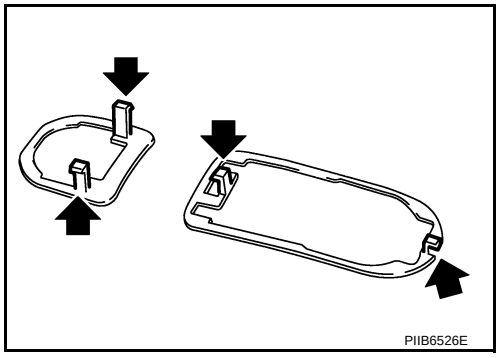
6. Pull the outside handle forward (1), while removing outside handle escutcheon (2).



7. Pull outside door handle forward (1), and slide it toward the rear of the vehicle to remove (2).

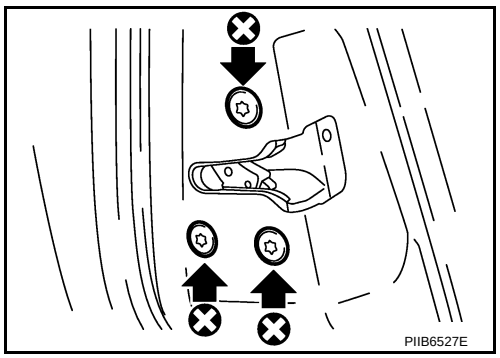


8. Remove the front and rear gaskets.

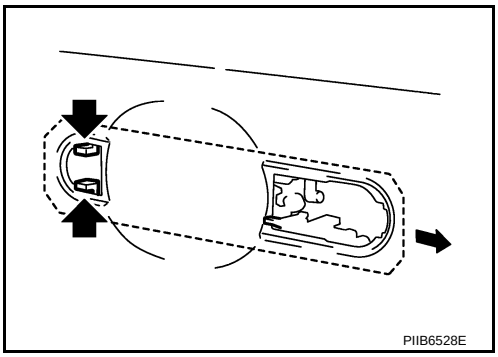


9. Remove the door lock assembly screws.

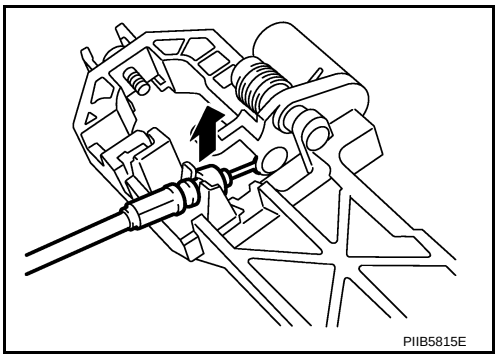
: 5.8 N·m (0.6 kg-m, 51.4 in-lb)



10. Slide the outside handle bracket toward the rear of vehicle, remove the outside handle bracket and the door lock assembly.


PIIB6528E

11. If equipped, disconnect the door lock assembly electrical connector.
12. Disconnect the outside handle cable from the outside handle bracket.

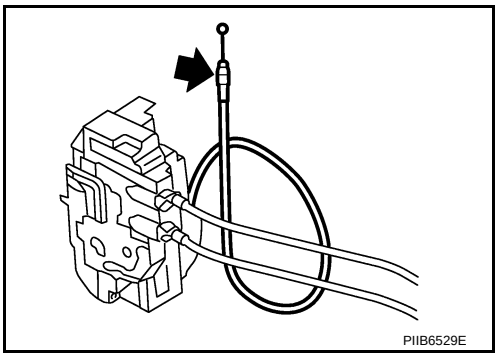

PIIB5815E

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **To install each rod, be sure to rotate the rod holder until a click is felt.**
- **When installing door lock assembly, be careful when rotating the outside handle cable as shown.**
- **Place the outside handle bracket cable on the inside of door lock assembly before installing.**


PIIB6529E

BACK DOOR LOCK

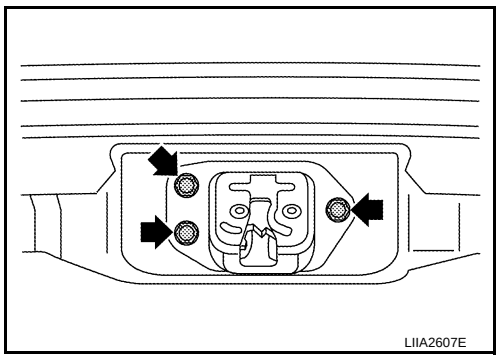
Removal and Installation

INFOID:0000000001732066

BACK DOOR LOCK

Removal

1. Remove the back door finisher lower. Refer to XX-XX, "*****".
2. Remove the bolts, disconnect the electrical connector and separate the lock from the door.



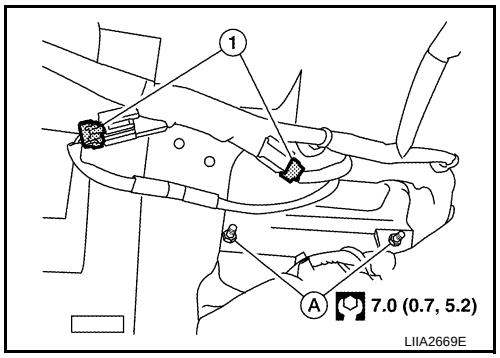
Installation

Installation is in the reverse order of removal.

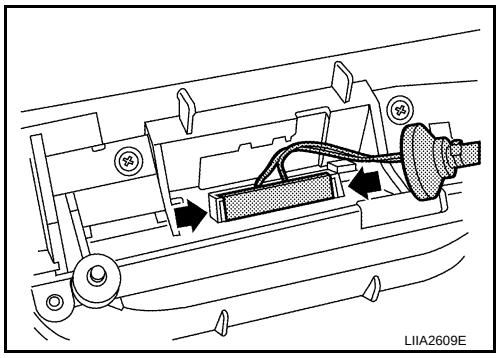
BACK DOOR HANDLE

Removal

1. Remove the back door finisher lower. Refer to XX-XX, "*****".
2. Disconnect the harness connectors (1), remove the nuts and the back door handle (A).



3. Release the clips and remove the switch from the housing.



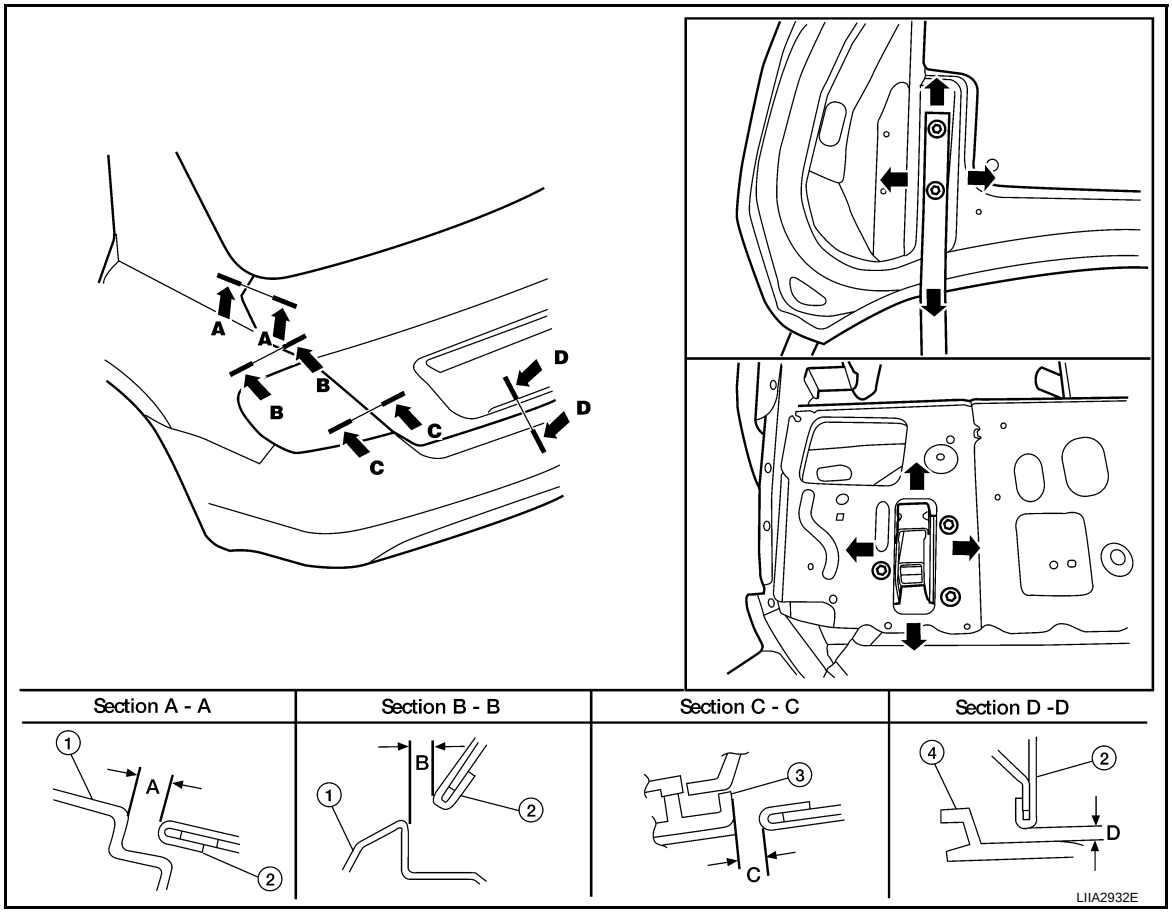
Installation

Installation is in the reverse order of removal.

TRUNK LID

Fitting Adjustment

INFOID:0000000001732067



1. Rear fender
2. Trunk lid
3. Rear combination lamp
4. Rear bumper fascia
a. 4.0 ± 1.0 mm (0.16 ± 0.04 in)
b. 3.5 ± 1.0 mm (0.14 ± 0.04 in)
c. 4.5 ± 1.7 mm (0.03 ± 0.06 in)
d. 7.0 ± 2.2 mm (0.28 ± 0.09 in)

Longitudinal and lateral clearance adjustment

1. With the striker released, loosen the trunk lid hinge nuts and close the trunk lid.
2. Make the lateral clearance and the clearance to the rear window glass equal. Then open the trunk lid to tighten the nuts.

Surface height adjustment

1. Loosen the striker bolts. Raise the striker to the top position, and temporarily tighten the upper bolt.
2. Close the trunk lid lightly and adjust the surface height. Then open the trunk lid and tighten the striker bolts.

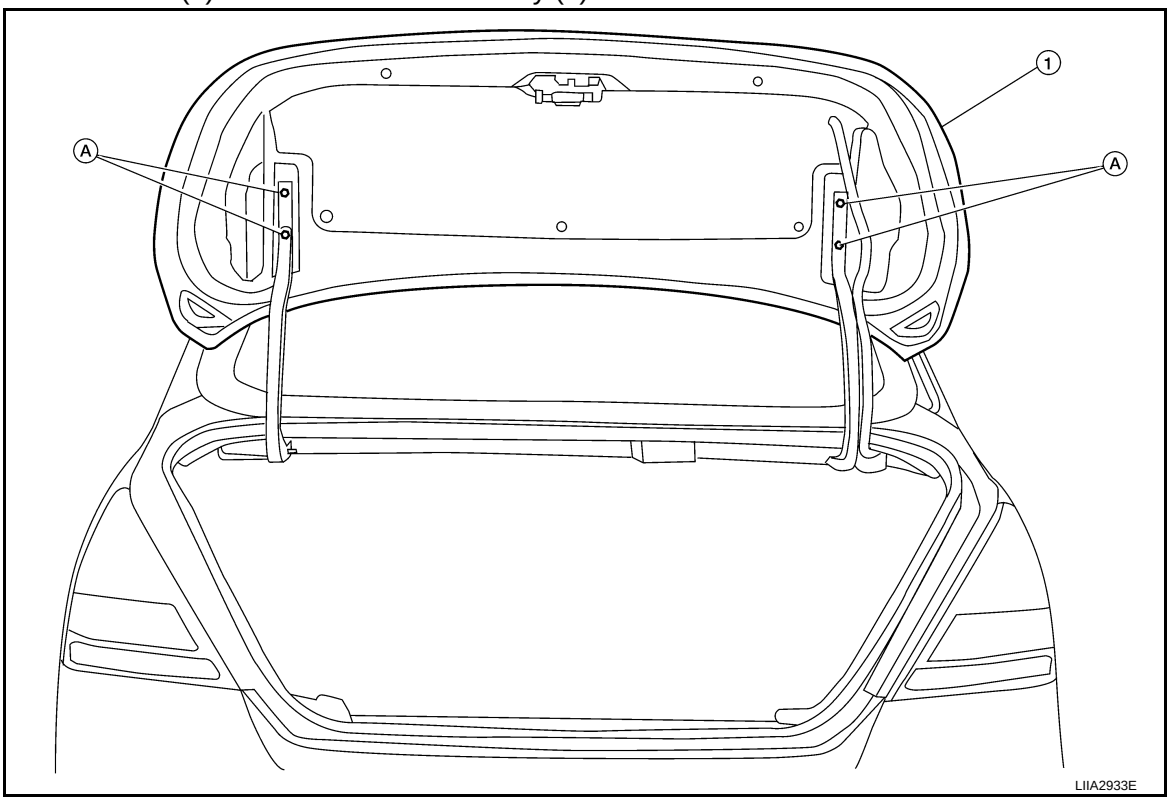
Trunk Lid Assembly

INFOID:0000000001732068

REMOVAL

1. Remove the trunk lid finisher. Refer to XX-XX, "*****" .
2. Remove the trunk lid wire harness.

3. Remove the nuts (a) and the trunk lid assembly (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

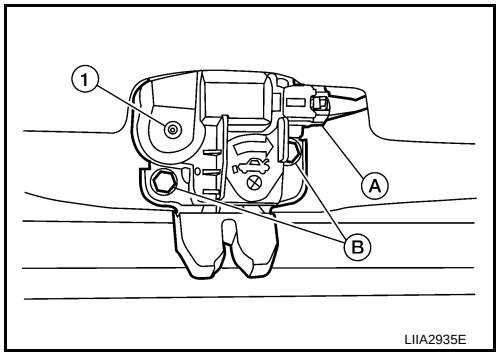
After installing, apply touch-up paint (body color) to the head of the hinge nuts.

Trunk Lid Lock

INFOID:0000000001732069

REMOVAL

1. Remove the trunk lid finisher. Refer to XX-XX, "*****".
2. If equipped, disconnect the trunk lid lock cylinder rod.
3. Remove the release cable.
4. Disconnect the electrical connector (a), remove the bolts (b) and the trunk lid lock (1).



INSTALLATION

Installation is in the reverse order of removal.

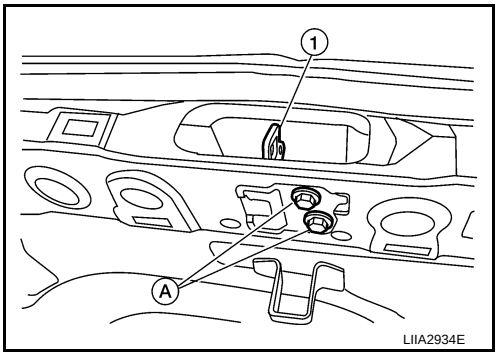
Trunk Lid Striker

INFOID:0000000001732070

REMOVAL

1. Remove the trunk rear plate and trunk rear finisher. Refer to XX-XX, "*****".
2. Remove the bolts, disconnect the electrical connector and remove the trunk lock actuator.
3. Remove the bolt and disconnect the trunk lid release cable.

4. Remove the bolts (a) and the trunk lid striker (1).



INSTALLATION

Installation is in the reverse order of removal.