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PRECAUTION

PRECAUTIONS

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

INFOID:0000000012408437

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

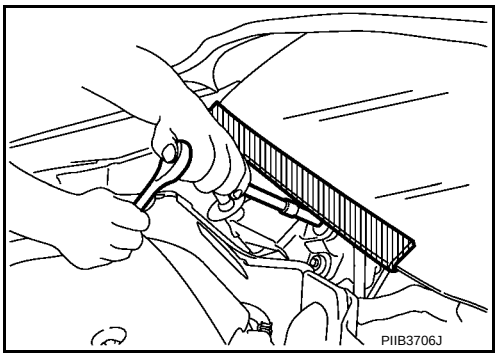
Always observe the following items for preventing accidental activation.

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

Precaution for Procedure without Cowl Top Cover

INFOID:0000000012408438

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



Precautions For Xenon Headlamp Service

INFOID:0000000012408439

WARNING:

Comply with the following warnings to prevent any serious accident.

- **Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.**
- **Never work with wet hands.**
- **Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector.**

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(Turning it ON outside the lamp case may cause fire or visual impairments.)
- **Never touch the bulb glass immediately after turning it OFF. It is extremely hot.**

CAUTION:

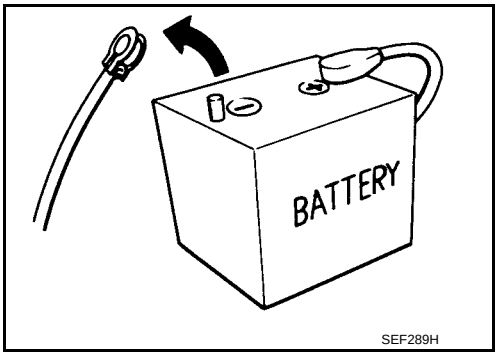
Comply with the following cautions to prevent any error and malfunction.
- **Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)**
- **Never perform HID circuit inspection with a tester.**
- **Never touch the xenon bulb glass with hands. Never put oil and grease on it.**
- **Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.**
- **Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).**

Precautions for Removing Battery Terminal

INFOID:0000000013042431

When disconnecting the battery terminal, pay attention to the following.
- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

D4D engine	: 20 minutes	YS23DDT	: 4 minutes
HRA2DDT	: 12 minutes	YS23DDTT	: 4 minutes
K9K engine	: 4 minutes	ZD30DDTi	: 60 seconds
M9R engine	: 4 minutes	ZD30DDTT	: 60 seconds
R9M engine	: 4 minutes		
V9X engine	: 4 minutes		
YD25DDTi	: 2 minutes		



NOTE:
ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.
- After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.

NOTE:
- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
  - Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
  - Driving for 30 minutes or more on a steep slope.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:
If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.
- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:
The removal of 12V battery may cause a DTC detection error.

Work

INFOID:0000000012408441

- 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.

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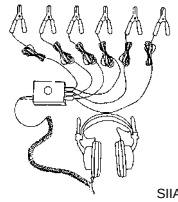
PREPARATION

PREPARATION

Special Service Tools

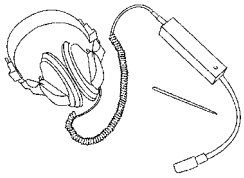
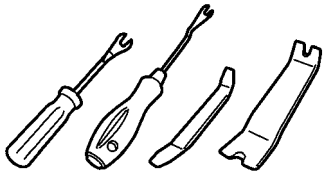
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The actual shapes of TechMate tools may differ from those of special service tools illustrated here.

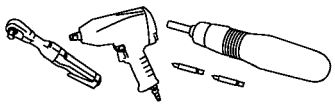
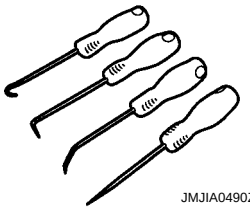
Tool number (TechMate No.) Tool name	Description
(J-39570) Chassis ear  SIIA0993E	Locates the noise
(J-50397) NISSAN Squeak and Rattle Kit  SIIA0994E	Repairs the cause of noise

Commercial Service Tools

INFOID:0000000012408443

Tool name	Description
Engine ear  SIIA0995E	Locates the noise
Remover tool  JMKIA3050ZZ	Removes clips, pawls and metal clips

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Tool name		Description
Power tool	 PIIB1407E	Loosening bolts, nuts and screws
Hook and pick tool	 JMJIA0490ZZ	Press tumbler stopper

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SYSTEM DESCRIPTION

COMPONENT PARTS

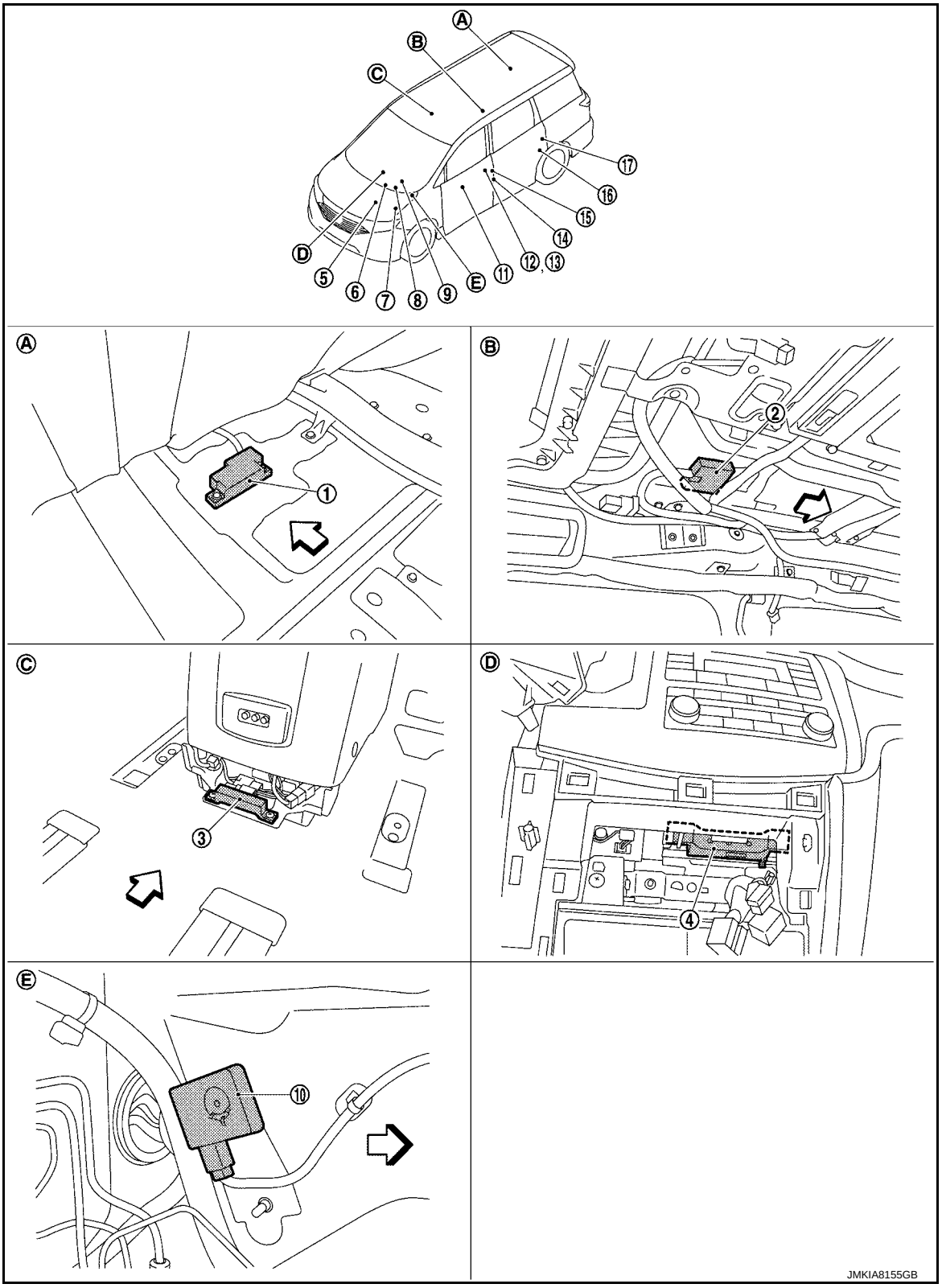
DOOR LOCK SYSTEM

DOOR LOCK SYSTEM : Component Parts Location

INFOID:0000000012408444

Front View

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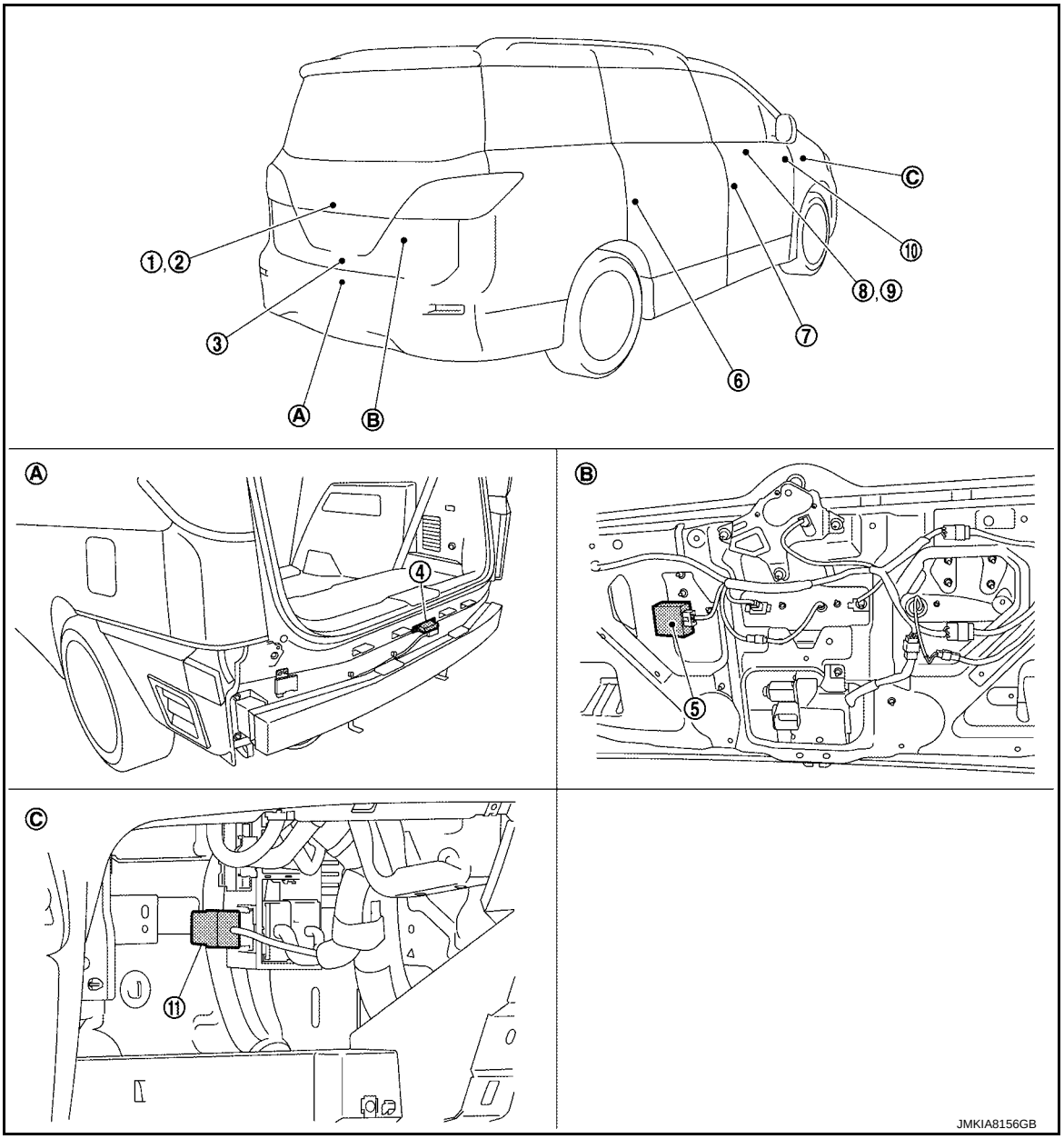
A. View with luggage room finisher removed
B. View with roof finisher removed
C. View with center console assembly removed
D. View with cluster lid C removed
E. Engine room LH

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No.	Component	Function
1.	Inside key antenna (luggage room)	DLK-27, "Inside Key Antenna"
2.	Remote keyless entry receiver	DLK-27, "Remote Keyless Entry Receiver"
3.	Inside key antenna (console)	DLK-27, "Inside Key Antenna"
4.	Inside key antenna (instrument center)	DLK-27, "Inside Key Antenna"
5.	TCM	Transmits shift position signal to BCM via CAN communication line Refer to TM-12, "CVT CONTROL SYSTEM : Component Parts Location" for detailed installation location
6.	Push-button ignition switch	• Inputs push-button ignition switch ON/OFF condition to BCM • Inputs power switch ON/OFF condition to BCM Refer to SEC-6, "Component Parts Location" for detailed installation location
7.	IPDM E/R	Sounds horn via CAN communication between BCM Refer to PCS-4, "IPDM E/R : Component Parts Location" for detailed installation location
8.	BCM	• BCM detects the vehicle status according to signals from each door switch, each outside/inside key antenna, and unlock sensor. BCM transmits drive signal to door lock actuator when BCM receives operation signal from remote keyless entry receiver and each switch • Inputs back door open request signal to back door control unit Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location
9.	Combination meter	• Displays each operation method guide and warning for system malfunction • Performs operation method guide and warning with buzzer • Transmits vehicle speed signal to CAN communication line Refer to MWI-7, "METER SYSTEM : Component Parts Location" for detailed installation location
10.	Intelligent Key warning buzzer	DLK-28, "Intelligent Key Warning Buzzer"
11.	Door lock and unlock switch (driver side)	DLK-28, "Door Lock and Unlock Switch (Driver Side)"
12.	Front door outside handle assembly LH (outside key antenna)	DLK-27, "Front Door Outside Handle Assembly (Outside Key Antenna)"
13.	Front door request switch (driver side)	DLK-28, "Front Door Request Switch"
14.	Front door switch (driver side)	DLK-28, "Front Door Switch"
15.	Front door lock assembly (driver side)	DLK-28, "Front Door Lock Assembly (Driver Side)"
16.	Sliding door switch LH	DLK-31, "Sliding Door Switch"
17.	Sliding door lock assembly LH	DLK-31, "Sliding Door Lock Assembly"

Rear View

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A. View with rear bumper removed
B. View with back door lower finisher removed
C. View with instrument lower panel RH removed

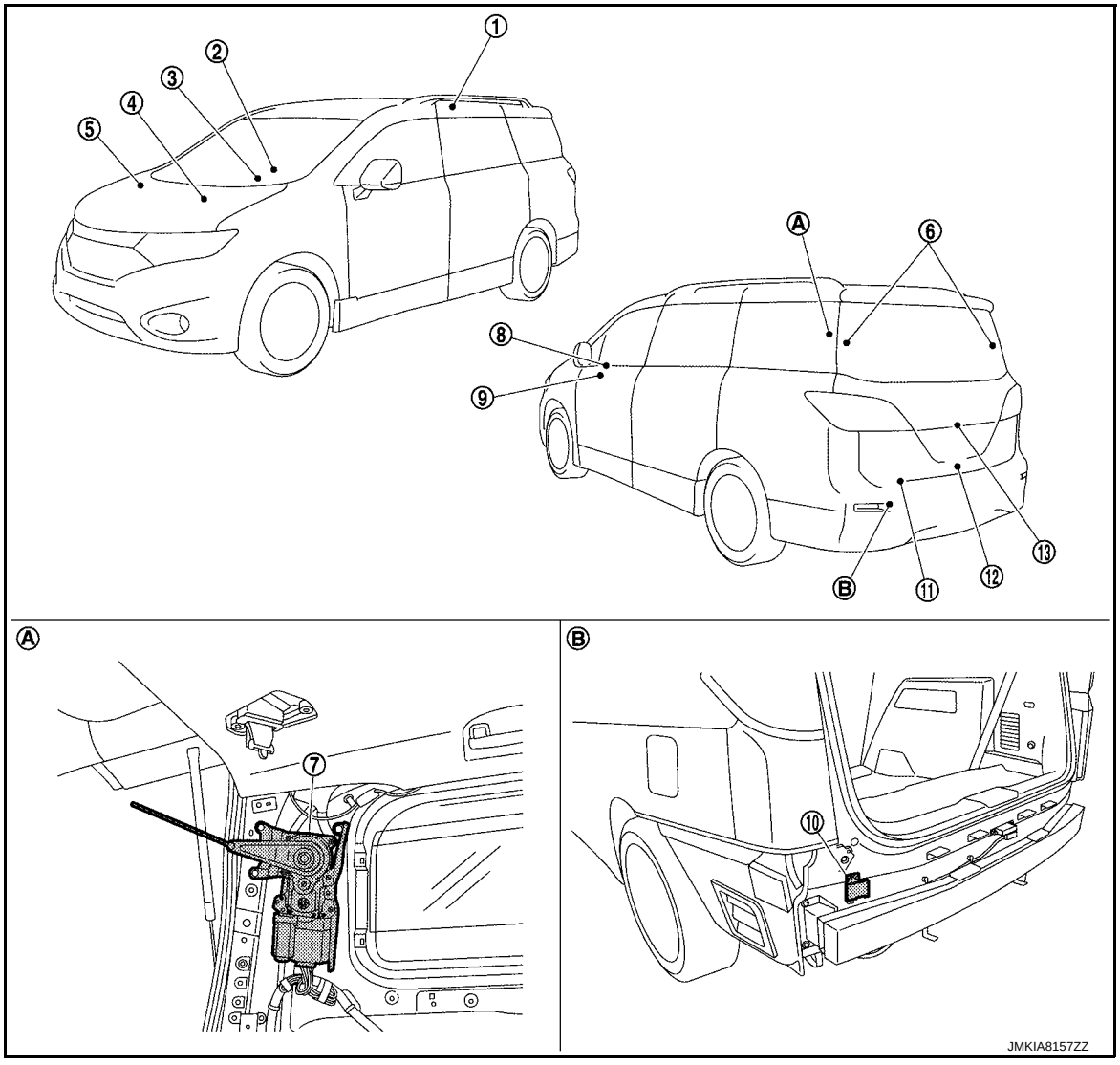
No.	Component	Function
1.	Back door opener switch	DLK-29, "Back Door Opener Switch"
2.	Back door request switch	DLK-29, "Back Door Request Switch"
3.	Back door lock assembly	DLK-29, "Back Door Lock Assembly (Without Automatic Back Door System)"
4.	Outside antenna (rear bumper)	DLK-27, "Outside Key Antenna (Rear Bumper)"
5.	Back door control unit	DLK-29, "Back Door Control Unit (Without Automatic Back Door System)"
6.	Sliding door switch RH	DLK-31, "Sliding Door Switch"
7.	Front door switch (passenger side)	DLK-28, "Front Door Switch"
8.	Front door outside handle assembly RH (outside key antenna)	DLK-27, "Front Door Outside Handle Assembly (Outside Key Antenna)"
9.	Front door request switch (passenger side)	DLK-28, "Front Door Request Switch"

No.	Component	Function
10.	Door lock and unlock switch (passenger side)	DLK-28, "Door Lock and Unlock Switch (Passenger Side)"
11.	Selective unlock relay	DLK-29, "Selective Unlock Relay"

AUTOMATIC BACK DOOR SYSTEM

AUTOMATIC BACK DOOR SYSTEM : Component Parts Location

INFOID:0000000012408445



A. View with luggage side upper finisher removed
B. View with rear bumper removed

No.	Component	Function
1.	Remote keyless entry receiver	Receives Intelligent Key operation and transmits to BCM Refer to DLK-18, "DOOR LOCK SYSTEM : Component Parts Location" for detailed installation location
2.	Combination meter	Transmits vehicle speed signal to CAN communication line Refer to MWI-7, "METER SYSTEM : Component Parts Location" for detailed installation location
3.	BCM	Transmits and receives signal to the automatic back door control module Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location

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No.	Component	Function
4.	TCM	Transmits shift position signal to BCM via CAN communication line Refer to TM-12, "CVT CONTROL SYSTEM : Component Parts Location" for detailed installation location
5.	ABS actuator and electric unit	Transmits vehicle speed signal to CAN communication line Refer to BRC-9, "Component Parts Location" for detailed installation location
6.	Back door touch sensor LH/RH	DLK-30, "Back Door Touch Sensor"
7.	Automatic back door control module	DLK-30, "Automatic Back Door Control Module"
8.	Automatic back door switch	DLK-30, "Automatic Back Door Switch"
9.	Automatic door main switch	DLK-30, "Automatic Door Main Switch"
10.	Automatic back door warning buzzer	DLK-30, "Automatic Back Door Warning Buzzer"
11.	Automatic back door close switch	DLK-30, "Automatic Back Door Close Switch"
12.	Back door lock assembly	DLK-30, "Back Door Lock Assembly (With Automatic Back Door System)"
13.	Automatic back door opener switch	DLK-30, "Automatic Back Door Opener Switch"

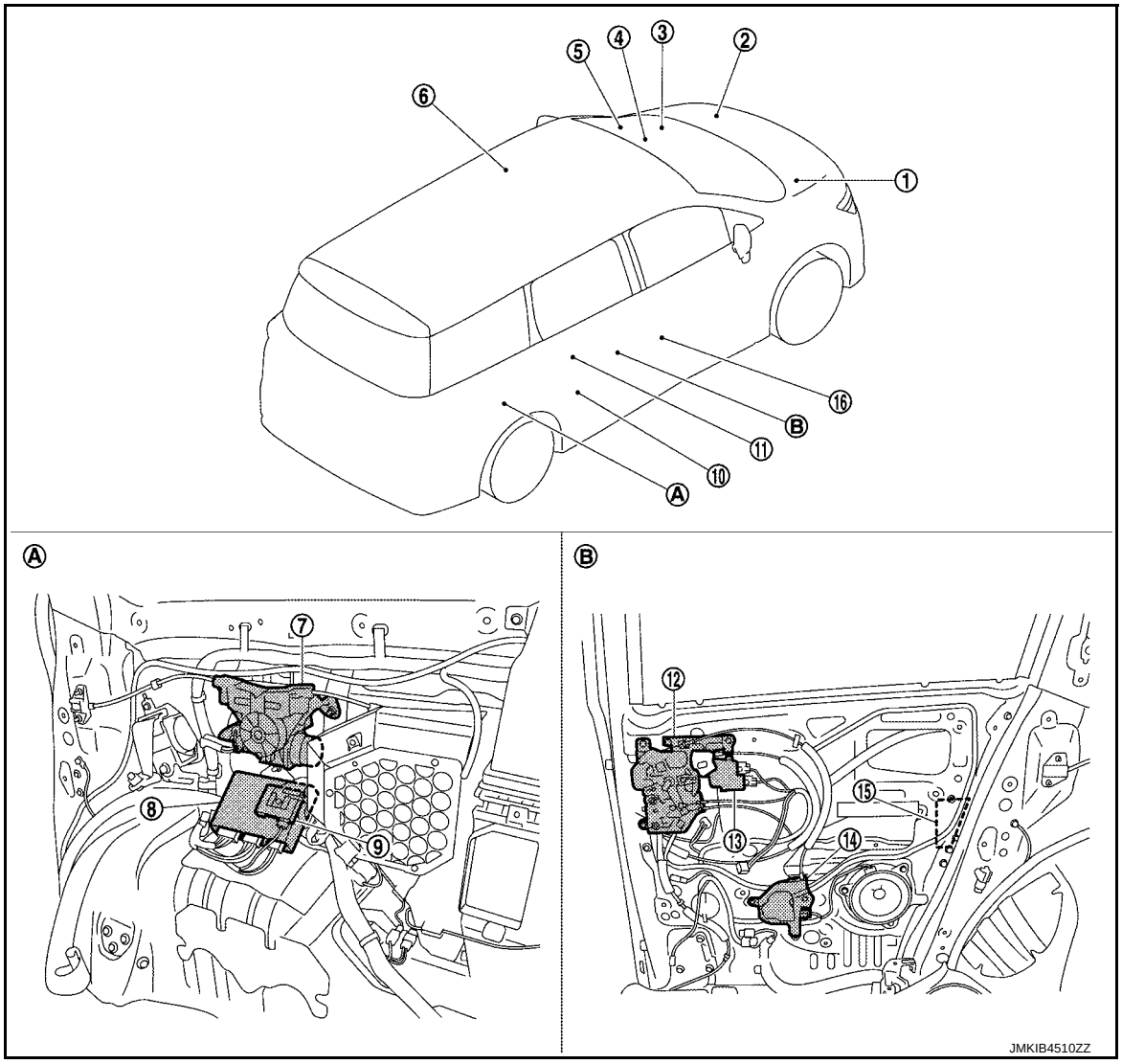
AUTOMATIC SLIDING DOOR SYSTEM

AUTOMATIC SLIDING DOOR SYSTEM : Component Parts Location

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RH

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A. View with luggage side lower finisher RH removed

B. View with sliding door finisher RH removed

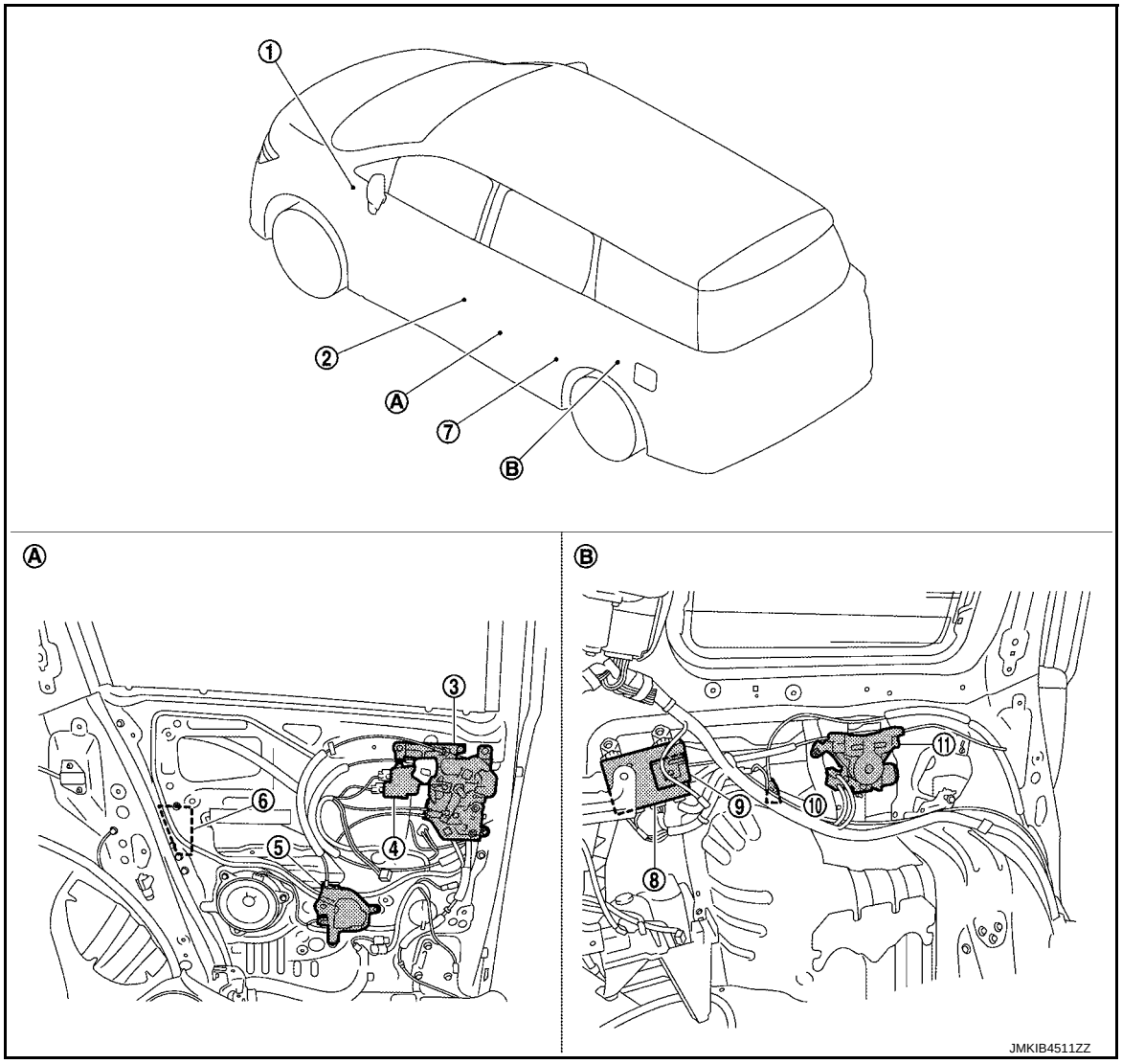
No.	Component	Function
1.	ABS actuator and electric unit	Transmits vehicle speed signal to sliding door control unit via CAN communication line Refer to BRC-9, "Component Parts Location" for detailed installation location
2.	TCM	Transmits shift position signal to sliding door control unit via CAN communication line Refer to TM-12, "CVT CONTROL SYSTEM : Component Parts Location" for detailed installation location
3.	BCM	Transmits ignition switch ON signal, automatic sliding door operate request signal and sleep wake up signal to sliding door control unit via CAN communication line Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location
4.	Combination meter	Transmits vehicle speed signal to sliding door control unit via CAN communication line Refer to MWI-7, "METER SYSTEM : Component Parts Location" for detailed installation location

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No.	Component		Function
5.	Automatic sliding door open/close switch (driver side)		DLK-30, "Automatic Sliding Door Open/Close Switch"
6.	Remote keyless entry receiver		Receives Intelligent Key operation and transmits to BCM Refer to DLK-18, "DOOR LOCK SYSTEM : Component Parts Location" for detailed installation location
7.	Automatic sliding door unit RH	Encoder	DLK-30, "Automatic Sliding Door Unit"
		Clutch	
		Automatic sliding door motor	
8.	Sliding door control unit RH		DLK-31, "Sliding Door Control Unit"
9.	Automatic sliding door warning buzzer RH		DLK-31, "Automatic Sliding Door Warning Buzzer"
10.	Sliding door switch RH		DLK-31, "Sliding Door Switch"
11.	Automatic sliding door one-touch open/close switch RH		DLK-31, "Automatic Sliding Door One-Touch Open/Close Switch"
12.	Remote control assembly RH (sliding door handle switch)		DLK-31, "Remote Control Assembly"
13.	Sliding door lock actuator RH	Sliding door lock actuator	DLK-31, "Sliding Door Lock Actuator"
		Sliding door lock status switch	
14.	Sliding door lock release actuator RH		DLK-31, "Sliding Door Lock Release Actuator"
15.	Sliding door lock assembly RH	Neutral switch	DLK-31, "Sliding Door Lock Assembly"
		Full latch switch	
		Half latch switch	
		Sliding door closure motor	
16.	Sliding door touch sensor RH		DLK-31, "Sliding Door Touch Sensor"

LH

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A. View with sliding door finisher LH removed

B. View with luggage side lower finisher LH removed

No.	Component		Function
1.	Automatic door main switch		DLK-30, "Automatic Door Main Switch"
2.	Sliding door touch sensor LH		DLK-31, "Sliding Door Touch Sensor"
3.	Remote control assembly LH (sliding door handle switch)		DLK-31, "Remote Control Assembly"
4.	Sliding door lock actuator LH	Sliding door lock actuator	DLK-31, "Sliding Door Lock Actuator"
		Sliding door lock status switch	
5.	Sliding door lock release actuator LH		DLK-31, "Sliding Door Lock Release Actuator"
6.	Sliding door lock assembly LH	Neutral switch	DLK-31, "Sliding Door Lock Assembly"
		Full latch switch	
		Half latch switch	
		Sliding door closure motor	
7.	Sliding door switch LH		DLK-31, "Sliding Door Switch"
8.	Sliding door control unit LH		DLK-31, "Sliding Door Control Unit"

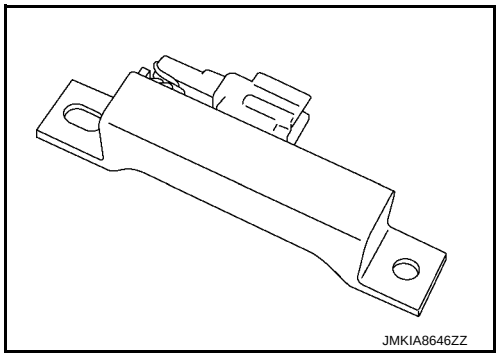
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No.	Component		Function
9.	Automatic sliding door warning buzzer LH		DLK-31, "Automatic Sliding Door Warning Buzzer"
10.	Fuel filler lid status switch		DLK-32, "Fuel Filler Lid Sliding Door Unit"
11.	Automatic sliding door unit LH	Encoder	DLK-30, "Automatic Sliding Door Unit"
		Clutch	
		Automatic sliding door motor	

Inside Key Antenna

INFOID:0000000012408447

Inside key antenna detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.



Front Door Outside Handle Assembly (Outside Key Antenna)

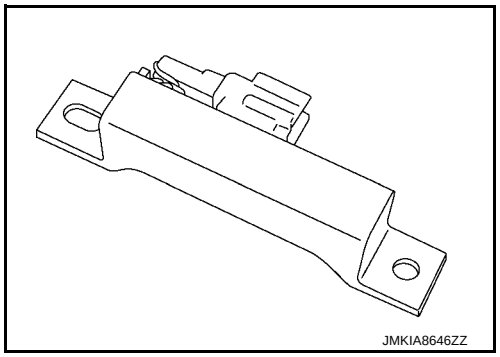
INFOID:0000000012408448

- Outside key antenna detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna is installed in side outside handle assembly.

Outside Key Antenna (Rear Bumper)

INFOID:0000000012408449

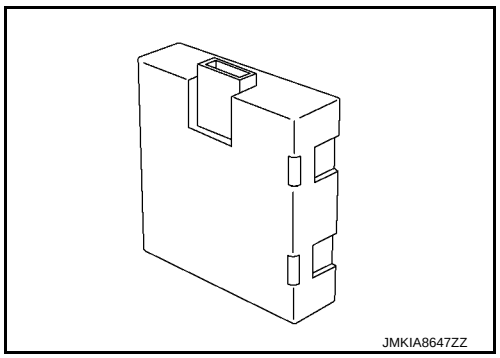
- Outside key antenna (rear bumper) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (rear bumper) is installed in the rear of rear bumper.



Remote Keyless Entry Receiver

INFOID:0000000012408450

Remote keyless entry receiver receives button operation signal and key ID signal of Intelligent Key, and then transmits them to BCM.

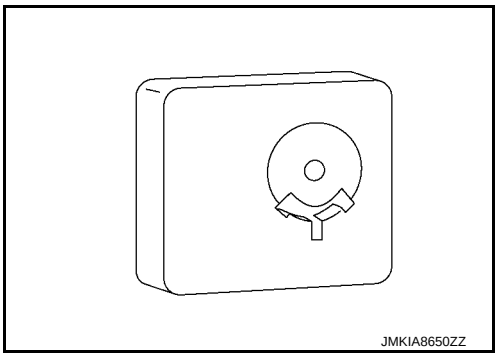


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Intelligent Key Warning Buzzer

INFOID:0000000012408451

Intelligent Key warning buzzer warns the user, who is outside vehicle, of operation confirmation according to Intelligent Key operation and door request switch operation, or of an inappropriate operation.


JMKIA8650ZZ

Door Lock and Unlock Switch (Driver Side)

INFOID:0000000012408452

- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.
- Door lock and unlock switch is Integrated in the power window main switch.

Door Lock and Unlock Switch (Passenger Side)

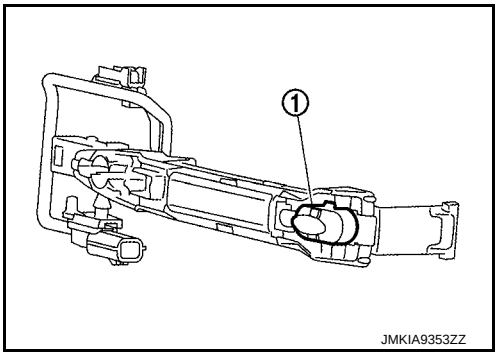
INFOID:0000000012408453

- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.
- Door lock and unlock switch is Integrated in the front power window switch (passenger side).

Front Door Request Switch

INFOID:0000000012408454

- Front door request switch (1) transmits door request switch signal to BCM.
- Front door request switch (1) integrated in outside handle assembly.

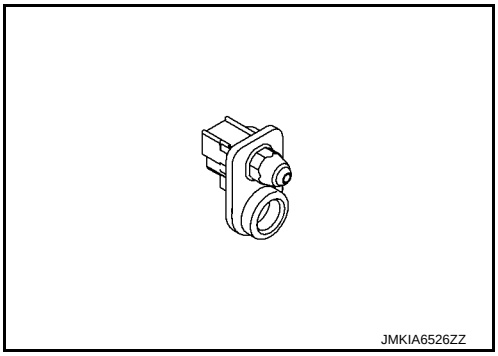


JMKIA9353ZZ

Front Door Switch

INFOID:0000000012408455

Door switch detects open/close status of door and transmits door switch signal to BCM.


JMKIA6526ZZ

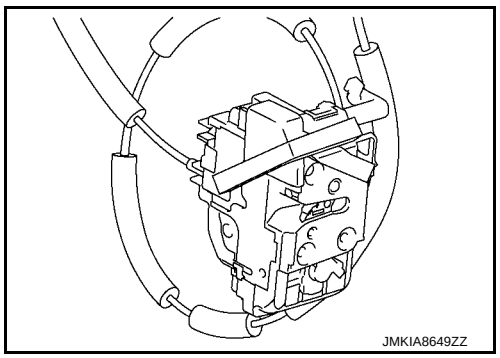
Front Door Lock Assembly (Driver Side)

INFOID:0000000012408456

- Door lock actuator and unlock sensor are Integrated in driver door lock assembly.
- Door lock actuator receives lock/unlock signal from BCM, and then locks/unlocks driver door.

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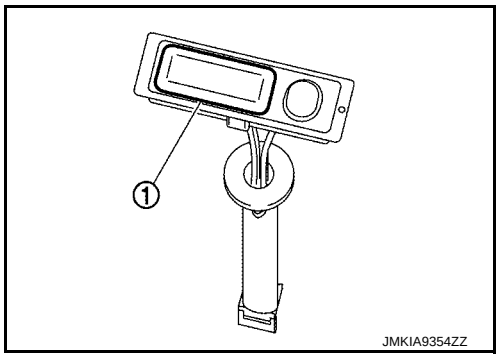
- Only front door lock assembly (driver side) integrates unlock sensor. Unlock sensor transmits lock/unlock status of driver seat to BCM.


JMKIA8649ZZ

Back Door Opener Switch

INFOID:0000000012408457

- Back door opener switch (1) transmits back door opener switch signal to BCM.
- Back door opener switch (1) is integrated in outside handle (back door).

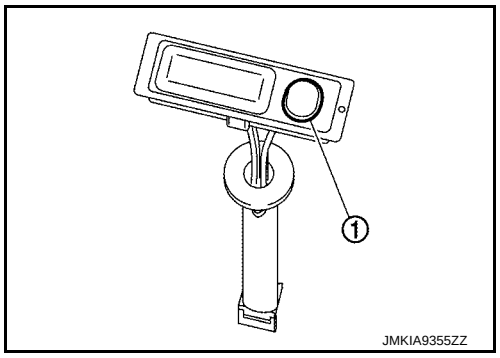


JMKIA9354ZZ

Back Door Request Switch

INFOID:0000000012408458

- Back door request switch (1) transmits back door request switch signal to BCM.
- Back door request switch (1) is integrated in outside handle (back door).



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Back Door Lock Assembly (Without Automatic Back Door System)

INFOID:0000000012408459

Back door closure motor, half latch switch, open switch, close switch and back door switch are installed

- Closure motor: Inputs open/close signal from back door control unit and activates the back door auto closure operation.
- Half latch switch: Starts the closure motor close operation.
- Open switch: Stops the closure motor open operation.
- Close switch: Stops the closure motor close operation.
- Back door switch: Detects open/close status of back door and transmits signal to BCM.

Back Door Control Unit (Without Automatic Back Door System)

INFOID:0000000012408460

Controls the back door auto closure system.

Selective Unlock Relay

INFOID:0000000012408461

Detects open/close status of front door (passenger side) and transmits signal to BCM.

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Back Door Touch Sensor

INFOID:0000000012408462

During back door close operation, the touch sensor detects any trapped foreign material.

Automatic Back Door Control Module

INFOID:0000000012408463

Automatic back door control unit, encoder, automatic back door motor and clutch are installed.
- Automatic back door control unit: Controls the automatic back door system.
- Encoder: Automatic back door control unit receives the pulse signals from encoders A and B that occurred due to synchronization with the back door operation. The automatic back door control unit calculates the back door position, operation direction, and operation speed according to the received pulse signals.
- Automatic back door motor: Inputs open/close signal from automatic back door control unit and activates the automatic back door open/close operation.
- Clutch: Performs the duty control of the power supply to control the operation speed of the back door.

Automatic Back Door Switch

INFOID:0000000012408464

Detects open/close operation of automatic back door

Automatic Door Main Switch

INFOID:0000000012408465

- Controls automatic open/close operation of each switches.
- Transmits automatic door main switch signal to sliding door control unit and automatic back door control module.

Automatic Back Door Warning Buzzer

INFOID:0000000012408466

Warns the user of the automatic back door condition and inappropriate operations with the buzzer sounds

Automatic Back Door Close Switch

INFOID:0000000012408467

- Detects close operation of automatic back door.
- Transmits automatic back door close switch signal to automatic back door control module.

Back Door Lock Assembly (With Automatic Back Door System)

INFOID:0000000012408468

Back door closure motor, half latch switch, open switch, close switch and back door switch are installed.
- Closure motor: Inputs open/close signal from automatic back door control module and activates the back door auto closure operation.
- Half latch switch: Starts the closure motor close operation.
- Open switch: Stops the closure motor open operation.
- Close switch: Stops the closure motor close operation.
- Back door switch: Inputs back door open/ close condition to BCM.

Automatic Back Door Opener Switch

INFOID:0000000012408469

Door switch detects open/close status of door and transmits door switch signal to BCM.
- Detects open operation of automatic back door.
- Transmits automatic back door opener switch signal to automatic back door control module.

Automatic Sliding Door Open/Close Switch

INFOID:0000000012408470

Transmits automatic sliding door open/close switch signal to sliding door control unit.

Automatic Sliding Door Unit

INFOID:0000000012408471

Encoder, clutch and automatic sliding door motor are installed.
- Encoder: Sliding door control unit receives the pulse signals from encoders A and B that occurred due to synchronization with the sliding door operation. The sliding door control unit calculates the sliding door position, operation direction, and operation speed according to the received pulse signals.
- Clutch: Performs the duty control of the power supply to control the operation speed of the sliding door.
- Automatic sliding door motor: Inputs open/close signal from sliding door control unit and activates the automatic sliding door auto open/close operation.

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Sliding Door Control Unit

INFOID:0000000012408472

Controls the automatic sliding door system

Automatic Sliding Door Warning Buzzer

INFOID:0000000012408473

Warns the user of the automatic sliding door condition and inappropriate operations with the buzzer sounds.

Automatic Sliding Door One-Touch Open/Close Switch

INFOID:0000000012408474

Transmits automatic sliding door one-touch open/close switch signal to sliding door control unit.

Remote Control Assembly

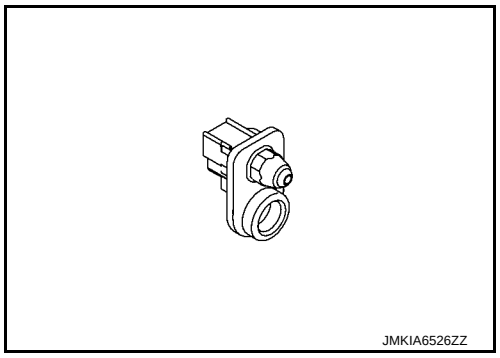
INFOID:0000000012408475

Sliding door handle switch is installed.
- Sliding door handle switch: Detects operation/non-operation status of sliding door handle and transmits signal to sliding door control unit.

Sliding Door Switch

INFOID:0000000012408476

Door switch detects open/close status of door and transmits door switch signal to BCM.



Sliding Door Lock Actuator

INFOID:0000000012408477

SLIDING DOOR LOCK ACTUATOR

Child lock status switch and sliding door handle switch are installed.

SLIDING DOOR LOCK STATUS SWITCH
- Child lock status switch: Detects lock/unlock status of sliding door child lock and transmits signal to sliding door control unit.
- Sliding door handle switch: Detects operation/non-operation status of sliding door handle and transmits signal to sliding door control unit.

Sliding Door Lock Release Actuator

INFOID:0000000012408478

Inputs release signal from sliding door control unit and releases sliding door latch

Sliding Door Lock Assembly

INFOID:0000000012408479

- Door lock actuator is Integrated in driver door lock assembly.
- Door lock actuator receives lock/unlock signal from BCM, and then locks/unlocks sliding door.
- Neutral switch, full latch switch, half latch switch and sliding door closure motor are installed.
- Neutral switch: Detects neutral position of sliding door closure motor.
- Full latch switch: Detects fully closed status of sliding door.
- Half latch switch: Detects half latch status of sliding door.
- Sliding door closure motor: Inputs close signal from sliding door control unit and activates the sliding door auto closure operation.

Sliding Door Touch Sensor

INFOID:0000000012408480

During sliding door close operation, the touch sensor detects any trapped foreign material.

Fuel Filler Lid Sliding Door Unit

INFOID:0000000012408481

- Detects open/close status of fuel filler lid and transmits signal to sliding door control unit.
- Integrated in fuel filler interlock assembly.

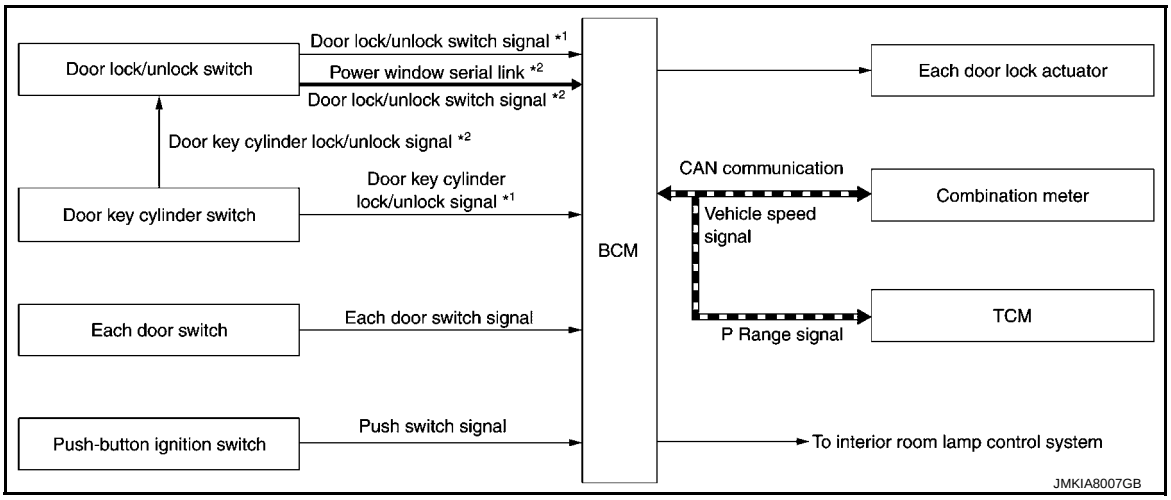
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SYSTEM (POWER DOOR LOCK SYSTEM)

System Description

INFOID:0000000012408482

SYSTEM DIAGRAM



*1:With driver side window anti-pinch
*2:With front window anti-pinch

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

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

Door Key Cylinder Switch

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

Selective unlock operation mode can be changed using CONSULT.
Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

DOOR KEY CYLINDER SWITCH POWER WINDOW FUNCTION

Driver side door key cylinder LOCK/UNLOCK operation can activate power window. Refer to PWC-10, "System Description" (with front window anti-pinch), PWC-76, "System Description" (driver side window anti-pinch).

IGNITION POSITION WARNING FUNCTION

When door lock and unlock switch are operated while driver side door is open and ignition position is ACC or ON, door locks once but immediately unlocks.

INTERIOR ROOM LAMP CONTROL FUNCTION

Interior room lamp is controlled according to door lock/unlock state, refer to INL-7, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description".

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

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

Vehicle Speed Sensing Auto Door Lock

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

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

P Range Interlock Door Lock

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

Setting change of Automatic Door Lock/Unlock Function

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

With CONSULT

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

Without CONSULT

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

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

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

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

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

IGN OFF Interlock Door Unlock

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

P Range Interlock Door Unlock

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

Setting change of Automatic Door Lock/Unlock Function

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

With CONSULT

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

Without CONSULT

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

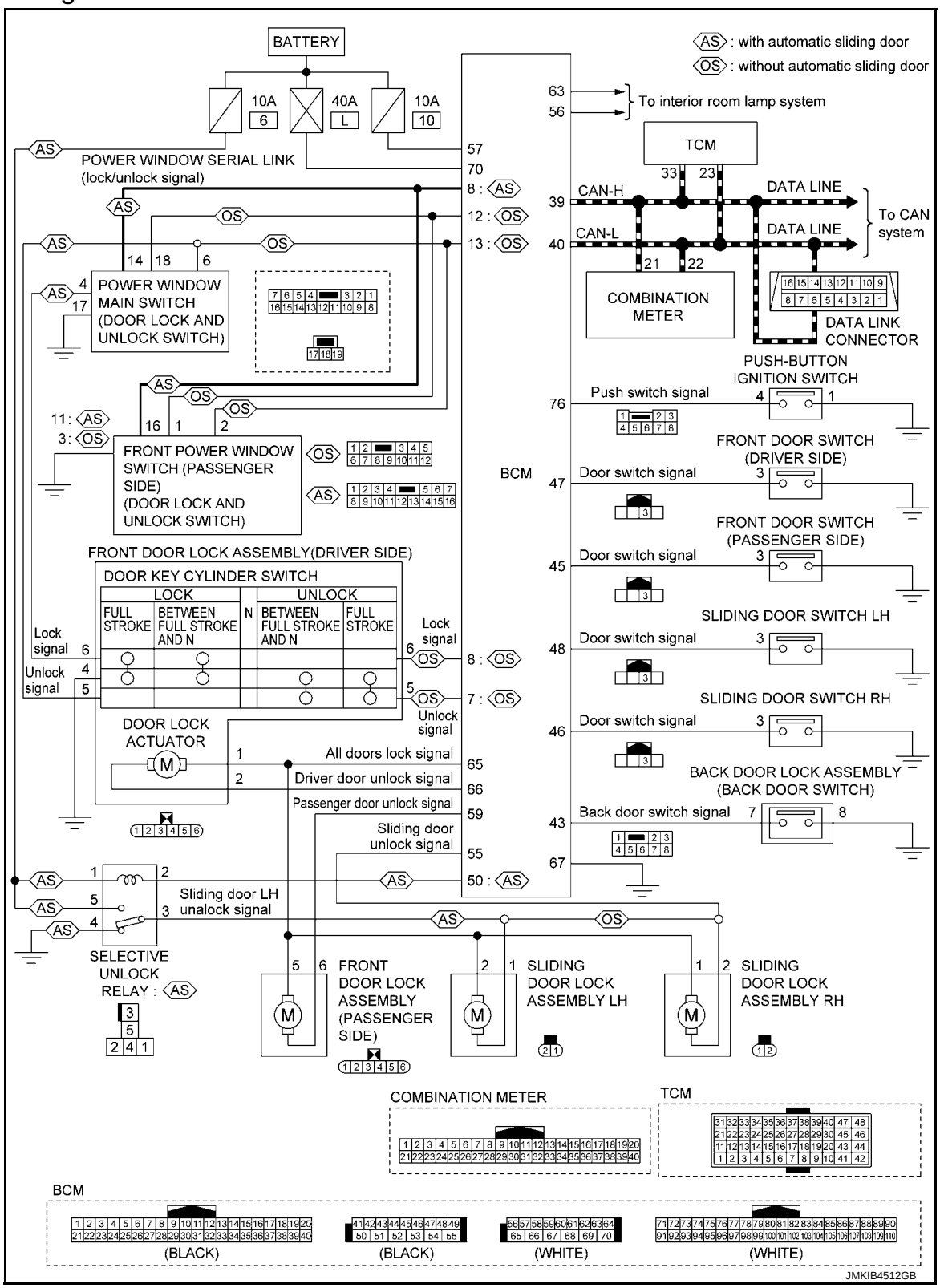
1. Close all doors (door switch OFF)
2. Ignition switch: OFF→ON
3. Press and hold the door lock and unlock switch for 5 seconds or more in the unlock direction within 20 seconds after turning the power supply position ON.
4. The switching is complete when the hazard lamp blinks.

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

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Circuit Diagram

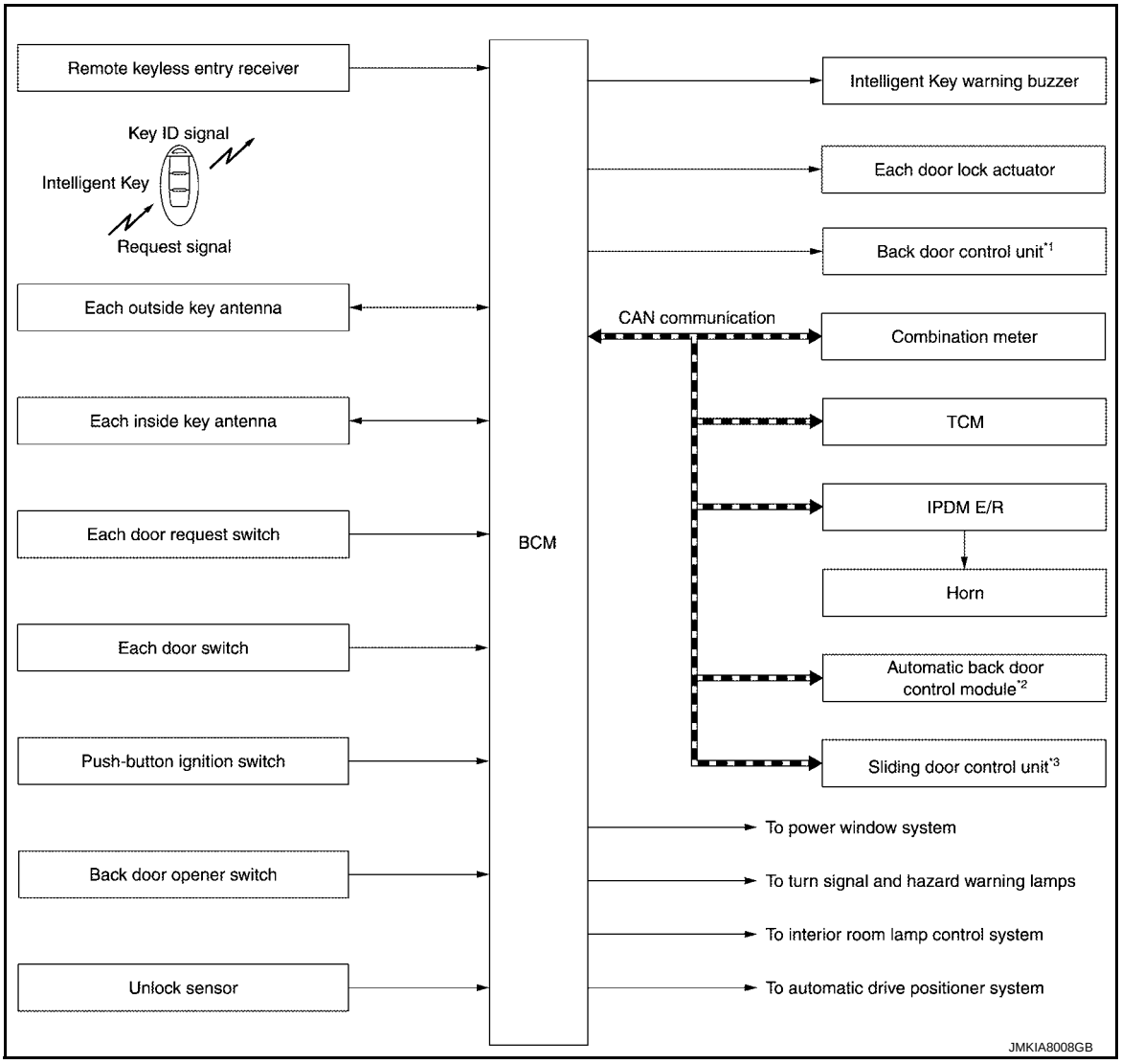
INFOID:0000000012408483



SYSTEM (INTELLIGENT KEY SYSTEM)
INTELLIGENT KEY SYSTEM
INTELLIGENT KEY SYSTEM : System Description

INFOID:0000000012408484

SYSTEM DIAGRAM



*1:With back door auto closure system
*2:With automatic back door system
*:With automatic sliding door system

- The Intelligent Key system is a system that makes it possible to lock and unlock the door locks (door lock/unlock function) by carrying the Intelligent Key, which operates based on the results of electronic ID verification using two-way communication between the Intelligent Key and the vehicle (BCM).
  NOTE:
  The driver should always carry the Intelligent Key
- The settings for each function can be changed with CONSULT.
- If an Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It is possible to perform a diagnosis on the system and register an Intelligent Key with CONSULT.

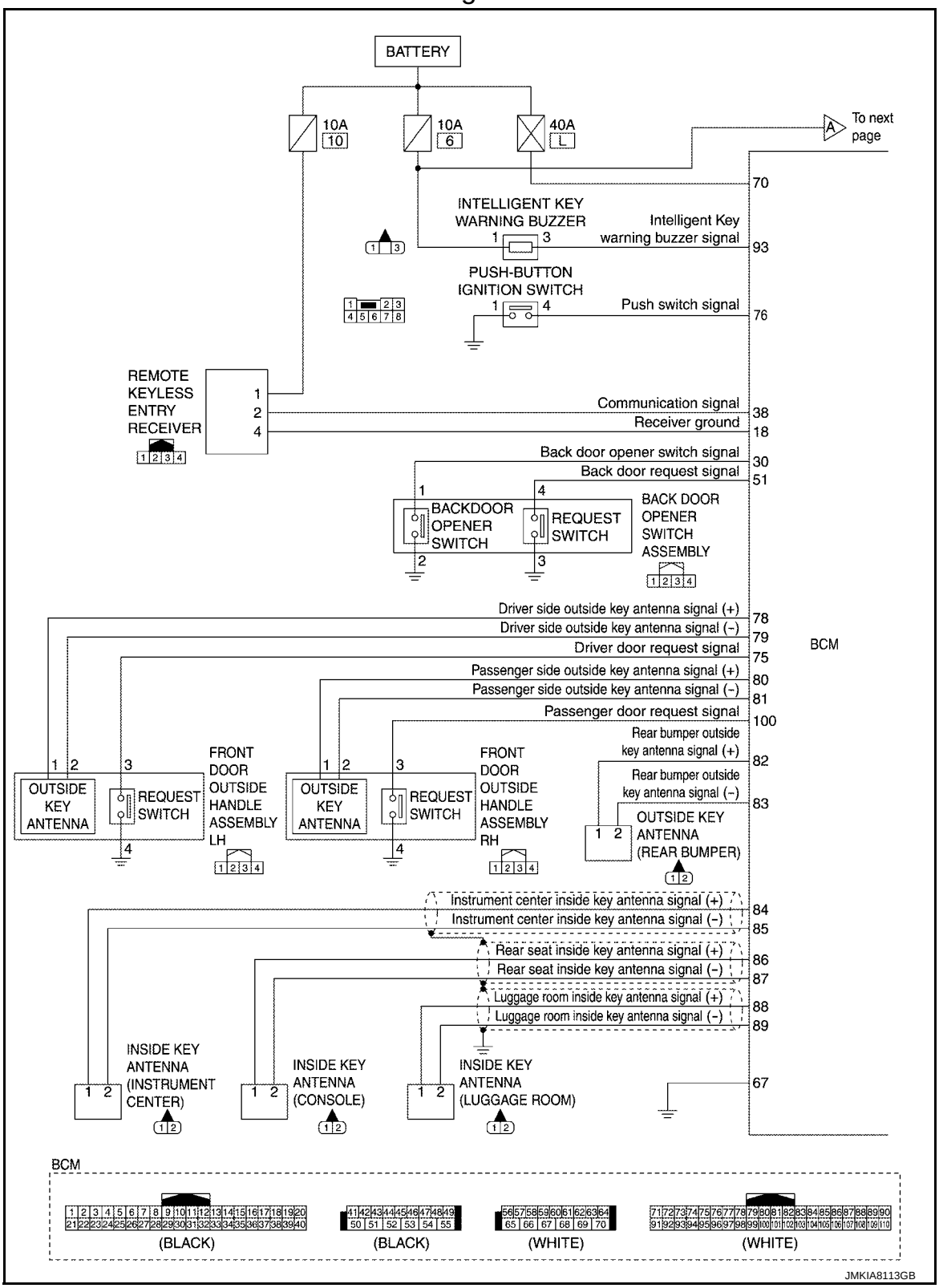
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Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch	DLK-40
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch	DLK-42
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key	DLK-44
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle	DLK-47
Warning	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver	DLK-47
Engine start	The engine can be turned on while carrying the Intelligent Key	SEC-10
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state	INL-7
Power window	Power window can be operated by Intelligent Key button operation	PWC-10
Automatic drive positioner	Automatic drive positioner system can be operated by door unlock operation	ADP-10
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds	SEC-20

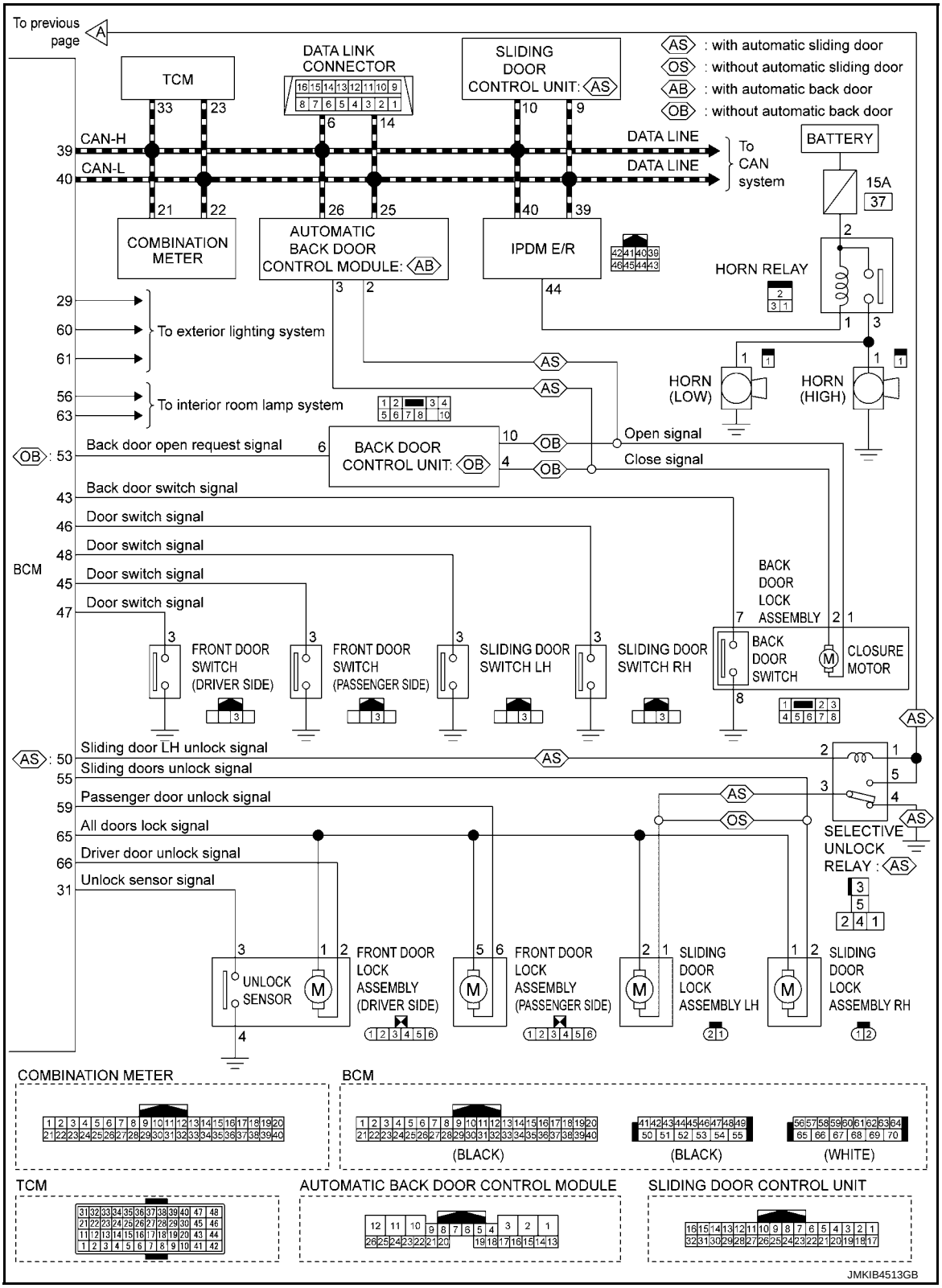
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INTELLIGENT KEY SYSTEM : Circuit Diagram

INFOID:0000000012408485



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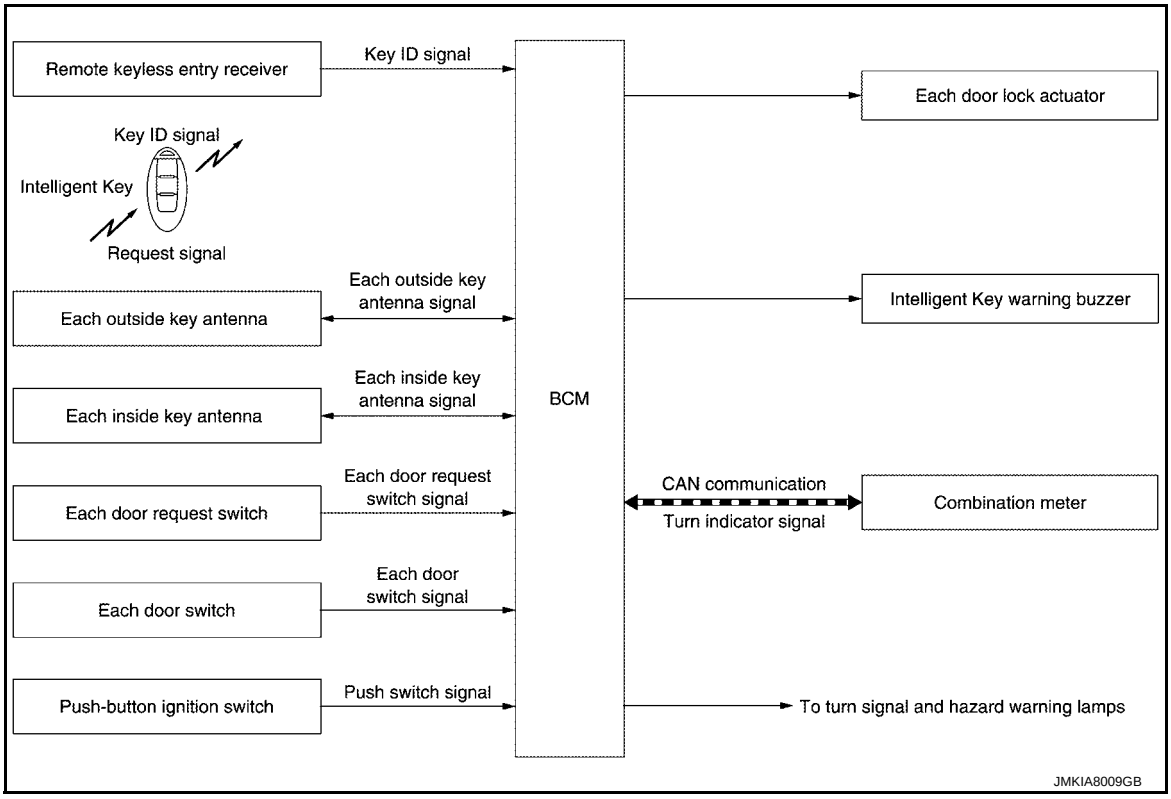


DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Description

INFOID:0000000012408486

SYSTEM DIAGRAM



DOOR REQUEST SWITCH OPERATION

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

OPERATION DESCRIPTION

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

OPERATION CONDITION

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

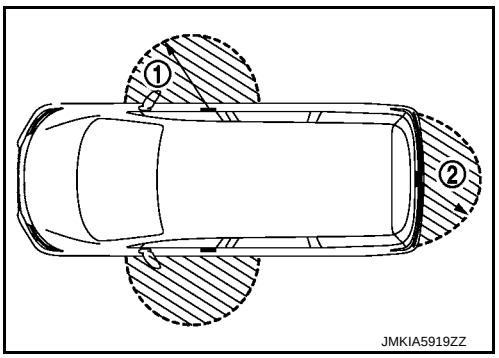
Each door request switch operation	Operation condition
Lock	• All doors are closed • Panic alarm is not activated • P position warning is not activated • Intelligent Key is outside the vehicle • Intelligent Key is within outside key antenna detection area*
Unlock	• Panic alarm is not activated • Intelligent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

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

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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, passenger door handles (1) and back door handle (2). However, this operating range depends on the ambient conditions.



SELECTIVE UNLOCK FUNCTION

Lock Operation

When an LOCK signal is sent from door request switch (driver side, passenger side, back door), all doors and fuel filler lid are locked.

Unlock Operation

- When an UNLOCK signal from driver side door request switch is transmitted, driver side door are unlocked. When another UNLOCK signal is transmitted within 60 seconds, all other doors are unlocked, back door open permission is set.
- When an UNLOCK signal from passenger side door request switch is transmitted, passenger side door is unlocked. When another UNLOCK signal is transmitted within 60 seconds, all other doors are unlocked, back door open permission is set.
- When an UNLOCK signal from back door request switch is transmitted, back door open permission is set. When another UNLOCK signal is transmitted within 60 seconds, all doors are unlocked.
- Only the door, of which one touch switch is pressed, unlock and starts automatic open operation when one-touch switch of sliding door is pressed.

How To Change Selective Unlock Operation Mode

Selective unlock operation mode can be changed using CONSULT.
Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

HAZARD AND BUZZER REMINDER FUNCTION

During lock or unlock operation by each door request switch, the hazard warning lamps and Intelligent Key warning buzzer blinks or honks as a reminder.

Operating Function Of Hazard And buzzer Reminder

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

Hazard and buzzer reminder does not operate in the following conditions.

- Ignition switch position is ON
- Door is open (only lock operation)

How To Change Hazard And Buzzer Reminder Mode

Hazard and buzzer reminder mode can be changed using CONSULT.
Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

AUTO DOOR LOCK FUNCTION

After door is unlocked by door request switch operation and if 60 seconds or more passes without performing the following operation, all doors are automatically locked. However, operation check function does not activate.

Operating condition	• Door switch is ON (door is open) • Door is locked • Push switch is pressed

How To Change Auto Door Lock Operation Mode

Auto door lock operation mode can be changed using CONSULT.

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Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

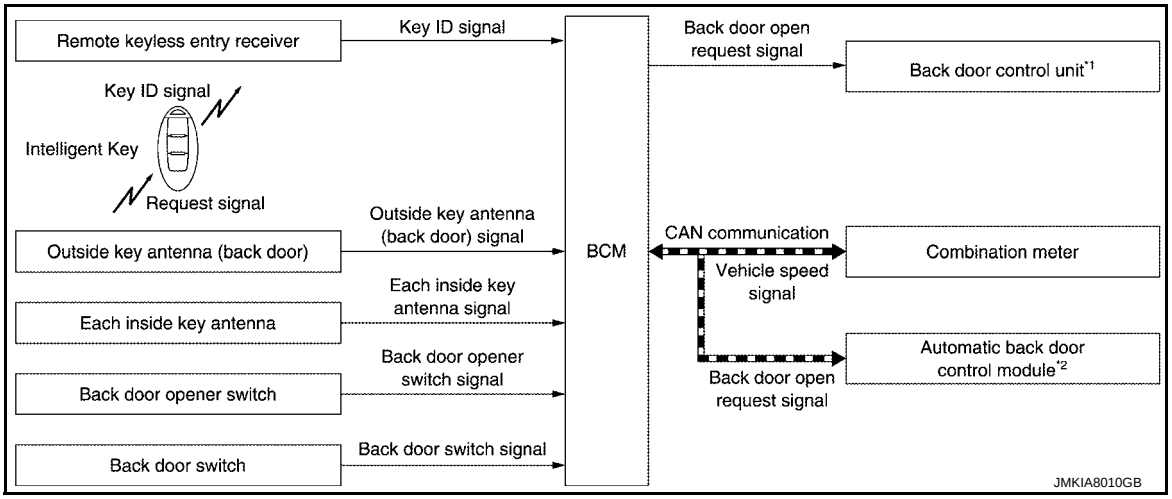
Function	Intelligent Key	Remote keyless entry receiver	Door switch	Door request switch	Door lock actuator	Inside key antenna	Outside key antenna	CAN communication system	BCM	Hazard warning lamp	Intelligent Key warning buzzer	Push-button ignition switch
Door lock/unlock function	×	×	×	×	×	×	×		×			
Hazard reminder function								×	×	×	×	
Selective unlock function	×			×	×	×	×		×			
Auto door lock function	×				×				×			×

BACK DOOR OPEN FUNCTION

BACK DOOR OPEN FUNCTION : System Description

INFOID:0000000012408487

BACK DOOR OPEN OPERATION



*1:With back door auto closure system

*2:With automatic back door system

BACK DOOR OPEN OPERATION

This section describes the operation of the back door opener switch.

- The back door open function can open the back door by pressing the back door opener switch while carrying the Intelligent Key and all doors are locked.
- The back door open function enables the back door to be opened by pressing back door opener switch after BCM transmits UNLOCK signal to each door.Refer to DLK-52, "System Description".

BACK DOOR OPEN (WITH BACK DOOR AUTO CLOSURE SYSTEM MODELS)

- When the BCM detects that back door opener switch is pressed, it activates the outside key antenna (rear bumper) and inside key antenna and transmits the request signal to the Intelligent Key. And then, check that the Intelligent Key is near the back door.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to the BCM via remote keyless entry receiver.
- BCM receives the key ID signal and compares it with the registered key ID.
- If the verification result is OK, BCM transmits the back door open request signal to back door control unit.

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- Back door control unit transmits back door open request signal to back door lock assembly and back door is open.
- When back door is open, back door auto closure system performs waiting operation for next back door close operation.
  The operation of then back door open is the same as the back door auto closure system, refer to DLK-52, "System Description".

BACK DOOR OPEN (WITH AUTOMATIC BACK DOOR SYSTEM MODELS)

- When the BCM detects that back door opener switch is pressed, it activates the outside key antenna (rear bumper) and inside key antenna and transmits the request signal to the Intelligent Key. And then, check that the Intelligent Key is near the back door.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to the BCM via remote keyless entry receiver.
- BCM receives the key ID signal and compares it with the registered key ID.
- If the verification result is OK, BCM transmits the back door open request signal to automatic back door control module via CAN communication.
- Automatic back door control module transmits back door open request signal to back door lock assembly and back door is open.
- When the back door is open, automatic back door system performs waiting operation for next back door close operation.
  The operation of then back door open is the same as the automatic back door system, refer to DLK-61, "OPEN FUNCTION : System Description".

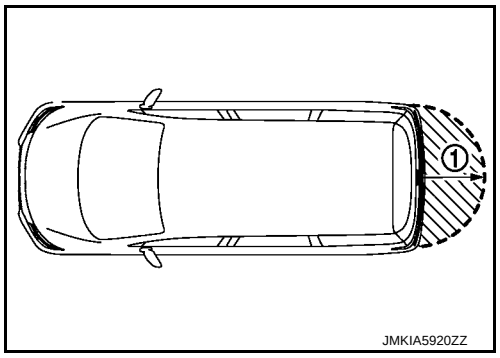
OPERATION CONDITION

If the following conditions are not satisfied, back door open operation is not performed even if the back door opener switch is operated.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH) • Intelligent Key is within outside key antenna (back door) detection area • Back door is closed • Panic alarm is not activated

OUTSIDE KEY ANTENNA DETECTION AREA

The outside key antenna detection area of back door open function is in the range of approximately 80 cm (31.50 in) surrounding the outside key antenna (rear bumper) (1). However, this operating range depends on the ambient conditions.



LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

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Function	Intelligent Key	Remote keyless entry receiver	Back door opener switch	Back door lock assembly	Inside key antenna	Outside key antenna (rear bumper)	CAN communication system	BCM	Back door control unit*1	Automatic back door control module*2
Back door open function	×	×	×	×	×	×	×	×	×	×

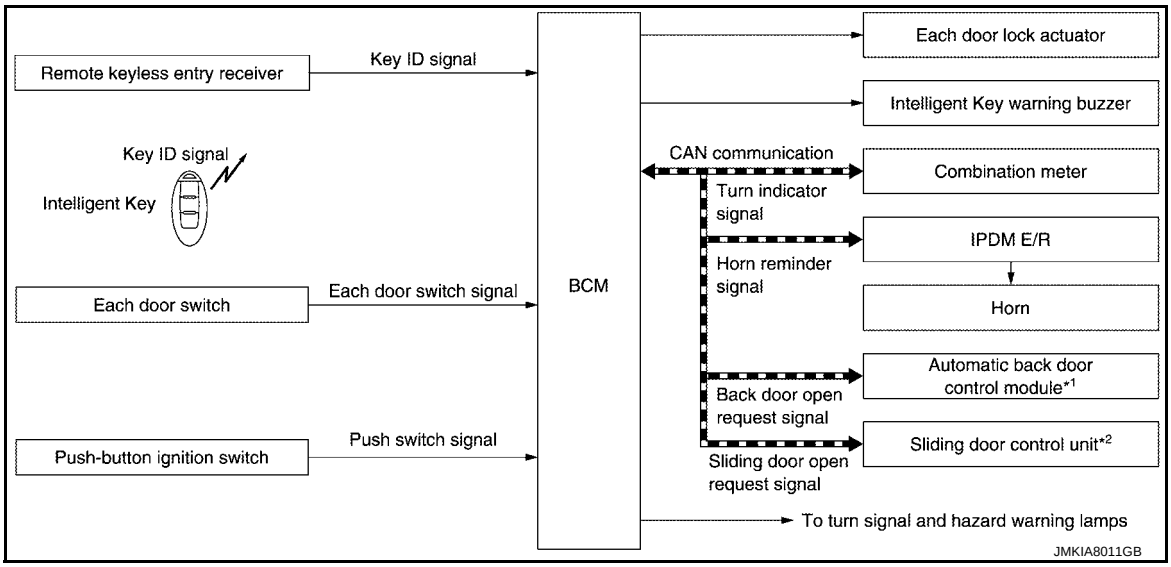
*1:With back door auto closure system
*2:With automatic back door system

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:0000000012408488

SYSTEM DIAGRAM



*1:With automatic back door system
*2:With automatic sliding door system

BASIC OPERATION

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

OPERATION

Remote keyless entry system controls operation of the following items.
- Door lock/unlock function
- Selective unlock function
- Auto door lock function
- Hazard and horn reminder function
- Automatic back door open/close function
- Automatic sliding door open/close function

OPERATION AREA

To check that the Intelligent Key works normally, use within 1 m (3 ft) range of each doors, however the operable range may differ according to surroundings.

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DOOR LOCK/UNLOCK FUNCTION

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

OPERATION CONDITION

If the following condition are satisfied, remote keyless entry operation is performed when the Intelligent Key is operated.

Remote controller operation	Operation condition
Lock	• Panic alarm is not activated • P position warning is not activated
Unlock	Panic alarm is not activated

SELECTIVE UNLOCK FUNCTION

- When an LOCK signal is transmitted from Intelligent Key, all doors are locked.
- When an UNLOCK signal is transmitted from Intelligent Key once, driver side door is unlocked.
- Then, if an UNLOCK signal is transmitted from Intelligent Key again within 60 seconds, all other doors are unlocked. back door open permission is set.
- Only the door, of which back door button of Intelligent Key is pressed, unlock and starts automatic open operation when back door button of Intelligent Key of sliding door is pressed.

How to change selective unlock operation mode.

Selective unlock operation mode can be changed using CONSULT.

Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

AUTO DOOR LOCK FUNCTION

After door is unlocked by Intelligent Key button operation and if 60 seconds or more passes without performing the following operation, all doors are locked. However, operation check function does not activate.

Operating condition	• Door switch is ON (door is open) • Door is locked • Push switch is pressed

How to change auto door lock operation mode.

Auto door lock mode can be changed using CONSULT.

Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

HAZARD AND HORN REMINDER FUNCTION

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

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

Operating Function of Hazard and Horn Reminder

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

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

- Ignition switch position is ON.
- Door is open (only lock operation)

How to Change Hazard and Horn Reminder Mode

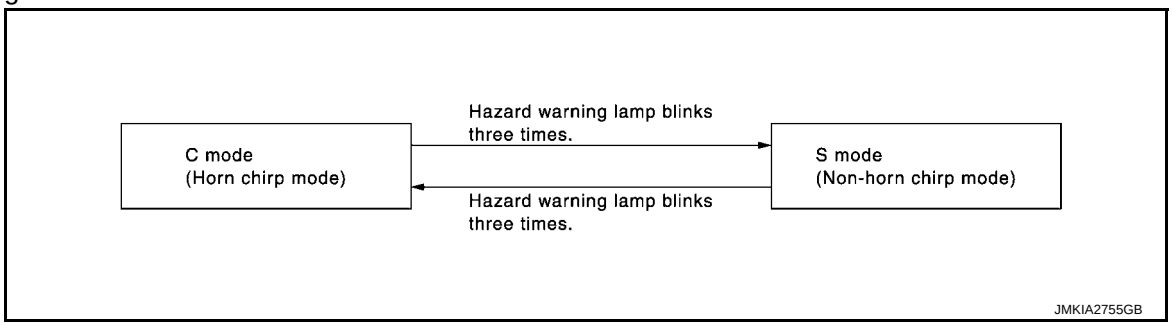
With CONSULT

Hazard and horn reminder operation mode can be changed using CONSULT.

Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT

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



AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

When back door button of Intelligent Key is pressed, back door open automatically for detailed description, refer to DLK-52, "System Description".

AUTOMATIC SLIDING DOOR OPEN/CLOSE FUNCTION

When sliding door button of Intelligent Key is pressed, sliding door open automatically for detailed description, refer to DLK-64, "AUTOMATIC SLIDING DOOR SYSTEM : System Description".

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Function	Intelligent Key	Door switch	Door lock actuator	Push-button ignition switch	CAN communication system	BCM	IPDM E/R	Horn	Combination meter	Hazard warning lamp	Intelligent Key warning buzzer	Automatic back door control module*1	Sliding door control unit*2
Door lock/unlock function	×	×	×			×							
Selective unlock function	×	×	×			×							
Auto door lock function	×	×	×	×		×							
Hazard and horn reminder function					×	×	×	×	×	×	×		
Automatic back door open/close function	×				×	×						×	×
Automatic sliding door open/close function	×				×	×							×

*1:With automatic back door system

*2:With automatic sliding door system

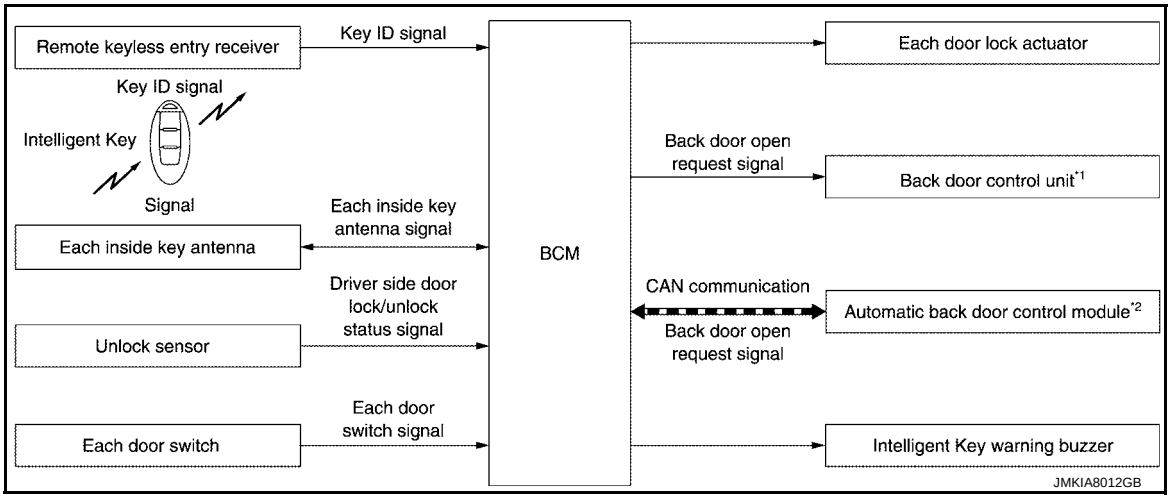
KEY REMINDER FUNCTION

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KEY REMINDER FUNCTION : System Description

INFOID:0000000012408489

SYSTEM DIAGRAM



*1:With back door auto closure system

*2:With automatic back door system

BASIC OPERATION

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

Key remainder function	Operation condition	Operation
Driver door closed*	Right after driver side door is closed under the following conditions • Door lock operation is performed • Driver side door is open • Driver side door is in unlock state	All doors unlock
Door is open or closed	Right after all doors are closed under the following conditions • Intelligent Key is inside the vehicle • Any door is open • All doors are locked by door lock and unlock switch or door lock knob	• All doors unlock • Honk Intelligent Key warning buzzer
Back door is closed	Right after back door is closed under the following conditions • Intelligent Key is inside vehicle • All doors (except for back door) are closed • All doors (except for back door) are locked	• All doors unlock • Back door can open with back door opener switch • Honk Intelligent Key warning buzzer

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

NOTE:

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

WARNING FUNCTION

WARNING FUNCTION : System Description

INFOID:0000000012408490

OPERATION DESCRIPTION

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

- Intelligent Key system malfunction
- OFF position warning
- P position warning

- ACC warning
- Take away warning
- Door lock operation warning
- Engine start information
- Intelligent Key low battery warning
- Key ID warning
- Key ID verification information

OPERATION CONDITION

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

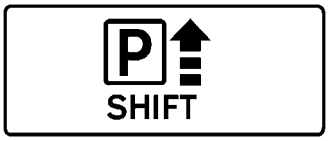
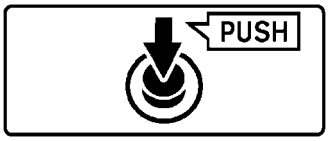
Warning/Information functions		Operation procedure
Intelligent Key system malfunction		When a malfunction is detected on BCM, “KEY” warning lamp illuminates
OFF position warning	For internal	When condition A, B or condition C is satisfied • Condition A - Ignition switch: ACC position - Door switch (driver side): ON (Door is open) • Condition B - Turn ignition switch from ON to OFF while door is open • Condition C - Intelligent Key backside is contacted to ignition switch while brake pedal is depressed and ignition switch is LOCK or OFF (When the Intelligent Key battery is discharged) - Door switch (driver side): ON (Door is open)
	For external	OFF position warning (For internal) is in active mode, driver side door is closed **NOTE:** OFF position (For external) active only when each of the sequence occurs as below: P position warning → ACC warning → OFF position warning (For internal) → OFF position warning (For internal)
P position warning	For internal	• Shift position: Except P position • Engine is running to stopped (Ignition switch is ON to OFF)
	For external	Warning is activated when driver door is closed from the open position while the P position warning (for inside vehicle) is ON
ACC warning		• When P position warning is in active mode, shift position changes P position • Ignition switch: ACC position
Take away warning	Door is open to close	• Ignition switch: Except LOCK position • Door switch: ON to OFF (Door is open to close) • Intelligent Key cannot be detected inside the vehicle
	Door is open	• Ignition switch: Except LOCK position • Door switch: ON (Door is open) • Key ID verification every 5 seconds when registered Intelligent Key cannot be detected inside the vehicle
	Push-button ignition switch operation	• Ignition switch: Except LOCK position • Press push-button ignition switch • Intelligent Key cannot be detected inside the vehicle
Door lock operation warning		When door lock operation is requested while door lock operating condition of door request switch or Intelligent Key are not satisfied

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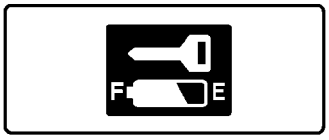
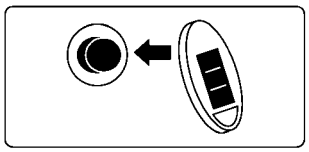
Warning/Information functions		Operation procedure
Engine start information	Ignition switch is ON position	• Ignition switch: ON position • Shift position: P position • Engine is stopped
	Ignition switch is except ON position	• Ignition switch: Except ON position • Shift position: P position • Intelligent Key is in the passenger room after driver door is opened and closed.
	Ignition switch is ON position to OFF position	• Ignition switch: ON position to OFF position • Shift position: P position **NOTE:** Engine start information turns ON for several seconds and then turns OFF, when ignition switch is turned to the ON position from the OFF position. Engine start information does not turn ON until opening and closing of driver door is detected again.
Intelligent Key low battery warning		When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON
Key ID warning		When registered Intelligent Key cannot be detected inside the vehicle after ignition switch is turned ON
Key ID verification information		• When registered Intelligent Key cannot be detected inside the vehicle • Intelligent Key battery is discharged • When NATS antenna amp cannot be detected NATS ID

WARNING METHOD

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

Warning/Information functions		"KEY" warning lamp	Information display (combination meter)	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key system malfunction		Indicate	—	—	—
OFF position warning	For internal	—	—	Activate	—
	For external	—	—	—	Activate
P position warning	For internal	—	 JMKIA0037GB	Activate	—
	For external			—	Active
ACC warning		—	 JMKIA0047GB	Activate	—
Take away warning	Door is open to close	—	 JMKIA0036GB	Activate	Activate
	Door is open			—	—
	Push button-ignition switch operation			Activate	—

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Warning/Information functions		"KEY" warning lamp	Information display (combination meter)	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Door lock operation warning	Request switch operation	—	—	—	Activate
	Intelligent Key	—	—	—	Activate
Key ID warning		—	 JMKIA0036GB	—	—
Engine start information		—	 JMKIA0032GB	—	—
Intelligent Key low battery warning		—	 JMKIA3049ZZ	—	—
Key ID verification information		—	 JMKIA4907ZZ	—	—

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Warning function		Intelligent Key	Push-button Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display	"KEY" warning lamp
Intelligent Key system malfunction										×	×		×
OFF position warning	For internal			×					×	×	×		
	For external			×				×			×		
P position warning			×						×	×	×	×	×
ACC warning			×						×	×	×	×	

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Warning function		Intelligent Key	Push-button Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display	"KEY" warning lamp
Take away warning	Door is open or close	×		×		×		×	×	×	×	×	×
	Door is open	×		×		×				×	×	×	×
	Push-button ignition switch operation	×	×			×			×	×	×	×	×
Door lock operation warning		×		×	×	×	×	×			×		
Key ID warning			×			×				×	×	×	×
Engine start information	Ignition switch is ON position	×	×			×				×	×	×	
	Ignition switch is except ON position	×	×			×				×	×	×	
Intelligent Key low battery warning		×				×				×	×	×	×
Key ID verification information		×				×				×	×	×	

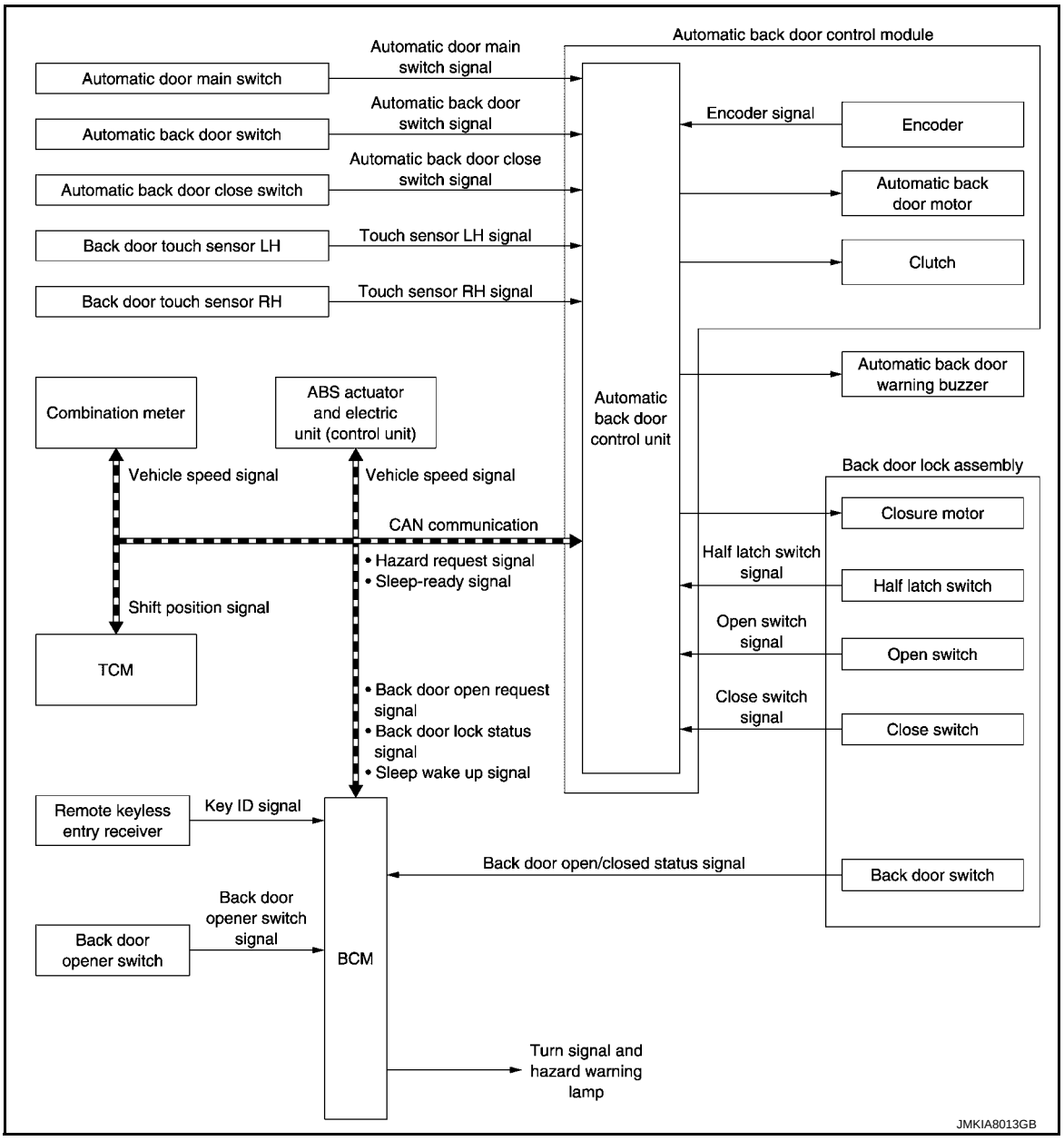
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SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

System Description

INFOID:0000000012408491

SYSTEM DIAGRAM



BASIC OPRATION

The automatic back door system performs the automatic open/close operation of the back door by operating the automatic back door switch, the automatic back door close switch, the back door opener switch, and Intelligent Key.

AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

- In the case of the back door fully closed, operate the automatic back door switch, Intelligent Key or back door opener switch with the back door unlock. The back door closure motor releases the latch, then the automatic back door motor opens the back door to the fully open position. Reverse the closure motor to the neutral position simultaneously.
- In the case of the back door fully open, operate the automatic back door switch, Intelligent Key or automatic back door close switch. The automatic back door motor closes the back door to the half-latch position, then the back door closure motor to the full latch position. Then, reverse the closure motor to the neutral position.

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BACK DOOR AUTO CLOSURE FUNCTION

Open Function

When back door opener switch is pressed and automatic door main switch in the OFF position, BCM transmits the back door open request signal to automatic back door control module via CAN communication, and automatic back door control module opens back door lock assembly.

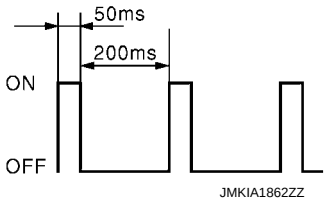
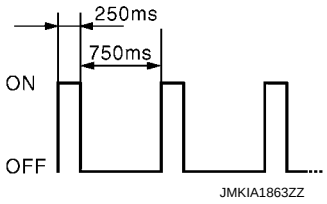
Closure Function

When the back door is closed to the half-latch position, the motor drives to rotate the latch lever and pulls it in from half latched to fully latched and automatically closes the door. Then, reverse the closure motor to the neutral position.

WARNING FUNCTION

The warning function is as follows and gives the user warning information and warnings using automatic back door buzzer and hazard.

Buzzer Operation Condition

Pattern		Time	Description
A		0.75 sec.	Operation start announcement Anti-pinch operation start announcement
B	Pi---	2.0 sec.	During the closure operation, the touch sensor detects any trapped foreign material and stops halfway
C	Pi------••••••	Back door fully closed or vehicle is stopped	The conditions are not satisfied in the fully open position or during the operation, and then the operation continues
D		During open/close operation	During operation announcement

ANTI-PINCH FUNCTION

During auto operation, if an object is detected by encoder pulse in the door's path, a warning chime sounds and the back door operates in the reverse direction to prevent pinching.
During auto close operation, if an object is detected by the touch sensors in the door's path, a warning chime sounds and the back door operates in the open direction until it is fully open.

Operation Condition

Detection method		Encoder pulse	Touch sensor
Applicable operation		Open/close operation	Close operation
Operation when any trapped foreign material is detected	Stop the vehicle	Buzzer sounds (pattern A) and reverse operation	• Buzzer sounds (pattern A) and the back door stops in the fully-open position after reverse operation • During closure (close) operation (at main switch OFF): Closure [open (neutral position return)] operation
	Running the vehicle	No reverse operation (buzzer sounds, pattern C)	• The back door reverses a certain amount, and then it reverses automatically to perform the auto close operation • During closure (close) operation (at main switch ON): Closure (open) operation

Detection method	Encoder pulse	Touch sensor
Non-reverse area	• Just after starting the motor operation • Full range of closure operation • Driving	• Back door open operation • Closure [open (return the latch to the neutral position)]
Switch operation during reverse operation	Receive	
Number of allowable reverse operations	Perform the intermittent clutch function after 2 reverse operations regardless of the operation direction	

INTERMITTENT CLUTCH FUNCTION

If the main switch is turned to OFF during auto operation, the back door may be closed suddenly because the operation is interrupted immediately when the operation cannot be continued because of the detection of a system malfunction. Therefore, operate the clutch intermittently to stabilize the back door behavior and ensure safety.

AUTOMATIC BACK DOOR OPEN/CLOSE OPERATION CONDITION

	Automatic back door switch			Intelligent Key		Automatic back door close switch	Back door opener switch	
Operating direction	Fully closed → Open		Fully open →Closed	Fully closed → Open	Fully open → Closed	Fully open → Closed	Fully closed → Open	
Main switch	—		—	—	—	ON	ON	
Ignition position	ON	ACC/ LOCK	—	—		—	ON	ACC/ LOCK
Shift selector lever	P position	—	—	—	—	—	P position	—
Vehicle speed	0 km/h							
Back door lock condition	—		—	—	—	—	Unlock*	
Touch sensor	Normal							
Power supply (Automatic power back door control unit)	Approx. 11 V or more							

*: If the registered Intelligent Key is used, the operation can be performed even if the back door is in the LOCK position

CONTROL IF NOT WITHIN THE OPERATION CONDITIONS DURING THE OPERATION

If the back door is not within the operation conditions during the operation, the automatic back door control unit performs the control as follows.

Item (Condition)	Back door condition
Main Switch (ON → OFF)	• Motor: OFF • Clutch: OFF (Intermittent clutch function)
Vehicle stop condition (open operation) • IGN ON and shift P position→IGN ON and other than P position • IGN OFF and shift N position → IGN ON and N position	The operation is continued
Operation condition release during the operation start announcement condition	Automatic back door function does not operate

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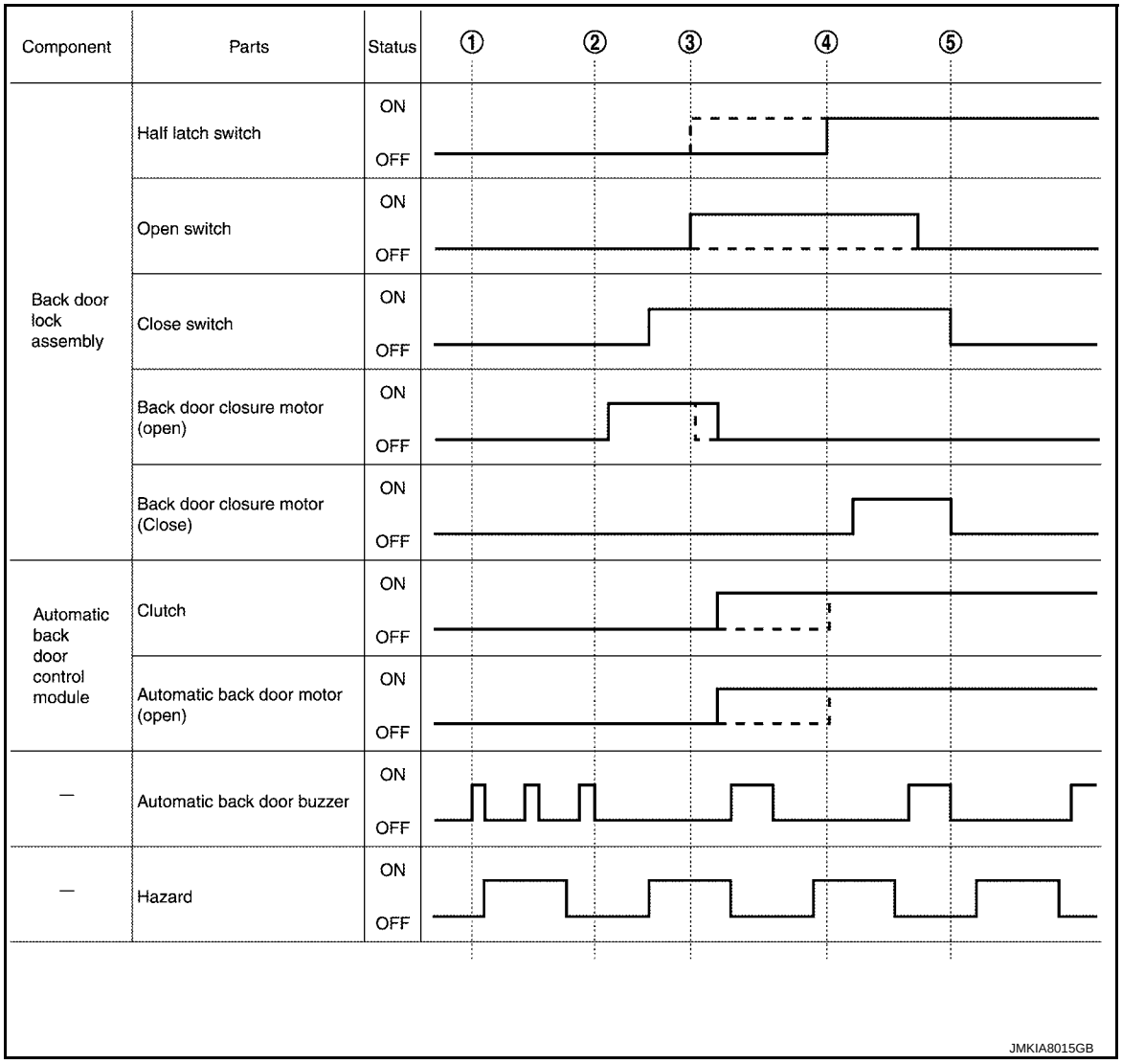
Item (Condition)	Back door condition	
Vehicle speed (0 km/h → More than 0 km/h)	Open operation	Operation stop and intermittent clutch function [Back door fully closed or buzzer sounds until the vehicle stops (pattern C)]
	Close operation	The operation is continued [buzzer sounds (pattern C) until back door fully closed]
Touch sensor (Normal → Open)	Open operation	The operation is continued (If the pinch is detected after that, the system switches to the intermittent clutch function)
	Close operation	Intermittent clutch function
	Closure (close) operation	Closure (open) operation and buzzer sounds (pattern B)
	Closure [open (return the latch to the neutral position)] operation	The operation is continued
Operation time (More than approx. 30 sec.)	Intermittent clutch function	
Back door opener switch (OFF → ON)	Open/close operation	The operation is continued
	Closure (close) operation	Closure (open) operation and back door open
	Closure [open (return the latch to the neutral position)] operation	Back door open
Malfunction detected (IGN circuit, half latch switch and back door state)	Intermittent clutch function	

TIME CHART FOR AUTOMATIC POWER BACK DOOR SYSTEM

Fully Closed to Fully Open Operation

When operating the automatic back door switch, automatic back door opener switch and Intelligent Key in the fully closed position, the system operates as follows.

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NOTE:
Output sequence for half latch switch, open switch, and close switch may vary depending on reaction force difference of back door weather-strip. When reaction force of back door weather-strip is strong, refer to a broken line in the chart.

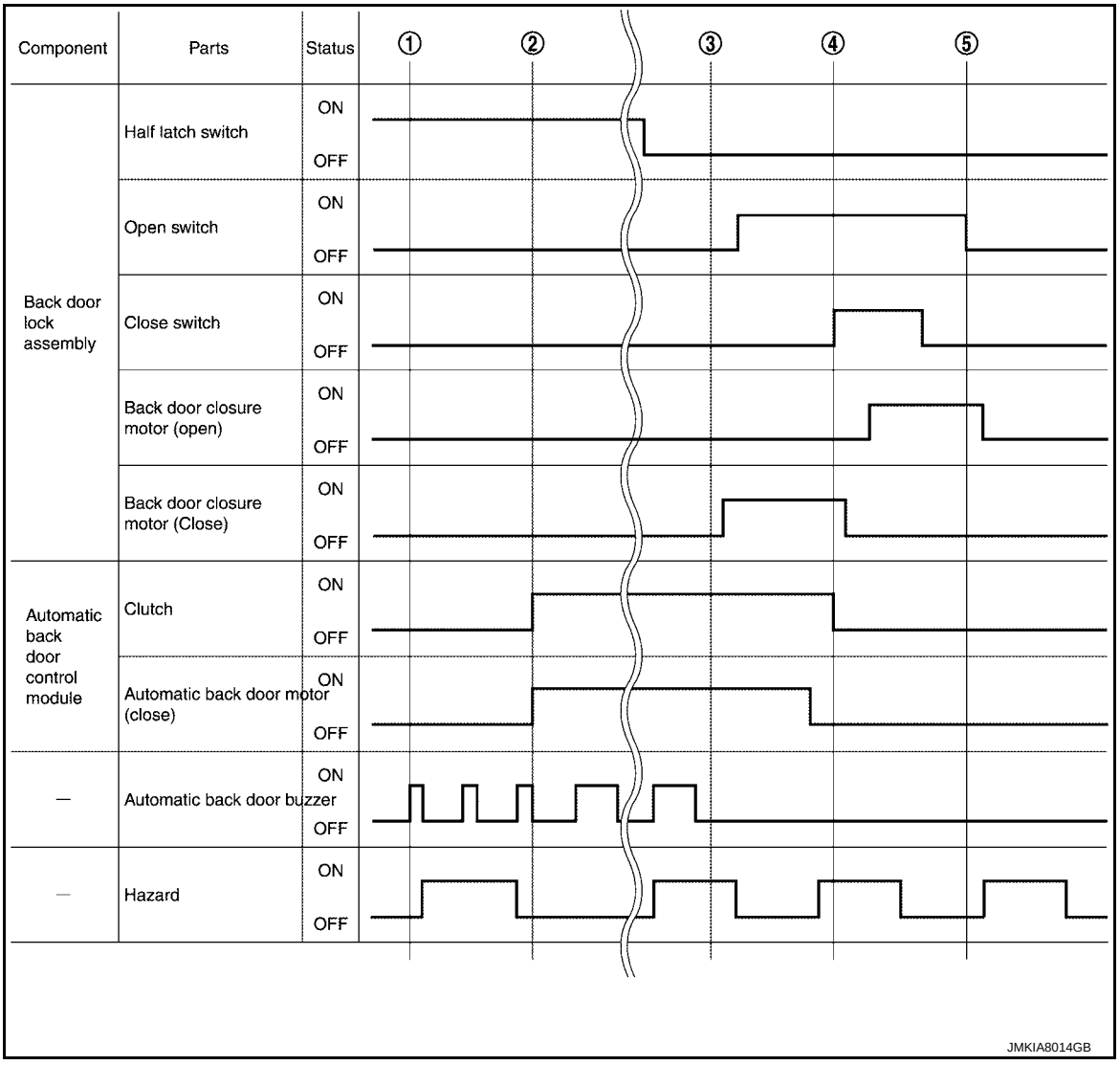
When reaction force of back door weather-strip is not strong
1. Buzzer and hazard lamp operate after condition are satisfied.
2. After buzzer operation (pattern A), back door closure motor starts the open operation.
3. When the latch is released and reaction force of weather-strip is not strong, half latch switch does not turn ON, and back door closure motor stops the open operation when open switch turns ON. After this operation, automatic back door motor and magnet clutch operate, and then back door starts the open operation.
4. When door is lifted up, half latch switch turns ON, and then back door closure motor operates the reverse operation and starts returning to the neutral position.
5. When close switch turns OFF, back door closure motor stops the reverse operation and then completes returning to the neutral position.

When reaction force of back door weather-strip is strong
1. Buzzer and hazard lamp operate after condition are satisfied.
2. After buzzer operation (pattern A), back door closure motor starts the open operation.
3. When the latch is released, half latch switch turns ON, and then back door closure motor stops the open operation.
4. When automatic back door motor and clutch operate and back door starts the open operation, back door closure motor operates the reverse operation and starts returning to the neutral operation.
5. When close switch turns OFF, back door closure motor stops the reverse operation and then completes returning to the neutral position.

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Fully Open to Fully Closed Operation

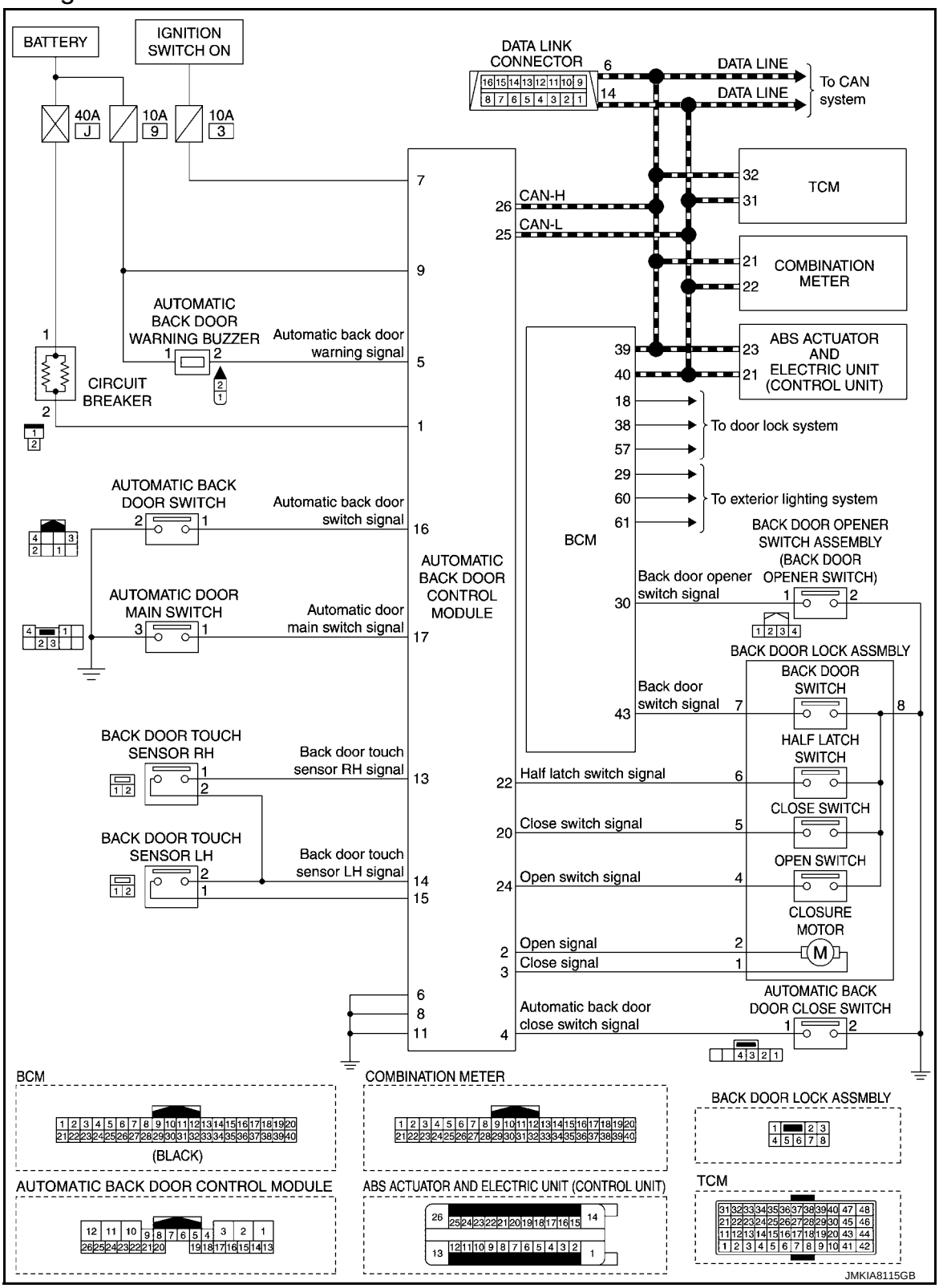
When operating the automatic back door switch, automatic back door close switch and Intelligent Key, the automatic back door system operates as follows.



1. Operates the buzzer and hazard after the operation enable conditions are established
2. After the buzzer (pattern A) stops sounding, operates the automatic back door motor and clutch to perform the back door close operation
3. The back door closure motor performs the close operation after 300 msec. or more from turning the half latch switch to OFF
4. The back door closure motor performs the open operation after turning the close switch to ON
5. Stop the back door closure motor open operation and return the latch to the neutral position after turning the close switch to OFF

Circuit Diagram

INFOID:0000000012408492



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Fail Safe

INFOID:0000000012408493

Display contents of CONSULT	Fail-safe	Cancellation
B2401 IGN OPEN	Intermittent clutch function	All following condition are satisfied • Power supply condition of automatic back door control unit: OFF • BCM receive ignition position signal (OFF) via CAN
B2403 PULSE ENCODER	Inhibit automatic back door operation	When receiving the pulse from encoders A and B normally (5 pulses)
B2409 HALF LATCH SW	Intermittent clutch function	Half latch switch is ON from OFF
B2416 TOUCH SEN R OPEN	During close operation: Intermittent clutch function	Normal return
B2417 TOUCH SEN L OPEN	During close operation: Intermittent clutch function	Normal return
B2419 OPEN SW	Inhibit automatic back door operation	Erase DTC, reconnect battery
B2420 CLOSE SW	Inhibit automatic back door operation	Erase DTC, reconnect battery
B2421 CLUTCH TIME OUT	Intermittent clutch function	Reception of next operation request
B2422 BACK DOOR STATE	Intermittent clutch function	Detect back door fully closed position
B2423 ABD MTR TIME OUT	Intermittent clutch function	Reception of next operation request
B2424 CLSR CONDITION	Inhibit automatic back door operation	Normal return or reconnect battery

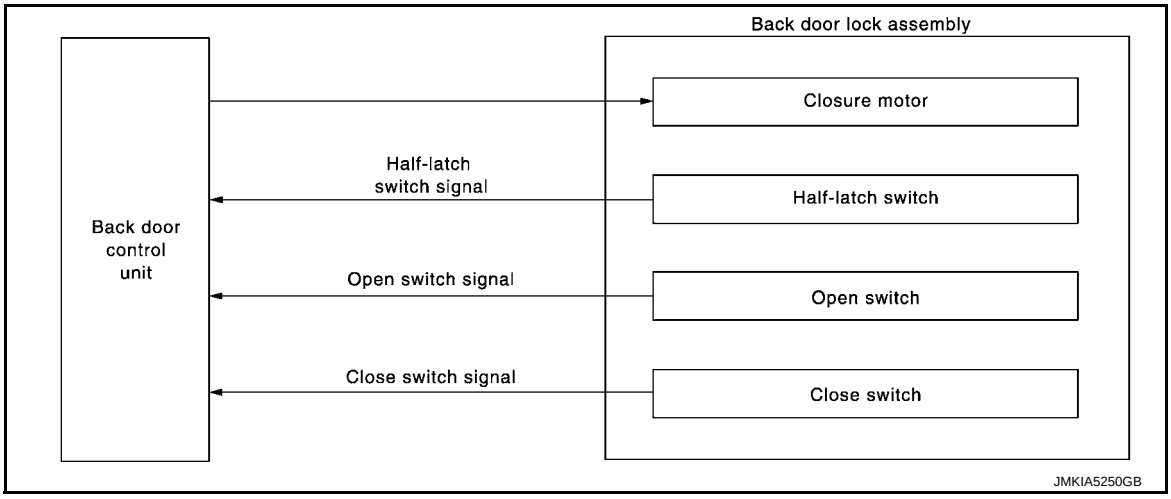
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SYSTEM (BACK DOOR AUTO CLOSURE SYSTEM)
CLOSURE FUNCTION

CLOSURE FUNCTION : System Description

INFOID:0000000012408494

SYSTEM DIAGRAM

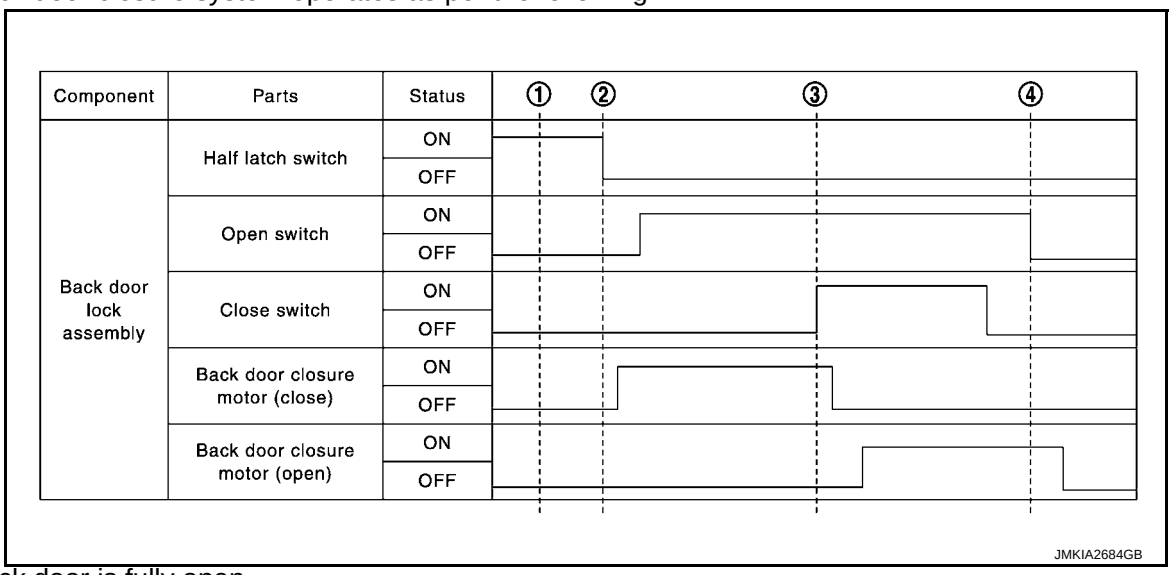


AUTO CLOSURE OPERATION

When back door is closed to the half-latch position, closure motor operates to rotate the latch lever from the half latched to fully latched position and automatically closes back door. Then, closure motor reverses to the neutral position.

From fully Open to Fully Closed Operation

The back door closure system operates as per the following.



1. Back door is fully open.
2. Back door closure motor starts the close operation after turning half latch switch OFF.
3. Back door closure motor stops the close operation and starts the neutral operation after turning close switch ON.
4. Back door closure motor stops the open operation and returns the latch to the neutral position after turning open switch OFF.

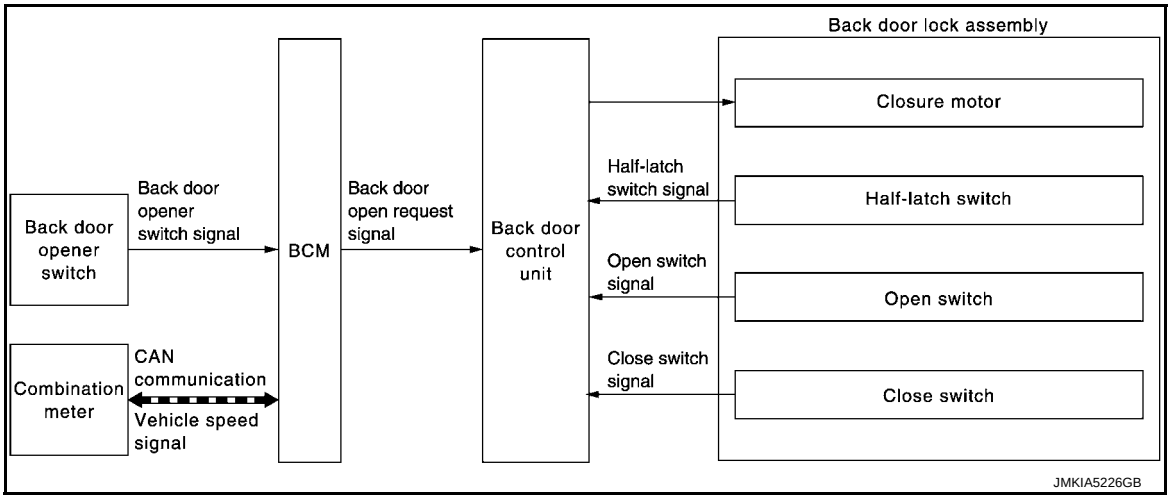
OPEN FUNCTION

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OPEN FUNCTION : System Description

INFOID:0000000012408495

SYSTEM DIAGRAM



OPEN OPERATION

- When the back door opener switch operation signal is input into back door control unit from BCM, back door is opened by the closure motor open operation.
- When back door opener switch is pressed, BCM transmits the back door open request signal to back door control unit and back door control unit opens back door.
- The operation to open back door with Intelligent Key is the same as the Intelligent Key system. Refer to DLK-42, "BACK DOOR OPEN FUNCTION : System Description"

Operation Condition

If the following conditions are satisfied, the back door opener operation is performed.

Back door opener switch operation	Operation condition
Back door open	• When back door is unlocked using back door request switch (selective unlock mode), or after BCM outputs all doors unlock signal • Vehicle speed is less than 5 km/h (3 MPH)

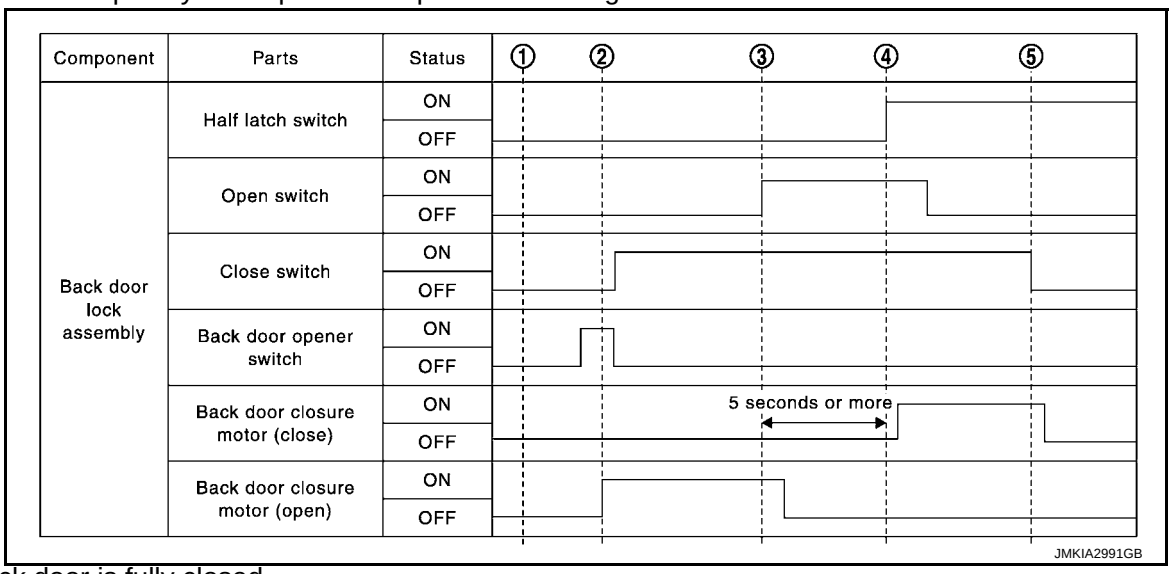
NOTE:

- When battery terminal is disconnected and reconnected during all doors unlock state, back door may not open.
- Regardless of door lock actuator state, BCM resets recognition of all doors unlock state approximately 30 seconds after battery terminal is disconnected and BCM recognizes that all doors are in lock state.
- When battery terminal is reconnected and back door does not open, have BCM recognize that all doors are in unlock state.

From Fully Closed To Fully Open Operation

The back door open system operates as per the following.

Component	Parts	Status
Back door lock assembly	Half latch switch	ON
		OFF
	Open switch	ON
		OFF
	Close switch	ON
		OFF
	Back door opener switch	ON
		OFF
	Back door closure motor (close)	ON
		OFF
	Back door closure motor (open)	ON
		OFF

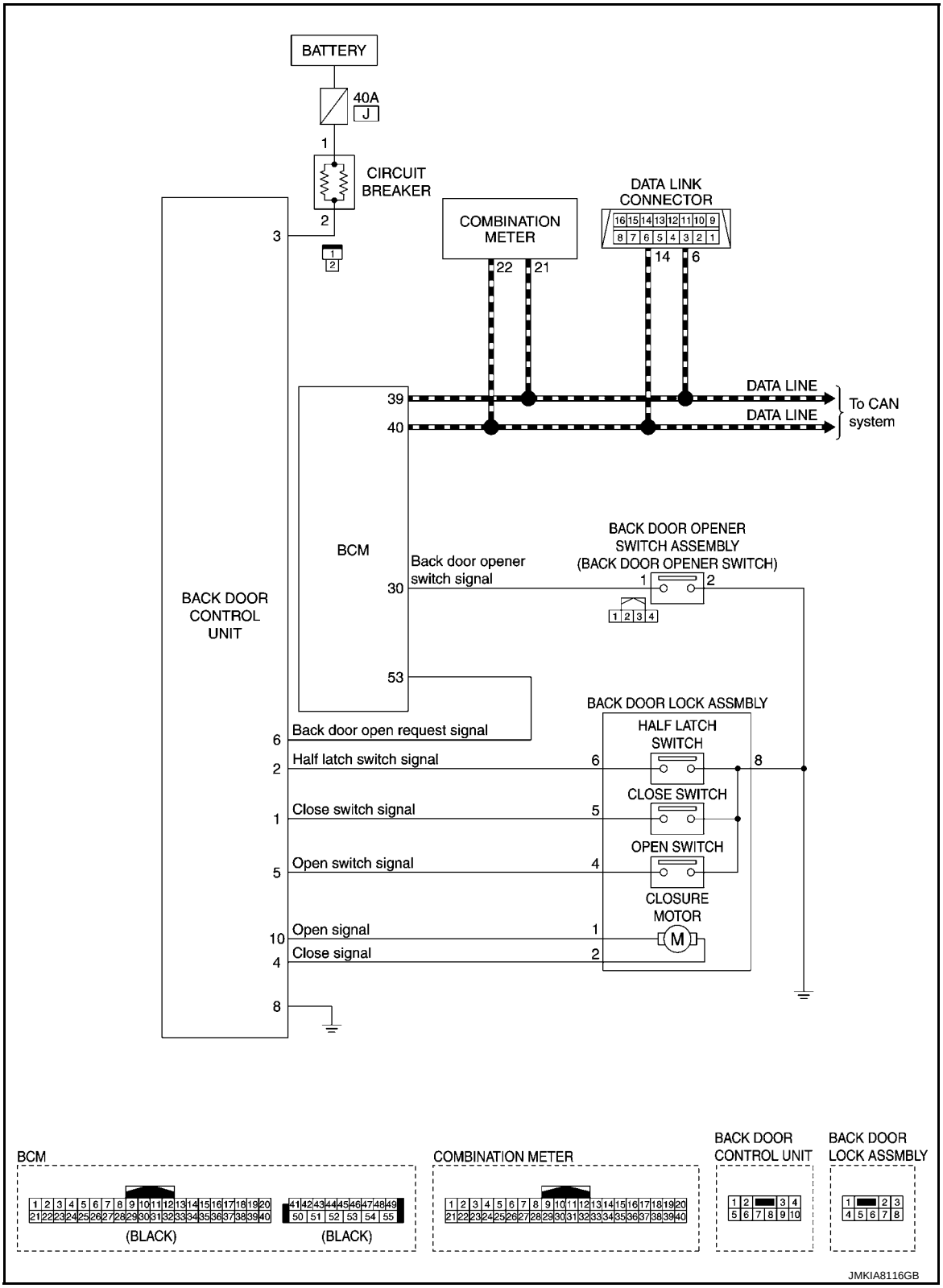


1. Back door is fully closed.
2. Back door closure motor starts the open operation after turning back door opener switch ON.
3. Back door closure motor stops the open operation after turning open switch ON.
4. Back door closure motor starts the close operation after turning half latch switch ON.
5. Back door closure motor stops the close operation and returns the latch to the neutral position after turning close switch OFF.

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Circuit Diagram

INFOID:0000000012408496



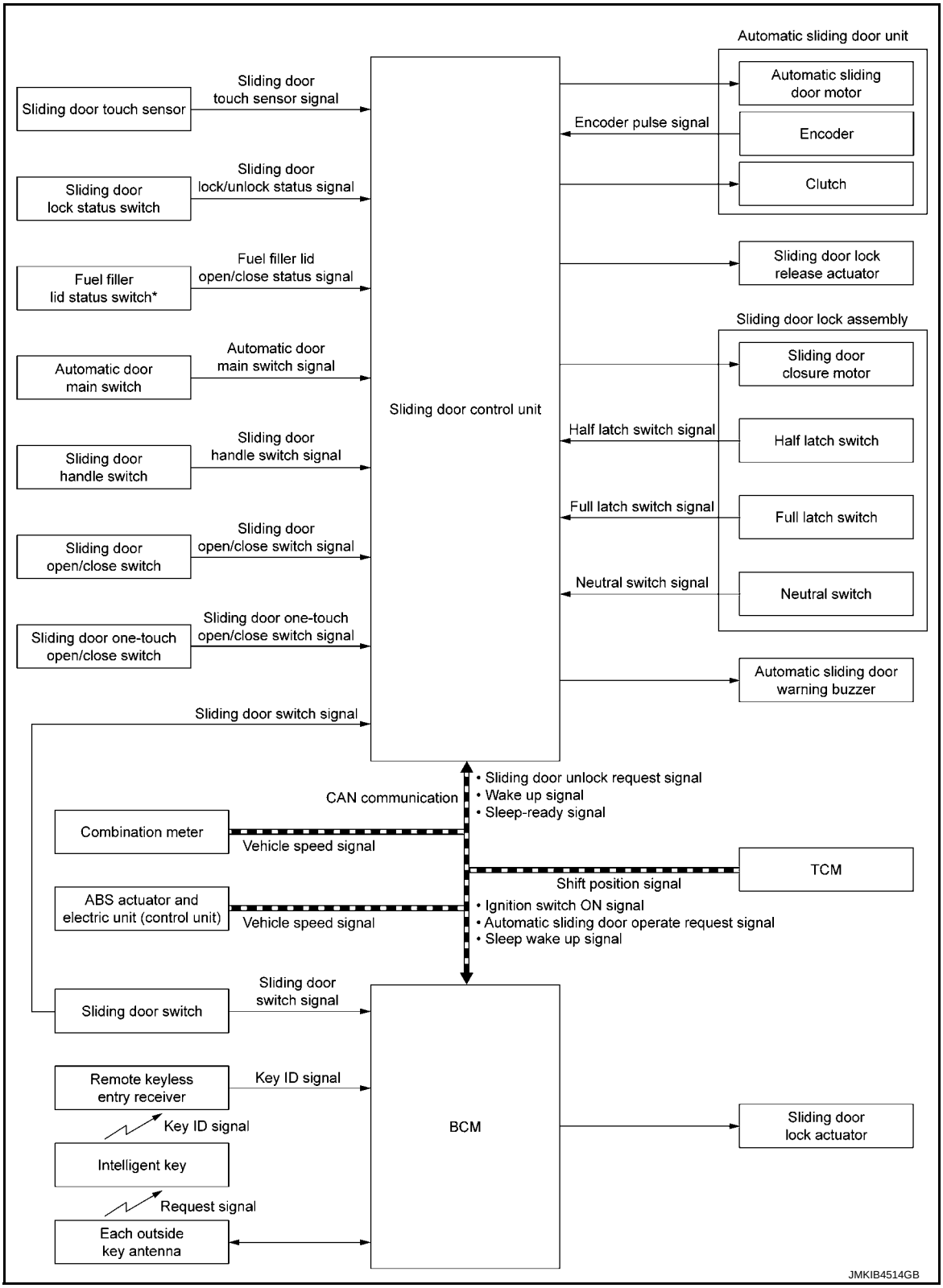
SYSTEM (AUTOMATIC SLIDING DOOR SYSTEM)

AUTOMATIC SLIDING DOOR SYSTEM

AUTOMATIC SLIDING DOOR SYSTEM : System Description

INFOID:0000000012408497

SYSTEM DIAGRAM



*: For automatic sliding door LH

- Automatic sliding door system controls auto open/close operation of sliding door LH and sliding door RH.

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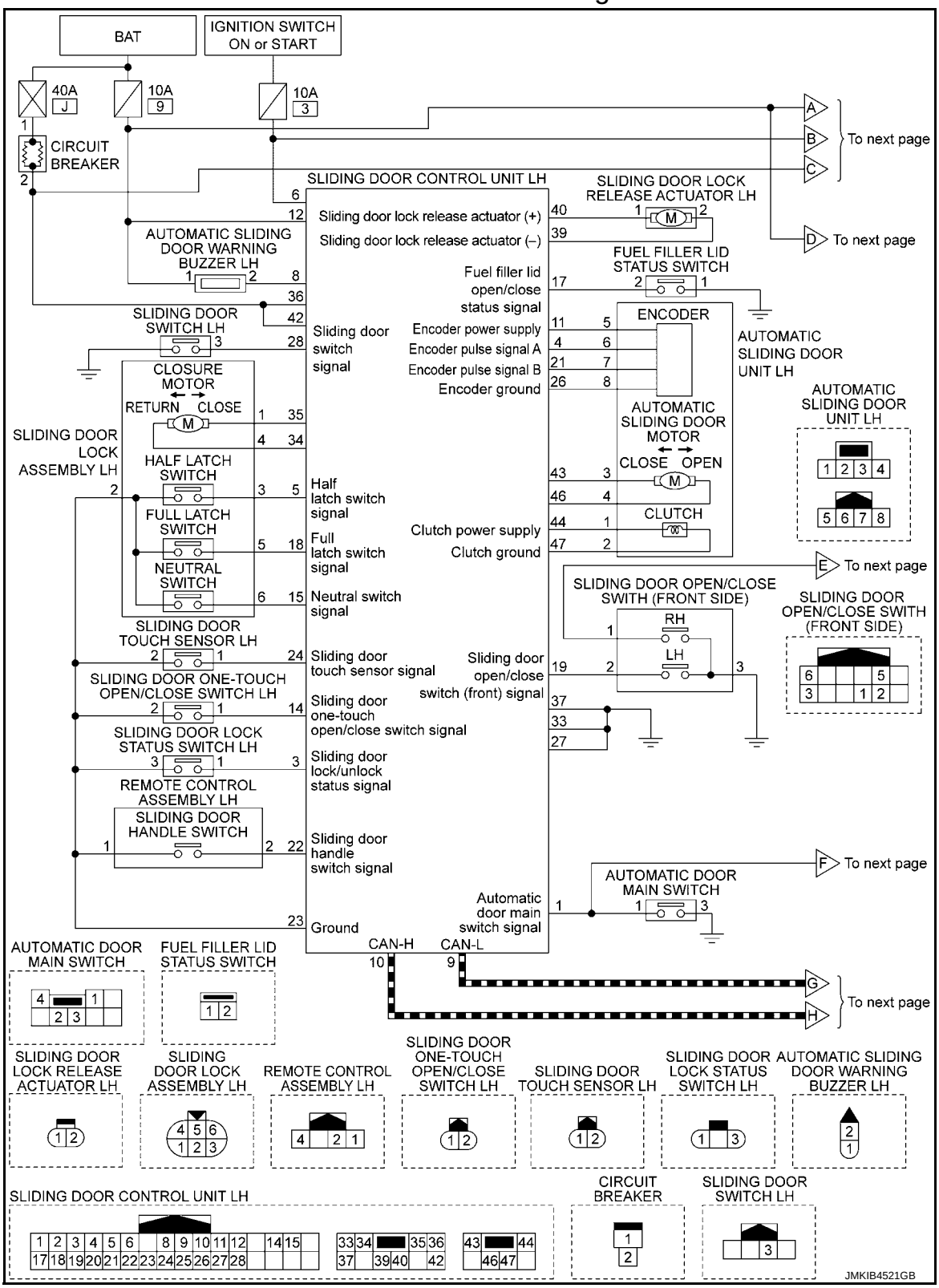
- Sliding door control unit controls each function of automatic sliding door system.

Function	Description	Refer
Auto open/close	Sliding door is automatically opened or closed according to operation of sliding door handle, sliding door open/close switch, sliding door one-touch open/close switch, and Intelligent Key	DLK-70
One-touch unlock	By carrying Intelligent Key, sliding door is unlocked and automatically opened according to operation of sliding door one-touch open/close switch, even when sliding door is in fully closed and locked status	DLK-75
Unlock-linked opening	Sliding door is unlocked and automatically opened according to operation of sliding door open/close switch (front side) or Intelligent Key button, even when sliding door is in fully closed and locked status	DLK-77
Power assist	Sliding door is automatically opened or closed according to direction of sliding door movement, when sliding door is manually opened or closed	DLK-79
Sliding door auto closure	Sliding door closure motor operates and sliding door is automatically retracted and closed to fully closed status, when sliding door is in half latch status	DLK-81
Hold	During vehicle driving, if sliding door is in open status because of incorrect operation or any other cause, sliding door control unit continuously keeps clutch to the ON position and holds the position of sliding door so that it does not open further	DLK-83
Anti-pinch	During sliding door auto open/close operation, if pinching of foreign materials is detected, sliding door control unit operates sliding door in the reverse direction	DLK-85
Intermittent clutch	During sliding door auto open/close operation, if system malfunction is detected, sliding door control unit operates clutch intermittently to the ON/OFF position and prevents sliding door from opening or closing suddenly, so that safety can be ensured	DLK-87
Buzzer reminder	Automatic sliding door warning buzzer sounds so that user is informed of operation start when sliding door auto open/close operation starts to operate	DLK-88

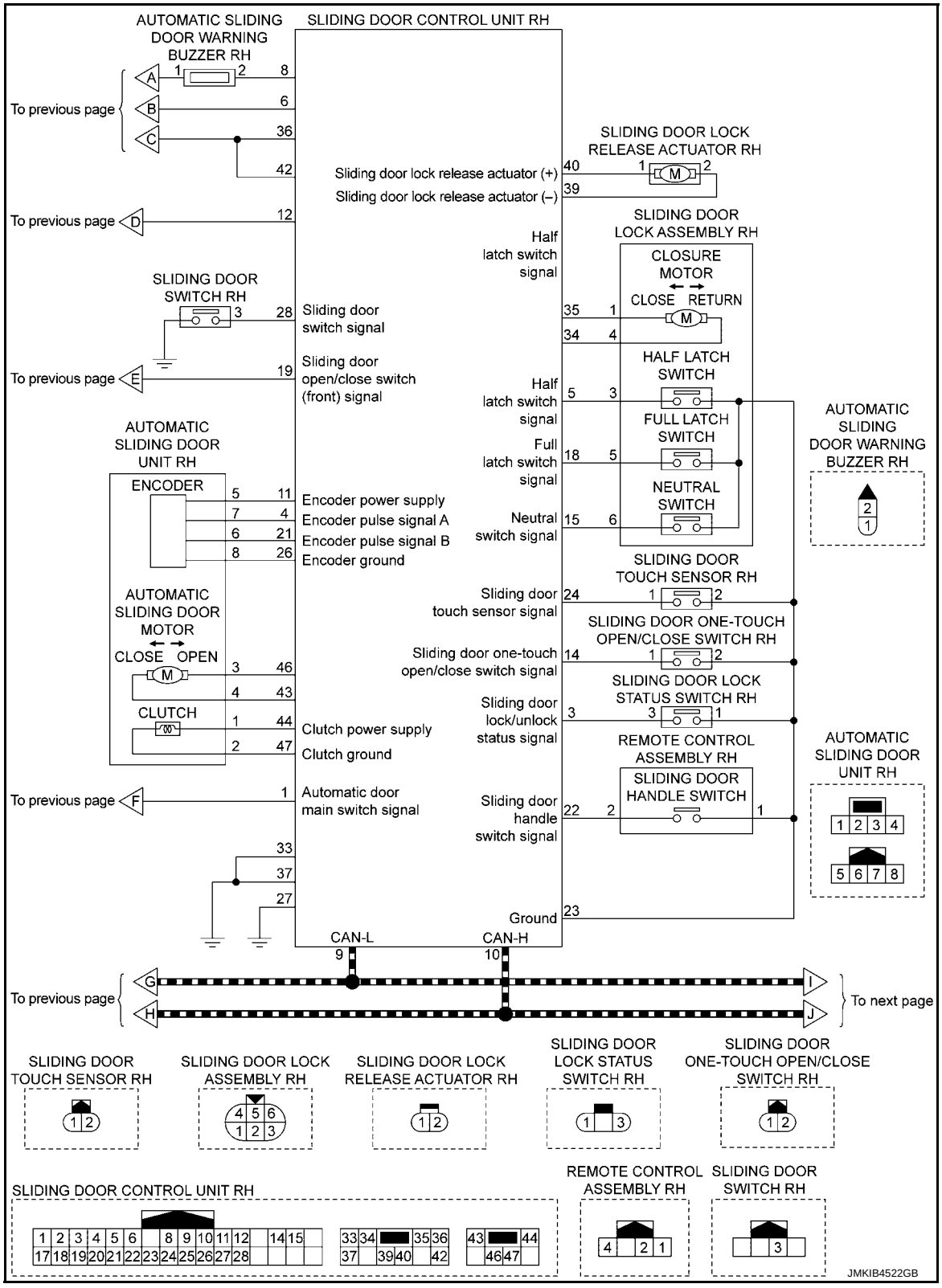
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AUTOMATIC SLIDING DOOR SYSTEM : Circuit Diagram

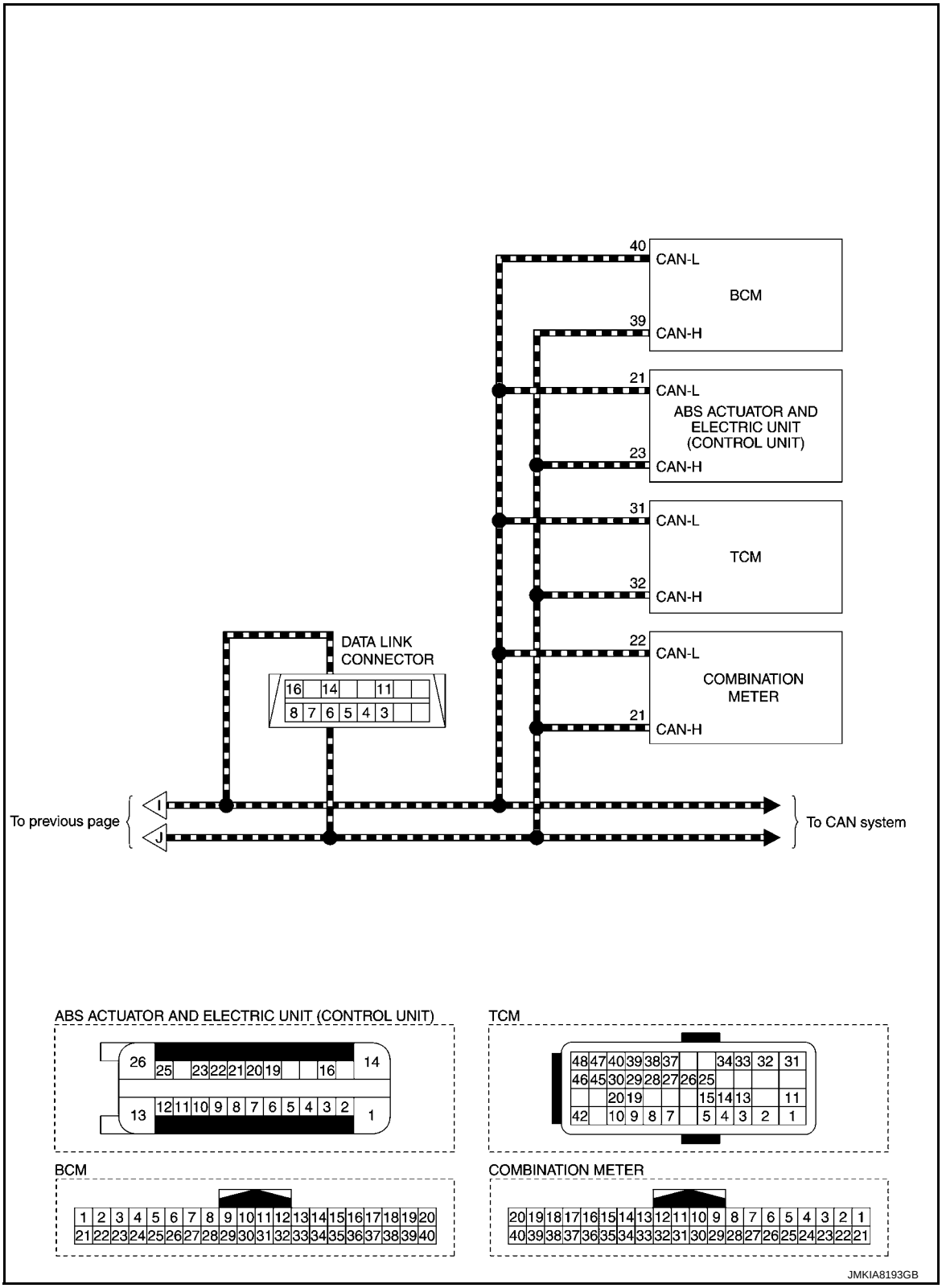
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AUTOMATIC SLIDING DOOR SYSTEM : Fail-safe

INFOID:0000000012408499

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

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Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

[*2]: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

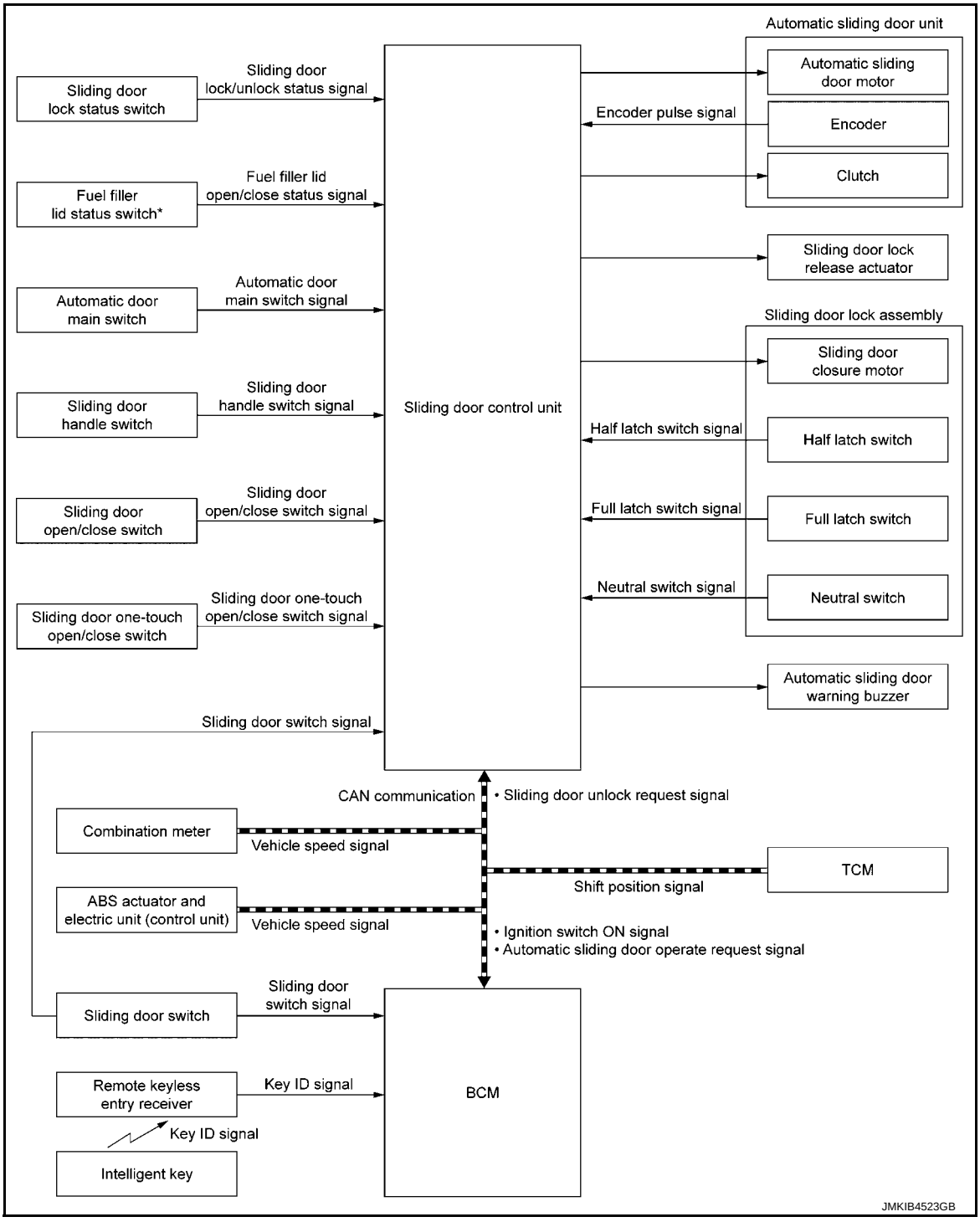
AUTO OPEN/CLOSE FUNCTION

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AUTO OPEN/CLOSE FUNCTION : System Description

INFOID:0000000012408500

SYSTEM DIAGRAM



*: For automatic sliding door LH

Auto open/close function operates auto open/close of sliding door according to operation of sliding door handle, sliding door open/close switch, sliding door one-touch open/close switch, and Intelligent Key.

AUTO OPEN/CLOSE FUNCTION (OPEN OPERATION)

Sliding Door Handle Operation

- When sliding door handle is operated, sliding door handle switch, half latch switch, and full latch switch turn ON. Sliding door control unit sounds automatic sliding door warning buzzer as a reminder.
  NOTE:
  The function may not be operated unless sliding door handle is pulled continuously.

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- Sliding door control unit operates sliding door lock release actuator, and then operates automatic sliding door motor to move sliding door to the fully open position.
- When sliding door handle is operated again during auto open operation, sliding door control unit stops auto open operation and operates sliding door in reverse direction to the fully closed position.
- When child lock is in the lock status, auto open function does not operate even when sliding door inside handle is operated.

Sliding Door Open/close Switch and Sliding Door One-touch Open/close Switch Operation

- When sliding door open/close switch or sliding door one-touch open/close switch is operated, sliding door control unit sounds automatic sliding door warning buzzer as a reminder.
- Sliding door control unit operates clutch and sliding door lock release actuator, and it releases sliding door latch (only when sliding door is fully closed).
- Sliding door control unit detects half latch switch signal and full latch switch signal. When judging that sliding door latch is released, sliding door control unit operates automatic sliding door motor and it moves sliding door to the fully open position.
- When switch is operated again during auto open operation, sliding door control unit stops auto open operation and operates sliding door in reverse direction to the fully closed position.

Intelligent Key Button Operation

- When sliding door open button of Intelligent Key is operated, BCM transmits automatic sliding door operate request signal to sliding door control unit via CAN communication.
- When automatic sliding door operate request signal is received from BCM, sliding door control unit sounds automatic sliding door warning buzzer as a reminder.
- Sliding door control unit operates clutch and sliding door lock release actuator, and it releases sliding door latch. (Only when sliding door is fully closed.)
- Sliding door control unit detects half latch switch signal and full latch switch signal. When judging that sliding door latch is released, sliding door control unit operates automatic sliding door motor and it moves sliding door to the fully open position.
- When Intelligent Key button is operated again during auto open operation, sliding door control unit stops auto open operation and operates sliding door in reverse direction to the fully closed position.

OPERATION CONDITION

The auto open operation is performed, when the following conditions are satisfied.

Operation	Operation condition
Sliding door open/close switch (front side)	Vehicle speed: 0 km/h
	Battery voltage: 11 V or more
	Fuel filler lid: Closed status (Operation condition for sliding door LH)
	Shift position: P position*
	Sliding door: Not fully opened
	Sliding door: Unlocked while fully closed
	Vehicle security system: Not set
Intelligent Key	Vehicle speed: 0 km/h
	Battery voltage: 11 V or more
	Fuel filler lid: Closed status (Operation condition for sliding door LH)
	Shift position: P position*
	Sliding door: Not fully opened
	Sliding door: Unlocked while fully closed

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Operation	Operation condition
Sliding door handle	Automatic door main switch: ON
	Vehicle speed: 0 km/h
	Battery voltage: 11 V or more
	Fuel filler lid: Closed status (Operation condition for sliding door LH)
	Shift position: P position*
	Sliding door: Not fully opened
	Sliding door: Unlocked while fully closed
	Child lock: Unlocked (Sliding door inside handle only)
	Vehicle security system: Not set
Sliding door one-touch open/close switch	Automatic door main switch: ON
	Vehicle speed: 0 km/h
	Battery voltage: 11 V or more
	Fuel filler lid: Closed status (Operation condition for sliding door LH)
	Shift position: P position*
	Sliding door: Not fully opened
	Sliding door: Unlocked while fully closed

*: Only when ignition switch is in the ON position.

AUTO OPEN/CLOSE FUNCTION (CLOSE OPERATION)

- Sliding door control unit sounds automatic sliding door warning buzzer as a reminder, when operation of sliding door handle, sliding door open/close switch, sliding door one-touch open/close switch, or Intelligent Key button is detected while sliding door is in the fully open status.
  NOTE:
  The function may not be operated unless sliding door handle is pulled continuously.
- Sliding door control unit operates clutch and sliding door lock release actuator and it performs latch release operation, so that sliding door control unit can judge whether sliding door latch is in released status.
- Sliding door control unit operates automatic sliding door motor and moves sliding door to half latch status, when sliding door control unit judges sliding door handle switch ON status and latch release status according to operation of sliding door release actuator.
- Sliding door control unit detects half latch status according to half latch switch. Sliding door control unit operates sliding door auto closure function and closes sliding door to the fully closed position.
- When sliding door handle, each switch, or Intelligent Key button is operated again during auto close operation, sliding door control unit stops auto close operation and operates sliding door in reverse direction to the fully open position.

OPERATION CONDITION

The auto close operation is performed, when the following conditions are satisfied.

- Automatic door main switch: ON*1
- Battery voltage: 11 V or more
- Fuel filler lid: Closed status*2
- Sliding door: Fully open

*1: Except operation of sliding door open/close switch (front side) and Intelligent Key button.

*2: When sliding door LH is operated.

CONTROL WHEN OPERATION CONDITION IS NOT SATISFIED

Sliding door is controlled as described in the following table, when operation condition becomes invalid during automatic operation.

Condition	Operation
Automatic door main switch: Turned to the OFF position	One-way operation is continued
Shift position: P position → Other than P position	One-way operation is continued

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Condition	Operation
Vehicle speed: 0 km/h more during auto open operation	• Automatic sliding door warning buzzer sounds continuously and hold function is activated • When the vehicle stops, automatic sliding door warning buzzer operation stops, intermittent clutch function operates, and sliding door enters into manual mode
Low battery voltage: 11 – 9 V	One-way operation is continued
Low battery voltage: 9 – 5 V for 2.1 seconds or more (Traction force lower limit – clutch force assurance)	Automatic sliding door motor stops, and then intermittent clutch function operate
Low battery voltage: 5 – 4 V (Control unit reset voltage – clutch hold voltage)	• Automatic sliding door motor stops (Clutch ON) → sliding door stops continuously and stays restricted (Clutch ON in circuit) • Control is impossible because control unit is reset
Low battery voltage: 4 – 0 V	• Sliding door stops continuously and stays restricted (Clutch ON in circuit) • Sliding door position cannot be held when the vehicle is on a slope, because clutch force is not sufficient
Fuel filler lid: Open	Intermittent clutch function operates. Sliding door enters into manual mode (Sliding door returns to electric mode when fuel filler lid is closed)

AUTO OPEN/CLOSE FUNCTION : Fail-safe

INFOID:0000000012408501

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

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Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

[*2]: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

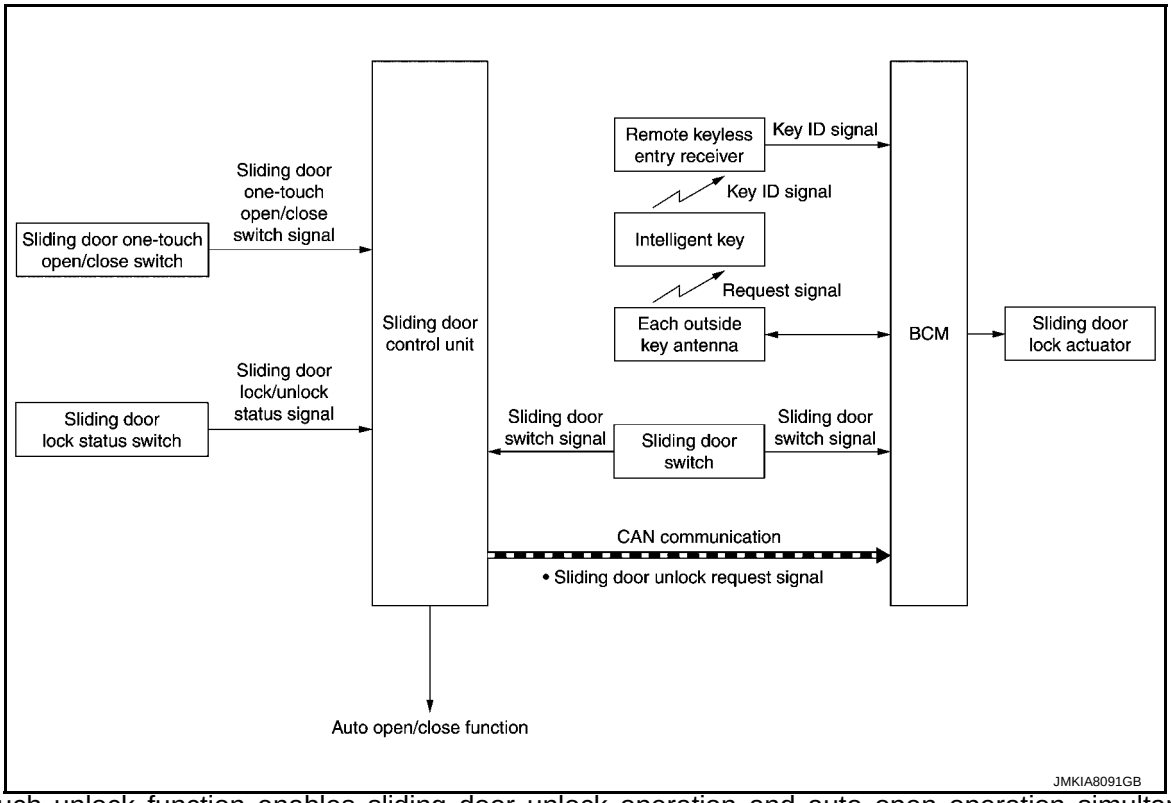
ONE-TOUCH UNLOCK FUNCTION

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ONE-TOUCH UNLOCK FUNCTION : System Description

INFOID:0000000012408502

SYSTEM DIAGRAM



One-touch unlock function enables sliding door unlock operation and auto open operation simultaneously when sliding door one-touch open/close switch is operated while carrying Intelligent Key, even when sliding door is in fully closed and locked status.

OPERATION DESCRIPTION

- Sliding door control unit checks sliding door lock status according to sliding door lock status switch, when sliding door one-touch open/ close switch operation is detected.
- Sliding door control unit transmits sliding door unlock request signal to BCM via CAN communication, when sliding door is locked.
- When sliding door unlock request signal is received, BCM activates outside key antenna, transmits request signal to Intelligent Key, and then checks that Intelligent Key is located near the door.
- Intelligent Key, when it is within outside key antenna detection area (within activation range), transmits key ID signal to BCM via remote keyless entry receiver.
- BCM receives key ID signal and verifies the received key ID with the registered key ID to the vehicle.
- When selective unlock function is in ON status and key ID verification is successful, BCM operates sliding door lock actuator and unlocks sliding door.
- When selective unlock function is in OFF status and key ID verification is successful, BCM operates each door lock actuator and unlocks all doors.
- Sliding door control unit starts auto open operation when sliding door unlocked status is detected according to sliding door lock status switch.

OPERATION CONDITION

If the following conditions are satisfied, the one-touch unlock function is performed.

- Automatic door main switch: ON
- Vehicle speed: 0 km/h
- Battery voltage: 11V or more
- Fuel filler lid: Closed status[*1]
- Sliding door: Fully closed status
- Sliding door lock status switch: OFF (Sliding door locked status)
- Shift position: P position [*2]

[*1]:When sliding door LH is operated

[*2]:Only when ignition switch is in the ON position

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ONE-TOUCH UNLOCK FUNCTION : Fail-safe

INFOID:0000000012408503

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

[*2]: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

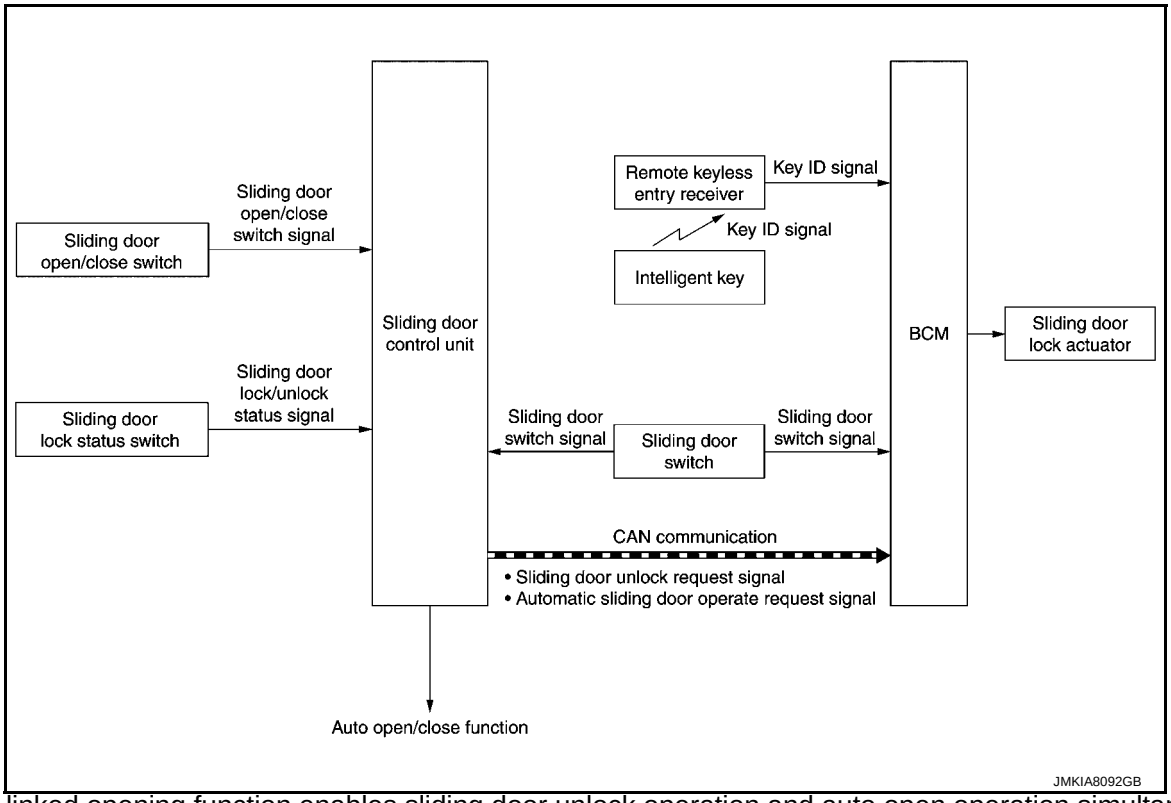
UNLOCK-LINKED OPENING FUNCTION

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UNLOCK-LINKED OPENING FUNCTION : System Description

INFOID:0000000012408504

SYSTEM DIAGRAM



Unlock-linked opening function enables sliding door unlock operation and auto open operation simultaneously when sliding door open/close switch (front side) or Intelligent Key button is operated, even when sliding door is in fully closed and locked status.

OPERATION DESCRIPTION

Sliding Door Open/close Switch (Front Side) Operation

- Sliding door control unit checks sliding door lock status according to sliding door lock status switch, when sliding door open/close switch (front side) operation is detected.
- Sliding door control unit transmits sliding door unlock request signal to BCM via CAN communication, when sliding door is unlocked.
- BCM operates sliding door lock actuator and unlocks sliding door, when sliding door unlock request signal is received.
- Sliding door control unit starts auto open operation when sliding door lock status is detected according to sliding door lock status switch.

Intelligent Key Operation

- BCM transmits automatic sliding door operate request signal to sliding door control unit via CAN communication, when operation of Intelligent Key button id detected.
- Sliding door control unit checks sliding door lock status according to sliding door lock status switch, when automatic sliding door operate request signal is detected.
- Sliding door control unit transmits sliding door unlock request signal to BCM via CAN communication, when sliding door is locked.
- When selective unlock function is in ON status and sliding door unlock request signal is received, BCM operates sliding door lock actuator and unlocks sliding door.
- When selective unlock function is in OFF status and sliding door unlock request signal is received, BCM operates each door lock actuator and unlocks all doors.
- Sliding door control unit starts auto open operation when sliding door unlocked status is detected according to sliding door lock status switch.

OPERATION CONDITION

If the following conditions are satisfied, the unlock-linked opening function is performed.

- Vehicle speed: 0 km/h

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- Battery voltage: 11 V or more
- Fuel filler lid: Closed status*1
- Sliding door: Fully closed status
- Sliding door lock status switch: OFF (Sliding door locked status)
- Shift position: P position*2

*1: When sliding door LH is operated

*2: Only when ignition switch is in the ON position

UNLOCK-LINKED OPENING FUNCTION : Fail-safe

INFOID:0000000012408505

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

Display contents of CONSULT	Fail-safe	Reference page*1
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status*2
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC*2
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

*1: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

*2: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

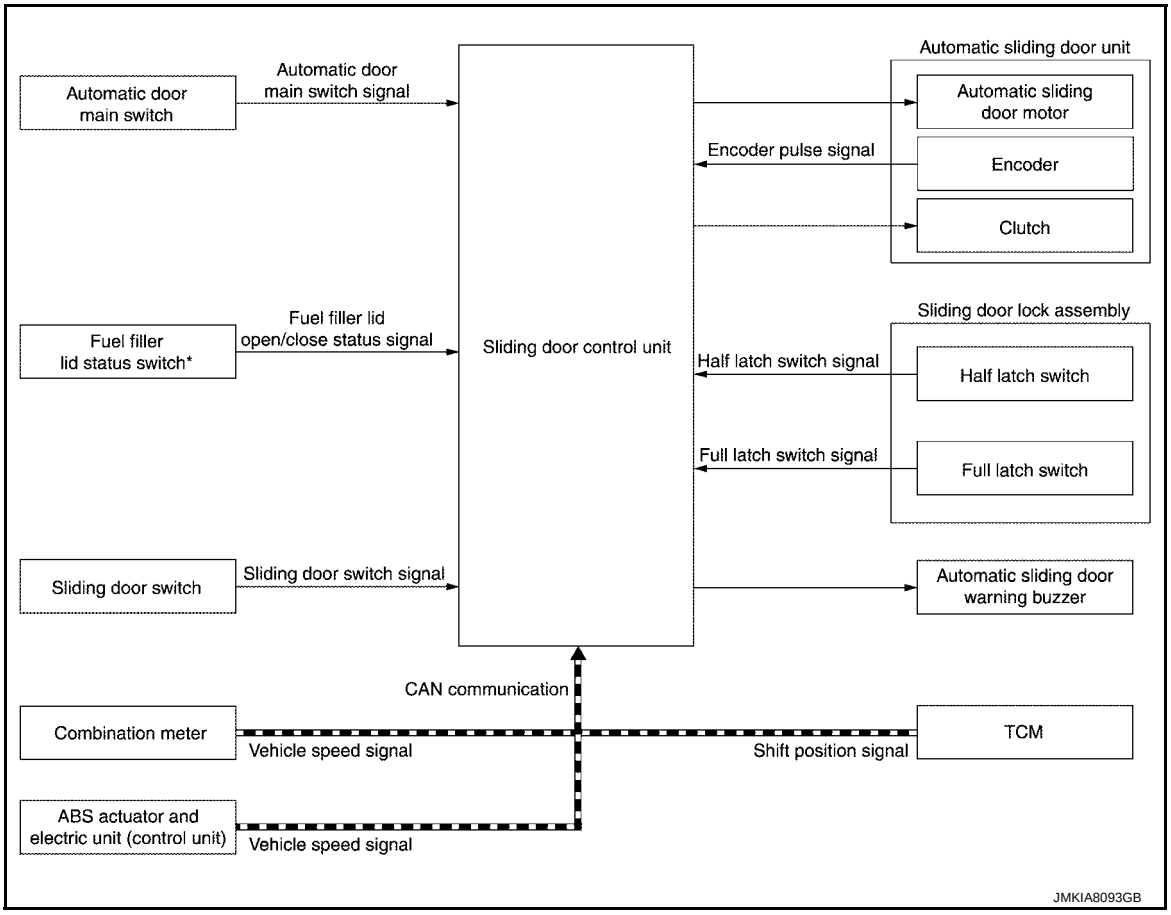
POWER ASSIST FUNCTION

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POWER ASSIST FUNCTION : System Description

INFOID:0000000012408506

SYSTEM DIAGRAM



*: For automatic sliding door LH

Power assist function automatically opens or closes sliding door to fully open/closed position, when sliding door is pressed manually without operating each switch or sliding door handle, while sliding door is in half open stop status or fully open stop status.

OPERATION DESCRIPTION

Sliding door control unit sounds automatic sliding door warning buzzer, activates automatic sliding door motor, and automatically opens or closes to the fully open/close position, when encoder pulse signal is detected from encoder.

OPERATION CONDITION

If the following conditions are satisfied, the power assist function is performed.

- Automatic door main switch: ON
- Vehicle speed: 0 km/h (auto close operation only)
- Fuel filler lid: Closed status*1
- Shift position: P position*2
- Sliding door position: Halfway position
- Sliding door status: Stop status

*1: When sliding door LH is operated.
*2: Only when ignition switch is in the ON position.

POWER ASSIST FUNCTION : Fail-safe

INFOID:0000000012408507

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

[*2]: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

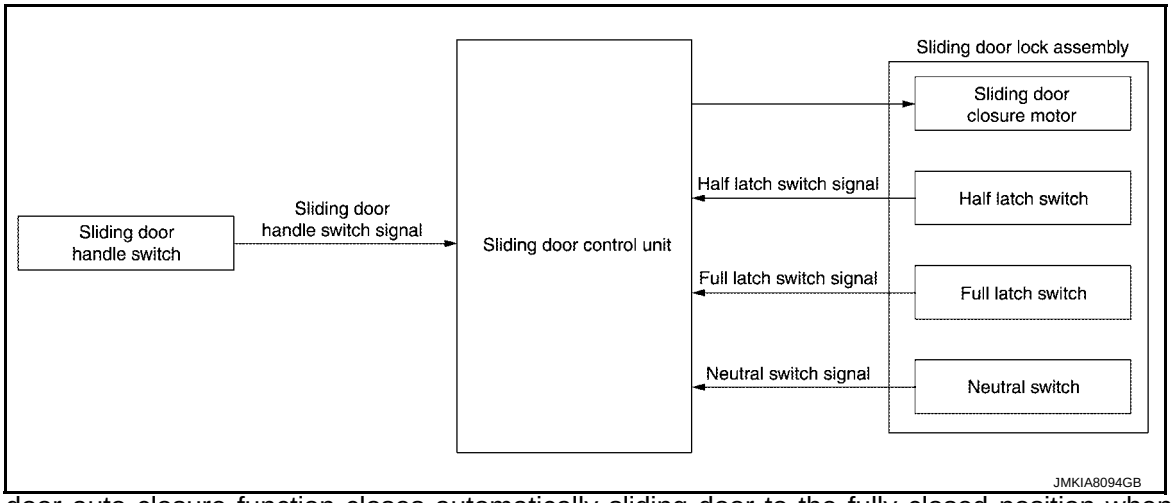
SLIDING DOOR AUTO CLOSURE FUNCTION

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SLIDING DOOR AUTO CLOSURE FUNCTION : System Description

INFOID:0000000012408508

SYSTEM DIAGRAM



Sliding door auto closure function closes automatically sliding door to the fully closed position when sliding door is in half latch status (lock and striker are in engage status). Sliding door auto closure function is operative, even when automatic door main switch is in the OFF position.

OPERATION DESCRIPTION

- When sliding door control unit judges that sliding door handle is in non-operated status and sliding door is in half latch status according to half latch switch signal and full latch switch signal, sliding door control unit judges that sliding door is in retractable position according to sliding door handle switch and neutral switch signal. Sliding door control unit operates sliding door closure motor, and starts retract operation.
- When sliding door control unit judges that sliding door is in fully closed status according to half latch switch signal and full latch switch signal, sliding door control unit stops sliding door closure motor operation once, and then operates sliding door closure motor in reverse direction to the neutral position of sliding door closure motor.
- Sliding door auto closure function does not operate when any of the following conditions is satisfied.

- Sliding door: When manually closed swiftly
- Sliding door handle: When operated immediately after detection of half latch status
- Battery voltage: 9 V or less

SLIDING DOOR AUTO CLOSURE FUNCTION : Fail-safe

INFOID:0000000012408509

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

[*2]: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

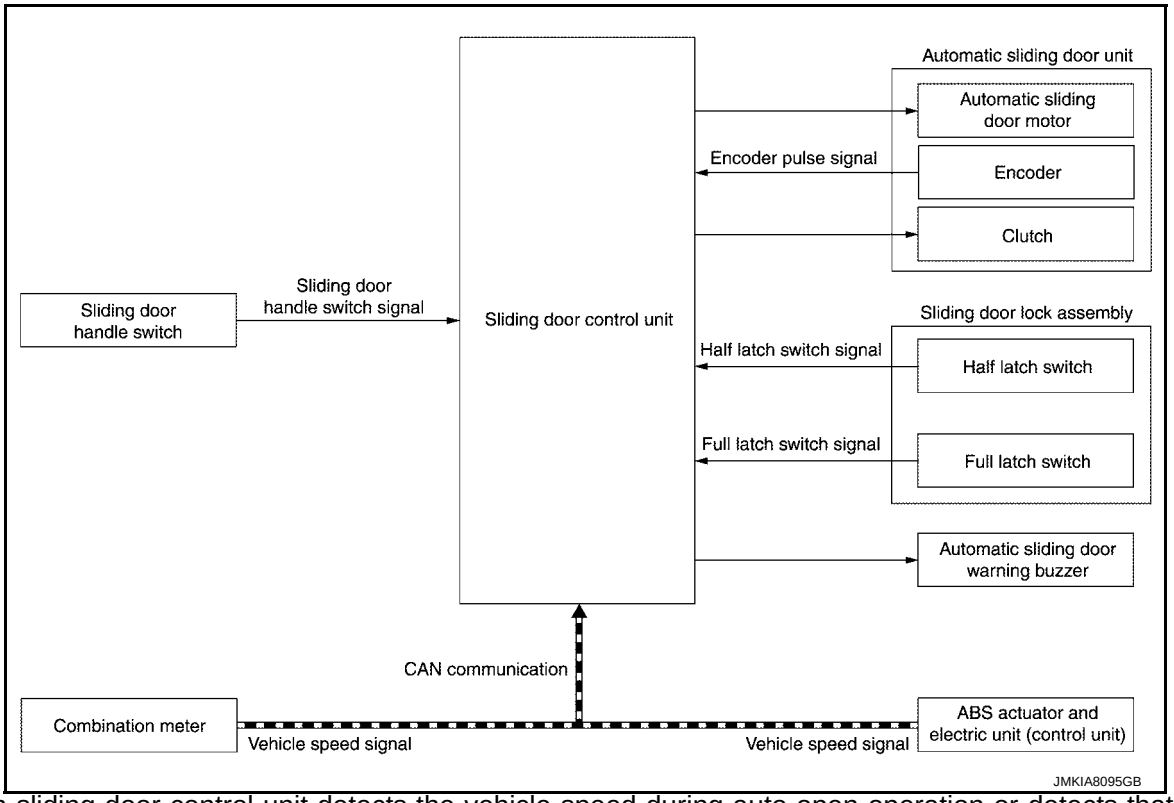
HOLD FUNCTION

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HOLD FUNCTION : System Description

INFOID:0000000012408510

SYSTEM DIAGRAM



- When sliding door control unit detects the vehicle speed during auto open operation or detects that sliding door is open during vehicle driving, sliding door control unit sounds automatic sliding door warning buzzer warning the driver, simultaneously stops automatic sliding door motor operation, operates clutch, and then holds sliding door.
- During hold function operation, when sliding door control unit detects half latch status, sliding door control unit stops hold function and operates sliding door auto closure function.
- During hold function operation, when sliding door control unit detects sliding door handle operation, sliding door control unit stops clutch operation. Sliding door can be closed manually.
- When hold function is stopped according to sliding door handle operation and sliding door is manually moved to open direction, sliding door control unit judges sliding door moving direction according to encoder pulse signal, operates clutch again, and holds sliding door.

HOLD FUNCTION : Fail-safe

INFOID:0000000012408511

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

[*2]: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

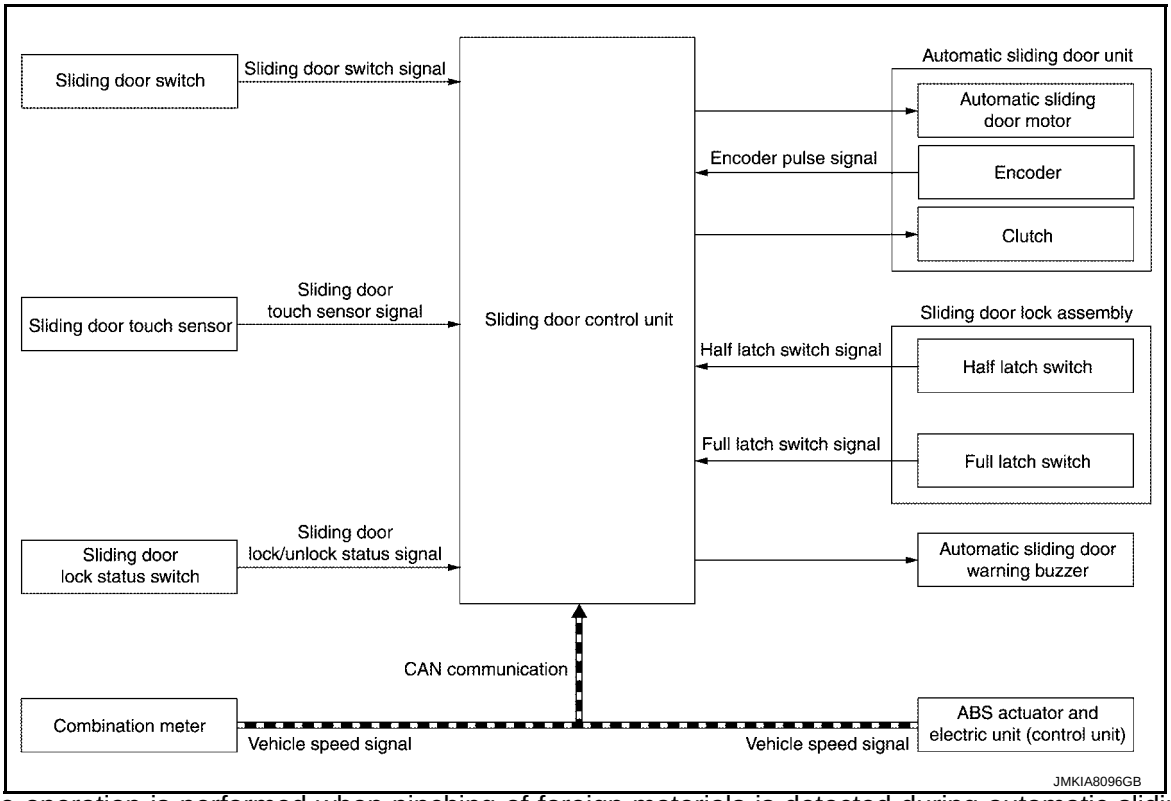
ANTI-PINCH FUNCTION

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ANTI-PINCH FUNCTION : System Description

INFOID:0000000012408512

SYSTEM DIAGRAM



Reverse operation is performed when pinching of foreign materials is detected during automatic sliding door auto open/close operation. Sliding door control unit stops automatic operation and enters into intermittent clutch, when pinching during auto close operation is continuously detected for 3 times or more.

DETECTION ACCORDING TO ENCODER

- During automatic operation when operation speed is reduced or sliding door motor operation load is increased due to pinching of foreign materials, sliding door control unit judges the pinching according to change in encoder pulse signal detected from encoder. Sliding door control unit stops automatic operation, and then automatically operates sliding door in reverse direction. Sliding door control unit stops automatic sliding door motor at the sliding door fully open or fully closed position.
- During auto close operation when the vehicle starts driving, auto close operation does not stop and continues to operate, although operation speed may be reduced or sliding door motor operation load may be increased due to pinching of foreign materials.

DETECTION ACCORDING TO SLIDING DOOR TOUCH SENSOR

- When the vehicle is in stop status and sliding door front end pinches foreign materials during auto close operation, sliding door control unit judges the pinching according to sliding door touch sensor signal, operates sliding door in reverse direction, and operates auto open operation to the fully open position.
- When sliding door is in lock status and sliding door front end pinches foreign materials during sliding door auto closure operation, sliding door control unit judges the pinching according to sliding door touch sensor signal, and stops sliding door auto closure operation.
- When sliding door is in unlock status and sliding door front end pinches foreign materials during sliding door auto closure operation, sliding door control unit judges the pinching according to sliding door touch sensor signal, stops sliding door auto closure operation, and operates sliding door auto open operation to the fully open position.

CAUTION:

Be careful that sliding door may not operate in reverse direction because load may not be detected when thin or soft foreign materials are pinched.

ANTI-PINCH FUNCTION : Fail-safe

INFOID:0000000012408513

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

[*2]: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

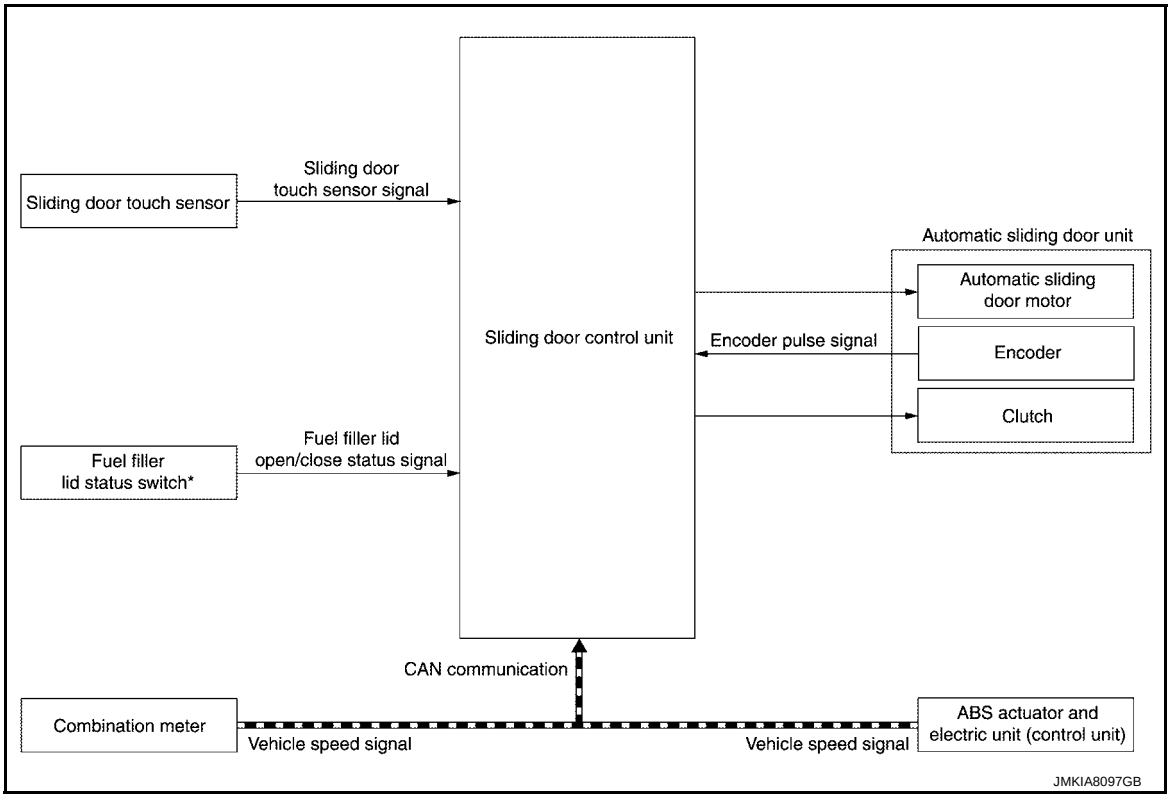
INTERMITTENT CLUTCH FUNCTION

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INTERMITTENT CLUTCH FUNCTION : System Description

INFOID:0000000012408514

SYSTEM DIAGRAM



*: For automatic sliding door LH

- During automatic operation of sliding door, when the vehicle is on a slope, it may become impossible to continue automatic operation of sliding door and its operation may stop suddenly, or door may open or close suddenly. This is due to automatic door main switch being turned the OFF position or any other cause. For prevention purposes, sliding door control unit stops automatic sliding door motor, and simultaneously operates clutch intermittently and prevents sliding door from opening or closing suddenly, so that safety can be secured.
- Intermittent clutch function operates when any of the following conditions is satisfied.

Operation	Operation condition
auto open/close function in operation	Fuel filler lid status: Closed → Open
	Automatic sliding door system malfunction
	Battery voltage: Continuous detection of 9 V or less for 2 seconds or more
Hold function in operation	Vehicle speed: 0 km/h
	Fuel filler lid status: Closed → Open
	Automatic sliding door system malfunction
Anti-pinch function	Continuous detection of pinching for 3 times during auto close operation

INTERMITTENT CLUTCH FUNCTION : Fail-safe

INFOID:0000000012408515

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

[*2]: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

BUZZER REMINDER FUNCTION

BUZZER REMINDER FUNCTION : System Description

INFOID:0000000012408516

- Automatic sliding door warning buzzer sounds when sliding door automatic function is operated as a reminder.

Operation	Automatic sliding door warning buzzer
Auto open	2 times for start operation
Auto close	From sliding door halfway position until operation start of sliding door auto closure function
Power assist function (open)	2 times for start operation
Power assist function (close)	
Reverse	2 times for reverse operation

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Operation	Function	Automatic sliding door warning buzzer operation pattern
Automatic operation start	Sliding door open/close switch	Sound twice (2 times)
	Intelligent Key button operation	
	Power assist function	
Reverse operation start	Reverse operation detection	
Hold function in operation	Vehicle speed 0km/h or more, and sliding door open	Sound continuously (until sliding door is fully closed or the vehicle stops)
Auto close in operation	Auto close in operation	Continuously sounds intermittently (until sliding door is in half latch position)

- When all of the following conditions are satisfied, automatic sliding door warning buzzer sounds, alerting the driver to stop the vehicle.
- Sliding door: Open status (Sliding door switch ON or full latch switch ON)
- Vehicle speed: 0 km/h or more

BUZZER REMINDER FUNCTION : Fail-safe

INFOID:0000000012408517

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

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*2: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

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SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

System Description

INFOID:0000000012408518

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

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DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000013014527

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
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	• Read and save the vehicle specification. • 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.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp control system	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
Air conditioning control system	AIR CONDITONER		×	×*
• Intelligent Key system • Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

NOTE:

*: For models with automatic air conditioning control system, this diagnosis mode is not used.

FREEZE FRAME DATA (FFD)

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

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CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected*	While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (LOCK)]
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode [Power supply position is OFF (OFF)]
	LOCK>ACC		While turning power supply position from OFF (LOCK) to ACC
	ACC>ON		While turning power supply position from ACC to ON
	RUN>ACC		While turning power supply position from RUN to ACC (Except emergency stop operation)
	CRANK>RUN		While turning power supply position from CRANK to RUN
	RUN>URGENT		While turning power supply position from RUN to ACC (Emergency stop operation)
	ACC>OFF		While turning power supply position from ACC to OFF (OFF)
	OFF>LOCK		While turning power supply position from OFF (OFF) to OFF (LOCK)
	OFF>ACC		While turning power supply position from OFF (OFF) to ACC
	ON>CRANK		While turning power supply position from ON to CRANK
	OFF>SLEEP		While turning BCM status from normal mode [Power supply position is OFF (OFF)] to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode [Power supply position is OFF (LOCK)] to low power consumption mode
	LOCK		Power supply position is OFF (LOCK)
	OFF		Power supply position is OFF (OFF)
	ACC		Power supply position is ACC
	ON		Power supply position is ON
	ENGINE RUN		Power supply position is RUN
	CRANKING		Power supply position is CRANK
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.	

NOTE:

*: Refer to the following for details of the power supply position.

- OFF (OFF, LOCK): Ignition switch OFF
- ACC: Ignition switch ACC
- IGN: Ignition switch ON with engine stopped
- RUN: Ignition switch ON with engine running
- CRANK: At engine cranking

Power supply position shifts to “OFF (LOCK)” from “OFF (OFF)”, when ignition switch is in the OFF position, shift position is in the P position, and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to “ACC” when the push-button ignition switch (push switch) is pushed at “OFF (LOCK)”.

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000012408520

BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

WORK SUPPORT

Monitor item	Description
DOOR LOCK-UNLOCK SET	Selective unlock function mode can be changed to operation with this mode • On: Operate • Off: Non-operation
AUTOMATIC DOOR LOCK SELECT	Automatic door lock function mode can be selected from the following in this mode • VH SPD: All doors are locked when vehicle speed more than 24 km/h (15 MPH) • P RANGE: All doors are locked when shifting the selector lever from P position to other than the P position
AUTOMATIC DOOR UNLOCK SELECT	Automatic door unlock function mode can be selected from the following in this mode • MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF • MODE 2: All doors are unlocked when shifting the selector lever from any position other than the P to P position • MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF • MODE 4: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position • MODE 5: This item is displayed, but cannot be used • MODE 6: This item is displayed, but cannot be used
AUTOMATIC LOCK/UNLOCK SET	Automatic door lock/unlock function mode can be selected from the following in this mode • Off: Non-operation • Unlock Only: Door unlock operation only • Lock Only: Door lock operation only • Lock/Unlock: Lock and unlock operation

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Contents
REQ SW-DR	Indicated [On/Off] condition of door request switch (driver side)
REQ SW-AS	Indicated [On/Off] condition of door request switch (passenger side)
REQ SW-BD/TR	Indicated [On/Off] condition of back door request switch
DOOR SW-DR	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR	Indicated [On/Off] condition of sliding door switch RH
DOOR SW-RL	Indicated [On/Off] condition of sliding door switch LH
DOOR SW-BK	Indicated [On/Off] condition of back door switch
CDL LOCK SW	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW	Indicated [On/Off] condition of unlock signal from door lock unlock switch
KEY CYL LK-SW	Indicated [On/Off] condition of lock signal from door key cylinder switch
KEY CYL UN-SW	Indicated [On/Off] condition of unlock signal from door key cylinder switch

ACTIVE TEST

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

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000012408521

WORK SUPPORT

Monitor item	Description
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch mode can be changed to operation in this mode • On: Operate • Off: Non-operation
ENGINE START BY I-KEY	Engine start function mode can be changed to operation with this mode • On: Operate • Off: Non-operation
TRUNK/GLASS HATCH OPEN	**NOTE:** This item is displayed, but cannot be used
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key button can be selected from the following with this mode • MODE 1: 0.5 sec • MODE 2: Non-operation • MODE 3: 1.5 sec
TRUNK OPEN DELAY	**NOTE:** This item is displayed, but cannot be used
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operation with this mode • On: Operate • Off: Non-operation
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operation with this mode • On: Operate • Off: Non-operation
HAZARD ANSWER BACK	Hazard reminder function mode by door request switch and Intelligent Key button can be selected from the following with this mode • Lock Only: Door lock operation only • Unlock Only: Door unlock operation only • Lock/Unlock: Lock and unlock operation • Off: Non-operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch can be selected from the following with this mode • Horn Chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • Off: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch can be changed to operation with this mode • On: Operate • Off: Non-operation
SHORT CRANKING OUTPUT	Starter motor can operate during the times below • 70 msec • 100 msec • 200 msec

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Monitor item	Description
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode
AUTO LOCK SET	Auto door lock operation time can be changed in this mode • MODE 1: OFF • MODE 2: 30 sec • MODE 3: 1 minute • MODE 4: 2 minutes • MODE 5: 3 minutes • MODE 6: 4 minutes • MODE 7: 5 minutes
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be selected from the following with this mode • On: Operate • Off: Non-operation
PW DOWN SET	Unlock button pressing time on Intelligent Key button can be selected from the following with this mode • MODE 1: 3 sec • MODE 2: Non-operation • MODE 3: 5 sec

SELF-DIAG RESULT

Refer to BCS-64, "DTC Index".

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Condition
REQ SW -DR	Indicates [On/Off] condition of door request switch (driver side)
REQ SW -AS	Indicates [On/Off] condition of door request switch (passenger side)
REQ SW -BD/TR	Indicates [On/Off] condition of back door request switch
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
CLUTCH SW	**NOTE:** This item is displayed, but cannot be monitored
BRAKE SW 1	Indicates [On/Off]* condition of stop lamp switch power supply
BRAKE SW 2	Indicates [On/Off] condition of stop lamp switch
DETE/CANCL SW	Indicates [On/Off] condition of P position
SFT PN/N SW	Indicates [On/Off] condition of P or N position
S/L -LOCK	**NOTE:** This item is displayed, but cannot be monitored
S/L -UNLOCK	**NOTE:** This item is displayed, but cannot be monitored
S/L RELAY -F/B	**NOTE:** This item is displayed, but cannot be monitored
UNLK SEN -DR	Indicates [On/Off] condition of driver door UNLOCK status
PUSH SW -IPDM	Indicates [On/Off] condition of push-button ignition switch
IGN RLY1 -F/B	Indicates [On/Off] condition of ignition relay 1
DETE SW -IPDM	Indicates [On/Off] condition of P position
SFT PN -IPDM	Indicates [On/Off] condition of P or N position
SFT P -MET	Indicates [On/Off] condition of P position
SFT N -MET	Indicates [On/Off] condition of N position
ENGINE STATE	Indicates [Stop/Stall/Crank/Run] condition of engine states

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Monitor Item	Condition
S/L LOCK-IPDM	**NOTE:** This item is displayed, but cannot be monitored
S/L UNLK-IPDM	**NOTE:** This item is displayed, but cannot be monitored
S/L RELAY-REQ	**NOTE:** This item is displayed, but cannot be monitored
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [km/h]
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [km/h]
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of unlock sensor
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger side door status
ID OK FLAG	Indicates [Set/Reset] condition of key ID
PRMT ENG STRT	Indicates [Set/Reset] condition of engine start possibility
PRMT RKE STRT	**NOTE:** This item is displayed, but cannot be monitored
TRNK/HAT MNTR	**NOTE:** This item is displayed, but cannot be monitored
RKE-LOCK	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key
RKE-TR/BD	**NOTE:** This item is displayed, but cannot be monitored
RKE-PANIC	Indicates [On/Off] condition of PANIC button of Intelligent Key
RKE-MODE CHG	Indicates [On/Off] condition of MODE CHANGE signal from Intelligent Key
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing
RKE OPE COUN2	**NOTE:** This item is displayed, but cannot be monitored

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

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation • On: Operate • Off: Non-operation
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation • On: Operate • Off: Non-operation
INSIDE BUZZER	This test is able to check warning chime in combination meter operation • Take Out: Take away warning chime sounds when CONSULT screen is touched • Key: Key warning chime sounds when CONSULT screen is touched • Knob: OFF position warning chime sounds when CONSULT screen is touched • Off: Non-operation
INDICATOR	This test is able to check warning lamp operation • KEY ON: “KEY” Warning lamp illuminates when CONSULT screen is touched • KEY IND: “KEY” Warning lamp blinks when CONSULT screen is touched • Off: Non-operation
INT LAMP	This test is able to check interior room lamp operation • On: Operate • Off: Non-operation

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Test item	Description
LCD	This test is able to check meter display information • Engine start information displays when “BP N” on CONSULT screen is touched • Engine start information displays when “BP I” on CONSULT screen is touched • Key ID warning displays when “ID NG” on CONSULT screen is touched • ROTAT: This item is displayed, but cannot be used. • P position warning displays when “SFT P” on CONSULT screen is touched • INSRT: This item is displayed, but cannot be monitored • BATT: This item is displayed, but cannot be monitored • Take away through window warning displays when “NO KY” on CONSULT screen is touched • Take away warning display when “OUTKEY” on CONSULT screen is touched • OFF position warning display when “LK WN” on CONSULT screen is touched
FLASHER	This test is able to check hazard warning lamp operation • LH: LH side hazard warning lamps operate • RH: RH side hazard warning lamps operate • Off: Non-operation
P RANGE	This test is able to check CVT shift selector power supply • On: Operate • Off: Non-operation
ENGINE SW ILLUMI	This test is able to check push-button ignition switch illumination operation • On: Operate • Off: Non-operation
LOCK INDICATOR	This test is able to check LOCK indicator (push-button ignition switch) operation • On: Operate • Off: Non-operation
ACC INDICATOR	This test is able to check ACC indicator (push-button ignition switch) operation • On: Operate • Off: Non-operation
IGNITION ON IND	This test is able to check ON indicator (push-button ignition switch) operation • On: Operate • Off: Non-operation
HORN	This test is able to check horn operation • On: Operate • Off: Non-operation
TRUNK/BACK DOOR	**NOTE:** This item is displayed, but cannot be used
POWER SLIDE DOOR	This test is able to check automatic siding door operation • RR PSD ON: Auto open/close operate • RL PSD ON: Auto open/close operate

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:0000000012408522

DATA MONITOR

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Contents
PUSH SW	Indicates [On/Off] condition of push switch
UNLK SEN -DR	Indicates [On/Off] condition of unlock sensor
VEH SPEED 1	Indicates [km/h] condition of vehicle speed signal from combination meter
TR/BD OPEN SW	Indicates [On/Off] condition of back door opener switch

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Monitor Item	Contents
TRNK/HAT MNTR	**NOTE:** This item is displayed, but cannot be monitored
RKE-TR/BD	**NOTE:** This item is displayed, but cannot be monitored

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DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

CONSULT Function (AUTOMATIC BACK DOOR CONTROL UNIT)

INFOID:0000000012408523

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with automatic back door control unit.

Diagnosis mode	Function Description
Self Diagnostic Result	Displays the diagnosis results judged by automatic back door control unit
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from automatic back door control unit
Data Monitor	The automatic back door control unit input/output signals are displayed
Ecu Identification	The automatic back door control unit part number is displayed

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Unit	Description
VHCL SPEED MTR	[km/h]	Display the vehicle speed signal received from combination meter by numerical value
VHCL SPEED ABS	[km/h]	Display the vehicle speed signal received from ABS actuator and electrical unit by numerical value
VHCL SPEED SIG	[NORMAL/ERROR]	Indicates condition of vehicle speed from automatic back door control unit
MAIN SW	[ON/OFF]	Indicates condition of automatic door main switch
AUTO BD SW	[ON/OFF]	Indicates condition of automatic back door switch
BK DOOR CL SW	[ON/OFF]	Indicates condition of automatic back door close switch
UNLOCK SEN DR	[ON/OFF]	**NOTE:** This item is displayed, but cannot be monitored
OPEN SW	[ON/OFF]	Indicates condition of open switch
CLOSE SW	[ON/OFF]	Indicates condition of close switch
HALF LATCH SW	[ON/OFF]	Indicates condition of half latch switch
TOUCH SEN RH	[ON/OFF/OPEN]	Indicates condition of touch sensor RH
TOUCH SEN LH	[ON/OFF/OPEN]	Indicates condition of touch sensor LH
P RANGE IND	[ON/OFF]	Indicates condition of P range signal from TCM
RKE REQ	[OFF/MOVE/REV]	Indicates condition of remote keyless entry signal from BCM
IGN SW	[ON/OFF]	Indicates condition of IGN power supply
ENCODER A	[LO/HI]	Indicates condition of encoder signal from encoder A
ENCODER B	[LO/HI]	Indicates condition of encoder signal from encoder B
BD OPENER SW	[ON/OFF]	Indicates condition of back door opener switch
UNLOCK SEN BD	[LOCK/UNLOCK]	**NOTE:** This item is displayed, but cannot be monitored
DESTINATION	[JPN/NAM]	Indicates specification of destination of the automatic back door system
HAZARD	[ON/OFF]	Indicates specification of hazard warning

SELF-DIAG RESULT

Refer to DLK-109, "DTC Index".

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DIAGNOSIS SYSTEM (SLIDING DOOR CONTROL UNIT LH)

CONSULT Function

INFOID:0000000012408524

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with sliding door control unit LH.

Diagnosis mode	Function description
Self Diagnostic Result	Displays the diagnosis results judged by sliding door control unit LH
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from sliding door control unit LH
Data Monitor	The sliding door control unit LH input/output signals are displayed
Active Test	The signal used to activate each device are forcibly supplied from sliding door control unit LH
Ecu Identification	The sliding door control unit LH part number is displayed

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item	Description
SPEED METER	Vehicle speed signal from combination meter is displayed
ABS SPEED	Vehicle speed signal from ABS actuator and electric unit (control unit) is displayed
MAIN SW	[ON/OFF] status of automatic door main switch, which is judged from automatic door main switch signal, is displayed
KNOB LCK SW L	[Lock (OFF)/unlock (ON)] status of sliding door LH, which is judged from sliding door lock/unlock status signal, is displayed
ONE-TOUCH SW	[Operation (ON)/non-operation (OFF)] status of sliding door one-touch open/close switch LH, which is judged from sliding door one-touch open/close switch signal, is displayed
F LID SW	[ON/OFF] status of fuel filler lid status switch, which is judged from fuel filler lid open/close status signal, is displayed
B PILLER SW	**NOTE:** This item is displayed, but cannot be used
DRIVER SW	[Operation (ON)/non-operation (OFF)] status of sliding door open/close switch (front LH), which is judged from sliding door open/close switch (front LH) signal, is displayed
ACC On SW	[ON, ACC status (ON)/other than ON, ACC (OFF)] status of ignition switch, which is judged from ACC signal, is displayed
DOR HAND SW L	[Operation (ON)/non-operation (OFF)] status of sliding door handle LH, which is judged from sliding door handle switch signal, is displayed
TOUCH SEN LH	[Pinching detection (ON)/non-detection (OFF)] status of sliding door touch sensor LH, which is judged from sliding door touch sensor signal, is displayed
RR-LH DOOR SW	[Open (ON)/close (OFF)] status of sliding door LH, which is judged from sliding door switch signal, is displayed
HAF LATC SW L	[Half latch, fully close (OFF)/open (ON)] status of half latch switch, which is judged from half latch switch signal, is displayed
P RANGE SW	[P position (ON)/other than P position (OFF)] status of selector lever, which is judged from shift position signal, is displayed
BRAKE SW	[Depressed (ON)/non-depressed (OFF)] status of brake pedal, which is judged from stop lamp switch signal, is displayed
P BRAKE SW	[Operation (ON)/non-operation (OFF)] status of parking brake, which is judged from park brake switch signal, is displayed

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Monitor item	Description
KEYLESS SIG	[REV→MOVE→OFF] status of auto open/close operation is displayed according to Intelligent Key button operation • REV: When Intelligent Key signal is received (button short press) • MOVE: When Intelligent Key signal is received (button long press) • OFF: When Intelligent Key button is not operated
IGN SW	[ON position (ON)/other than ON position (OFF)] of ignition switch, which is judged from ignition switch ON signal, is displayed
ENCODER A LH	Encoder status, which is judged from encoder pulse signal, is displayed
ENCODER B LH	Encoder status, which is judged from encoder pulse signal, is displayed
CHILD LOCK SW	**NOTE:** This item is displayed, but cannot be used
FULL LATC SW L	[Full close (OFF)/other than full close (ON)] status of sliding door LH, which is judged from full latch switch signal, is displayed
NEUTRAL SW	[Neutral position (OFF)/other than neutral position (ON)] status of sliding door closure motor, which is judged from neutral switch signal, is displayed

ACTIVE TEST

Test Item	Description
CLUTCH	Clutch operation of sliding door LH can be checked according to screen operation of CONSULT • HOLD: Clutch ON (sliding door LH cannot be operated manually) • RELEASE: Clutch OFF (sliding door LH can be operated manually) **NOTE:** Be careful to perform active test after turning automatic door main switch to the OFF position and setting sliding door to the halfway stop position

SELF-DIAG REULT

Refer to DLK-115, "LH : DTC Index".

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DIAGNOSIS SYSTEM (SLIDING DOOR CONTROL UNIT RH)

CONSULT Function

INFOID:0000000012408525

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with sliding door control unit RH.

Diagnosis mode	Function description
Self Diagnostic Result	Displays the diagnosis results judged by sliding door control unit RH
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from sliding door control unit RH
Data Monitor	The sliding door control unit RH input/output signals are displayed
Active Test	The signal used to activate each device are forcibly supplied from sliding door control unit RH
Ecu Identification	The sliding door control unit RH part number is displayed

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item	Description
SPEED METER	Vehicle speed signal from combination meter is displayed
ABS SPEED	Vehicle speed signal from ABS actuator and electric unit (control unit) is displayed
MAIN SW	[ON/OFF] status of automatic door main switch, which is judged from automatic door main switch signal, is displayed
KNOB LCK SW R	[Lock (OFF)/unlock (ON)] status of sliding door RH, which is judged from sliding door lock/unlock status signal, is displayed
ONE-TOUCH SW	[Operation (ON)/non-operation (OFF)] status of sliding door one-touch open/close switch RH, which is judged from sliding door one-touch open/close switch signal, is displayed
F LID SW	[ON/OFF] status of fuel filler lid status switch, which is judged from fuel filler lid open/close status signal, is displayed
B PILLER SW	**NOTE:** This item is displayed, but cannot be used
DRIVER SW	[Operation (ON)/non-operation (OFF)] status of sliding door open/close switch (front RH), which is judged from sliding door open/close switch (front RH) signal, is displayed
ACC On SW	[ON, ACC status (ON)/other than ON, ACC (OFF)] status of ignition switch, which is judged from ACC signal, is displayed
DOR HAND SW R	[Operation (ON)/non-operation (OFF)] status of sliding door handle RH, which is judged from sliding door handle switch signal, is displayed
TOUCH SEN RH	[Pinching detection (ON)/non-detection (OFF)] status of sliding door touch sensor RH, which is judged from sliding door touch sensor signal, is displayed
RR-RH DOOR SW	[Open (ON)/close (OFF)] status of sliding door RH, which is judged from sliding door switch signal, is displayed
HAF LATC SW R	[Half latch, fully close (OFF)/open (ON)] status of half latch switch, which is judged from half latch switch signal, is displayed
P RANGE SW	[P position (ON)/other than P position (OFF)] status of selector lever, which is judged from shift position signal, is displayed
BRAKE SW	[Depressed (ON)/non-depressed (OFF)] status of brake pedal, which is judged from stop lamp switch signal, is displayed
P BRAKE SW	[Operation (ON)/non-operation (OFF)] status of parking brake, which is judged from park brake switch signal, is displayed

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Monitor item	Description
KEYLESS SIG	[REV→MOVE→OFF] status of auto open/close operation is displayed according to Intelligent Key button operation • REV: When Intelligent Key signal is received (button short press) • MOVE: When Intelligent Key signal is received (button long press) • OFF: When Intelligent Key button is not operated
IGN SW	[ON position (ON)/other than ON position (OFF)] of ignition switch, which is judged from ignition switch ON signal, is displayed
ENCODER A RH	Encoder status, which is judged from encoder pulse signal, is displayed
ENCODER B RH	Encoder status, which is judged from encoder pulse signal, is displayed
CHILD LOCK SW	**NOTE:** This item is displayed, but cannot be used
FUL LATC SW R	[Full close (OFF)/other than full close (ON)] status of sliding door RH, which is judged from full latch switch signal, is displayed
NEUTRAL SW	[Neutral position (OFF)/other than neutral position (ON)] status of sliding door closure motor, which is judged from neutral switch signal, is displayed

ACTIVE TEST

Test Item	Description
CLUTCH	Clutch operation of sliding door RH can be checked according to screen operation of CONSULT • HOLD: Clutch ON (sliding door RH cannot be operated manually) • RELEASE: Clutch OFF (sliding door RH can be operated manually) **NOTE:** Be careful to perform active test after turning automatic door main switch to the OFF position and setting sliding door to the halfway stop position

SELF-DIAG REULT

Refer to DLK-121, "RH : DTC Index".

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ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000012408526

ECU	Reference
BCM	BCS-41, "Reference Value"
	BCS-63, "Fail-safe"
	BCS-63, "DTC Inspection Priority Chart"
	BCS-64, "DTC Index"

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AUTOMATIC BACK DOOR CONTROL MODULE

Reference Value

INFOID:0000000012408527

VALUES ON THE DIAGNOSIS TOOL

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

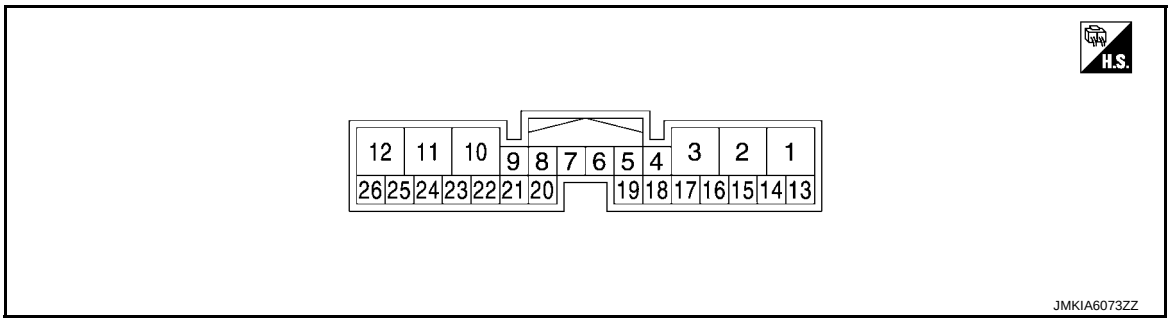
CONSULT MONITOR ITEM

Monitor Item	Condition		Value/Status
VHCL SPEED MTR	While driving		Equivalent to speedometer reading
VHCL SPEED ABS	While driving		Equivalent to speedometer reading
VHCL SPEED SIG	Vehicle speed from automatic back door control unit	Normal	NORMAL
		Error	ERROR
MAIN SW	Automatic door main switch	OFF	OFF
		ON	ON
AUTO BD SW	Automatic back door switch	Release	OFF
		Press	ON
BK DOOR CL SW	Automatic back door close switch	Release	OFF
		Press	ON
UNLOCK SEN DR	**NOTE:** This item is displayed, but cannot be monitored		OFF
			ON
OPEN SW	Back door	Half latch/fully closed	OFF
		Open	ON
CLOSE SW	Back door	Open/half latch	OFF
		Fully closed	ON
HALF LATCH SW	Back door	Half latch/fully closed	OFF
		Open	ON
TOUCH SEN RH	Back door touch sensor RH	Other than bellow	OFF
		Detect obstruction	ON
TOUCH SEN LH	Back door touch sensor LH	Other than bellow	OFF
		Detect obstruction	ON
P RANGE IND	Selector lever	Other than P position	OFF
		P position	ON
RKE REQ	Intelligent Key button (back door)	Release	OFF
		Press (more than 0.5 second)	MOVE
		Press (just after)	REV
IGN SW	Ignition switch	Other than ON position	OFF
		ON position	ON
ENCODER A	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
ENCODER B	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
BD OPENER SW	Back door opener switch	Release	UNLK
		Press	LOCK

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Monitor Item	Condition		Value/Status
UNLOCK SEN BD	**NOTE:** This item is displayed, but cannot be monitored		OFF
			ON
DESTINATION	Circuit between automatic back door control module terminal 6 and ground	Normal	NAM
		Open or short	JPN
HAZARD	Circuit between automatic back door control module terminal 8 and ground	Normal	ON
		Open or short	OFF

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
1 (SB)	Ground	Power supply (BAT)	Input	—		9 - 16 V
2 (BR)	Ground	Back door closure motor (close)	Output	Back door	Close operation	9 - 16 V
					Other than above	0 - 1.5 V
3 (L)	Ground	Back door closure motor (open)	Output	Back door	Open operation	9 - 16 V
					Other than above	0 - 1.5 V
4 (P)	Ground	Automatic back door close switch	Input	Automatic back door close switch	Pressed	0 - 1.5 V
					Released	9 - 16 V
5 (W)	Ground	Automatic back door warning buzzer	Output	Automatic back door warning buzzer	Sounding	0 - 1.5 V
					Not sounding	9 - 16 V
6 (B)	Ground	Ground (destination)	—	—		0 - 1.5 V
7 (P)	Ground	Power supply (IGN)	Input	Ignition switch ON		9 - 16 V
8 (B)	Ground	Ground (Hazard reminder)	—	—		0 - 1.5 V
9 (GR)	Ground	Power supply (BAT)	Input	—		9 - 16 V
11 (B)	Ground	Ground	—	—		0 - 1.0 V
13 (W)	Ground	Touch sensor RH signal	Input	Back door touch sensor RH	Detect obstruction	0 - 1.5 V
					Other than above	5 - 6.7 V
14 (P)	Ground	Touch sensor ground	Input	—		0 - 1.5 V

Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
15 (GR)	Ground	Touch sensor LH signal	Input	Back door touch sensor LH	Detect obstruction	0 - 1.5 V
					Other than above	5 - 6.7 V
16 (L)	Ground	Automatic back door switch	Input	Automatic back door switch	Pressed	0 - 1.5 V
					Released	9 - 16 V
17 (G)	Ground	Automatic door main switch	Input	Automatic door main switch	ON	9 - 16 V
					OFF	0 - 1.5 V
20 (R)	Ground	Close switch signal	Input	Back door	Fully closed	0 - 1.5 V
					Open/half latch	9 - 16 V
22 (W)	Ground	Half latch switch signal	Input	Back door	Open	0 - 1.5 V
					Fully closed/half latch	9 - 16 V
24 (G)	Ground	Open switch signal	Input	Back door	Open	0 - 1.5 V
					Half latch/fully closed	9 - 16 V
25 (P)	Ground	CAN - L	Input/ Output	—		—
26 (L)	Ground	CAN - H	Input/ Output	—		—

Fail Safe

INFOID:0000000012408528

Display contents of CONSULT	Fail-safe	Cancellation
B2401 IGN OPEN	Intermittent clutch function	All following condition are satisfied • Power supply condition of automatic back door control unit: OFF • BCM receive ignition position signal (OFF) via CAN
B2403 PULSE ENCODER	Inhibit automatic back door operation	When receiving the pulse from encoders A and B normally (5 pulses)
B2409 HALF LATCH SW	Intermittent clutch function	Half latch switch is ON from OFF
B2416 TOUCH SEN R OPEN	During close operation: Intermittent clutch function	Normal return
B2417 TOUCH SEN L OPEN	During close operation: Intermittent clutch function	Normal return
B2419 OPEN SW	Inhibit automatic back door operation	Erase DTC, reconnect battery
B2420 CLOSE SW	Inhibit automatic back door operation	Erase DTC, reconnect battery
B2421 CLUTCH TIME OUT	Intermittent clutch function	Reception of next operation request
B2422 BACK DOOR STATE	Intermittent clutch function	Detect back door fully closed position
B2423 ABD MTR TIME OUT	Intermittent clutch function	Reception of next operation request
B2424 CLSR CONDITION	Inhibit automatic back door operation	Normal return or reconnect battery

DTC Inspection Priority Chart

INFOID:0000000012408529

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

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Priority	DTC
1	• B2425 AUTO BK DR CNT UNIT • U1000: CAN COMM • U1010: CONTROL UNIT (CAN) • B2401 IGN OPEN
2	• B2403 PULSE ENCODER • B2409 HALF LATCH SW • B2416 TOUCH SEN R OPEN • B2417 TOUCH SEN L OPEN • B2419 OPEN SW • B2420 CLOSE SW • B2421 CLUTCH TIME OUT • B2422 BACK DOOR STATE • B2423 ABD MTR TIME OUT • B2424 CLSR CONDITION

DTC Index

INFOID:0000000012408530

NOTE:

Details of time display

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

CONSULT display	Fail-safe	Reference page
U1000: CAN COMM	—	DLK-177
U1010: CONTROL UNIT(CAN)	—	DLK-179
B2401: IGN OPEN	×	DLK-180
B2403: PULSE ENCODER	×	DLK-188
B2409: HALF LATCH SW	×	DLK-194
B2416: TOUCH SEN R OPEN	×	DLK-216
B2417: TOUCH SEN L OPEN	×	DLK-219
B2419: OPEN SW	×	DLK-222
B2420: CLOSE SW	×	DLK-224
B2421: CLUTCH TIME OUT	×	DLK-226
B2422: BACK DOOR STATE	×	DLK-227
B2423: ABD MTR TIME OUT	×	DLK-228
B2424: CLSR CONDITION	×	DLK-229
B2425: AUTO BCK DR CNT UNIT	—	DLK-231

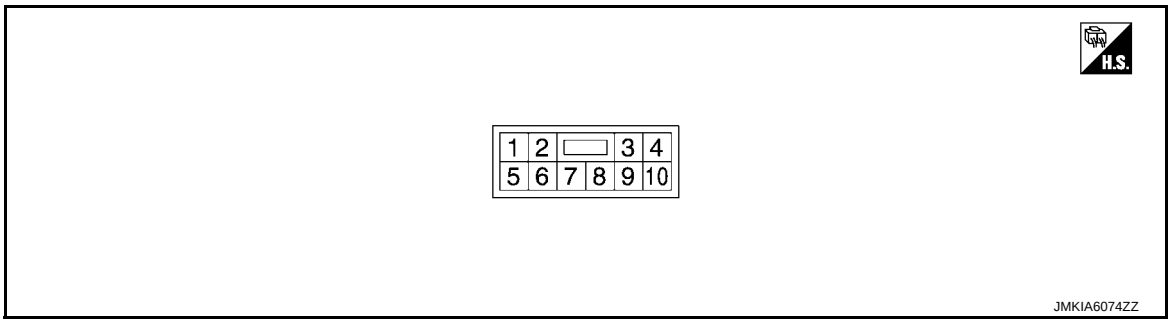
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BACK DOOR CONTROL UNIT

Reference Value

INFOID:0000000012408531

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
1 (W)	Ground	Close switch signal	Input	Closure motor	Stop	8 - 16 V
					Close operation	8 - 16 V
					Open operation	0 - 1.5 V
2 (G)	Ground	Half-latch switch signal	Input	Back door	Open	0 - 1.5 V
					Fully closed/half latch	3.5 - 5.5 V
3 (LG)	Ground	Battery power supply	Input	—		8 - 16 V
4 (V)	Ground	Back door closure motor (close)	Output	Back door	Close operation	5 - 16 V
					Other than above	0 - 1.5 V
5 (R)	Ground	Open switch signal	Input	Closure motor	Stop	8 - 16 V
					Close operation	0 - 1.5 V
					Open operation	8 - 16 V
6 (P)	Ground	Back door open request signal	Input	Back door opener switch	Pressed	0 - 1.5 V
					Released	8 - 16 V
7 (B)	Ground	Ground	—	—	—	0 - 1.5 V
8 (GR)	Ground	Ground	—	—	—	0 - 1.5 V
10 (BR)	Ground	Back door closure motor (open)	Output	Back door	Open operation	5 - 16 V
					Other than above	0 - 1.5 V

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SLIDING DOOR CONTROL UNIT
LH

LH : Reference Value

INFOID:0000000012408532

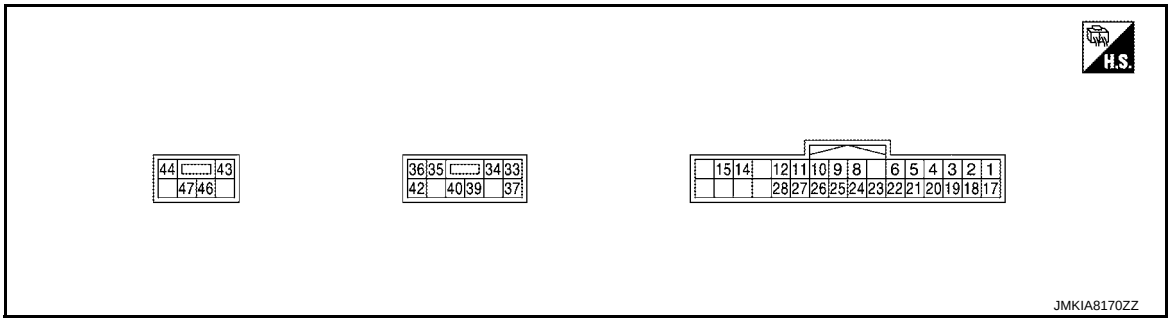
CONSULT MONITOR ITEM

NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

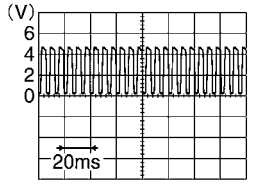
Monitor Item	Condition		Value/Status
SPEED METER	While driving		Equivalent to speedometer reading
ABS SPEED	While driving		Equivalent to speedometer reading
MAIN SW	Automatic door main switch	OFF	OFF
		ON	ON
KNOB LCK SW L	Sliding door lock knob LH	Lock	OFF
		Unlock	ON
ONE-TOUCH SW	Sliding door one-touch open/close switch LH	Release	OFF
		Press	ON
F LID SW	Fuel filler lid status switch	OFF	OFF
		ON	ON
B PILLER SW	**NOTE:** This item is displayed, but cannot be used		OFF
DRIVER SW	Sliding door open/close switch (front LH)	Release	OFF
		Press	ON
ACC On SW	Ignition position	Other than below	OFF
		ON, ACC position	ON
DOR HAND SW L	Sliding door handle LH	Release	OFF
		Pull	ON
TOUCH SEN LH	Sliding door touch sensor LH	Other than below	OFF
		Pinching detection	ON
RR-LH DOOR SW	Sliding door LH	Close	OFF
		Open	ON
HAF LATC SW L	Sliding door LH	Half latch/fully closed	OFF
		Open	ON
P RANGE SW	Selector lever	Other than P position	OFF
		P position	ON
BRAKE SW	Brake pedal	Not depressed	OFF
		Depressed	ON
P BRAKE SW	Parking brake	Not operate	OFF
		Operate	ON
KEYLESS SIG	Intelligent Key button (sliding door LH)	Pressed for short period of time	REV
		Pressed for long period of time	MOVE
		No operation	OFF

Monitor Item	Condition		Value/Status
IGN SW	Ignition position	Other than below	OFF
		ON position	ON
ENCODER A LH	Sliding door LH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
ENCODER B LH	Sliding door LH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
CHILD LOCK SW	**NOTE:** This item is displayed, but cannot be used		OFF
FULL LATC SW L	Sliding door LH	Full closed	OFF
		Other than below	ON
NEUTRAL SW	Sliding door closure motor LH	Neutral position	OFF
		Other than below	ON

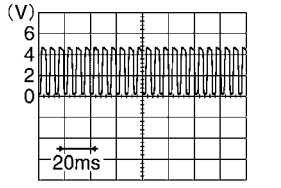
TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
1 (G)	Ground	Automatic door main switch	Input	Automatic door main switch	OFF	8 – 16 V
					ON	0 – 1.5 V
3 (R)	Ground	Sliding door lock status switch	Input	Sliding door lock knob	Unlock	0 – 1.5 V
					Lock	8 – 16 V
4 (GR)	Ground	Encoder A signal	Input	Sliding door LH	Moving (auto or manual)	 JMKIA6157ZZ **NOTE:** Waveform width changes according to sliding door open/ close speed
					When stopped	4 V or 0 – 0.5 V
5 (L)	Ground	Half latch switch	Input	Sliding door LH	Open	0 – 1.5 V
					Full closed/half latch	8 – 16 V
6 (P)	Ground	Power supply (IGN)	Input	Ignition switch ON		9 – 16 V

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Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
8 (W)	Ground	Automatic sliding door warning buzzer	Output	Automatic sliding door warning buzzer LH	Sounding	0 – 1.5 V
					Not sounding	8 – 16 V
9 (P)	Ground	CAN - L	Input/ Output	—		—
10 (L)	Ground	CAN - H	Input/ Output	—		—
11 (P)	Ground	Encoder power supply	Output	Ignition switch OFF		8 – 16 V
12 (GR)	Ground	Power supply (BAT)	Input	Ignition switch OFF		8 – 16 V
14 (GR)	Ground	Sliding door one-touch open/close switch	Output	Sliding door one-touch open/ close switch LH	Released	8 – 16 V
					Pressed	0 – 1.5 V
15 (R)	Ground	Neutral switch	Input	Sliding door closure motor	Neutral position	8 – 16 V
					Other than above	0 – 1.5 V
17 (GR)	Ground	Fuel filler lid status switch	Input	Fuel filler lid status switch	OFF	8 – 16 V
					ON	0 – 1.5 V
18 (W)	Ground	Full latch switch	Input	Sliding door LH	Full closed	8 – 16 V
					Other than above	0 – 1.5 V
19 (P)	Ground	Sliding door open/ close switch (front side)	Input	Sliding door open/close switch (front LH)	Released	8 – 16 V
					Pressed	0 – 1.5 V
21 (G)	Ground	Encoder B signal	Input	Sliding door LH	Moving (auto or manual)	 JMKIA6157ZZ **NOTE:** Waveform width changes according to sliding door open/ close speed
					When stopped	4 V or 0 – 0.5 V
22 (W)	Ground	Sliding door handle switch	Input	Sliding door handle LH	Released	8 – 16 V
					Pulled	0 – 1.5 V
23 (B)	Ground	Ground	—	—		0 V
24 (G)	Ground	Sliding door touch sensor	Input	Sliding door touch sensor LH	Pinching detection	0 – 1.5 V
					Other than above	4 – 8 V
26 (L)	Ground	Ground (encoder)	—	—		0 V
27 (B)	Ground	Ground	—	—		0 V

Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
28 (GR)	Ground	Sliding door switch	Input	Sliding door switch LH	Close	8 – 16 V
					Open	0 – 1.5 V
33 (B)	Ground	Ground	—	—		0 V
34 (L)	Ground	Sliding door closure motor (close)	Output	Sliding door closure motor LH	Close operation	9 – 16 V
					Other than above	0 – 1.5 V
35 (SB)	Ground	Sliding door closure motor (return)	Output	Sliding door closure motor LH	Return operation	9 – 16 V
					Other than above	0 – 1.5 V
36 (V)	Ground	Power supply (BAT)	Input	Ignition switch OFF		9 – 16 V
37 (B)	Ground	Ground	—	—		0 V
39 (G)	Ground	Sliding door lock release actuator (-)	Output	Sliding door lock release actuator LH	Operate	0 – 1.5 V
					Other than above	0 V
40 (Y)	Ground	Sliding door lock release actuator (+)	Output	Sliding door lock release actuator LH	Operate	9 – 16 V
					Other than above	0 V
42 (V)	Ground	Power supply (sliding door auto closure)	Input	Ignition switch OFF		9 – 16 V
43 (R)	Ground	Sliding door motor (open)	Output	Sliding door LH	Auto open operation	9 – 16 V
					Other than above	0 – 1.5 V
44 (L)	Ground	Clutch (–)	Output	Clutch LH	ON	0 – 1.5 V
					OFF	0 V
46 (W)	Ground	Sliding door motor (close)	Output	Sliding door LH	Auto close operation	9 – 16 V
					Other than above	0 – 1.5 V
47 (SB)	Ground	Clutch (+)	Output	Clutch LH	ON	9 – 16 V
					OFF	0 V

LH : Fail-safe

INFOID:0000000012408533

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

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Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

[*1]: When battery is reconnected, cancellation conditions are unconditionally fulfilled.
[*2]: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

LH : DTC Inspection Priority Chart

INFOID:0000000012408534

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN) • B2401: IGN OPEN • B2405: ECU FAIL
2	• B2402: TOUCH SENSOR OPEN • B2403: PULSE ENCODER • B2409: HALF LATCH SW • B241A: ENCDR PWR SUPLY
3	• B2412: ASD MTR/ENCDR • B2413: ASD MTR/ENCDR • B2414: ASD MTR TIME OUT

LH : DTC Index

INFOID:0000000012408535

NOTE:

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The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

CONSULT display	Fail-safe	Reference page
U1000: CAN COMM CIRCUIT	—	DLK-177
U1010: CONTROL UNIT (CAN)	×	DLK-179
B2401: IGN OPEN	×	DLK-180
B2402: TOUCH SENSOR OPEN	×	DLK-183
B2403: PULSE ENCODER	×	DLK-188
B2405: ECU FAIL	×	DLK-193
B2409: HALF LATCH SW	×	DLK-195
B2412: ASD MTR/ENCDR	×	DLK-203
B2413: ASD MTR/ENCDR	×	DLK-209
B2414: ASD MTR TIME OUT	×	DLK-212
B241A: ENCDR PWR SUPLY	×	DLK-200

RH

RH : Reference Value

INFOID:0000000012408536

CONSULT MONITOR ITEM

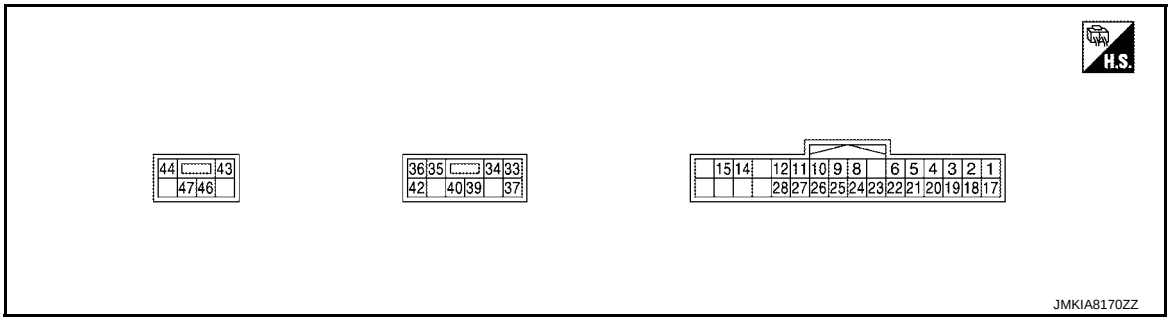
NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Condition		Value/Status
SPEED METER	While driving		Equivalent to speedometer reading
ABS SPEED	While driving		Equivalent to speedometer reading
MAIN SW	Automatic door main switch	OFF	OFF
		ON	ON
KNOB LCK SW R	Sliding door lock knob RH	Lock	OFF
		Unlock	ON
ONE-TOUCH SW	Sliding door one-touch open/close switch RH	Release	OFF
		Press	ON
F LID SW	**NOTE:** This item is displayed, but cannot be monitored		OFF
B PILLER SW	**NOTE:** This item is displayed, but cannot be monitored		OFF
DRIVER SW	Sliding door open/close switch (front RH)	Release	OFF
		Press	ON
ACC On SW	Ignition position	Other than bellow	OFF
		ON, ACC position	ON
DOR HAND SW R	Sliding door handle RH	Release	OFF
		Pull	ON
TOUCH SEN RH	Sliding door touch sensor RH	Other than bellow	OFF
		Pinching detection	ON

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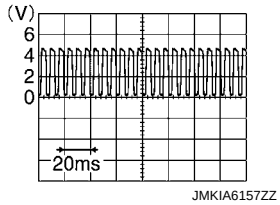
Monitor Item	Condition		Value/Status
RR-RH DOOR SW	Sliding door RH	Close	OFF
		Open	ON
HAF LATC SW R	Sliding door RH	Half latch/fully closed	OFF
		Open	ON
P RANGE SW	Selector lever	Other than P position	OFF
		P position	ON
BRAKE SW	Brake pedal	Not depressed	OFF
		Depressed	ON
P BRAKE SW	Parking brake	Not operate	OFF
		Operate	ON
KEYLESS SIG	Intelligent Key button (sliding door RH)	Pressed for short period of time	REV
		Pressed for long period of time	MOVE
		No operation	OFF
IGN SW	Ignition position	Other than bellow	OFF
		ON position	ON
ENCODER A RH	Sliding door RH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
ENCODER B RH	Sliding door RH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
CHILD LOCK SW	**NOTE:** This item is displayed, but cannot be monitored		OFF
FUL LATC SW R	Sliding door RH	Full closed	OFF
		Other than bellow	ON
NEUTRAL SW	Sliding door closure motor RH	Neutral position	OFF
		Other than bellow	ON

TERMINAL LAYOUT

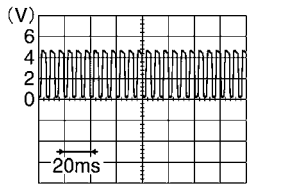


PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
1 (R)	Ground	Automatic door main switch	Input	Automatic door main switch	OFF	8 – 16 V
					ON	0 – 1.5 V
3 (P)	Ground	Sliding door lock status switch	Input	Sliding door lock knob RH	Unlock	0 – 1.5 V
					Lock	8 – 16 V

Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
4 (R)	Ground	Encoder A signal	Input	Sliding door RH	Moving (auto or manual)	 JMKIA6157ZZ **NOTE:** Waveform width changes according to sliding door open/ close speed
					When stopped	4 V or 0 – 0.5 V
5 (G)	Ground	Half latch switch	Input	Sliding door RH	Open	0 – 1.5 V
					Full closed/half latch	8 – 16 V
6 (L)	Ground	Power supply (IGN)	Input	Ignition switch ON		9 – 16 V
8 (P)	Ground	Automatic sliding door warning buzzer	Output	Automatic sliding door warning buzzer RH	Sounding	0 – 1.5 V
					Not sounding	8 – 16 V
9 (B)	Ground	CAN - L	Input/ Output	—		—
10 (W)	Ground	CAN - H	Input/ Output	—		—
11 (G)	Ground	Encoder power supply	Output	Ignition switch OFF		8 – 16 V
12 (Y)	Ground	Power supply (BAT)	Input	Ignition switch OFF		8 – 16 V
14 (GR)	Ground	Sliding door one-touch open/close switch	Output	Sliding door one-touch open/ close switch RH	Released	8 – 16 V
					Pressed	0 – 1.5 V
15 (R)	Ground	Neutral switch	Input	Sliding door closure motor	Neutral position	8 – 16 V
					Other than above	0 – 1.5 V
18 (W)	Ground	Half latch switch	Input	Sliding door RH	Full closed	8 – 16 V
					Other than above	0 – 1.5 V
19 (G)	Ground	Sliding door open/ close switch (front side)	Input	Sliding door open/close switch (front RH)	Released	8 – 16 V
					Pressed	0 – 1.5 V

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Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
21 (P)	Ground	Encoder B signal	Input	Sliding door RH	Moving (auto or manual)	 JMKIA6157ZZ **NOTE:** Waveform width changes according to sliding door open/ close speed
					When stopped	4 V or 0 – 0.5 V
22 (W)	Ground	Sliding door handle switch	Input	Sliding door handle RH	Released	8 – 16 V
					Pulled	0 – 1.5 V
23 (B)	Ground	Ground	—	—		0 V
24 (G)	Ground	Sliding door touch sensor	Input	Sliding door touch sensor RH	Pinching detection	0 – 1.5 V
					Other than above	4 – 8 V
26 (GR)	Ground	Ground (encoder)	—	—		0 V
27 (GR)	Ground	Ground	—	—		0 V
28 (GR)	Ground	Sliding door switch	Input	Sliding door switch RH	Close	8 – 16 V
					Open	0 – 1.5 V
33 (B/R)	Ground	Ground	—	—		0 V
34 (R)	Ground	Sliding door closure motor (close)	Output	Sliding door closure motor RH	Close operation	9 – 16 V
					Other than above	0 – 1.5 V
35 (G)	Ground	Sliding door closure motor (return)	Output	Sliding door closure motor RH	Return operation	9 – 16 V
					Other than above	0 – 1.5 V
36 (Y)	Ground	Power supply (BAT)	Input	Ignition switch OFF		9 – 16 V
37 (B/R)	Ground	Ground	—	—		0 V
39 (L)	Ground	Sliding door lock release actuator (-)	Output	Sliding door lock release actuator RH	Operate	0 – 1.5 V
					Other than above	0 V
40 (O)	Ground	Sliding door lock release actuator (+)	Output	Sliding door lock release actuator RH	Operate	9 – 16 V
					Other than above	0 V
42 (Y)	Ground	Power supply (sliding door auto closure)	Input	Ignition switch OFF		9 – 16 V

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Terminal No. (Wire color)		Description		Condition		Voltage
(+)	(–)	Signal name	Input/ Output			
43 (B)	Ground	Sliding door motor (open)	Output	Sliding door RH	Auto open operation	9 – 16 V
					Other than above	0 – 1.5 V
44 (L)	Ground	Clutch (–)	Output	Clutch RH	ON	0 – 1.5 V
					OFF	0 V
46 (W)	Ground	Sliding door motor (close)	Output	Sliding door RH	Auto close operation	9 – 16 V
					Other than above	0 – 1.5 V
47 (BR)	Ground	Clutch (+)	Output	Clutch RH	ON	9 – 16 V
					OFF	0 V

RH : Fail-safe

INFOID:0000000012408537

FAIL-SAFE CONTROL BT DTC

Sliding door control unit performs fail-safe control when any DTC is detected.

Display contents of CONSULT	Fail-safe	Reference page[*1]
U1010: CAN COMM CIRCUIT	Intermittent clutch operation	Return to normal status[*2]
B2401: IGN OPEN		When the following conditions are fulfilled • Sliding door control unit detects that ignition switch is in the OFF position • Sliding door control unit detects that ignition switch is not in the ON position via CAN communication
B2402: TOUCH SENSOR OPEN		Return to normal status
B2403: PULSE ENCODER		Sliding door control unit detects that sliding door is in the fully closed position
B2405: ECU FAIL		Erase DTC[*2]
B2409: HALF LATCH SW		Sliding door control unit detects that sliding door is in the fully closed position
B2412: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2413: ASD MTR/ENCDR		Sliding door control unit detects that sliding door is in the fully closed position
B2414: ASD MTR TIME OUT		Sliding door control unit detects that sliding door is in the fully closed position
B241A: ENCDR PWR SUPLY		When the following conditions are fulfilled • Return to normal status • Sliding door control unit detects that sliding door is in the fully closed position

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*1: When battery is reconnected, cancellation conditions are unconditionally fulfilled.

*2: After returning to normal status, auto open/close function does not operate unless sliding door auto closure function is operated.

RH : DTC Inspection Priority Chart

INFOID:0000000012408538

Priority	DTC
1	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN) • B2401: IGN OPEN • B2405: ECU FAIL
2	• B2402: TOUCH SENSOR OPEN • B2403: PULSE ENCODER • B2409: HALF LATCH SW • B241A: ENCDR PWR SUPLY
3	• B2412: ASD MTR/ENCDR • B2413: ASD MTR/ENCDR • B2414: ASD MTR TIME OUT

RH : DTC Index

INFOID:0000000012408539

NOTE:
The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

CONSULT display	Fail-safe	Reference page
U1000: CAN COMM CIRCUIT	—	DLK-178
U1010: CONTROL UNIT (CAN)	×	DLK-179
B2401: IGN OPEN	×	DLK-181
B2402: TOUCH SENSOR OPEN	×	DLK-185
B2403: PULSE ENCODER	×	DLK-190
B2405: ECU FAIL	×	DLK-193
B2409: HALF LATCH SW	×	DLK-198
B2412: ASD MTR/ENCDR	×	DLK-205
B2413: ASD MTR/ENCDR	×	DLK-209
B2414: ASD MTR TIME OUT	×	DLK-213
B241A: ENCDR PWR SUPLY	×	DLK-201

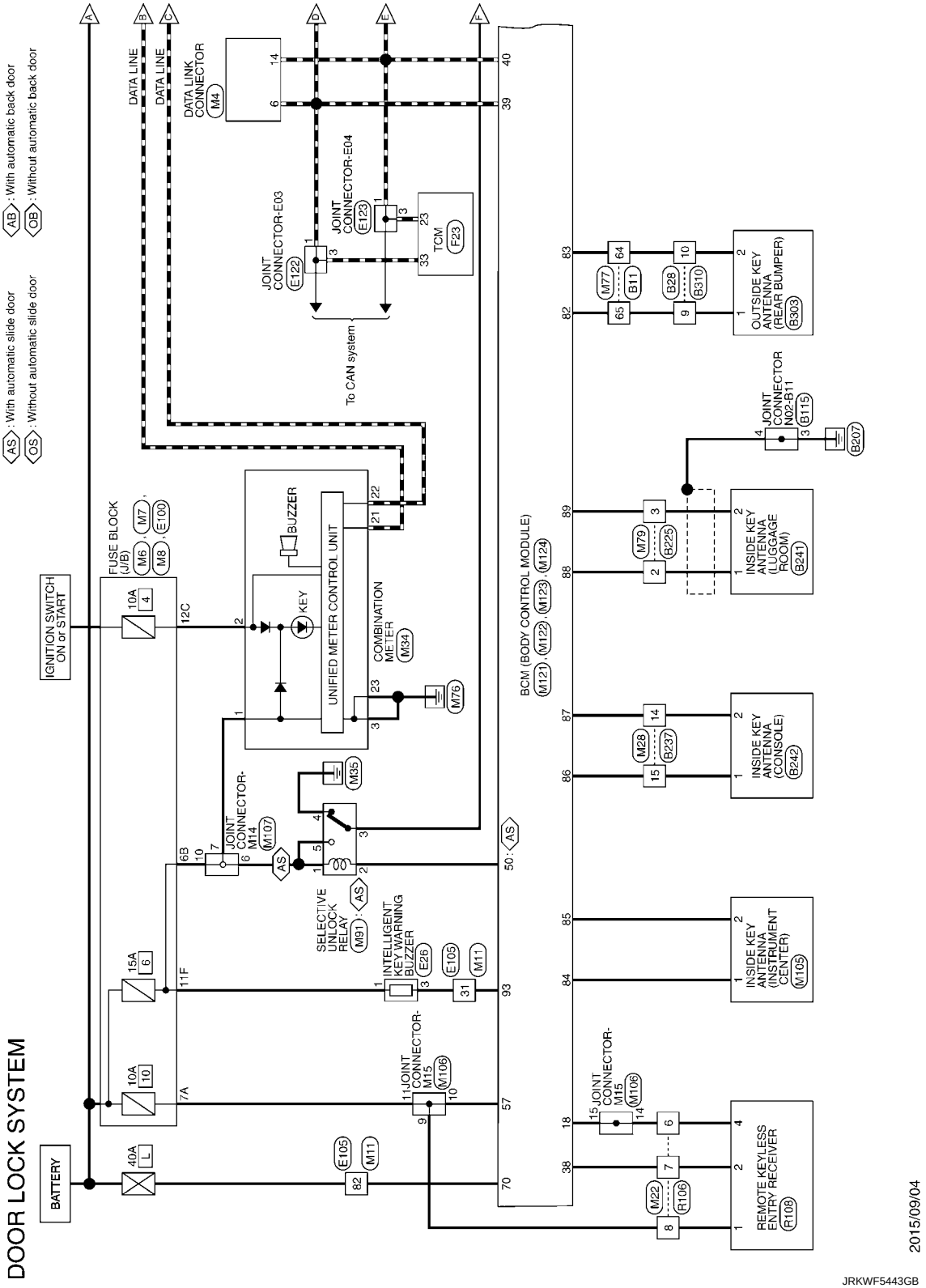
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WIRING DIAGRAM

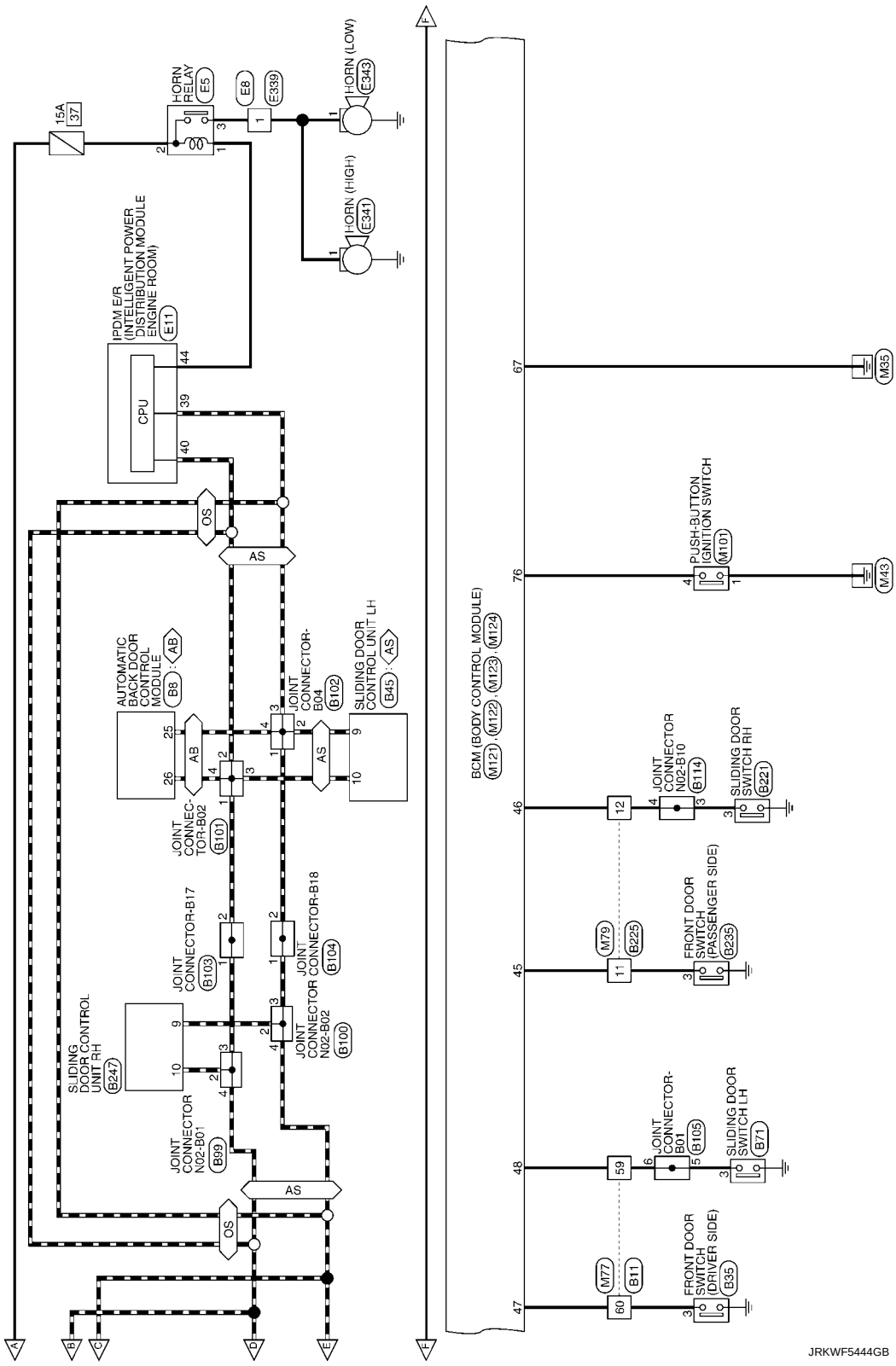
DOOR & LOCK SYSTEM

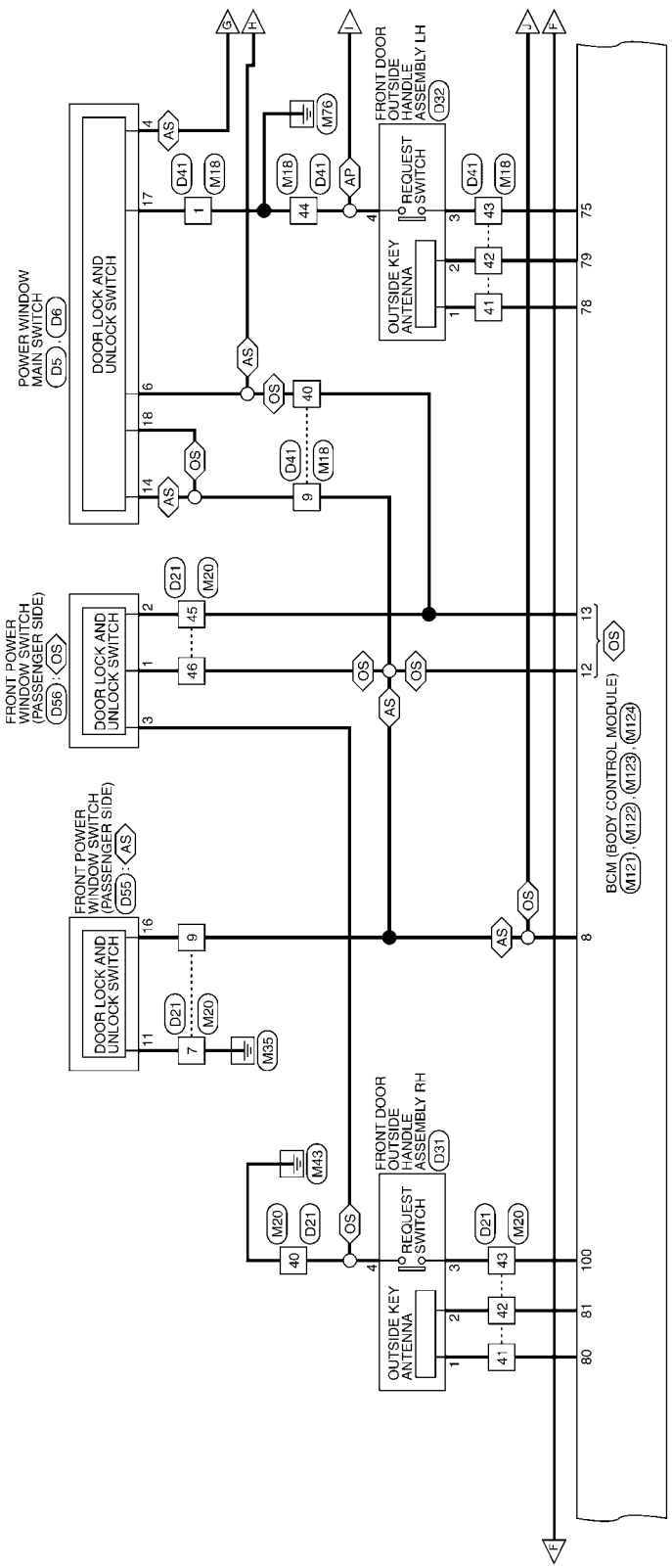
Wiring Diagram

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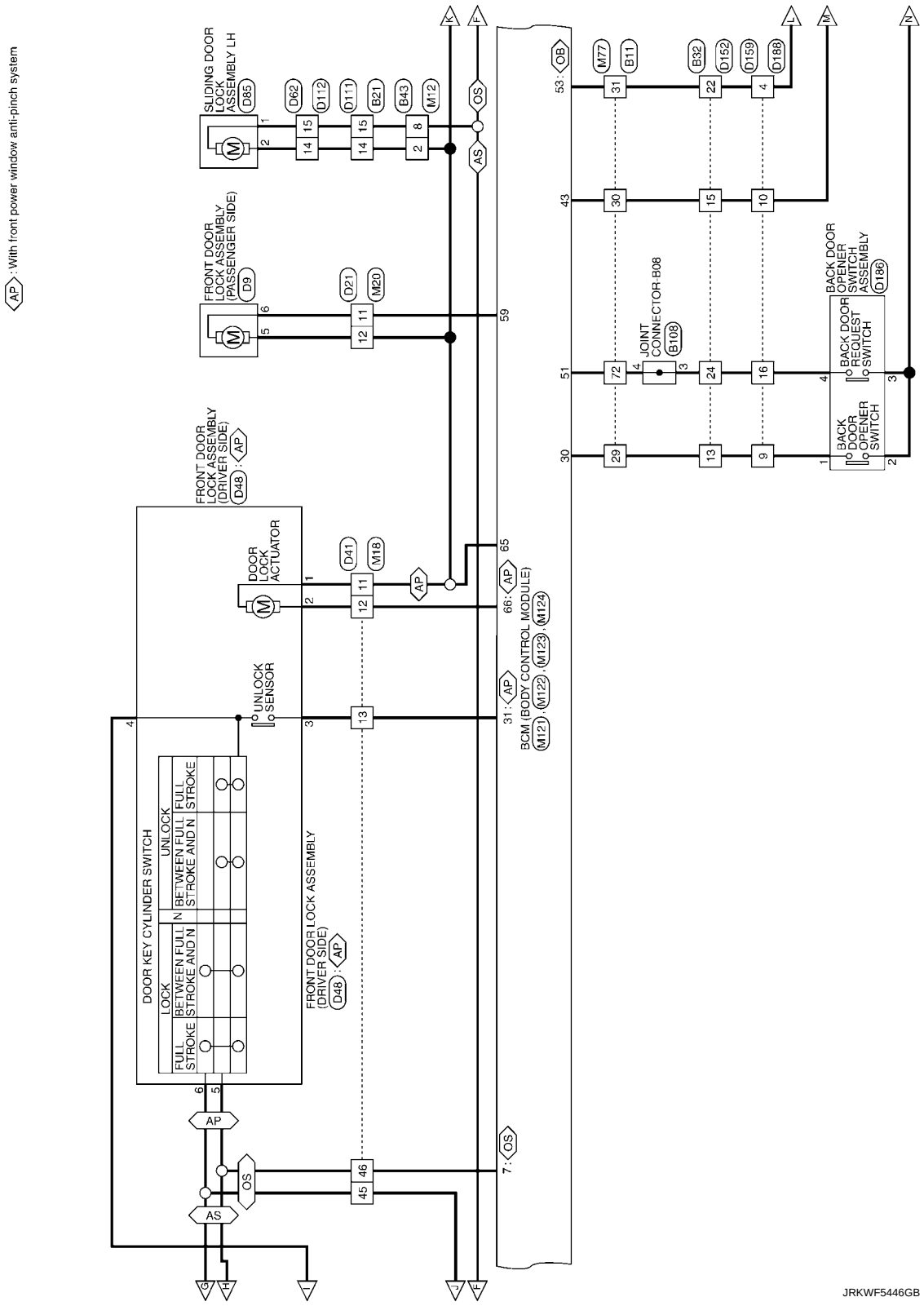


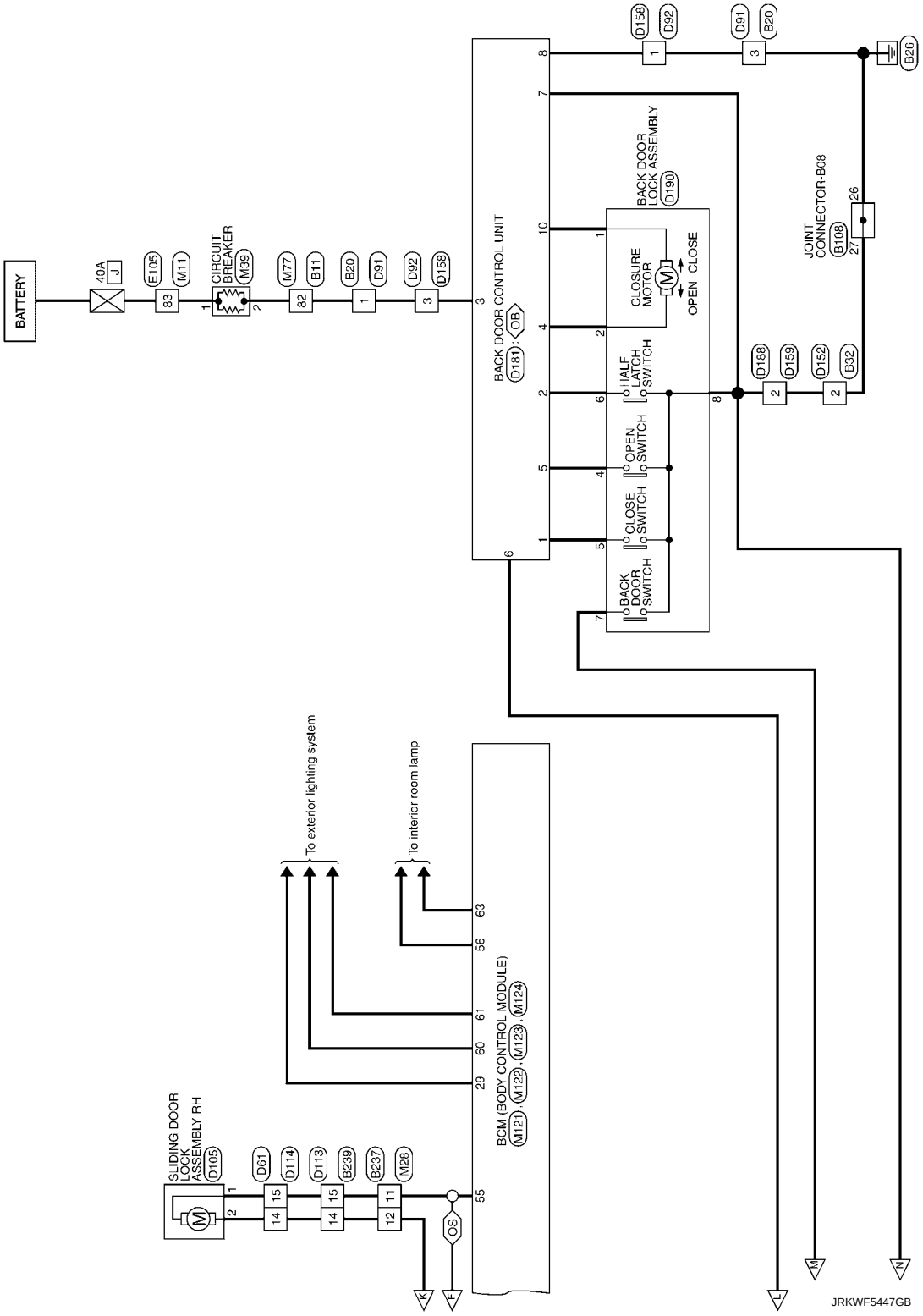
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15A
37
HORN RELAY
E5
E8
E339
HORN (LOW)
E343
HORN (HIGH)
E341
IPDM E/R
(INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E11
CPU
44
39
40
OS
AS
AUTOMATIC BACK DOOR CONTROL MODULE
B8
AB
JOINT CONNECTOR-B04
B102
SLIDING DOOR CONTROL UNIT LH
B45
AS
JOINT CONNEC-TOR-B02
B101
JOINT CONNECTOR-B17
B103
JOINT CONNECTOR CONNECTOR-B18
B104
SLIDING DOOR CONTROL UNIT RH
B247
JOINT CONNECTOR N02-B02
B100
JOINT CONNECTOR N02-B01
B99
BCM (BODY CONTROL MODULE)
M121, M122, M123, M124
67
76
46
45
48
47
PUSH-BUTTON IGNITION SWITCH
M101
M43
M35
JOINT CONNECTOR N02-B10
B114
SLIDING DOOR SWITCH RH
B221
M79
B225
FRONT DOOR SWITCH (PASSENGER SIDE)
B235
JOINT CONNECTOR-B01
B105
SLIDING DOOR SWITCH LH
B71
M77
B11
FRONT DOOR SWITCH (DRIVER SIDE)
B35
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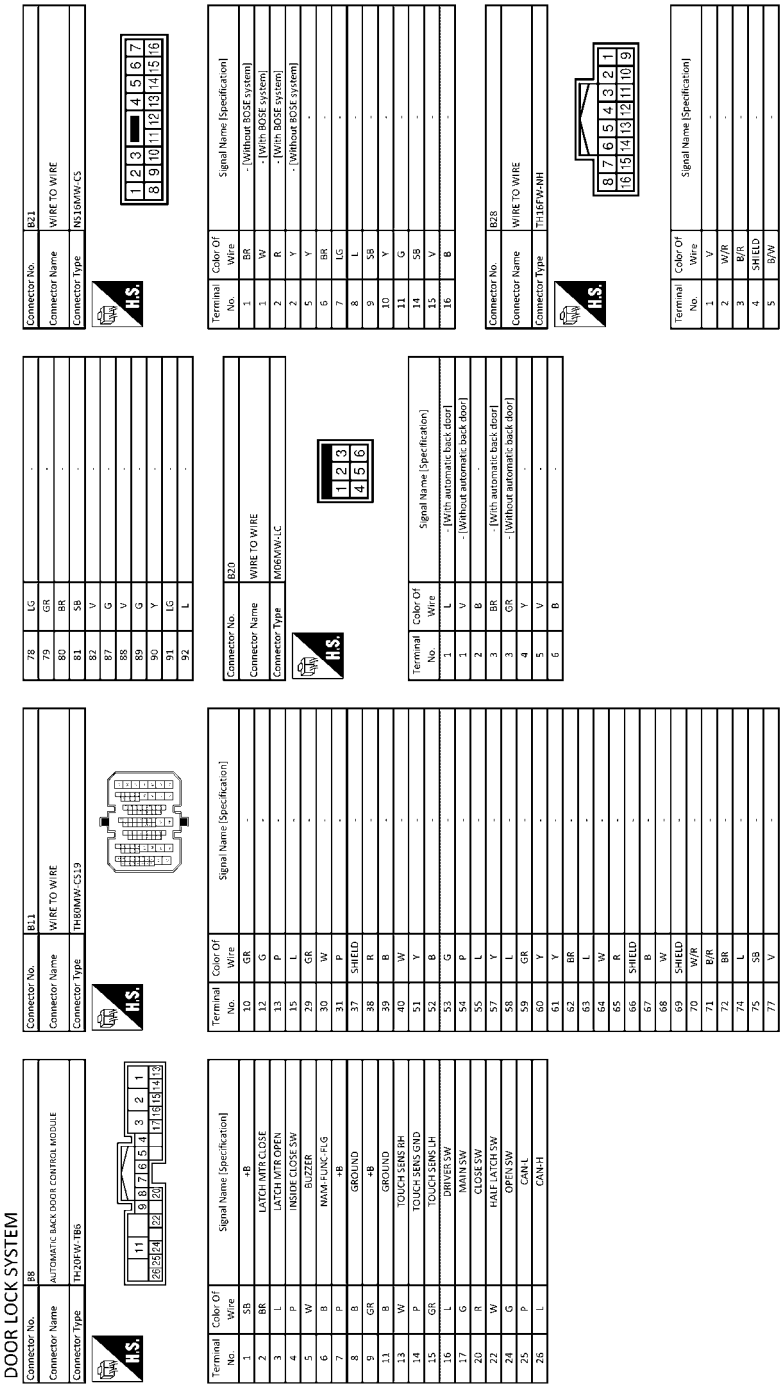


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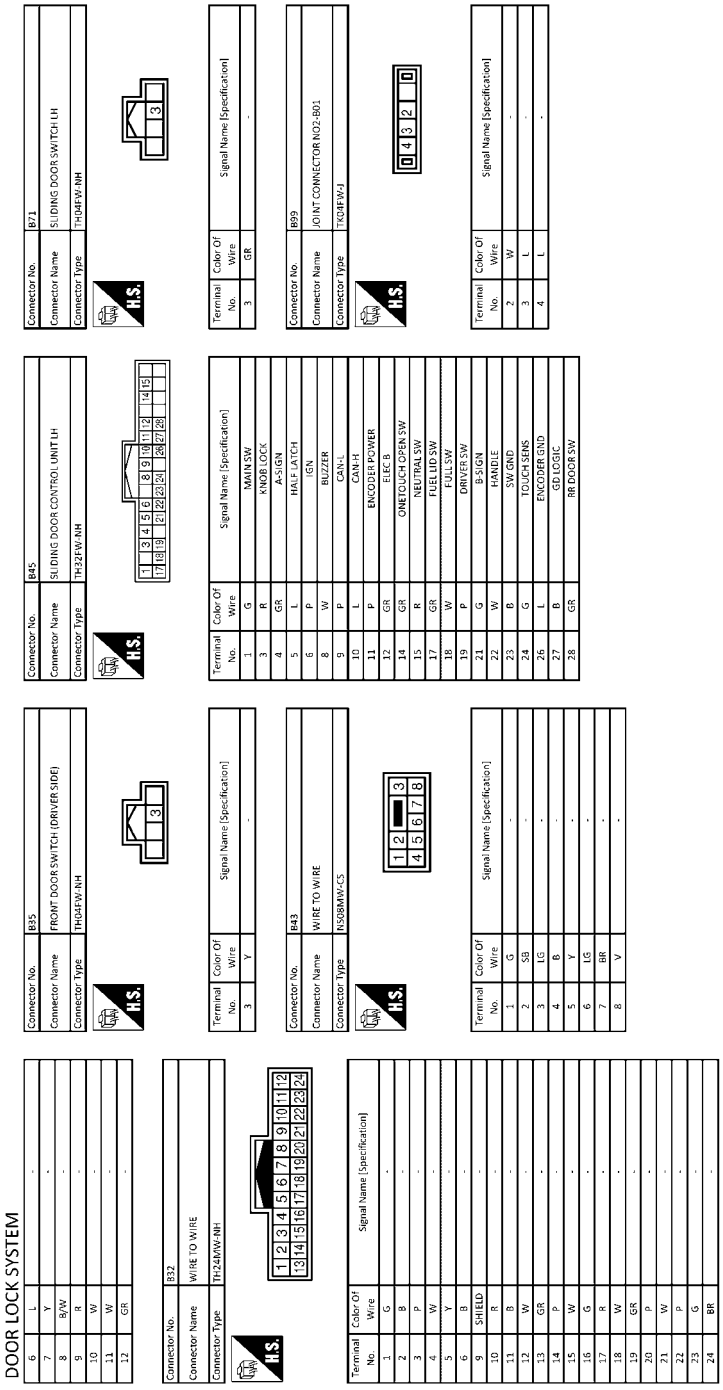

AP : With front power window anti-pinch system
SLIDING DOOR LOCK ASSEMBLY LH (D85)
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE) (D9)
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) (D48) : AP
DOOR LOCK ACTUATOR
UNLOCK SENSOR
DOOR KEY CYLINDER SWITCH
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) (D48) : AP
JOINT CONNECTOR-B08 (B108)
BACK DOOR OPENER SWITCH ASSEMBLY (D186)
BACK DOOR REQUEST SWITCH
BACK DOOR OPENER SWITCH
BCM (BODY CONTROL MODULE) (M121), (M122), (M123), (M124)
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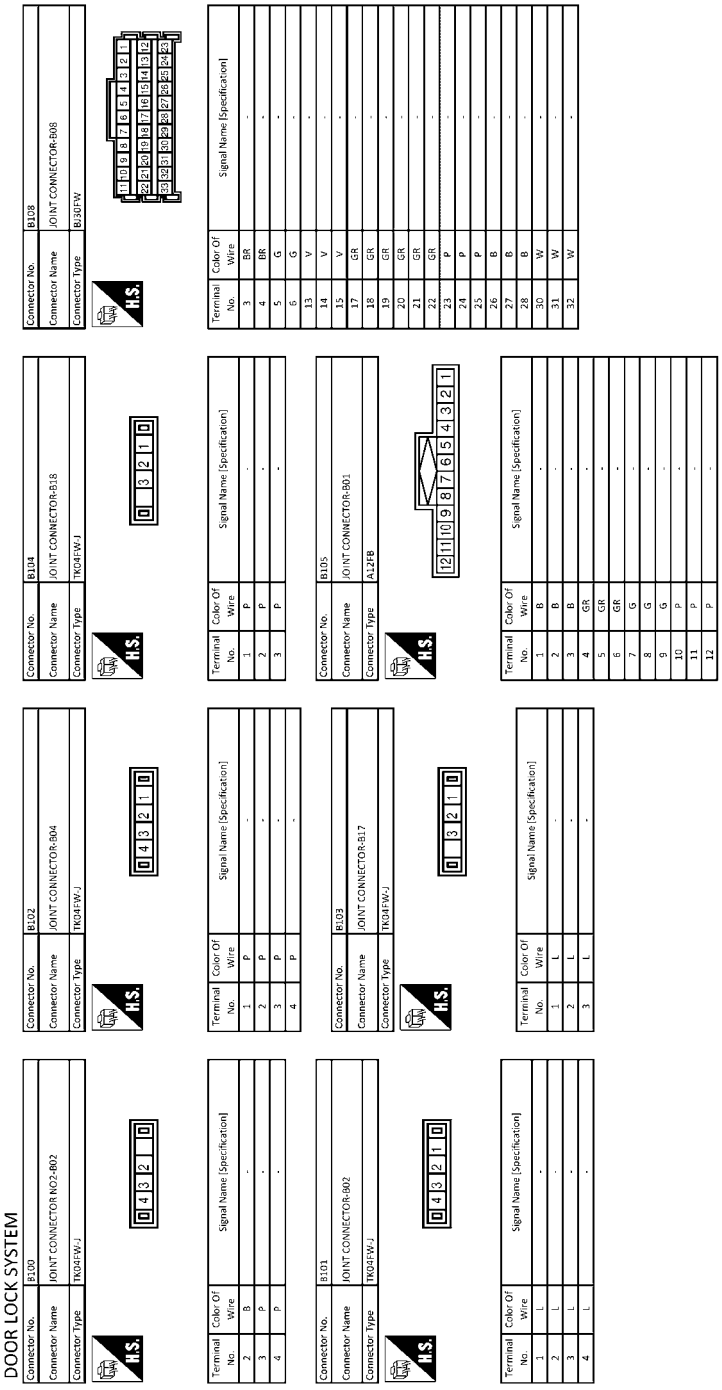
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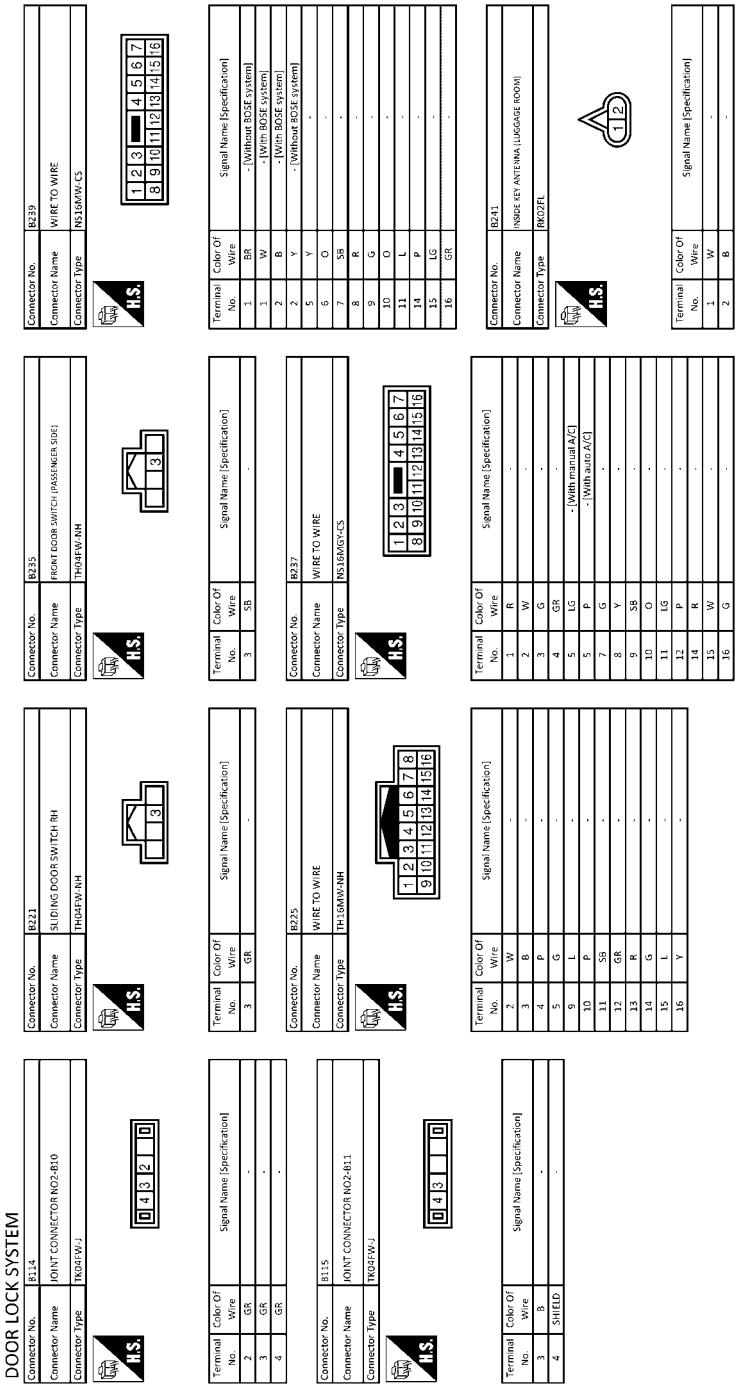
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DOOR LOCK SYSTEM



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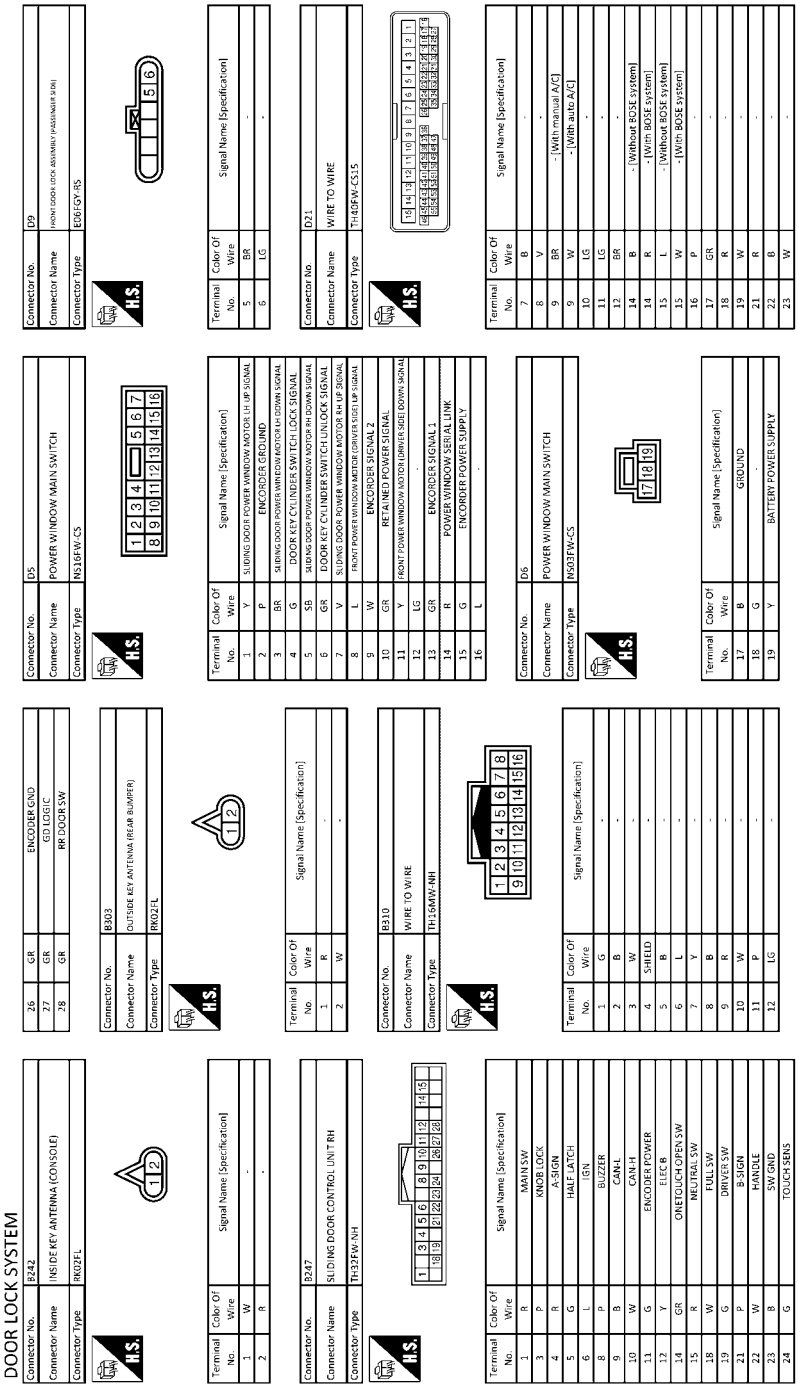
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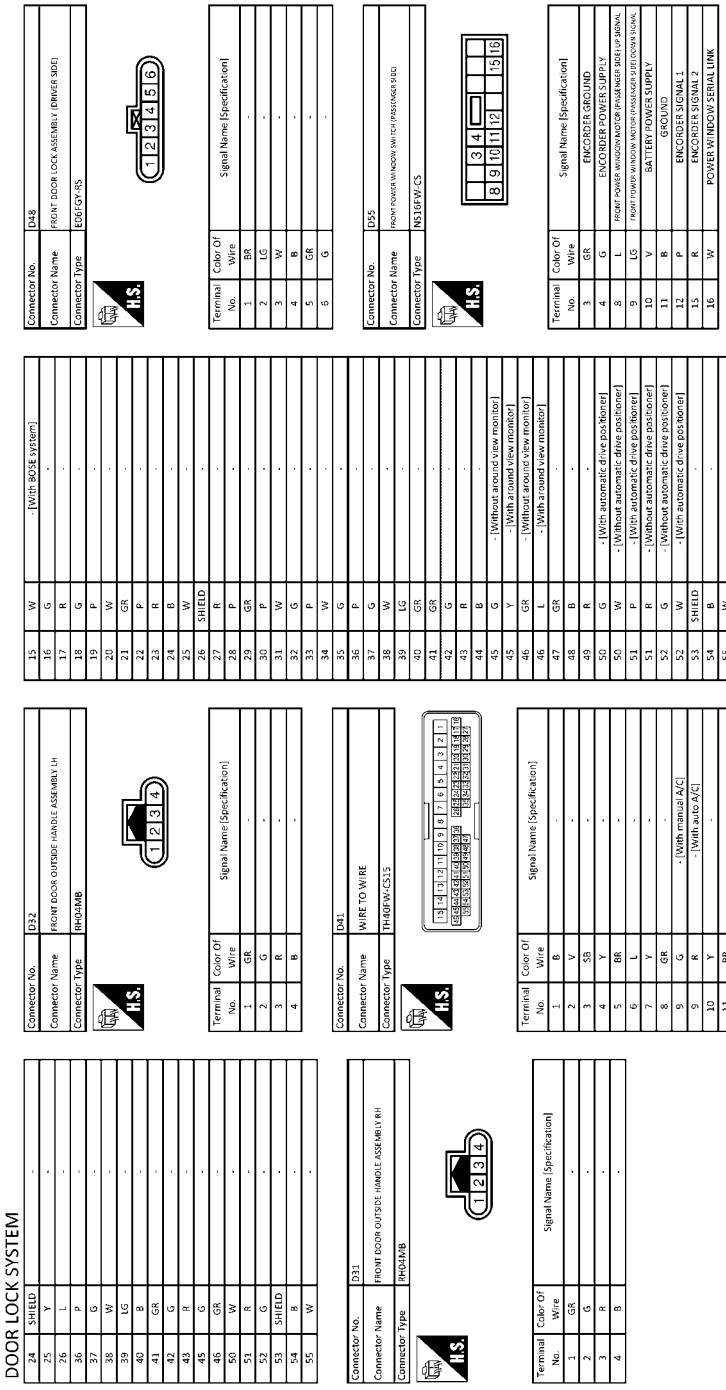
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DOOR LOCK SYSTEM

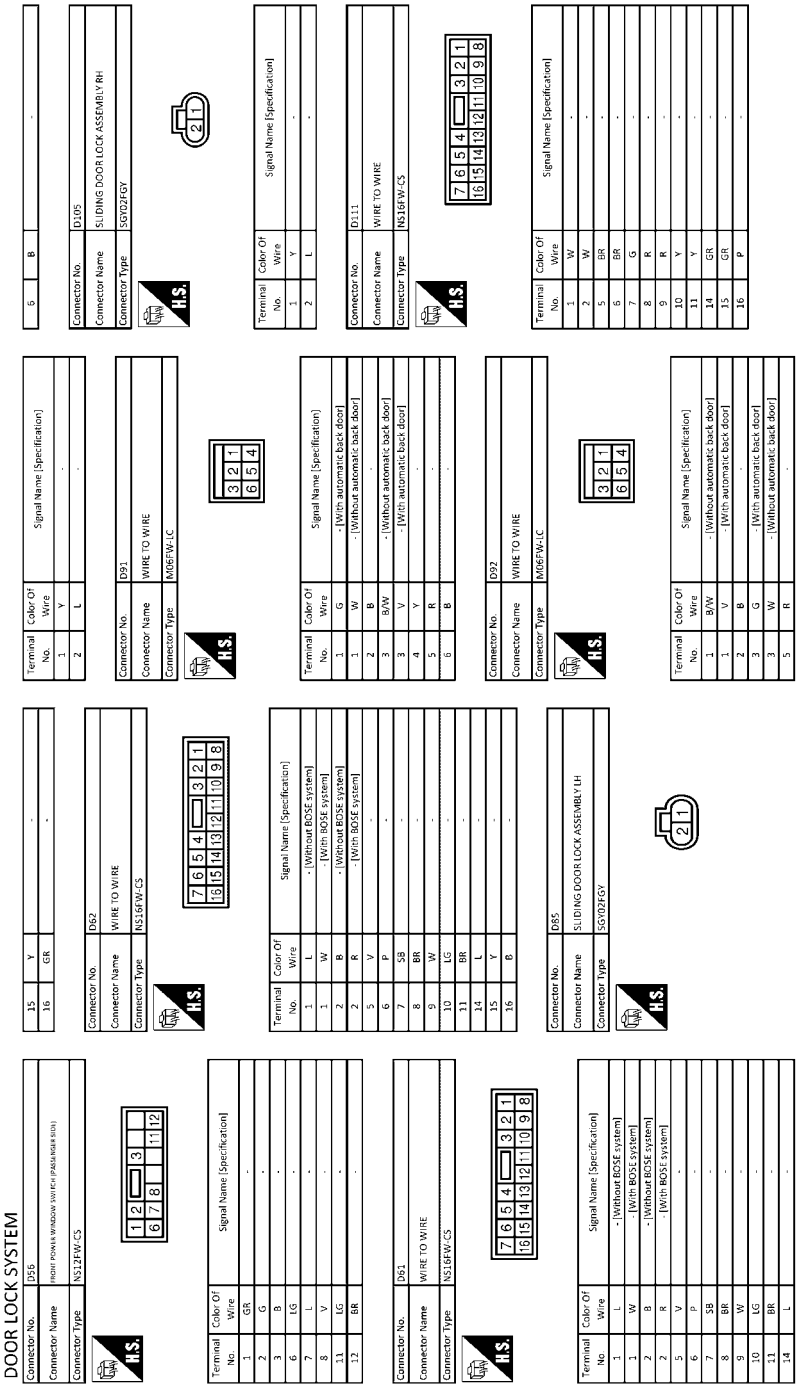


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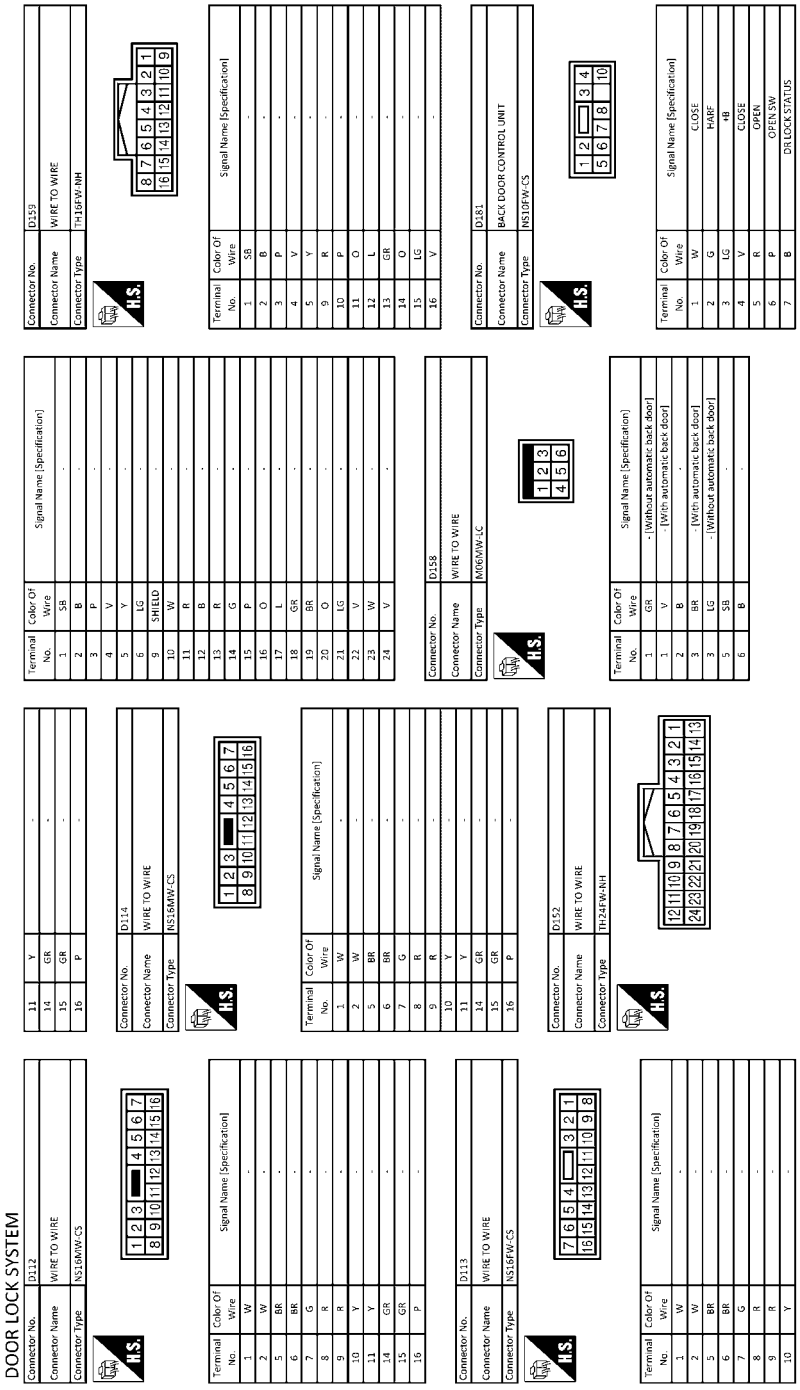


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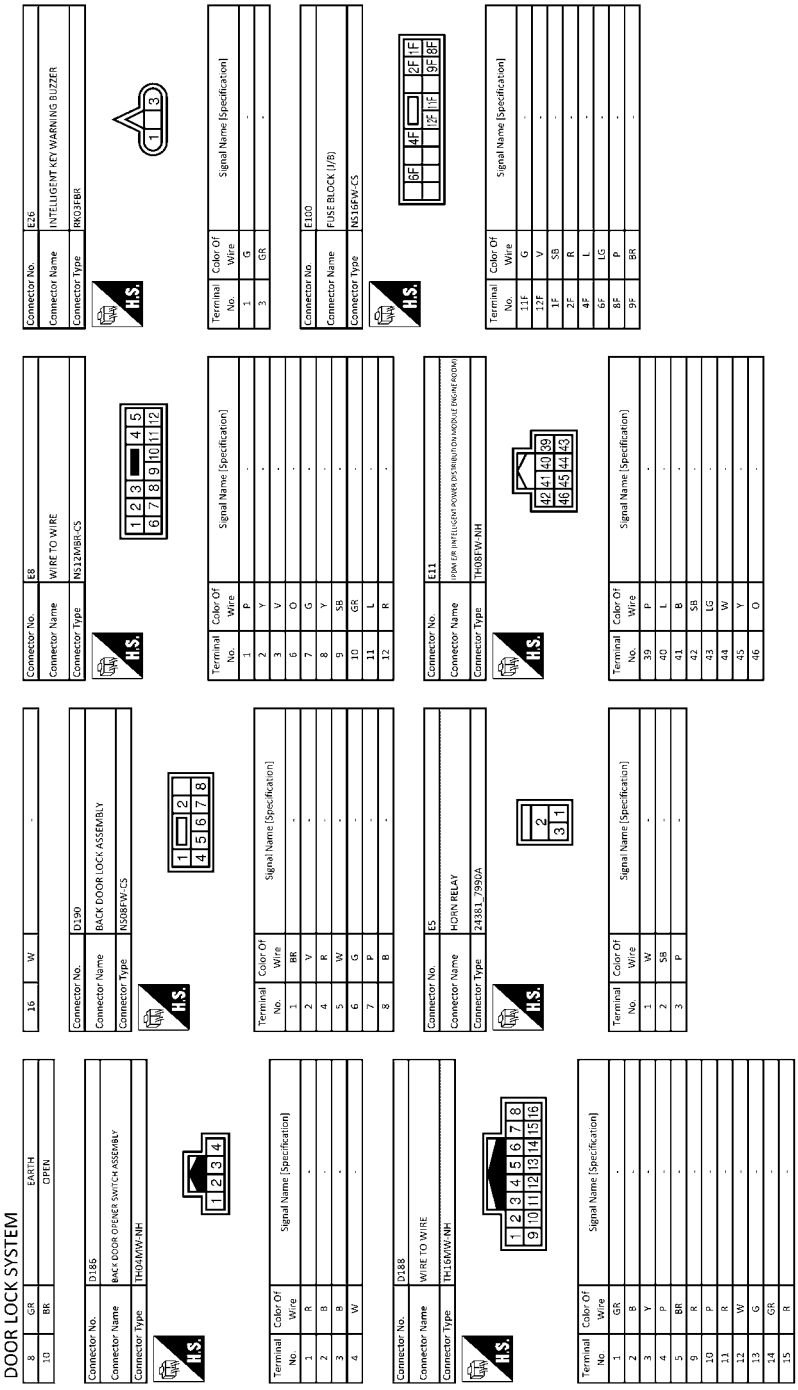


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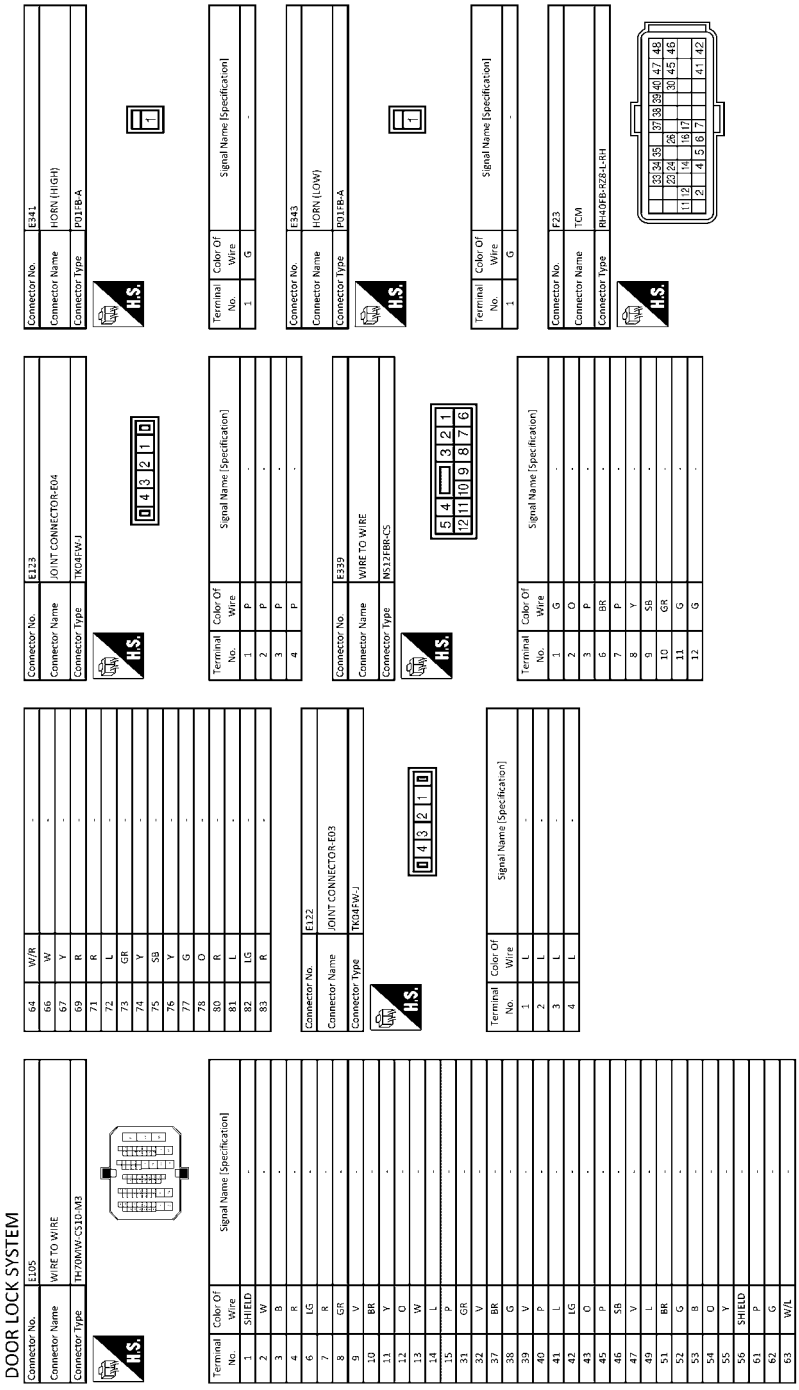


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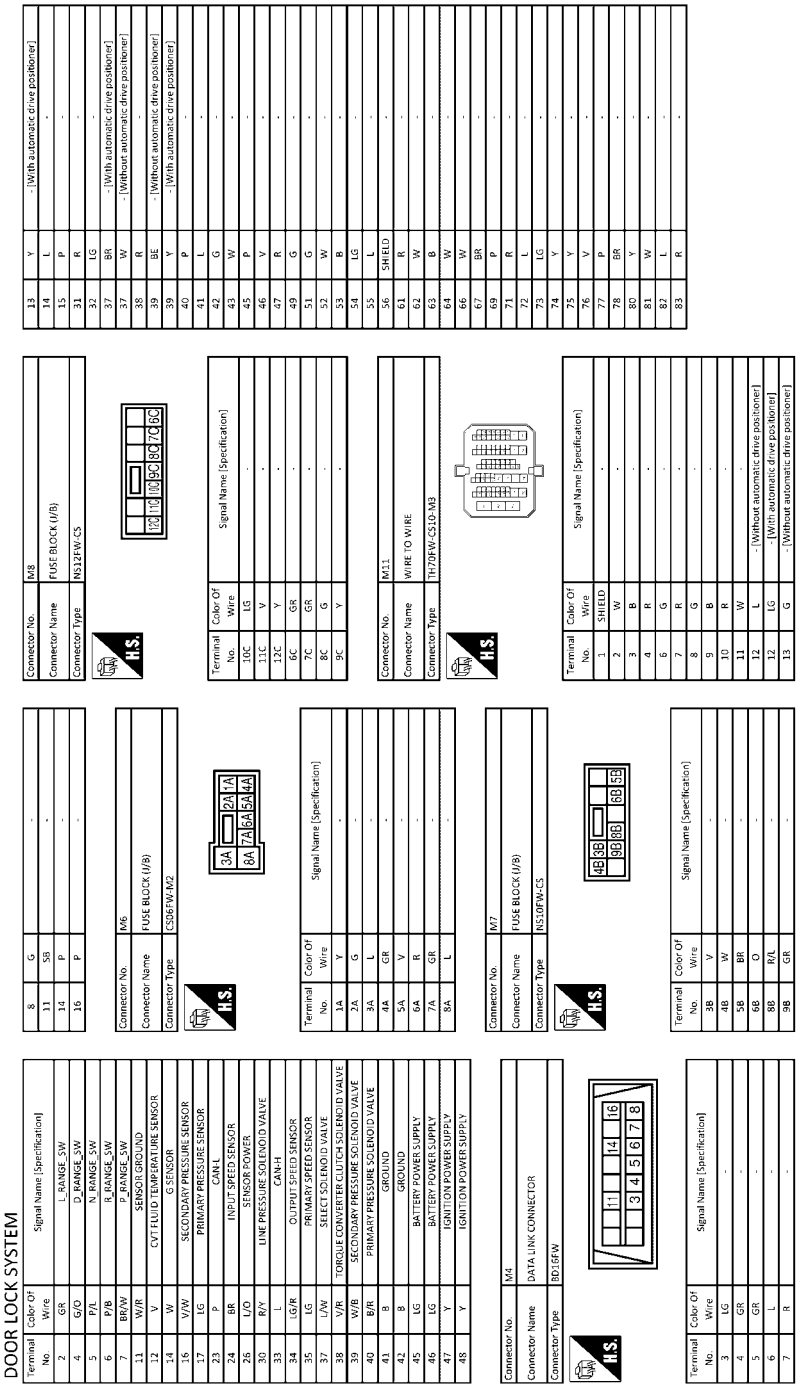


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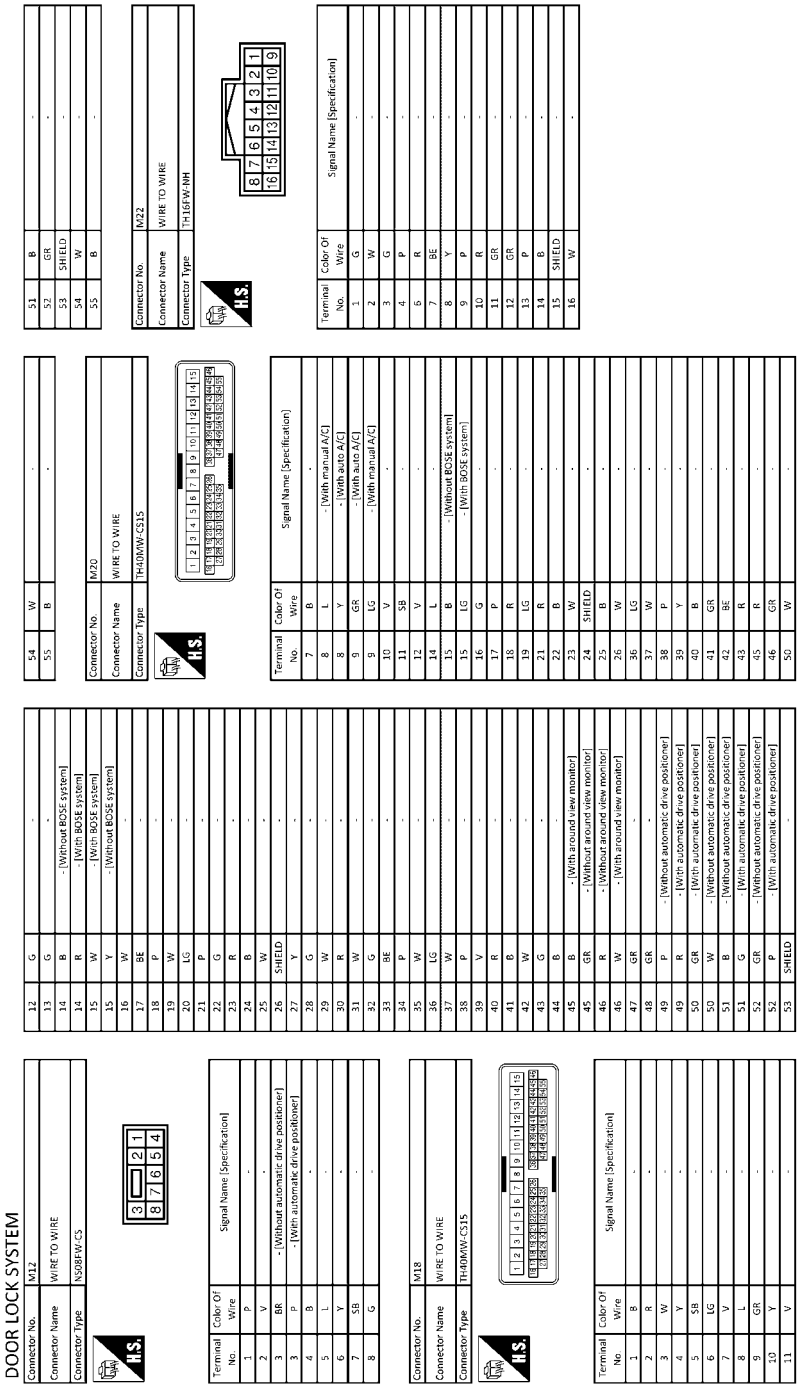


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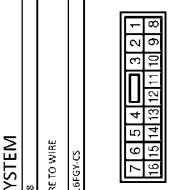


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DOOR LOCK SYSTEM

Connector No.	M28
Connector Name	WIRE TO WIRE
Connector Type	NS16FGY-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	G	-
3	BR	-
4	SB	-
5	R	-
7	G	-
8	L	-
9	R	-
10	W	-
11	G	-
12	V	-
14	BE	-
15	W	-
16	Y	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH

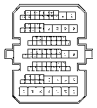
Terminal No.	Color Of Wire	Signal Name [Specification]
1	O	BATTERY POWER SUPPLY [With automatic drive positioner]
1	P	BATTERY POWER SUPPLY [Without automatic drive positioner]
2	G	IGNITION SIGNAL [Without automatic drive positioner]
2	Y	IGNITION SIGNAL [With automatic drive positioner]
3	B	GROUND
4	B	GROUND
5	B	ILLUMINATION CONTROL SIGNAL [Without automatic drive positioner]
5	B/P	ILLUMINATION CONTROL SIGNAL [With automatic drive positioner]
8	G	TRIP RESET SWITCH SIGNAL [Without automatic drive positioner]
8	SB	TRIP RESET SWITCH SIGNAL [With automatic drive positioner]
10	P	METER CONTROL SWITCH GROUND
11	G	ENTER SWITCH SIGNAL
12	BR	SELECT SWITCH SIGNAL [With automatic drive positioner]
12	R	SELECT SWITCH SIGNAL [Without automatic drive positioner]
13	W	ILLUMINATION CONTROL SWITCH SIGNAL [Without automatic drive positioner]
13	Y	ILLUMINATION CONTROL SWITCH SIGNAL [With automatic drive positioner]
14	G	ILLUMINATION CONTROL SWITCH BACK SIGNAL [Without automatic drive positioner]
14	V	ILLUMINATION CONTROL SWITCH BACK SIGNAL [With automatic drive positioner]
15	BR	AIR BAG SIGNAL
16	L	ENGINE COOLANT TEMPERATURE SIGNAL
18	L	AMBIENT SENSOR SIGNAL [Without automatic drive positioner]
18	LG	AMBIENT SENSOR SIGNAL [With automatic drive positioner]
19	R	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
20	G	AMBIENT SENSOR GROUND [Without automatic drive positioner]
20	Y	AMBIENT SENSOR GROUND [With automatic drive positioner]
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	B	FUEL LEVEL SENSOR GROUND
25	BR	ALTERNATOR SIGNAL [With automatic drive positioner]
25	W	ALTERNATOR SIGNAL [Without automatic drive positioner]
26	BR	PARKING BRAKE SWITCH SIGNAL
27	BE	BRAKE FLUID LEVEL SWITCH SIGNAL [Without automatic drive positioner]
27	Y	BRAKE FLUID LEVEL SWITCH SIGNAL [With automatic drive positioner]
28	V	SECURITY SIGNAL
29	G	WASHER LEVEL SWITCH SIGNAL
31	SB	VEHICLE SPEED SIGNAL [8-PULSE]
32	P	OVERDRIVE CONTROL SWITCH SIGNAL
34	O	FUEL LEVEL SENSOR SIGNAL
35	BR	CAN-H [For models with 24-pin connector]
35	P	CAN-H [For models with 40-pin connector]
36	BR	PASSENGER SEAT BELT WARNING SIGNAL

Connector No.	M39
Connector Name	CIRCUIT BREAKER
Connector Type	M02FW-P-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-

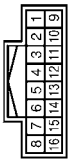
Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19



Terminal No.	Color Of Wire	Signal Name [Specification]
10	P	-
12	BE	-
13	W	-
15	R	-
29	W	-
30	P	-
31	BE	-
37	SHIELD	-
38	B	- [Without around view monitor]
38	W	- [With around view monitor]
39	B	- [With around view monitor]
39	W	- [Without around view monitor]
40	R	-
51	LG	-
52	B	-
53	BE	-
54	P	-
55	L	-

57	Y	-
58	L	-
59	BE	-
60	G	-
61	LG	-
62	SB	-
63	BE	-
64	R	-
65	G	-
66	SHIELD	-
67	B	-
68	W	-
69	SHIELD	-
70	B	-
71	W	-
72	G	-
74	GR	-
75	G	-
77	W	-
78	R	-
79	W	-
80	G	-
81	L	-
82	W	-
87	V	-
88	LG	-
89	GR	-
90	R	- [With automatic drive positioner]
90	Y	- [Without automatic drive positioner]
91	LG	-
92	BR	-

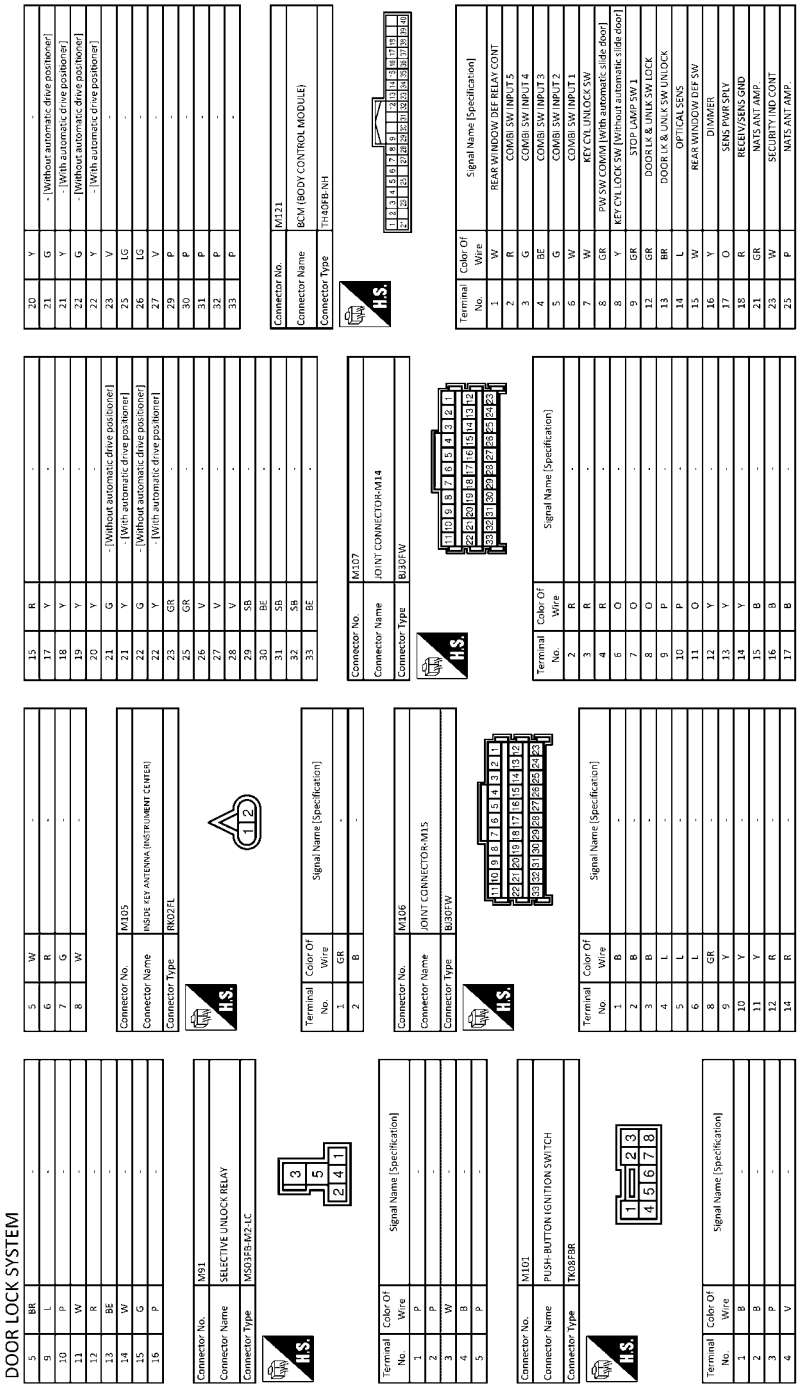
Connector No.	M79
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	B	-
4	P	-

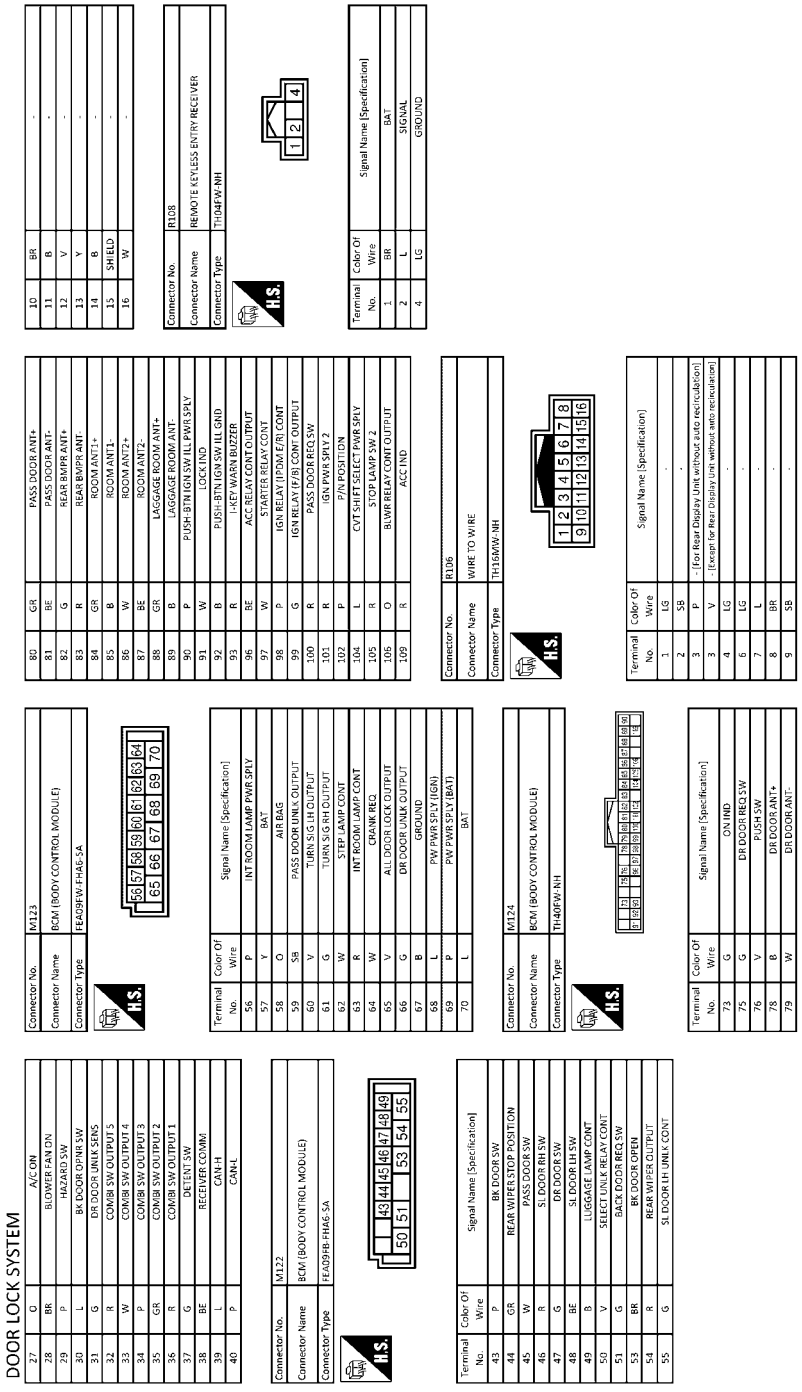
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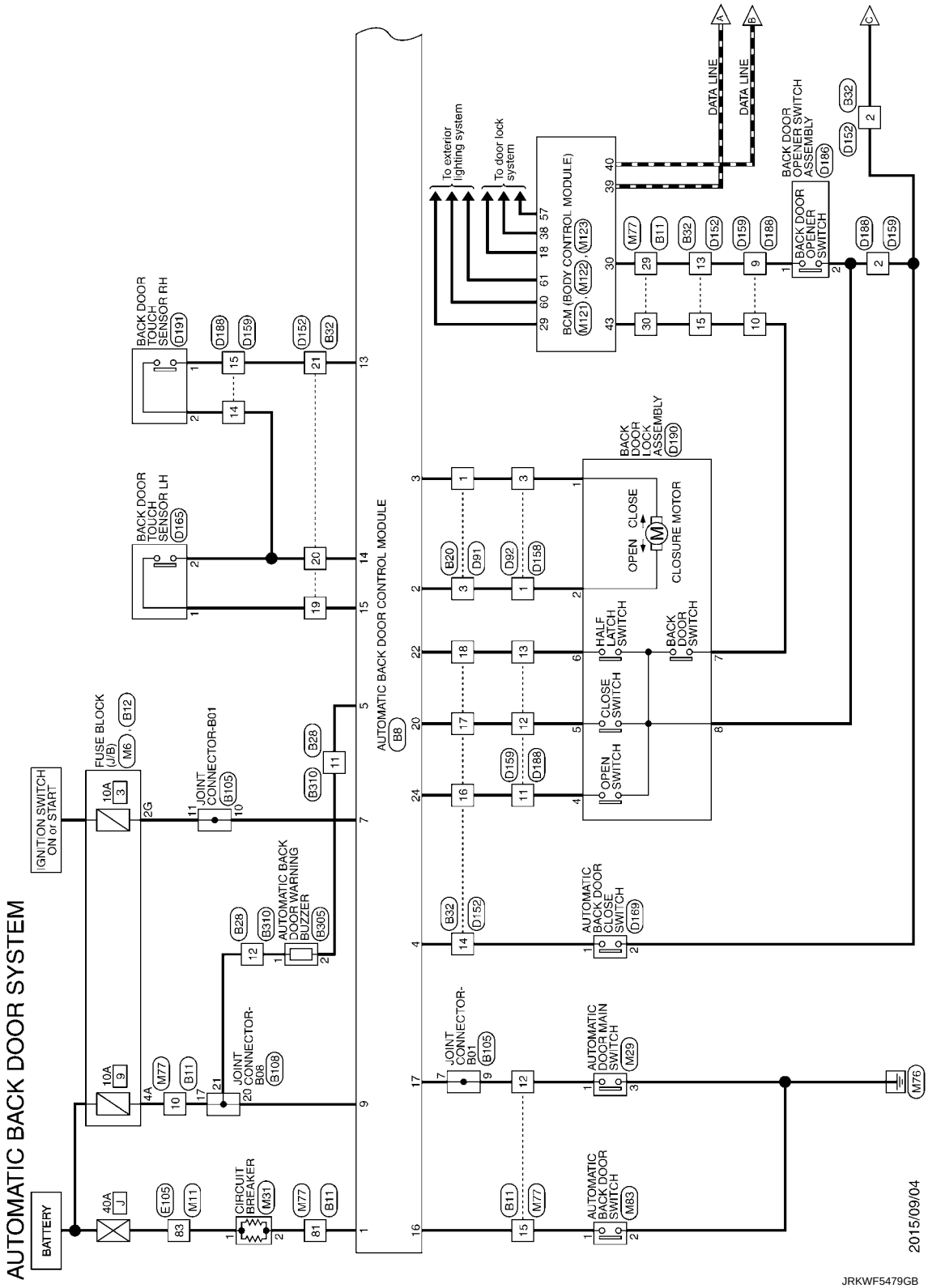


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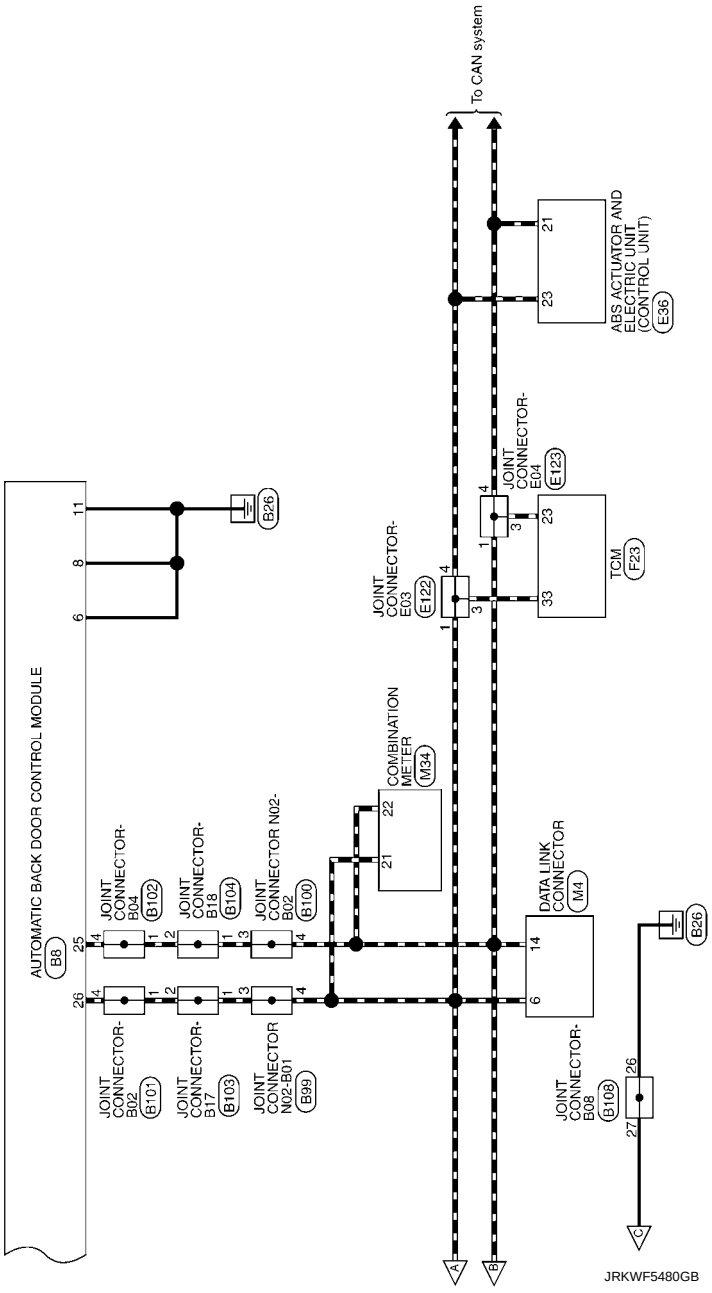
AUTOMATIC BACK DOOR SYSTEM

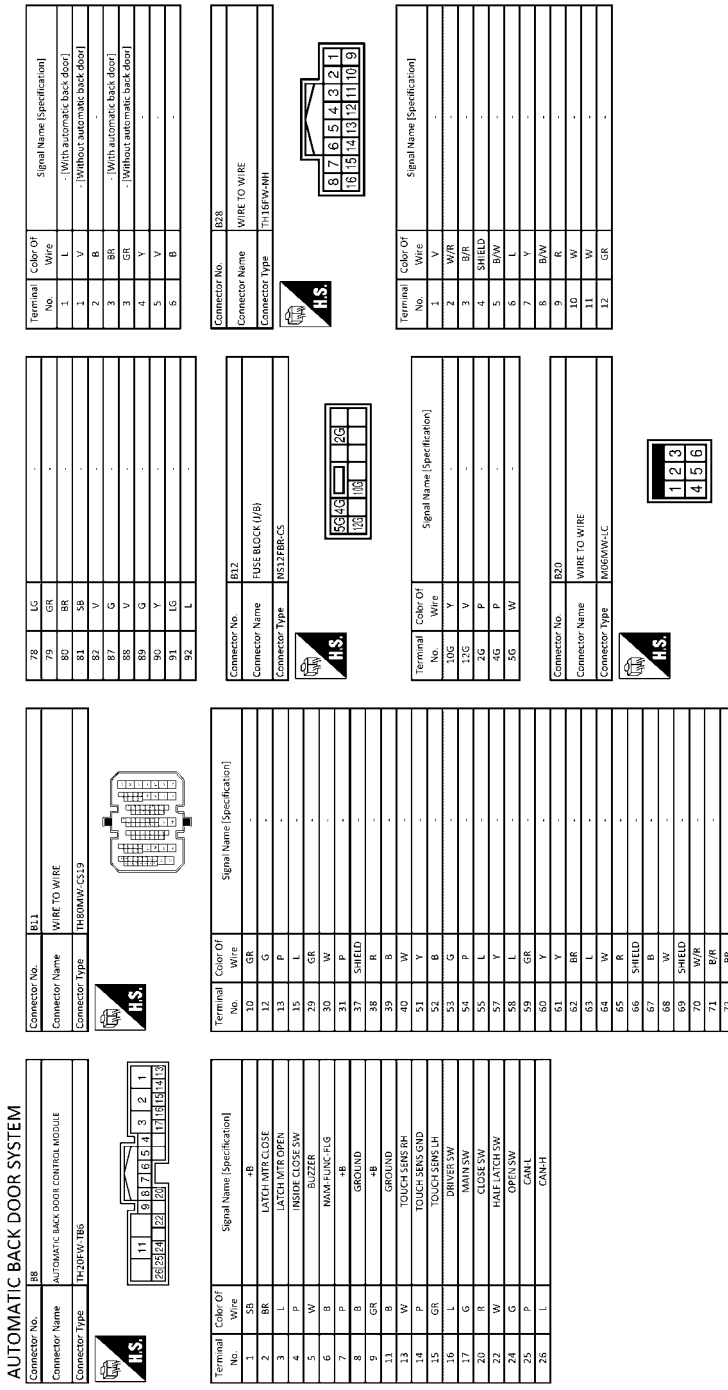
Wiring Diagram

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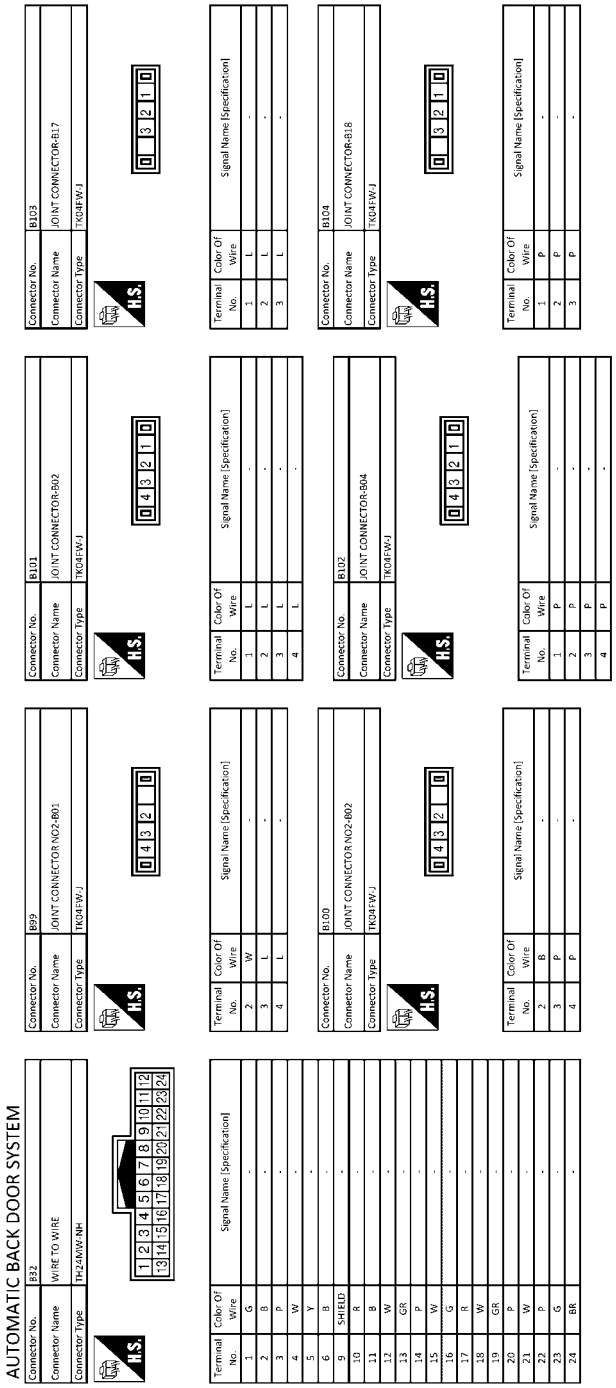
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To CAN system
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E36
JOINT CONNECTOR-E04 E123
TCM F23
JOINT CONNECTOR-E03 E122
COMBINATION METER M34
DATA LINK CONNECTOR M4
AUTOMATIC BACK DOOR CONTROL MODULE B8
JOINT CONNECTOR-B04 B102
JOINT CONNECTOR-B18 B104
JOINT CONNECTOR N02-B02 B100
JOINT CONNECTOR-B02 B101
JOINT CONNECTOR-B17 B103
JOINT CONNECTOR N02-B01 B99
JOINT CONNECTOR-B08 B108
B26
B26
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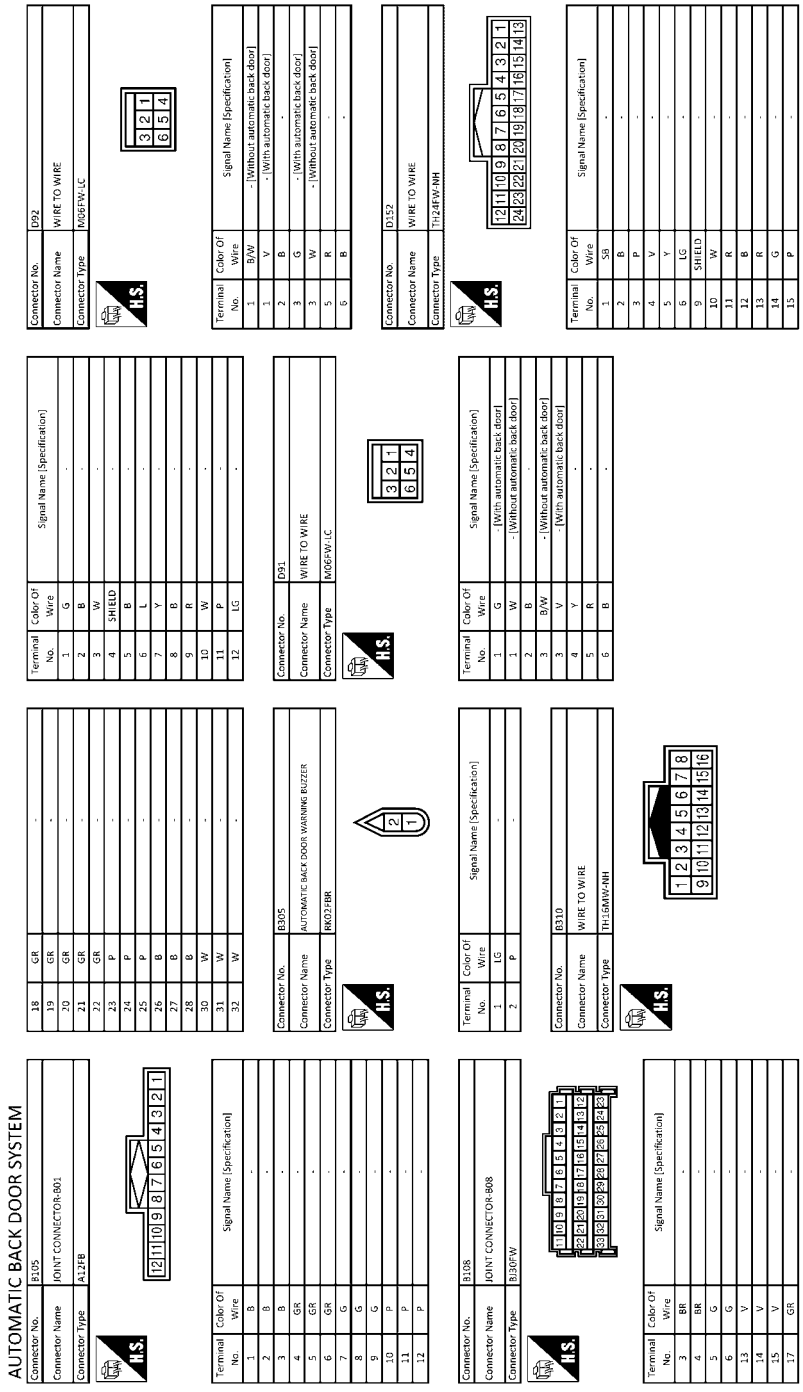
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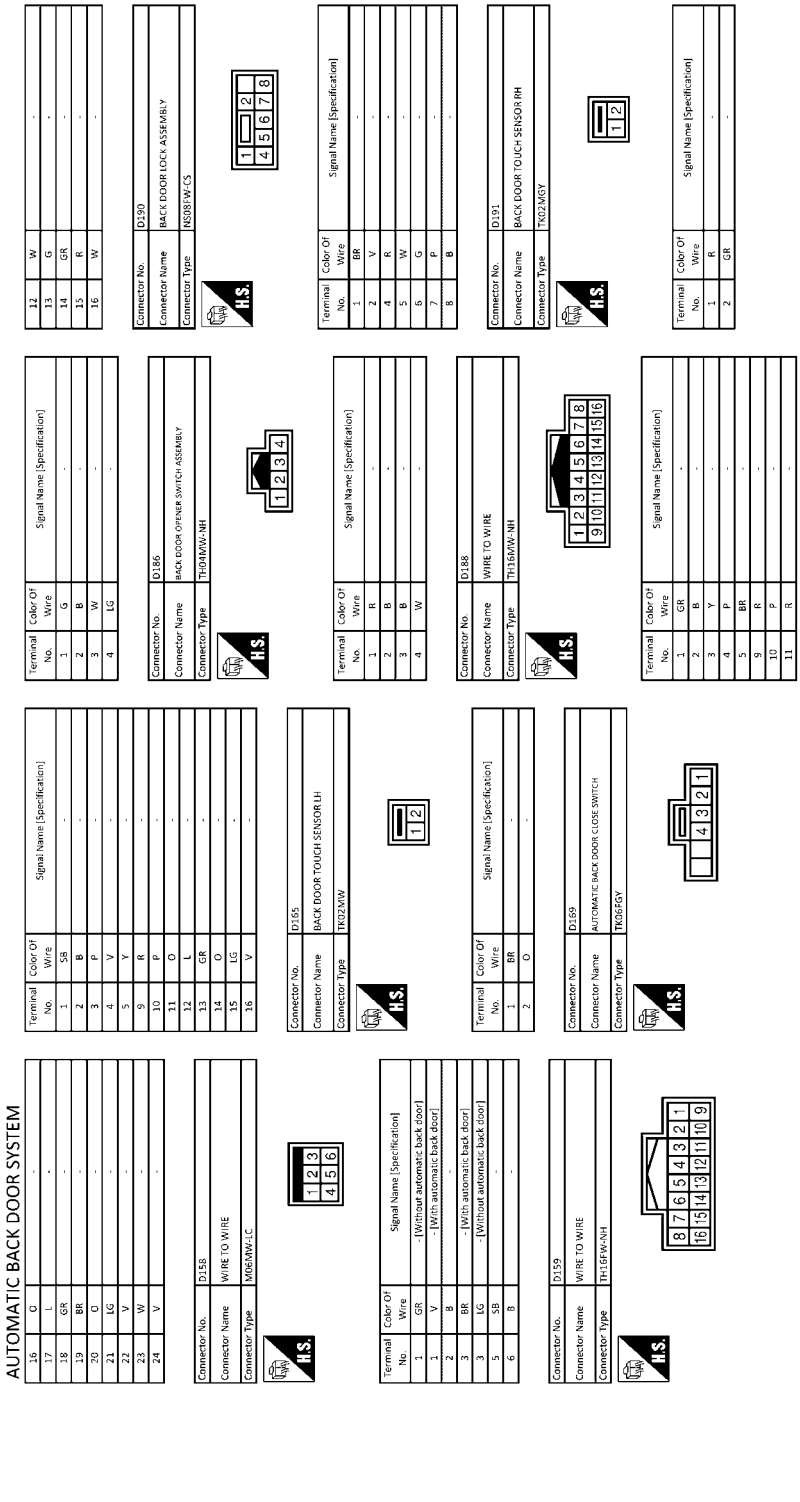
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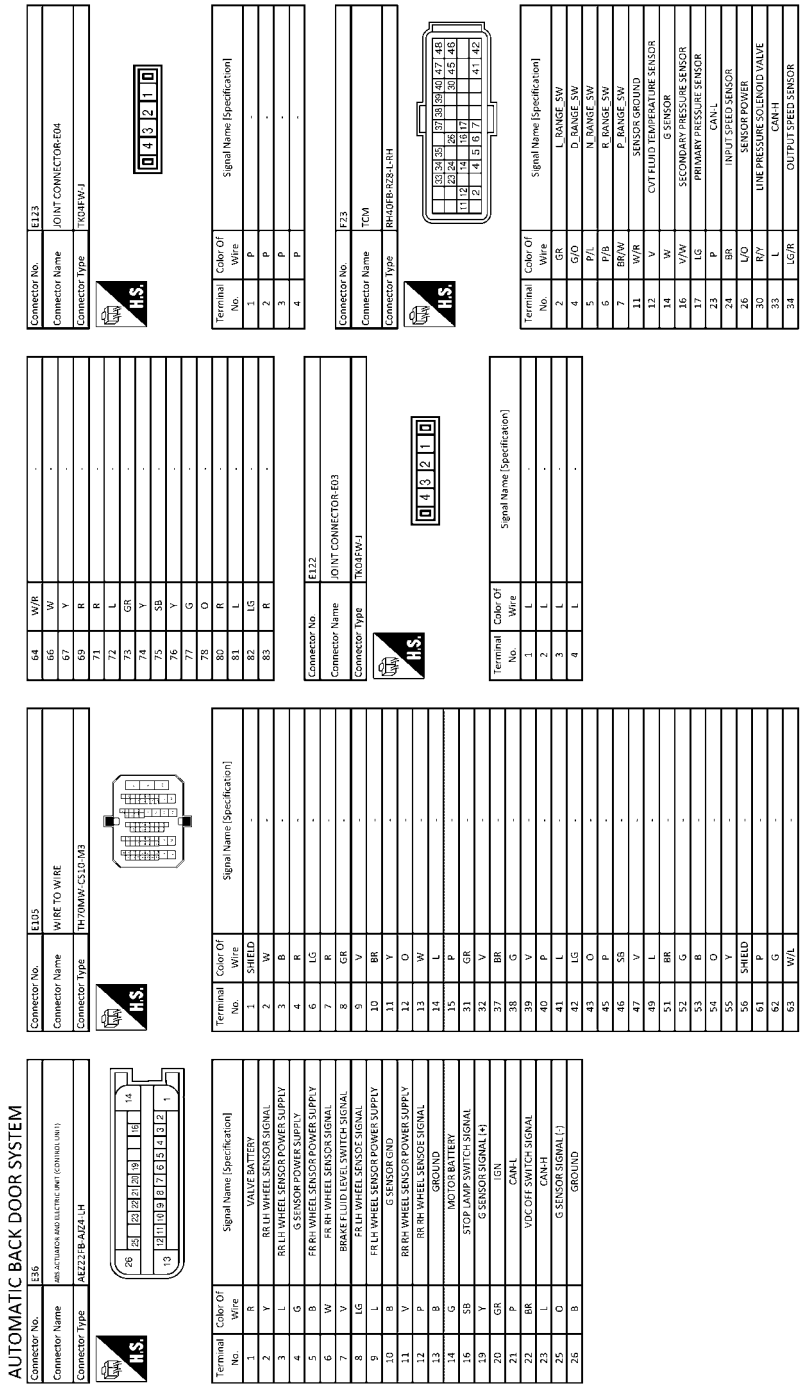


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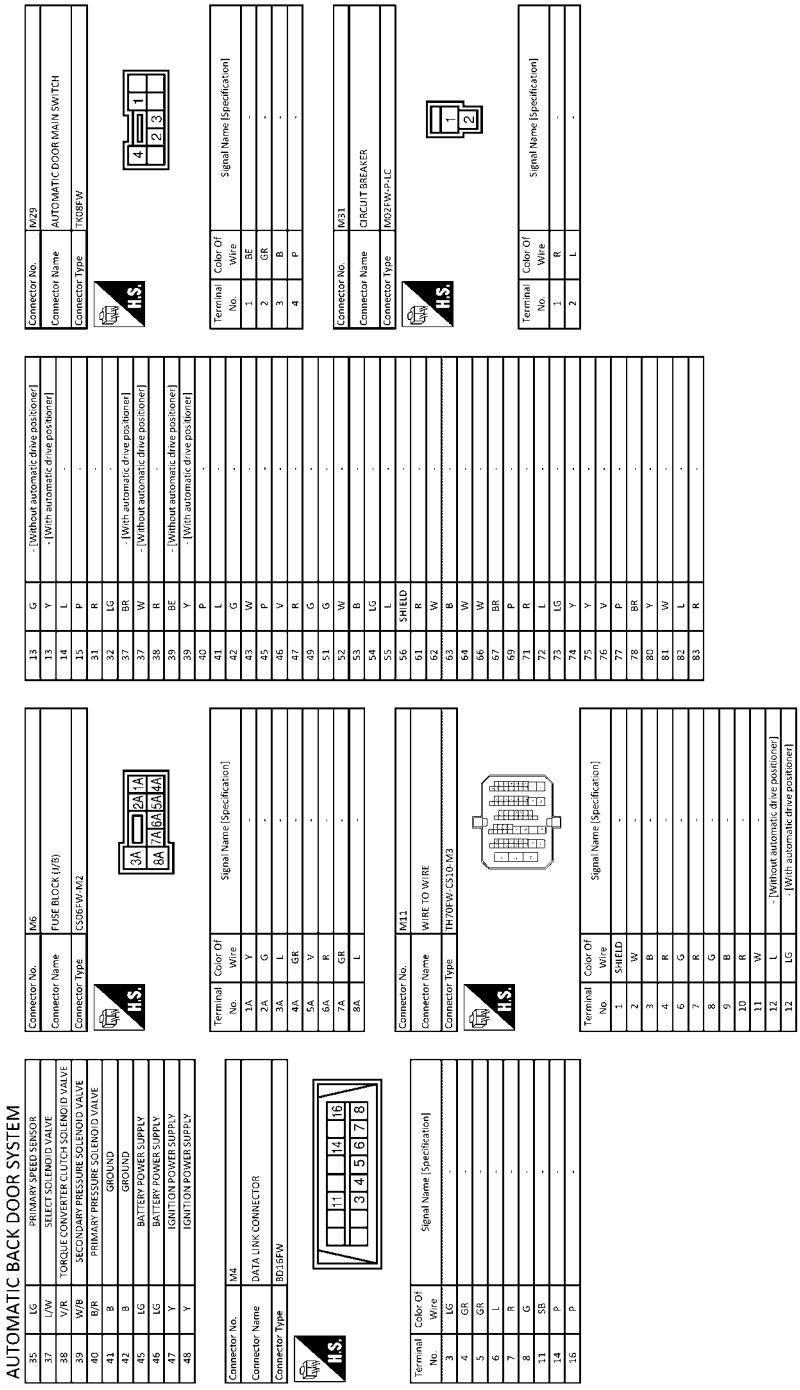


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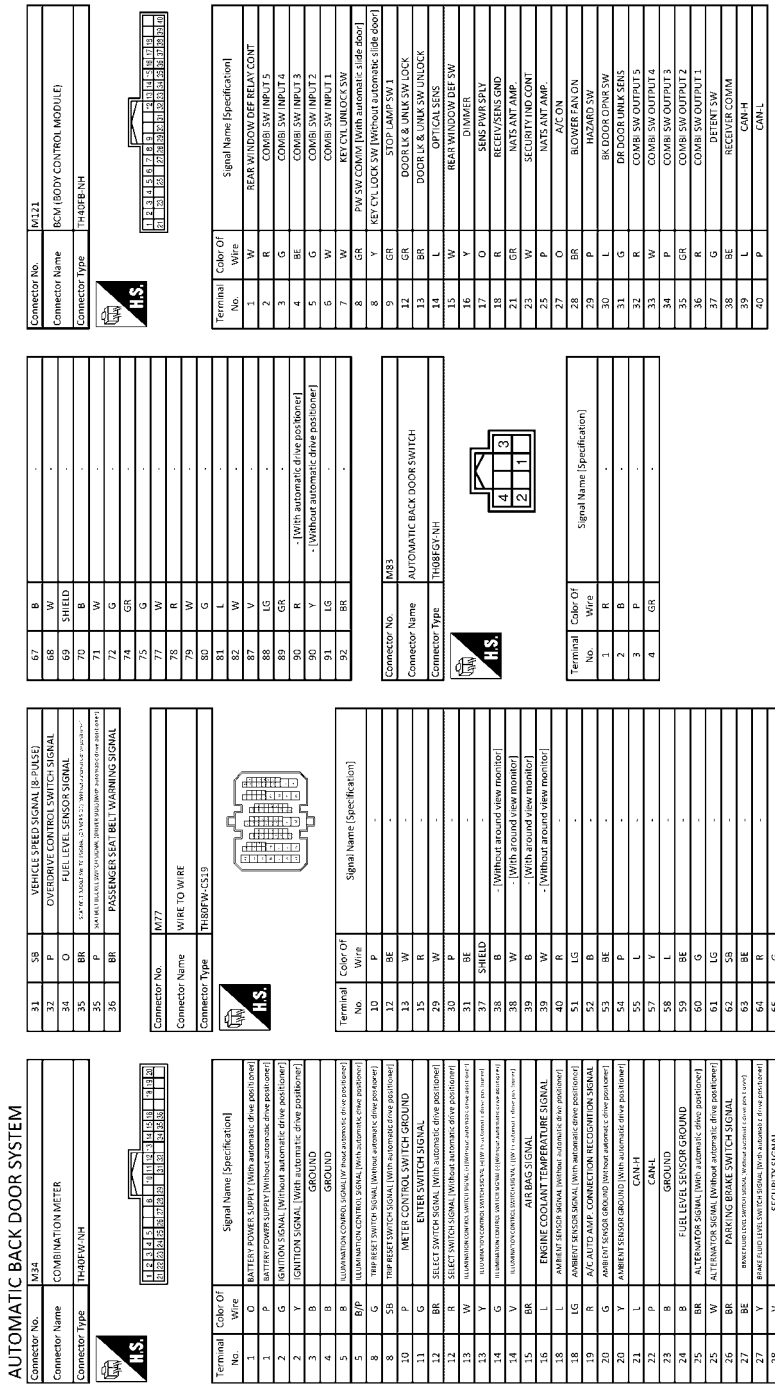


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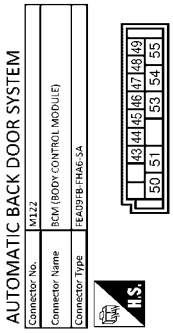


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AUTOMATIC BACK DOOR SYSTEM

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09TB-FHA6-SA



Terminal No.	Color Of Wire	Signal Name [Specification]
43	P	Bk DOOR SW
44	GR	REAR WIPER STOP POSITION
45	W	PASS DOOR SW
46	R	SL DOOR RH SW
47	G	DR DOOR SW
48	BE	SL DOOR LH SW
49	B	LUGGAGE LAMP CONT
50	V	SELECT UNLK RELAY CONT
51	G	BACK DOOR REQ SW
53	BR	BK DOOR OPEN
54	R	REAR WIPER OUTPUT
55	G	SL DOOR LH UNLK CONT

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09TW-FHA6-SA

Terminal No.	Color Of Wire	Signal Name [Specification]
56	P	INT ROOM LAMP PWR SPLY
57	Y	BAT
58	O	AIR BAG
59	SB	PASS DOOR UNLK OUTPUT
60	V	TURN SIG LH OUTPUT
61	G	TURN SIG RH OUTPUT
62	W	STEP LAMP CONT
63	R	INT ROOM LAMP CONT
64	W	CRANK REQ
65	V	ALL DOOR LOCK OUTPUT
66	G	DR DOOR UNLK OUTPUT
67	B	GROUND
68	L	PW PWR SPLY (IGN)
69	P	PW PWR SPLY (BAT)
70	L	BAT

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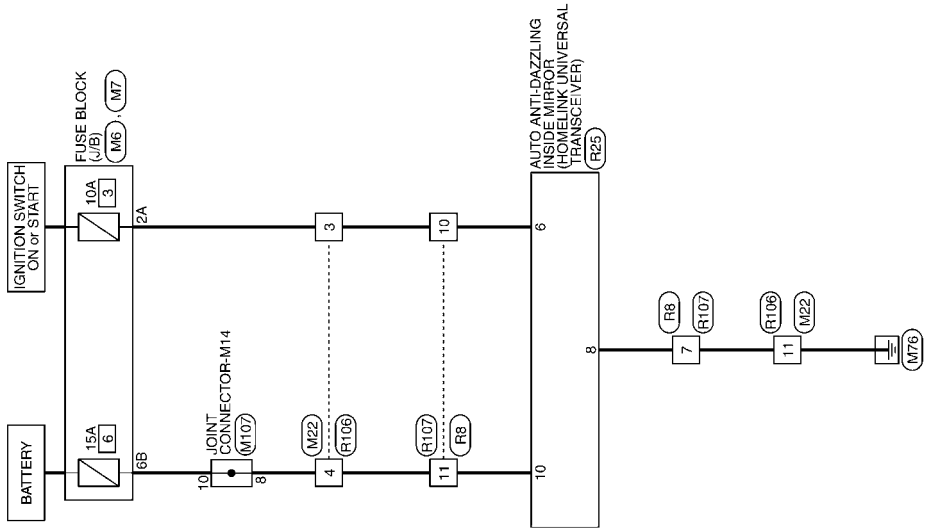
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INTEGRATED HOMELINK TRANSMITTER SYSTEM

Wiring Diagram

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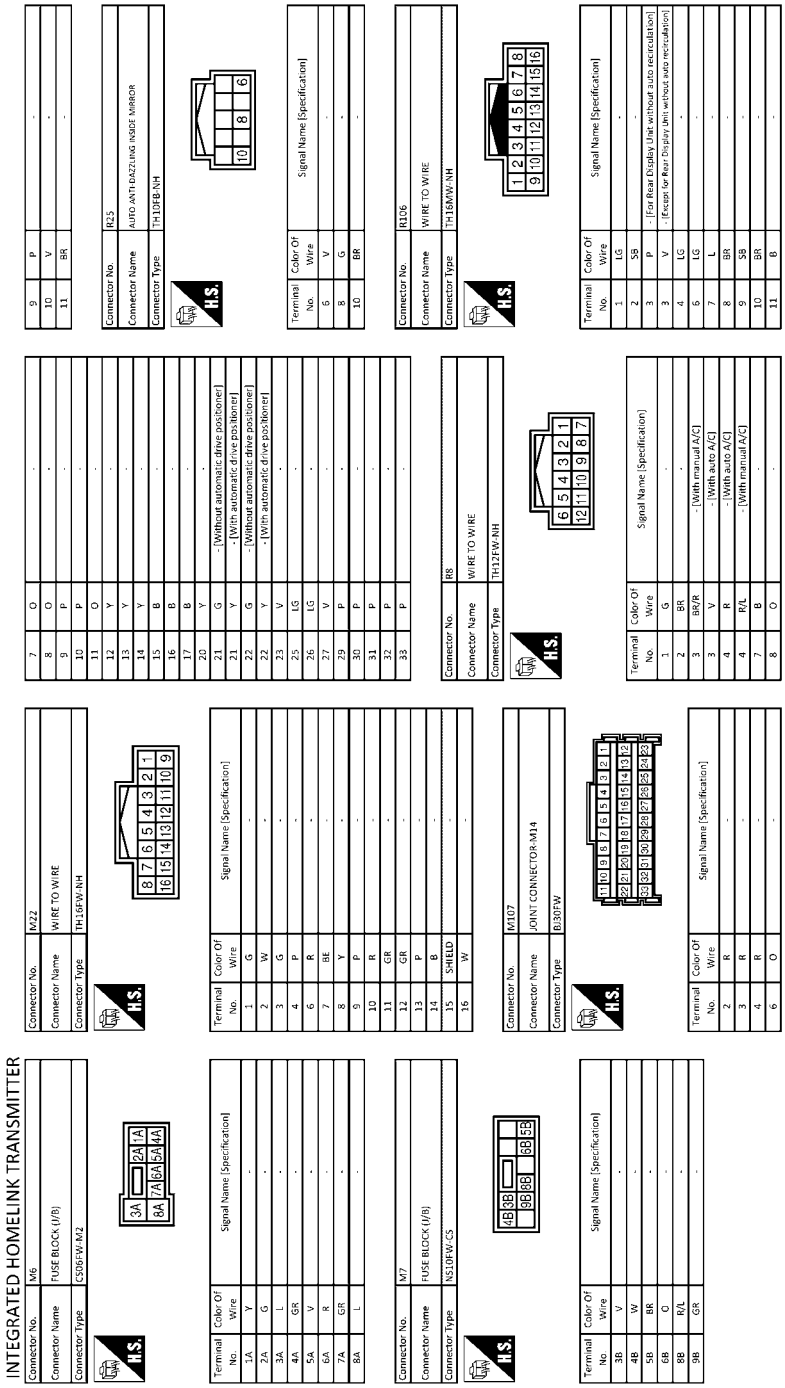
INTEGRATED HOMELINK TRANSMITTER



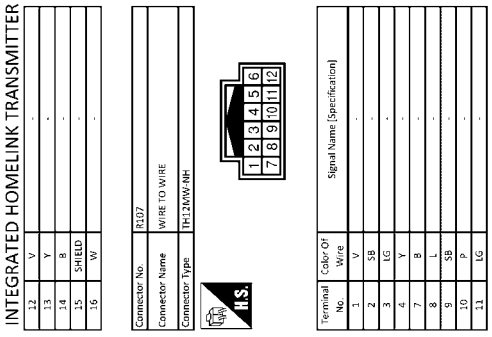
2015/09/04

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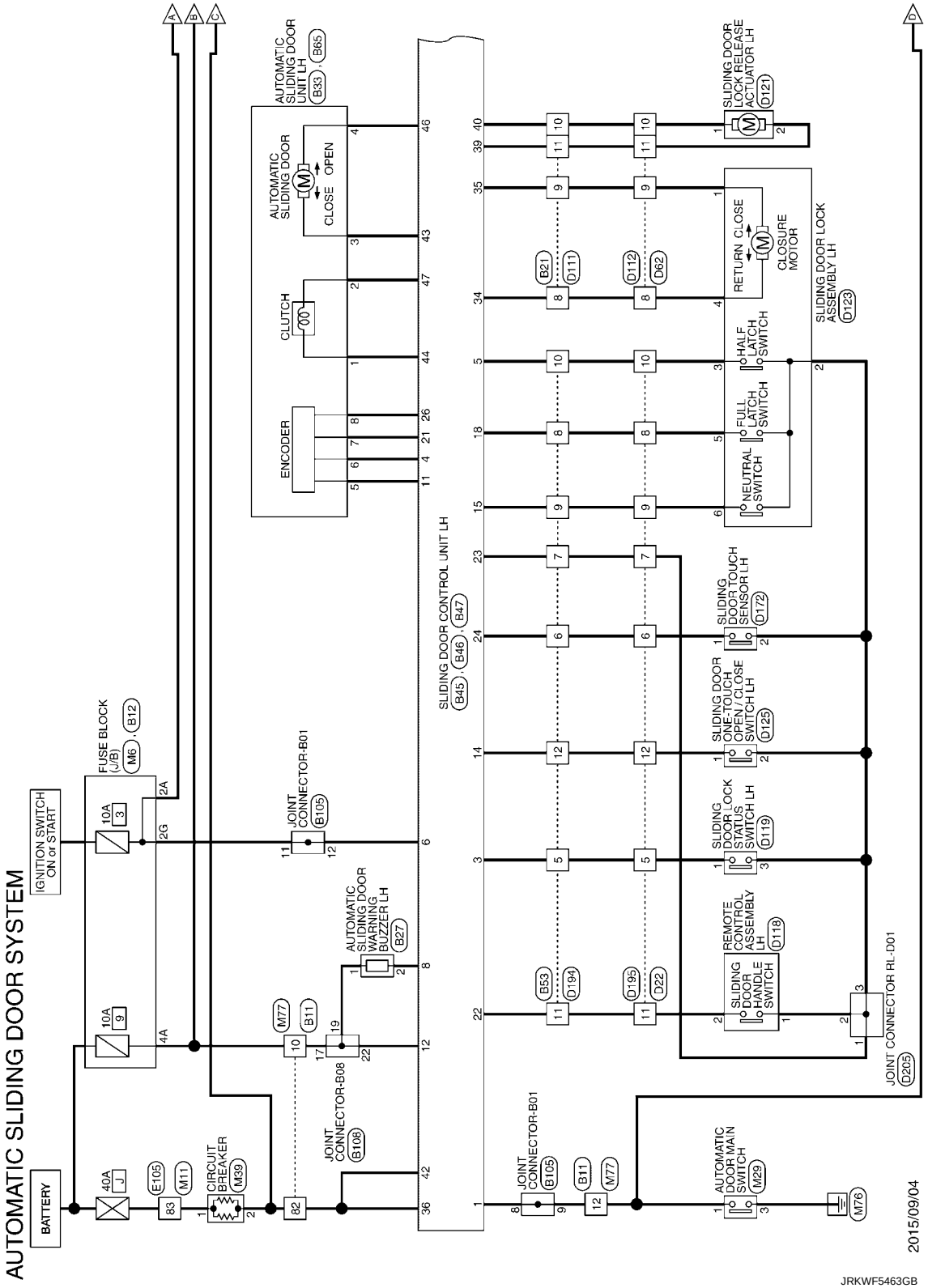
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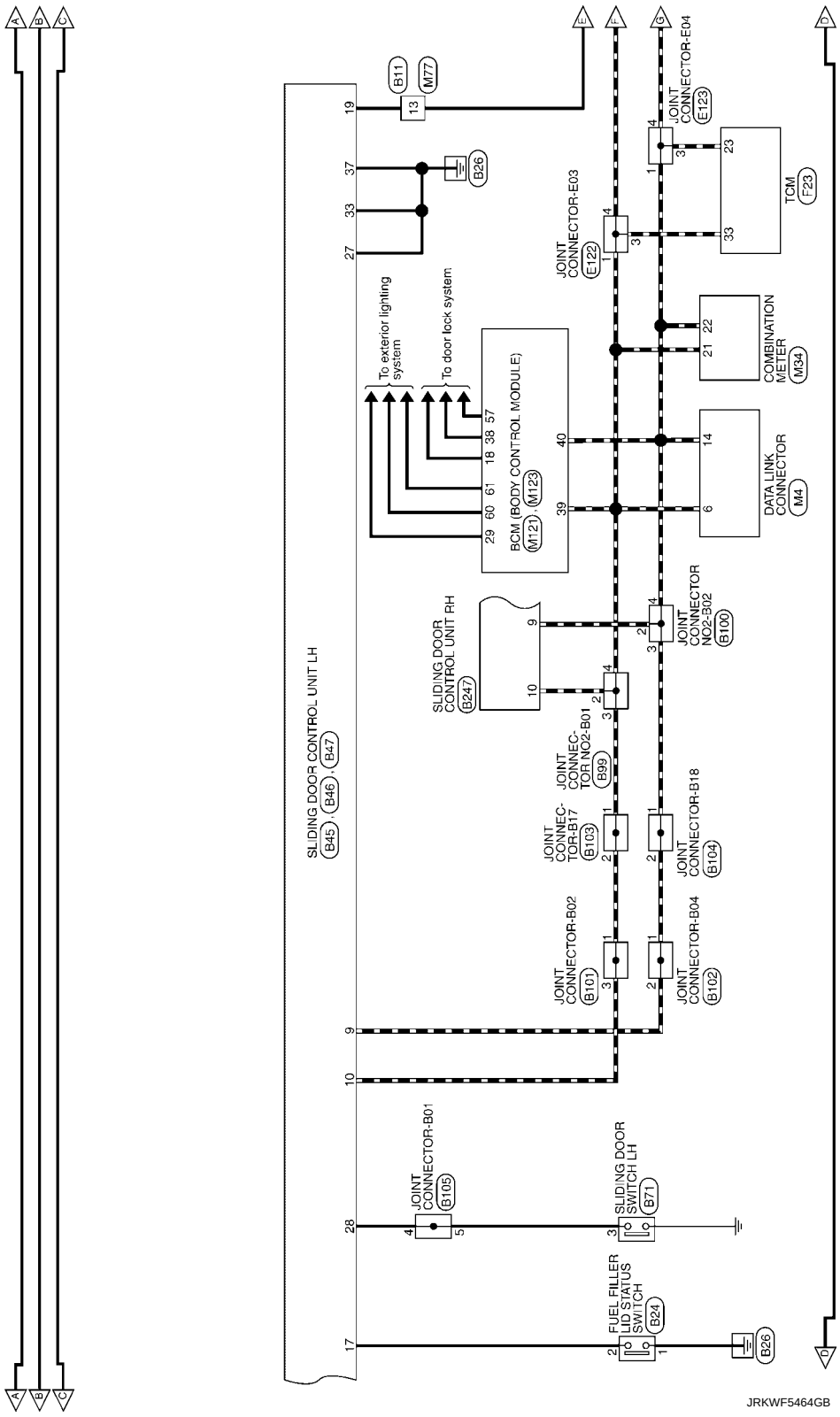
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AUTOMATIC SLIDING DOOR SYSTEM

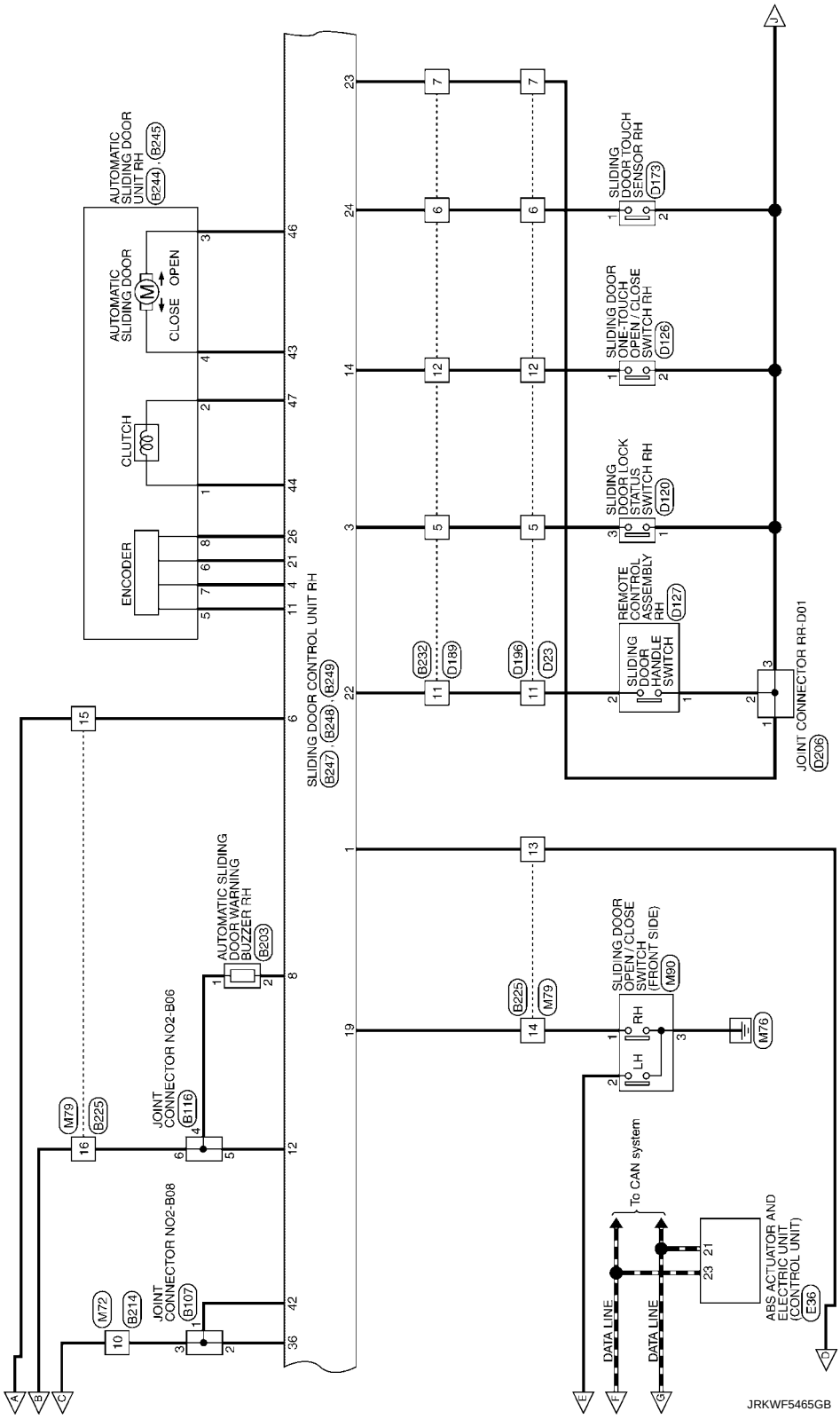
Wiring Diagram

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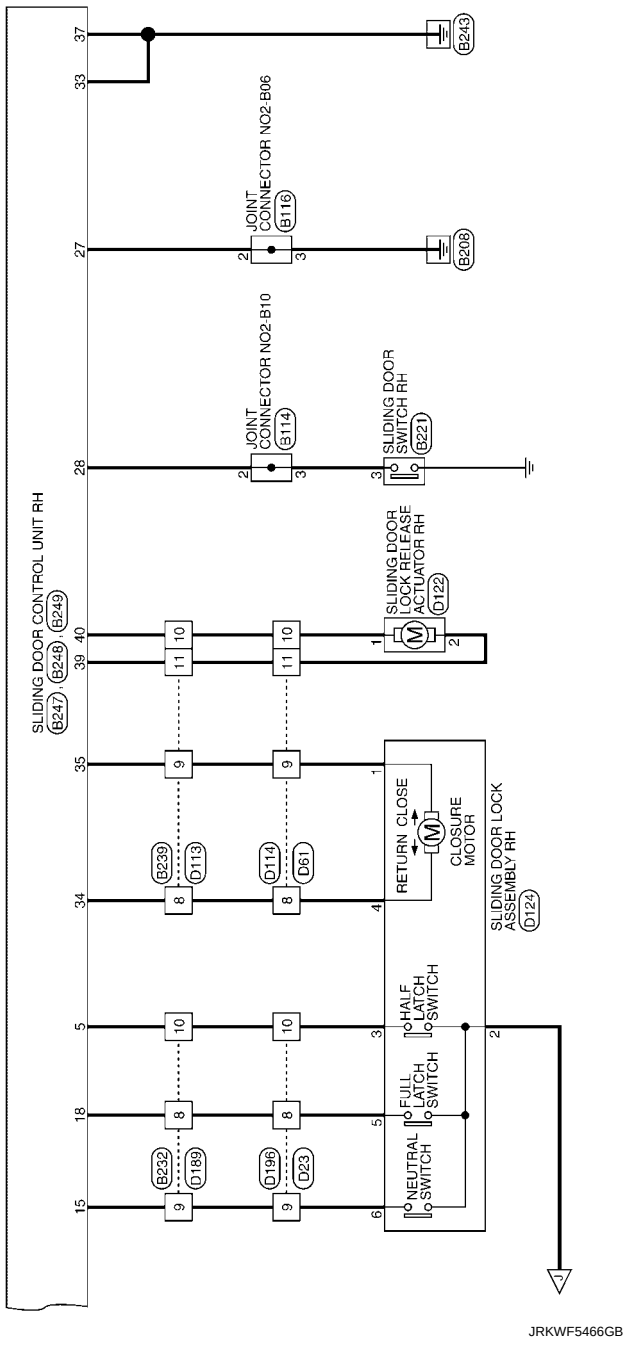




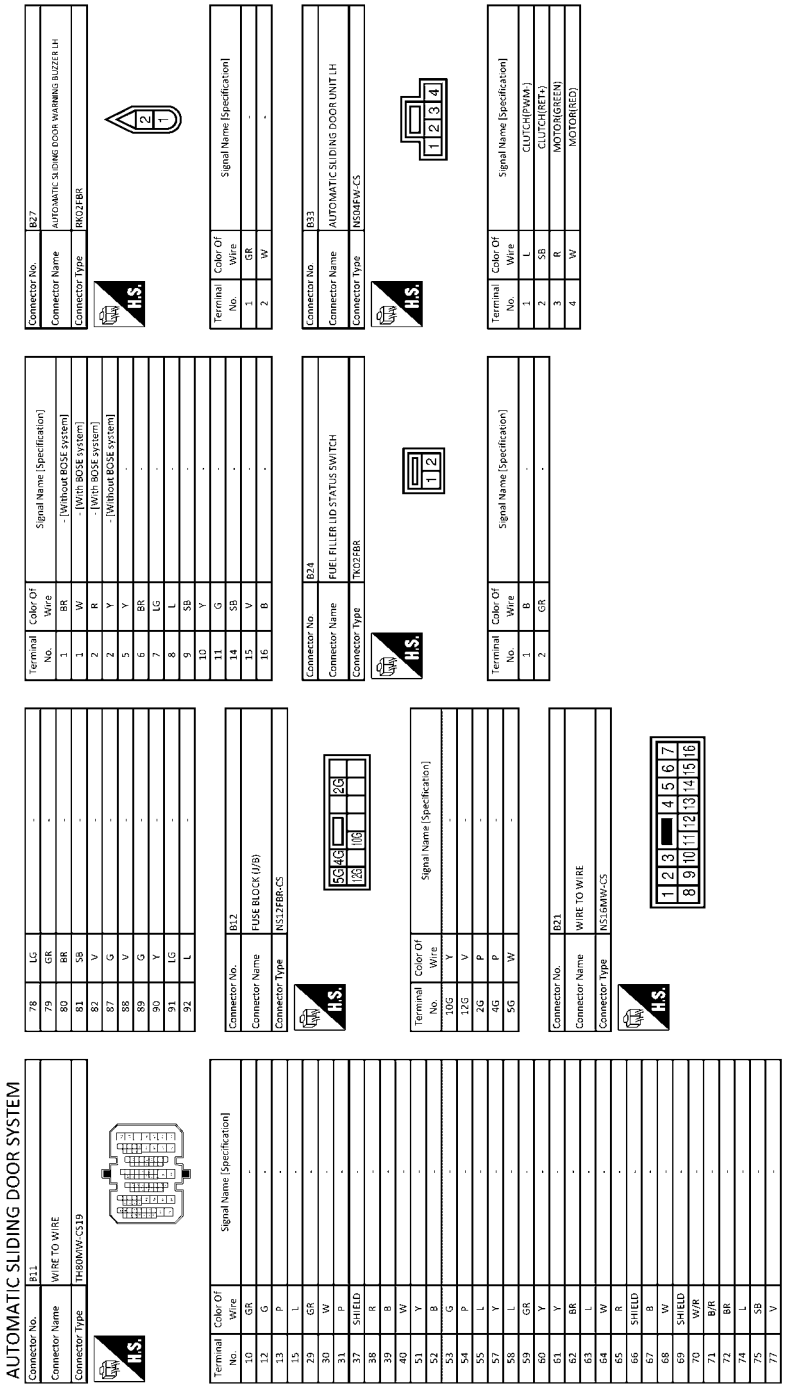
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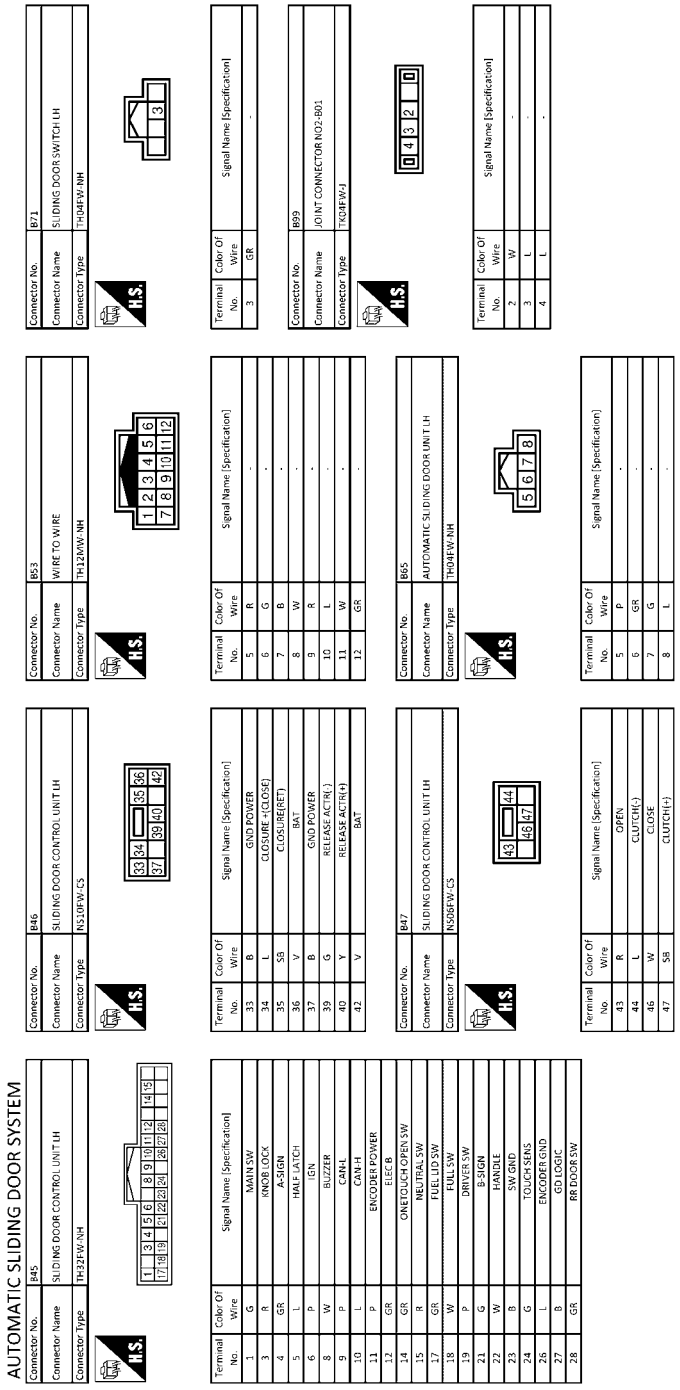
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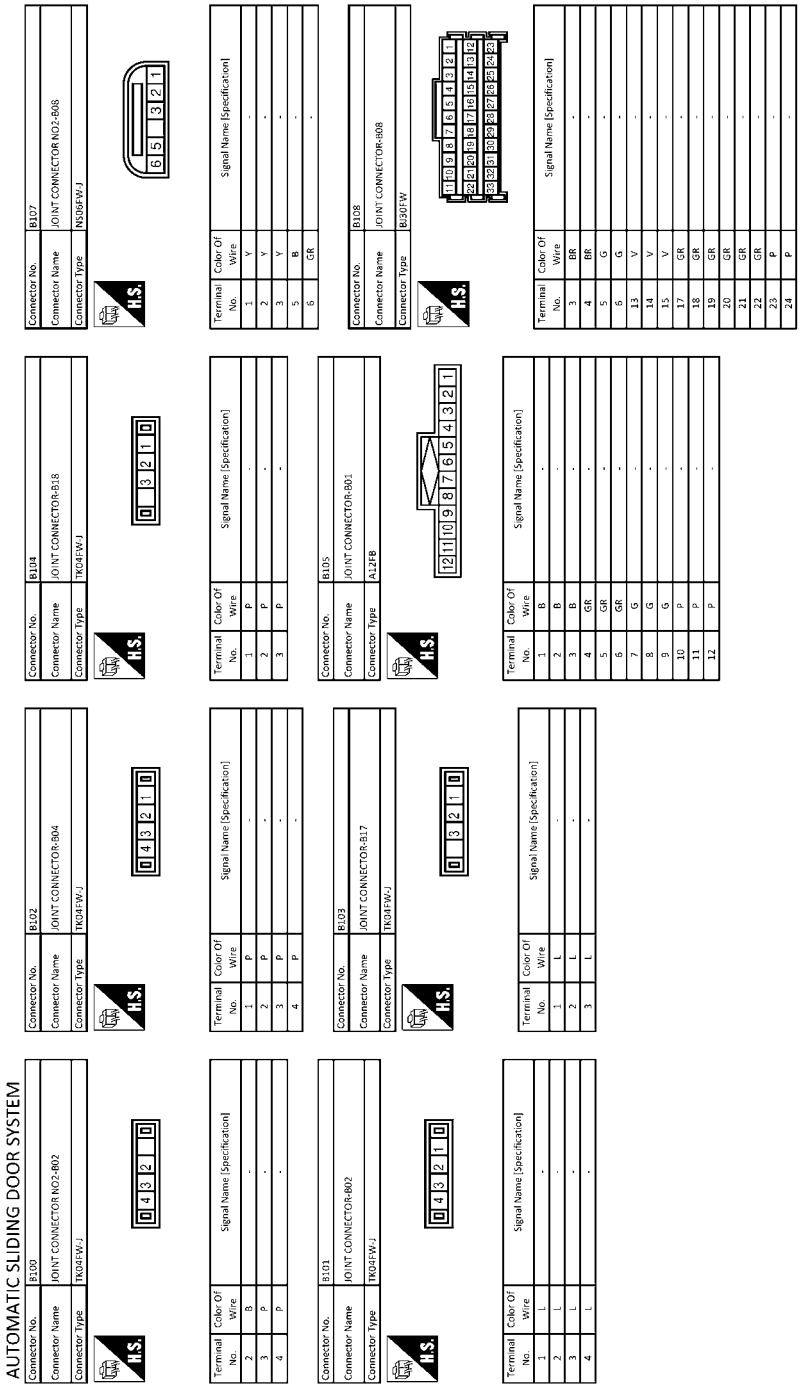


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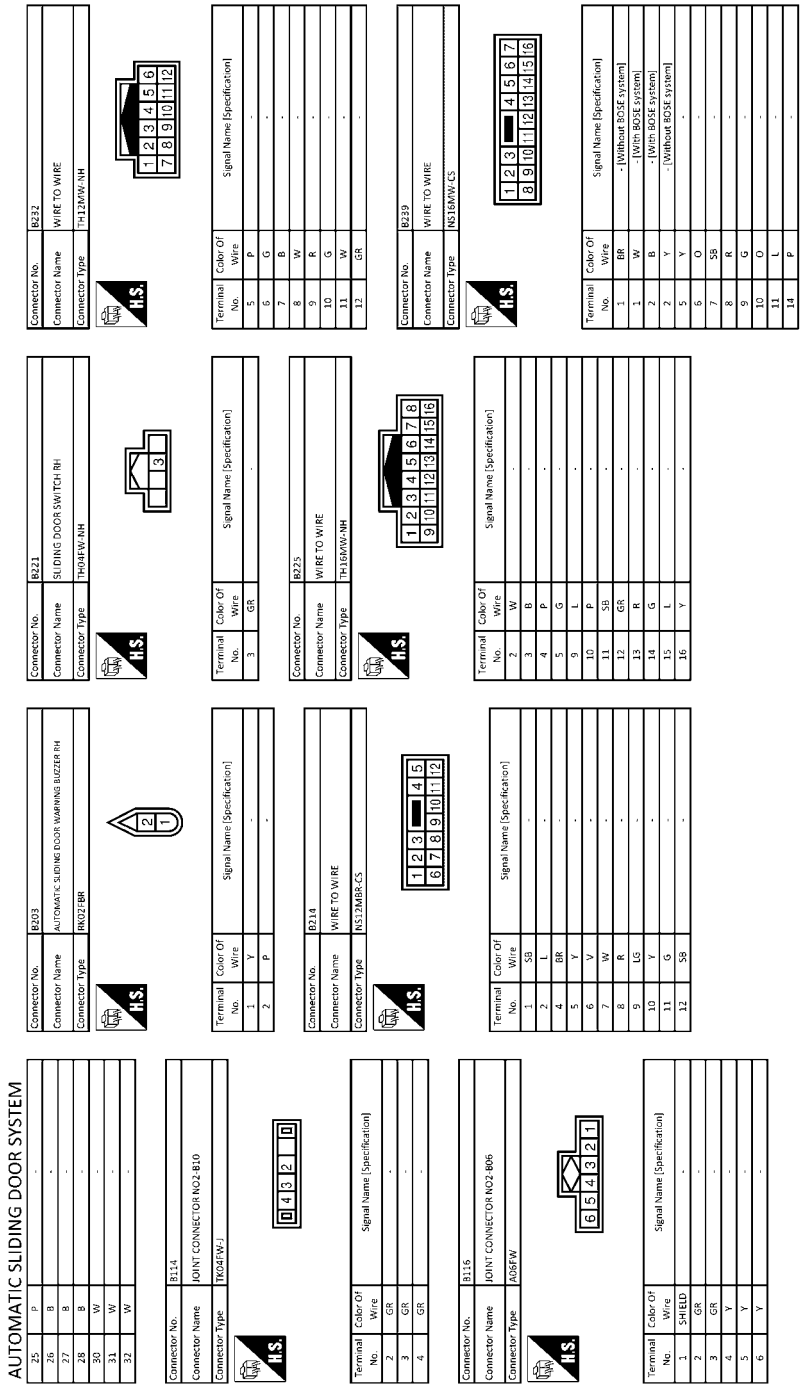


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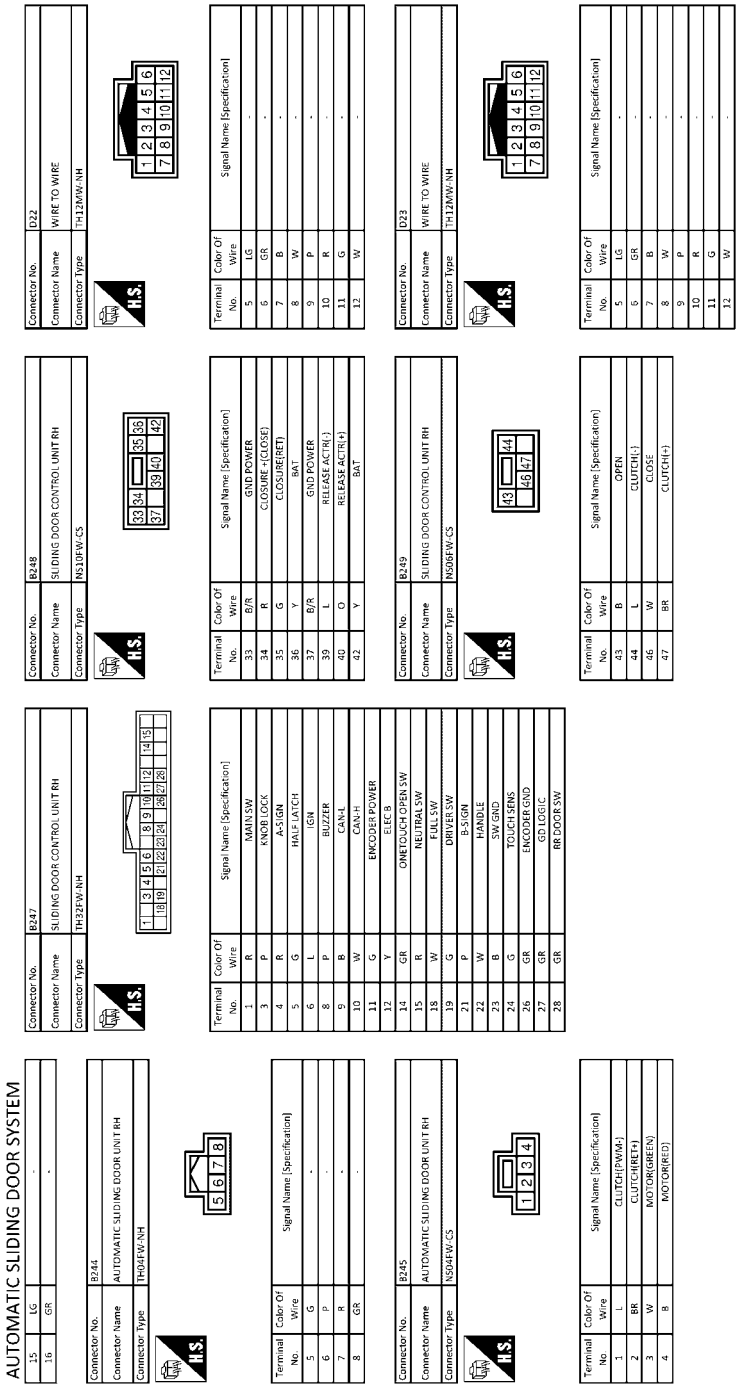


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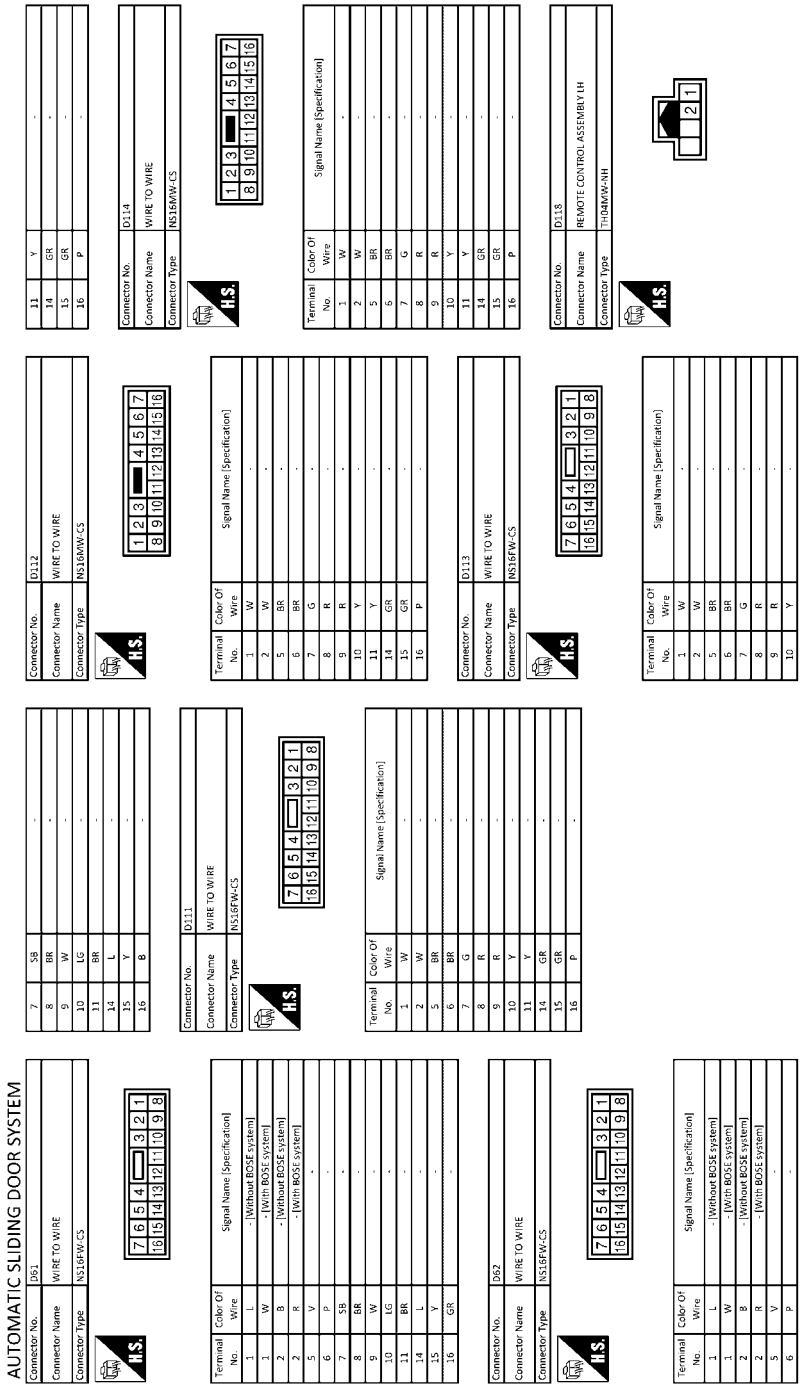
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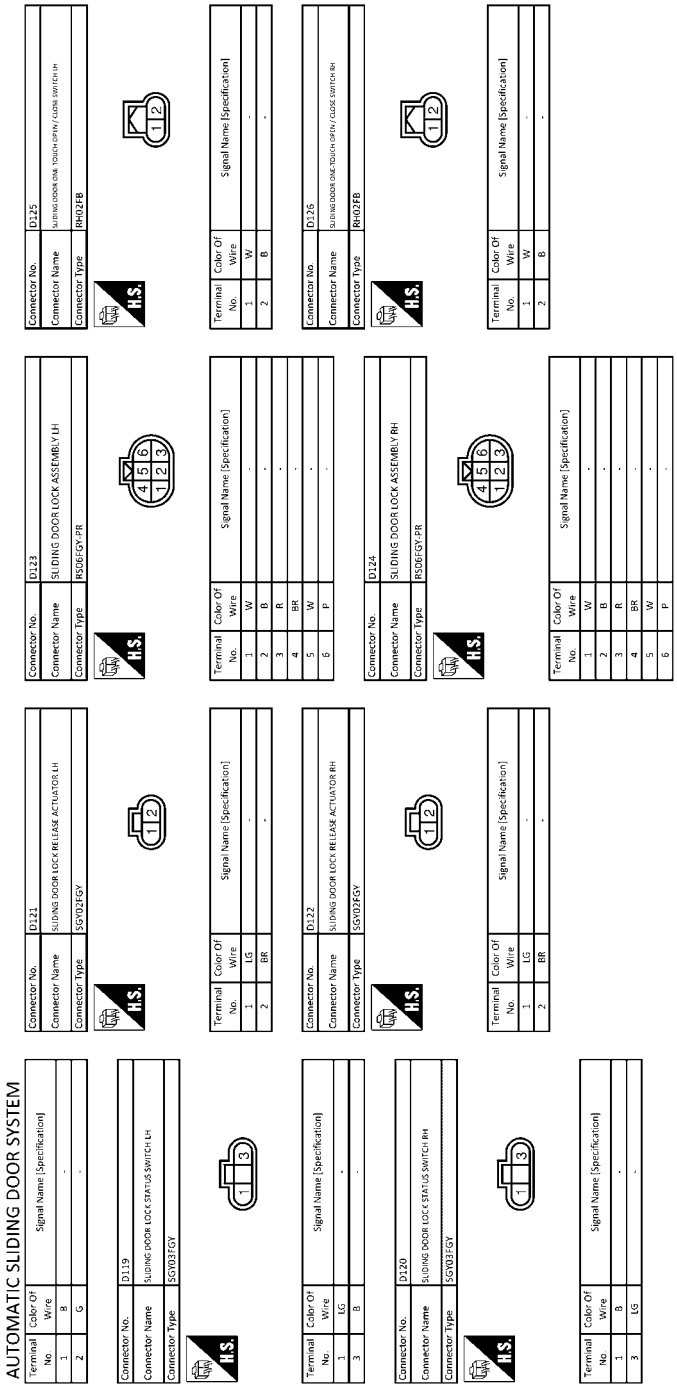
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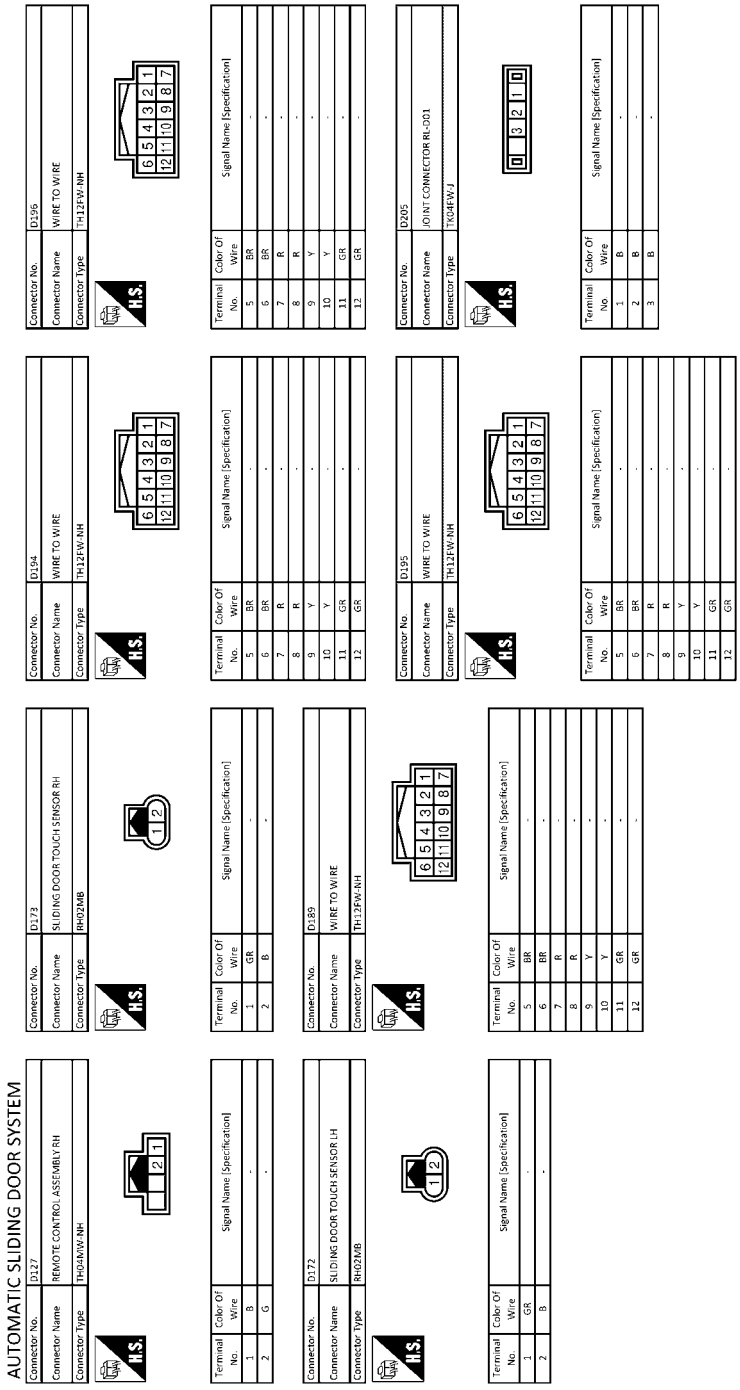


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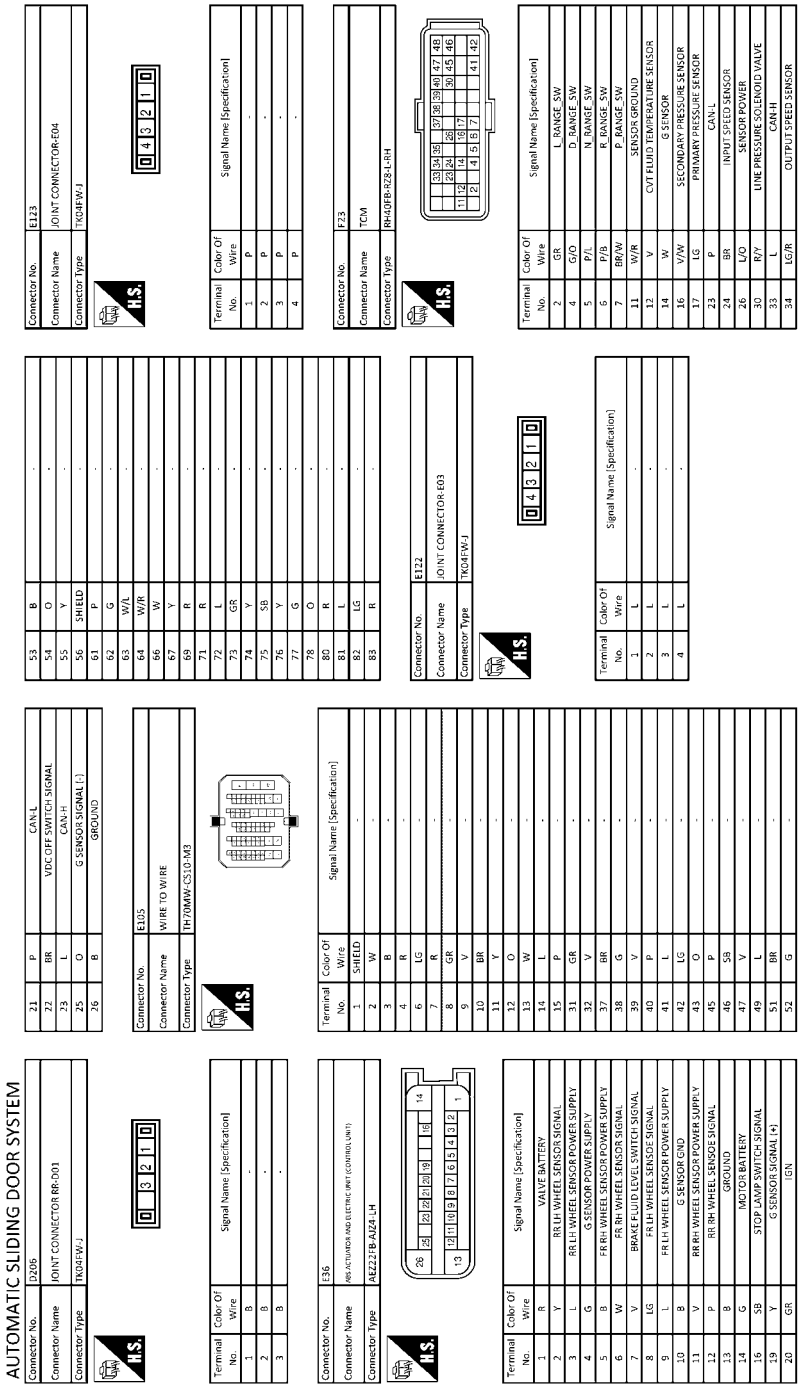


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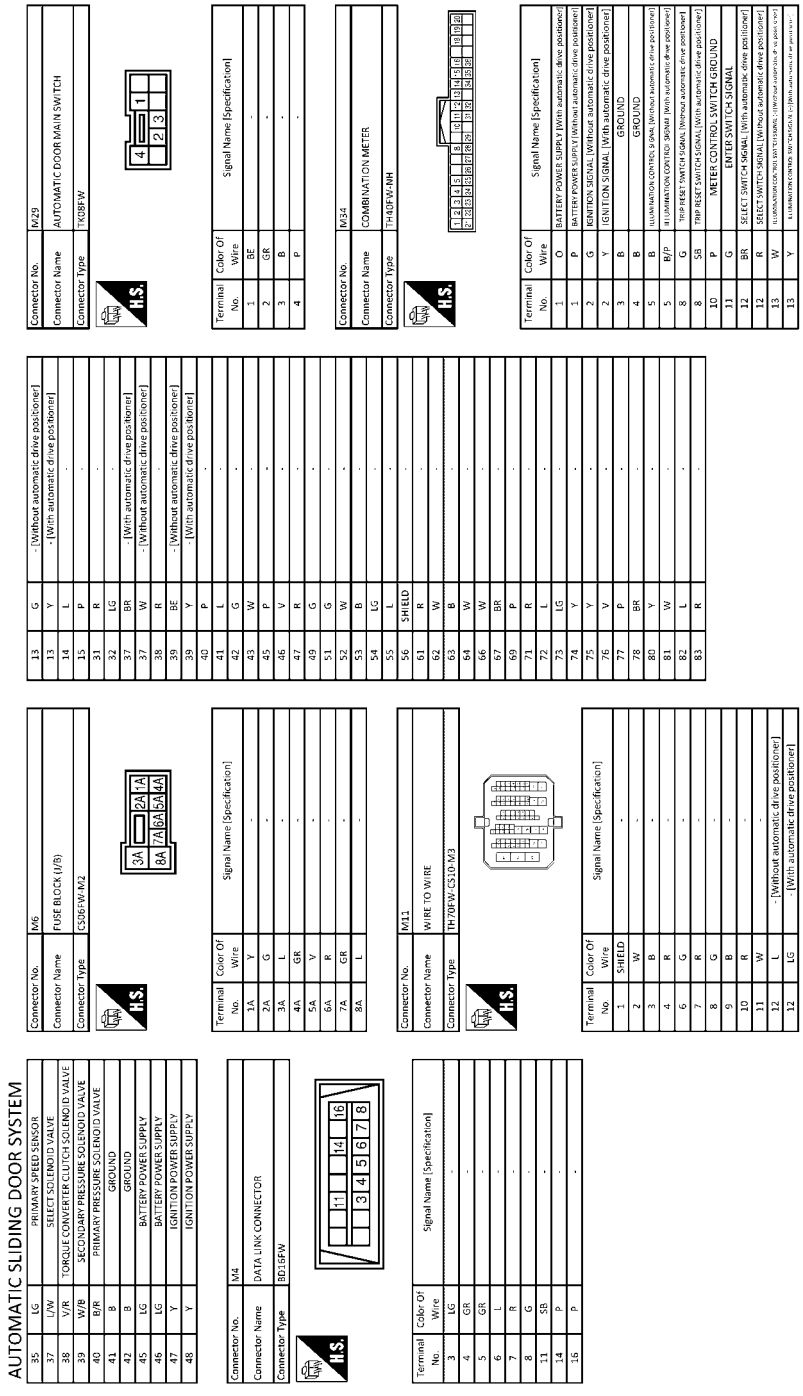


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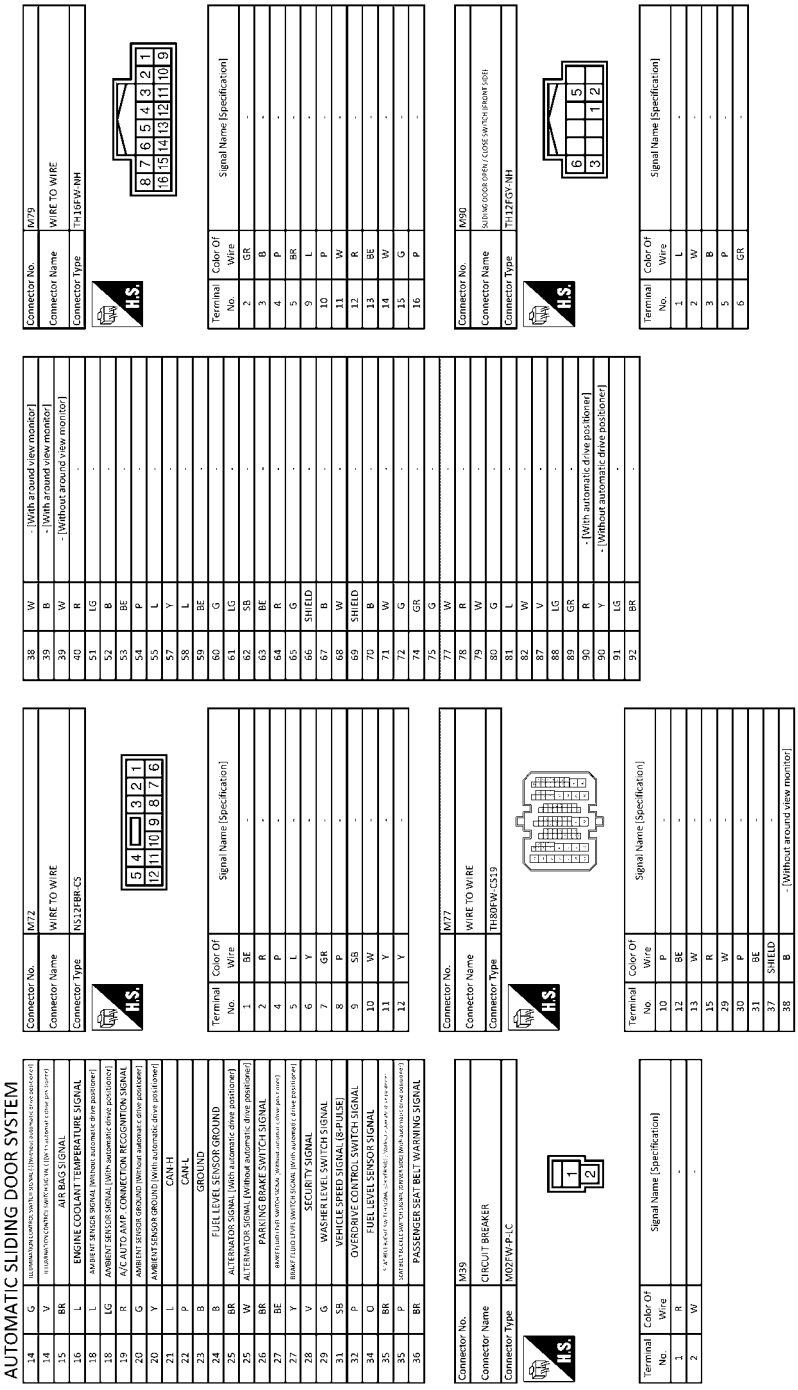


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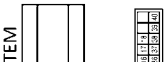
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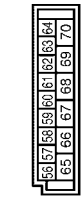
AUTOMATIC SLIDING DOOR SYSTEM

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	REAR WINDOW DEF RELAY CONT
2	R	COMBI SW INPUT 5
3	G	COMBI SW INPUT 4
4	BE	COMBI SW INPUT 3
5	G	COMBI SW INPUT 2
6	W	COMBI SW INPUT 1
7	W	KEY CYL UNLOCK SW
8	GR	PW SW COMM [With automatic slide door]
9	Y	KEY CYL LOCK SW [Without automatic slide door]
12	GR	STOP LAMP SW 1
13	BR	DOOR LK & UNLK SW LOCK
14	L	DOOR LK & UNLK SW UNLOCK
15	W	OPTICAL SENS
16	Y	REAR WINDOW DEF SW
17	O	DIMMER
18	R	SENS PWR SPLY
21	GR	RECEIV/SENS GND
23	W	NATS ANT AMP.
25	P	SECURITY IND CONT
27	O	NATS ANT AMP.
28	BR	A/C ON
29	P	BLOWER FAN ON
30	L	HAZARD SW
31	G	BK DOOR OPNR SW
32	R	DR DOOR UNLK SENS
33	W	COMBI SW OUTPUT 5
34	P	COMBI SW OUTPUT 4
35	GR	COMBI SW OUTPUT 3
36	R	COMBI SW OUTPUT 2
37	G	COMBI SW OUTPUT 1
38	BE	DETENT SW
39	L	RECEIVER COMM
40	P	CAN-H
		CAN-L

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHAG-SA



Terminal No.	Color Of Wire	Signal Name [Specification]
56	P	INT ROOM LAMP PWR SPLY
57	Y	BAT
58	O	AIR BAG
59	SB	PASS DOOR UNLK OUTPUT
60	V	TURN SIG LH OUTPUT
61	G	TURN SIG RH OUTPUT
62	W	STEP LAMP CONT
63	R	INT ROOM LAMP CONT
64	W	CRANK REQ
65	V	ALL DOOR LOCK OUTPUT
66	G	DR DOOR UNLK OUTPUT
67	B	GROUND
68	L	PW PWR SPLY [IGN]
69	P	PW PWR SPLY [BAT]
70	L	BAT

JRKWF5478GB

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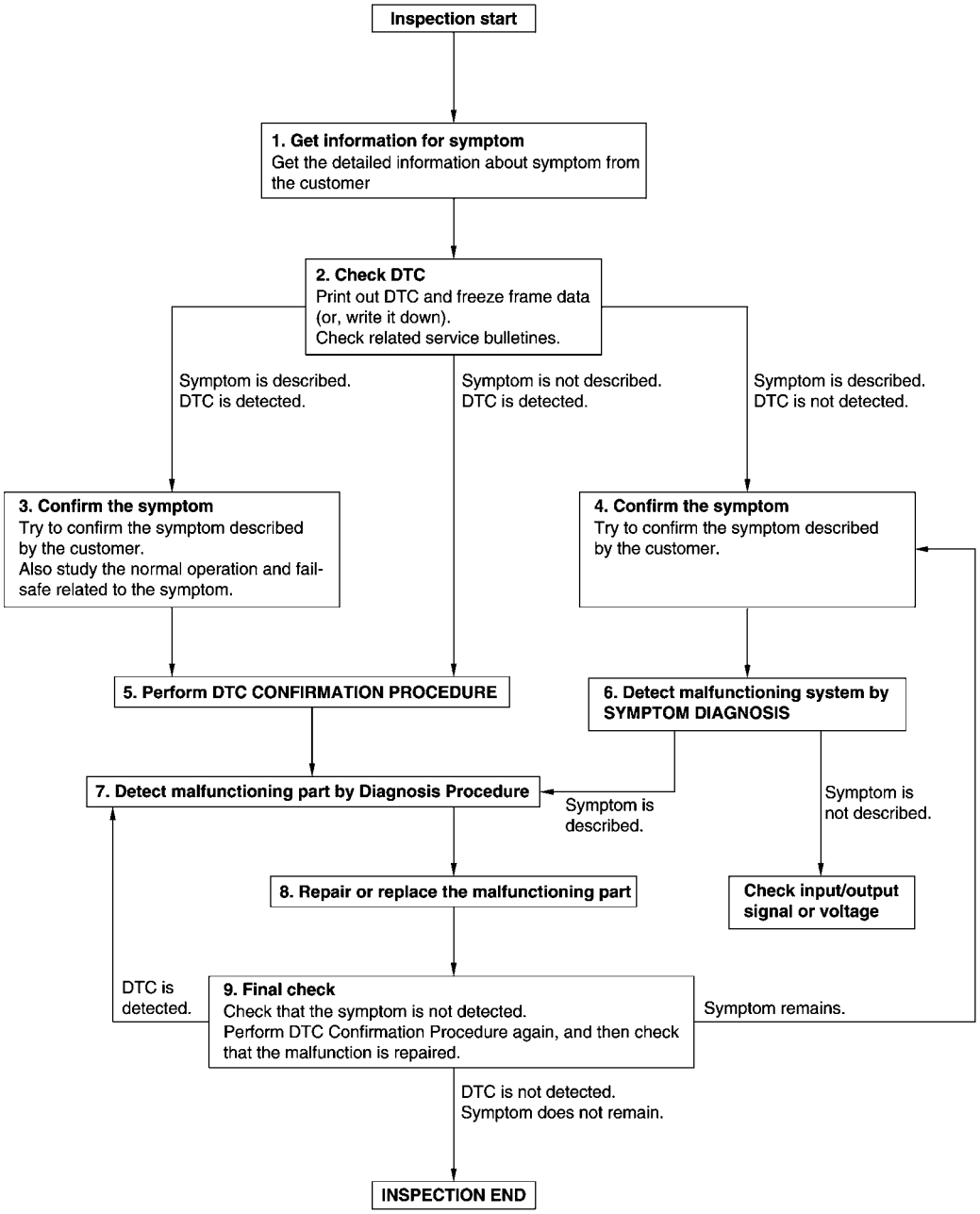
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000012408544

OVERALL SEQUENCE



JMKIA8652GB

DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).
2. Check operation condition of the function that is malfunctioning.

>> GO TO 2.

2.CHECK DTC

1. Check DTC.
2. Perform the following procedure if DTC is detected.

- Record DTC and freeze frame data (Print them out using CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.

3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
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 detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-63, "DTC Inspection Priority Chart" (BCM), and determine trouble diagnosis order.

NOTE:

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

Is DTC detected?

YES >> GO TO 7.
NO >> Check according to GI-41, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

YES >> GO TO 7.
NO >> Monitor input data from related sensors or check voltage of related module terminals using CONSULT.

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

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Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-41, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.
When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.
YES-2 >> Symptom remains: GO TO 4.
NO >> Before returning the vehicle to the customer, always erase DTC.

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ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

AUTOMATIC BACK DOOR SYSTEM

AUTOMATIC BACK DOOR SYSTEM : Description

INFOID:0000000012408545

When the battery is disconnected from the negative terminal, it is necessary to perform initial setting to operate automatic back door system normally. (For details, refer to DLK-174, "AUTOMATIC BACK DOOR SYSTEM : Work Procedure".)

CAUTION:

The following specified operations are not performed under the non-initialized condition.

- **Automatic back door open/close function**
- **Anti-pinch function**

AUTOMATIC BACK DOOR SYSTEM : Work Procedure

INFOID:0000000012408546

1. INITIALIZATION

1. Fully close the back door manually. (When back door is already fully closed, this operation is not necessary)
2. Perform automatic back door open/close operation of back door.
3. Check for noise or malfunctioning during operation.
4. Check that hazard lamp blinks and that warning buzzer operates.

CAUTION:

Never touch back door, or allow foreign materials to be pinched in door, when performing automatic back door open/close operation of back door, until it is in the fully closed or fully open position.

>> WORK END

AUTOMATIC SLIDING DOOR SYSTEM

AUTOMATIC SLIDING DOOR SYSTEM : Description

INFOID:0000000012408547

When the battery is disconnected from the negative terminal, it is necessary to perform initial setting to operate automatic sliding door system normally. (For details, refer to DLK-174, "AUTOMATIC SLIDING DOOR SYSTEM : Work Procedure".)

CAUTION:

Be careful of sliding door that does not operate smoothly in the non-initialized status because door speed is constant during automatic open/close operation. Also, be careful of high reverse load.

AUTOMATIC SLIDING DOOR SYSTEM : Work Procedure

INFOID:0000000012408548

1. INITIALIZATION

1. Operate automatic sliding door open/close switch or automatic sliding door one-touch open/close switch, and the automatic open function operates. (Perform open operation first in the non-initialized status regardless of sliding door position)
2. After sliding door is stopped in the fully open position, operate automatic sliding door open/close switch or automatic sliding door one-touch open/close switch, and the automatic close function operates.
3. Check for noise or malfunctioning during operation.
4. Check that automatic sliding door warning buzzer operates.

CAUTION:

Never touch sliding door, or allow foreign materials to be pinched in door, when performing automatic open/close operation of sliding door, until it is in the fully closed or fully open position.

>> WORK END

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ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL MODULE

Description

INFOID:0000000012408549

When replacing control module, or removing connector terminal, it is necessary to perform initial setting to operate automatic back door system normally. (For details, refer to DLK-175, "Work Procedure".)

CAUTION:

The following specified operations are not performed under the non-initialized condition.

- **Automatic back door open/close function**
- **Anti-pinch function**

Work Procedure

INFOID:0000000012408550

1. INITIALIZATION

1. Fully close the back door manually. (When back door is already fully closed, this operation is not necessary)
2. Perform automatic back door open/close operation of back door.
3. Check for noise or malfunctioning during operation.
4. Check that hazard lamp blinks and that warning buzzer operates.

CAUTION:

Never touch back door, or allow foreign materials to be pinched in door, when performing automatic back door open/close operation of back door, until it is in the fully closed or fully open position.

>> WORK END

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ADDITIONAL SERVICE WHEN REPLACING SLIDING DOOR CONTROL UNIT

Description

INFOID:0000000012408551

When replacing control module, or removing connector terminal, it is necessary to perform initial setting to operate automatic sliding door system normally. (For details, refer to DLK-176, "Work Procedure".)

CAUTION:

Be careful of sliding door that does not operate smoothly in the non-initialized status because door speed is constant during automatic open/close operation. Also, be careful of high reverse load.

Work Procedure

INFOID:0000000012408552

1. INITIALIZATION

1. Operate automatic sliding door open/close switch or automatic sliding door one-touch open/close switch, and the automatic open function operates. (Perform open operation first in the non-initialized status regardless of sliding door position)
2. After sliding door is stopped in the fully open position, operate automatic sliding door open/close switch or automatic sliding door one-touch open/close switch, and the automatic close function operates.
3. Check for noise or malfunctioning during operation.
4. Check that automatic sliding door warning buzzer operates.

CAUTION:

Never touch sliding door, or allow foreign materials to be pinched in door, when performing automatic open/close operation of sliding door, until it is in the fully closed or fully open position.

>> WORK END

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DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

AUTOMATIC BACK DOOR CONTROL MODULE

AUTOMATIC BACK DOOR CONTROL MODULE : Description

INFOID:0000000012408553

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-32, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart".

AUTOMATIC BACK DOOR CONTROL MODULE : DTC Logic

INFOID:0000000012408554

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
U1000	CAN COMM	When automatic back door control unit cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system

AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure

INFOID:0000000012408555

1.PERFORM SELF DIAGNOSTIC

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

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-17, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-41, "Intermittent Incident".

SLIDING DOOR LH

SLIDING DOOR LH : Description

INFOID:0000000012408556

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-32, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart".

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408557

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
U1000	CAN COMM	When sliding door control unit cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408558

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR” using CONSULT.

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-17, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-41, "Intermittent Incident".

SLIDING DOOR RH

SLIDING DOOR RH : Description

INFOID:0000000012408559

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-32, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart".

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408560

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
U1000	CAN COMM	When sliding door control unit cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408561

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR RIGHT” using CONSULT.

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-17, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-41, "Intermittent Incident".

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U1010 CONTROL UNIT (CAN)

AUTOMATIC BACK DOOR CONTROL MODULE

AUTOMATIC BACK DOOR CONTROL MODULE : DTC Logic

INFOID:0000000012408562

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
U1010	CONTROL UNIT (CAN)	Automatic back door control unit detected internal CAN communication circuit malfunction	Automatic back door control module

AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure

INFOID:0000000012408563

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC [U1010] is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".

SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408564

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
U1010	CONTROL UNIT (CAN)	Sliding door control unit LH detected internal CAN communication circuit malfunction	Sliding door control unit LH

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408565

1.REPLACE SLIDING DOOR CONTROL UNIT

When DTC [U1010] is detected, replace sliding door control unit LH.

>> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408566

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
U1010	CONTROL UNIT (CAN)	Sliding door control unit RH detected internal CAN communication circuit malfunction	Sliding door control unit RH

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408567

1.REPLACE SLIDING DOOR CONTROL UNIT

When DTC [U1010] is detected, replace sliding door control unit RH.

>> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

B2401 IGNITION POWER SUPPLY CIRCUIT

AUTOMATIC BACK DOOR CONTROL MODULE

AUTOMATIC BACK DOOR CONTROL MODULE : DTC Logic

INFOID:0000000012408568

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2401	IGN OPEN	When the automatic back door control unit detects the following condition for 0.3 second or more • Power supply condition (OFF) of automatic back door control unit and Ignition position signal (ON) from BCM via CAN	• Fuse • Harness or connectors (Ignition power supply condition circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON and wait for at least 1 second.
2. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-180, "AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure".
NO >> INSPECTION END

AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure

INFOID:0000000012408569

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse, [No. 3, located in fuse block (J/B)].

Is the inspection result normal?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Condition		Voltage
Automatic back door control module					
Connector	Terminal				
B8	7	Ground	Ignition switch	ON	9 - 16 V

Is the measurement value normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".
NO >> Repair or replace harness.

SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408570

DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause
B2401	IGN OPEN	When the sliding door control unit detects the following condition for 0.3 second or more • Power supply condition (OFF) of sliding door control unit and ignition position signal (ON) from BCM via CAN	• Fuse • Harness or connectors (Ignition power supply condition circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-181, "SLIDING DOOR LH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408571

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse, [No. 3, located in fuse block (J/B)].

Is the inspection result normal?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit LH connector.
3. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Condition		Voltage
Sliding door control unit LH					
Connector	Terminal				
B45	6	Ground	Ignition switch	ON	9 – 16 V

Is the measurement value normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".
NO >> Repair or replace harness.

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408572

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2401	IGN OPEN	When the sliding door control unit detects the following condition for 0.3 second or more • Power supply condition (OFF) of sliding door control unit and ignition position signal (ON) from BCM via CAN	• Fuse • Harness or connectors (Ignition power supply condition circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR RIGHT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-182, "SLIDING DOOR RH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408573

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse, [No. 3, located in fuse block (J/B)].

Is the inspection result normal?

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

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit RH connector.
3. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Condition		Voltage
Sliding door control unit RH					
Connector	Terminal				
B247	6	Ground	Ignition switch	ON	9 – 16 V

Is the measurement value normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".
NO >> Repair or replace harness.

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B2402 TOUCH SENSOR
SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408574

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2402	TOUCH SENSOR OPEN	When the sliding door control unit detects the open circuit of the sliding door touch sensor	• Sliding door touch sensor • Harness or connector (Sliding door touch sensor circuit is open) • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-183, "SLIDING DOOR LH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408575

1.CHECK SLIDING DOOR TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between sliding door touch sensor LH harness connector and sliding door control unit LH harness connector.

(+)		(–)		Condition		Voltage
Sliding door touch sensor LH		Sliding door control unit LH				
Connector	Terminal	Connector	Terminal			
D172	1	B45	23	Sliding door touch sensor LH	Pinching detection	0 – 1.5 V
					Other than above	4 – 8 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR TOUCH SENSOR CIRCUIT

1. Disconnect sliding door control unit LH connector and sliding door touch sensor LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door touch sensor LH harness connector.

Sliding door control unit LH		Sliding door touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	24	D172	1	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	24		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR TOUCH SENSOR GROUND CIRCUIT

1. Disconnect sliding door control unit LH connector and sliding door touch sensor LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door touch sensor LH harness connector.

Sliding door control unit LH		Sliding door touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	23	D172	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	23		Not existed

Is the inspection result normal?

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

4.CHECK SLIDING DOOR TOUCH SENSOR CIRCUIT 2

1. Connect sliding door control unit LH connector and sliding door touch sensor LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

5.CHECK SLIDING DOOR TOUCH SENSOR

Refer to DLK-186, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door touch sensor LH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408576

1.CHECK SLIDING DOOR TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect sliding door touch sensor LH connector.
3. Check resistance between sliding door touch sensor LH terminals.

Sliding door touch sensor LH		Condition		Resistance (Approx.)
Terminal				
1	2	Sliding door touch sensor LH	Pinching detection	120 Ω or less
			Other than above	1 kΩ ± 10%

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Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door touch sensor LH.

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408577

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2402	TOUCH SENSOR OPEN	When the sliding door control unit detects the open circuit of the sliding door touch sensor	• Sliding door touch sensor • Harness or connector (Sliding door touch sensor circuit is open) • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR RIGHT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-185, "SLIDING DOOR RH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408578

1.CHECK SLIDING DOOR TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between sliding door touch sensor RH harness connector and sliding door control unit RH harness connector.

(+)		(–)		Condition		Voltage
Sliding door touch sensor RH		Sliding door control unit RH				
Connector	Terminal	Connector	Terminal			
D173	1	B247	23	Sliding door touch sensor RH	Pinching detection	0 – 1.5 V
					Other than above	4 – 8 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR TOUCH SENSOR CIRCUIT

1. Disconnect sliding door control unit RH connector and sliding door touch sensor RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door touch sensor RH harness connector.

Sliding door control unit RH		Sliding door touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	24	D173	1	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	24		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR TOUCH SENSOR GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector and sliding door touch sensor RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door touch sensor RH harness connector.

Sliding door control unit RH		Sliding door touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	23	D173	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	23		Not existed

Is the inspection result normal?

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

4.CHECK SLIDING DOOR TOUCH SENSOR CIRCUIT 2

1. Connect sliding door control unit RH connector and sliding door touch sensor RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "LH : Removal and Installation".

5.CHECK SLIDING DOOR TOUCH SENSOR

Refer to DLK-186, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door touch sensor RH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH : Component Inspection

INFOID:0000000012408579

1.CHECK SLIDING DOOR TOUCH SENSOR RH

1. Turn ignition switch OFF.
2. Disconnect sliding door touch sensor RH connector.
3. Check resistance between sliding door touch sensor RH terminals.

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Sliding door touch sensor RH		Condition		Resistance (Approx.)
Terminal				
1	2	Sliding door touch sensor RH	Pinching detection	120 Ω or less
			Other than above	1 kΩ ± 10%

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door touch sensor RH.

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B2403 ENCODER

AUTOMATIC BACK DOOR CONTROL MODULE

AUTOMATIC BACK DOOR CONTROL MODULE : DTC Logic

INFOID:0000000012408580

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2403	PULSE ENCODER	When the automatic back door control unit cannot receive the signal from the encoder just after starting the open/close operation	• Battery voltage (low battery) • Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-188, "AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure".
NO >> INSPECTION END

AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure

INFOID:0000000012408581

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check automatic back door control module power supply and ground circuit.
   Refer to DLK-244, "AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408582

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2403	PULSE ENCODER	When sliding door control unit cannot receive the signal from the encoder just after starting the open/close operation	• Encoder • Battery voltage (low battery) • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-188, "SLIDING DOOR LH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408583

1.CHECK ENCODER POWER SUPPLY

1. Turn ignition switch OFF.

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2. Disconnect automatic sliding door unit LH connector.
3. Check voltage between automatic sliding door unit LH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door unit LH			
Connector	Terminal		
B65	5	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK ENCODER CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	11	B65	5	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	11		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK ENCODER CIRCUIT 2

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	4	B65	6	Existed
	21		7	

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	4		Not existed
	21		

Is the inspection result normal?

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

4.CHECK ENCODER GROUND CIRCUIT

1. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	26	B65	8	Existed

2. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	26		Not existed

Is the inspection result normal?

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

5.CHECK ENCODER CIRCUIT 3

1. Connect sliding door control unit LH connector and automatic sliding door unit LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	26	Ground	0 V

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408584

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2403	PULSE ENCODER	When sliding door control unit cannot receive the signal from the encoder just after starting the open/close operation	• Encoder • Battery voltage (low battery) • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR RIGHT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-190, "SLIDING DOOR RH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408585

1.CHECK ENCODER POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit RH connector.

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3. Check voltage between automatic sliding door unit RH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door unit RH			
Connector	Terminal		
B244	5	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK ENCODER CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	11	B244	5	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	11		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK ENCODER CIRCUIT 2

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	4	B244	7	Existed
	21		6	

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	4		Not existed
	21		

Is the inspection result normal?

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

4.CHECK ENCODER GROUND CIRCUIT

1. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	26	B244	8	Existed

2. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	26		Not existed

Is the inspection result normal?

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

5.CHECK ENCODER CIRCUIT 3

1. Connect sliding door control unit RH connector and automatic sliding door unit RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	26	Ground	0 V

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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B2405 SLIDING DOOR CONTROL UNIT

SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408586

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2405	ECU FAIL	Sliding door control unit detected CPU malfunction	Sliding door control unit

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408587

1.REPLACE SLIDING DOOR CONTROL UNIT

When DTC [B2405] is detected, replace sliding door control unit LH.

>> Replace sliding door control unit. Refer to DLK-499, "LH : Removal and Installation".

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408588

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2405	ECU FAIL	Sliding door control unit detected CPU malfunction	Sliding door control unit

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408589

1.REPLACE SLIDING DOOR CONTROL UNIT

When DTC [B2405] is detected, replace sliding door control unit RH.

>> Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation".

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B2409 HALF LATCH SWITCH

AUTOMATIC BACK DOOR CONTROL MODULE

AUTOMATIC BACK DOOR CONTROL MODULE : DTC Logic

INFOID:0000000012408590

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2409	HALF LATCH SW	When the automatic back door control unit can not detects the half latch switch ON condition even when the back door is in the open position	• Half latch switch • Harness or connectors (Half latch switch circuit is open) • Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door function.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-194, "AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure".
NO >> INSPECTION END

AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure

INFOID:0000000012408591

1.CHECK HALF LATCH SWITCH SIGNAL

1. Select “AUTO BACK DOOR” using CONSULT.
2. Select “HALF LATCH SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
HALF LATCH SW	Back door	Fully closed/Half latch	OFF
		Open	ON

Is the inspection result normal?

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

2.CHECK HALF LATCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage
Back door lock assembly			
Connector	Terminal		
D190	6	Ground	9 - 16 V

Is the inspection result normal?

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

3.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

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Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B8	22	D190	6	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	22		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK HALF LATCH SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	8		Existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace back door lock assembly ground circuit.

5. CHECK HALF LATCH SWITCH

Refer to DLK-195, "AUTOMATIC BACK DOOR CONTROL MODULE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door lock assembly.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

AUTOMATIC BACK DOOR CONTROL MODULE : Component Inspection

INFOID:0000000012408592

1. CHECK HALF LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
6	8	Back door lock	Open	Existed
			Fully closed/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408593

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2409	HALF LATCH SW	When the sliding door control unit cannot detects the half latch switch ON condition even when the sliding door release actuator operate	• Half latch switch • Harness or connectors (Half latch switch circuit is open) • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-196, "SLIDING DOOR LH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408594

1.CHECK HALF LATCH SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly LH connector.
3. Check voltage between sliding door lock assembly LH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock assembly LH			
Connector	Terminal		
D123	3	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock assembly LH harness connector.

Sliding door control unit LH		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	5	D123	3	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	5		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock assembly LH harness connector.

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Sliding door control unit LH		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	23	D123	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	23		Not existed

Is the inspection result normal?

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

4.CHECK HALF LATCH SWITCH CIRCUIT 2

1. Connect sliding door control unit LH connector and sliding door lock assembly LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

5.CHECK HALF LATCH SWITCH

Refer to DLK-197, "SLIDING DOOR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door lock assembly LH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408595

1.CHECK HALF LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly LH connector.
3. Check continuity between sliding door lock assembly LH terminals.

Sliding door lock assembly LH		Condition		Continuity
Terminal				
3	2	Sliding door LH	Open	Existed
			Half latch/full closed	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door lock assembly LH.

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408596

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2409	HALF LATCH SW	When the sliding door control unit cannot detects the half latch switch ON condition even when the sliding door release actuator operate	• Half latch switch • Harness or connectors (Half latch switch circuit is open) • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR RIGHT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-198, "SLIDING DOOR RH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408597

1.CHECK HALF LATCH SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly RH connector.
3. Check voltage between sliding door lock assembly RH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock assembly RH			
Connector	Terminal		
D124	3	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock assembly RH harness connector.

Sliding door control unit RH		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	5	D124	3	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	5		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector.

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2. Check continuity between sliding door control unit RH harness connector and sliding door lock assembly RH harness connector.

Sliding door control unit RH		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	23	D124	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	23		Not existed

Is the inspection result normal?

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

4.CHECK HALF LATCH SWITCH CIRCUIT 2

1. Connect sliding door control unit RH connector and sliding door lock assembly RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

5.CHECK HALF LATCH SWITCH

Refer to DLK-199, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door lock assembly RH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH : Component Inspection

INFOID:0000000012408598

1.CHECK HALF LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly RH connector.
3. Check continuity between sliding door lock assembly RH terminals.

Sliding door lock assembly RH		Condition		Continuity
Terminal				
3	2	Sliding door RH	Open	Existed
			Half latch/full closed	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door lock assembly RH.

B241A ENCODER
SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408599

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B241A	ENCDR PWR SUPLY	When battery voltage to encoder is 4.5 V or less	• Encoder • Harness or connectors • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-200, "SLIDING DOOR LH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408600

1.CHECK ENCODER POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit LH connector.
3. Check voltage between automatic sliding door unit LH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door unit LH			
Connector	Terminal		
B65	5	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK ENCODER CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	11	B65	5	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	11		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

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3.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408601

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B241A	ENCDR PWR SUPLY	When battery voltage to encoder is 4.5 V or less	• Encoder • Harness or connectors • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR RIGHT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-201, "SLIDING DOOR RH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408602

1.CHECK ENCODER POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit RH connector.
3. Check voltage between automatic sliding door unit RH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door unit RH			
Connector	Terminal		
B247	11	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK ENCODER CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	11	B244	5	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	11		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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B2412 AUTOMATIC SLIDING DOOR MOTOR/ENCODER SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408603

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2412	ASD MTR/ENCDR	When sliding door control unit transmits signal to automatic sliding door motor but pulse signal from encoder is not detected for 1 second or more	• Sliding door motor • Encoder • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-203, "SLIDING DOOR LH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408604

1.CHECK ENCODER MONITOR ITEM

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “ENCODER A LH ” and “ENCODER B LH” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
ENCODER A LH	Sliding door LH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
ENCODER B LH	Sliding door LH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO

Is the inspection result normal?

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

2.CHECK ENCODER POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit LH connector.
3. Check voltage between automatic sliding door unit LH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door unit LH			
Connector	Terminal		
B65	5	Ground	8 – 16 V

Is the inspection result normal?

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

3.CHECK ENCODER CIRCUIT 1

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

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Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	11	B65	5	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	11		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

4. CHECK ENCODER CIRCUIT 2

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	4	B65	6	Existed
	21		7	

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	4		Not existed
	21		

Is the inspection result normal?

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

5. CHECK ENCODER GROUND CIRCUIT

1. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	26	B65	8	Existed

2. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	26		Not existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6. CHECK ENCODER CIRCUIT 3

1. Connect sliding door control unit LH connector and automatic sliding door unit LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

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(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	26	Ground	0 V

Is the inspection result normal?

YES >> Replace automatic sliding door unit LH.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

7.CHECK AUTOMATIC SLIDING DOOR MOTOR CIRCUIT

1. Disconnect sliding door control unit LH connector and automatic sliding door unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B47	43	B33	3	Existed
	46		4	

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B47	43		Not existed
	46		

Is the inspection result normal?

YES >> Replace automatic sliding door unit LH.
NO >> Repair or replace harness.

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408605

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2412	ASD MTR/ENCDR	When sliding door control unit transmits signal to automatic sliding door motor but pulse signal from encoder is not detected for 1 second or more	• Sliding door motor • Encoder • Harness or connectors

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR RIGHT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-205, "SLIDING DOOR RH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408606

1.CHECK ENCODER MONITOR ITEM

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “ENCODER A RH ” and “ENCODER B RH” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
ENCODER A RH	Sliding door RH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
ENCODER B RH	Sliding door RH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO

Is the inspection result normal?

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

2.CHECK ENCODER POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit RH connector.
3. Check voltage between automatic sliding door unit RH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door unit RH			
Connector	Terminal		
B244	5	Ground	8 – 16 V

Is the inspection result normal?

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

3.CHECK ENCODER CIRCUIT 1

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	11	B244	5	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	11		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

4.CHECK ENCODER CIRCUIT 2

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	4	B244	7	Existed
	21		6	

3. Check continuity between sliding door control unit RH harness connector and ground.

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Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	4		Not existed
	21		

Is the inspection result normal?

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

5. CHECK ENCODER GROUND CIRCUIT

1. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	26	B244	8	Existed

2. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	26		Not existed

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6. CHECK ENCODER CIRCUIT 3

1. Connect sliding door control unit RH connector and automatic sliding door unit RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	26	Ground	0 V

Is the inspection result normal?

YES >> Replace automatic sliding door unit RH.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

7. CHECK AUTOMATIC SLIDING DOOR MOTOR CIRCUIT

1. Disconnect sliding door control unit RH connector and automatic sliding door unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B249	43	B245	4	Existed
	46		3	

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B249	43		Not existed
	46		

Is the inspection result normal?

YES >> Replace automatic sliding door unit RH.
NO >> Repair or replace harness.

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B2413 AUTOMATIC SLIDING DOOR MOTOR/ENCODER SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408607

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2413	ASD MTR/ENCDR	When sliding door control unit detects pulse signal that is in the reverse direction of sliding door motor operation	• Reverse connection of harness between encoder and sliding door control unit • Reverse connection of harness between automatic sliding door motor and sliding door control unit • Encoder • Automatic sliding door motor • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-209, "SLIDING DOOR LH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408608

1.CHECK ENCODER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit LH connector and automatic sliding door unit LH connector.
3. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	4	B65	6	Existed
	21		7	
	4		7	Not existed
	21		6	

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK AUTOMATIC SLIDING DOOR MOTOR CIRCUIT

Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B47	43	B33	3	Existed
	46		4	
	43		4	Not existed
	46		3	

Is the inspection result normal?

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

3.CHECK AUTOMATIC SLIDING DOOR UNIT LH

1. Replace automatic sliding door unit LH. (New unit or other unit)
2. Erase DTC.
3. Operate auto open/close function.

Is DTC detected?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> INSPECTION END

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408609

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2413	ASD MTR/ENCDR	When sliding door control unit detects pulse signal that is in the reverse direction of sliding door motor operation	• Reverse connection of harness between encoder and sliding door control unit • Reverse connection of harness between automatic sliding door motor and sliding door control unit • Encoder • Automatic sliding door motor • Sliding door control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR RIGHT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-210, "SLIDING DOOR RH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408610

1.CHECK ENCODER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit RH connector and automatic sliding door unit RH connector.
3. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

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Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	4	B244	7	Existed
	21		6	
	4		6	Not existed
	21		7	

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK AUTOMATIC SLIDING DOOR MOTOR CIRCUIT

Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B249	43	B245	4	Existed
	46		3	
	43		3	Not existed
	46		4	

Is the inspection result normal?

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

3.CHECK AUTOMATIC SLIDING DOOR UNIT RH

1. Replace automatic sliding door unit RH. (New unit or other unit)
2. Erase DTC.
3. Operate auto open/close function.

Is DTC detected?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> INSPECTION END

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B2414 AUTOMATIC SLIDING DOOR MOTOR
SLIDING DOOR LH

SLIDING DOOR LH : DTC Logic

INFOID:0000000012408611

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2414	ASD MTR TIME OUT	When the sliding door control unit and sliding door motor operate in the same direction for 15 seconds or more continuously	• Clutch • Automatic sliding door motor • Sliding door control unit • Battery voltage (low battery)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-212, "SLIDING DOOR LH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408612

1.CHECK SLIDING DOOR CONTROL UNIT LH POWER SUPPLY

Check sliding door control unit LH power supply.
Refer to DLK-245, "SLIDING DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK CLUTCH

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “CLUTCH” in “ACTIVE TEST” mode.
3. Touch “HOLD” or “RELEASE” to check that it works normally.

Is the inspection result normal?

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

3.CHECK AUTOMATIC SLIDING DOOR MOTOR OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit LH connector.
3. Check voltage between automatic sliding door unit LH harness connector and ground.

(+)		(–)	Condition		Voltage
Automatic sliding door unit LH					
Connector	Terminal				
B33	3	Ground	Sliding door LH	Auto open operation	9 – 16 V
				Other than above	0 – 1.5 V
	4			Auto close operation	9 – 16 V
				Other than above	0 – 1.5 V

Is the inspection result normal?

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YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> GO TO 5.

4. CHECK CLUTCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit LH connector and automatic sliding door unit LH connector.
3. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B47	44	B33	1	Existed
	47		2	

4. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B47	44		Not existed
	47		

Is the inspection result normal?

YES >> Replace automatic sliding door unit LH.
NO >> Repair or replace harness.

5. CHECK AUTOMATIC SLIDING DOOR MOTOR CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B47	43	B33	3	Existed
	46		4	

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B47	43		Not existed
	46		

Is the inspection result normal?

YES >> Replace automatic sliding door unit LH.
NO >> Repair or replace harness.

SLIDING DOOR RH

SLIDING DOOR RH : DTC Logic

INFOID:0000000012408613

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2414	ASD MTR TIME OUT	When the sliding door control unit and sliding door motor operate in the same direction for 15 seconds or more continuously	• Clutch • Automatic sliding door motor • Sliding door control unit • Battery voltage (low battery)

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DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO SLIDE DOOR RIGHT” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-214, "SLIDING DOOR RH : Diagnosis Procedure".
NO >> INSPECTION END

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408614

1.CHECK SLIDING DOOR CONTROL UNIT RH POWER SUPPLY

Check sliding door control unit RH power supply.
Refer to DLK-245, "SLIDING DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK CLUTCH

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “CLUTCH” in “ACTIVE TEST” mode.
3. Touch “HOLD” or “RELEASE” to check that it works normally.

Is the inspection result normal?

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

3.CHECK AUTOMATIC SLIDING DOOR MOTOR OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit RH connector.
3. Check voltage between automatic sliding door unit RH harness connector and ground.

(+)		(–)	Condition		Voltage
Automatic sliding door unit RH					
Connector	Terminal				
B245	3	Ground	Sliding door RH	Auto close operation	9 – 16 V
				Other than above	0 – 1.5 V
	4			Auto open operation	9 – 16 V
				Other than above	0 – 1.5 V

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> GO TO 5.

4.CHECK CLUTCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit RH connector and automatic sliding door unit RH connector.
3. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B249	44	B245	1	Existed
	47		2	

4. Check continuity between sliding door control unit RH harness connector and ground.

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Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B249	44		Not existed
	47		

Is the inspection result normal?

YES >> Replace automatic sliding door unit RH.
NO >> Repair or replace harness.

5. CHECK AUTOMATIC SLIDING DOOR MOTOR CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B249	43	B245	4	Existed
	46		3	

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B249	43		Not existed
	46		

Is the inspection result normal?

YES >> Replace automatic sliding door unit RH.
NO >> Repair or replace harness.

B2416 TOUCH SENSOR RH

DTC Logic

INFOID:0000000012408615

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2416	TOUCH SEN R OPEN	When the automatic back door control unit detects the open circuit of the back door touch sensor RH	• Back door touch sensor RH • Harness or connectors (Back door touch sensor RH circuit is open) • Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-216, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012408616

1.CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between back door touch sensor RH harness connector and automatic back door control module harness connector.

(+)		(–)		Condition		Voltage
Back door touch sensor RH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D191	1	B8	14	Back door touch sensor RH	Detect obstruction	0 – 1.5 V
					Other than above	5 – 6.7 V

Is the inspection result normal?

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

2.CHECK BACK DOOR TOUCH SENSOR RH CIRCUIT

1. Disconnect automatic back door control module connector and back door touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and back door touch sensor RH harness connector.

Automatic back door control module		Back door touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B8	13	D191	1	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	13		Not existed

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Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR TOUCH SENSOR RH GROUND CIRCUIT

1. Disconnect automatic back door control module connector and back door touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and back door touch sensor RH harness connector.

Automatic back door control module		Back door touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B8	14	D191	2	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	14		Not existed

Is the inspection result normal?

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

4.CHECK BACK DOOR TOUCH SENSOR RH GROUND CIRCUIT 2

1. Connect automatic back door control module connector and back door touch sensor RH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage
Automatic back door control module			
Connector	Terminal		
B8	14	Ground	0 – 1.5 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".

5.CHECK BACK DOOR TOUCH SENSOR RH

Refer to DLK-217, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door touch sensor RH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408617

1.CHECK TOUCH SENSOR RH

1. Turn ignition switch OFF.
2. Disconnect back door touch sensor RH connector.
3. Check resistance between back door touch sensor RH terminals.

Back door touch sensor RH		Condition		Resistance
Terminal				
1	2	Back door touch sensor RH	Detect obstruction	360 - 440 Ω
			Other than above	0.9 - 1.1 kΩ

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door touch sensor RH.

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B2417 TOUCH SENSOR LH

DTC Logic

INFOID:0000000012408618

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2417	TOUCH SEN L OPEN	When the automatic back door control unit detects the open circuit of the back door touch sensor LH.	• Back door touch sensor LH • Harness or connectors (Back door touch sensor LH circuit is open) • Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-219, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012408619

1.CHECK BACK DOOR TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between back door touch sensor LH harness connector and automatic back door control module harness connector.

(+)		(–)		Condition		Voltage
Back door touch sensor LH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D165	1	B8	14	Back door touch sensor LH	Detect obstruction	0 – 1.5 V
					Other than above	5 – 6.7 V

Is the inspection result normal?

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

2.CHECK BACK DOOR TOUCH SENSOR LH CIRCUIT

1. Disconnect automatic back door control module connector and back door touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and back door touch sensor LH harness connector.

Automatic back door control module		Back door touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B8	15	D165	1	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	15		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR TOUCH SENSOR LH GROUND CIRCUIT

1. Disconnect automatic back door control module connector and back door touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and back door touch sensor LH harness connector.

Automatic back door control module		Back door touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B8	14	D165	2	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	14		Not existed

Is the inspection result normal?

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

4.CHECK BACK DOOR TOUCH SENSOR LH GROUND CIRCUIT 2

1. Connect automatic back door control module connector and back door touch sensor LH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage
Automatic back door control module			
Connector	Terminal		
B8	14	Ground	0 – 1.5 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".

5.CHECK BACK DOOR TOUCH SENSOR LH

Refer to DLK-220, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door touch sensor LH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408620

1.CHECK BACK DOOR TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect back door touch sensor LH connector.
3. Check resistance between back door touch sensor LH terminals.

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Back door touch sensor LH		Condition		Resistance
Terminal				
1	2	Back door touch sensor LH	Detect obstruction	360 - 440 Ω
			Other than above	0.9 - 1.1 kΩ

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door touch sensor LH.

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B2419 OPEN SWITCH

DTC Logic

INFOID:0000000012408621

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2419	OPEN SW	When the automatic back door control unit detects any of the following conditions • The change of open switch cannot be detected for 1 second or more after starting the closure open output for the 3rd time in a row • The change of open switch cannot be detected for 0.5 second or more after starting the closure close output for the 3rd time in a row • The condition that the open switch is in the ON position and the close switch is in the OFF position is detected when starting the closure open/close output for the 3rd time in a row	• Open switch • Harness or connectors (Open switch circuit is open or shorted) • Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-222, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012408622

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage
Back door lock assembly			
Connector	Terminal		
D190	4	Ground	9 - 16 V

Is the inspection result normal?

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

2.CHECK OPEN SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B8	24	D190	4	Existed

3. Check continuity between automatic back door control module harness connector and ground.

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Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	24		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK OPEN SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	8		Existed

Is the inspection result normal?

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

4.CHECK OPEN SWITCH

Refer to DLK-223, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408623

COMPONENT INSPECTION

1.CHECK OPEN SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
4	8	Back door	Open	Existed
			Fully closed/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

B2420 CLOSE SWITCH

DTC Logic

INFOID:0000000012408624

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2420	CLOSE SW	When the automatic back door control unit detects any of the following condition • The change of close switch cannot be detected for 3 second or more after starting the closure close output for the 3rd time in a row	• Close switch • Harness or connectors (Close switch circuit is open or shorted) • Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-224, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012408625

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage
Back door lock assembly			
Connector	Terminal		
D190	5	Ground	9 - 16 V

Is the inspection result normal?

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

2.CHECK CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B8	20	D190	5	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	20		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation"

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NO >> Repair or replace harness.

3.CHECK CLOSE SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	8		Existed

Is the inspection result normal?

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

4.CHECK CLOSE SWITCH

Refer to DLK-225, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408626

1.CHECK CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
5	8	Back door	Fully closed	Existed
			Open/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

B2421 CLUTCH OPERATION TIME

DTC Logic

INFOID:0000000012408627

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2421	CLUTCH TIME OUT	When the automatic back door control unit detects the power distribution to the clutch for 2 minutes or more	• Automatic back door control module • Battery voltage (low voltage)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-226, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012408628

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check automatic back door control module power supply and ground circuit.
   Refer to DLK-244, "AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

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B2422 BACK DOOR STATE

DTC Logic

INFOID:0000000012408629

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2422	BACK DOOR STATE	When the automatic back door control unit detects back door position malfunction according to the pulse signal	• Back door mechanism • Automatic back door control module

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-227, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012408630

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC [B2422] is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".

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B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

DTC Logic

INFOID:0000000012408631

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2423	ABD MTR TIME OUT	When the automatic back door control unit and automatic back door motor operate in the same direction for 30 seconds or more continuously	• Back door mechanism • Automatic back door control module • Battery voltage (low battery)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-228, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012408632

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE POWER SUPPLY AND GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check automatic back door control module power supply and ground circuit.
   Refer to DLK-244, "AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

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B2424 CLOSURE CONDITION

DTC Logic

INFOID:0000000012408633

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2424	CLSR CONDITION	When the following condition is detected after OPEN/CLOSE operation of the back door closure motor • Open switch and close switch are ON	• Harness or connector (Open switch or close switch circuit is open or shorted) • Back door lock assembly

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-229, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012408634

1.CHECK AUTOMATIC BACK DOOR CONTROL MODULE OUTPUT

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage
Back door lock assembly			
Connector	Terminal		
D190	4	Ground	9 - 16 V
	5		

Is the inspection result normal?

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

2.CHECK OPEN/CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B8	20	D190	5	Existed
	24		4	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	20		Not existed
	24		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	8		Existed

Is the inspection result normal?

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

4.CHECK OPEN/CLOSE SWITCH

Refer to DLK-230, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408635

1.CHECK OPEN/CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
5	8	Back door lock	Fully closed	Existed
			Open/half latch	Not existed
4			Open	Existed
			Fully closed/half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

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B2425 AUTOMATIC BACK DOOR CONTROL UNIT

DTC Logic

INFOID:0000000012408636

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
B2425	AUTO BCK DR CNT UNIT	Automatic back door control unit detected CPU malfunction	Automatic back door control module

Diagnosis Procedure

INFOID:0000000012408637

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC [B2425] is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".

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B2621 INSIDE ANTENNA

DTC Logic

INFOID:0000000012408638

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2621	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (instrument center) is sent to BCM	• Inside key antenna (instrument center) • Harness or connector (Front inside key antenna (instrument center) circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “INSIDE ANT DIAGNOSIS” in “WORK SUPPORT” mode.
3. Perform inside key antenna (“INSIDE ANT DIAGNOSIS”) on “WORK SUPPORT” of “INTELLIGENT KEY”.
4. Check BCM for DTC.

Is inside key antenna DTC detected?

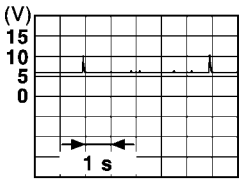
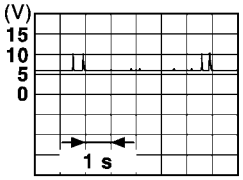
YES >> Refer to DLK-232, "Diagnosis Procedure".
NO >> Inside key antenna (instrument center) is OK.

Diagnosis Procedure

INFOID:0000000012408639

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M124	84, 85	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

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

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

BCM		Inside key antenna (instrument center)		Continuity
Connector	Terminal	Connector	Terminal	
M124	84	M105	1	Existed
	85		2	

3. Check continuity between BCM harness connector and ground.

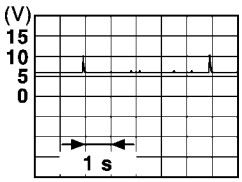
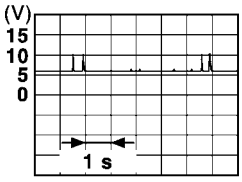
BCM		Ground	Continuity
Connector	Terminal		
M124	84		Not existed
	85		

Is the inspection result normal?

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

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM		(–)	Condition	Signal (Reference value)
Connector	Terminal			
M124	84, 85	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (instrument center).
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

B2622 INSIDE ANTENNA

DTC Logic

INFOID:0000000012408640

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2622	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (console) is sent to BCM	• Inside key antenna (console) • Harness or connector (Front inside key antenna (console) circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “INSIDE ANT DIAGNOSIS” in “WORK SUPPORT” mode.
3. Perform inside key antenna (“INSIDE ANT DIAGNOSIS”) on “WORK SUPPORT” of “INTELLIGENT KEY”.
4. Check BCM for DTC.

Is inside key antenna DTC detected?

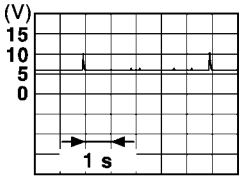
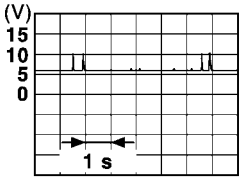
YES >> Refer to DLK-234, "Diagnosis Procedure".
NO >> Inside key antenna (console) is OK.

Diagnosis Procedure

INFOID:0000000012408641

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M124	86, 87	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

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

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BCM		Inside key antenna (console)		Continuity
Connector	Terminal	Connector	Terminal	
M124	86	B242	1	Existed
	87		2	

3. Check continuity between BCM harness connector and ground.

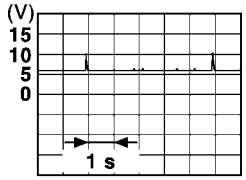
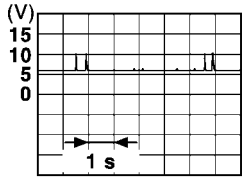
BCM		Ground	Continuity
Connector	Terminal		
M124	86		Not existed
	87		

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M124	86, 87	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (console).
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

B2623 INSIDE ANTENNA

DTC Logic

INFOID:0000000012408642

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2623	INSIDE ANTENNA	An excessive high or low voltage from inside antenna (luggage room) is sent to BCM	• Inside key antenna (luggage room) • Harness or connector (Front inside key antenna (luggage room) circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “INSIDE ANT DIAGNOSIS” in “WORK SUPPORT” mode.
3. Perform inside key antenna (“INSIDE ANT DIAGNOSIS”) on “WORK SUPPORT” of “INTELLIGENT KEY”.
4. Check BCM for DTC.

Is inside key antenna DTC detected?

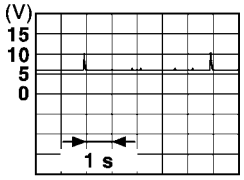
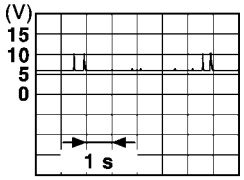
YES >> Refer to DLK-236, "Diagnosis Procedure".
NO >> Inside key antenna (luggage room) is OK.

Diagnosis Procedure

INFOID:0000000012408643

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M124	88, 89	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (luggage room) connector.
2. Check continuity between BCM harness connector and inside key antenna (luggage room) harness connector.

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BCM		Inside key antenna (luggage room)		Continuity
Connector	Terminal	Connector	Terminal	
M124	88	B241	1	Existed
	89		2	

3. Check continuity between BCM harness connector and ground.

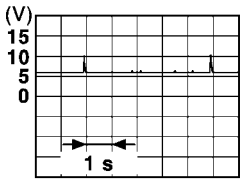
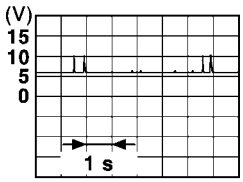
BCM		Ground	Continuity
Connector	Terminal		
M124	88		Not existed
	89		

Is the inspection result normal?

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

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M124	88, 89	Ground	When Intelligent Key is in the antenna detection area	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (luggage room).
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

B2626 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000012408644

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2626	OUTSIDE ANTENNA	An excessive high or low voltage from front door right outside key antenna is sent to BCM	• Front door right outside key antenna • Harness or connector (Front door right outside key antenna circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “BCM” using CONSULT.

Is DTC detected?

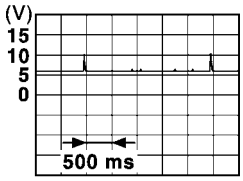
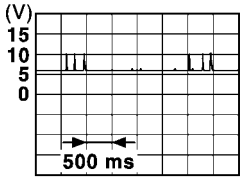
YES >> Refer to DLK-238, "Diagnosis Procedure".
NO >> Outside key antenna (passenger side) is OK.

Diagnosis Procedure

INFOID:0000000012408645

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M124	80, 81	Ground	When the passenger door request switch is operated with power switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and front door outside handle assembly RH connector.
2. Check continuity between BCM harness connector and front door outside handle assembly RH harness connector.

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BCM		Front door outside handle assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
M124	80	D31	1	Existed
	81		2	

3. Check continuity between BCM harness connector and ground.

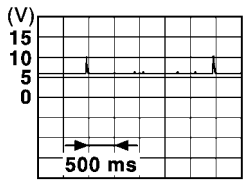
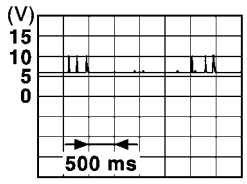
BCM		Ground	Continuity
Connector	Terminal		
M124	80		Not existed
	81		

Is the inspection result normal?

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

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna (passenger side). (New antenna or other antenna)
2. Connect BCM connector and front door outside handle assembly RH connector.
3. Turn ignition switch ON.
4. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(–)	Condition		Signal (Reference value)
Connector	Terminal				
M124	80, 81	Ground	When the passenger door request switch is operated with power switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace front door outside handle assembly RH (outside key antenna).
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

B2627 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000012408646

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2627	OUTSIDE ANTENNA	An excessive high or low voltage from front door left outside key antenna is sent to BCM	• Front door left outside key antenna • Harness or connector (Front door left outside key antenna circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “BCM” using CONSULT.

Is DTC detected?

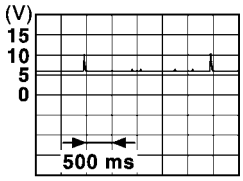
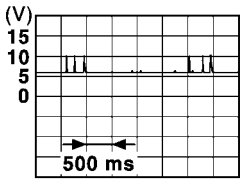
YES >> Refer to DLK-240, "Diagnosis Procedure".
NO >> Outside key antenna (driver side) is OK.

Diagnosis Procedure

INFOID:0000000012408647

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M124	78,79	Ground	When the driver door request switch is operated with power switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and front door outside handle assembly LH connector.
2. Check continuity between BCM harness connector and front door outside handle assembly LH harness connector.

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BCM		Front door outside handle assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M124	78	D32	1	Existed
	79		2	

3. Check continuity between BCM harness connector and ground.

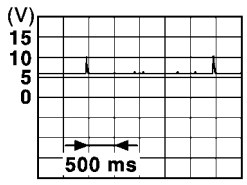
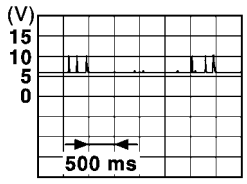
BCM		Ground	Continuity
Connector	Terminal		
M124	78		Not existed
	79		

Is the inspection result normal?

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

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna (driver side). (New antenna or other antenna)
2. Connect BCM connector and front door outside handle assembly LH connector.
3. Turn ignition switch ON.
4. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(–)	Condition		Signal (Reference value)
Connector	Terminal				
M124	78,79	Ground	When the driver door request switch is operated with power switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace front door outside handle assembly LH (outside key antenna).
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

B2628 OUTSIDE ANTENNA

DTC Logic

INFOID:0000000012408648

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B2628	OUTSIDE ANTENNA	An excessive high or low voltage from outside key antenna (rear bumper) is sent to BCM	• Outside key antenna (rear bumper) • Harness or connector (Outside key antenna (rear bumper) circuit is open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “BCM” using CONSULT.

Is DTC detected?

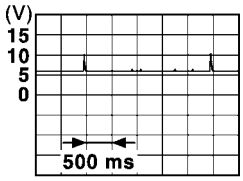
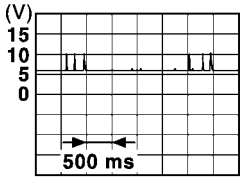
YES >> Refer to DLK-236, "Diagnosis Procedure".
NO >> Outside key antenna (rear bumper) is OK.

Diagnosis Procedure

INFOID:0000000012408649

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M124	82, 83	Ground	When the back door request switch is operated with power switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (rear bumper) connector.
2. Check continuity between BCM harness connector and outside key antenna (rear bumper) harness connector.

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BCM		Outside key antenna (rear bumper)		Continuity
Connector	Terminal	Connector	Terminal	
M124	82	B303	1	Existed
	83		2	

3. Check continuity between BCM harness connector and ground.

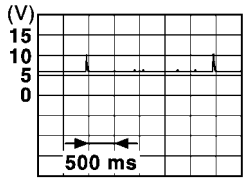
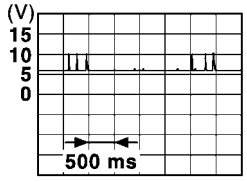
BCM		Ground	Continuity
Connector	Terminal		
M124	82		Not existed
	83		

Is the inspection result normal?

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

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna (rear bumper). (New antenna or other antenna)
2. Connect BCM and outside key antenna (rear bumper) connector.
3. Turn ignition switch ON.
4. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM		(–)	Condition		Signal (Reference value)
Connector	Terminal				
M124	82, 83	Ground	When the back door request switch is operated with power switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper).
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

POWER SUPPLY AND GROUND CIRCUIT
AUTOMATIC BACK DOOR CONTROL MODULE

AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure

INFOID:0000000012408650

1.CHECK FUSE, FUSIBLE LINK AND CIRCUIT BREAKER

Check that the following fuse and fusible link are not blown (open).

Fuse and fusible link No.	Signal name
J (40A)	Battery power supply
9 (10A)	
3 (10A)	Ignition power supply

Is the fuse or fusible link blown (open)?

YES >> Replace the blown (open) fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown (open).
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Condition		Voltage
Automatic back door control module					
Connector	Terminal				
B8	1	Ground	Ignition switch	OFF	9 - 16 V
	7			ON	
	9			OFF	

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	11		Existed

Does continuity exist?

YES >> INSPECTION END
NO >> Repair or replace harness.

BACK DOOR CONTROL UNIT

BACK DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012408651

1.CHECK FUSE

Check that the following fusible link is not blown (open).

Fusible link	Signal name
J (40A)	Battery power supply

Is the fusible link blown (open)?

YES >> Replace the blown (open) fusible link after repairing the affected circuit if a fuse is blown (open).

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NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect back door control unit connector.
3. Check voltage between back door control unit harness connector and ground.

(+)		(–)	Voltage
Back door control unit			
Connector	Terminal		
D181	3	Ground	8 - 16 V

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between back door control unit harness connector and ground.

Back door control unit		Ground	Continuity
Connector	Terminal		
D181	7		Existed
	8		

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace harness.

SLIDING DOOR CONTROL UNIT

SLIDING DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012408652

1.CHECK FUSE, FUSIBLE LINK AND CIRCUIT BREAKER

1. Turn ignition switch OFF.
2. Check that the following fuse and fusible link are not blown (open).

Fuse and fusible link No.	Signal name
3 (10 A)	Ignition power supply
9 (10 A)	Battery power supply
J(40 A)	

Is the fuse or fusible link blown (open)?

YES >> Replace the blown (open) fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown (open).
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect sliding door control unit connector.
2. Check voltage between sliding door control unit harness connector and ground.

Sliding door LH

(+)		(–)	Condition		Voltage
Sliding door control unit LH					
Connector	Terminal				
B45	6	Ground	Ignition switch	ON	9 – 16 V
	12			OFF	8 – 16 V
B46	36				9 – 16 V
	42				

Sliding door RH

(+)		(–)	Condition		Voltage
Sliding door control unit RH					
Connector	Terminal				
B247	6	Ground	Ignition switch	ON	9 – 16 V
	12			OFF	8 – 16 V
B248	36				9 – 16 V
	42				

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between sliding door control unit harness connector and ground.

Sliding door LH

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	27		Existed
B46	33		
	37		

Sliding door RH

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	27		Existed
B248	33		
	37		

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace harness.

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DOOR SWITCH

Component Function Check

INFOID:0000000012408653

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR SW-DR”, “DOOR SW-AS”, “DOOR SW-RL”, “DOOR SW-RR”, in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DOOR SW-DR	Driver side door	Open	On
		Closed	Off
DOOR SW-AS	Passenger side door	Open	On
		Closed	Off
DOOR SW-RL	Sliding door LH	Open	On
		Closed	Off
DOOR SW-RR	Sliding door RH	Open	On
		Closed	Off

Is the inspection result normal?

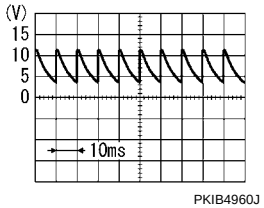
YES >> Door switch is OK.
NO >> Refer to DLK-247, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408654

1.CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

(+)			(–)	Signal (Reference value)
Door switch				
Connector		Terminal		
Driver side	B35	3	Ground	 PKIB4960J 7.0 - 8.0 V
Passenger side	B235			
Sliding door LH	B71			
Sliding door RH	B221			

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between door switch harness connector and BCM harness connector.

Door switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
Driver side	B35	3	M122	47	Existed
Passenger side	B235			45	
Sliding LH	B71			48	
Sliding RH	B221			46	

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

Door switch			Ground	Continuity
Connector		Terminal		
Driver side	B35	3		Not existed
Passenger side	B235			
Sliding LH	B71			
Sliding RH	B221			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR SWITCH

Refer to DLK-248, "Component Inspection".

Is the inspection result normal?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408655

1.CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check continuity between door switch terminals.

Door switch		Condition		Continuity
Terminal				
3	Ground part of door switch	Door switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

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

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BACK DOOR SWITCH

Component Function Check

INFOID:0000000012408656

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR SW-BK” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DOOR SW-BK	Back door	Open	On
		Closed	Off

Is the inspection result normal?

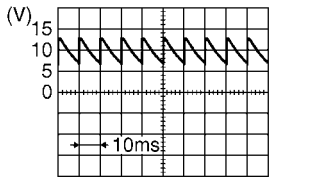
YES >> Back door switch is OK.
NO >> Refer to DLK-249, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408657

1.CHECK BACK DOOR SWITCH INPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
Back door lock assembly			
Connector	Terminal		
D190	7	Ground	 JPMIA0593GB 9.0 - 10.0 V

Is the inspection result normal?

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

2.CHECK BACK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between back door lock assembly harness connector and BCM harness connector.

Back door lock assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
D190	7	M122	43	Existed

3. Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	7		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Repair or replace harness.

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3.CHECK BACK DOOR SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	8		Existed

Is the inspection result normal?

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

4.CHECK BACK DOOR SWITCH

Refer to DLK-250, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408658

1.CHECK BACK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
7	8	Back door lock	Lock	Existed
			Unlock	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

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DOOR LOCK AND UNLOCK SWITCH

WITH AUTOMATIC SLIDING DOOR

WITH AUTOMATIC SLIDING DOOR : Component Function Check

INFOID:0000000012408659

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “CDL LOCK SW”, “CDL UNLOCK SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
CDL LOCK SW	Door lock and unlock switch	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-251, "WITH AUTOMATIC SLIDING DOOR : Diagnosis Procedure".

WITH AUTOMATIC SLIDING DOOR : Diagnosis Procedure

INFOID:0000000012408660

1.CHECK POWER WINDOW OPERATION

1. Turn ignition switch ON.
2. Check power window operation.

Does power window operate?

YES >> Replace the malfunctioning power window switch.
NO >> Refer to PWC-54, "POWER WINDOW MAIN SWITCH : Diagnosis Procedure" (power window main switch), PWC-55, "FRONT POWER WINDOW SWITCH (PASSENGER SIDE) : Diagnosis Procedure" [front power window switch (passenger side)].

WITHOUT AUTOMATIC SLIDING DOOR

WITHOUT AUTOMATIC SLIDING DOOR : Component Function Check

INFOID:0000000012408661

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “CDL LOCK SW”, “CDL UNLOCK SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
CDL LOCK SW	Door lock and unlock switch	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-251, "WITHOUT AUTOMATIC SLIDING DOOR : Diagnosis Procedure".

WITHOUT AUTOMATIC SLIDING DOOR : Diagnosis Procedure

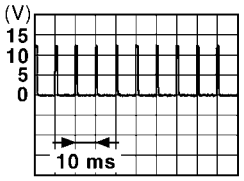
INFOID:0000000012408662

POWER WINDOW MAIN SWITCH

1.CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect power window main switch connector.
3. Check signal between power window main switch harness connector and ground using oscilloscope.

(+)		(–)	Signal (Reference value)
Power window main switch			
Connector	Terminal		
D6	18	Ground	 JPMIA0012GB 1.0 - 1.5 V
D5	6		

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

1. Disconnect BCM connector and power window main switch connector.
2. Check continuity between BCM harness connector and power window main switch harness connector.

BCM		Power window main switch		Continuity
Connector	Terminal	Connector	Terminal	
M121	12	D6	18	Existed
	13	D5	6	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	12		Not existed
	13		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D6	17		Existed

Is the inspection result normal?

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

4.CHECK DOOR LOCK AND UNLOCK SWITCH

Refer to DLK-254, "WITHOUT AUTOMATIC SLIDING DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace power window main switch. Refer to PWC-126, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

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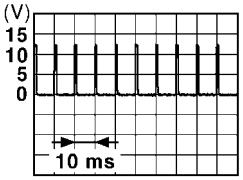
Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

1.CHECK DOOR LOCK AND UNLOCK SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front power window switch (passenger side) connector.
3. Check signal between front power window switch (passenger side) harness connector and ground using oscilloscope.

(+)		(–)	Signal (Reference value)
front power window switch (passenger side)			
Connector	Terminal		
D56	1	Ground	 JPMIA0012GB 1.0 - 1.5 V
	2		

Is the inspection result normal?

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

2.CHECK DOOR LOCK AND UNLOCK SWITCH CIRCUIT

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

BCM		front power window switch (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M121	12	D56	1	Existed
	13		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	12		Not existed
	13		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR LOCK AND UNLOCK SWITCH GROUND

Check continuity between front power window switch (passenger side) harness connector and ground.

front power window switch (passenger side)		Ground	Continuity
Connector	Terminal		
D56	3		Existed

Is the inspection result normal?

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

4.CHECK DOOR LOCK AND UNLOCK SWITCH

Refer to DLK-254, "WITHOUT AUTOMATIC SLIDING DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front power window switch (passenger side). Refer to PWC-126, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

WITHOUT AUTOMATIC SLIDING DOOR : Component Inspection

INFOID:0000000012408663

POWER WINDOW MAIN SWITCH

1.CHECK DOOR LOCK AND UNLOCK SWITCH

1. Turn ignition switch OFF.
2. Disconnect power window main switch connector.
3. Check continuity between power window main switch terminals.

Power window main switch		Condition		Continuity
Terminal				
18	17	Door lock and unlock switch	LOCK	Existed
			UNLOCK	Not existed
6			LOCK	Not existed
			UNLOCK	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power window main switch.

FRONT POWER WINDOW SWITCH (PASSENGER SIDE)

1.CHECK DOOR LOCK AND UNLOCK SWITCH

1. Turn ignition switch OFF.
2. Disconnect front power window switch (passenger side) connector.
3. Check continuity between front power window switch (passenger side) terminals.

Front power window switch (passenger side)		Condition		Continuity
Terminal				
1	3	Door lock and unlock switch	LOCK	Existed
			UNLOCK	Not existed
2			LOCK	Not existed
			UNLOCK	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace front power window switch (passenger side).

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DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000012408664

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Touch “ALL LOCK” or “ALL UNLK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-255, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012408665

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage
Front door lock assembly (driver side)					
Connector	Terminal				
D48	1	Ground	Door lock and unlock switch	Lock	9 - 16 V
	2			Unlock	

Is the inspection result normal?

YES >> Replace front door lock assembly (driver side).
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators connector.
2. Check continuity between BCM harness connector and front door lock assembly (driver side) harness connector.

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M123	65	D48	1	Existed
	66		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	65		Not existed
	66		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Condition		Voltage
BCM					
Connector	Terminal				
M123	65	Ground	Door lock and unlock switch	Lock	9 - 16 V
	66			Unlock	

Is the inspection result normal?

YES >> Check for internal short of door lock actuator.
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000012408666

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Touch “ALL LOCK” or “ALL UNLK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-256, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012408667

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage
Front door lock assembly (passenger side)					
Connector	Terminal				
D9	5	Ground	Door lock and unlock switch	Lock	9 - 16 V
	6			Unlock	

Is the inspection result normal?

YES >> Replace front door lock assembly (passenger side).
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators connector.
2. Check continuity between BCM harness connector and front door lock assembly (passenger side) harness connector.

BCM		Front door lock assembly (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M123	65	D9	5	Existed
	59		6	

3. Check continuity between BCM harness connector and ground.

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BCM		Ground	Continuity
Connector	Terminal		
M123	65		Not existed
	59		

Is the inspection result normal?

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

3. CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Condition		Voltage
BCM					
Connector	Terminal				
M123	65	Ground	Door lock and unlock switch	Lock	9 - 16 V
	59			Unlock	

Is the inspection result normal?

YES >> Check for internal short of door lock actuator.
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

SLIDING DOOR LOCK ACTUATOR WITH AUTOMATIC SLIDING DOOR

WITH AUTOMATIC SLIDING DOOR : Component Function Check

INFOID:0000000012408668

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Touch “ALL LOCK” or “ALL UNLK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-261, "WITHOUT AUTOMATIC SLIDING DOOR : Diagnosis Procedure".

WITH AUTOMATIC SLIDING DOOR : Diagnosis Procedure

INFOID:0000000012408669

Sliding door lock assembly LH

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly LH connector.
3. Check voltage between sliding door lock assembly LH harness connector and ground.

(+)		(–)	Condition		Voltage
Sliding door lock assembly LH					
Connector	Terminal				
D85	2	Ground	Door lock and unlock switch	Lock	9 - 16 V
	1			Unlock	

Is the inspection result normal?

YES >> Replace sliding door lock assembly.
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT 1

1. Disconnect BCM, all door lock actuators connector.
2. Check continuity between BCM harness connector and sliding door lock assembly LH harness connector.

BCM		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M123	65	D85	2	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	65		Not existed

Is the inspection result normal?

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

3.CHECK DOOR LOCK ACTUATOR CIRCUIT 2

1. Disconnect selective unlock relay connector.
2. Check continuity between selective unlock relay harness connector and sliding door lock assembly LH harness connector.

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Selective unlock relay		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M91	3	D85	1	Existed

3. Check continuity between BCM harness connector and ground.

Selective unlock relay		Ground	Continuity
Connector	Terminal		
M91	3		Not existed

Is the inspection result normal?

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

4. CHECK SELECTIVE UNLOCK RELAY GROUND CIRCUIT

1. Disconnect selective unlock relay connector.
2. Check continuity between selective unlock relay harness connector and ground.

Selective unlock relay		Ground	Continuity
Connector	Terminal		
M91	4		Existed

Is the inspection result normal?

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

5. CHECK SELECTIVE UNLOCK RELAY

Check selective unlock relay.
Refer to DLK-264, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace selective unlock relay.

6. CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Condition		Voltage
BCM					
Connector	Terminal				
M123	65	Ground	Door lock and unlock switch	Lock	9 - 16 V
M122	50			Unlock	0 V
				Other than above	9 - 16 V

Is the inspection result normal?

YES >> Check for internal short of door lock actuator.
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

Sliding door lock assembly RH

1. CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly RH connector.
3. Check voltage between sliding door lock assembly RH harness connector and ground.

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(+)		(–)	Condition		Voltage
Sliding door lock assembly RH					
Connector	Terminal				
D105	2	Ground	Door lock and unlock switch	Lock	9 - 16 V
	1			Unlock	

Is the inspection result normal?

YES >> Replace sliding door lock assembly.
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators connector.
2. Check continuity between BCM harness connector and sliding door lock assembly RH harness connector.

BCM		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
M123	65	D105	2	Existed
M122	55		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	65		Not existed
M122	55		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Condition		Voltage
BCM					
Connector	Terminal				
M123	65	Ground	Door lock and unlock switch	Lock	9 - 16 V
M122	55			Unlock	

Is the inspection result normal?

YES >> Check for internal short of door lock actuator.
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

WITH AUTOMATIC SLIDING DOOR : Component Inspection

INFOID:0000000012408670

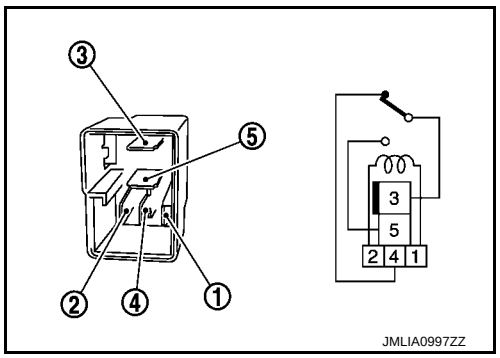
1.CHECK SELECTIVE UNLOCK RELAY

1. Turn ignition switch OFF.
2. Remove selective unlock relay.

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3. Check the continuity between selective unlock relay terminals under the following conditions.

Terminal		Condition	Continuity
4	3	No current supply	Existed
		12 V direct current supply between terminals 1 and 2.	Not existed
5		12 V direct current supply between terminals 1 and 2.	Existed
		No current supply	Not existed



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Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace selective unlock relay.

WITHOUT AUTOMATIC SLIDING DOOR

WITHOUT AUTOMATIC SLIDING DOOR : Component Function Check

INFOID:0000000012408671

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Touch “ALL LOCK” or “ALL UNLK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-261, "WITHOUT AUTOMATIC SLIDING DOOR : Diagnosis Procedure".

WITHOUT AUTOMATIC SLIDING DOOR : Diagnosis Procedure

INFOID:0000000012408672

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly LH connector and sliding door lock assembly RH connector.
3. Check voltage between sliding door lock assembly LH/RH harness connector and ground.

(+)			(–)	Condition		Voltage
Sliding door lock assembly						
Connector		Terminal				
LH	D85	2	Ground	Door lock and unlock switch	Lock	9 - 16 V
		1			Unlock	
RH	D105	2			Lock	
		1			Unlock	

Is the inspection result normal?

YES >> Replace sliding door lock assembly.
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuators connector.
2. Check continuity between BCM harness connector and sliding door lock assembly LH/RH harness connector.

BCM			Sliding door lock assembly		Continuity
Connector		Terminal	Connector	Terminal	
LH	M123	65	D85	2	Existed
	M122	55		1	
RH	M123	65	D105	2	
	M122	55		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	65		Not existed
M122	55		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Condition		Voltage
BCM					
Connector	Terminal				
M123	65	Ground	Door lock and unlock switch	Lock	9 - 16 V
M122	55			Unlock	

Is the inspection result normal?

YES >> Check for internal short of each door lock actuator and fuel lid lock actuator.
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

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SELECT UNLOCK RELAY

Component Function Check

INFOID:0000000012408673

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK” in “ACTIVE TEST” mode.
3. Touch “ALL UNLK” to check that it works normally of sliding door LH.

Is the inspection result normal?

YES >> Selective unlock relay is OK.
NO >> Refer to DLK-263, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408674

1.CHECK SELECTIVE UNLOCK RELAY POWER SUPPLY 1

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

(+)		(–)	Voltage (V)
BCM			
Connector	Terminal		
M122	50	Ground	9 - 16 V

Is the inspection result normal?

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

2.CHECK SELECTIVE UNLOCK RELAY POWER SUPPLY 2

1. Disconnect selective unlock relay connector.
2. Check voltage between selective unlock relay and ground.

(+)		(–)	Voltage (V)
Selective unlock relay			
Connector	Terminal		
M91	1	Ground	9 - 16 V
	5		

Is the inspection result normal?

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

3.DETECT MALFUNCTIONING PART

Check the following.
- 10 A fuse (#6)
- Harness for open or short between selective unlock relay harness connector and battery terminal.

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

4.CHECK SELECTIVE UNLOCK RELAY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between selective unlock relay harness connector and BCM harness connector.

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Selective unlock relay		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M91	2	M122	50	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	50		Not existed

Is the inspection result normal?

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

5.CHECK SELECTIVE UNLOCK RELAY

Check selective unlock relay.
Refer to DLK-264, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace selective unlock relay.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident"

>> INSPECTION END

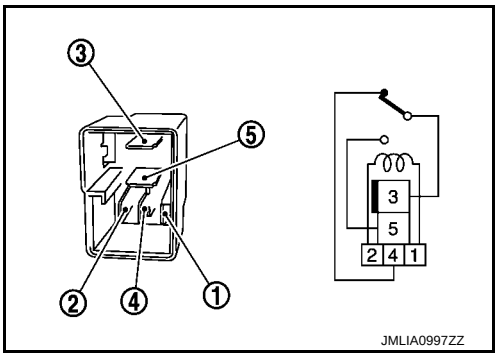
Component Inspection

INFOID:0000000012408675

1.CHECK SELECTIVE UNLOCK RELAY

1. Turn ignition switch OFF.
2. Remove selective unlock relay.
3. Check the continuity between selective unlock relay terminals under the following conditions.

Terminal		Condition	Continuity
4	3	No current supply	Existed
		12 V direct current supply between terminals 1 and 2.	Not existed
5		12 V direct current supply between terminals 1 and 2.	Existed
		No current supply	Not existed



Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace selective unlock relay.

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UNLOCK SENSOR

Component Function Check

INFOID:0000000012408676

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “UNLK SEN-DR” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
UNLK SEN -DR	Driver side door	Lock	OFF
		Unlock	ON

Is the inspection result normal?

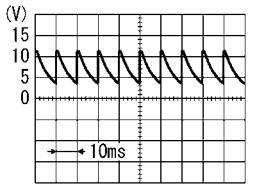
YES >> Unlock sensor is OK.
NO >> Refer to DLK-265, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408677

1.CHECK UNLOCK SENSOR INPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
Front door lock assembly (driver side)			
Connector	Terminal		
D48	3	Ground	 PKIB4960J 7.0 - 8.0 V

Is the inspection result normal?

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

2.CHECK UNLOCK SENSOR CIRCUIT

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

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M121	31	D48	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	31		Not existed

Is the inspection result normal?

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YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

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

Front door lock assembly (driver side)		Ground	Continuity
Connector	Terminal		
D48	4		Existed

Is the inspection result normal?

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

4.CHECK UNLOCK SENSOR

Refer to DLK-266, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front door lock assembly (driver side).

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408678

1.CHECK UNLOCK SENSOR

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (driver side) connector.
3. Check continuity between front door lock assembly (driver side) terminals.

Front door lock assembly (driver side)		Condition		Continuity
Terminal				
3	4	Driver side door	Unlock	Existed
			Lock	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace front door lock assembly (driver side).

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DOOR KEY CYLINDER SWITCH WITH AUTOMATIC SLIDING DOOR

WITH AUTOMATIC SLIDING DOOR : Component Function Check

INFOID:0000000012408679

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “KEY CYL LK-SW”, “KEY CYL UN-SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
KEY CYL LK-SW	Driver side door key cylinder	Lock	ON
		Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

Is the inspection result normal?

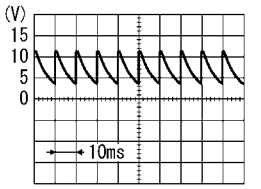
YES >> Door key cylinder switch is OK.
NO >> Refer to DLK-267, "WITH AUTOMATIC SLIDING DOOR : Diagnosis Procedure".

WITH AUTOMATIC SLIDING DOOR : Diagnosis Procedure

INFOID:0000000012408680

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
Front door lock assembly (driver side)			
Connector	Terminal		
D48	5	Ground	 PKIB4960J 7.0 - 8.0 V
	6		

Is the inspection result normal?

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

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

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

Power window main switch		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
D5	4	D48	6	Existed
	6		5	

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

Power window main switch		Ground	Continuity
Connector	Terminal		
D5	4		Not existed
	6		

Is the inspection result normal?

YES >> Replace power window main switch. Refer to PWC-70, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

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

Front door lock assembly (driver side)		Ground	Continuity
Connector	Terminal		
D48	4		Existed

Is the inspection result normal?

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

4.CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-268, "WITH AUTOMATIC SLIDING DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front door lock assembly (driver side).

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

WITH AUTOMATIC SLIDING DOOR : Component Inspection

INFOID:0000000012408681

1.CHECK DOOR KEY CYLINDER SWITCH

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (driver side) connector.
3. Check continuity between front door lock assembly (driver side) terminals.

Front door lock assembly (driver side)		Condition		Continuity
Terminal				
5	4	Driver side door key cylinder	Unlock	Existed
			Neutral / Lock	Not existed
6			Lock	Existed
			Neutral / Unlock	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace front door lock assembly (driver side).

WITHOUT AUTOMATIC SLIDING DOOR

WITHOUT AUTOMATIC SLIDING DOOR : Component Function Check

INFOID:0000000012408682

1.CHECK FUNCTION

1. Select “DOOR LOCK” of “BCM” using CONSULT.

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2. Select “KEY CYL LK-SW”, “KEY CYL UN-SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
KEY CYL LK-SW	Driver side door key cylinder	Lock	ON
		Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

Is the inspection result normal?

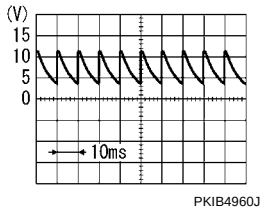
YES >> Door key cylinder switch is OK.
NO >> Refer to DLK-269, "WITHOUT AUTOMATIC SLIDING DOOR : Diagnosis Procedure".

WITHOUT AUTOMATIC SLIDING DOOR : Diagnosis Procedure

INFOID:0000000012408683

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
Front door lock assembly (driver side)			
Connector	Terminal		
D48	5	Ground	 PKIB4960J 7.0 - 8.0 V
	6		

Is the inspection result normal?

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

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

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

BCM		Front door lock assembly (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M121	8	D48	6	Existed
	7		5	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	8		Not existed
	7		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

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

Front door lock assembly (driver side)		Ground	Continuity
Connector	Terminal		
D48	4		Existed

Is the inspection result normal?

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

4.CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-270, "WITHOUT AUTOMATIC SLIDING DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front door lock assembly (driver side).

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

WITHOUT AUTOMATIC SLIDING DOOR : Component Inspection

INFOID:0000000012408684

1.CHECK DOOR KEY CYLINDER SWITCH

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly (driver side) connector.
3. Check continuity between front door lock assembly (driver side) terminals.

Front door lock assembly (driver side)		Condition		Continuity
Terminal				
5	4	Driver side door key cylinder	Unlock	Existed
			Neutral / Lock	Not existed
6			Lock	Existed
			Neutral / Unlock	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace front door lock assembly (driver side).

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REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

INFOID:0000000012408685

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “RKE OPE COUN1” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-271, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408686

1.CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect remote keyless entry receiver connector.
3. Check voltage between remote keyless entry receiver harness connector and ground.

(+)		(–)	Voltage
Remote keyless entry receiver			
Connector	Terminal		
R108	1	Ground	9 - 16 V

Is the inspection result normal?

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

2.DETECT MALFUNCTIONING PART

Check the following.
- 10 A fuse (#10)
- Harness for open or short between selective unlock relay harness connector and battery terminal.

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

3.CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT 1

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M121	18	R108	4	Existed

3. Check continuity between BCM harness connector and ground.

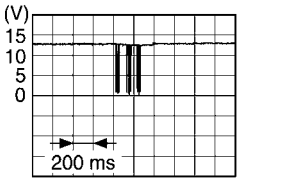
BCM		Ground	Continuity
Connector	Terminal		
M121	18		Not existed

Is the inspection result normal?

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

4. CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

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

(+)		(–)	Condition	Signal (Reference value)
Remote keyless entry receiver				
Connector	Terminal			
R108	2	Ground	Waiting	(Approx.) 12 V
			Press the Intelligent Key lock or unlock button	 JMMIA0572GB

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace remote keyless entry receiver.

5. CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT

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

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M121	38	R108	2	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	38		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Repair or replace harness.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000012408687

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “REQ SW-DR”, “REQ SW-AS” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REQ SW -DR	Driver side door request switch	Pressed	ON
		Released	OFF
REQ SW -AS	Passenger side door request switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Front door request switch is OK.
NO >> Refer to DLK-273, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408688

1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning front door outside assembly connector.
3. Check voltage between malfunctioning front door outside handle assembly harness connector and ground.

(+)			(–)	Voltage
Front door outside handle assembly				
Connector		Terminal		
LH	D32	3	Ground	9 - 16 V
RH	D31			

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between malfunctioning front door outside handle assembly harness connector and BCM harness connector.

Front door outside handle assembly			BCM		Continuity
Connector		Terminal	Connector	Terminal	
LH	D32	3	M124	75	Existed
RH	D31			100	

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

Front door outside handle assembly			Ground	Continuity
Connector		Terminal		
LH	D32	3		Not existed
RH	D31			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

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

Front door outside handle assembly			Ground	Continuity
Connector		Terminal		
LH	D32	4		Existed
RH	D31			

Is the inspection result normal?

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

4.CHECK DOOR REQUEST SWITCH

Refer to DLK-274, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace malfunctioning front door outside handle assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408689

1.CHECK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.
2. Disconnect malfunctioning front door request switch connector.
3. Check continuity between malfunctioning front door request switch terminals.

Front door request switch		Condition		Continuity
Terminal				
3	4	Door request switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

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

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BACK DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000012408690

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “REQ SW-BD/TR” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REQ SW-BD/TR	Back door request switch	Pressed	On
		Released	Off

Is the inspection result normal?

YES >> Back door request switch is OK.
NO >> Refer to DLK-275, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408691

1.CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door opener switch assembly connector.
3. Check voltage between back door opener switch assembly harness connector and ground.

(+)		(–)	Voltage
Back door opener switch assembly			
Connector	Terminal		
D186	4	Ground	9 - 16 V

Is the inspection result normal?

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

2.CHECK BACK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and back door opener switch assembly harness connector.

BCM		Back door opener switch assembly		Continuity
Connector	Terminal	Connector	Terminal	
M122	51	D186	4	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	51		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between back door opener switch assembly harness connector and ground.

Back door opener switch assembly		Ground	Continuity
Connector	Terminal		
D186	3		Existed

Is the inspection result normal?

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

4.CHECK BACK DOOR REQUEST SWITCH

Refer to DLK-276, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408692

1.CHECK BACK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door opener switch assembly connector.
3. Check continuity between back door opener switch assembly terminals.

Back door opener switch assembly		Condition		Continuity
Terminal				
3	4	Back door request switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

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

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BACK DOOR OPENER SWITCH

Component Function Check

INFOID:0000000012408693

1.CHECK FUNCTION

1. Select “TRUNK” of “BCM” using CONSULT.
2. Select “TR/BD OPEN SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TR/BD OPEN SW	Back door opener switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

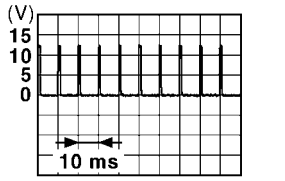
YES >> Back door opener switch is OK.
NO >> Refer to DLK-277, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408694

1.CHECK BACK DOOR OPEN INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door opener switch assembly connector.
3. Check signal between back door opener switch assembly harness connector and ground.

(+)		(–)	Signal (Reference value)
Back door opener switch assembly			
Connector	Terminal		
D186	1	Ground	 JPMIA0012GB 1.0 - 1.5 V

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and back door opener switch assembly harness connector.

BCM		Back door opener switch assembly		Continuity
Connector	Terminal	Connector	Terminal	
M121	30	D186	1	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	30		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

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NO >> Repair or replace harness.

3.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch assembly harness connector and ground.

Back door opener switch assembly		Ground	Continuity
Connector	Terminal		
D186	2		Existed

Is the inspection result normal?

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

4.CHECK BACK DOOR OPENER SWITCH

Refer to DLK-278, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408695

1.CHECK BACK DOOR OPENER SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door opener switch assembly connector.
3. Check continuity between back door opener switch assembly terminals.

Back door opener switch assembly		Condition		Continuity
Terminal				
1	2	Back door opener switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

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

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INTELLIGENT KEY WARNING BUZZER

Component Function Check

INFOID:0000000012408696

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “OUTSIDE BUZZER” in “ACTIVE TEST” mode.
3. Touch “On” or “Off” to check that it works normally.

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.
NO >> Refer to DLK-279, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408697

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 15 A fuse, [No. 6, located in fuse block (J/B)].

Is the inspection result normal?

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

2.CHECK INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT

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

(+)		(–)	Voltage
Intelligent Key warning buzzer			
Connector	Terminal		
E26	1	Ground	9 - 16 V

Is the inspection result normal?

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

3.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

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

BCM		Intelligent Key warning buzzer		Continuity
Connector	Terminal	Connector	Terminal	
M124	93	E26	3	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M124	93		Not existed

Is the inspection result normal?

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

4.CHECK INTELLIGENT KEY WARNING BUZZER

Refer to DLK-280, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".
NO >> Replace Intelligent Key warning buzzer.

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Component Inspection

INFOID:0000000012408698

1. CHECK INTELLIGENT KEY WARNING BUZZER

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key warning buzzer connector.
3. Connect battery power supply directly to Intelligent Key warning buzzer terminals and check the operation.

Intelligent Key warning buzzer		Operation
Terminal		
(+)	(–)	
1	3	Buzzer sounds

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace Intelligent Key warning buzzer.

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INTELLIGENT KEY

Component Function Check

INFOID:0000000012408699

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “RKE OPE COUN1” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

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

Is the inspection result normal?

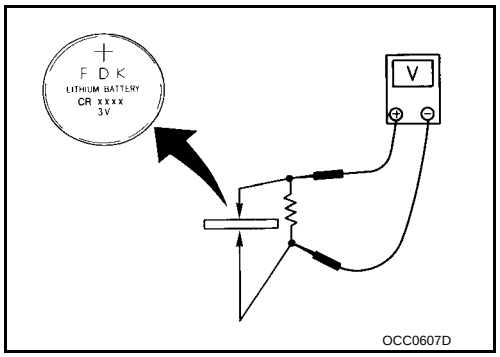
YES >> Intelligent Key is OK.
NO >> Refer to DLK-281, "Component Inspection".

Component Inspection

INFOID:0000000012408700

1.CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to DLK-492, "Removal and Installation".



Standard : Approx. 2.5 - 3.0V

Is the measurement value within the specification?

YES >> INSPECTION END
NO >> Replace Intelligent Key battery.

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COMBINATION METER BUZZER

Component Function Check

INFOID:0000000012408701

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “INSIDE BUZZER” in “ACTIVE TEST” mode.
3. Touch “Key”, “Knob” or “Take Out” to check that it works normally.

Is the inspection result normal?

Yes >> Combination meter buzzer is OK.
No >> Refer to DLK-282, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408702

1.CHECK COMBINATION METER BUZZER CIRCUIT

Refer to WCS-43, "Component Function Check".

Is the inspection result normal?

Yes >> GO TO 2.
No >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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INFORMATION DISPLAY

Component Function Check

INFOID:0000000012408703

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “LCD” in “ACTIVE TEST” mode.
3. Check each warning display on meter display.

Is the inspection result normal?

YES >> Information display is OK.
NO >> Refer to DLK-283, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408704

1.CHECK COMBINATION METER

Refer to MWI-35, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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KEY WARNING LAMP

Component Function Check

INFOID:0000000012408705

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “INDICATOR” in “ACTIVE TEST” mode.
3. Touch “KEY IND” or “KEY ON” to check that it works normally.

Is the inspection result normal?

YES >> Key warning lamp is OK.
NO >> Refer to DLK-284, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408706

1.CHECK KEY WARNING LAMP

Refer to MWI-35, "On Board Diagnosis Function".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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HAZARD FUNCTION

Component Function Check

INFOID:0000000012408707

1.CHECK FUNCTION

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “FLASHER” in “ACTIVE TEST” mode.
3. Touch “LH” or “RH” to check that it works normally.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-285, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408708

1.CHECK HAZARD SWITCH CIRCUIT

Refer to EXL-78, "Component Function Check" (xenon type), EXL-177, "Component Function Check" (halogen type) .

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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BACK DOOR OPEN REQUEST SIGNAL CIRCUIT

Diagnosis Procedure

INFOID:0000000012408709

1.CHECK BACK DOOR CONTROL UNIT INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door control unit connector.
3. Check voltage between back door control unit harness connector and ground.

(+)		(–)	Condition		Voltage
Back door control unit					
Connector	Terminal				
D181	6	Ground	Back door opener switch	Pressed	0 - 1.5 V
				Released	8 - 16 V

Is the inspection result normal?

YES >> Replace back door control unit. Refer to DLK-493, "Removal and Installation".
NO >> GO TO 2.

2.CHECK BACK DOOR CONTROL UNIT CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between back door control unit harness connector and BCM harness connector.

Back door control unit		BCM		Continuity
Connector	Terminal	Connector	Terminal	
D181	6	M122	53	Existed

3. Check continuity between BCM harness connector and ground.

Back door control unit		Ground	Continuity
Connector	Terminal		
D181	6		Not existed

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Condition		Voltage
BCM					
Connector	Terminal				
M122	53	Ground	Back door opener switch	Pressed	0 V
				Released	9 - 16 V

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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AUTOMATIC BACK DOOR CLOSE SWITCH

Component Function Check

INFOID:0000000012408710

1.CHECK FUNCTION

1. Select “AUTO BACK DOOR” using CONSULT.
2. Select “BK DOOR CL SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
BK DOOR CL SW	Automatic back door close switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Automatic back door close switch is OK.
NO >> Refer to DLK-287, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408711

1.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic back door close switch connector.
3. Check voltage between automatic back door close switch harness connector and ground.

(+)		(–)	Voltage
Automatic back door close switch			
Connector	Terminal		
D169	1	Ground	9 - 16 V

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door close switch harness connector.

Automatic back door control module		Automatic back door close switch		Continuity
Connector	Terminal	Connector	Terminal	
B8	4	D169	1	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	4		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH GROUND CIRCUIT

Check continuity between automatic back door close switch harness connector and ground.

Automatic back door close switch		Ground	Continuity
Connector	Terminal		
D169	2		Existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Refer to DLK-288, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door close switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408712

1.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door close switch connector.
3. Check continuity between automatic back door close switch terminals.

Automatic back door close switch		Condition		Continuity
Terminal				
1	2	Automatic back door close switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic back door close switch.

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AUTOMATIC DOOR MAIN SWITCH

AUTOMATIC BACK DOOR CONTROL MODULE

AUTOMATIC BACK DOOR CONTROL MODULE : Component Function Check

INFOID:0000000012408713

1.CHECK FUNCTION

1. Select “AUTO BACK DOOR” using CONSULT.
2. Select “MAIN SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
MAIN SW	Automatic door main switch	ON	ON
		OFF	OFF

Is the inspection result normal?

YES >> Automatic door main switch is OK.
NO >> Refer to DLK-289, "AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure".

AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure

INFOID:0000000012408714

1.CHECK AUTOMATIC DOOR MAIN SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage
Automatic door main switch			
Connector	Terminal		
M29	1	Ground	9 - 16 V

Is the inspection result normal?

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

2.CHECK AUTOMATIC DOOR MAIN SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic door main switch harness connector.

Automatic back door control module		Automatic door main switch		Continuity
Connector	Terminal	Connector	Terminal	
B8	17	M29	1	Existed

3. Check continuity between automatic back door control module connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	17		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK AUTOMATIC DOOR MAIN SWITCH GROUND CIRCUIT

Check continuity between automatic door main switch connector and ground.

Automatic door main switch		Ground	Continuity
Connector	Terminal		
M29	3		Existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC DOOR MAIN SWITCH

Refer to DLK-290, "AUTOMATIC BACK DOOR CONTROL MODULE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic door main switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

AUTOMATIC BACK DOOR CONTROL MODULE : Component Inspection

INFOID:0000000012408715

1.CHECK AUTOMATIC DOOR MAIN SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic door main switch connector.
3. Check continuity between automatic door main switch terminals.

Automatic door main switch		Condition		Continuity
Terminal				
1	3	Automatic door main switch	ON	Existed
			OFF	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic door main switch.

SLIDING DOOR CONTROL UNIT

SLIDING DOOR CONTROL UNIT : Component Function Check

INFOID:0000000012408716

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” (LH) or “AUTO SLDE DOOR RIGHT” (RH) using CONSULT.
2. Select “MAIN SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
MAIN SW	Automatic door main switch	ON	ON
		OFF	OFF

Is the inspection result normal?

YES >> Automatic door main switch is OK.
NO >> Refer to DLK-290, "SLIDING DOOR CONTROL UNIT : Diagnosis Procedure".

SLIDING DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012408717

1.CHECK AUTOMATIC DOOR MAIN SWITCH POWER SUPPLY

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

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3. Check voltage between automatic door main switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic door main switch			
Connector	Terminal		
M29	1	Ground	8 – 16 V

Is the inspection result normal?

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

2. CHECK AUTOMATIC DOOR MAIN SWITCH CIRCUIT

1. Disconnect sliding door control unit connector.
2. Check continuity between sliding door control unit harness connector and automatic door main switch harness connector.

Sliding door LH

Sliding door control unit LH		Automatic door main switch		Continuity
Connector	Terminal	Connector	Terminal	
B45	1	M29	1	Existed

Sliding door RH

Sliding door control unit LH		Automatic door main switch		Continuity
Connector	Terminal	Connector	Terminal	
B247	1	M29	1	Existed

3. Check continuity between sliding door control unit connector and ground.

Sliding door LH

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	1		Not existed

Sliding door RH

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B247	1		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit.
NO >> Repair or replace harness.

3. CHECK AUTOMATIC DOOR MAIN SWITCH GROUND CIRCUIT

Check continuity between automatic door main switch connector and ground.

Automatic door main switch		Ground	Continuity
Connector	Terminal		
M29	3		Existed

Is the inspection result normal?

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

4. CHECK AUTOMATIC DOOR MAIN SWITCH

Refer to DLK-292, "SLIDING DOOR CONTROL UNIT : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic door main switch.

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5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR CONTROL UNIT : Component Inspection

INFOID:0000000012408718

1.CHECK AUTOMATIC DOOR MAIN SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic door main switch connector.
3. Check continuity between automatic door main switch terminals.

Automatic door main switch		Condition		Continuity
Terminal				
1	3	Automatic door main switch	ON	Existed
			OFF	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic door main switch.

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AUTOMATIC BACK DOOR SWITCH

Component Function Check

INFOID:0000000012408719

1.CHECK FUNCTION

1. Select “AUTO BACK DOOR” using CONSULT.
2. Select “AUTO BD SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
AUTO BD SW	Automatic back door switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

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

Diagnosis Procedure

INFOID:0000000012408720

1.CHECK AUTOMATIC BACK DOOR SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage
Automatic back door switch			
Connector	Terminal		
M83	1	Ground	9 - 16 V

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door switch harness connector.

Automatic back door control module		Automatic back door switch		Continuity
Connector	Terminal	Connector	Terminal	
B8	16	M83	1	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	16		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR SWITCH GROUND CIRCUIT

Check continuity between automatic back door switch harness connector and ground.

Automatic back door switch		Ground	Continuity
Connector	Terminal		
M83	2		Existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC BACK DOOR SWITCH

Refer to DLK-294, "Component Inspection".

Is the inspection result normal?

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

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408721

1.CHECK AUTOMATIC BACK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door switch connector.
3. Check continuity between automatic back door switch terminals.

Automatic back door switch		Condition		Continuity
Terminal				
1	2	Automatic back door switch	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

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

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OPEN SWITCH

Diagnosis Procedure

INFOID:0000000012408722

1.CHECK OPEN SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage
Back door lock assembly			
Connector	Terminal		
D190	4	Ground	8 - 16 V

Is the inspection result normal?

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

2.CHECK OPEN SWITCH CIRCUIT

1. Disconnect back door control unit connector.
2. Check continuity between back door control unit harness connector and back door lock assembly harness connector.

Back door control unit		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
D181	5	D190	4	Existed

3. Check continuity between back door control unit harness connector and ground.

Back door control unit		Ground	Continuity
Connector	Terminal		
D181	5		Not existed

Is the inspection result normal?

YES >> Replace back door control unit. Refer to DLK-493, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK OPEN SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	8		Existed

Is the inspection result normal?

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

4.CHECK OPEN SWITCH

Refer to DLK-296, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408723

1.CHECK OPEN SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
4	8	Back door	Open	Existed
			Fully closed/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

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CLOSE SWITCH

Diagnosis Procedure

INFOID:0000000012408724

1.CHECK CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage
Back door lock assembly			
Connector	Terminal		
D190	5	Ground	8 - 16

Is the inspection result normal?

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

2.CHECK CLOSE SWITCH CIRCUIT

1. Disconnect back door control unit connector.
2. Check continuity between back door control unit harness connector and back door lock assembly harness connector.

Back door control unit		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
D181	1	D190	5	Existed

3. Check continuity between back door control unit harness connector and ground.

Back door control unit		Ground	Continuity
Connector	Terminal		
D181	1		Not existed

Is the inspection result normal?

YES >> Replace back door control unit. Refer to DLK-493, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK CLOSE SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	8		Existed

Is the inspection result normal?

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

4.CHECK CLOSE SWITCH

Refer to DLK-298, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408725

1.CHECK CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
5	8	Back door	Fully closed	Existed
			Open/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

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HALF LATCH SWITCH
WITH AUTOMATIC BACK DOOR

WITH AUTOMATIC BACK DOOR : Component Function Check

INFOID:0000000012408726

1.CHECK FUNCTION

1. Select “AUTO BACK DOOR” using CONSULT.
2. Select “HALF LATCH SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
HALF LATCH SW	Back door	Fully closed/Half latch	OFF
		Open	ON

Is the inspection result normal?

YES >> Half latch switch is OK.
NO >> Refer to DLK-299, "WITH AUTOMATIC BACK DOOR : Diagnosis Procedure".

WITH AUTOMATIC BACK DOOR : Diagnosis Procedure

INFOID:0000000012408727

1.CHECK HALF LATCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage
Back door lock assembly			
Connector	Terminal		
D190	6	Ground	9 - 16 V

Is the inspection result normal?

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

2.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B8	22	D190	6	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	22		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	8		Existed

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace back door lock assembly ground circuit.

4.CHECK HALF LATCH SWITCH

Refer to DLK-300, "WITH AUTOMATIC BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

WITH AUTOMATIC BACK DOOR : Component Inspection

INFOID:0000000012408728

1.CHECK HALF LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
6	8	Back door lock	Open	Existed
			Fully closed/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

WITHOUT AUTOMATIC BACK DOOR

WITHOUT AUTOMATIC BACK DOOR : Diagnosis Procedure

INFOID:0000000012408729

1.CHECK HALF LATCH SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(–)		(–)	Voltage
Back door lock assembly			
Connector	Terminal		
D190	6	Ground	3.5 -5.5 V

Is the inspection result normal?

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

2.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect back door control unit connector.
2. Check continuity between back door control unit harness connector.

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Back door control unit		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
D181	2	D190	6	Existed

3. Check continuity between back door control unit harness connector and ground.

Back door control unit		Ground	Continuity
Connector	Terminal		
D181	2		Not existed

Is the inspection result normal?

YES >> Replace back door control unit. Refer to DLK-493, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D190	8		Existed

Is the inspection result normal?

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

4.CHECK HALF LATCH SWITCH

Refer to DLK-301, "WITHOUT AUTOMATIC BACK DOOR : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

WITHOUT AUTOMATIC BACK DOOR : Component Inspection

INFOID:0000000012408730

1.CHECK HALF LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
6	8	Back door	Open	Existed
			Fully closed/Half latch	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back door lock assembly.

SLIDING DOOR CONTROL UNIT

SLIDING DOOR CONTROL UNIT : Component Function Check

INFOID:0000000012408731

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” (LH) or “AUTO SLDE DOOR RIGHT” (RH) using CONSULT.
2. Select “HAF LATC SW L” (LH) or “HAF LATC SW R” (RH) in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
HAF LATC SW L	Sliding door LH	Open	ON
		Half latch/fully closed	OFF
HAF LATC SW R	Sliding door RH	Open	ON
		Half latch/fully closed	OFF

Is the inspection result normal?

YES >> Half latch switch is OK.
NO >> Refer to DLK-304, "SLIDING DOOR CONTROL UNIT : Component Inspection".

SLIDING DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012408732

1.CHECK HALF LATCH SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly connector.
3. Check voltage between sliding door lock assembly harness connector and ground.

Sliding door LH

(+)		(–)	Voltage
Sliding door lock assembly LH			
Connector	Terminal		
D123	3	Ground	8 – 16 V

Sliding door RH

(+)		(–)	Voltage
Sliding door lock assembly RH			
Connector	Terminal		
D124	3	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect sliding door control unit connector.
2. Check continuity between sliding door control unit harness connector and sliding door lock assembly harness connector.

Sliding door LH

Sliding door control unit LH		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	5	D123	3	Existed

Sliding door RH

Sliding door control unit RH		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	5	D124	3	Existed

3. Check continuity between sliding door control unit harness connector and ground.

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Sliding door LH

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	5		Not existed

Sliding door RH

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	5		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit.
NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit connector.
2. Check continuity between sliding door control unit harness connector and sliding door lock assembly harness connector.

Sliding door LH

Sliding door control unit LH		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	23	D123	2	Existed

Sliding door RH

Sliding door control unit RH		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	23	D124	2	Existed

3. Check continuity between sliding door control unit harness connector and ground.

Sliding door LH

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	23		Not existed

Sliding door RH

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	23		Not existed

Is the inspection result normal?

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

4.CHECK HALF LATCH SWITCH CIRCUIT 2

1. Connect sliding door control unit connector and sliding door lock assembly connector.
2. Check voltage between sliding door control unit harness connector and ground.

Sliding door LH

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	23	Ground	0 V

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Sliding door RH

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit.

5.CHECK HALF LATCH SWITCH

Refer to DLK-304, "SLIDING DOOR CONTROL UNIT : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door lock assembly

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR CONTROL UNIT : Component Inspection

INFOID:0000000012408733

1.CHECK HALF LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly connector.
3. Check continuity between sliding door lock assembly terminals.

Sliding door lock assembly		Condition		Continuity
Terminal				
3	2	Sliding door	Open	Existed
			Half latch/fully closed	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door lock assembly.

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BACK DOOR TOUCH SENSOR
LH

LH : Component Function Check

INFOID:0000000012408734

1.CHECK FUNCTION

1. Select “AUTO BACK DOOR” using CONSULT.
2. Select “TOUCH SEN LH” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TOUCH SEN LH	Back door touch sensor LH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> Back door touch sensor LH is OK.
NO >> Refer to DLK-305, "LH : Diagnosis Procedure".

LH : Diagnosis Procedure

INFOID:0000000012408735

1.CHECK BACK DOOR TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between back door touch sensor LH harness connector and automatic back door control module harness connector.

(+)		(–)		Condition		Voltage
Back door touch sensor LH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D165	1	B8	14	Back door touch sensor LH	Detect obstruction	0 – 1.5 V
					Other than above	5 – 6.7 V

Is the inspection result normal?

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

2.CHECK BACK DOOR TOUCH SENSOR LH CIRCUIT

1. Disconnect automatic back door control module connector and back door touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and back door touch sensor LH harness connector.

Automatic back door control module		Back door touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B8	15	D165	1	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	15		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR TOUCH SENSOR LH GROUND CIRCUIT

1. Disconnect automatic back door control module connector and back door touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and back door touch sensor LH harness connector.

Automatic back door control module		Back door touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B8	14	D165	2	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	14		Not existed

Is the inspection result normal?

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

4.CHECK BACK DOOR TOUCH SENSOR LH GROUND CIRCUIT 2

1. Connect automatic back door control module connector and back door touch sensor LH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage
Automatic back door control module			
Connector	Terminal		
B8	14	Ground	0 – 1.5 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".

5.CHECK BACK DOOR TOUCH SENSOR LH

Refer to DLK-306, "LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door touch sensor LH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

LH : Component Inspection

INFOID:0000000012408736

1.CHECK BACK DOOR TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect back door touch sensor LH connector.
3. Check resistance between back door touch sensor LH terminals.

Back door touch sensor LH		Condition		Resistance
Terminal				
1	2	Back door touch sensor LH	Detect obstruction	360 - 440 Ω
			Other than above	0.9 - 1.1 kΩ

Is the inspection result normal?

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YES >> INSPECTION END
NO >> Replace back door touch sensor LH.

RH

RH : Component Function Check

INFOID:0000000012408737

1.CHECK FUNCTION

1. Select “AUTO BACK DOOR” using CONSULT.
2. Select “TOUCH SEN RH” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TOUCH SEN RH	Back door touch sensor RH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> Back door touch sensor RH is OK.
NO >> Refer to DLK-307, "RH : Diagnosis Procedure".

RH : Diagnosis Procedure

INFOID:0000000012408738

1.CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between back door touch sensor RH harness connector and automatic back door control module harness connector.

(+)		(–)		Condition		Voltage
Back door touch sensor RH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D191	1	B8	14	Back door touch sensor RH	Detect obstruction	0 – 1.5 V
					Other than above	5 – 6.7 V

Is the inspection result normal?

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

2.CHECK BACK DOOR TOUCH SENSOR RH CIRCUIT

1. Disconnect automatic back door control module connector and back door touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and back door touch sensor RH harness connector.

Automatic back door control module		Back door touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B8	13	D191	1	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	13		Not existed

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

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3.CHECK BACK DOOR TOUCH SENSOR RH GROUND CIRCUIT

1. Disconnect automatic back door control module connector and back door touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and back door touch sensor RH harness connector.

Automatic back door control module		Back door touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B8	14	D191	2	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	14		Not existed

Is the inspection result normal?

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

4.CHECK BACK DOOR TOUCH SENSOR RH GROUND CIRCUIT 2

1. Connect automatic back door control module connector and back door touch sensor RH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage
Automatic back door control module			
Connector	Terminal		
B8	14	Ground	0 – 1.5 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".

5.CHECK BACK DOOR TOUCH SENSOR RH

Refer to DLK-308, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace back door touch sensor RH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

RH : Component Inspection

INFOID:0000000012408739

1.CHECK TOUCH SENSOR RH

1. Turn ignition switch OFF.
2. Disconnect back door touch sensor RH connector.
3. Check resistance between back door touch sensor RH terminals.

Back door touch sensor RH		Condition		Resistance
Terminal				
1	2	Back door touch sensor RH	Detect obstruction	360 - 440 Ω
			Other than above	0.9 - 1.1 kΩ

Is the inspection result normal?

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YES >> INSPECTION END
NO >> Replace back door touch sensor RH.

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BACK DOOR CLOSURE MOTOR
WITH AUTOMATIC BACK DOOR

WITH AUTOMATIC BACK DOOR : Diagnosis Procedure

INFOID:0000000012408740

1.CHECK BACK DOOR CLOSURE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Condition		Voltage
Back door lock assembly					
Connector	Terminal				
D190	1	Ground	Back door	Open	9 - 16 V
				Ohter than above	0 - 1.5 V
	2			Close	9 - 16 V
				Ohter than above	0 - 1.5 V

Is the inspection result normal?

YES >> Replace back door lock assembly.
NO >> GO TO 2.

2.CHECK BACK DOOR CLOSURE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B8	3	D190	1	Existed
	2		2	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	3		Not existed
	2		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

WITHOUT AUTOMATIC BACK DOOR

WITHOUT AUTOMATIC BACK DOOR : Diagnosis Procedure

INFOID:0000000012408741

1.CHECK BACK DOOR CLOSURE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

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(+)		(–)	Condition		Voltage
Back door lock assembly					
Connector	Terminal				
D190	1	Ground	Back door	Open	5 - 16 V
				Ohter than above	0 - 1.5 V
	2			Close	5 - 16 V
				Ohter than above	0 - 1.5 V

Is the inspection result normal?

YES >> Replace back door lock assembly.
NO >> GO TO 2.

2.CHECK BACK DOOR CLOSURE MOTOR CIRCUIT

1. Disconnect back door control unit connector.
2. Check continuity between back door control unit harness connector and back door lock assembly harness connector.

Back door control unit		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
D181	10	D190	1	Existed
	4		2	

3. Check continuity between back door control unit harness connector and ground.

Back door control unit		Ground	Continuity
Connector	Terminal		
D181	10		Not existed
	4		

Is the inspection result normal?

YES >> Replace back door control unit.
NO >> Repair or replace harness.

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AUTOMATIC BACK DOOR WARNING BUZZER

Diagnosis Procedure

INFOID:0000000012408742

1.CHECK AUTOMATIC BACK DOOR WARNING BUZZER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door warning buzzer connector.
3. Check voltage between automatic back door warning buzzer harness connector and ground.

(+)		(–)	Voltage
Automatic back door warning buzzer			
Connector	Terminal		
B305	1	Ground	9 - 16 V

Is the inspection result normal?

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

2.CHECK FUSE

Check the following.
- 10 A fuse, [No.9, located in fuse block (J/B)].
- Harness for open or short between automatic back door warning buzzer harness connector and battery terminal.

Is the inspection result normal?

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

3.CHECK AUTOMATIC BACK DOOR WARNING BUZZER OUTPUT SIGNAL CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door warning buzzer harness connector.

Automatic back door control module		Automatic back door warning buzzer		Continuity
Connector	Terminal	Connector	Terminal	
B8	5	B305	2	Existed

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	5		Not existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC BACK DOOR WARNING BUZZER

Refer to DLK-312, "Component Inspection"

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Replace automatic back door warning buzzer.

Component Inspection

INFOID:0000000012408743

1.CHECK AUTOMATIC BACK DOOR WARNING BUZZER

1. Turn ignition switch OFF.
2. Disconnect automatic back door warning buzzer connector.

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3. Check battery power supply directly to automatic back door warning buzzer terminals and check the operation.

Automatic back door warning buzzer		Operation
Terminal		
(+)	(-)	
1	2	Buzzer sounds

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic back door warning buzzer.

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GROUND CIRCUIT

Component Function Check

INFOID:0000000012408744

1.CHECK FUNCTION

1. Select “AUTO BACK DOOR” using CONSULT.
2. Select “DESTINATION” and “HAZARD” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DESTINATION	Circuit between automatic back door control module terminal 6 and ground	Normal	NAM
		Open or short	JPN
HAZARD	Circuit between automatic back door control module terminal 8 and ground	Normal	ON
		Open or short	OFF

Is the inspection result normal?

YES >> Automatic back door ground circuit is OK.
NO >> Refer to DLK-314, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408745

1.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module connector.
3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B8	6		Existed
	8		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-494, "Removal and Installation".
NO >> Repair or replace harness.

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INTEGRATED HOMELINK TRANSMITTER

Component Function Check

INFOID:0000000012408746

1.CHECK FUNCTION

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

Is the inspection result normal?

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

2.CHECK ILLUMINATE

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

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-315, "Diagnosis Procedure".

3.CHECK TRANSMITTER

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

Is the inspection result normal?

YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
NO >> Replace auto anti-dazzling inside mirror (integrated homelink transmitter).

Diagnosis Procedure

INFOID:0000000012408747

1.CHECK POWER SUPPLY

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

(+)		(–)	Condition		Voltage (Approx.)
Auto anti-dazzling inside mirror (Integrated homelink transmitter)					
Connector	Terminal				
R25	6	Ground	Ignition switch	ON	Battery voltage
	10			OFF	

Is the inspection result normal?

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

2.CHECK GROUND CIRCUIT

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

Auto anti-dazzling inside mirror (Integrated homelink transmitter)		Ground	Continuity
Connector	Terminal		
R25	8		Existed

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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ENCODER
SLIDING DOOR LH

SLIDING DOOR LH : Component Function Check

INFOID:0000000012408748

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “ENCODER A LH ” and “ENCODER B LH” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
ENCODER A LH	Sliding door LH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
ENCODER B LH	Sliding door LH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO

Is the inspection result normal?

YES >> Encoder is OK.
NO >> Refer to DLK-317, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408749

1.CHECK ENCODER POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit LH connector.
3. Check voltage between automatic sliding door unit LH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door unit LH			
Connector	Terminal		
B65	5	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK ENCODER CIRCUIT 1

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	11	B65	5	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	11		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK ENCODER CIRCUIT 2

1. Disconnect sliding door control unit LH connector.

2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	4	B65	6	Existed
	21		7	

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	4		Not existed
	21		

Is the inspection result normal?

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

4.CHECK ENCODER GROUND CIRCUIT

1. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	26	B65	8	Existed

2. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	26		Not existed

Is the inspection result normal?

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

5.CHECK ENCODER CIRCUIT 3

1. Connect sliding door control unit LH connector and automatic sliding door unit LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	26	Ground	0 V

Is the inspection result normal?

YES >> Replace automatic sliding door unit LH.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

INFOID:0000000012408750

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “ENCODER A RH ” and “ENCODER B RH” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

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Monitor item	Condition		Status
ENCODER A RH	Sliding door RH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
ENCODER B RH	Sliding door RH	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO

Is the inspection result normal?

YES >> Encoder is OK.
NO >> Refer to DLK-319, "SLIDING DOOR RH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408751

1.CHECK ENCODER POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit RH connector.
3. Check voltage between automatic sliding door unit RH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door unit RH			
Connector	Terminal		
B244	5	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK ENCODER CIRCUIT 1

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	11	B244	5	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	11		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK ENCODER CIRCUIT 2

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	4	B244	7	Existed
	21		6	

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	4		Not existed
	21		

Is the inspection result normal?

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

4. CHECK ENCODER GROUND CIRCUIT

1. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	26	B244	8	Existed

2. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	26		Not existed

Is the inspection result normal?

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

5. CHECK ENCODER CIRCUIT 3

1. Connect sliding door control unit RH connector and automatic sliding door unit RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	26	Ground	0 V

Is the inspection result normal?

YES >> Replace automatic sliding door unit RH.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

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SLIDING DOOR SWITCH
SLIDING DOOR LH

SLIDING DOOR LH : Component Function Check

INFOID:0000000012408752

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “RR-LH DOOR SW ” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
RR-LH DOOR SW	Sliding door LH	Open	ON
		Closed	OFF

Is the inspection result normal?

YES >> Sliding door switch is OK
NO >> Refer to DLK-321, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408753

1.SLIDING DOOR SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage
Sliding door switch LH			
Connector	Terminal		
B71	3	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR SWITCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door switch LH harness connector.

Sliding door control unit LH		Sliding door switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	28	B71	3	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	28		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR SWITCH

Refer to DLK-322, "SLIDING DOOR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

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NO >> Replace sliding door switch LH.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408754

1.CHECK SLIDING DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door switch LH connector.
3. Check continuity between sliding door switch LH terminals.

Sliding door switch LH		Condition		Continuity
Terminal				
3	Ground part of door switch	Sliding door switch LH	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door switch LH.

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

INFOID:0000000012408755

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “RR-RH DOOR SW ” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
RR-RH DOOR SW	Sliding door RH	Open	ON
		Closed	OFF

Is the inspection result normal?

YES >> Sliding door switch is OK
NO >> Refer to DLK-322, "SLIDING DOOR RH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408756

1.SLIDING DOOR SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage
Sliding door switch RH			
Connector	Terminal		
B221	3	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR SWITCH CIRCUIT

1. Disconnect sliding door control unit RH connector.

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2. Check continuity between sliding door control unit RH harness connector and sliding door switch RH harness connector.

Sliding door control unit RH		Sliding door switch RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	28	B221	3	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	28		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR SWITCH

Refer to DLK-323, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace sliding door switch RH.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH : Component Inspection

INFOID:0000000012408757

1.CHECK SLIDING DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door switch RH connector.
3. Check continuity between sliding door switch RH terminals.

Sliding door switch RH		Condition		Continuity
Terminal				
3	Ground part of door switch	Sliding door switch RH	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door switch RH.

FULL LATCH SWITCH
SLIDING DOOR LH

SLIDING DOOR LH : Component Function Check

INFOID:0000000012408758

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “FULL LATC SW L” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
FULL LATC SW L	Sliding door LH	Full close	OFF
		Other than above	ON

Is the inspection result normal?

YES >> Full latch switch is OK.
NO >> Refer to DLK-324, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408759

1.CHECK FULL LATCH SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly LH connector.
3. Check voltage between sliding door lock assembly LH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock assembly LH			
Connector	Terminal		
D123	5	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK FULL LATCH SWITCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock assembly LH harness connector.

Sliding door control unit LH		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	18	D123	5	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	18		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK FULL LATCH SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock assembly LH harness connector.

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Sliding door control unit LH		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	23	D123	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	23		Not existed

Is the inspection result normal?

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

4. CHECK FULL LATCH SWITCH CIRCUIT 2

1. Connect sliding door control unit LH connector and sliding door lock assembly LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

5. CHECK FULL LATCH SWITCH

Refer to DLK-325, "SLIDING DOOR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door lock assembly LH.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408760

1. CHECK FULL LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly LH connector.
3. Check continuity between sliding door lock assembly LH terminals.

Sliding door lock assembly LH		Condition		Continuity
Terminal				
5	2	Sliding door LH	Full close	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door lock assembly LH.

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

INFOID:0000000012408761

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “FUL LATC SW R” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
FUL LATC SW R	Sliding door RH	Full close	OFF
		Other than above	ON

Is the inspection result normal?

YES >> Full latch switch is OK.
NO >> Refer to DLK-326, "SLIDING DOOR RH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408762

1.CHECK FULL LATCH SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly RH connector.
3. Check voltage between sliding door lock assembly RH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock assembly RH			
Connector	Terminal		
D124	5	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK FULL LATCH SWITCH CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock assembly RH harness connector.

Sliding door control unit RH		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	18	D124	5	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	18		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK FULL LATCH SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock assembly RH harness connector.

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Sliding door control unit RH		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	23	D124	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	23		Not existed

Is the inspection result normal?

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

4.CHECK FULL LATCH SWITCH CIRCUIT 2

1. Connect sliding door control unit RH connector and sliding door lock assembly RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

5.CHECK FULL LATCH SWITCH

Refer to DLK-327, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door lock assembly RH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH : Component Inspection

INFOID:0000000012408763

1.CHECK FULL LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly RH connector.
3. Check continuity between sliding door lock assembly RH terminals.

Sliding door lock assembly RH		Condition		Continuity
Terminal				
5	2	Sliding door RH	Full close	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door lock assembly RH.

NEUTRAL SWITCH
SLIDING DOOR LH
SLIDING DOOR LH : Component Function Check

INFOID:0000000012408764

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “NEUTRAL SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
NEUTRAL SW	Sliding door closure motor LH	Neutral position	OFF
		Other than above	ON

Is the inspection result normal?

YES >> Neutral switch is OK.
NO >> Refer to DLK-328, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408765

1.CHECK NEUTRAL SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly LH connector.
3. Check voltage between sliding door lock assembly LH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock assembly LH			
Connector	Terminal		
D123	6	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK NEUTRAL SWITCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock assembly LH harness connector.

Sliding door control unit LH		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	15	D123	6	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	15		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK NEUTRAL SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit LH connector.

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2. Check continuity between sliding door control unit LH harness connector and sliding door lock assembly LH harness connector.

Sliding door control unit LH		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	23	D123	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	23		Not existed

Is the inspection result normal?

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

4.CHECK NEUTRAL SWITCH CIRCUIT 2

1. Connect sliding door control unit LH connector and sliding door lock assembly LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

5.CHECK NEUTRAL SWITCH

Refer to DLK-329, "SLIDING DOOR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door lock assembly LH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408766

1.CHECK NEUTRAL SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly LH connector.
3. Check continuity between sliding door lock assembly LH terminals.

Sliding door lock assembly LH		Condition		Continuity
Terminal				
6	2	Sliding door closure motor LH	Neutral position	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door lock assembly LH.

SLIDING DOOR RH

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SLIDING DOOR RH : Component Function Check

INFOID:0000000012408767

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “NEUTRAL SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
NEUTRAL SW	Sliding door closure motor RH	Neutral position	OFF
		Other than above	ON

Is the inspection result normal?

YES >> Neutral switch is OK.
NO >> Refer to DLK-330, "SLIDING DOOR RH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408768

1.CHECK NEUTRAL SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly RH connector.
3. Check voltage between sliding door lock assembly RH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock assembly RH			
Connector	Terminal		
D124	6	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK NEUTRAL SWITCH CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock assembly RH harness connector.

Sliding door control unit RH		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	15	D124	6	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	15		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK NEUTRAL SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock assembly RH harness connector.

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Sliding door control unit RH		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	23	D124	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	23		Not existed

Is the inspection result normal?

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

4. CHECK NEUTRAL SWITCH CIRCUIT 2

1. Connect sliding door control unit RH connector and sliding door lock assembly RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

5. CHECK NEUTRAL SWITCH

Refer to DLK-331, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door lock assembly RH.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH : Component Inspection

INFOID:0000000012408769

1. CHECK NEUTRAL SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door lock assembly RH connector.
3. Check continuity between sliding door lock assembly RH terminals.

Sliding door lock assembly RH		Condition		Continuity
Terminal				
6	2	Sliding door closure motor RH	Neutral position	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door lock assembly RH.

SLIDING DOOR HANDLE SWITCH
SLIDING DOOR LH

SLIDING DOOR LH : Component Function Check

INFOID:0000000012408770

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “DOR HAND SW L” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DOR HAND SW L	Sliding door handle LH	Pull	ON
		Release	OFF

Is the inspection result normal?

YES >> Sliding door handle switch is OK.
NO >> Refer to DLK-332, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408771

1.CHECK SLIDING DOOR HANDLE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect remote control assembly LH connector.
3. Check voltage between remote control assembly LH harness connector and ground.

(+)		(–)	Voltage
Remote control assembly LH			
Connector	Terminal		
D118	2	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR HANDLE SWITCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and remote control assembly LH harness connector.

Sliding door control unit LH		Remote control assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	22	D118	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	22		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR HANDLE SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and remote control assembly LH harness connector.

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Sliding door control unit LH		Remote control assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	23	D118	1	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	23		Not existed

Is the inspection result normal?

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

4.CHECK SLIDING DOOR HANDLE SWITCH CIRCUIT 2

1. Connect sliding door control unit LH connector and remote control assembly LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

5.CHECK SLIDING DOOR HANDLE SWITCH

Refer to DLK-333, "SLIDING DOOR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace remote control assembly LH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408772

1.CHECK SLIDING DOOR HANDLE SWITCH

1. Turn ignition switch OFF.
2. Disconnect remote control assembly LH connector.
3. Check continuity between remote control assembly LH terminals.

Remote control assembly LH		Condition		Continuity
Terminal				
2	1	Sliding door handle LH	Pull	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace remote control assembly LH.

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

INFOID:0000000012408773

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “DOR HAND SW R” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DOR HAND SW R	Sliding door handle RH	Pull	ON
		Release	OFF

Is the inspection result normal?

YES >> Sliding door handle switch is OK.
NO >> Refer to DLK-334, "SLIDING DOOR RH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408774

1.CHECK SLIDING DOOR HANDLE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect remote control assembly RH connector.
3. Check voltage between remote control assembly RH harness connector and ground.

(+)		(–)	Voltage
Remote control assembly RH			
Connector	Terminal		
D127	2	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR HANDLE SWITCH CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and remote control assembly RH harness connector.

Sliding door control unit RH		Remote control assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	22	D127	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	22		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR HANDLE SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and remote control assembly RH harness connector.

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Sliding door control unit RH		Remote control assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	23	D127	1	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	23		Not existed

Is the inspection result normal?

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

4. CHECK SLIDING DOOR HANDLE SWITCH CIRCUIT 2

1. Connect sliding door control unit RH connector and remote control assembly RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

5. CHECK SLIDING DOOR HANDLE SWITCH

Refer to DLK-335, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace remote control assembly RH.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH : Component Inspection

INFOID:0000000012408775

1. CHECK SLIDING DOOR HANDLE SWITCH

1. Turn ignition switch OFF.
2. Disconnect remote control assembly RH connector.
3. Check continuity between remote control assembly RH terminals.

Remote control assembly RH		Condition		Continuity
Terminal				
2	1	Sliding door handle RH	Pull	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace remote control assembly RH.

SLIDING DOOR LOCK STATUS SWITCH
SLIDING DOOR LH

SLIDING DOOR LH : Component Function Check

INFOID:0000000012408776

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “KNOB LCK SW L” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
KNOB LCK SW L	Sliding door LH	LOCK	OFF
		UNLOCK	ON

Is the inspection result normal?

YES >> Sliding door lock status switch is OK.
NO >> Refer to DLK-336, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408777

1.CHECK SLIDING DOOR LOCK STATUS SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock status switch LH connector.
3. Check voltage between sliding door lock status switch LH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock status switch LH			
Connector	Terminal		
D119	1	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR LOCK STATUS SWITCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock status switch LH harness connector.

Sliding door control unit LH		Sliding door lock status switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	3	D119	1	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	3		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR LOCK STATUS SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock status switch LH harness connector.

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Sliding door control unit LH		Sliding door lock status switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	23	D119	3	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	23		Not existed

Is the inspection result normal?

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

4.CHECK SLIDING DOOR LOCK STATUS SWITCH CIRCUIT 2

1. Connect sliding door control unit LH connector and sliding door lock status switch LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

5.CHECK SLIDING DOOR LOCK STATUS SWITCH

Refer to DLK-337, "SLIDING DOOR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door lock actuator LH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408778

1.CHECK SLIDING DOOR LOCK STATUS SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door lock status switch LH connector.
3. Check continuity between sliding door lock status switch LH terminals.

Sliding door lock status switch LH		Condition		Continuity
Terminal				
3	1	Sliding door LH	LOCK	Not existed
			UNLOCK	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door lock status switch LH.

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

INFOID:0000000012408779

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “KNOB LCK SW R” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
KNOB LCK SW R	Sliding door RH	LOCK	OFF
		UNLOCK	ON

Is the inspection result normal?

YES >> Sliding door lock status switch is OK.
NO >> Refer to DLK-338, "SLIDING DOOR RH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408780

1.CHECK SLIDING DOOR LOCK STATUS SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock status switch RH connector.
3. Check voltage between sliding door lock status switch RH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock status switch RH			
Connector	Terminal		
D120	3	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR LOCK STATUS SWITCH CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock status switch RH harness connector.

Sliding door control unit RH		Sliding door lock status switch RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	3	D120	3	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	3		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR LOCK STATUS SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock status switch RH harness connector.

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Sliding door control unit RH		Sliding door lock status switch RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	23	D120	1	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	23		Not existed

Is the inspection result normal?

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

4. CHECK SLIDING DOOR LOCK STATUS SWITCH CIRCUIT 2

1. Connect sliding door control unit RH connector and sliding door lock status switch RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

5. CHECK SLIDING DOOR LOCK STATUS SWITCH

Refer to DLK-339, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door lock actuator RH.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH : Component Inspection

INFOID:0000000012408781

1. CHECK SLIDING DOOR LOCK STATUS SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door lock status switch RH connector.
3. Check continuity between sliding door lock status switch RH terminals.

Sliding door lock status switch RH		Condition		Continuity
Terminal				
3	1	Sliding door RH	LOCK	Not existed
			UNLOCK	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door lock actuator RH.

FUEL LID STATUS SWITCH

Component Function Check

INFOID:0000000012408782

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “F LID SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
F LID SW	Fuel filler lid status switch	ON	ON
		OFF	OFF

Is the inspection result normal?

YES >> Fuel filler lid status switch is OK.
NO >> Refer to DLK-340, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012408783

1.CHECK FUEL FILLER LID STATUS SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect fuel filler lid status switch connector.
3. Check voltage between fuel filler lid status switch harness connector and ground.

(+)		(–)	Voltage
Fuel filler lid status switch			
Connector	Terminal		
B24	2	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK FUEL FILLER LID STATUS SWITCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and fuel filler lid status switch harness connector.

Sliding door control unit LH		Fuel filler lid status switch		Continuity
Connector	Terminal	Connector	Terminal	
B45	17	B24	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	17		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK FUEL FILLER LID STATUS SWITCH GROUND CIRCUIT

Check continuity between fuel filler lid status switch LH harness connector and ground.

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Fuel filler lid status switch		Ground	Continuity
Connector	Terminal		
B24	1		Existed

Is the inspection result normal?

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

4. CHECK FUEL FILLER LID STATUS SWITCH

Refer to DLK-341, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace fuel filler interlock assembly.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012408784

1. CHECK FUEL FILLER LID STATUS SWITCH

1. Turn ignition switch OFF.
2. Disconnect fuel filler lid status switch connector.
3. Check continuity between fuel filler lid status switch terminals.

Fuel filler lid status switch		Condition		Continuity
Terminal				
2	1	Fuel filler lid status switch	ON	Existed
			OFF	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace fuel filler lid interlock assembly.

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SLIDING DOOR OPEN/CLOSE SWITCH
FRONT LH

FRONT LH : Component Function Check

INFOID:0000000012408785

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “DRIVER SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DRIVER SW	Sliding door open/close switch (front LH)	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Sliding door open/close switch (front LH) is OK.
NO >> Refer to DLK-342, "FRONT LH : Diagnosis Procedure".

FRONT LH : Diagnosis Procedure

INFOID:0000000012408786

1.CHECK SLIDING DOOR OPEN/CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door open/close switch (front side) connector.
3. Check voltage between sliding door open/close switch (front side) harness connector and ground.

(+)		(–)	Voltage
Sliding door open/close switch (front side)			
Connector	Terminal		
M90	2	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR OPEN/CLOSE SWITCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door open/close switch (front side) harness connector.

Sliding door control unit LH		Sliding door open/close switch (front side)		Continuity
Connector	Terminal	Connector	Terminal	
B45	19	M90	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	19		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR OPEN/CLOSE SWITCH GROUND CIRCUIT

Check continuity between sliding door open/close switch (front side) harness connector and ground.

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Sliding door open/close switch (front side)		Ground	Continuity
Connector	Terminal		
M90	3		Existed

Is the inspection result normal?

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

4.CHECK SLIDING DOOR OPEN/CLOSE SWITCH

Refer to DLK-343, "FRONT LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door open/close switch (front side).

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

FRONT LH : Component Inspection

INFOID:0000000012408787

1.CHECK SLIDING DOOR OPEN/CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door open/close switch (front side) connector.
3. Check continuity between sliding door open/close switch (front side) terminals.

Sliding door open/close switch (front side)		Condition		Continuity
Terminal				
2	3	Sliding door open/close switch (front LH)	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door open/close switch (front side).

FRONT RH

FRONT RH : Component Function Check

INFOID:0000000012408788

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “DRIVER SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
DRIVER SW	Sliding door open/close switch (front RH)	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Sliding door open/close switch (front RH) is OK.
NO >> Refer to DLK-343, "FRONT RH : Diagnosis Procedure".

FRONT RH : Diagnosis Procedure

INFOID:0000000012408789

1.CHECK SLIDING DOOR OPEN/CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door open/close switch (front side) connector.

3. Check voltage between sliding door open/close switch (front side) harness connector and ground.

(+)		(–)	Voltage
Sliding door open/close switch (front side)			
Connector	Terminal		
M90	1	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR OPEN/CLOSE SWITCH CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door open/close switch (front side) harness connector.

Sliding door control unit RH		Sliding door open/close switch (front side)		Continuity
Connector	Terminal	Connector	Terminal	
B247	19	M90	1	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	19		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR OPEN/CLOSE SWITCH GROUND CIRCUIT

Check continuity between sliding door open/close switch (front side) harness connector and ground.

Sliding door open/close switch (front side)		Ground	Continuity
Connector	Terminal		
M90	3		Existed

Is the inspection result normal?

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

4.CHECK SLIDING DOOR OPEN/CLOSE SWITCH

Refer to DLK-344, "FRONT RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door open/close switch (front side).

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

FRONT RH : Component Inspection

INFOID:0000000012408790

1.CHECK SLIDING DOOR OPEN/CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door open/close switch (front side) connector.
3. Check continuity between sliding door open/close switch (front side) terminals.

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Sliding door open/close switch (front side)		Condition		Continuity
Terminal				
1	3	Sliding door open/close switch (front RH)	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door open/close switch (front side).

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SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH
SLIDING DOOR LH

SLIDING DOOR LH : Component Function Check

INFOID:0000000012408791

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR” using CONSULT.
2. Select “ONE-TOUCH SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
ONE-TOUCH SW	Sliding door one-touch open/ close switch LH	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Sliding door one-touch open/close switch is OK.
NO >> Refer to DLK-346, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408792

1.CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door one-touch open/close switch LH connector.
3. Check voltage between sliding door one-touch open/close switch LH harness connector and ground.

(+)		(–)	Voltage
Sliding door one-touch open/close switch LH			
Connector	Terminal		
D125	1	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door one-touch open/ close switch LH harness connector.

Sliding door control unit LH		Sliding door one-touch open/close switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	14	D125	1	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	14		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door one-touch open/ close switch LH harness connector.

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Sliding door control unit LH		Sliding door one-touch open/close switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	23	D125	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	23		Not existed

Is the inspection result normal?

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

4. CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH CIRCUIT 2

1. Connect sliding door control unit LH connector and sliding door one-touch open/close switch LH connector.
2. Check voltage between sliding door one-touch open/close switch LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

5. CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH

Refer to DLK-347, "SLIDING DOOR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door one-touch open/close switch LH.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408793

1. CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door one-touch open/close switch LH connector.
3. Check continuity between sliding door one-touch open/close switch LH terminals.

Sliding door one-touch open/close switch LH		Condition		Continuity
Terminal				
1	2	Sliding door one-touch open/close switch LH	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door one-touch open/close switch LH.

SLIDING DOOR RH

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SLIDING DOOR RH : Component Function Check

INFOID:0000000012408794

1.CHECK FUNCTION

1. Select “AUTO SLDE DOOR RIGHT” using CONSULT.
2. Select “ONE-TOUCH SW” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
ONE-TOUCH SW	Sliding door one-touch open/ close switch RH	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Sliding door one-touch open/close switch is OK.
NO >> Refer to DLK-346, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408795

1.CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door one-touch open/close switch RH connector.
3. Check voltage between sliding door one-touch open/close switch RH harness connector and ground.

(+)		(–)	Voltage
Sliding door one-touch open/close switch RH			
Connector	Terminal		
D126	1	Ground	8 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door one-touch open/close switch RH harness connector.

Sliding door control unit RH		Sliding door one-touch open/close switch RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	14	D126	1	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	14		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door one-touch open/close switch RH harness connector.

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Sliding door control unit RH		Sliding door one-touch open/close switch RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	23	D126	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	23		Not existed

Is the inspection result normal?

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

4. CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH CIRCUIT 2

1. Connect sliding door control unit RH connector and sliding door one-touch open/close switch RH connector.
2. Check voltage between sliding door one-touch open/close switch RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

5. CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH

Refer to DLK-349, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door one-touch open/close switch RH.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH : Component Inspection

INFOID:0000000012408796

1. CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect sliding door one-touch open/close switch RH connector.
3. Check continuity between sliding door one-touch open/close switch RH terminals.

Sliding door one-touch open/close switch RH		Condition		Continuity
Terminal				
1	2	Sliding door one-touch open/close switch RH	Pressed	Existed
			Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door one-touch open/close switch RH.

SLIDING DOOR TOUCH SENSOR
SLIDING DOOR LH

SLIDING DOOR LH : Component Function Check

INFOID:0000000012408797

1.CHECK FUNCTION

1. Select “AUTO SLIDE DOOR” using CONSULT.
2. Select “TOUCH SEN LH” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TOUCH SEN LH	Sliding door touch sensor LH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> Sliding door touch sensor is OK.
NO >> Refer to DLK-350, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408798

1.CHECK SLIDING DOOR TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between sliding door touch sensor LH harness connector and sliding door control unit LH harness connector.

(+)		(–)		Condition		Voltage
Sliding door touch sensor LH		Sliding door control unit LH				
Connector	Terminal	Connector	Terminal			
D172	1	B45	23	Sliding door touch sensor LH	Detect obstruction	0 – 1.5 V
					Other than above	4 – 8 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR TOUCH SENSOR CIRCUIT

1. Disconnect sliding door control unit LH and sliding door touch sensor LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door touch sensor LH harness connector.

Sliding door control unit LH		Sliding door touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	24	D172	1	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	24		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR TOUCH SENSOR GROUND CIRCUIT

1. Disconnect sliding door control unit LH and sliding door touch sensor LH connectors.

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2. Check continuity between sliding door control unit LH harness connector and sliding door touch sensor LH harness connector.

Sliding door control unit LH		Sliding door touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	23	D172	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	23		Not existed

Is the inspection result normal?

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

4.CHECK SLIDING DOOR TOUCH SENSOR GROUND CIRCUIT 2

1. Connect sliding door control unit LH connector and sliding door touch sensor LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B45	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

5.CHECK SLIDING DOOR TOUCH SENSOR

Refer to DLK-351, "SLIDING DOOR LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door touch sensor LH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408799

1.CHECK SLIDING DOOR TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect sliding door touch sensor LH connector.
3. Check resistance between sliding door touch sensor LH terminals.

Sliding door touch sensor LH		Condition		Resistance
Terminal				
1	2	Sliding door touch sensor RH	Detect obstruction	120 Ω or less
			Other than above	1 kΩ ± 10%

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door touch sensor LH.

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

INFOID:0000000012408800

1.CHECK FUNCTION

1. Select “AUTO SLIDE DOOR RIGHT” using CONSULT.
2. Select “TOUCH SEN RH” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TOUCH SEN RH	Sliding door touch sensor RH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> Sliding door touch sensor is OK.
NO >> Refer to DLK-352, "SLIDING DOOR RH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408801

1.CHECK SLIDING DOOR TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between sliding door touch sensor RH harness connector and sliding door control unit RH harness connector.

(+)		(–)		Condition		Voltage
Sliding door touch sensor RH		Sliding door control unit RH				
Connector	Terminal	Connector	Terminal			
D173	1	B247	23	Sliding door touch sensor RH	Detect obstruction	0 – 1.5 V
					Other than above	4 – 8 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR TOUCH SENSOR CIRCUIT

1. Disconnect sliding door control unit RH connector and sliding door touch sensor RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door touch sensor RH harness connector.

Sliding door control unit RH		Sliding door touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	24	D173	1	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	24		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK SLIDING DOOR TOUCH SENSOR GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector and sliding door touch sensor RH connectors.
2. Check continuity between sliding door control unit RH harness connector and sliding door touch sensor RH harness connector.

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Sliding door control unit RH		Sliding door touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	23	D173	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	23		Not existed

Is the inspection result normal?

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

4.CHECK SLIDING DOOR TOUCH SENSOR GROUND CIRCUIT 2

1. Connect sliding door control unit RH connector and sliding door touch sensor RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B247	23	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "LH : Removal and Installation".

5.CHECK SLIDING DOOR TOUCH SENSOR

Refer to DLK-353, "SLIDING DOOR RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace sliding door touch sensor RH.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH : Component Inspection

INFOID:0000000012408802

1.CHECK SLIDING DOOR TOUCH SENSOR RH

1. Turn ignition switch OFF.
2. Disconnect sliding door touch sensor RH connector.
3. Check resistance between sliding door touch sensor RH terminals.

Sliding door touch sensor RH		Condition		Resistance
Terminal				
1	2	Sliding door touch sensor RH	Detect obstruction	120 Ω or less
			Other than above	1 kΩ ± 10%

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace sliding door touch sensor RH.

CLUTCH
SLIDING DOOR LH
SLIDING DOOR LH : Component Function Check

INFOID:0000000012408803

1.CHECK FUNCTION

1. Select “AUTO SLIDE DOOR” using CONSULT.
2. Select “CLUTCH” in “ACTIVE TEST” mode.
3. Touch “HOLD” and “RELEASE” to check that it works normally.

Is the inspection result normal?

YES >> Clutch is OK.
NO >> Refer to DLK-354, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408804

1.CHECK CLUTCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit LH connector.
3. Check voltage between automatic sliding door unit LH harness connector and ground.

(+)		(–)	Condition		Voltage
Automatic sliding door unit LH					
Connector	Terminal				
B33	2	Ground	Clutch	ON	9 – 16 V
				OFF	0 V

Is the inspection result normal?

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

2.CHECK CLUTCH CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B47	47	B33	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B47	47		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK CLUTCH GROUND CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

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Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B47	44	B33	1	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B47	44		Not existed

Is the inspection result normal?

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

4.CHECK CLUTCH CIRCUIT 2

1. Connect sliding door control unit LH connector and automatic sliding door unit LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B47	44	Ground	0 V

Is the inspection result normal?

YES >> Replace automatic sliding door unit LH.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

SLIDING DOOR RH

SLIDING DOOR RH : Component Function Check

INFOID:0000000012408805

1.CHECK FUNCTION

1. Select “AUTO SLIDE DOOR RIGHT” using CONSULT.
2. Select “CLUTCH” in “ACTIVE TEST” mode.
3. Touch “HOLD” and “RELEASE” to check that it works normally.

Is the inspection result normal?

YES >> Clutch is OK.
NO >> Refer to DLK-354, "SLIDING DOOR LH : Diagnosis Procedure".

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408806

1.CHECK CLUTCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door unit RH connector.
3. Check voltage between automatic sliding door unit RH harness connector and ground.

(+)		(–)	Condition		Voltage
Automatic sliding door unit RH					
Connector	Terminal				
B245	2	Ground	Clutch	ON	9 – 16 V
				OFF	0 V

Is the inspection result normal?

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

2.CHECK CLUTCH CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B249	47	B245	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B249	47		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

3.CHECK CLUTCH GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B249	44	B245	1	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B249	44		Not existed

Is the inspection result normal?

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

4.CHECK CLUTCH CIRCUIT 2

1. Connect sliding door control unit RH connector and automatic sliding door unit RH connector.
2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B249	44	Ground	0 V

Is the inspection result normal?

YES >> Replace automatic sliding door unit RH.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

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AUTOMATIC SLIDING DOOR MOTOR

SLIDING DOOR LH

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408807

1.CHECK AUTOMATIC SLIDING DOOR MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit LH connector.
3. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Condition		Voltage
Sliding door control unit LH					
Connector	Terminal				
B47	43	Ground	Sliding door LH	Open operate	9 – 16 V
	46			Close operate	

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

2.CHECK AUTOMATIC SLIDING DOOR MOTOR CIRCUIT

1. Disconnect automatic sliding door unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door unit LH harness connector.

Sliding door control unit LH		Automatic sliding door unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B47	43	B33	3	Existed
	46		4	

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B47	43		Not existed
	46		

Is the inspection result normal?

YES >> Replace automatic sliding door unit LH.
NO >> Repair or replace harness.

SLIDING DOOR RH

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408808

1.CHECK AUTOMATIC SLIDING DOOR MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit RH connector.
3. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Condition		Voltage
Sliding door control unit RH					
Connector	Terminal				
B249	43	Ground	Sliding door RH	Open operate	9 – 16 V
	46			Close operate	

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "LH : Removal and Installation".

2. CHECK AUTOMATIC SLIDING DOOR MOTOR CIRCUIT

1. Disconnect automatic sliding door unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door unit RH harness connector.

Sliding door control unit RH		Automatic sliding door unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B249	43	B245	4	Existed
	46		3	

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B249	43		Not existed
	46		

Is the inspection result normal?

YES >> Replace automatic sliding door unit RH.
NO >> Repair or replace harness.

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SLIDING DOOR LOCK RELEASE ACTUATOR
SLIDING DOOR LH

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408809

1.CHECK SLIDING DOOR LOCK RELEASE ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock release actuator LH connector.
3. Check voltage between sliding door lock release actuator LH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock release actuator LH			
Connector	Terminal		
D121	1	Ground	9 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR LOCK RELEASE ACTUATOR CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock release actuator LH harness connector.

Sliding door control unit LH		Sliding door lock release actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
B46	39	D121	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B46	39		Not existed

Is the inspection result normal?

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

3.CHECK SLIDING DOOR LOCK RELEASE ACTUATOR CIRCUIT 2

1. Connect sliding door control unit LH connector and sliding door lock release actuator LH connector.
2. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit LH			
Connector	Terminal		
B46	39	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

4.CHECK SLIDING DOOR LOCK RELEASE ACTUATOR GROUND CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock release actuator LH harness connector.

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Sliding door control unit LH		Sliding door lock release actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
B46	40	D121	1	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B46	40		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

SLIDING DOOR RH

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408810

1.CHECK SLIDING DOOR LOCK RELEASE ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door lock release actuator RH connector.
3. Check voltage between sliding door lock release actuator RH harness connector and ground.

(+)		(–)	Voltage
Sliding door lock release actuator RH			
Connector	Terminal		
D122	1	Ground	9 – 16 V

Is the inspection result normal?

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

2.CHECK SLIDING DOOR LOCK RELEASE ACTUATOR CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock release actuator RH harness connector.

Sliding door control unit RH		Sliding door lock release actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
B248	39	D122	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B248	39		Not existed

Is the inspection result normal?

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

3.CHECK SLIDING DOOR LOCK RELEASE ACTUATOR CIRCUIT 2

1. Connect sliding door control unit RH connector and sliding door lock release actuator RH connector.

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2. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Voltage
Sliding door control unit RH			
Connector	Terminal		
B248	39	Ground	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

4. CHECK SLIDING DOOR LOCK RELEASE ACTUATOR GROUND CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock release actuator RH harness connector.

Sliding door control unit RH		Sliding door lock release actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
B248	40	D122	1	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B248	40		Not existed

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

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SLIDING DOOR CLOSURE MOTOR

SLIDING DOOR LH

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408811

1.CHECK SLIDING DOOR CLOSURE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit LH connector.
3. Check voltage between sliding door control unit LH harness connector and ground.

(+)		(–)	Condition		Voltage
Sliding door control unit LH					
Connector	Terminal				
B46	34	Ground	Sliding door closure motor LH	Closure operation	9 – 16 V
	35			Return operation	

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".

2.CHECK SLIDING DOOR CLOSURE MOTOR CIRCUIT

1. Disconnect sliding door lock assembly LH connector.
2. Check continuity between sliding door control unit LH harness connector and sliding door lock assembly LH harness connector.

Sliding door control unit LH		Sliding door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
B46	34	D123	4	Existed
	35		1	

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B46	34		Not existed
	35		

Is the inspection result normal?

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

SLIDING DOOR RH

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408812

1.CHECK SLIDING DOOR CLOSURE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect sliding door control unit RH connector.
3. Check voltage between sliding door control unit RH harness connector and ground.

(+)		(–)	Condition		Voltage
Sliding door control unit RH					
Connector	Terminal				
B248	34	Ground	Sliding door closure motor RH	Closure operation	9 – 16 V
	35			Return operation	

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Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".

2. CHECK SLIDING DOOR CLOSURE MOTOR CIRCUIT

1. Disconnect sliding door lock assembly RH connector.
2. Check continuity between sliding door control unit RH harness connector and sliding door lock assembly RH harness connector.

Sliding door control unit RH		Sliding door lock assembly RH		Continuity
Connector	Terminal	Connector	Terminal	
B248	34	D124	4	Existed
	35		1	

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B248	34		Not existed
	35		

Is the inspection result normal?

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

AUTOMATIC SLIDING DOOR WARNING BUZZER
SLIDING DOOR LH

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408813

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse, [No.9, located in fuse block (J/B)]

Is the inspection result normal?

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

2.CHECK AUTOMATIC SLIDING DOOR WARNING BUZZER INPUT SIGNAL

1. Disconnect automatic sliding door warning buzzer LH connector.
2. Check voltage between automatic sliding door warning buzzer LH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door warning buzzer LH			
Connector	Terminal		
B27	1	Ground	8 – 16 V

Is the inspection result normal?

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

3.CHECK AUTOMATIC SLIDING DOOR WARNING BUZZER CIRCUIT

1. Disconnect sliding door control unit LH connector.
2. Check continuity between sliding door control unit LH harness connector and automatic sliding door warning buzzer LH harness connector.

Sliding door control unit LH		Automatic sliding door warning buzzer LH		Continuity
Connector	Terminal	Connector	Terminal	
B45	8	B27	2	Existed

3. Check continuity between sliding door control unit LH harness connector and ground.

Sliding door control unit LH		Ground	Continuity
Connector	Terminal		
B45	8		Not existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC SLIDING DOOR WARNING BUZZER

Refer to DLK-364, "SLIDING DOOR LH : Component Inspection"

Is the inspection result normal?

YES >> Replace sliding door control unit LH. Refer to DLK-499, "LH : Removal and Installation".
NO >> Repair or replace harness.

SLIDING DOOR LH : Component Inspection

INFOID:0000000012408814

1.CHECK AUTOMATIC SLIDING DOOR WARNING BUZZER

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door warning buzzer LH connector.
3. Check battery power supply directly to automatic sliding door warning buzzer LH terminals and check the operation.

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Automatic sliding door warning buzzer LH		Operation
Terminal		
(+)	(–)	
1	2	Buzzer sounds

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic sliding door warning buzzer LH.

SLIDING DOOR RH

SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408815

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10 A fuse, [No.9, located in fuse block (J/B)]

Is the inspection result normal?

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

2.CHECK AUTOMATIC SLIDING DOOR WARNING BUZZER INPUT SIGNAL

1. Disconnect automatic sliding door warning buzzer RH connector.
2. Check voltage between automatic sliding door warning buzzer RH harness connector and ground.

(+)		(–)	Voltage
Automatic sliding door warning buzzer RH			
Connector	Terminal		
B203	1	Ground	8 – 16 V

Is the inspection result normal?

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

3.CHECK AUTOMATIC SLIDING DOOR WARNING BUZZER CIRCUIT

1. Disconnect sliding door control unit RH connector.
2. Check continuity between sliding door control unit RH harness connector and automatic sliding door warning buzzer RH harness connector.

Sliding door control unit RH		Automatic sliding door warning buzzer RH		Continuity
Connector	Terminal	Connector	Terminal	
B247	8	B203	2	Existed

3. Check continuity between sliding door control unit RH harness connector and ground.

Sliding door control unit RH		Ground	Continuity
Connector	Terminal		
B247	8		Not existed

Is the inspection result normal?

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

4.CHECK AUTOMATIC SLIDING DOOR WARNING BUZZER

Refer to DLK-366, "SLIDING DOOR RH : Component Inspection"

Is the inspection result normal?

YES >> Replace sliding door control unit RH. Refer to DLK-499, "RH : Removal and Installation".
NO >> Repair or replace harness.

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SLIDING DOOR RH : Component Inspection

INFOID:0000000012408816

1.CHECK AUTOMATIC SLIDING DOOR WARNING BUZZER

1. Turn ignition switch OFF.
2. Disconnect automatic sliding door warning buzzer RH connector.
3. Check battery power supply directly to automatic sliding door warning buzzer RH terminals and check the operation.

Automatic sliding door warning buzzer RH		Operation
Terminal		
(+)	(–)	
1	2	Buzzer sounds

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace automatic sliding door warning buzzer RH.

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SYMPTOM DIAGNOSIS

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

ALL DOOR

ALL DOOR : Description

INFOID:0000000012408817

All doors do not lock/unlock using door lock and unlock switch.

ALL DOOR : Diagnosis Procedure

INFOID:0000000012408818

1. CHECK DOOR LOCK AND UNLOCK SWITCH

Check door lock and unlock switch.
- With automatic sliding door system: Refer to DLK-251, "WITH AUTOMATIC SLIDING DOOR : Component Function Check".
- Without automatic sliding door system: Refer to DLK-251, "WITHOUT AUTOMATIC SLIDING DOOR : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-255, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

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

3. REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000012408819

Driver side door does not lock/unlock using door lock and unlock switch.

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012408820

1. CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (driver side).
Refer to DLK-255, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2. REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000012408821

Passenger side door does not lock/unlock using door lock and unlock switch.

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012408822

1.CHECK DOOR LOCK ACTUATOR

Check front door lock assembly (passenger side).
Refer to DLK-256, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

SLIDING DOOR LH

SLIDING DOOR LH : Description

INFOID:0000000012408823

Rear LH side door does not lock/unlock using door lock and unlock switch.

SLIDING DOOR LH : Diagnosis Procedure

INFOID:0000000012408824

1.CHECK DOOR LOCK ACTUATOR

Check sliding door lock assembly LH.
Refer to DLK-258, "WITH AUTOMATIC SLIDING DOOR : Component Function Check" (with automatic sliding door system), DLK-261, "WITHOUT AUTOMATIC SLIDING DOOR : Component Function Check" (without automatic sliding door system).

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK SELECTIVE UNLOCK RELAY

Check selective unlock relay.
Refer to DLK-263, "Component Function Check".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

SLIDING DOOR RH

SLIDING DOOR RH : Description

INFOID:0000000012408825

Rear RH side door does not lock/unlock using door lock and unlock switch.

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SLIDING DOOR RH : Diagnosis Procedure

INFOID:0000000012408826

1.CHECK DOOR LOCK ACTUATOR

Check sliding door lock assembly RH.
Refer to DLK-258, "WITH AUTOMATIC SLIDING DOOR : Component Function Check" (with automatic sliding door system), DLK-261, "WITHOUT AUTOMATIC SLIDING DOOR : Component Function Check" (without automatic sliding door system).

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR KEY CYLINDER OPERATION

Diagnosis Procedure

INFOID:0000000012408827

1.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 2.
NO >> Refer to DLK-367, "ALL DOOR : Diagnosis Procedure".

2.CHECK DOOR KEY CYLINDER SWITCH

Check door key cylinder switch.
Refer to DLK-267, "WITH AUTOMATIC SLIDING DOOR : Component Function Check" (with automatic sliding door), DLK-268, "WITHOUT AUTOMATIC SLIDING DOOR : Component Function Check" (without automatic sliding door).

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH

ALL DOOR REQUEST SWITCHES

ALL DOOR REQUEST SWITCHES : Description

INFOID:0000000012408828

All doors do not lock/unlock using all door request switches.

ALL DOOR REQUEST SWITCHES : Diagnosis Procedure

INFOID:0000000012408829

1.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 2.
NO >> Refer to DLK-271, "Component Function Check".

2.CHECK “LOCK/UNLOCK BY I-KEY” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “LOCK/UNLOCK BY I-KEY” in “WORK SUPPORT” mode.
3. Check “LOCK/UNLOCK BY I-KEY” setting in “WORK SUPPORT”.
   Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “ON” in “LOCK/UNLOCK BY I-KEY”.

3.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to DLK-232, "DTC Logic".
- Console: Refer to DLK-234, "DTC Logic".
- Luggage room: Refer to DLK-236, "DTC Logic".

Is the inspection result normal?

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

4.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna.

- Driver side: Refer to DLK-240, "DTC Logic".
- Passenger side: Refer to DLK-238, "DTC Logic".
- Rear bumper: Refer to DLK-242, "DTC Logic".

Is the inspection result normal?

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

5.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

DRIVER SIDE DOOR REQUEST SWITCH

DRIVER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000012408830

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

DRIVER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000012408831

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (driver side).
Refer to DLK-273, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (driver side).
Refer to DLK-240, "DTC Logic".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

PASSENGER SIDE DOOR REQUEST SWITCH

PASSENGER SIDE DOOR REQUEST SWITCH : Description

INFOID:0000000012408832

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

PASSENGER SIDE DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000012408833

1.CHECK DOOR REQUEST SWITCH

Check front door request switch (passenger side).
Refer to DLK-273, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (passenger side).
Refer to DLK-238, "DTC Logic".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

BACK DOOR REQUEST SWITCH

BACK DOOR REQUEST SWITCH : Description

INFOID:0000000012408834

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

BACK DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000012408835

1.CHECK BACK DOOR REQUEST SWITCH

Check back door request switch.

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Refer to DLK-275, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2. CHECK OUTSIDE KEY ANTENNA

Check outside key antenna (rear bumper).
Rear bumper: Refer to DLK-242, "DTC Logic".

Is the inspection result normal?

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

3. REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Diagnosis Procedure

INFOID:0000000012408836

1.CHECK INTELLIGENT KEY

For Intelligent Key that cannot be used for door lock and unlock, check that the Intelligent Key belongs to the vehicle to be checked.

Does the Intelligent Key belong to the vehicle to checked?

YES >> GO TO 2.
NO >> Check Intelligent Key button operation with registered Intelligent Key belonging to the vehicle.

2.CHECK INTELLIGENT KEY LOW BATTERY WARNING

Check that the Intelligent Key low battery warning is operated.

Is the Intelligent Key low battery warning operated?

YES >> GO TO 6.
NO-1 >> With another registered Intelligent Key: GO TO 3.
NO-2 >> Without another registered Intelligent Key: GO TO 4.

3.CHECK INTELLIGENT KEY BUTTON OPERATION

Check that door lock and unlock can be performed by operating the buttons of another registered Intelligent Key.

Can door lock and unlock be performed with another registered Intelligent Key?

YES >> GO TO 4.
NO >> GO TO 7.

4.CHECK ENGINE START

While depressing the brake pedal, contact the backside of the Intelligent Key that cannot be used to perform door lock and unlock operation to the push-button ignition switch. Operate the push-button ignition switch, and check that the vehicle is in START status.

Is the vehicle in START status?

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

5.CHECK INTELLIGENT KEY

Check the inside of the Intelligent Key for rust or corrosion by water. Simultaneously check the internal circuits for damage.

Is the vehicle in START status?

YES >> GO TO 6.
NO >> Replace Intelligent Key.

6.CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.
Refer to DLK-281, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Replace Intelligent Key battery.

7.CHECK POWER DOOR LOCK OPERATION

Check door lock/unlock using door lock and unlock switch.

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

YES >> GO TO 8.
NO >> Refer to DLK-367, "ALL DOOR : Diagnosis Procedure".

8.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.
Refer to DLK-271, "Component Function Check".

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Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace the malfunctioning parts.

9. CHECK DOOR SWITCH

Check door switch.
Refer to DLK-247, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 10.
NO >> Repair or replace the malfunctioning parts.

10. REPLACE INTELLIGENT KEY

1. Replace Intelligent Key.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Replace BCM. Refer to BCS-99, "Removal and Installation".

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IGNITION POSITION WARNING FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408837

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-64, "DTC Index".

2.CHECK POWER DOOR LOCK OPERATION

Check power door lock operation.

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

YES >> GO TO 3.
NO >> Refer to DLK-367, "ALL DOOR : Diagnosis Procedure".

3.CHECK DOOR SWITCH

Check door switch
Refer to DLK-247, "Component Function Check".

Is the inspection result normal?

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

4.CHECK BACK DOOR SWITCH

Check door switch
Refer to DLK-249, "Component Function Check".

Is the inspection result normal?

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

5.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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SELECTIVE UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408838

1. CHECK “DOOR LOCK–UNLOCK SET” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “DOOR LOCK-UNLOCK SET” in “WORK SUPPORT” mode.
3. Check “DOOR LOCK-UNLOCK SET” setting in “WORK SUPPORT”.
   Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “On” in “DOOR LOCK-UNLOCK SET”.

2. REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTO DOOR LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408839

1.CHECK “AUTO LOCK SET” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “AUTO LOCK SET” in “WORK SUPPORT” mode.
3. Check “AUTO LOCK SET” setting in “WORK SUPPORT”.
   Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “MODE 2”, “MODE 3”, “MODE 4”, “MODE 5”, “MODE 6” or “MODE 7” in “AUTO LOCK SET”.

2.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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VEHICLE SPEED SENSING AUTO LOCK OPERATION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408840

1. CHECK “AUTOMATIC LOCK/UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC LOCK/UNLOCK SELECT” setting in “WORK SUPPORT”. Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “Lock Only” or “Lock/Unlock” in “WORK SUPPORT”.

2. CHECK “AUTOMATIC DOOR LOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR LOCK SELECT” setting in “WORK SUPPORT”. Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “VH SPD” in “AUTOMATIC DOOR LOCK SELECT”.

3. REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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IGN OFF INTERLOCK DOOR UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408841

1. CHECK “AUTOMATIC LOCK/UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC LOCK/UNLOCK SELECT” setting in “WORK SUPPORT”.
   Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “Unlock Only” or “Lock/Unlock” in “AUTOMATIC LOCK/UNLOCK SELECT”.

2. CHECK “AUTOMATIC DOOR UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR UNLOCK SELECT” setting in “WORK SUPPORT”.
   Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “MODE 1” or “MODE 3” in “AUTOMATIC DOOR UNLOCK SELECT”.

3. REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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P RANGE INTERLOCK DOOR LOCK/UNLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408842

1. CHECK “AUTOMATIC LOCK/UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC LOCK/UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC LOCK/UNLOCK SELECT” setting in “WORK SUPPORT”. Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set “Unlock Only”, “Lock Only” or “Lock/Unlock” in “AUTOMATIC LOCK/UNLOCK SELECT”.

2. CHECK “AUTOMATIC DOOR LOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR LOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR LOCK SELECT” setting in “WORK SUPPORT”. Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “P RANGE” in “AUTOMATIC DOOR LOCK SELECT”.

3. CHECK “AUTOMATIC DOOR UNLOCK SELECT” SETTING IN “WORK SUPPORT”

1. Select “DOOR LOCK” of “BCM” using CONSULT.
2. Select “AUTOMATIC DOOR UNLOCK SELECT” in “WORK SUPPORT” mode.
3. Check “AUTOMATIC DOOR UNLOCK SELECT” setting in “WORK SUPPORT”. Refer to DLK-94, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set “MODE 2” or “MODE 4” in “AUTOMATIC DOOR UNLOCK SELECT”.

4. REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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HAZARD AND HORN REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408843

1. CHECK “HAZARD ANSWER BACK” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “HAZARD ANSWER BACK” in “WORK SUPPORT” mode.
3. Check the “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.
   Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set the “Lock Only”, “Unlock Only” or “Lock/Unlock” in “HAZARD ANSWER BACK”.

2. CHECK “HORN WITH KEYLESS LOCK” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “HORN WITH KEYLESS LOCK” in “WORK SUPPORT” mode.
3. Check the “HORN WITH KEYLESS LOCK” in “WORK SUPPORT”.
   Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set the “On” in “HORN WITH KEYLESS LOCK”.

3. CHECK HAZARD FUNCTION

Check hazard function.
Refer to DLK-285, "Component Function Check".

Is the inspection result normal?

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

4. CHECK HORN FUNCTION

Check horn function.
Refer to SEC-125, "Component Function Check".

Is the inspection result normal?

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

5. REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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HAZARD AND BUZZER REMINDER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408844

1. CHECK “HAZARD ANSWER BACK” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “HAZARD ANSWER BACK” in “WORK SUPPORT” mode.
3. Check the “HAZARD ANSWER BACK” setting in “WORK SUPPORT”.
   Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Set the “Lock Only”, “Unlock Only” or “Lock/Unlock” in “HAZARD ANSWER BACK”.

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

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “ANS BACK I-KEY LOCK” in “WORK SUPPORT” mode.
3. Check the “ANS BACK I-KEY LOCK”setting in “WORK SUPPORT”.
   Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set the “Horn Chirp” or “Buzzer” in “ANS BACK I-KEY LOCK”.

3. CHECK “ANS BACK I-KEY UNLOCK” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “ANS BACK I-KEY UNLOCK” in “WORK SUPPORT” mode.
3. Check the “ANS BACK I-KEY UNLOCK” setting in “WORK SUPPORT”.
   Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set the “On” in “ANS BACK I-KEY UNLOCK”.

4. CHECK HAZARD FUNCTION

Check hazard function.
Refer to DLK-285, "Component Function Check".

Is the inspection result normal?

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

5. CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-279, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6. REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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KEY REMINDER FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408845

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-64, "DTC Index".

2.CHECK “ANTI KEY LOCK IN FUNCTI” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM” using CONSULT.
2. Select “ANTI KEY LOCK IN FUNCTI” in “WORK SUPPORT” mode.
3. Check “ANTI KEY LOCK IN FUNCTI” setting in “WORK SUPPORT”.
   Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “On” in “ANTI KEY LOCK IN FUNCTI”.

3.CHECK DOOR SWITCH

Check door switch
Refer to DLK-247, "Component Function Check".

Is the inspection result normal?

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

4.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-232, "DTC Logic".
- Console: Refer to DLK-234, "DTC Logic".
- Luggage room: Refer to DLK-236, "DTC Logic".

Is the inspection result normal?

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

5.CHECK UNLOCK SENSOR

Check unlock sensor.
Refer to DLK-265, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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OFF POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408846

1.CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-64, "DTC Index" (BCM).
NO-2 >> Refer to MWI-49, "DTC Index" (combination meter).

2.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to DLK-282, "Component Function Check".

Is the inspection result normal?

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

3.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-279, "Component Function Check".

Is the inspection result normal?

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

4.CHECK DOOR SWITCH

Check front door switch (driver side).
Refer to DLK-247, "Component Function Check".

Is the inspection result normal?

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

5.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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P POSITION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408847

1.CHECK DTC WITH BCM, TCM AND COMBINATION METER

Check that DTC is not detected with BCM, TCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-64, "DTC Index" (BCM).
NO-2 >> Refer to TM-59, "DTC Index" (TCM).
NO-3 >> Refer to MWI-49, "DTC Index" (Combination meter).

2.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to DLK-282, "Component Function Check".

Is the inspection result normal?

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

3.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-279, "Component Function Check".

Is the inspection result normal?

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

4.CHECK DOOR SWITCH

Check front door switch (driver side).
Refer to DLK-247, "Component Function Check".

Is the inspection result normal?

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

5.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-232, "DTC Logic".
- Console: Refer to DLK-234, "DTC Logic".
- Luggage room: Refer to DLK-236, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.CHECK INFORMATION DISPLAY

Check information display.
Refer to DLK-283, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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ACC WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408848

1.CHECK P POSITION WARNING FUNCTION

Check P position warning function.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DLK-386, "Diagnosis Procedure".

2.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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TAKE AWAY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408849

1.CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-64, "DTC Index" (BCM).
NO-2 >> Refer to MWI-49, "DTC Index" (Combination meter).

2.CHECK COMBINATION METER BUZZER

Check combination meter buzzer.
Refer to DLK-282, "Component Function Check".

Is the inspection result normal?

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

3.CHECK INFORMATION DISPLAY

Check information display.
Refer to DLK-283, "Component Function Check".

Is the inspection result normal?

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

4.CHECK DOOR SWITCH

Check front door switch (driver side).
Refer to DLK-247, "Component Function Check".

Is the inspection result normal?

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

5.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-279, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

- Instrument center: Refer to DLK-232, "DTC Logic".
- Console: Refer to DLK-234, "DTC Logic".
- Luggage room: Refer to DLK-236, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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KEY ID WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408850

1.CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-64, "DTC Index" (BCM).
NO-2 >> Refer to MWI-49, "DTC Index" (Combination meter).

2.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-281, "Component Function Check".

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-232, "DTC Logic".
- Console: Refer to DLK-234, "DTC Logic".
- Luggage room: Refer to DLK-236, "DTC Logic".

Is the inspection result normal?

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

4.CHECK INFORMATION DISPLAY

Check information display.
Refer to DLK-283, "Component Function Check".

Is the inspection result normal?

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

5.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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INTELLIGENT KEY LOW BATTERY WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408851

1.CHECK DTC WITH BCM AND COMBINATION METER

Check that DTC is not detected with BCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-64, "DTC Index" (BCM).
NO-2 >> Refer to MWI-49, "DTC Index" (Combination meter).

2.CHECK “LO- BATT OF KEY FOB WARN” SETTING IN “WORK SUPPORT”

1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “LO- BATT OF KEY FOB WARN” in “WORK SUPPORT” mode.
3. Check “LO- BATT OF KEY FOB WARN” setting in “WORK SUPPORT”.
   Refer to DLK-95, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Set “ON” in “LO- BATT OF KEY FOB WARN”.

3.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-281, "Component Function Check".

Is the inspection result normal?

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

4.CHECK INFORMATION DISPLAY

Check information display.
Refer to DLK-283, "Component Function Check".

Is the inspection result normal?

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

5.CHECK INSIDE KEY ANTENNA

Check inside key antenna.
- Instrument center: Refer to DLK-232, "DTC Logic".
- Console: Refer to DLK-234, "DTC Logic".
- Luggage room: Refer to DLK-236, "DTC Logic".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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DOOR LOCK OPERATION WARNING DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408852

1.CHECK DOOR LOCK FUNCTION

Check door lock function.

Does door lock/unlock using door request switch?

YES >> GO TO 2.
NO >> Refer to DLK-371, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".

2.CHECK INTELLIGENT KEY WARNING BUZZER

Check Intelligent Key warning buzzer.
Refer to DLK-279, "Component Function Check".

Is the inspection result normal?

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

3.REPLACE BCM

1. Replace BCM. Refer to BCS-99, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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BACK DOOR AUTO CLOSURE FUNCTION DOES NOT OPERATE

OPEN/CLOSURE FUNCTION

OPEN/CLOSURE FUNCTION : Description

INFOID:0000000012408853

Back door auto closure does not operate when back door opening and closing operations are performed.

OPEN/CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000012408854

1.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to BCS-64, "DTC Index".

2.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check back door control unit power supply and ground circuit.
Refer to DLK-244, "BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

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

3.CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.
Refer to DLK-310, "WITHOUT AUTOMATIC BACK DOOR : Diagnosis Procedure".

Is the inspection result normal?

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

4.REPLACE BACK DOOR CONTROL UNIT

1. Replace back door control unit.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

OPEN FUNCTION

OPEN FUNCTION : Description

INFOID:0000000012408855

Back door auto closure does not operate when back door opening operation is performed.

OPEN FUNCTION : Diagnosis Procedure

INFOID:0000000012408856

1.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-277, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK BACK DOOR OPEN REQUEST SIGNAL CIRCUIT

Check back door open request signal circuit.
Refer to DLK-286, "Diagnosis Procedure".

Is the inspection result normal?

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

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3.REPLACE BACK DOOR CONTROL UNIT

1. Replace back door control unit.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

INFOID:0000000012408857

Back door auto closure does not operate when back door closing operation is performed.

CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000012408858

1.CHECK HALF LATCH SWITCH

Check half latch switch.
Refer to DLK-300, "WITHOUT AUTOMATIC BACK DOOR : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK OPEN SWITCH

Check open switch.
Refer to DLK-295, "Diagnosis Procedure".

Is the inspection result normal?

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

3.CHECK CLOSE SWITCH

Check close switch.
Refer to DLK-297, "Diagnosis Procedure".

Is the inspection result normal?

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

4.REPLACE BACK DOOR CONTROL UNIT

1. Replace back door control unit.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE
ALL SWITCHES

ALL SWITCHES : Description

INFOID:0000000012408859

Automatic back door open/close function does not operate using all switches.
NOTE:
Automatic back door open/close operation condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-52, "System Description".

ALL SWITCHES : Diagnosis Procedure

INFOID:0000000012408860

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK BACK DOOR AUTO CLOSURE FUNCTION

Check back door auto closure function.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-397, "OPEN/CLOSURE FUNCTION : Diagnosis Procedure".

3.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.
Refer to DLK-314, "Component Function Check".

Is the inspection result normal?

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

4.CHECK TOUCH SENSOR LH

Check touch sensor LH.
Refer to DLK-305, "LH : Component Function Check".

Is the inspection result normal?

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

5.CHECK TOUCH SENSOR RH

Check touch sensor RH.
Refer to DLK-307, "RH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

AUTOMATIC BACK DOOR SWITCH

AUTOMATIC BACK DOOR SWITCH : Description

INFOID:0000000012408861

Automatic back door open/close function does not operate using automatic back door switch.
NOTE:

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Automatic back door open/close operation condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-52, "System Description".

AUTOMATIC BACK DOOR SWITCH : Diagnosis Procedure

INFOID:0000000012408862

1.CHECK AUTOMATIC BACK DOOR SWITCH

Check automatic back door switch.
Refer to DLK-293, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

AUTOMATIC BACK DOOR CLOSE SWITCH

AUTOMATIC BACK DOOR CLOSE SWITCH : Description

INFOID:0000000012408863

Automatic back door open/close function does not operate using automatic back door close switch.

NOTE:
Automatic back door open/close operation condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-52, "System Description".

AUTOMATIC BACK DOOR CLOSE SWITCH : Diagnosis Procedure

INFOID:0000000012408864

1.CONFIRM THE OPERATION

1. Turn ON automatic door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Check automatic back door close switch.
Refer to DLK-287, "Component Function Check".

Is the inspection result normal?

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

3.CHECK AUTOMATIC DOOR MAIN SWITCH

Check automatic door main switch.
Refer to DLK-289, "AUTOMATIC BACK DOOR CONTROL MODULE : Component Function Check".

Is the inspection result normal?

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

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

INTELLIGENT KEY

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INTELLIGENT KEY : Description

INFOID:0000000012408865

Automatic back door open/close function does not operate using Intelligent Key.

NOTE:

Automatic back door open/close operation condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-52, "System Description".

INTELLIGENT KEY : Diagnosis Procedure

INFOID:0000000012408866

1.CHECK DTC WITH BCM AND AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with BCM, TCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-64, "DTC Index" (BCM).
NO-2 >> Refer to DLK-109, "DTC Index" (automatic back door control module).

2.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 3.
NO >> Refer to DLK-374, "Diagnosis Procedure".

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : Description

INFOID:0000000012408867

Automatic back door open/close function does not operate using back door opener switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated, during operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-52, "System Description".

BACK DOOR OPENER SWITCH : Diagnosis Procedure

INFOID:0000000012408868

1.CONFIRM THE OPERATION

1. Turn ON automatic door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic door system is normal.
NO >> GO TO 2.

2.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-277, "Component Function Check".

Is the inspection result normal?

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

3.CHECK AUTOMATIC DOOR MAIN SWITCH

Check automatic door main switch.
Refer to DLK-289, "AUTOMATIC BACK DOOR CONTROL MODULE : Component Function Check".

Is the inspection result normal?

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

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

OPEN/CLOSURE FUNCTION

OPEN/CLOSURE FUNCTION : Description

INFOID:0000000012408869

Back door auto closure function does not operate when back door opening and closing operations are performed.

OPEN/CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000012408870

1. CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.
Refer to DLK-244, "AUTOMATIC BACK DOOR CONTROL MODULE : Diagnosis Procedure".

Is the inspection result normal?

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

3. CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.
Refer to DLK-310, "WITH AUTOMATIC BACK DOOR : Diagnosis Procedure".

Is the inspection result normal?

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

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

OPEN FUNCTION

OPEN FUNCTION : Description

INFOID:0000000012408871

Back door auto closure function does not operate when back door opening operations are performed.

OPEN FUNCTION : Diagnosis Procedure

INFOID:0000000012408872

1. CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-277, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

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NO >> Repair or replace the malfunctioning parts.

2.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

INFOID:0000000012408873

Back door auto closure function does not operate when back door closing operations are performed.

CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000012408874

1.CHECK HALF LATCH SWITCH

Check half latch switch.
Refer to DLK-299, "WITH AUTOMATIC BACK DOOR : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

BUZZER

BUZZER : Description

INFOID:0000000012408875

Automatic back door warning buzzer does not operate when automatic back door warning function are performed.

BUZZER : Diagnosis Procedure

INFOID:0000000012408876

1.CHECK DTC WITCH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK AUTOMATIC BACK DOOR WARNING BUZZER

Check automatic back door warning buzzer.
Refer to DLK-312, "Diagnosis Procedure".

Is the inspection result normal?

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

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Description

INFOID:0000000012408877

Hazard warning lamp does not operate when automatic back door warning function are performed.

HAZARD WARNING LAMP : Diagnosis Procedure

INFOID:0000000012408878

1.CHECK DTC WITH BCM AND AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with BCM, TCM and combination meter.

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Refer to BCS-64, "DTC Index" (BCM).
NO-2 >> Refer to DLK-109, "DTC Index" (automatic back door control module).

2.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.
Refer to DLK-314, "Component Function Check".

Is the inspection result normal?

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

3.CHECK HAZARD AND HORN REMINDER FUNCTION

Check hazard and horn reminder function.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Refer to DLK-382, "Diagnosis Procedure".

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

Diagnosis Procedure

INFOID:0000000012408879

1.CHECK THE OPERATION

Check automatic door main switch function.

NOTE:

When the main switch is OFF, the automatic back door operation is not available by back door opener switch and automatic back door close switch.

Is the inspection result normal?

YES >> Automatic back door system is normal.
NO >> GO TO 2.

2.CHECK AUTOMATIC DOOR MAIN SWITCH

Check automatic door main switch.
Refer to DLK-289, "AUTOMATIC BACK DOOR CONTROL MODULE : Component_Function_Check".

Is the inspection result normal?

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

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408880

1.CHECK TOUCH SENSOR LH

Check touch sensor LH.
Refer to DLK-305, "LH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK TOUCH SENSOR RH

Check touch sensor RH.
Refer to DLK-307, "RH : Component Function Check".

Is the inspection result normal?

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

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module.
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012408881

1.CHECK INTEGRATED HOMELINK TRANSMITTER

Check integrated homelink transmitter.
Refer to DLK-315, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE AUTO ANTI-DAZZLING INSIDE MIRROR

Replace auto anti-dazzling inside mirror.
Refer to MIR-32, "Removal and Installation".

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTOMATIC SLIDING DOOR SYSTEM DOES NOT OPERATE

ALL FUNCTIONS

ALL FUNCTIONS : Description

INFOID:0000000012408882

Automatic sliding door system all functions does not operate.

ALL FUNCTIONS : Diagnosis Procedure

INFOID:0000000012408883

1.CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check sliding door control unit power supply and ground circuit.
Refer to DLK-245, "SLIDING DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

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

3.REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

ONE-TOUCH UNLOCK FUNCTION

ONE-TOUCH UNLOCK FUNCTION : Description

INFOID:0000000012408884

Automatic sliding door system one-touch unlock function does not operate.

ONE-TOUCH UNLOCK FUNCTION : Diagnosis Procedure

INFOID:0000000012408885

1.CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 3.
NO >> Refer to DLK-374, "Diagnosis Procedure".

3.CHECK AUTO OPEN/CLOSE FUNCTION

Check automatic sliding door system auto open/close function.

Does sliding door auto open/close with switches?

YES >> GO TO 4.
NO >> Refer to DLK-411, "ALL SWITCHES : Diagnosis Procedure".

4.CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH

Check sliding door one-touch open/close switch.

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- Sliding door LH: Refer to DLK-346, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-348, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

5. CHECK SLIDING DOOR LOCK STATUS SWITCH

Check sliding door lock status switch.
- Sliding door LH: Refer to DLK-336, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-338, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6. REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

POWER ASSIST FUNCTION

POWER ASSIST FUNCTION : Description

INFOID:0000000012408886

Automatic sliding door system power assist function does not operate.

POWER ASSIST FUNCTION : Diagnosis Procedure

INFOID:0000000012408887

1. CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK AUTO OPEN/CLOSE FUNCTION

Check automatic sliding door system auto open/close function.

Does sliding door auto open/close with switches?

YES >> GO TO 3.
NO >> Refer to DLK-411, "ALL SWITCHES : Diagnosis Procedure".

3. REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

UNLOCK-LINKED OPENING FUNCTION

UNLOCK-LINKED OPENING FUNCTION : Description

INFOID:0000000012408888

Automatic sliding door unlock-linked opening function does not operate.

UNLOCK-LINKED OPENING FUNCTION : Diagnosis Procedure

INFOID:0000000012408889

1. CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK ONE-TOUCH UNLOCK FUNCTION

Check automatic sliding door one-touch unlock function.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-404, "ONE-TOUCH UNLOCK FUNCTION : Diagnosis Procedure".

3.REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

HOLD FUNCTION

HOLD FUNCTION : Description

INFOID:0000000012408890

Automatic sliding door system hold function does not operate.

HOLD FUNCTION : Diagnosis Procedure

INFOID:0000000012408891

1.CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK SLIDING DOOR HANDLE SWITCH

Check sliding door handle switch.
- Sliding door LH: Refer to DLK-332, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-334, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

3.CHECK CLUTCH

Check clutch.
- Sliding door LH: Refer to DLK-354, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-355, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

4.CHECK FULL LATCH SWITCH

Check full latch switch.
- Sliding door LH: Refer to DLK-324, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-326, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

5.CHECK HALF LATCH SWITCH

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Check half latch switch.
Refer to DLK-302, "SLIDING DOOR CONTROL UNIT : Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6. REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

ANTI-PINCH FUNCTION

ANTI-PINCH FUNCTION : Description

INFOID:0000000012408892

Automatic sliding door system anti-pinch function does not operate.

ANTI-PINCH FUNCTION : Diagnosis Procedure

INFOID:0000000012408893

1. CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK SLIDING DOOR TOUCH SENSOR

Check sliding door touch sensor.
- Sliding door LH: Refer to DLK-350, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-352, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

3. CHECK ENCODER

Check encoder.
- Sliding door LH: Refer to DLK-317, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-318, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

4. CHECK FULL LATCH SWITCH

Check full latch switch.
- Sliding door LH: Refer to DLK-324, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-326, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

5. CHECK SLIDING DOOR LOCK STATUS SWITCH

Check sliding door lock status switch.
- Sliding door LH: Refer to DLK-336, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-338, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

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NO >> Repair or replace the malfunctioning parts.

6.CHECK SLIDING DOOR SWITCH

Check sliding door switch.
- Sliding door LH: Refer to DLK-321, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-322, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7.REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

INTERMITTENT CLUTCH FUNCTION

INTERMITTENT CLUTCH FUNCTION : Description

INFOID:0000000012408894

Automatic sliding door system intermittent clutch function does not operate.

INTERMITTENT CLUTCH FUNCTION : Diagnosis Procedure

INFOID:0000000012408895

1.CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK CLUTCH

Check clutch.
- Sliding door LH: Refer to DLK-354, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-355, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

3.REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

HAZARD AND BUZZER REMINDER FUNCTION

HAZARD AND BUZZER REMINDER FUNCTION : Description

INFOID:0000000012408896

Automatic sliding door system hazard and buzzer reminder function does not operate.

HAZARD AND BUZZER REMINDER FUNCTION : Diagnosis Procedure

INFOID:0000000012408897

1.CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

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YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK AUTOMATIC SLIDING DOOR WARNING BUZZER

Check automatic sliding door warning buzzer.
- Sliding door LH: Refer to DLK-364, "SLIDING DOOR LH : Diagnosis Procedure".
- Sliding door RH: Refer to DLK-365, "SLIDING DOOR RH : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or rereplace the malfunctioning parts.

3.REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

SLIDING DOOR AUTO CLOSURE FUNCTION

SLIDING DOOR AUTO CLOSURE FUNCTION : Description

INFOID:0000000012408898

Automatic sliding door system sliding door auto closure function does not operate.

SLIDING DOOR AUTO CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000012408899

1.CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK SLIDING DOOR HANDLE SWITCH

Check sliding door handle switch.
- Sliding door LH: Refer to DLK-332, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-334, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

3.CHECK FULL LATCH SWITCH

Check full latch switch.
- Sliding door LH: Refer to DLK-324, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-326, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

4.CHECK NEUTRAL SWITCH

Check neutral switch.
- Sliding door LH: Refer to DLK-328, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-330, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

5.CHECK HALF LATCH SWITCH

Check half latch switch.

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Refer to DLK-302, "SLIDING DOOR CONTROL UNIT : Component Function Check".

Is the inspection result normal?

YES >> GO TO 6
NO >> Repair or replace the malfunctioning parts.

6. CHECK SLIDING DOOR CLOSURE MOTOR

Check sliding door closure motor.

- Sliding door LH: Refer to DLK-362, "SLIDING DOOR LH : Diagnosis Procedure".
- Sliding door RH: Refer to DLK-362, "SLIDING DOOR RH : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7. REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTOMATIC SLIDING DOOR OPEN/CLOSE FUNCTION DOES NOT OPERATE

ALL SWITCHES

ALL SWITCHES : Description

INFOID:0000000012408900

Automatic sliding door system auto open/close function does not operate using all switches.

ALL SWITCHES : Diagnosis Procedure

INFOID:0000000012408901

1. CHECK AUTOMATIC DOOR MAIN SWITCH POSITION

Check automatic door main switch is in the ON position.

Is the inspection result normal?

YES >> GO TO 2
NO >> Press automatic door main switch to ON position.

2. CHECK DTC WITH SLIDING DOOR MAIN SWITCH

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3. CHECK AUTOMATIC DOOR MAIN SWITCH

Check automatic door main switch.
Refer to DLK-290, "SLIDING DOOR CONTROL UNIT : Component Function Check".

Is the inspection result normal?

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

4. CHECK FUEL FILLER LID STATUS SWITCH

Check fuel filler lid status switch.
Refer to DLK-340, "Component Function Check".

Is the inspection result normal?

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

5. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check sliding door control unit power supply and ground circuit.
Refer to DLK-245, "SLIDING DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6. CHECK SLIDING DOOR LOCK RELEASE ACTUATOR

Check sliding door lock release actuator.
- Sliding door LH: Refer to DLK-359, "SLIDING DOOR LH : Diagnosis Procedure".
- Sliding door RH: Refer to DLK-360, "SLIDING DOOR RH : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7. CHECK CLUTCH

Check clutch.
- Sliding door LH: Refer to DLK-354, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-355, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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YES >> GO TO 8.
NO >> Repair or replace the malfunctioning parts.

8. CHECK AUTOMATIC SLIDING DOOR MOTOR

Check automatic sliding door motor.
- Sliding door LH: Refer to DLK-357, "SLIDING DOOR LH : Diagnosis Procedure".
- Sliding door RH: Refer to .DLK-357, "SLIDING DOOR RH : Diagnosis Procedure"

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace the malfunctioning parts.

9. CHECK HALF LATCH SWITCH

Check half latch switch.
Refer to DLK-302, "SLIDING DOOR CONTROL UNIT : Component Function Check".

Is the inspection result normal?

YES >> GO TO 10.
NO >> Repair or replace the malfunctioning parts.

10. CHECK FULL LATCH SWITCH

Check full latch switch.
- Sliding door LH: Refer to DLK-324, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-326, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 11.
NO >> Repair or replace the malfunctioning parts.

11. CHECK SLIDING DOOR SWITCH

Check sliding door switch.
- Sliding door LH: Refer to DLK-321, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-322, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 12.
NO >> Repair or replace the malfunctioning parts.

12. REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

OUTSIDE HANDLE

OUTSIDE HANDLE : Description

INFOID:0000000012408902

Automatic sliding door system auto open/close function does not operate using sliding door outside handle.

OUTSIDE HANDLE : Diagnosis Procedure

INFOID:0000000012408903

1. CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK AUTO OPEN/CLOSE FUNCTION

Check automatic sliding door system auto open/close function.

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Does sliding door auto open/close with switches?

YES >> GO TO 3.
NO >> Refer to DLK-411, "ALL SWITCHES : Diagnosis Procedure".

3. CHECK SLIDING DOOR HANDLE SWITCH

Check sliding door handle switch.
- Sliding door LH: Refer to DLK-332, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-334, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

4. REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

INSIDE HANDLE

INSIDE HANDLE : Description

INFOID:0000000012408904

Automatic sliding door system auto open/close function does not operate using sliding door inside handle.

INSIDE HANDLE : Diagnosis Procedure

INFOID:0000000012408905

1. CHECK CHILD LOCK STATUS

Check child lock is unlock.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2. CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3. CHECK AUTO OPEN/CLOSE FUNCTION

Check automatic sliding door system auto open/close function.

Does sliding door auto open/close with switches?

YES >> GO TO 4.
NO >> Refer to DLK-411, "ALL SWITCHES : Diagnosis Procedure".

4. REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:0000000012408906

Automatic sliding door system auto open/close function does not operate using Intelligent Key.

INTELLIGENT KEY : Diagnosis Procedure

INFOID:0000000012408907

1.CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 3.
NO >> Refer to DLK-374, "Diagnosis Procedure".

3.CHECK AUTO OPEN/CLOSE FUNCTION

Check automatic sliding door system auto open/close function.

Does sliding door auto open/close with sliding door outside handle?

YES >> GO TO 4.
NO >> Refer to DLK-412, "OUTSIDE HANDLE : Diagnosis Procedure".

4.REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

SLIDING DOOR OPEN/CLOSE SWITCH

SLIDING DOOR OPEN/CLOSE SWITCH : Description

INFOID:0000000012408908

Automatic sliding door system auto open/close function does not operate using sliding door open/close switch.

SLIDING DOOR OPEN/CLOSE SWITCH : Diagnosis Procedure

INFOID:0000000012408909

1.CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK AUTO OPEN/CLOSE FUNCTION

Check automatic sliding door system auto open/close function.

Does sliding door auto open/close with switches?

YES >> GO TO 3.
NO >> Refer to DLK-411, "ALL SWITCHES : Diagnosis Procedure".

3.CHECK SLIDING DOOR OPEN/CLOSE SWITCH

Check sliding door open/close switch.

- Front LH: Refer to DLK-342, "FRONT LH : Component Function Check".
- Front RH: Refer to DLK-343, "FRONT RH : Component Function Check".

Is the inspection result normal?

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

4.REPLACE SLIDING DOOR CONTROL UNIT

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1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH

SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH : Description

INFOID:0000000012408910

Automatic sliding door system auto open/close function does not operate using sliding door one-touch open close switch.

SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH : Diagnosis Procedure

INFOID:0000000012408911

1.CHECK DTC WITH SLIDING DOOR CONTROL UNIT

Check that DTC is not detected with sliding door control unit.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK AUTO OPEN/CLOSE FUNCTION

Check automatic sliding door system auto open/close function.

Does sliding door auto open/close with switches?

YES >> GO TO 3.
NO >> Refer to DLK-394, "ALL SWITCHES : Diagnosis Procedure".

3.CHECK SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH

Check sliding door one-touch open/close switch.

- Sliding door LH: Refer to DLK-346, "SLIDING DOOR LH : Component Function Check".
- Sliding door RH: Refer to DLK-348, "SLIDING DOOR RH : Component Function Check".

Is the inspection result normal?

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

4.REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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AUTOMATIC SLIDING DOOR FUNCTIONS DO NOT CANCEL

Diagnosis Procedure

INFOID:0000000012408912

1.CHECK AUTOMATIC DOOR MAIN SWITCH

Check automatic door main switch.
Refer to DLK-290, "SLIDING DOOR CONTROL UNIT : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.REPLACE SLIDING DOOR CONTROL UNIT

1. Replace sliding door control unit. Refer to DLK-499, "RH : Removal and Installation" (RH) or DLK-499, "LH : Removal and Installation" (LH).
2. Confirm the operation after replacement.

Is the result normal?

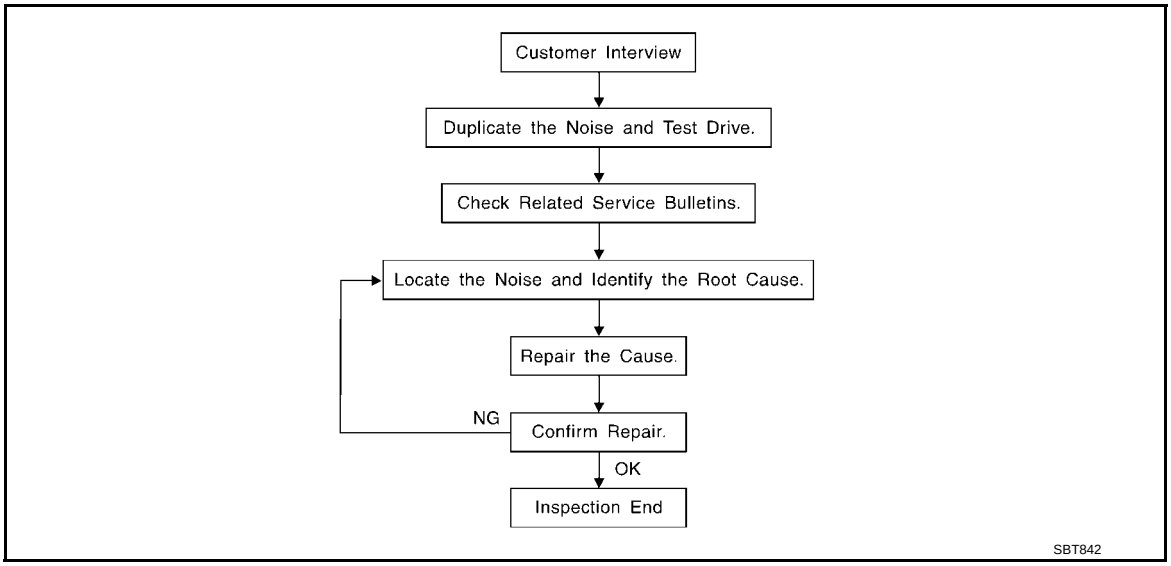
YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000012408913



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to DLK-421, "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, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak – (Like tennis shoes on a clean floor)
  Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces = higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
- Creak – (Like walking on an old wooden floor)
  Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle – (Like shaking a baby rattle)
  Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock – (Like a knock on a door)
  Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick – (Like a clock second hand)
  Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump – (Heavy, muffled knock noise)
  Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz – (Like a bumblebee)
  Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

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

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

1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- Removing the components in the area that is are suspected to be the cause of the noise.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise.
  Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks.
  Refer to DLK-419, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:

- Separate components by repositioning or loosening and retightening the component, if possible.
- Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-50397) is available through the authorized Nissan Parts Department.

CAUTION:
Never use excessive force as many components are constructed of plastic and may be damaged.
NOTE:
Always check with the Parts Department for the latest parts information.
The following materials are contained in the Nissan Squeak and Rattle Kit (J-50397) are listed on the inside cover of the kit; and can each be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)
INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97 in)
FELT CLOTHTAPE
Used to insulate where movement does not occur. Ideal for instrument panel applications.
68370-4B000: 15 × 25 mm (0.59 × 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll
The following materials, not found in the kit, can also be used to repair squeaks and rattles.
UHMW (TEFLON) TAPE

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Insulates where slight movement is present. Ideal for instrument panel applications.
SILICONE GREASE
Used in place of UHMW tape that is be visible or does not fit. Will only last a few months.
SILICONE SPRAY
Used when grease cannot be applied.
DUCT TAPE
Used to eliminate movement.

CONFIRM THE REPAIR

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

Inspection Procedure

INFOID:0000000012408914

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. The cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint
   These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.
   CAUTION:
   Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.

CENTER CONSOLE

Components to pay attention to include:

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 following:

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. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-50397) to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the customer.
In addition look for the following:

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

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Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

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

SEATS

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

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

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

UNDERHOOD

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

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

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

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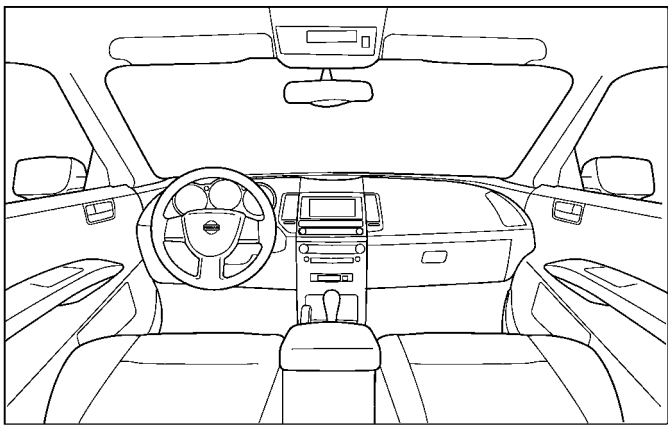
Diagnostic Worksheet

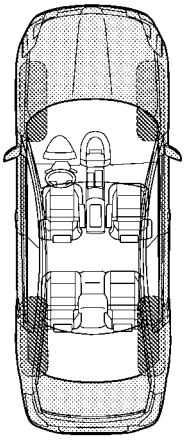
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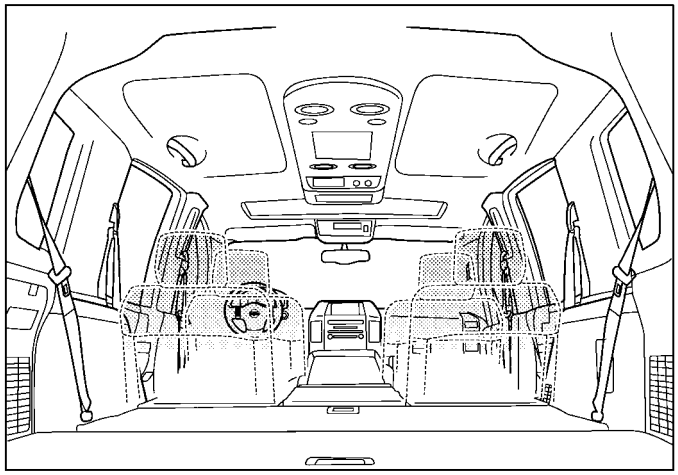
SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

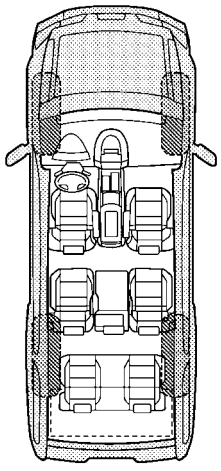
Dear Nissan Customer:
We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what 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

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SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- ☐ anytime
- ☐ 1st time in the morning
- ☐ only when it is cold outside
- ☐ only when it is hot outside
- ☐ after sitting out in the rain
- ☐ when it is raining or wet
- ☐ dry or dusty conditions
- ☐ other:

III. WHEN DRIVING:

- ☐ through driveways
- ☐ over rough roads
- ☐ over speed bumps
- ☐ only about ____ mph
- ☐ on acceleration
- ☐ coming to a stop
- ☐ on turns: left, right or either (circle)
- ☐ with passengers or cargo
- ☐ other: _____
- ☐ after driving _____ miles or _____ minutes

IV. WHAT TYPE OF NOISE

- ☐ squeak (like tennis shoes on a clean floor)
- ☐ creak (like walking on an old wooden floor)
- ☐ rattle (like shaking a baby rattle)
- ☐ knock (like a knock at the door)
- ☐ tick (like a clock second hand)
- ☐ thump (heavy, muffled knock noise)
- ☐ buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

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

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

This form must be attached to Work Order

PIIB8742E

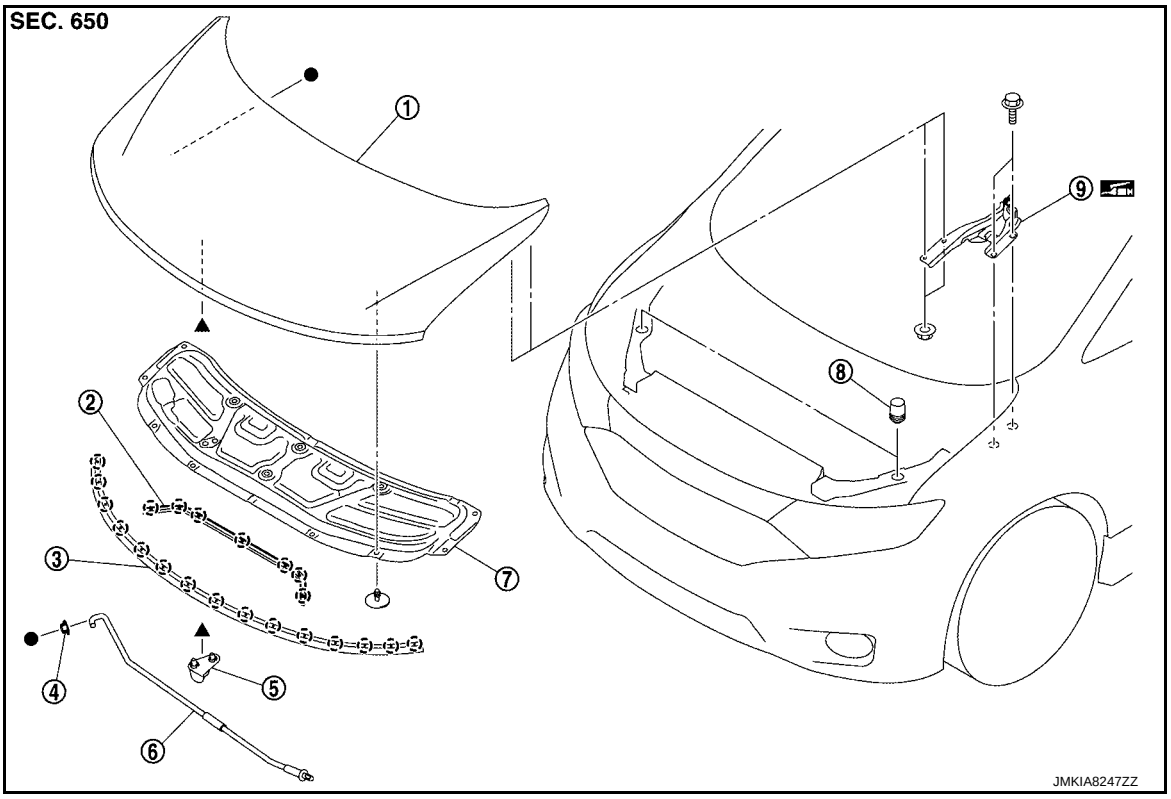
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REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:0000000012408916



1. Hood assembly
2. Radiator core seal
3. Hood seal
4. Grommet
5. Clamp
6. Hood support rod
7. Hood insulator
8. Bumper rubber
9. Hood hinge

: Clip

: Body grease

●, ▲: Indicates that the part is connected at points with same symbol in actual vehicle.

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000012408917

CAUTION:
- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or shop cloth to protect from damage during removal and installation.**

REMOVAL

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

   WARNING:
   Injury may occur if hood assembly is not supported with appropriate material when removing hood assembly.
2. Remove hood hinge mounting nuts on the hood to remove the hood assembly.

INSTALLATION

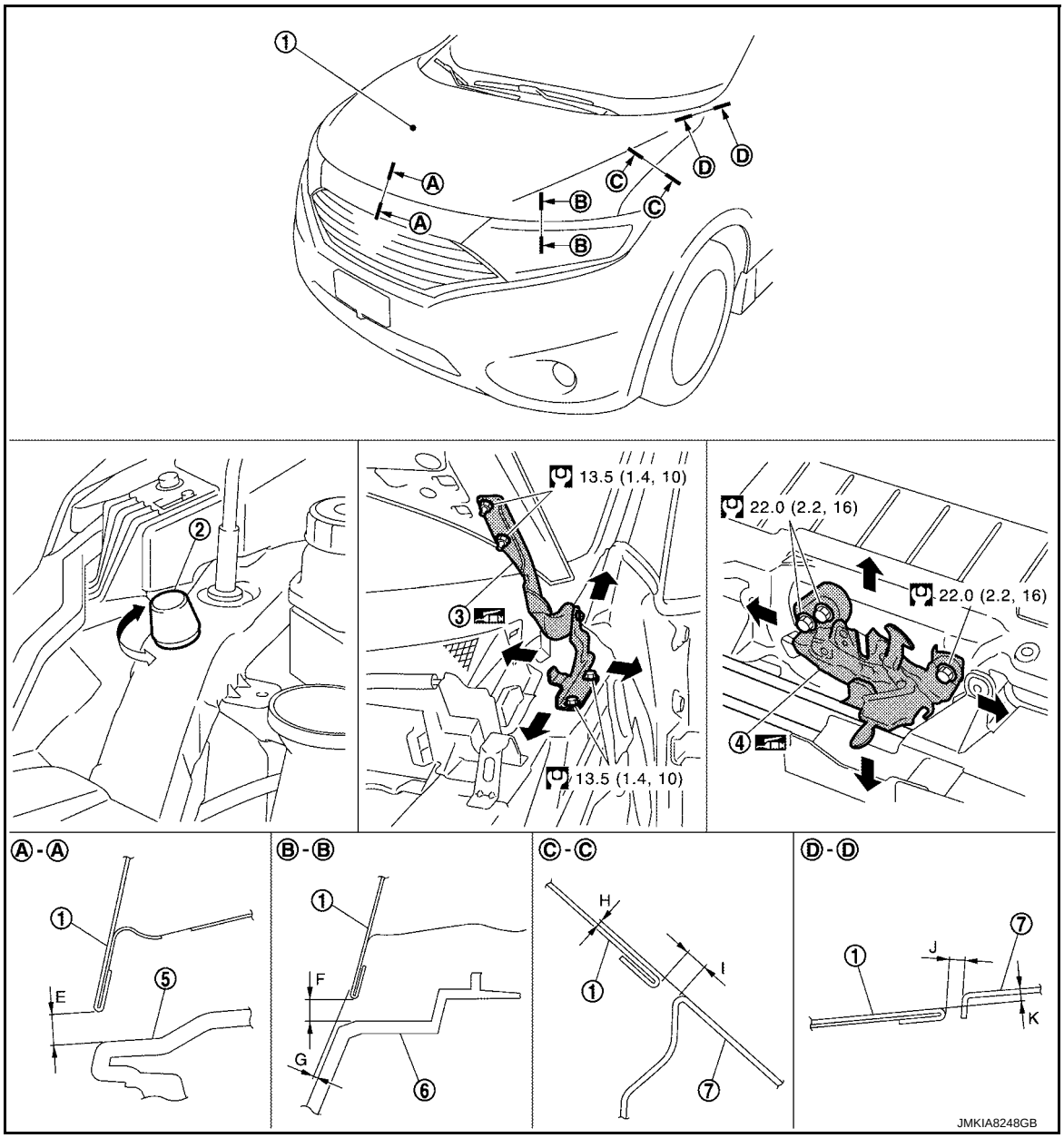
Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Before installing the hood hinge, apply anticorrosive agent onto the mounting surface of the vehicle body.**
- **After installing, perform hood fitting adjustment. Refer to DLK-424, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000012408918



1. Hood assembly
2. Bumper rubber
3. Hood hinge
4. Hood lock assembly
5. Front grille
6. Front combination lamp
7. Front fender

: N·m (kg-m, ft-lb)

: Body grease

Check the clearance and the surface height between hood and each part by visually and touching.
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

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Portion				Standard	Difference (RH/LH, MAX)
Hood – Front grille	A – A	E	Clearance	4.0 – 8.5 mm (0.157 – 0.335 in)	—
Hood – Front combination lamp	B – B	F	Clearance	3.7 – 8.3 mm (0.146 – 0.327 in)	3.0 mm (0.118 in)
		G	Surface height	(–1.7) –(+3.7) mm [(–0.067) – (+0.146) in]	3.0 mm (0.118 in)
Hood – Front fender	C – C	H	Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]	1.5 mm (0.059 in)
		I	Clearance	2.7 – 4.7 mm (0.106 – 0.185 in)	1.5 mm (0.059 in)
Hood – Front fender	D – D	J	Clearance	3.1 – 5.1 mm (0.122 – 0.201 in)	1.5 mm (0.059 in)
		K	Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]	—

FITTING ADJUSTMENT PROCEDURE

1. Remove front grille. Refer to EXT-18, "Removal and Installation".
2. Remove hood lock assembly.
3. Temporarily install front grille, and then adjust the surface height of hood assembly, front fender assembly, and front combination lamp according to the specified value, by rotating hood bumper rubber.
4. Remove front grille.
5. Position hood lock assembly and engage hood striker. Check hood lock assembly and hood striker for looseness.
6. Move hood lock assembly laterally until the center of hood striker and hood lock assembly are vertical when viewed from the front.
7. After adjustment, tighten lock bolts to the specified torque.
8. Check that secondary latch is securely engaged with secondary striker from the dead load of the hood assembly.
9. Check that primary latch is securely engaged with primary striker when hood assembly is closed [free-fall from approximately 200 mm (7.874 in) height].
   CAUTION:
   Never free-fall hood assembly from a height of 300 (11.811 in) mm or more.
10. Install front grille. Refer to EXT-18, "Removal and Installation".

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000012408919

REMOVAL

1. Remove hood assembly. Refer to DLK-423, "HOOD ASSEMBLY : Removal and Installation".
2. Remove front fender. Refer to DLK-429, "FRONT FENDER : Removal and Installation".
3. Remove hood hinge mounting bolts, and then remove hood hinge.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

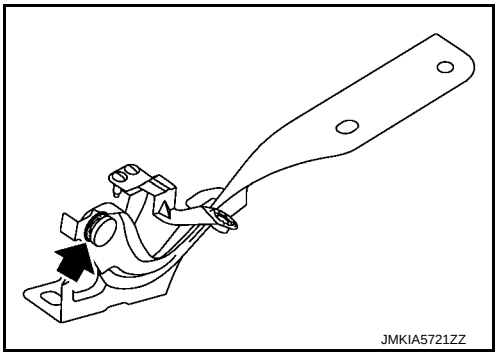
CAUTION:

- **After installation, perform hood fitting adjustment. Refer to DLK-424, "HOOD ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of the hinge mounting bolts and nuts.**

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- **Check hood hinge rotating part for poor lubrication. If necessary, apply grease.**

: Grease up point



HOOD SUPPORT ROD

HOOD SUPPORT ROD : Removal and Installation

INFOID:0000000012408920

REMOVAL

CAUTION:

Two workers are required to support the hood.

1. Support hood assembly with a appropriate material to prevent it from falling.

   WARNING:

   Injury may occur if hood assembly is not supported with appropriate material when removing hood assembly.

2. Pull hood support rod from grommet and remove.

INSTALLATION

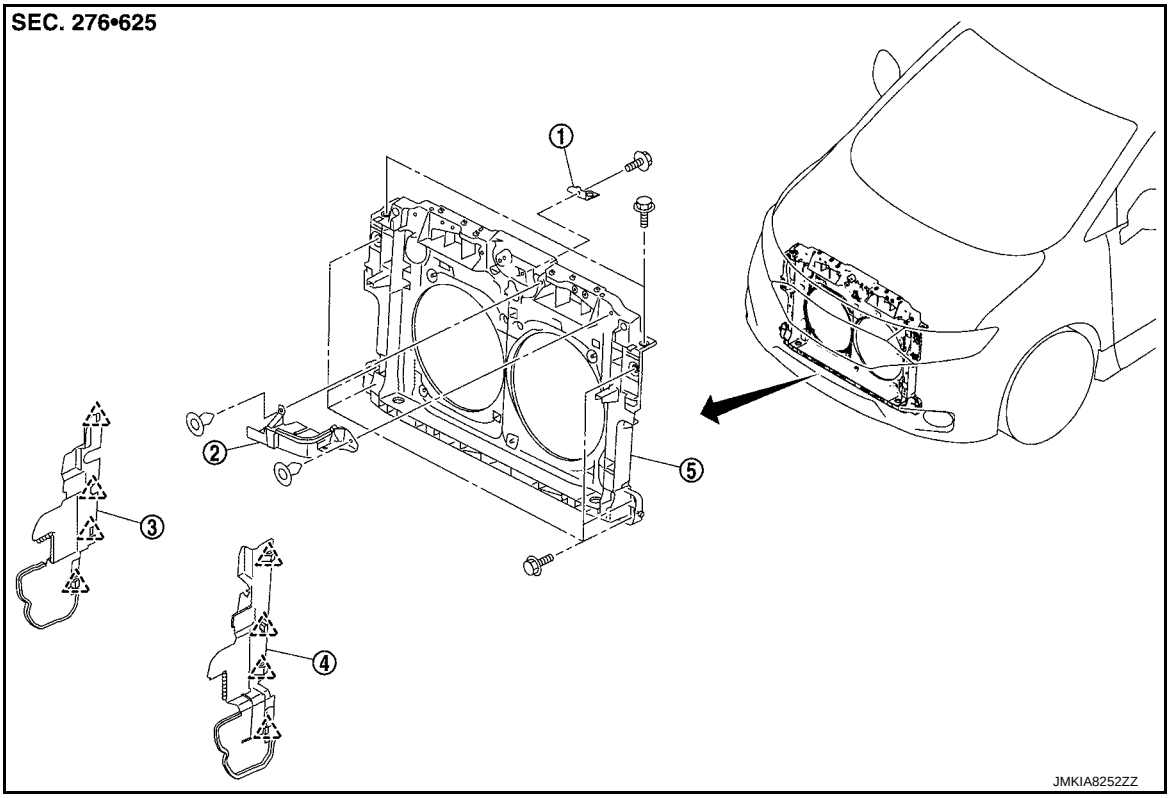
Install in the reverse order of removal.

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RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000012408921



1. Radiator upper hose bracket
2. Air guide upper
3. Air guide side RH
4. Air guide side LH
5. Radiator core support

: Pawl

Removal and Installation

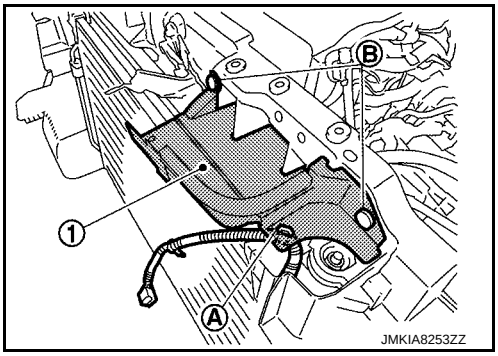
INFOID:0000000012408922

REMOVAL

1. Use a refrigerant collecting equipment to discharge the refrigerant. Refer to HA-20, "Recycle Refrigerant".
2. Remove engine under cover. Refer to EXT-28, "Removal and Installation".
3. Drain engine coolant from radiator. Refer to CO-9, "Draining".
4. Remove front grille. Refer to EXT-18, "Removal and Installation".
5. Remove front bumper fascia, energy absorber, bumper reinforcement. Refer to EXT-12, "Removal and Installation".
6. Remove front combination lamp LH and RH. Refer to EXL-92, "Removal and Installation" (XENON TYPE) or EXL-191, "Removal and Installation" (HALOGEN TYPE).
7. Remove air duct (inlet). Refer to EM-27, "Removal and Installation".
8. Remove air guide upper.

a. Remove exhaust gas/outside odor sensor. Refer to HAC-152, "Removal and Installation" (AUTOMATIC AIR CONDITIONING).

b. Remove harness fixing clip (A).
c. Remove fixing clips (B), and then remove air guide upper (1).



9. Remove hood lock assembly. Refer to DLK-458, "HOOD LOCK : Removal and Installation".
10. Disengage pawls, and then remove air guide side LH and RH.
11. Remove condenser. Refer to HA-43, "CONDENSER : Removal and Installation".
12. Remove ambient sensor. Refer to HAC-148, "Removal and Installation" (AUTOMATIC AIR CONDITIONING).
13. Remove reservoir tank, radiator hose (upper) and radiator pipe (upper). Refer to CO-14, "Removal and Installation".
14. Remove crash zone sensor. Refer to SR-24, "Removal and Installation".
15. Remove cooling fan assembly. Refer to CO-18, "Removal and Installation".
16. Remove radiator hose (lower), radiator pipe (lower) and radiator. Refer to CO-14, "Removal and Installation".
17. Remove all harness clips from radiator core support.
18. Remove mounting bolts, and then remove radiator core support.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

After installation, inspection and replenish the following.

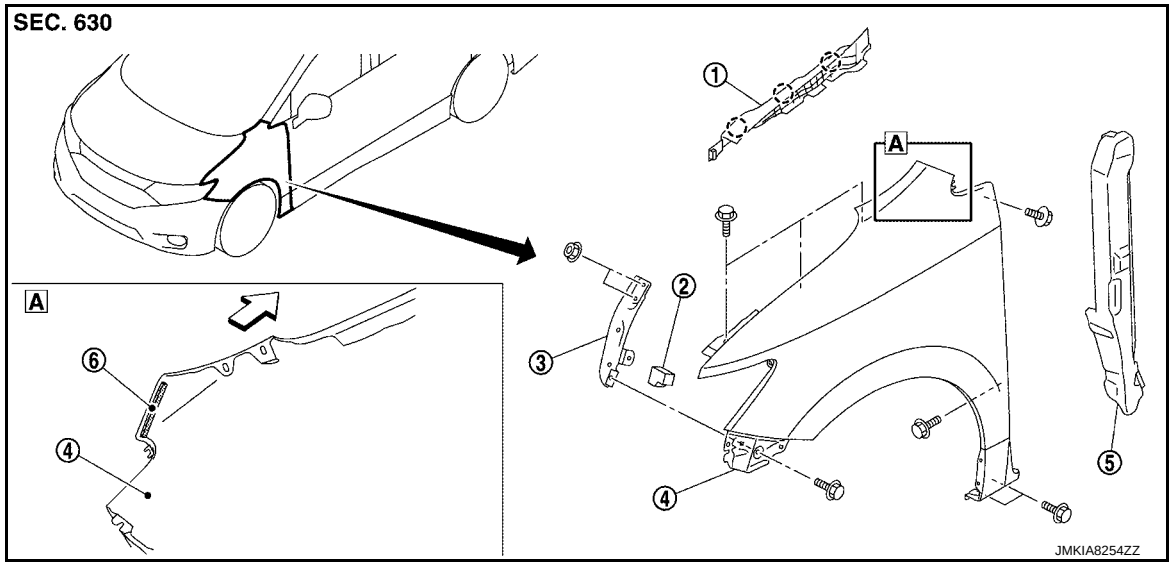
- **Refrigerant: Refer to HA-20, "Charge Refrigerant".**
- **Engine coolant: Refer to CO-10, "Refilling".**

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FRONT FENDER

Exploded View

INFOID:0000000012408923



1. Hood side cover
2. Front fender spacer
3. Front fender stay
4. Front fender assembly
5. Front fender baffle
6. Front fender stiffener

: Clip

: Vehicle front

FRONT FENDER

FRONT FENDER : Removal and Installation

INFOID:0000000012408924

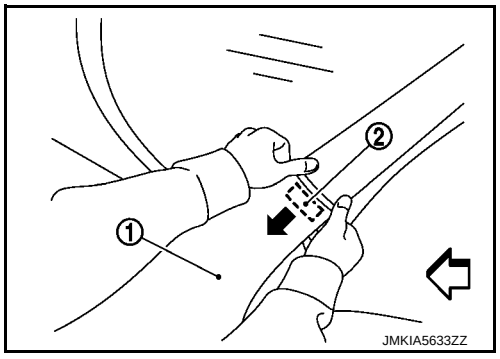
CAUTION:

Use a shop cloth to protect the body from being damaged during removal and installation.

REMOVAL

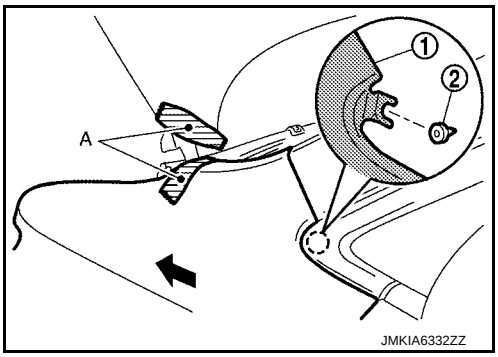
1. Remove front fender cover. Refer to EXT-21, "Exploded View".
2. Remove hood side cover. Refer to DLK-430, "HOOD SIDE COVER : Removal and Installation".
3. Remove front bumper fascia and bumper side bracket. Refer to EXT-12, "Removal and Installation".
4. Remove front combination lamp. Refer to EXL-92, "Removal and Installation" (XENON TYPE) or EXL-191, "Removal and Installation" (HALOGEN TYPE).
5. Remove fender protect molding. Refer to EXT-24, "FENDER PROTECT MOLDING : Removal and Installation".
6. Remove fender protector (front and rear). Refer to EXT-23, "Removal and Installation".
7. Remove front fender spacer and front fender baffle.
8. Remove mounting bolts of front fender assembly.
9. Remove front fender stiffener (2) from the vehicle body while carefully pulling upper portion of front fender (1) toward vehicle outside.

: Vehicle front



10. Move front fender (1) toward vehicle front, and then disengage clip (2).
CAUTION:
Apply protective tape (A) on the hood and front fender to protect the painted surface from damage.

: Clip



11. Remove front fender assembly.

INSTALLATION
Note the following items, and then install in the reverse order of removal.
CAUTION:
- **After installation, apply the touch-up paint (the body color) onto the head of front fender mounting bolts.**
- **After installation, adjust the following part.**
- **Hood assembly: Refer to DLK-424, "HOOD ASSEMBLY : Adjustment".**
- **Front door: Refer to DLK-433, "DOOR ASSEMBLY : Adjustment".**

HOOD SIDE COVER

HOOD SIDE COVER : Removal and Installation

INFOID:0000000012408925

REMOVAL
1. Disconnect end of hood side cover from front combination lamp.
2. Remove fixing clips, and then remove hood side cover.

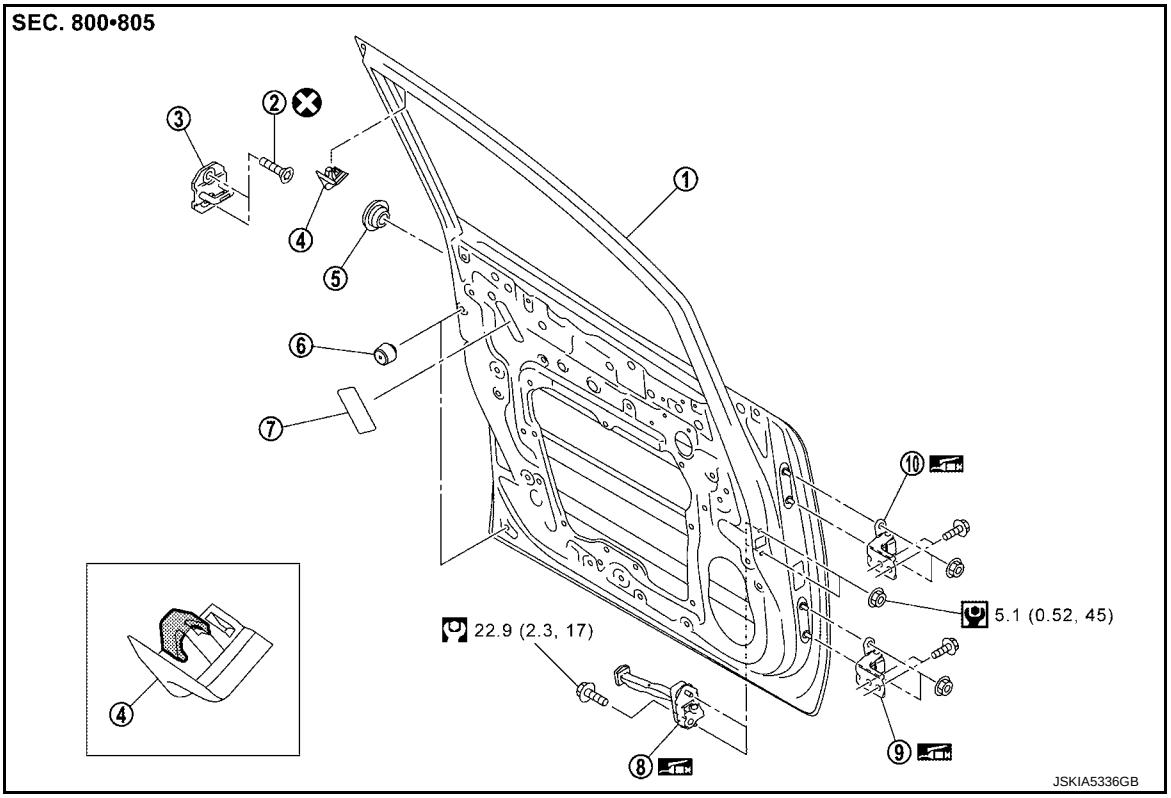
INSTALLATION
Install in the reverse order of removal.

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FRONT DOOR

Exploded View

INFOID:0000000012408926



1. Front door panel
2. TORX bolt
3. Door striker
4. Front door sash inner cover
5. Grommet
6. Bumper rubber
7. Hole cover
8. Door check link
9. Door hinge (lower)
10. Door hinge (upper)

: Always replace after every disassembly.

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

: Body grease

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

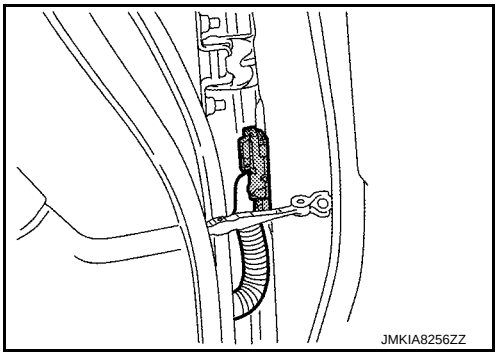
INFOID:0000000012408927

WARNING:
Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.
CAUTION:
- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing front door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove front door protect molding. Refer to EXT-25, "FRONT DOOR PROTECT MOLDING : Removal and Installation".

2. Disconnect front door harness connector.



3. Remove mounting bolt of door check link on the vehicle.
4. Remove door hinge mounting nuts (door side), and then remove door assembly.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

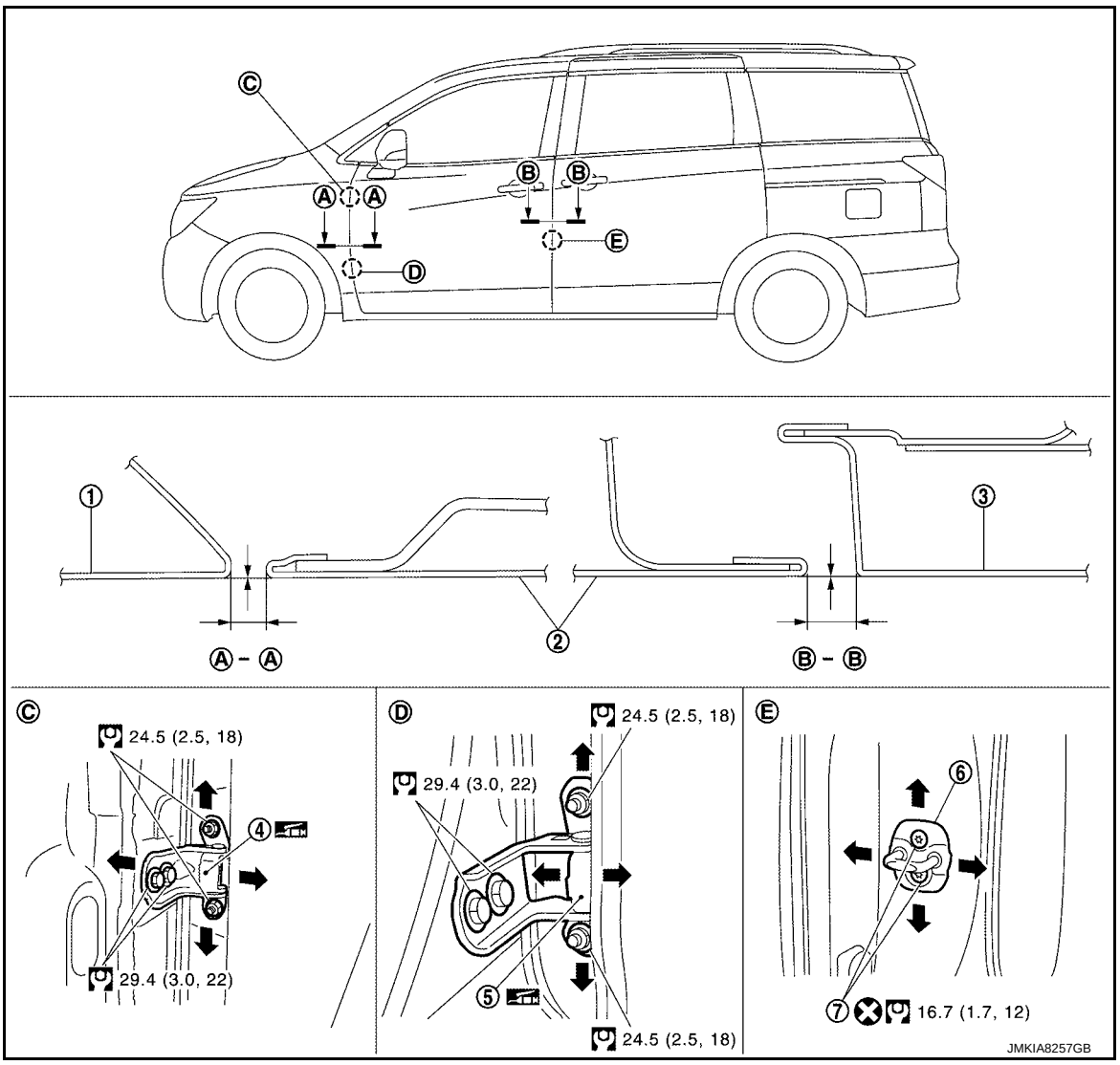
CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check front door open/close, lock/unlock operation after installation.**
- **After installation, perform the fitting adjustment. Refer to DLK-433, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
- **If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT. Refer to SRC-15, "On Board Diagnosis Function" or SRC-19, "CONSULT Function".**
- **After the work is completed, check that no system malfunction is detected by air bag warning lamp.**

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DOOR ASSEMBLY : Adjustment

INFOID:0000000012408928



1. Front fender
2. Front door
3. Slide door
4. Front door hinge (upper)
5. Front door hinge (lower)
6. Door striker
7. TORX bolt

: Always replace after every disassembly.

: N·m (kg-m, ft-lb)

: Body grease

Check the clearance and the surface height between front door and each part by visually and touching.
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Portion			Standard
Front fender – Front door	A – A	Clearance	3.5 – 5.5 mm (0.138 – 0.217 in)
		Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]

Portion			Standard
Front door – Slide door	B – B	Clearance	3.5 – 6.5 mm (0.138 – 0.256 in)
		Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]

FITTING ADJUSTMENT PROCEDURE

1. Remove front fender. Refer to DLK-429, "FRONT FENDER : Removal and Installation".
2. Loosen door hinge mounting nuts on door side.
3. Adjust the surface height of front door according to the fitting standard dimension.
4. Temporarily tighten door hinge mounting nuts on door side.
5. Loosen door hinge mounting bolts on body side.
6. Raise front door at rear end to adjust clearance of the front door according to the fitting standard dimension.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **After installation, apply touch-up paint (the body color) onto the head of hinge mounting bolts and nuts.**
   - **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**
8. Install front fender. Refer to refer to DLK-429, "FRONT FENDER : Removal and Installation".

DOOR STRIKER ADJUSTMENT

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

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000012408929

REMOVAL

Remove TORX bolts, and then remove door striker.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Check front door open/close, operation after installation.**
- **After installation, be sure to perform the fitting adjustment. Refer to DLK-433, "DOOR ASSEMBLY : Adjustment".**

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000012408930

REMOVAL

WARNING:

Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.

CAUTION:

- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing front door assembly, support door with a jack and shop cloth to protect door and body.**

1. Remove front fender. Refer to DLK-429, "FRONT FENDER : Removal and Installation".
2. Remove front door assembly. Refer to DLK-431, "DOOR ASSEMBLY : Removal and Installation".
3. Remove front door hinge mounting bolts (body side), and then remove front door hinge.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

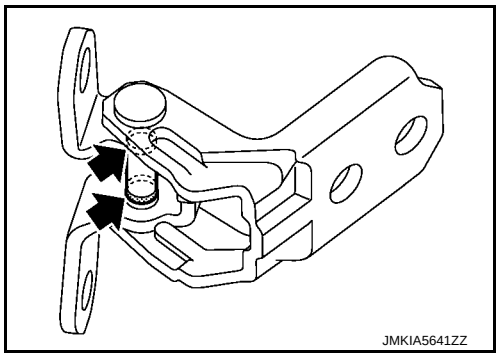
CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check front door open/close, lock/unlock operation after installation.**

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- **After installation, perform the fitting adjustment. Refer to DLK-433, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of door hinge mounting nuts.**
- **Check door hinge rotating part for poor lubrication. If necessary, apply body grease.**

⬅ : Grease up point



- **If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT. Refer to SRC-15, "On Board Diagnosis Function" or SRC-19, "CONSULT Function".**
- **After the work is completed, check that no system malfunction is detected by air bag warning lamp.**

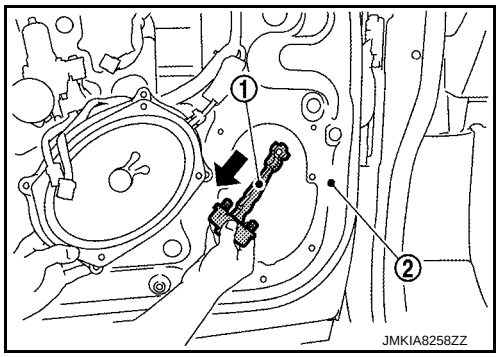
DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000012408931

REMOVAL

1. Fully close the front door window.
2. Remove front door finisher. Refer to INT-14, "Removal and Installation".
3. Remove bracket mounting bolts of front door speaker.
4. Remove front door speaker and bracket as a set, and move them aside.
5. Remove mounting bolt of door check link on the vehicle.
6. Remove mounting nuts of door check link on door panel.
7. Take door check link (1) out from the hole of door panel (2).



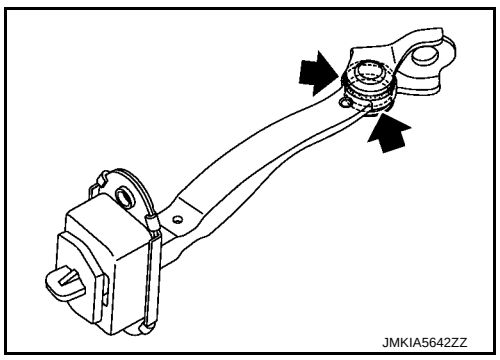
INSTALLATION

Note the following items, and install in the reverse order of removal.

CAUTION:

- **Check front door open/close operation after installation.**
- **Check door check link rotating part for poor lubrication. If necessary, apply grease.**

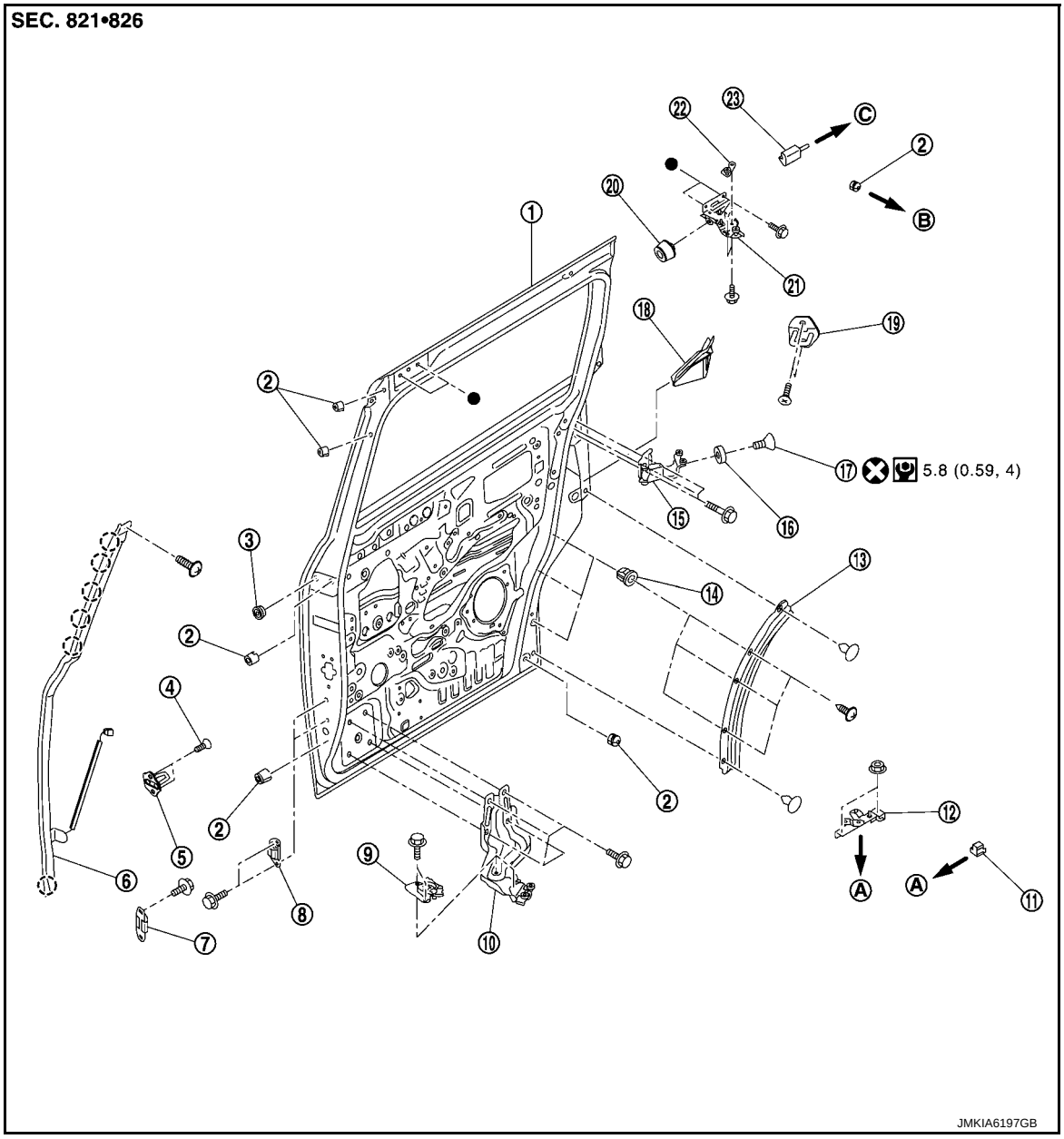
⬅ : Grease up point



SLIDE DOOR

Exploded View

INFOID:0000000012408932



1. Slide door panel
2. Bumper rubber
3. Grommet
4. TORX bolt
5. Door striker (front)
6. Touch sensor (automatic sliding door models)
7. Dovetail (female)
8. Dovetail (male)
9. Lower latch
10. Lower roller
11. Slide door lower stopper
12. Slide door lower striker
13. Slide door lower weather-strip
14. Screw grommet
15. Rear roller
16. Roller
17. TORX bolt
18. Slide door outside protector
19. Door striker (rear)
20. Stopper rubber
21. Upper roller assembly
22. Sub roller
23. Slide door upper stopper

A : To slide door lower rail
B : To body outer panel
C : Slide door upper rail

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: Clip

: Always replace after every disassembly.

: N·m (kg-m, in-lb)

●: Indicates that the part is connected at points with same symbol in actual vehicle.

DOOR ASSEMBLY

DOOR ASSEMBLY : Removal and Installation

INFOID:0000000012408933

CAUTION:

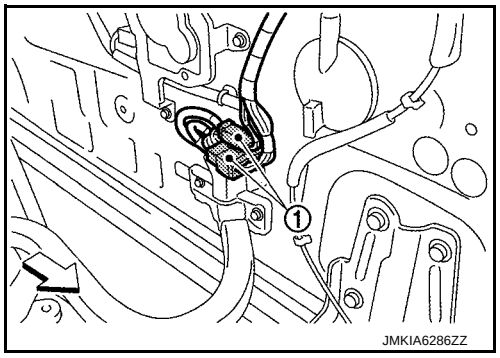
- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing slide door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove slide door protect molding. Refer to EXT-26, "SLIDE DOOR PROTECT MOLDING : Removal and Installation".
2. Remove slide door finisher. Refer to INT-17, "Removal and Installation".
3. Remove lower latch. Refer to DLK-442, "LOWER LATCH : Removal and Installation".
4. Disconnect uninterruptible power supply harness from slide door panel.

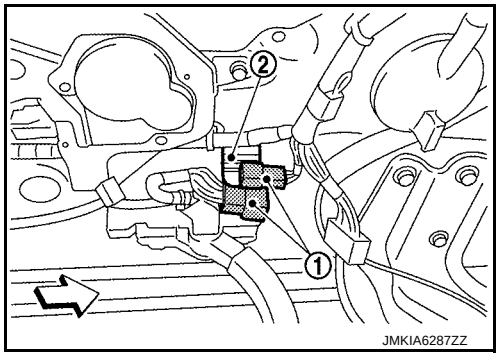
a. Disconnect harness connector (1).

: Vehicle front



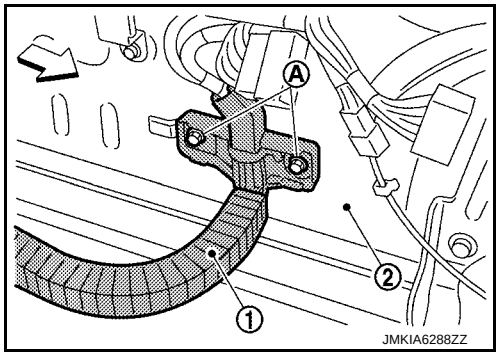
b. Remove harness connectors (1) from harness connector bracket (2).

: Vehicle front



c. Remove mounting bolts (A), and then remove uninterruptible power supply harness (1) from slide door panel (2).

: Vehicle front



5. Remove upper roller assembly mounting bolts. Refer to DLK-440, "UPPER ROLLER : Removal and Installation".

6. Remove rear roller mounting bolts. Refer to DLK-441, "REAR ROLLER : Removal and Installation".
7. Remove lower roller mounting bolts. Refer to DLK-441, "LOWER ROLLER : Removal and Installation".
8. Remove slide door assembly.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

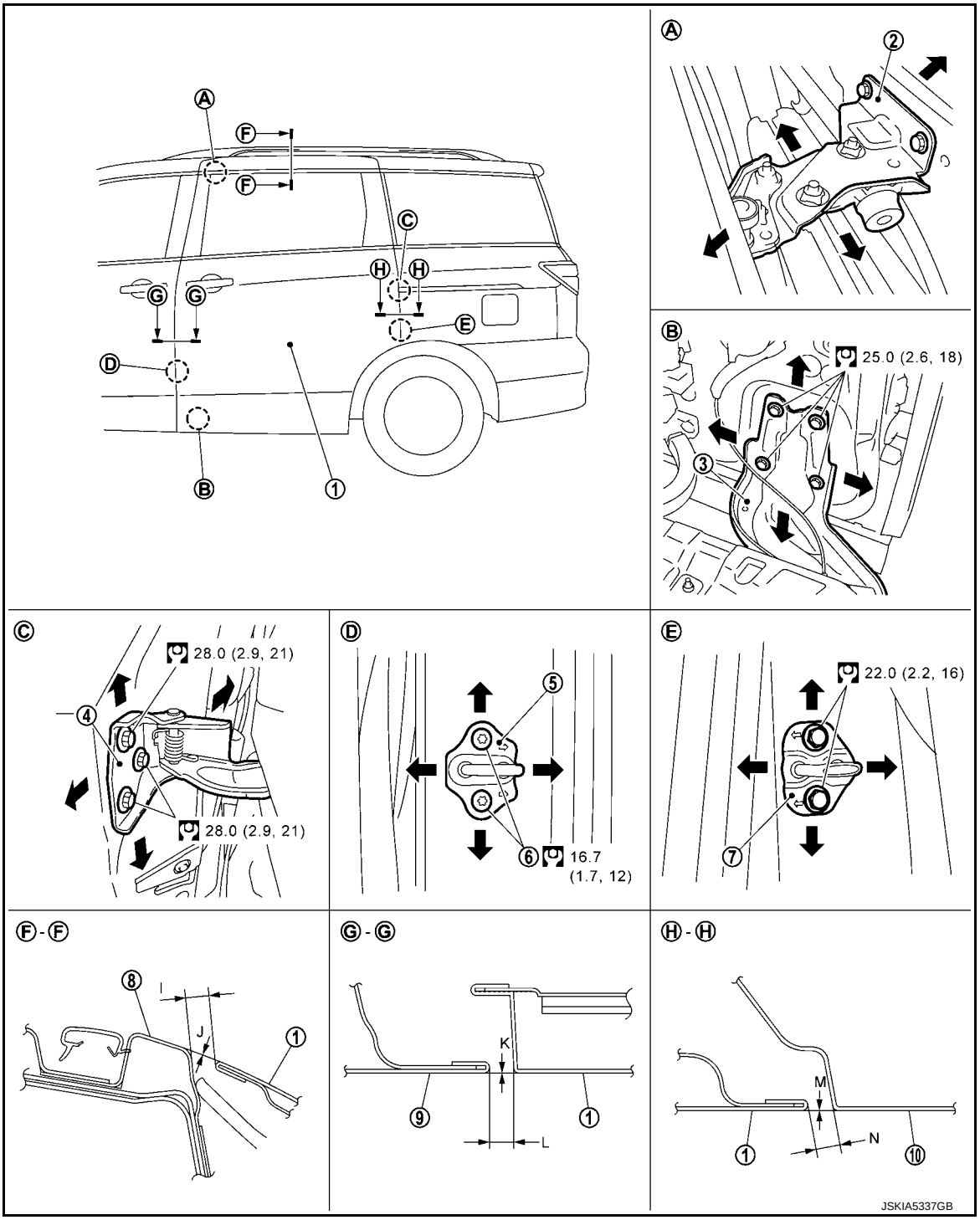
CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check slide door open/close, lock/unlock operation after installation.**
- **After installation, perform the fitting adjustment. Refer to DLK-439, "DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of slide door roller mounting bolts.**

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DOOR ASSEMBLY : Adjustment

INFOID:0000000012408934



1. Slide door
2. Upper roller assembly
3. Lower roller
4. Rear roller
5. Door striker (front)
6. TORX bolt
7. Door striker (rear)
8. Body side outer
9. Front door
10. Body side outer

: N·m (kg-m, ft-lb)

Check the clearance and the surface height between slide door each part by visually and touching.
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Portion				Standard
Slide door – Body side outer	F – F	I	Clearance	5.1 – 7.1 mm (0.201 – 0.280 in)
		J	Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]
Front door – Slide door	G – G	K	Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]
		L	Clearance	3.5 – 6.5 mm (0.138 – 0.256 in)
Slide door – Body side outer	H – H	M	Surface height	(–1.0) – (+1.0) mm [(–0.039) – (+0.039) in]
		N	Clearance	3.3 – 6.3 mm (0.130 – 0.248 in)

FITTING ADJUSTMENT PROCEDURE

Loosen the upper roller assembly, lower roller and rear roller mounting bolts, adjust the surface of slide door according to the fitting standard dimension.

DOOR STRIKER ADJUSTMENT

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

CAUTION:

After installation, apply touch-up paint (the body color) onto the head of slide door roller mounting bolts.

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000012408935

REMOVAL

Door striker (front)

Remove mounting TORX bolts, and then remove door striker (front).

Door striker (rear)

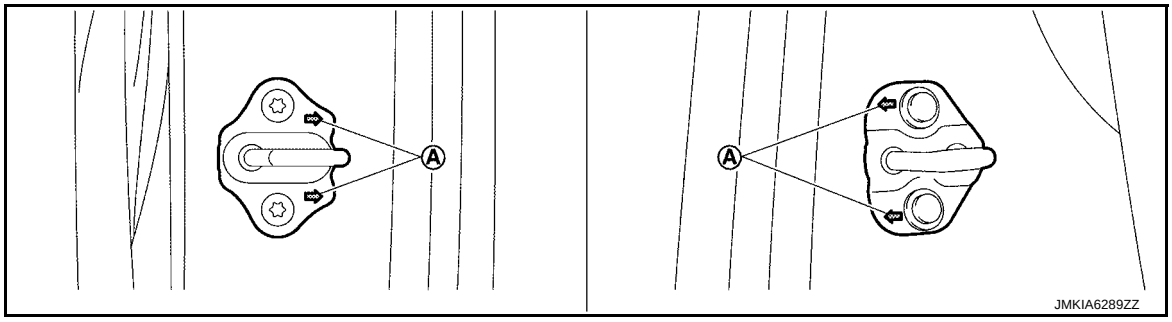
Remove mounting bolts, and then remove door striker (rear).

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **After installation, be sure to perform the fitting adjustment. Refer to DLK-439, "DOOR ASSEMBLY : Adjustment".**
- **After installation, check that the direction of arrows (A), as shown in the figure, faces toward passenger room.**



Door striker (front) Door striker (rear)

UPPER ROLLER

UPPER ROLLER : Removal and Installation

INFOID:0000000012408936

CAUTION:

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- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing slide door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove slide door upper stopper. Refer to DLK-446, "SLIDE DOOR UPPER STOPPER : Removal and Installation".
2. Support the front of slide door with the proper material to prevent it from falling.

   WARNING:
   Bodily injury may occur if no supporting jack is holding slide door open when removing upper roller assembly.
3. Remove upper roller assembly mounting bolts.
4. Remove upper roller assembly and sub roller as a set.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check slide door open/close operation after installation.**
- **When removing and installing slide door assembly, perform the fitting adjustment. Refer to DLK-439, "DOOR ASSEMBLY : Adjustment".**
- **After installing, apply the touch-up paint (the body color) onto the head of upper roller mounting bolts.**

REAR ROLLER

REAR ROLLER : Removal and Installation

INFOID:0000000012408937

CAUTION:
- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing slide door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove slide door rail cover. Refer to EXT-43, "Removal and Installation".
2. Support the end of slide door with the proper material to prevent it from falling.

   WARNING:
   Bodily injury may occur if no supporting jack is holding slide door open when removing rear roller.
3. Remove rear roller mounting bolts.
4. Disconnect cable holder of automatic sliding door unit (automatic sliding door models). Refer to DLK-473, "AUTOMATIC SLIDING DOOR UNIT : Removal and Installation".
5. Remove rear roller.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:
- **Apply anticorrosive agent onto the mounting surface.**
- **Check slide door open/close operation after installation.**
- **When removing and installing slide door assembly, perform the fitting adjustment. Refer to DLK-439, "DOOR ASSEMBLY : Adjustment".**
- **After installing, apply the touch-up paint (the body color) onto the head of rear roller mounting bolts.**

LOWER ROLLER

LOWER ROLLER : Removal and Installation

INFOID:0000000012408938

CAUTION:
- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing slide door assembly, support door with a jack and shop cloth to protect door and body.**

REMOVAL

1. Remove slide door finisher. Refer to INT-17, "Removal and Installation".
2. Remove lower latch. Refer to DLK-442, "LOWER LATCH : Removal and Installation".
3. Remove slide door lower striker. Refer to DLK-445, "SLIDE DOOR LOWER STRIKER : Removal and Installation".
4. Support the front of slide door with the proper material to prevent it from falling.

   WARNING:
   Bodily injury may occur if no supporting jack is holding slide door open when removing lower roller.
5. Remove the mounting bolts, and then remove the lower roller.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check slide door open/close operation after installation.**
- **When removing and installing slide door assembly, perform the fitting adjustment. Refer to DLK-439, "DOOR ASSEMBLY : Adjustment".**
- **After installing, apply the touch-up paint (the body color) onto the head of lower roller mounting bolts.**

LOWER LATCH

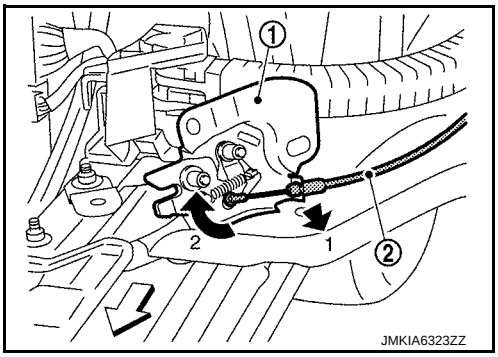
LOWER LATCH : Removal and Installation

INFOID:0000000012408939

REMOVAL

1. Remove rear kicking plate. Refer to INT-22, "KICKING PLATE : Removal and Installation".
2. Remove lower latch mounting bolts.
3. Disconnect remote control door lock cable (2) from lower latch (1).

⇦ : Vehicle front



INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

After installation, check door open/close, lock/unlock operation.

DOVETAIL

DOVETAIL : Removal and Installation

INFOID:0000000012408940

REMOVAL

Remove the mounting bolts, and then remove the dovetail (male/female).

INSTALLATION

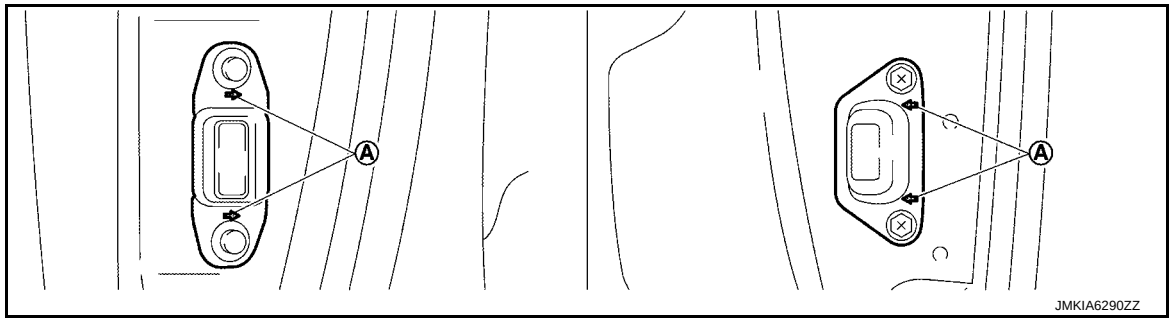
Install in the reverse order of removal.

1. Install dovetail (male).
2. Temporarily tighten dovetail (female) mounting bolts.
3. Perform the fitting adjustment.

a. Open and close two or three times slide doors.
b. Open the slide door, and then tighten the dovetail (female) mounting bolts.

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CAUTION:
After installation, check that the direction of arrows (A), as shown in the figure, faces toward passenger room.



Dovetail (female) Dovetail (male)

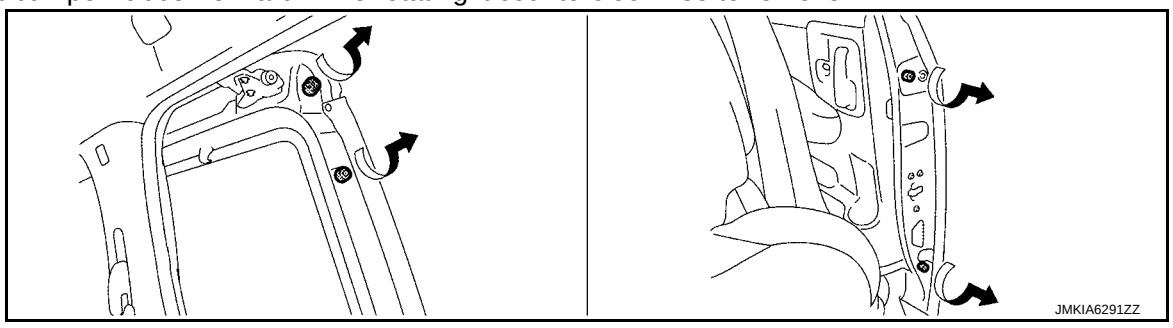
BUMPER RUBBER

BUMPER RUBBER : Removal and Installation

INFOID:0000000012408941

BUMPER RUBBER

Removal
Pull out bumper rubber forward while rotating it counterclockwise to remove.

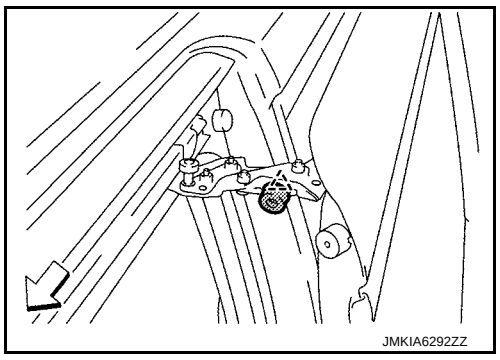


Installation
Install in the reverse order of removal.

STOPPER RUBBER

Removal
Disengage pawl of stopper rubber to remove.

: Pawl
: Vehicle front

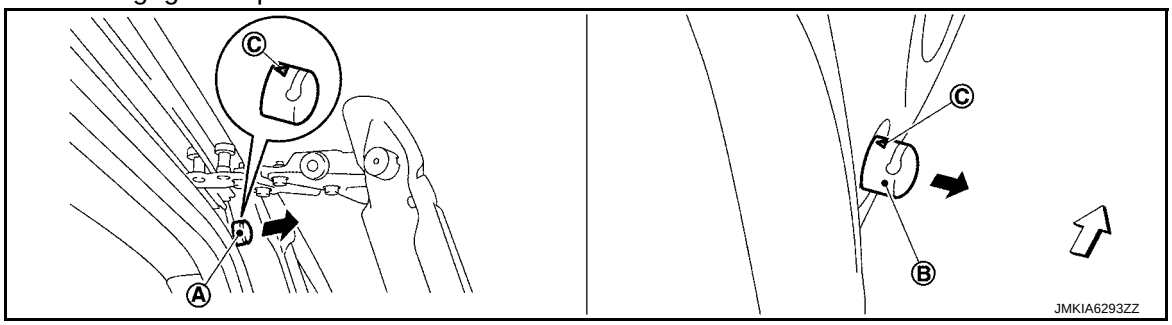


Installation
Install in the reverse order of removal.

BUMPER RUBBER (BODY UPPER PORTION AND SLIDE DOOR REAR LOWER PORTION)

Removal

Pull out and disengage bumper rubber to remove.



⇦ : Vehicle front

CAUTION:

When installing, check that △ mark (C) on bumper rubber of body upper portion (A) and slide door rear lower portion (B) are visible to vehicle upper side.

Installation

Install in the reverse order of removal.

SLIDE DOOR LOWER WEATHER-STRIP

SLIDE DOOR LOWER WEATHER-STRIP : Removal and Installation

INFOID:0000000012408942

REMOVAL

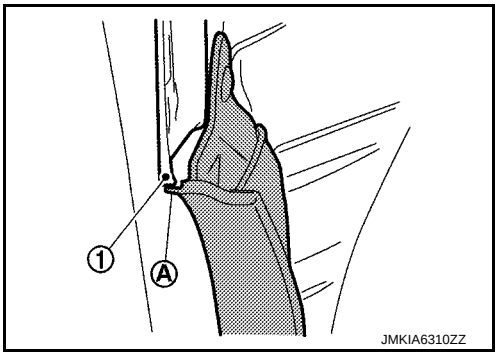
Remove fixing screws and clips, and then remove slide door lower weather-strip.

INSTALLATION

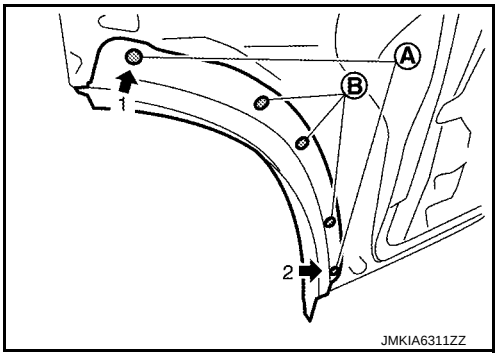
Note the following items, and then install in the reverse order of removal.

CAUTION:

- **When installing, check that lip portion (A) of slide door lower weather-strip overlaps end of slide door panel (1).**



- **When installing, install mounting clips (A) and mounting screws (B) in numerical order as shown in the figure.**



SLIDE DOOR OUTSIDE PROTECTOR

SLIDE DOOR OUTSIDE PROTECTOR : Removal and Installation

INFOID:0000000012408943

REMOVAL

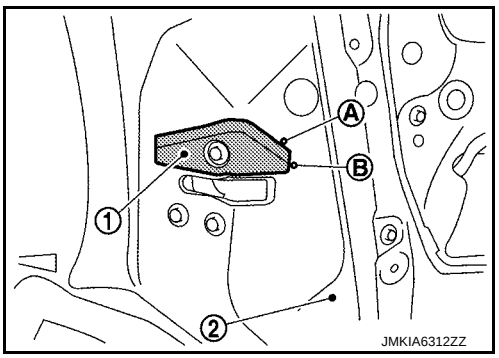
Remove slide door outside protector while peeling double-sided adhesive tape.

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INSTALLATION

Install slide door panel (2) while checking the installation position of slide door outside protector (1).

- Align to vehicle vertical position mark (A).
- Align to vehicle longitudinal position mark (B).
- Align lower end of slide door outside protector to be parallel to lock opening portion.



NOTE:

When reusing slide door outside protector, remove double-sided adhesive tape from protector and slide door panel sides, clean the applied area of double-sided adhesive tape, and then install slide door outside protector to slide door panel using new double-sided adhesive tape.

Double-sided tape t: 1.2 mm (0.047 in)

SLIDE DOOR LOWER STRIKER

SLIDE DOOR LOWER STRIKER : Removal and Installation

INFOID:0000000012408944

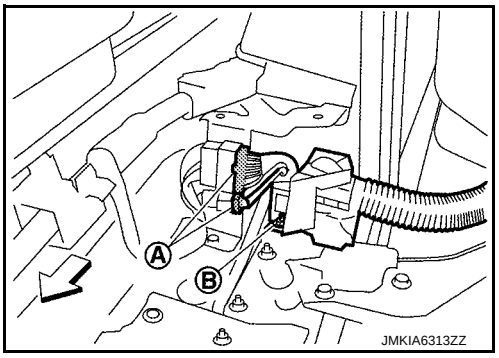
REMOVAL

1. Remove rear kicking plate and rear floor step assembly. Refer to INT-22, "KICKING PLATE : Removal and Installation" and INT-20, "Exploded View".
2. Disconnect uninterruptible power supply harness from slide door lower striker.

a. Disconnect harness connector (A).

b. Remove uninterruptible power supply harness mounting nut (B).

⇦ : Vehicle front



3. Remove mounting nuts, and then remove slide door lower striker.

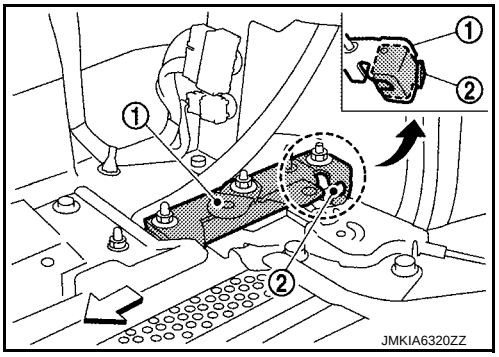
INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Fix rear end of slide door lower striker (1) to rear portion of slide door lower stopper (2).

⇦ : Vehicle front



SLIDE DOOR LOWER STOPPER

SLIDE DOOR LOWER STOPPER : Removal and Installation

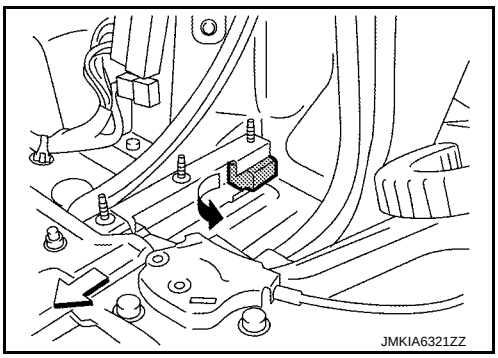
INFOID:0000000012408945

REMOVAL

1. Remove slide door lower striker. Refer to DLK-445, "SLIDE DOOR LOWER STRIKER : Removal and Installation".

2. Remove slide door lower stopper.

⇦ : Vehicle front


JMKIA6321ZZ

INSTALLATION
Install in the reverse order of removal.

SLIDE DOOR UPPER STOPPER

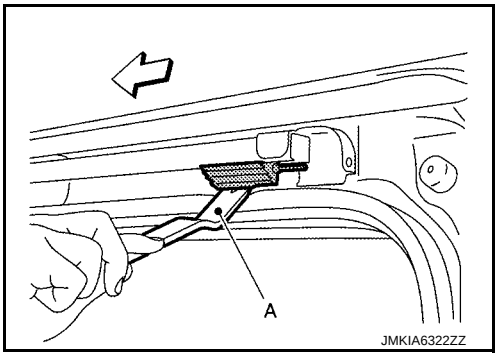
SLIDE DOOR UPPER STOPPER : Removal and Installation

INFOID:0000000012408946

REMOVAL

1. Slide the slide door upper stopper toward vehicle front.
2. Use a remover tool (A), and then remove slide door upper stopper.

⇦ : Vehicle front



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INSTALLATION
Install in the reverse order of removal.

TOUCH SENSOR

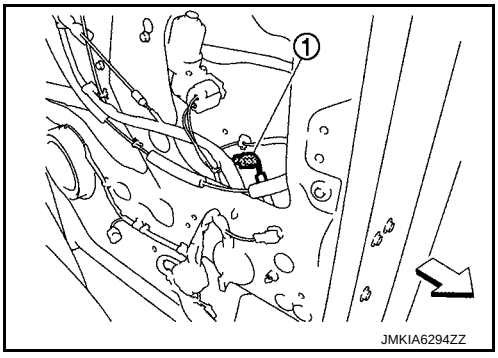
TOUCH SENSOR : Removal and Installation

INFOID:0000000012408947

REMOVAL

1. Remove remote control assembly. Refer to DLK-472, "REMOTE CONTROL ASSEMBLY : Removal and Installation".
2. Remove front side of sealing screen.
   NOTE:
   Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.
3. Disconnect touch sensor harness connector (1).

⇦ : Vehicle front

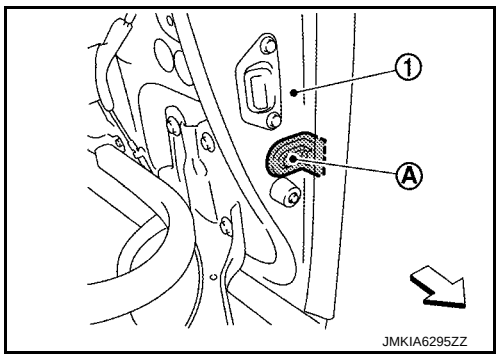


JMKIA6294ZZ

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4. Remove grommet (A), and then pull out harness from slide door panel (1).

⇦ : Vehicle front



5. Remove mounting screws and mounting clips, and then pull touch sensor toward vehicle front to remove.
CAUTION:
Never hit or bend touch sensor strongly.

INSTALLATION

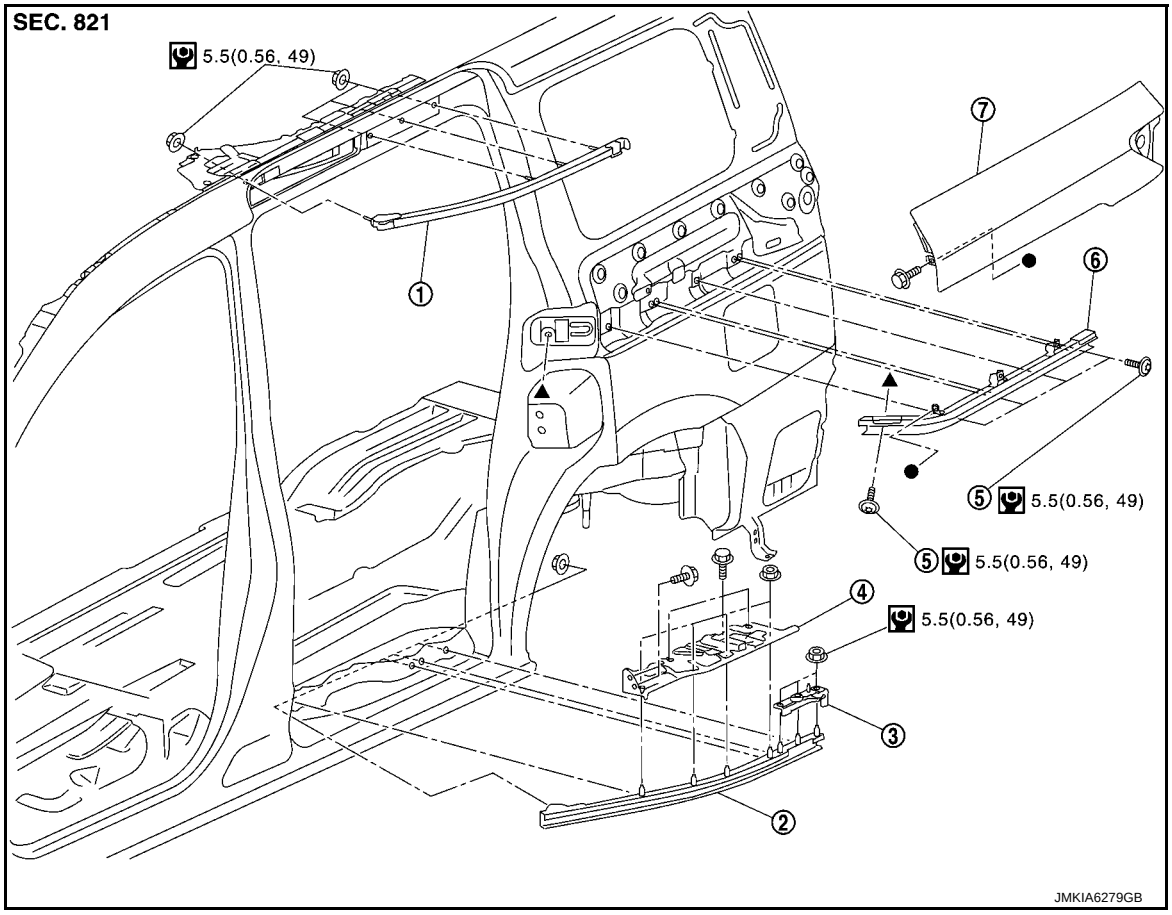
Note the following item, and install in the reverse order of removal.
CAUTION:
After installation, check that slide door is reversed normally.

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SLIDE DOOR GUIDE RAIL

Exploded View

INFOID:0000000012408948



1. Slide door upper guide rail
2. Slide door lower guide rail
3. Slide door lower striker
4. Rear floor step assembly
5. TORX bolt
6. Slide door rear guide rail
7. Slide door rail cover

: N·m (kg-m, in-lb)

●: ▲: Indicates that the part is connected at points with same symbol in actual vehicle.

SLIDE DOOR UPPER GUIDE RAIL

SLIDE DOOR UPPER GUIDE RAIL : Removal and Installation

INFOID:0000000012408949

CAUTION:

- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing slide door assembly, support door with a jack and shop cloth to protect door and body.**
- **Perform the following procedures after replacing guide rail.**
- **Paint rail the same color as the vehicle body.**
- **Apply grease to the roller rotating portion.**
- **Apply anti-corrosion treatment to installation surface between body panel and rail.**
- **Adjust fitting of slide door after installation. Refer to DLK-439, "DOOR ASSEMBLY : Adjustment".**

REMOVAL

1. Remove headlining. Refer to INT-35, "Removal and Installation".
2. Remove slide door assembly. Refer to DLK-437, "DOOR ASSEMBLY : Removal and Installation".

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3. Remove slide door upper stopper. Refer to DLK-446, "SLIDE DOOR UPPER STOPPER : Removal and Installation".
4. Remove upper roller assembly and sub roller as a set. Refer to DLK-440, "UPPER ROLLER : Removal and Installation".
5. Remove mounting nuts, and then remove slide door upper guide rail.

INSTALLATION

Install in the reverse order of removal.

SLIDE DOOR REAR GUIDE RAIL

SLIDE DOOR REAR GUIDE RAIL : Removal and Installation

INFOID:0000000012408950

CAUTION:

- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing slide door assembly, support door with a jack and shop cloth to protect door and body.**
- **Perform the following procedures after replacing guide rail.**
- **Paint rail the same color as the vehicle body.**
- **Apply anti-corrosion treatment to installation surface between body panel and rail.**
- **Adjust fitting of slide door after installation. Refer to DLK-439, "DOOR ASSEMBLY : Adjustment".**

REMOVAL

1. Remove slide door assembly. Refer to DLK-437, "DOOR ASSEMBLY : Removal and Installation".
2. Remove slide door rail cover. Refer to EXT-43, "Removal and Installation".
3. Remove rear roller. Refer to DLK-441, "REAR ROLLER : Removal and Installation".
4. Remove luggage side lower finisher. Refer to INT-43, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
5. Remove mounting TORX bolts and nuts, and then remove slide door rear guide rail.

INSTALLATION

Install in the reverse order of removal.

SLIDE DOOR LOWER GUIDE RAIL

SLIDE DOOR LOWER GUIDE RAIL : Removal and Installation

INFOID:0000000012408951

CAUTION:

- **Perform work with 2 workers, because of its heavy weight.**
- **When removing and installing slide door assembly, support door with a jack and shop cloth to protect door and body.**
- **Perform the following procedures after replacing guide rail.**
- **Paint rail the same color as the vehicle body.**
- **Apply anti-corrosion treatment to installation surface between body panel and rail.**
- **Apply anti-corrosion treatment to each end of mounting nuts and stud bolts of rail.**
- **Adjust fitting of slide door after installation. Refer to DLK-439, "DOOR ASSEMBLY : Adjustment".**

REMOVAL

1. Remove slide door assembly. Refer to DLK-437, "DOOR ASSEMBLY : Removal and Installation".
2. Remove rear kicking plate. Refer to INT-22, "KICKING PLATE : Removal and Installation".
3. Remove mounting bolts, and then remove rear floor step assembly.
4. Remove slide door lower striker. Refer to DLK-445, "SLIDE DOOR LOWER STRIKER : Removal and Installation".
5. Remove slide door lower stopper. Refer to DLK-445, "SLIDE DOOR LOWER STOPPER : Removal and Installation".
6. Remove lower roller. Refer to DLK-441, "LOWER ROLLER : Removal and Installation".
7. Remove mounting nuts, and then remove slide door lower guide rail.

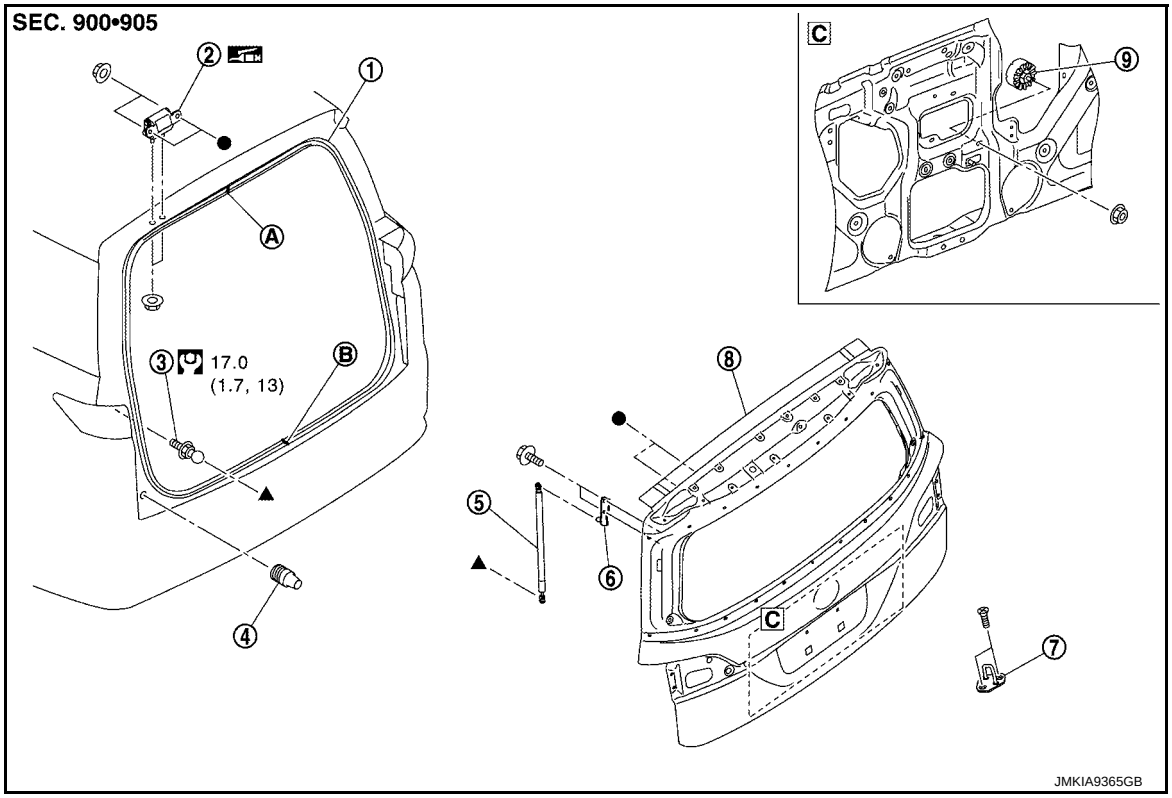
INSTALLATION

Install in the reverse order of removal.

BACK DOOR

Exploded View

INFOID:0000000012408952



1. Back door weather-strip
2. Back door hinge
3. Stud ball
4. Bumper rubber
5. Back door stay
6. Back door stay bracket
7. Back door striker
8. Back door panel
9. Back door damper

A. Center mark

B. Seam

: N·m (kg-m, ft-lb)

: Body grease

●, ▲: Indicates that the part is connected at points with same symbol in actual vehicle.

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000012408953

CAUTION:

- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or cloth to protect from damage during remove and installation.**

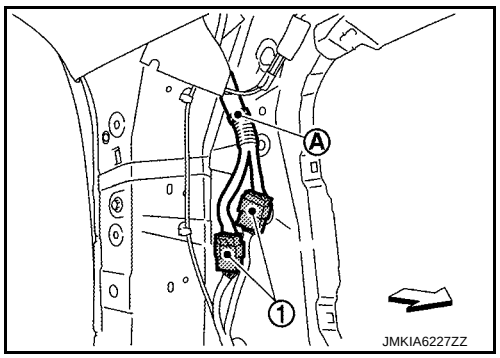
REMOVAL

1. Remove back door support rod (back door side). Refer to DLK-476, "BACK DOOR SUPPORT ROD : Removal and Installation" (automatic back door models).
2. Remove back pillar garnish LH and RH. Refer to INT-27, "BACK PILLAR GARNISH : Removal and Installation".

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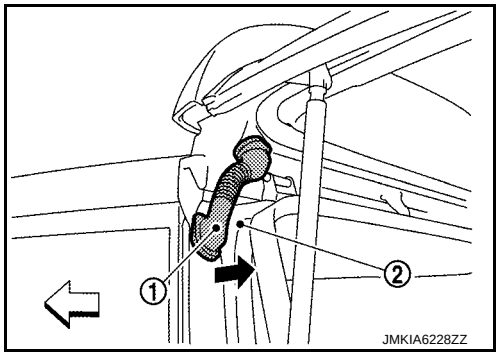
3. Disconnect harness connectors (1) and remove harness fixing clip (A).

⇦ : Vehicle front



4. Remove grommet (1), and then pull out harness from back main pillar (2).

⇦ : Vehicle front



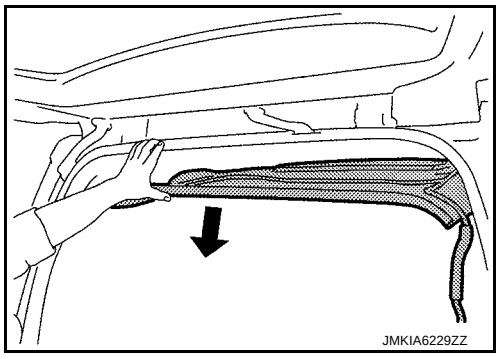
5. Lower rear portion of headlining and secure work space.

a. Remove rear pillar garnish LH and RH. Refer to INT-27, "REAR PILLAR GARNISH : Removal and Installation".

b. Remove roof side garnish LH and RH. Refer to INT-28, "ROOF SIDE GARNISH : Removal and Installation".

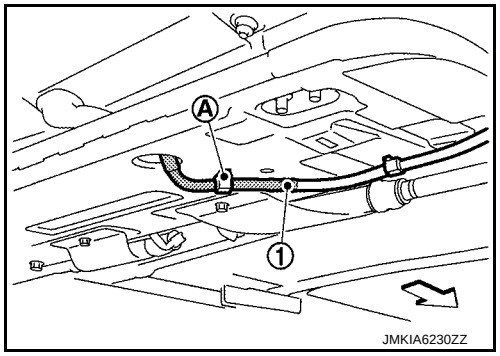
c. Remove upper side of back door weather-strip. Refer to DLK-456, "BACK DOOR WEATHER-STRIP : Removal and Installation".

d. Remove second assist grips LH and RH, third assist grips LH and RH and third seat belt finisher LH and RH, and then remove rear portion of headlining. Refer to INT-35, "Removal and Installation".



6. Remove fixing clip (A), and then disconnect rear washer tube (1).

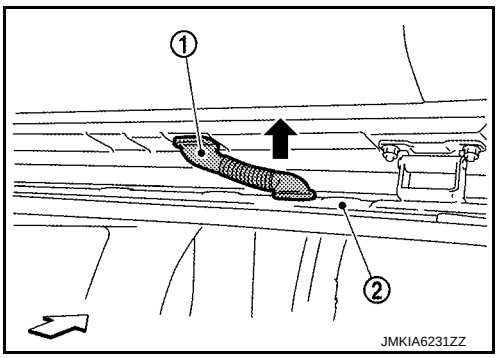
⇦ : Vehicle front



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7. Remove grommet (1), and then pull out washer tube from roof panel (2).

⇦ : Vehicle front



8. Support back door lock with the proper material to prevent it from falling.

WARNING:
Body injury may occur if no supporting rod is holding the back door open when removing the back door stay.

9. Remove back door stay (back door side). Refer to DLK-455, "BACK DOOR STAY : Removal and Installation".
10. Remove back door hinge mounting nuts on back door and remove back door assembly.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

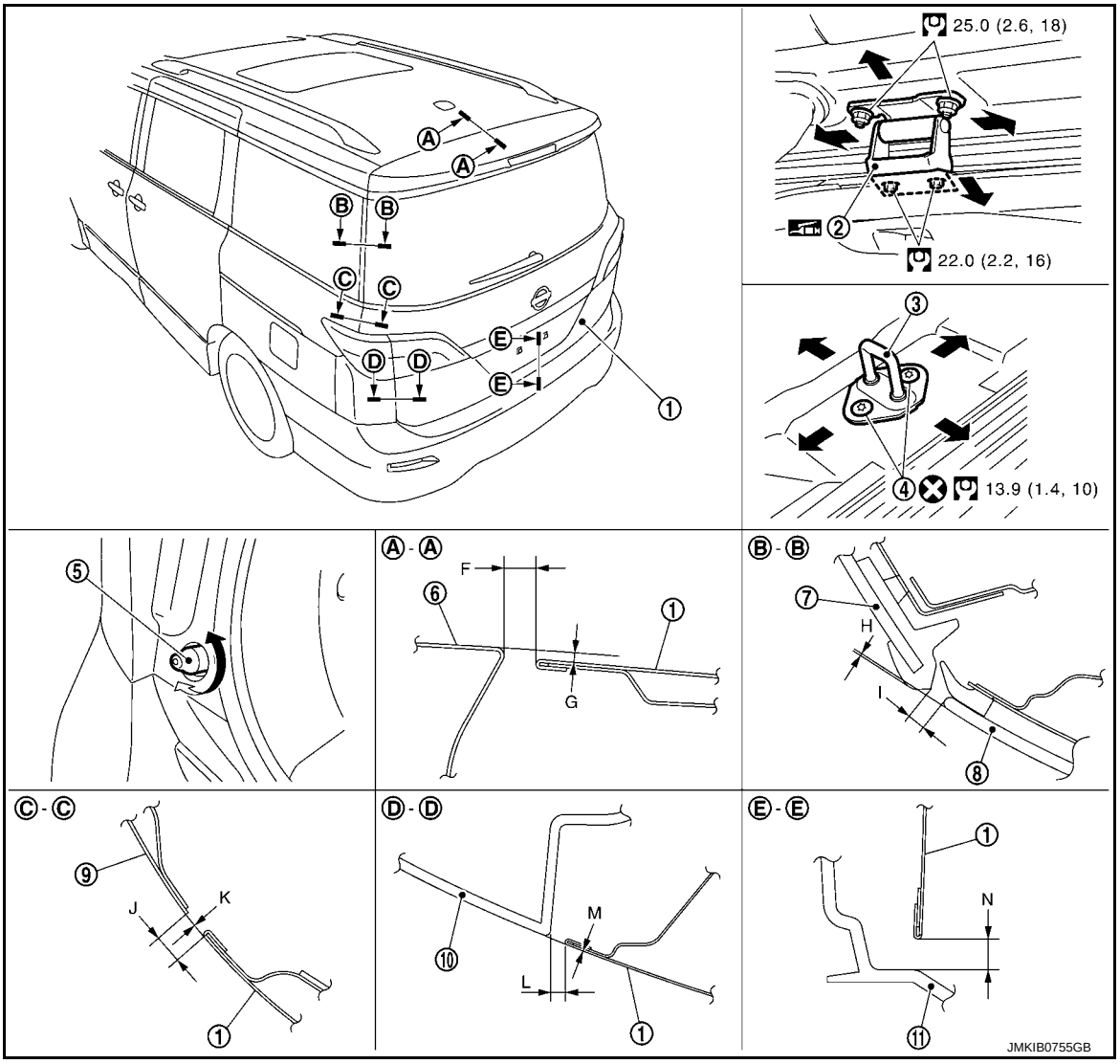
CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check back door open/close, lock/unlock operation after installation.**
- **After installation, perform fitting adjustment. Refer to DLK-453, "BACK DOOR ASSEMBLY : Adjustment".**

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BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000012408954



1. Back door
2. Back door hinge
3. Back door striker
4. TORX bolt
5. Bumper rubber
6. Roof panel
7. Side window glass
8. Back door glass
9. Slide door rail cover
10. Sight shield
11. Rear bumper fascia

: Always replace after every disassembly.

: N·m (kg-m, ft-lb)

: Body grease

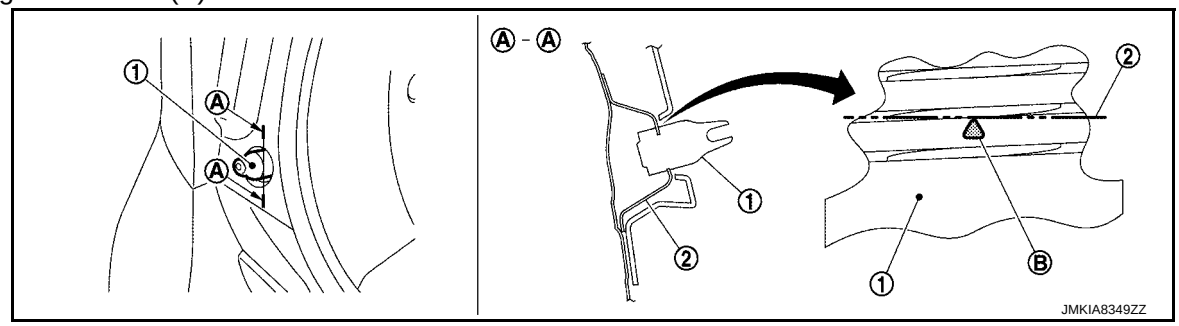
Check the clearance and the surface height between back door and each part by seeing and touching.
If the clearance and the surface height are out of specification, adjust them according to the procedures shown below.

Portion				Standard	Difference (RH/LH)
Back door – Roof panel	A – A	F	Clearance	5.5 – 8.5 mm (0.217 – 0.335 in)	—
		G	Surface height	0.0 – 2.0 mm (0.000 – 0.079 in)	—

Portion				Standard	Difference (RH/LH)
Back door glass – Side window glass	B – B	H	Surface height	(–1.6) – (+2.4) mm [(–0.063) – (+0.094) in]	1.5 mm (0.059 in)
		I	Clearance	3.0 – 7.0 mm (0.118 – 0.276 in)	—
Back door – Slide door rail cover	C – C	J	Clearance	4.0 – 8.0 mm (0.157 – 0.315 in)	—
		K	Surface height	(–1.5) – (+1.5) mm [(–0.059) – (+0.059) in]	—
Back door – Sight shield	D – D	L	Clearance	3.3 – 6.7 mm (0.130 – 0.264 in)	—
		M	Surface height	(–1.7) – (+1.7) mm [(–0.067) – (+0.067) in]	—
Back door – Rear bumper fascia	E – E	N	Clearance	6.0 – 10.0 mm (0.236 – 0.394 in)	—

FITTING ADJUSTMENT PROCEDURE

1. Loosen back door striker mounting bolts.
2. Loosen back door hinge mounting nuts (back door side).
3. Adjust back door using back door striker and back door hinge to the specified value, as shown in the following table.
4. After adjustment tighten back door striker mounting bolts and back door hinge mounting nuts (back door side) to the specified torque.
5. Viewing from vehicle upper, insert bumper rubber (1) into bumper rubber bracket (2) to the position of alignment mark (B).



CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **After installation, apply touch-up paint (the body color) onto the head of back door hinge mounting nuts.**
- **Adjust the following parts.**

- **Rear view camera.**

- **DISPLAY AUDIO: Refer to AV-109, "Adjustment".**
- **BASE AUDIO WITH SEPARATE DISPLAY: Refer to AV-259, "Adjustment".**
- **BOSE AUDIO WITHOUT NAVIGATION: Refer to AV-420, "Adjustment".**
- **BOSE AUDIO WITH NAVIGATION: Refer to AV-526, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Work Procedure".**

BACK DOOR STRIKER ADJUSTMENT

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

BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000012408955

REMOVAL

1. Remove tailgate kicking plate. Refer to INT-40, "TAILGATE KICKING PLATE : Removal and Installation".
2. Remove mounting TORX bolts, and then remove back door striker.

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INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Check back door open/close operation after installation.**
- **When removing and installing back door striker, check to perform the fitting adjustment. Refer to DLK-453, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:0000000012408956

CAUTION:

- **Operate with two workers, because of its heavy weight.**
- **Use protective tape or cloth to protect from damage during remove and installation.**

REMOVAL

1. Remove back door assembly. Refer to DLK-450, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Remove back door hinge mounting nuts (body side), and then remove back door hinge.

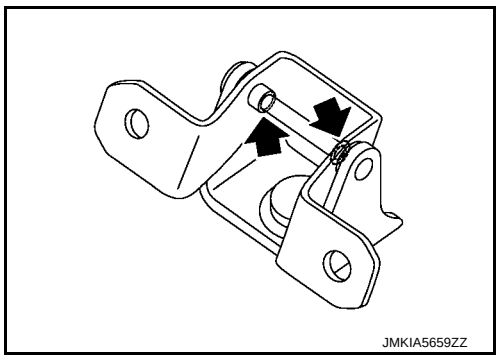
INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **Check back door open/close operation after installation.**
- **When removing and installing back door assembly, perform the fitting adjustment. Refer to DLK-453, "BACK DOOR ASSEMBLY : Adjustment".**
- **After installation, apply touch-up paint (the body color) onto the head of back door hinge mounting nuts.**
- **Check back door hinge rotating part for poor lubrication. If necessary, apply body grease.**

: Grease up point



BACK DOOR STAY

BACK DOOR STAY : Removal and Installation

INFOID:0000000012408957

REMOVAL

1. Support back door lock with the proper material to prevent it from falling.

   WARNING:

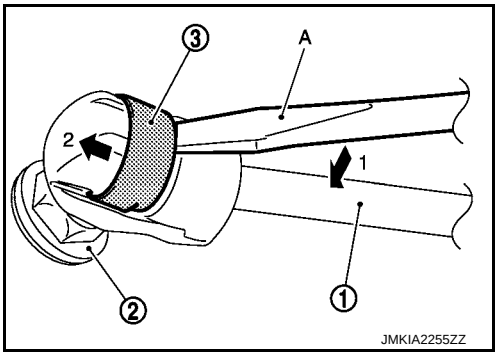
   Body injury may occur if no supporting rod is holding the back door open when removing the back door stay.

2. Remove back door stay mounting bolts.

   CAUTION:

   Be careful not to damage painted surface.

3. Remove the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (body side) by using a flat-bladed screwdriver (A).
CAUTION:
Be careful not to damage painted surface.



4. Remove back door stay.

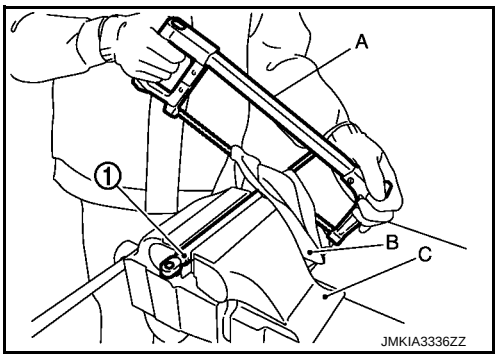
INSTALLATION

Note the following item, and then install in the reverse order of removal.
CAUTION:
Check back door open/close operation after installation.

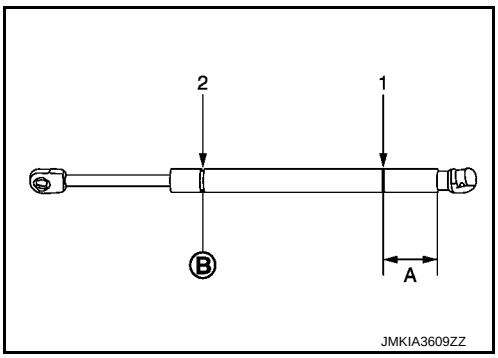
BACK DOOR STAY : Disposal

INFOID:0000000012408958

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



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



BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000012408959

REMOVAL

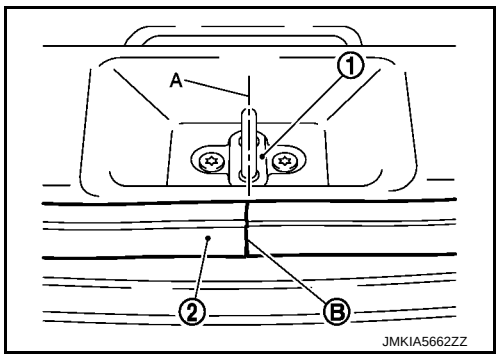
1. Remove back door support rod (back door side). Refer to DLK-476, "BACK DOOR SUPPORT ROD : Removal and Installation".
2. Pull up and remove engagement with body from weather-strip joint.
CAUTION:
Never pull strongly on weather-strip.

INSTALLATION

1. Working from the upper section, align weather-strip center mark with vehicle center position mark and install weather-strip onto the vehicle.

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2. Align the connecting point (B) of weather-strip (2) to the center (A) of striker (1), and then install as shown in the figure.



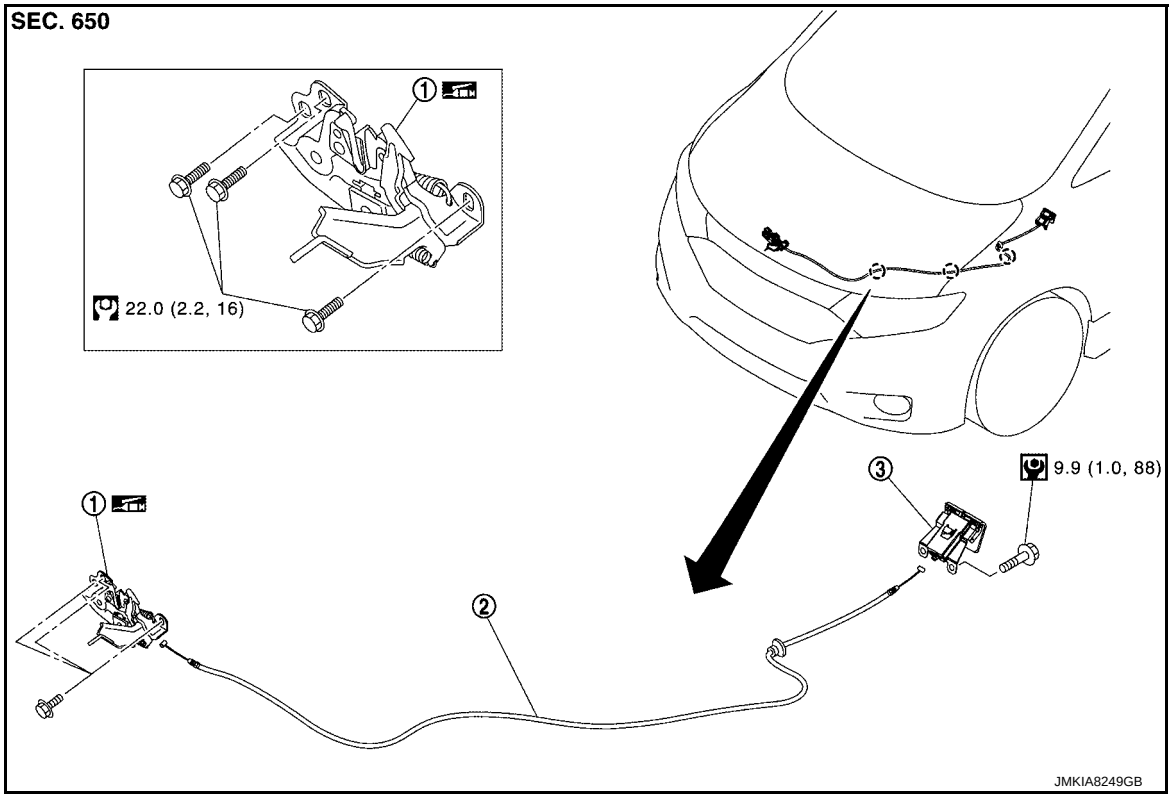
3. Pull weather-strip gently to ensure that there is no loose section.
   NOTE:
   Check that weather-strip is fit tightly at each corner and tailgate kicking plate.
4. Install back door support rod (back door side). Refer to DLK-476, "BACK DOOR SUPPORT ROD : Removal and Installation".

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HOOD LOCK

Exploded View

INFOID:0000000012408960



1. Hood lock assembly
2. Hood lock control cable
3. Hood lock control handle

: Clip

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

: Body grease

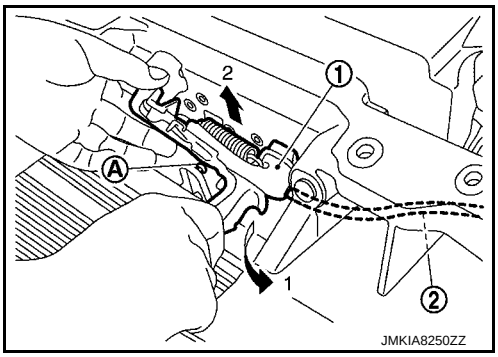
HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:0000000012408961

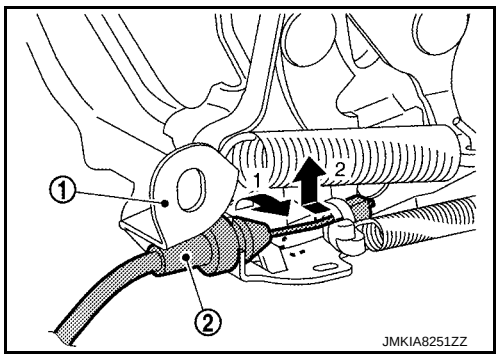
REMOVAL

1. Remove front grille. Refer to EXT-18, "Removal and Installation".
2. Remove mounting bolts, and then remove hood lock assembly (1).
   NOTE:
   Press the lever downward to avoid pin (A), then pull out hood lock assembly upward.
   CAUTION:
   Never bend hood lock control cable (2) strongly.



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3. Disconnect hood lock control cable (2) from hood lock assembly (1).



INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **After installation, perform hood fitting adjustment. Refer to DLK-424, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform hood lock control inspection. Refer to DLK-460, "Inspection".**

HOOD LOCK CONTROL CABLE

HOOD LOCK CONTROL CABLE : Removal and Installation

INFOID:0000000012408962

REMOVAL

1. Disconnect hood lock control cable from hood lock assembly. Refer to DLK-458, "HOOD LOCK : Removal and Installation".
2. Remove fender protector LH (front and rear). Refer to EXT-23, "Removal and Installation".
3. Remove hood lock cable fixing clips.
4. Disconnect hood lock control cable from hood lock control handle. Refer to DLK-460, "HOOD LOCK CONTROL HANDLE : Removal and Installation".
5. Remove grommet on the lower dash, and pull the hood lock control cable toward the passenger compartment.

   CAUTION:

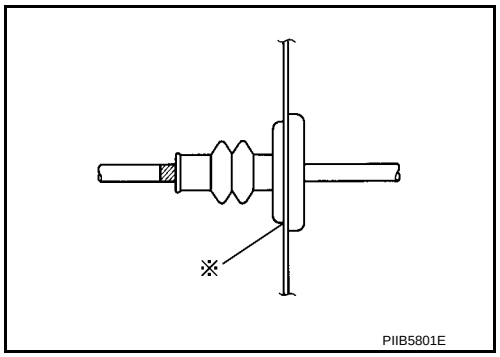
   While pulling, never to damage (peeling) the outside of hood lock control cable.

INSTALLATION

Note the following items, and install in the reverse order of removal.

CAUTION:

- **Never to bend cable too much, keeping the radius 100 mm (3.937 in) or more.**
- **Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.**



- **Check that hood lock control cable is properly engaged with hood lock.**
- **After installation, perform hood fitting adjustment. Refer to DLK-424, "HOOD ASSEMBLY : Adjustment".**
- **After installation, perform hood lock control inspection. Refer to DLK-460, "Inspection".**

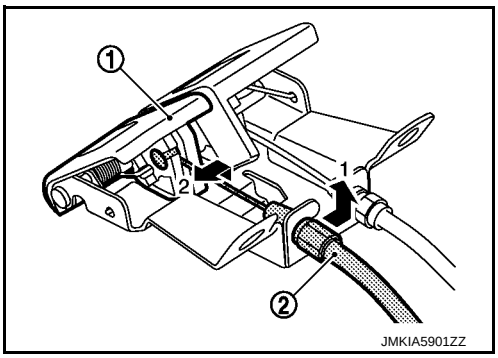
HOOD LOCK CONTROL HANDLE

HOOD LOCK CONTROL HANDLE : Removal and Installation

INFOID:0000000012408963

REMOVAL

1. Remove mounting bolts, and then hood lock control handle.
2. Remove fuel filler lid opener cable. Refer to DLK-479, "FUEL FILLER OPENER CABLE : Removal and Installation".
3. Remove hood lock control cable (2) from hood lock opener lever (1).



INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

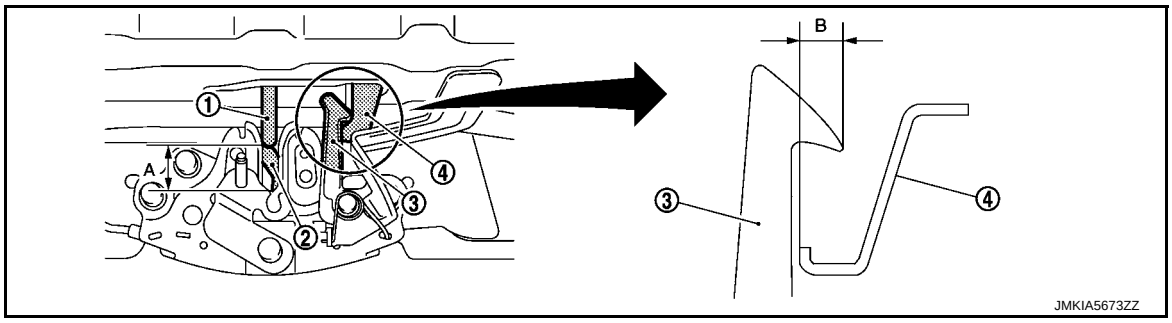
After installation, perform hood lock control inspection. Refer to DLK-460, "Inspection".

Inspection

INFOID:0000000012408964

NOTE:

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



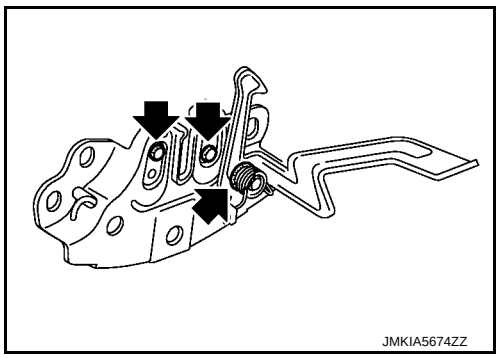
1. Primary striker
2. Primary latch
3. Secondary latch
4. Secondary striker

1. Check that secondary latch (3) is securely engaged with securely secondary striker (4) from the dead load of the hood assembly.
2. Check that primary latch (2) is securely engaged with primary striker (1) when hood assembly is closed [free-fall from approximately 200 mm (7.874 in) height].
   CAUTION:
   Never free-fall hood assembly from a height of 300 (11.811 in) mm or more.
3. While operating the hood opener carefully, check that the front end of the hood is lifted by approximately 20 mm (0.787 in) (A). Also, check that the hood opener returns to the original position.
4. Check that secondary latch is properly engaged with secondary striker [6.8 mm (0.268 in)] (B).

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5. Check the hood lock lubrication condition. If necessary, apply body grease to hood lock.

⬅ : Grease up point

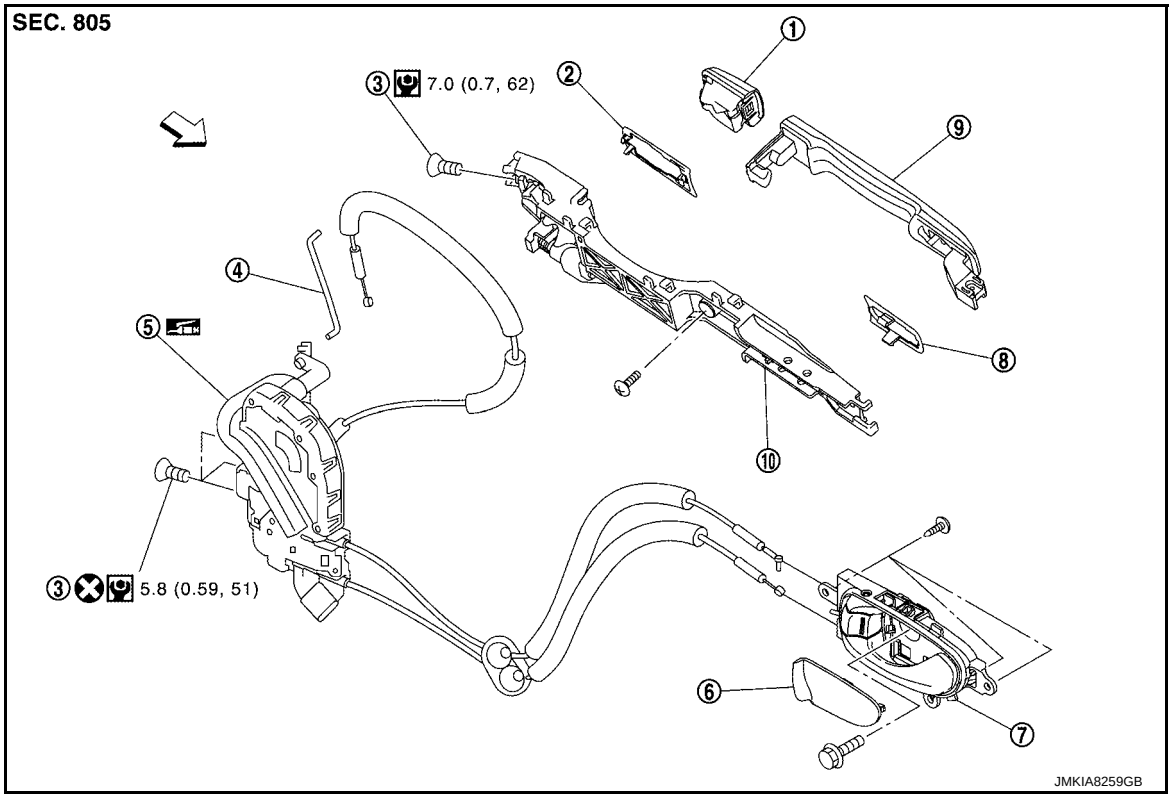


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FRONT DOOR LOCK

Exploded View

INFOID:0000000012408965



1. Door key cylinder assembly (driver side)
   Outside handle escutcheon (passenger side)
2. Rear gasket
3. TORX bolt
4. Key rod (driver side)
5. Door lock assembly
6. Inside handle cap
7. Inside handle
8. Front gasket
9. Outside handle
10. Outside handle bracket

⇦ : Vehicle front

: Always replace after every disassembly.

: N·m (kg-m, in-lb)

: Body grease

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000012408966

REMOVAL

1. Remove outside handle and outside handle bracket. Refer to DLK-463, "OUTSIDE HANDLE : Removal and Installation".
2. Disconnect door lock actuator connector.
3. Remove door lock assembly TORX bolts, and then remove door lock assembly.

INSTALLATION

Note the following items, and install in the reverse order of removal.

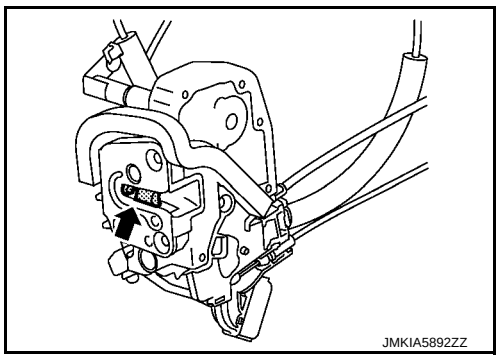
CAUTION:

- **Never reuse TORX bolt. Always replace it with a new one when it is removed.**

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- **Check door open/close, lock/unlock operation after installation.**
- **Check door lock cable is properly engaged with outside handle bracket.**
- **Check door lock assembly for poor lubrication. Apply body grease to door lock if necessary.**

: Grease up point



INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000012408967

REMOVAL

1. Remove front door finisher. Refer to INT-14, "Removal and Installation".
2. Remove inside handle mounting screws, and then remove the inside handle.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Check door lock cables are properly engaged with inside handle.**
- **After installation, check door open/close, lock/unlock operation.**

OUTSIDE HANDLE

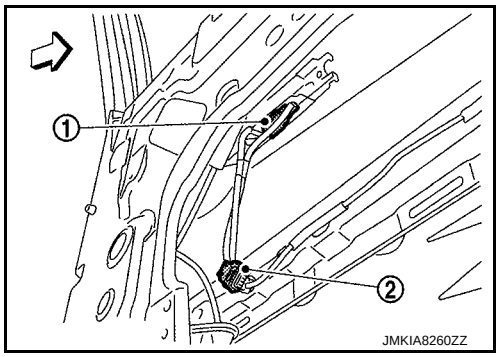
OUTSIDE HANDLE : Removal and Installation

INFOID:0000000012408968

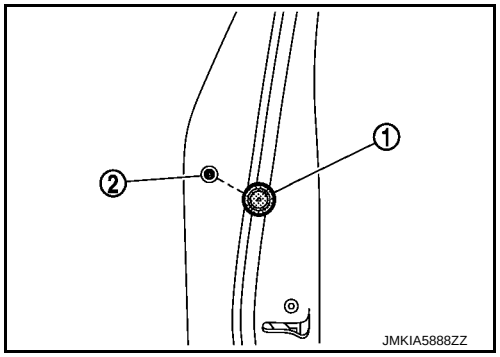
REMOVAL

1. Remove module base. Refer to GW-29, "Removal and Installation".
2. Disconnect key rod from door lock assembly (driver side).
3. Remove door antenna harness connector fixing clip (1), and then disconnect harness connector (2).

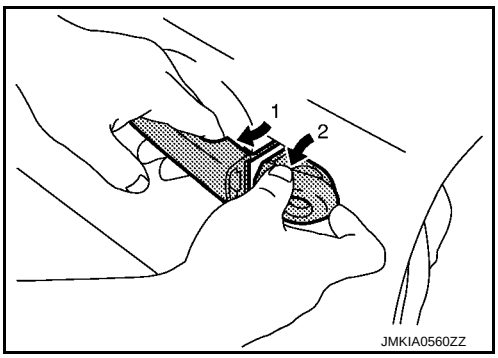
: Vehicle front



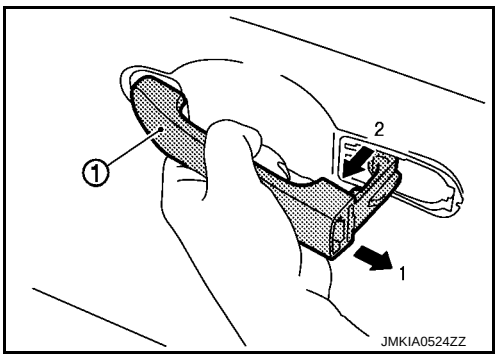
4. Remove grommet (1) of door side. Loosen, through grommet hole, TORX bolt (2) that fixes door lock cylinder. (For passenger side, TORX bolt fixes outside handle escutcheon.)



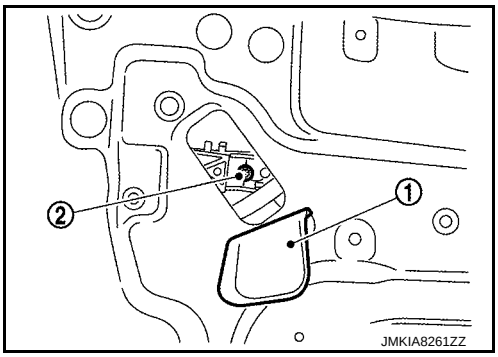
5. While pulling outside handle, remove door key cylinder assembly (driver side) or outside handle escutcheon (passenger side).



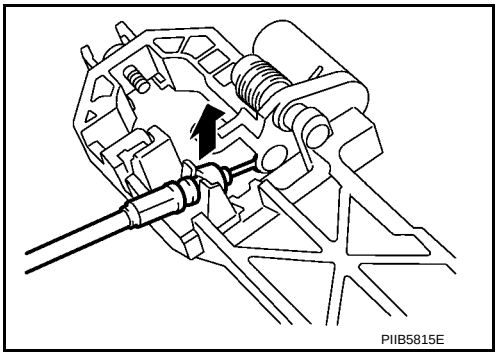
6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



7. Remove front gasket and rear gasket.
8. Peel hole cover (1) carefully, and then remove TORX bolt (2), which is fixing outside handle bracket, through hole.
   CAUTION:
   When affixing hole cover, if affixing force is insufficient, replace hole cover.



9. Slide outside handle bracket toward front of vehicle to remove.
10. Disconnect outside handle cable from outside handle bracket.



INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

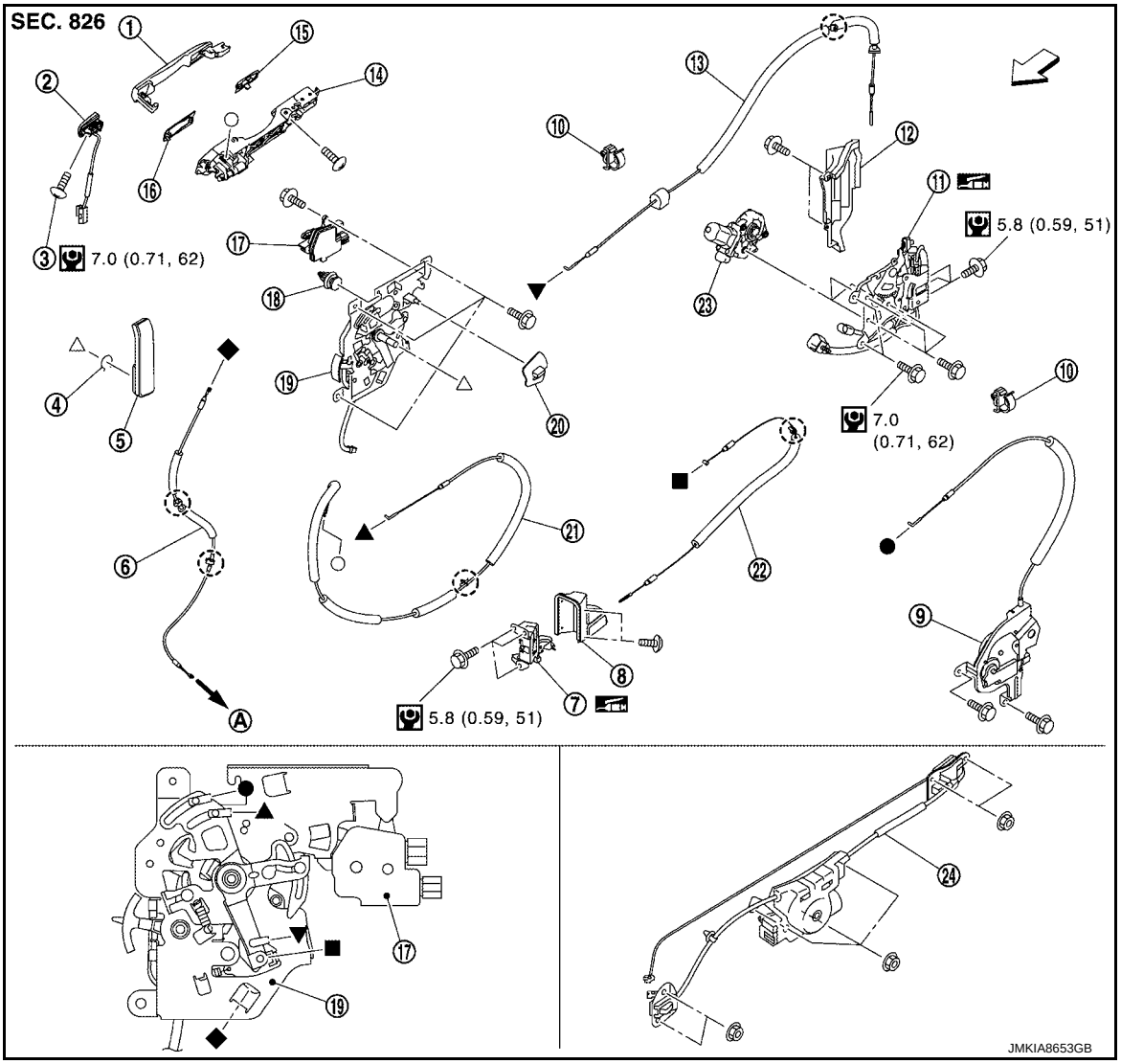
- **When installing key rod, rotate key rod holder until a click is felt.**
- **Check door lock cable is properly engaged with outside handle bracket.**
- **After installation, check door open/close, lock/unlock operation.**

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SLIDE DOOR LOCK

Exploded View

INFOID:0000000012408969



1. Outside handle assembly
2. Outside handle escutcheon
3. TORX bolt
4. Snap pin
5. Inside handle
6. Remote control door lock cable
7. Slide door lock assembly (front)
8. Slide door lock cover (front)
9. Slide door lock release actuator
10. Cable clip
11. Slide door lock assembly (rear)
12. Slide door lock cover (rear)
13. Slide door lock cable (rear)
14. Outside handle bracket
15. Rear gasket
16. Front gasket
17. Slide door lock actuator
18. Clip
19. Remote control assembly
20. Lock knob
21. Outside handle cable
22. Slide door lock cable (front)
23. Slide door closure motor
24. Automatic sliding door unit

A : To lower latch

: Clip

: Vehicle front

: N·m (kg-m, in-lb)

: Body grease

●, ▲, ■: Indicates that the part is connected at points with same symbol in actual vehicle.

CAUTION:

- **Apply anticorrosive agent onto the mounting surface.**
- **During removal and installation, work so as not to bend the ends of the cable.**
- **After installation, check door open/close, lock/unlock operation.**
- **Check door lock assembly for poor lubrication. Apply body grease to door lock if necessary.**

DOOR LOCK

DOOR LOCK : Removal and Installation

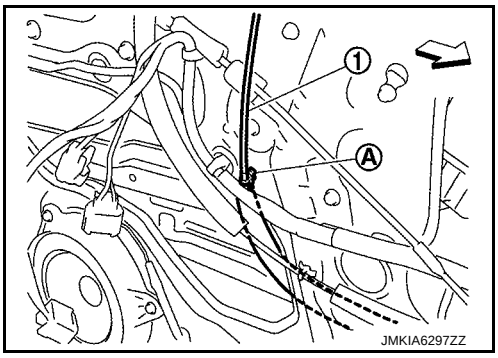
INFOID:0000000012408970

SLIDE DOOR LOCK ASSEMBLY (FRONT)

Removal

1. Fully close the slide door glass.
2. Remove remote control assembly. Refer to DLK-472, "REMOTE CONTROL ASSEMBLY : Removal and Installation".
3. Remove lock release actuator. Refer to DLK-473, "LOCK RELEASE ACTUATOR : Removal and Installation".
4. Remove sealing screen.
   NOTE:
   Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.
5. Remove cable fixing clip (A) of slide door lock cable (1).

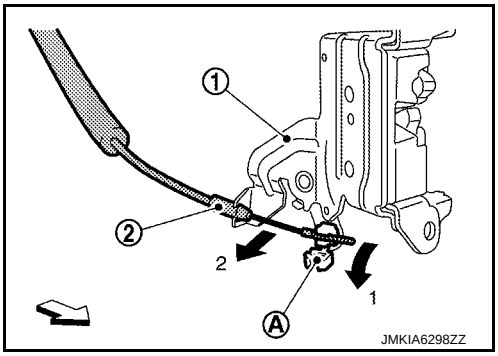
⇦ : Vehicle front



6. Remove mounting bolt, and then remove slide door lock assembly (front) and slide door lock cable (front) as a set.
7. Disconnect slide door lock cable (front) from slide door lock assembly (front).

a. Remove fixing screw, and then remove slide door lock cover (front)
b. Open cable mounting clip (A) of slide door lock assembly (front) (1).
c. Disconnect slide door lock cable (front) (2).

⇦ : Vehicle front



Installation

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Always adjust cable when assembling slide door lock cable (front) to slide door lock assembly (front). Refer to DLK-468, "DOOR LOCK : Inspection and Adjustment".**
- **After installation, check door open/close, lock/unlock operation.**

SLIDE DOOR LOCK ASSEMBLY (REAR)

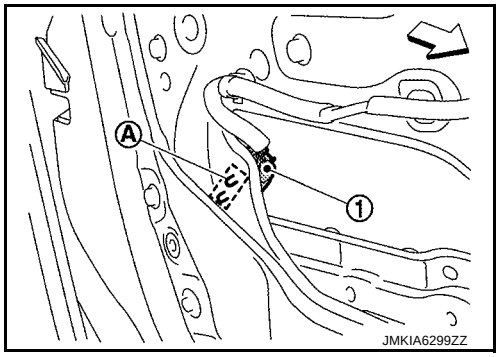
Removal

1. Fully close the slide door glass.

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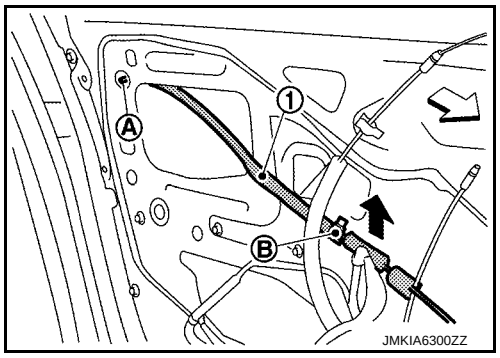
2. Remove remote control assembly. Refer to DLK-472, "REMOTE CONTROL ASSEMBLY : Removal and Installation".
3. Remove lock release actuator. Refer to DLK-473, "LOCK RELEASE ACTUATOR : Removal and Installation".
4. Remove sealing screen.
NOTE:
Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.
5. Remove harness connector fixing clip (A), and then disconnect slide door lock assembly harness connector (1).

⇦ : Vehicle front



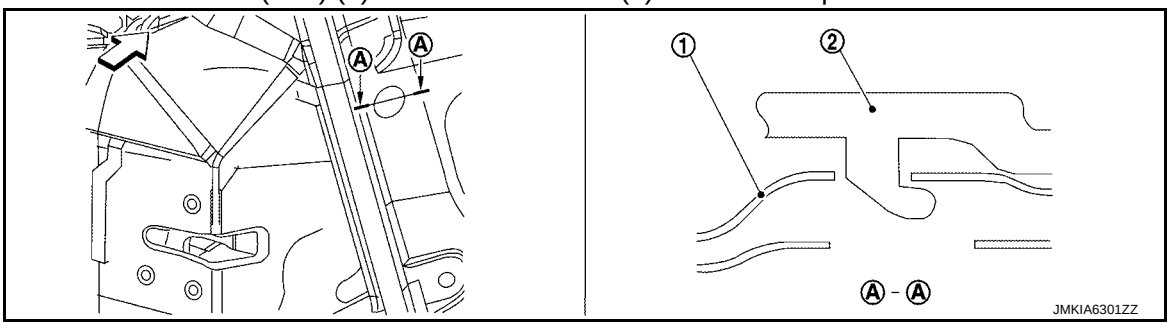
6. Remove cable fixing clip (A)
7. Disengage slide door lock cable (rear) (1) from cable clip (B).

⇦ : Vehicle front



8. Remove door lower sash (rear) of slide door glass. Refer to GW-32, "Exploded View".
9. Remove mounting bolt, and then remove slide door lock assembly (rear) and slide door lock cable (rear) as a set.

a. Remove slide door lock (rear) mounting bolts.
b. Remove slide door lock (rear) (2) from reinforcement (1) of slide door panel



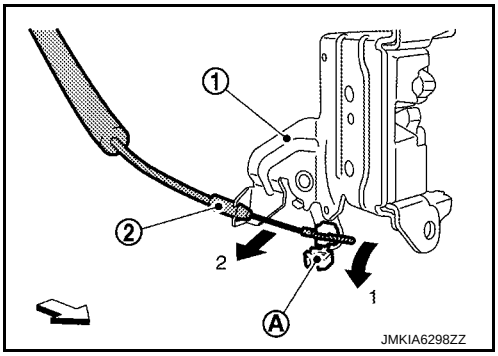
⇦ : Vehicle front

10. Disconnect slide door lock cable (rear) from slide door lock assembly (rear).

a. Remove fixing screw, and then remove slide door lock cover (rear)

b. Open cable mounting clip (A) of slide door lock assembly (rear) (1).
c. Disconnect slide door lock cable (rear) (2).

⇦ : Vehicle front



11. Remove slide door closure motor from slide door lock assembly (rear).
a. Disconnect harness connector of slide door closure motor.
b. Remove mounting molts, and then slide door closure motor.

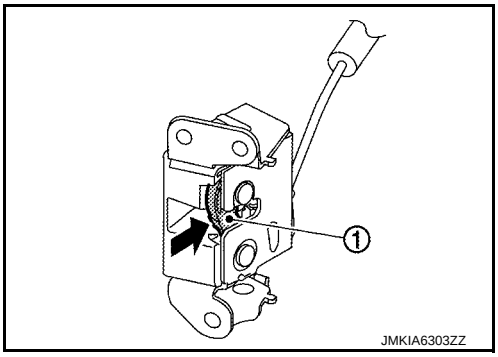
Installation
Note the following items, and then install in the reverse order of removal.
CAUTION:
- **Always adjust cable when assembling slide door lock cable (rear) to slide door lock assembly (rear). Refer to DLK-468, "DOOR LOCK : Inspection and Adjustment".**
- **After installation, check door open/close, lock/unlock operation.**

DOOR LOCK : Inspection and Adjustment

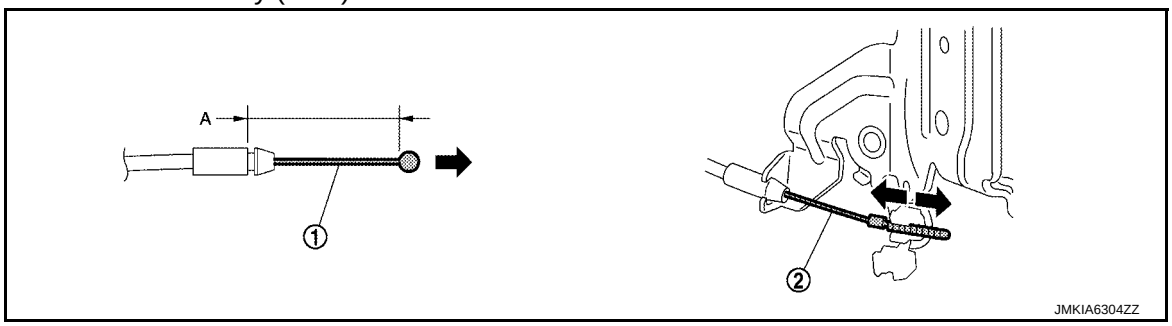
INFOID:0000000012408971

ADJUSTMENT OF SLIDE DOOR LOCK CABLE (FRONT)

1. Temporarily install slide door lock cable (front) to slide door lock assembly (front).
2. Set claw (1) of slide door lock assembly (front) to full latch status. (Press until it clicks.)



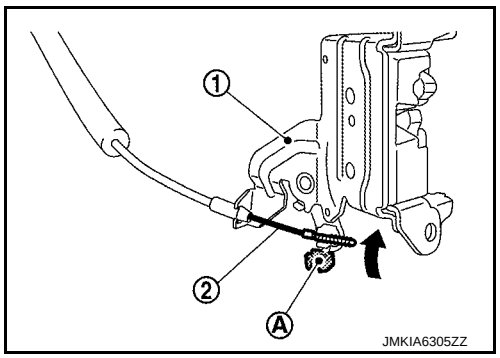
3. Pull lightly inner cable (1) of remote control assembly side in the direction indicated by arrow as shown in the figure so that play is eliminated. With play eliminated, adjust projection (A) by moving inner cable (2) of slide door lock assembly (front) side.



A : 45.8 – 47.2 mm (1.803 – 1.852 in)

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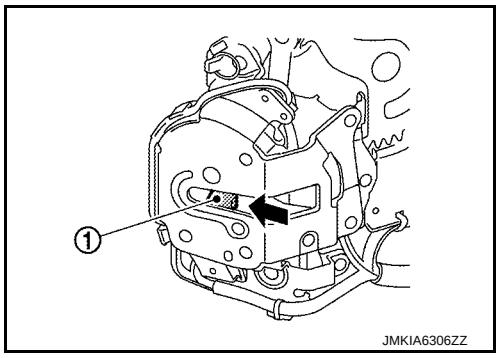
4. After the adjustment, close cable mounting clip (A) of slide door lock assembly (front) (1) and fix inner cable (2).



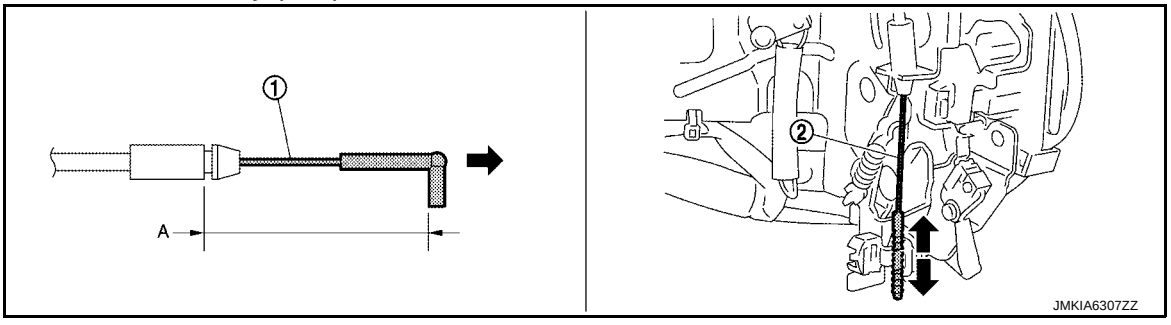
CAUTION:
Check the following items after assembling slide door lock assembly (front) to slide door panel.
- **Check that there is no slack in remote control assembly and inner cable.**
- **Check that no pulling tension by inner cable is applied to lever of remote control assembly.**

ADJUSTMENT OF SLIDE DOOR LOCK CABLE (REAR)

1. Temporarily install slide door lock cable (rear) to slide door lock assembly (rear).
2. Set claw (1) of slide door lock assembly (front) to full latch status. (Press until it clicks.)

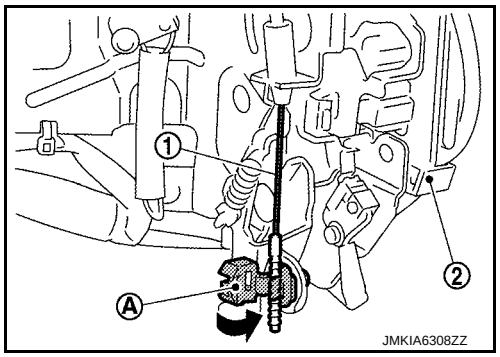


3. Pull lightly inner cable (1) of remote control assembly side in the direction indicated by arrow as shown in the figure so that play is eliminated. With play eliminated, adjust projection (A) by moving inner cable (2) of slide door lock assembly (rear) side.



A : 49.5 – 50.9 mm (1.949 – 2.004 in)

4. After the adjustment, close cable mounting clip (A) of slide door lock assembly (front) (2) and fix inner cable (1).



CAUTION:

Check the following items after assembling slide door lock assembly (rear) to slide door panel.
- **Check that there is no slack in remote control assembly and inner cable.**
- **Check that no pulling tension by inner cable is applied to lever of remote control assembly.**

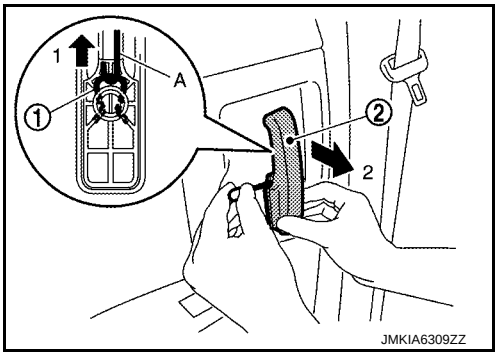
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000012408972

REMOVAL

1. Hang snap pin (1) on hook and pick tool (A) and pull it up to remove.
2. Remove inside handle (2)



INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

After installation, check door open/close, lock/unlock operation.

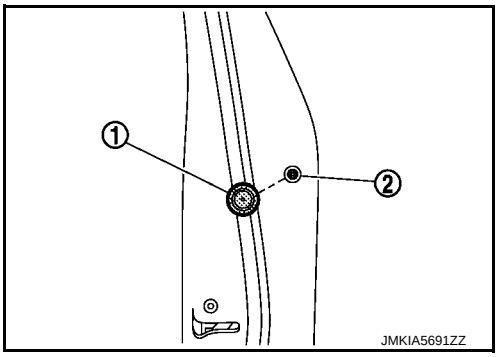
OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

INFOID:0000000012408973

REMOVAL

1. Fully close slide door glass.
2. Remove remote control assembly. Refer to DLK-472, "REMOTE CONTROL ASSEMBLY : Removal and Installation".
3. Remove upper side of sealing screen.
   NOTE:
   Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.
4. Remove fixing clip of sliding door one-touch open/close switch harness connector, and then disconnect sliding door one-touch open/close switch harness connector.
5. Remove grommet (1) door side. Loosen, through grommet hole, TORX bolt (2) that fixes outside handle escutcheon.

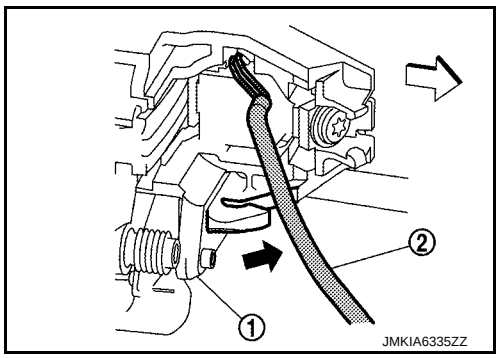


6. Remove outside handle escutcheon.

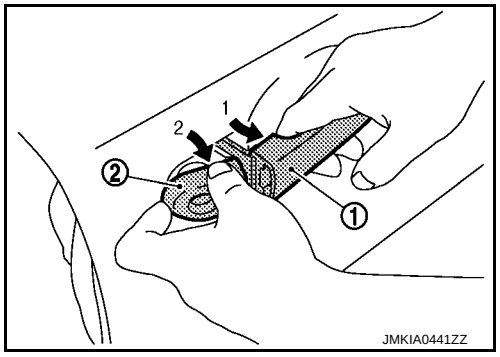
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a. Disconnect sliding door one-touch open/close switch harness connector (2) from outside handle bracket (1).

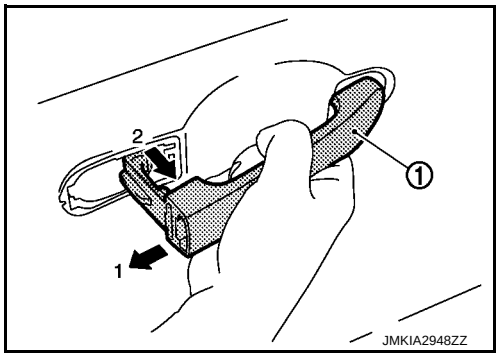
⇦ : Vehicle front



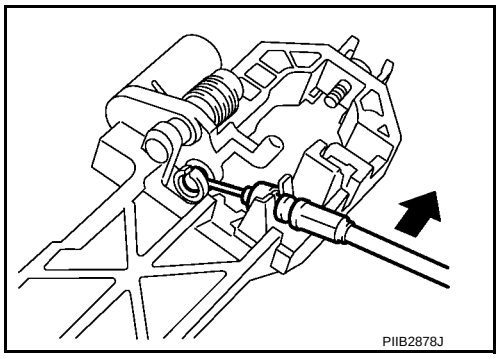
b. While pulling outside handle (1), remove outside handle escutcheon (2).



7. While pulling outside handle (1), slide toward front of vehicle to remove outside handle.



8. Remove front gasket and rear gasket.
9. Through the hole, remove TORX bolt that is fixing outside handle bracket.
10. Slide outside handle bracket toward rear of vehicle to remove.
11. Disconnect outside handle cable from outside handle bracket.



INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

After installation, check door open/close, lock/unlock operation.

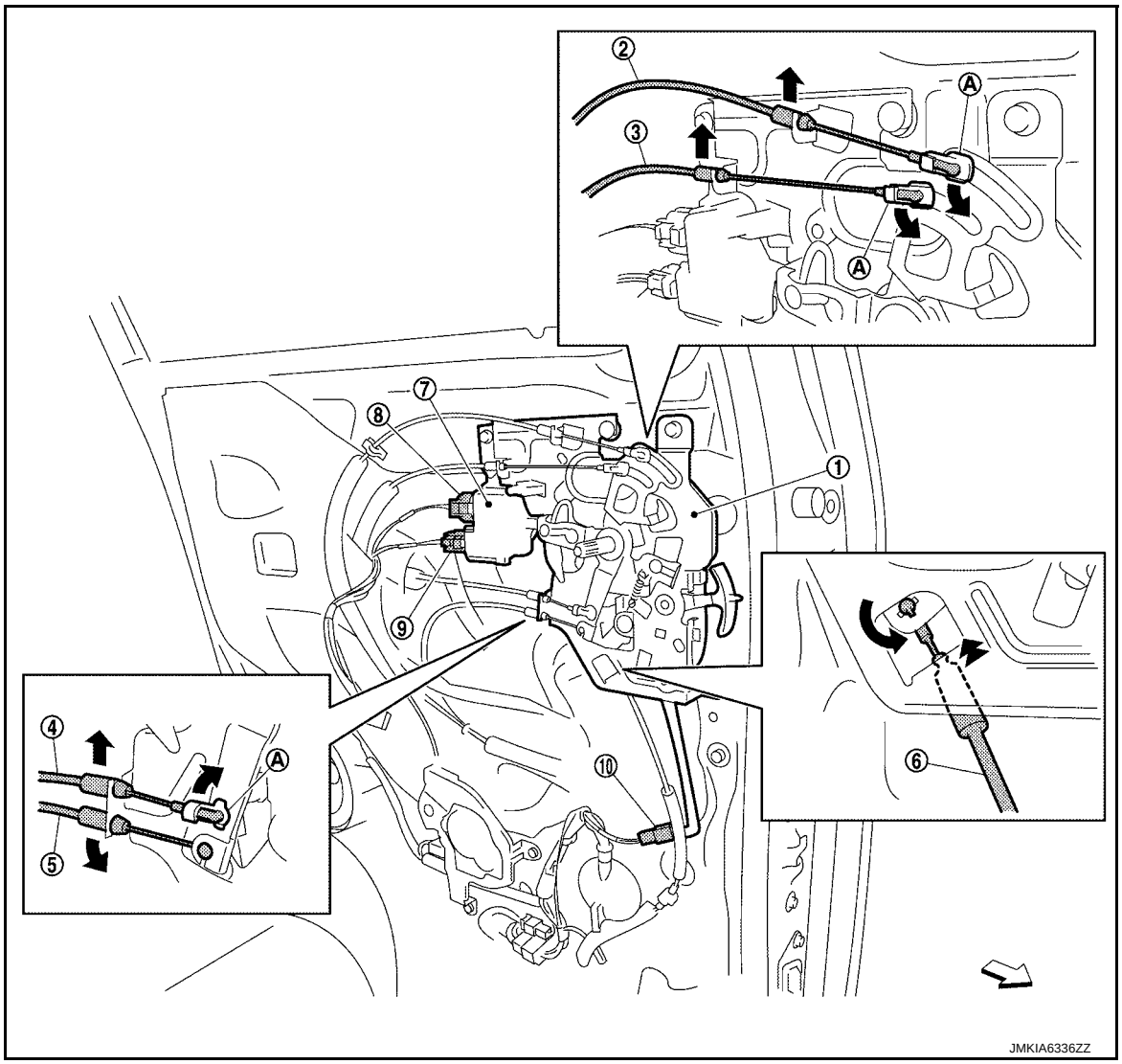
REMOTE CONTROL ASSEMBLY

REMOTE CONTROL ASSEMBLY : Removal and Installation

INFOID:0000000012408974

REMOVAL

1. Remove slide door finisher. Refer to INT-17, "Removal and Installation".
2. Pull lock knob toward passenger room side and remove.
3. Disengage cable holder (A), and then separate lock release actuator cable (2), outside handle cable (3), slide door lock cable (rear) (4), slide door lock cable (front) (5) and lower latch cable (6) from remote control assembly (1).
   CAUTION:
   Be careful not to bend cable end.



⇦ : Vehicle front

4. Disconnect harness connector (8) and (9) (automatic sliding door models) of slide door lock actuator (7).
5. Disconnect remote control assembly harness connector (10) (automatic sliding door models).
6. Remove mounting bolts and mounting clips. Remove remote control assembly and slide door lock actuator as a set.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:
After installation, check door open/close, lock/unlock operation.

LOCK RELEASE ACTUATOR

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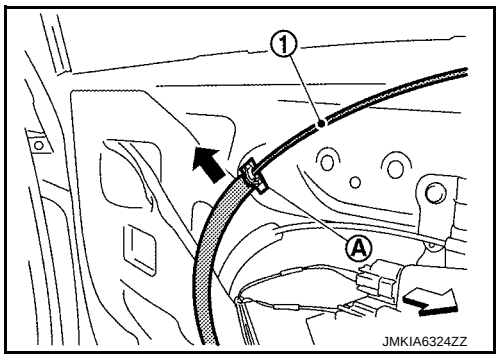
LOCK RELEASE ACTUATOR : Removal and Installation

INFOID:0000000012408975

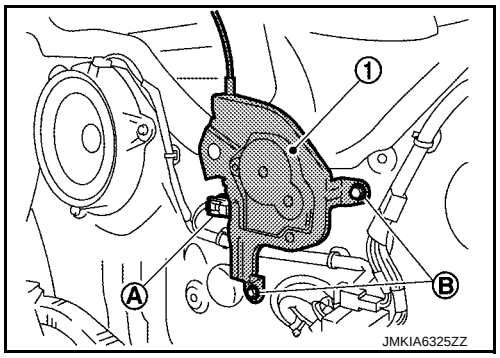
REMOVAL

1. Remove slide door finisher. Refer to INT-17, "Removal and Installation".
2. Disconnect cable of lock release actuator from remote control assembly. Refer to DLK-472, "REMOTE CONTROL ASSEMBLY : Removal and Installation".
3. Disengage lock release actuator cable (1) from cable clip (A).

⇦ : Vehicle front



4. Disconnect harness connector (A) from lock release actuator (1).
5. Remove mounting bolts (B), and then remove lock release actuator



INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

After installation, check door open/close, lock/unlock operation.

AUTOMATIC SLIDING DOOR UNIT

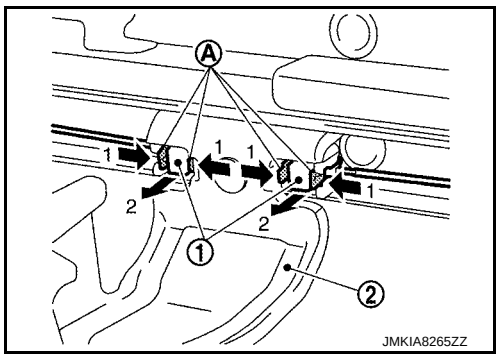
AUTOMATIC SLIDING DOOR UNIT : Removal and Installation

INFOID:0000000012408976

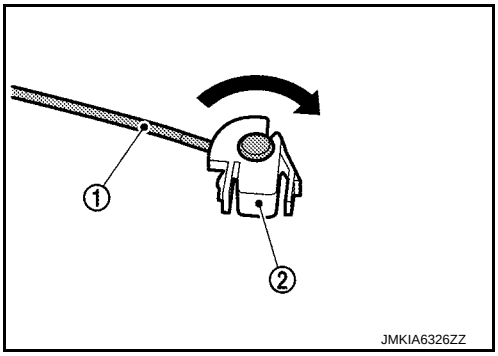
REMOVAL

1. Remove luggage side lower finisher. Refer to INT-43, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
2. Remove rear ventilator pillar duct. Refer to VTL-8, "Exploded View". (automatic sliding door unit RH only)
3. Separate rear roller from slide door assembly. Refer to DLK-441, "REAR ROLLER : Removal and Installation".
4. Disconnect cable holder of automatic sliding door unit from rear roller.

a. Disengage pawl (A) of cable holder (1), and then remove cable holder from rear roller (2).

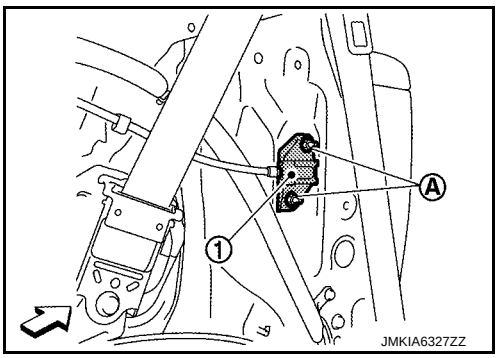


b. Remove cable holder (2) from cable (1) of automatic sliding door unit



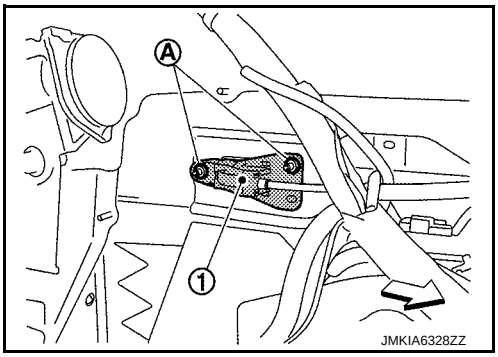
5. Remove mounting nut (A) of front pulley (1), and then pull front side cable of automatic sliding door unit into the vehicle.
CAUTION:
Be careful not to damage body paint surface when pulling cable into the vehicle.

⇦ : Vehicle front



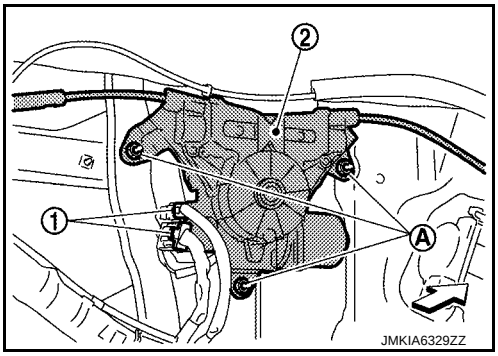
6. Remove mounting nut (A) of rear pulley (1), and then pull front side cable of automatic sliding door unit into the vehicle.
CAUTION:
Be careful not to damage body paint surface when pulling cable into the vehicle.

⇦ : Vehicle front



7. Disconnect harness connector (1) from automatic sliding door unit (2).
8. Remove mounting nuts (A), and then remove automatic sliding door unit.

⇦ : Vehicle front



INSTALLATION

Note the following item, and then install in the reverse order of removal.

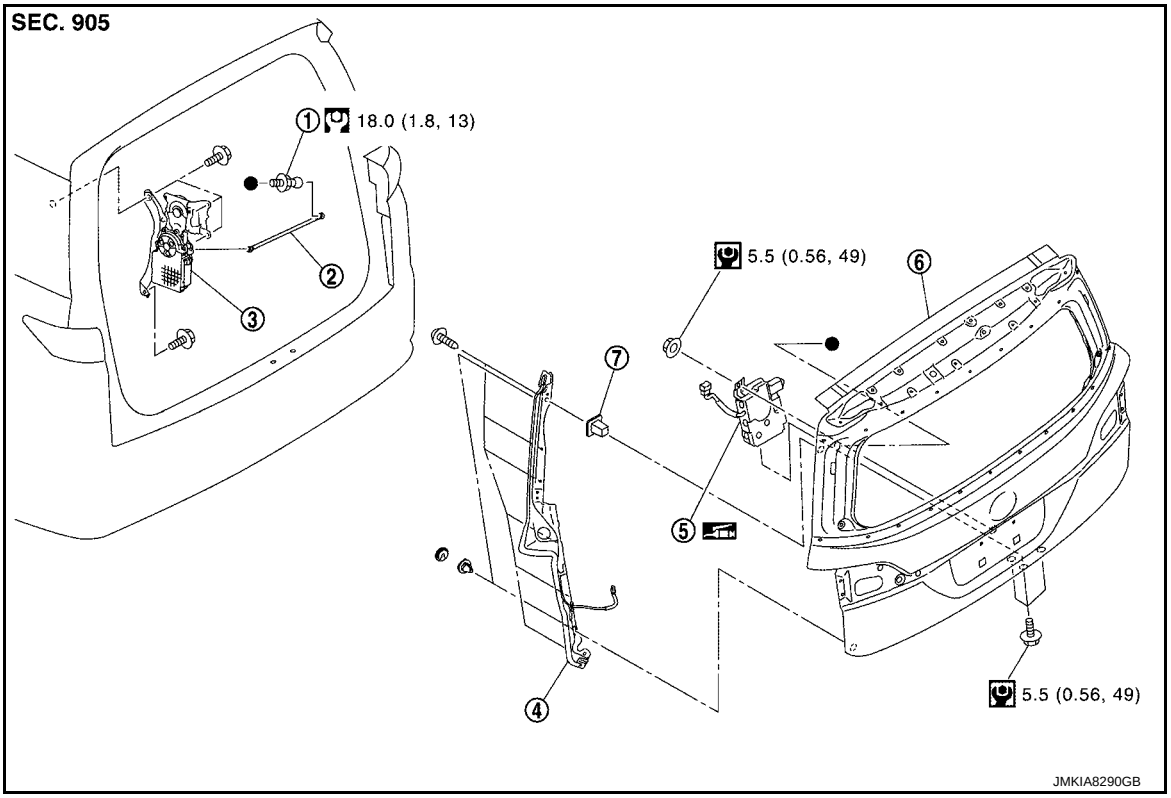
CAUTION:
After installation, check door open/close, lock/unlock operation.

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BACK DOOR LOCK

Exploded View

INFOID:0000000012408977



1. Stud ball
2. Back door support rod
3. Automatic back door control module
4. Touch sensor
5. Back door lock assembly
6. Back door assembly
7. Screw grommet

: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

: Body grease

●: Indicates that the part is connected at points with same symbol in actual vehicle.

DOOR LOCK

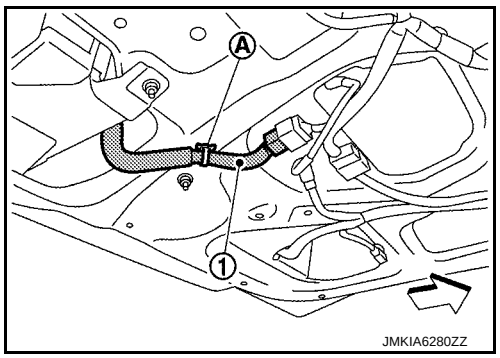
DOOR LOCK : Removal and Installation

INFOID:0000000012408978

REMOVAL

1. Remove back door lower finisher. Refer to INT-48, "BACK DOOR LOWER FINISHER : Removal and Installation".
2. Disconnect harness connector (1), and then remove harness fixing clip (A) and harness connector fixing clip.

⇦ : Vehicle front



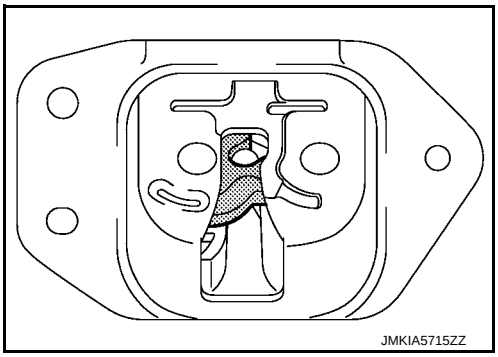
3. Remove back door lock mounting bolts and nut, and then remove back door lock assembly.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **Check back door open/close, lock/unlock operation after installation.**
- **Check door lock assembly for poor lubrication. Apply body grease to door lock if necessary.**



BACK DOOR SUPPORT ROD

BACK DOOR SUPPORT ROD : Removal and Installation

INFOID:0000000012408979

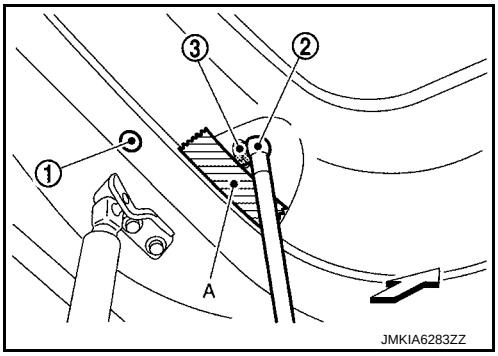
REMOVAL

1. Remove stud ball (3) of back door support rod (2) from back door assembly (1).

   CAUTION:

   Apply protective tape (A) on the door panel to protect the painted surface from damage.

   ⇦ : Vehicle front



2. Remove automatic back door control module. Refer to DLK-494, "Removal and Installation".

   NOTE:

   When replacing back door support rod, replace stud ball and automatic back door control module as a set, since back door support rod is engaged and connected to stud ball and automatic back door control module.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **When reusing stud ball, always apply locking sealant before installing stud ball to back door.**
- **Check back door open/close operation after installation.**

TOUCH SENSOR

TOUCH SENSOR : Removal and Installation

INFOID:0000000012408980

CAUTION:

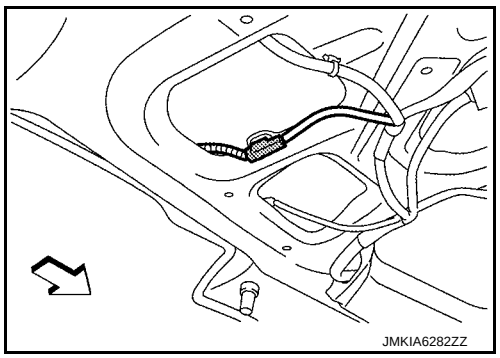
Take care not to bend touch sensor.

REMOVAL

1. Remove back door lower finisher. Refer to INT-48, "BACK DOOR LOWER FINISHER : Removal and Installation".
2. Disconnect touch sensor harness connector.

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⇦ : Vehicle front



3. Remove fixing clips and screws of touch sensor.
4. Pull harness of touch sensor out of back door and remove touch sensor.

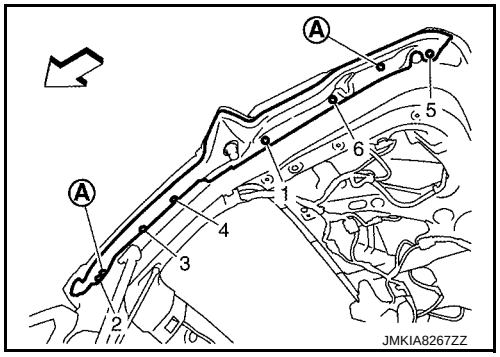
INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- **After installing touch sensor using fixing clips (A), tighten fixing screws in numerical order as shown in the figure.**

⇦ : Vehicle front



- **Check back door open/close operation after installation.**

EMERGENCY LEVER

EMERGENCY LEVER : Unlock procedures

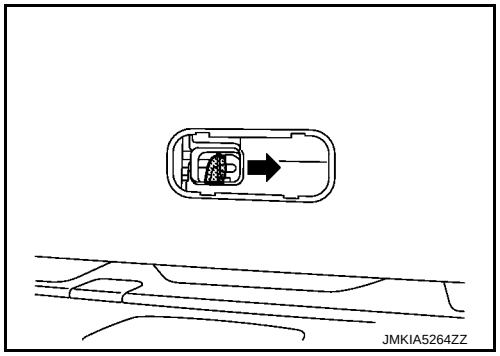
INFOID:0000000012408981

UNLOCK PROCEDURES

NOTE:

If back door lock cannot be unlocked due to a malfunction or battery discharge, follow the procedures to unlock back door.

1. Remove the emergency lid. Refer to INT-50, "EMERGENCY LID : Removal and Installation".
2. From inside the vehicle, rotate emergency lever toward lower direction and unlock.

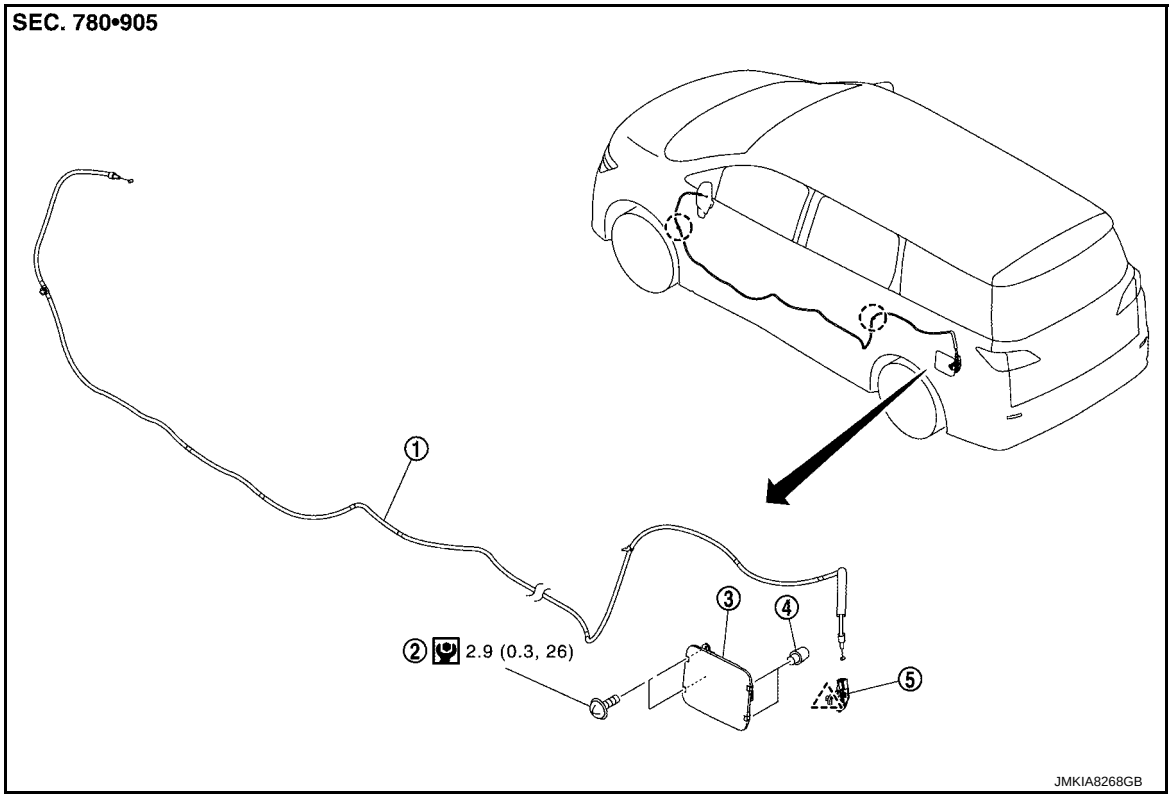


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FUEL FILLER LID OPENER

Exploded View

INFOID:0000000012408982



1. Fuel filler lid opener cable
2. TORX bolt
3. Fuel filler lid assembly
4. Bumper rubber
5. Fuel filler lid lock assembly

: Clip

: Pawl

: N·m (kg-m, in-lb)

CAUTION:
After installation, check fuel filler lid assembly open/close, lock/unlock operation.

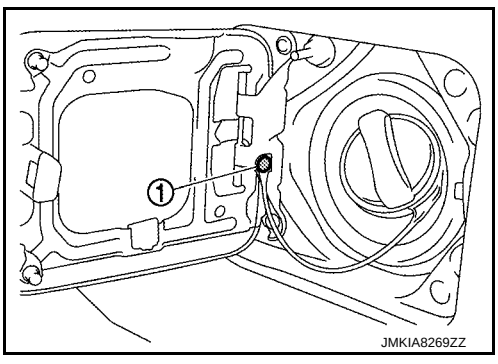
FUEL FILLER LID

FUEL FILLER LID : Removal and Installation

INFOID:0000000012408983

REMOVAL

1. Fully open fuel filler lid.
2. Remove fuel mounting pin (1).



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3. Remove mounting screws, and then remove fuel filler lid.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

After installation, check fuel filler lid assembly open/close, lock/unlock operation.

NOTE:

- The following table shows the specified values for checking normal installation status.
- Fitting adjustment cannot be performed.

	Clearance	Evenness
Fuel filler lid – Body side outer	**2.0 – 4.0 mm (0.079 – 0.157 in)**	**(-1.0) – (+1.0) mm [(-0.039) – (+0.039) in]**

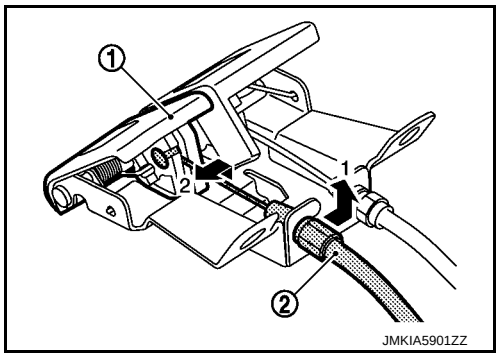
FUEL FILLER OPENER CABLE

FUEL FILLER OPENER CABLE : Removal and Installation

INFOID:0000000012408984

REMOVAL

1. Remove hood lock control handle from instrument lower panel LH. Refer to DLK-460, "HOOD LOCK CONTROL HANDLE : Removal and Installation".
2. Remove fuel filler lid opener cable (2) from fuel filler lid opener lever (1).



3. Remove front kicking plate LH and rear kicking plate LH. Refer to INT-22, "KICKING PLATE : Removal and Installation".
4. Remove dash side finisher LH. Refer to INT-24, "DASH SIDE FINISHER : Removal and Installation".
5. Remove center pillar lower garnish LH. Refer to INT-25, "CENTER PILLAR LOWER GARNISH : Removal and Installation".
6. Remove luggage side lower finisher LH. Refer to INT-43, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
7. Remove fuel filler lid opener cable from fuel filler lid lock assembly. Refer to DLK-479, "FUEL FILLER LID LOCK : Removal and Installation".
8. Remove fuel filler lid opener cable from each harness clamp of body harness.
9. Remove fuel filler lid opener cable fixing clips, and then remove fuel filler lid opener cable.

INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

After installation, check fuel filler lid assembly open/close, lock/unlock operation.

FUEL FILLER LID LOCK

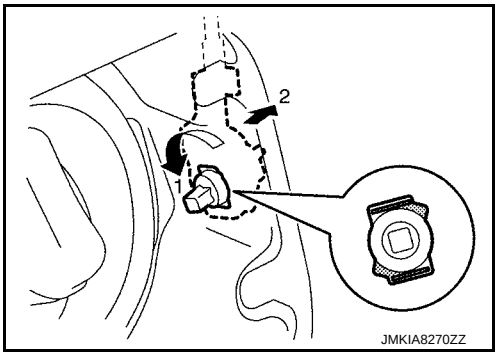
FUEL FILLER LID LOCK : Removal and Installation

INFOID:0000000012408985

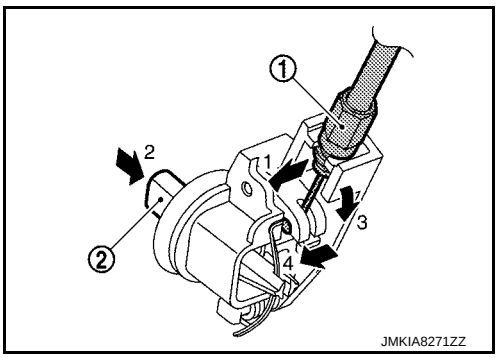
REMOVAL

1. Fully open fuel filler lid.
2. Remove luggage side lower finisher LH. Refer to INT-43, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".

3. Rotate and disengage fuel filler lid lock assembly, and then remove fuel filler lid lock assembly.
   NOTE:
   Operation is performed easily when rotating fuel filler lid lock from passenger room side.



4. Disengage fuel filler lid opener cable (1). Remove fuel filler lid opener cable while pressing stopper pin (2).



INSTALLATION

Note the following item, and install in the reverse order of removal.

CAUTION:

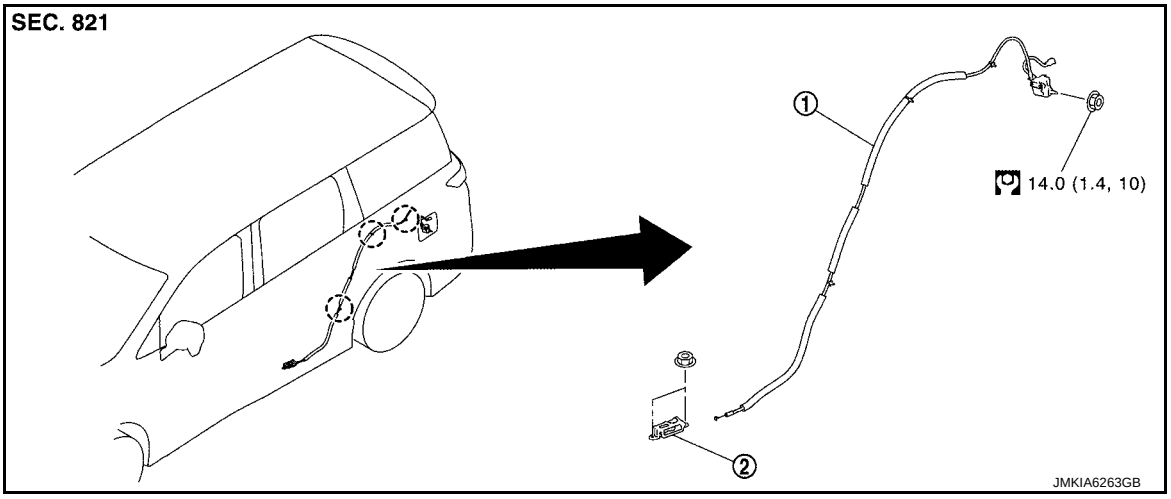
After installation, check fuel filler lid assembly open/close, lock/unlock operation.

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INTERLOCK

Exploded View

INFOID:0000000012408986



1. Fuel filler inter lock assembly
2. Slide door inter lock

: Clip

: N·m (kg-m, ft-lb)

SLIDE DOOR INTERLOCK

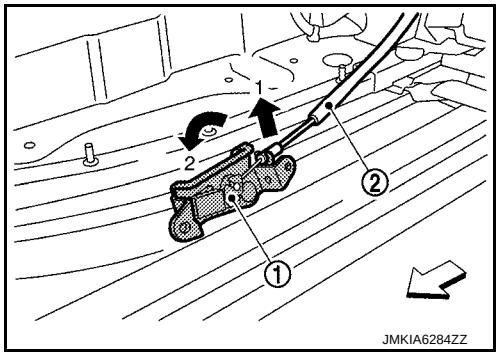
SLIDE DOOR INTERLOCK : Removal and Installation

INFOID:0000000012408987

REMOVAL

1. Remove rear floor step assembly. Refer to INT-20, "Exploded View".
2. Remove slide door interlock mounting nuts.
3. Disconnect cable (2) of fuel filler interlock assembly from slide door interlock (1).

: Vehicle front



INSTALLATION

Note the following items, and install in the reverse order of removal.

CAUTION:

- **After installation, check slide door open/close operation.**
- **After installation, check fuel filler lid lock/unlock operation.**

FUEL FILLER INTERLOCK

FUEL FILLER INTERLOCK : Removal and Installation

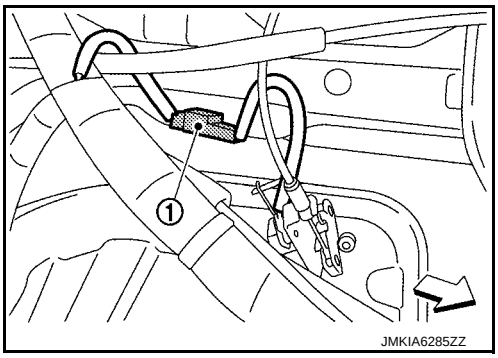
INFOID:0000000012408988

REMOVAL

1. Remove slide door interlock. Refer to DLK-481, "SLIDE DOOR INTERLOCK : Removal and Installation".

2. Remove luggage side lower finisher. Refer to INT-43, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
3. Disconnect fuel filler lid status switch connector (1), and then remove harness connector fixing clip.

⇦ : Vehicle front



4. Fully open fuel filler lid.
   CAUTION:
   Check in advance that fuel filler lid does not interfere with slide door.
5. Remove fuel filler interlock assembly mounting nut.
6. Remove cable fixing clips of fuel filler inter lock, and then remove fuel filler inter lock assembly.

INSTALLATION

Note the following items, and install in the reverse order of removal.

CAUTION:

- **After installation, check slide door open/close operation.**
- **After installation, check fuel filler lid lock/unlock operation.**

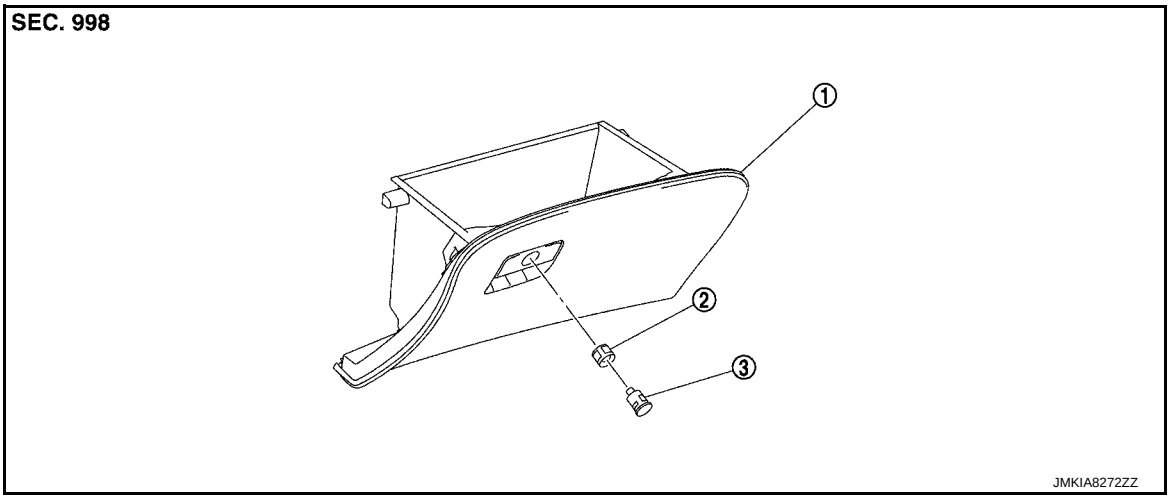
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KEY CYLINDER

GLOVE BOX LID KEY CYLINDER

GLOVE BOX LID KEY CYLINDER : Exploded View

INFOID:0000000012408989



1. Glove box assembly
2. Sleeve
3. Glove box lid lock cylinder

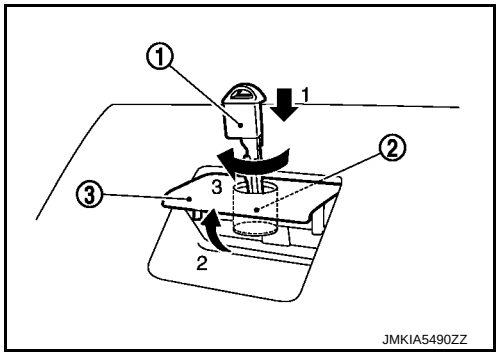
CAUTION:
After installation, check glove box assembly open/close, lock/unlock operation.

GLOVE BOX LID KEY CYLINDER : Removal and Installation

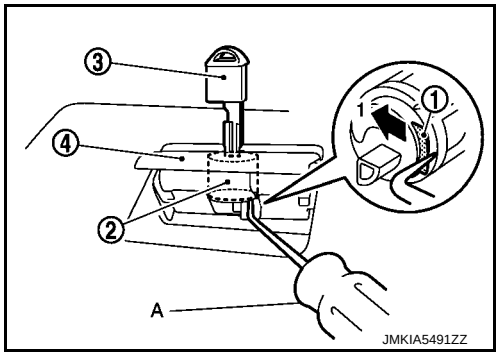
INFOID:0000000012408990

REMOVAL

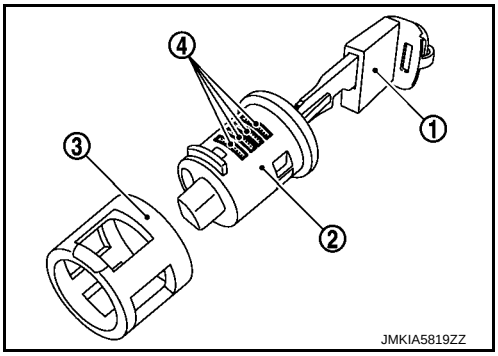
1. Remove glove box assembly. Refer to IP-14, "Removal and Installation".
2. Insert mechanical key (1) into glove box lid lock cylinder (2).
3. Set glove box lid release handle (3) to the pulled-up status.
4. Rotate mechanical key and turn glove box lid key cylinder to the lock position.



5. Press tumbler stopper (1) into glove box lid lock cylinder (2) using a hook and pick tool (A), and then remove mechanical key (3) and glove box lid lock cylinder together from glove box lid release handle (4).
   NOTE:
   When removing glove box lid lock cylinder, write a short note describing its position against glove box lid release handle.



6. Remove sleeve (3) from glove box lid release handle, and then install sleeve to glove box lid lock cylinder.
   NOTE:
   When removing sleeve, write a short note describing its position against glove box lid release handle.
   CAUTION:
   Never pull out mechanical key (1) from glove box lid lock cylinder (2) while sleeve is uninstalled. Otherwise, tumbler (4) pops out of glove box lid lock cylinder.



INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

After installation, check glove box assembly open/close, lock/unlock operation.

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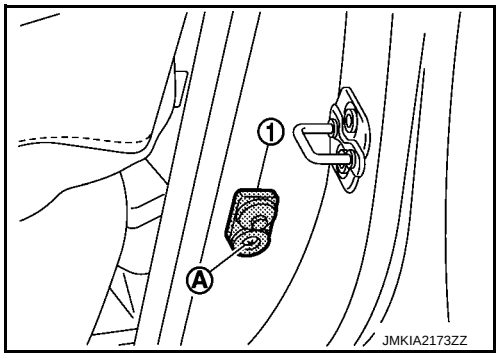
DOOR SWITCH

Removal and Installation

INFOID:0000000012408991

REMOVAL

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



INSTALLATION

Install in the reverse order of removal.

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DOOR REQUEST SWITCH

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000012408992

REMOVAL

Remove the driver side outside handle. Refer to DLK-463, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000012408993

REMOVAL

Remove the passenger side outside handle. Refer to DLK-463, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

BACK DOOR

BACK DOOR : Removal and Installation

INFOID:0000000012408994

REMOVAL

Remove the back door finisher. Refer to EXT-47, "Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

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INSIDE KEY ANTENNA

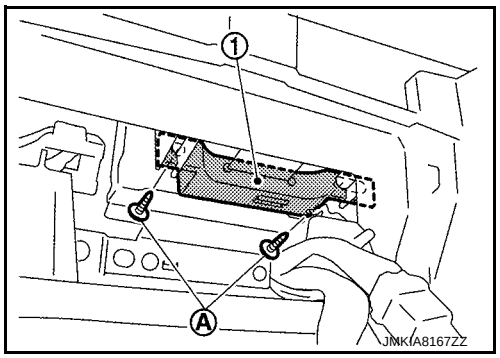
INSTRUMENT CENTER

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000012408995

REMOVAL

1. Remove the instrument lower center panel. Refer to IP-14, "Removal and Installation".
2. Remove the inside key antenna (instrument center) mounting screw (A), and then remove inside key antenna (instrument center) (1).
   CAUTION:
   Be careful not to drop mounting screw (A) into instrument panel.



INSTALLATION

Install in the reverse order of removal.

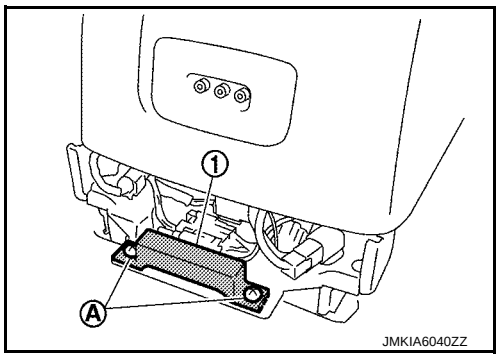
CONSOLE

CONSOLE : Removal and Installation

INFOID:0000000012408996

REMOVAL

1. Remove the console body assembly. Refer to IP-28, "Removal and Installation".
2. Remove the inside key antenna (console) mounting screw (A), and then remove inside key antenna (console) (1).



INSTALLATION

Install in the reverse order of removal.

LUGGAGE ROOM

LUGGAGE ROOM : Removal and Installation

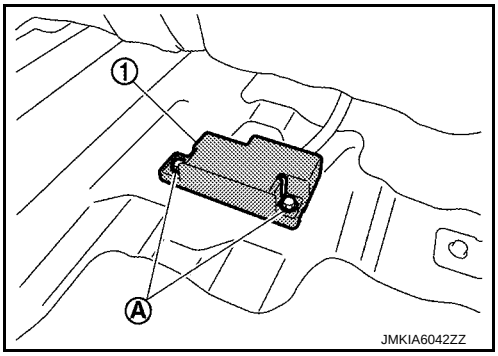
INFOID:0000000012408997

REMOVAL

1. Remove the rear floor carpet. Refer to INT-31, "REAR FLOOR CARPET : Removal and Installation".

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2. Remove the inside key antenna (luggage room) mounting screw (A), and then remove inside key antenna (luggage room) (1).



INSTALLATION

Install in the reverse order of removal.

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OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000012408998

REMOVAL

Remove the driver side outside handle. Refer to DLK-463, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000012408999

REMOVAL

Remove the passenger side outside handle. Refer to DLK-463, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

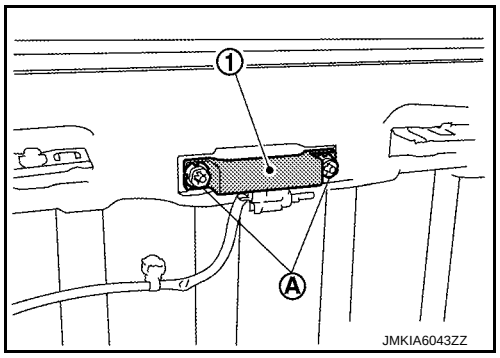
REAR BUMPER

REAR BUMPER : Removal and Installation

INFOID:0000000012409000

REMOVAL

1. Remove the rear bumper fascia. Refer to EXT-16, "REAR BUMPER : Removal and Installation".
2. Remove the outside key antenna (rear bumper) mounting clip (A), then remove outside key antenna (rear bumper) (1).



INSTALLATION

Install in the reverse order of removal.

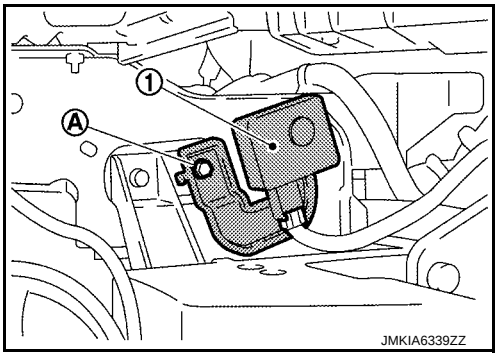
INTELLIGENT KEY WARNING BUZZER

Removal and Installation

INFOID:0000000012409001

REMOVAL

1. Remove the front bumper fascia. Refer to EXT-12, "Removal and Installation".
2. Remove the Intelligent Key warning buzzer mounting bolt (A), and then remove the Intelligent Key warning buzzer (1).



INSTALLATION

Install in the reverse order of removal.

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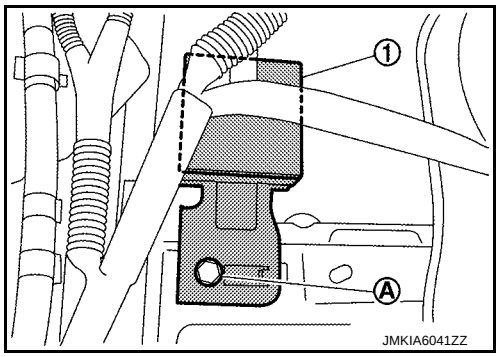
REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000012409002

REMOVAL

1. Remove the headlining assembly. Refer to INT-35, "Removal and Installation"
2. Disconnect remote keyless entry receiver harness connector.
3. Remove the remote keyless entry receiver mounting bolt Ⓐ, and then remote keyless entry receiver①.



INSTALLATION

Install in the reverse order of removal.

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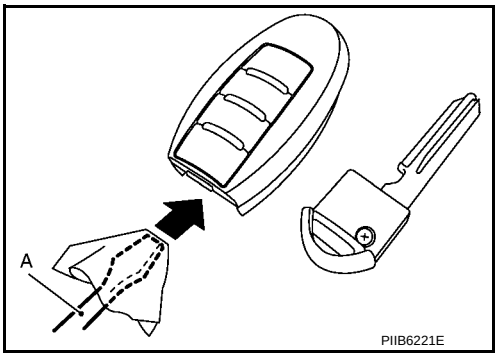
INTELLIGENT KEY BATTERY

Removal and Installation

INFOID:0000000012409003

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

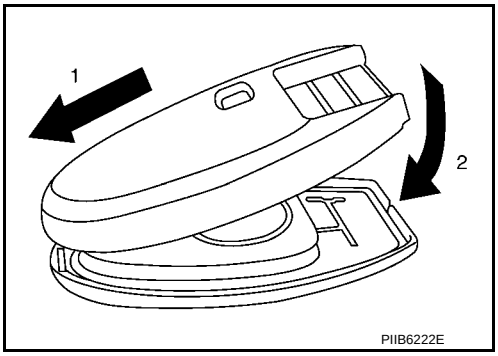
2. Insert a remover tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.
CAUTION:
- **Do not touch the circuit board or battery terminal.**
- **The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.**



3. Replace the battery with new one.

Battery replacement	**: Coin-type lithium battery (CR2025)**

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



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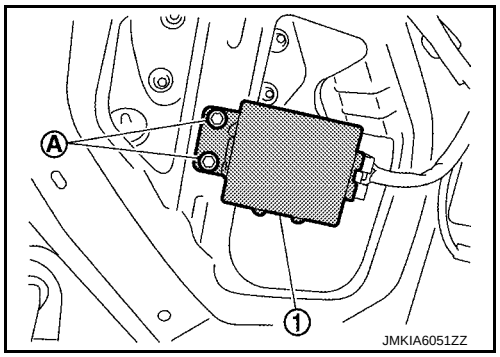
BACK DOOR CONTROL UNIT

Removal and Installation

INFOID:0000000012409004

REMOVAL

1. Remove the back door lower finisher. Refer to INT-48, "BACK DOOR LOWER FINISHER : Removal and Installation".
2. Remove the back door control unit mounting bolt (A), and then remove the back door control unit (1).



INSTALLATION

Install in the reverse order of removal.

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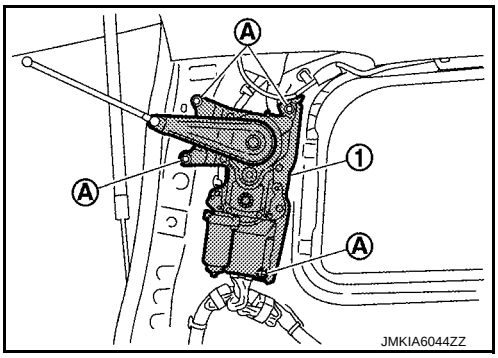
AUTOMATIC BACK DOOR CONTROL MODULE

Removal and Installation

INFOID:0000000012409005

REMOVAL

1. Remove the back pillar garnish LH. Refer to INT-27, "BACK PILLAR GARNISH : Removal and Installation".
2. Remove the back door support rod. Refer to DLK-476, "BACK DOOR SUPPORT ROD : Removal and Installation".
3. Remove the automatic back door control module mounting bolt (A), and then remove the automatic back door control module (1).



INSTALLATION

Install in the reverse order of removal.

NOTE:

After installing automatic back door control module, perform additional service when replace control unit. Refer to DLK-175, "Work Procedure".

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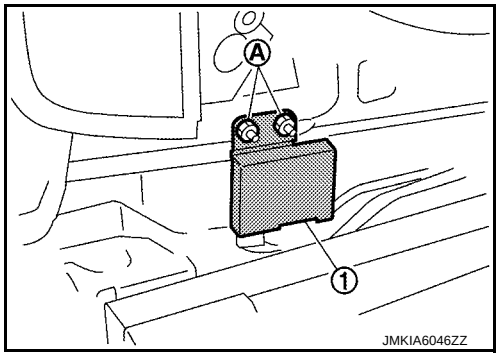
AUTOMATIC BACK DOOR WARNING BUZZER

Removal and Installation

INFOID:0000000012409006

REMOVAL

1. Remove the rear bumper fascia. Refer to EXT-16, "REAR BUMPER : Removal and Installation".
2. Remove the automatic back door warning buzzer mounting bolt (A), and then remove the automatic back door warning buzzer (1).



INSTALLATION

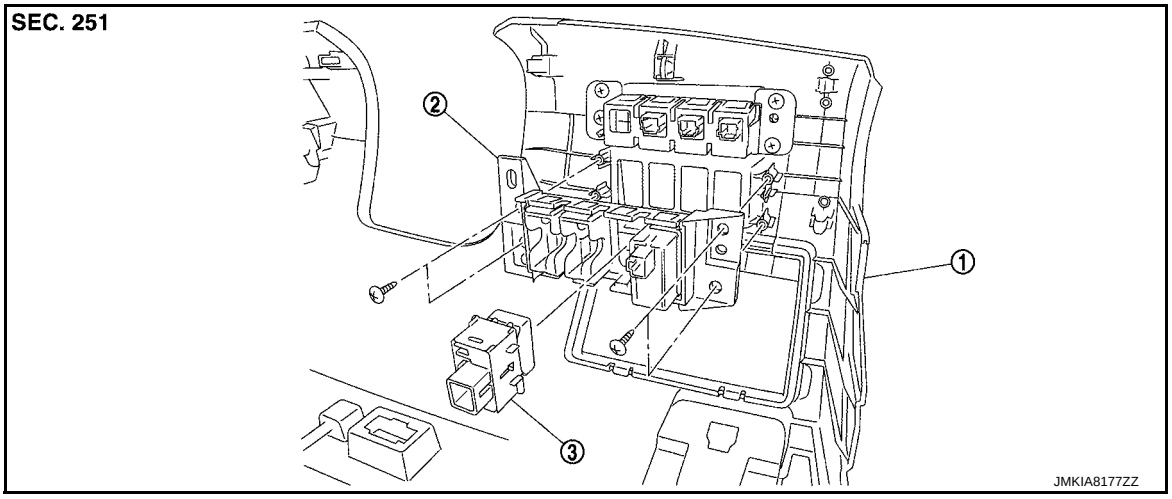
Install in the reverse order of removal.

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AUTOMATIC DOOR MAIN SWITCH

Exploded View

INFOID:0000000012409007



1. Instrument lower panel LH
2. Switch bracket lower
3. Automatic door main switch

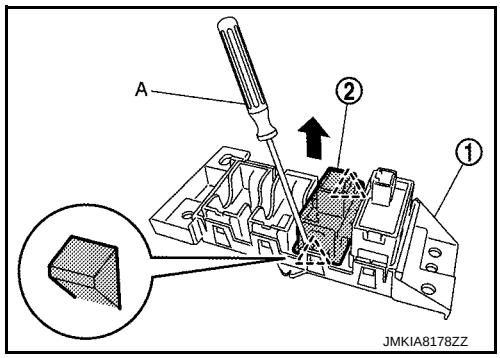
Removal and Installation

INFOID:0000000012409008

REMOVAL

1. Remove the instrument lower panel LH. Refer to IP-14, "Removal and Installation".
2. Removed automatic door main switch (1) from switch bracket lower (2) using remover tool (A).

: Pawl



INSTALLATION

Install in the reverse order of removal.

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AUTOMATIC BACK DOOR CLOSE SWITCH

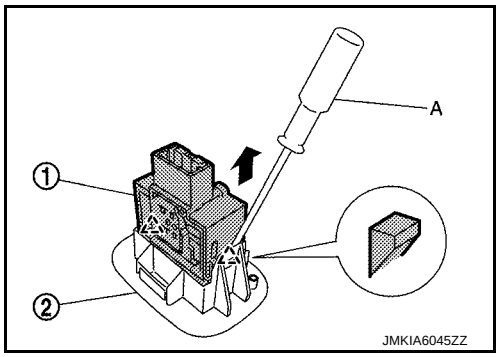
Removal and Installation

INFOID:0000000012409009

REMOVAL

1. Remove the automatic back door close switch finisher. Refer to INT-48, "BACK DOOR LOWER FINISHER : Removal and Installation".
2. Remove automatic back door close switch (1) from automatic back door close switch finisher (2) using remover tool (A).

: Pawl



INSTALLATION

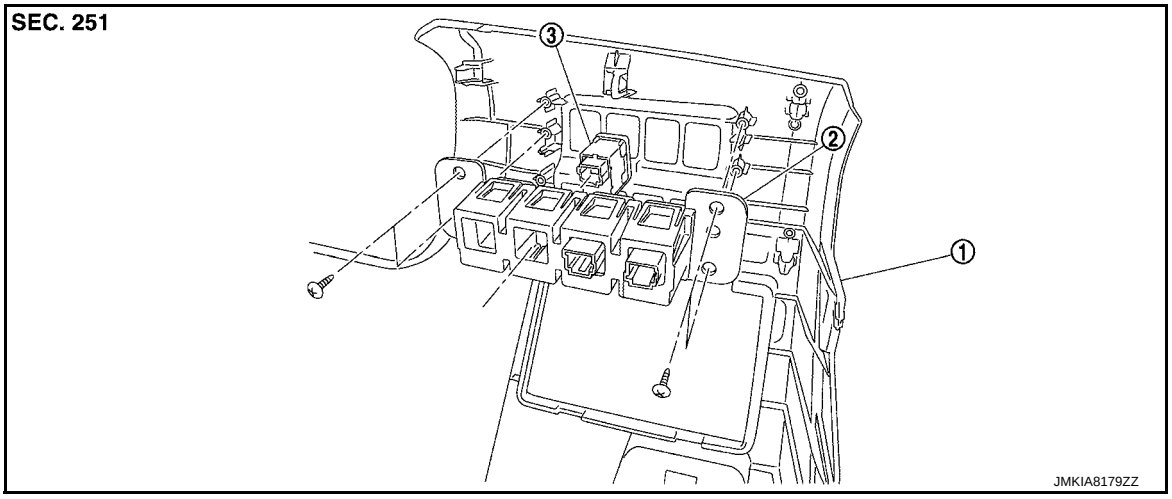
Install in the reverse order of removal.

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AUTOMATIC BACK DOOR SWITCH

Exploded View

INFOID:0000000012409010



1. Instrument lower panel LH
2. Switch bracket upper
3. Automatic door switch

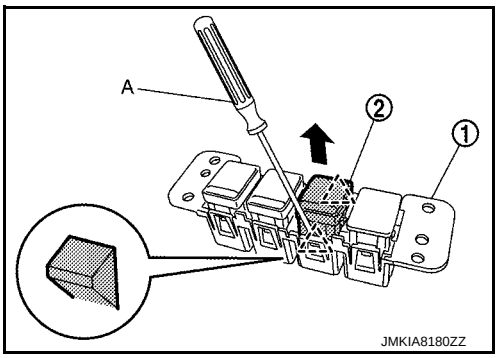
Removal and Installation

INFOID:0000000012409011

REMOVAL

1. Remove the instrument driver lower panel. Refer to IP-14, "Removal and Installation".
2. Remove automatic back door switch (1) from switch bracket (2) using remover tool (A).

: Pawl



INSTALLATION

Install in the reverse order of removal.

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SLIDING DOOR CONTROL UNIT

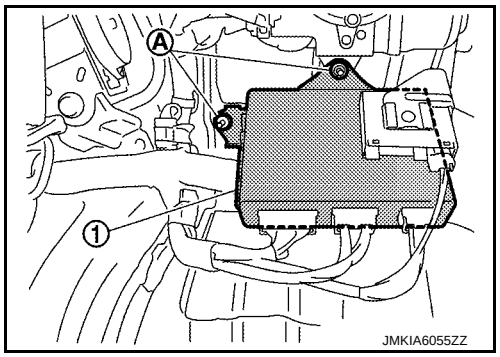
RH

RH : Removal and Installation

INFOID:0000000012409012

REMOVAL

1. Remove the luggage side lower finisher RH. Refer to INT-43, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
2. Remove the rear foot duct. Refer to VTL-14, "REAR FOOT DUCT : Removal and Installation".
3. Remove the sliding door control unit RH mounting bolt and nats (A), and then remove the sliding door control unit RH (1).



INSTALLATION

Install in the reverse order of removal

NOTE:

After installing sliding door control unit, perform additional service when replace control unit. Refer to DLK-176, "Work Procedure".

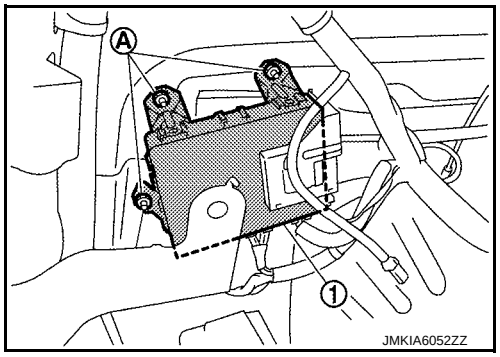
LH

LH : Removal and Installation

INFOID:0000000012409013

REMOVAL

1. Remove the luggage side lower finisher LH. Refer to INT-43, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
2. Remove the sliding door control unit LH mounting bolt and nats (A), and then remove the sliding door control unit LH (1).



INSTALLATION

Install in the reverse order of removal

NOTE:

After installing sliding door control unit, perform additional service when replace control unit. Refer to DLK-176, "Work Procedure".

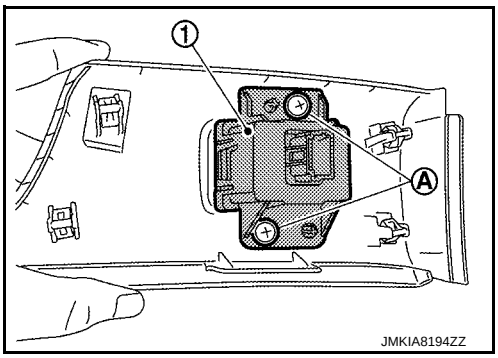
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SLIDING DOOR OPEN/CLOSE SWITCH
FRONT
FRONT : Removal and Installation

INFOID:0000000012409014

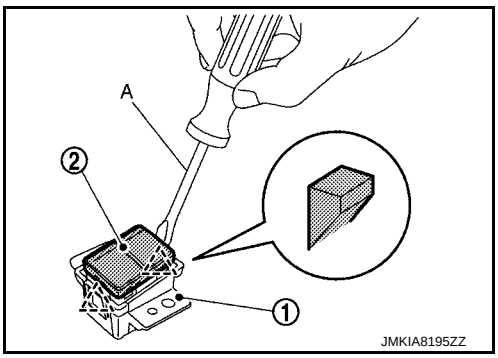
REMOVAL

1. Remove the instrument finisher B. Refer to IP-14, "Removal and Installation".
2. Remove the switch bracket lower mounting screw (A), and then remove the switch bracket lower from instrument finisher B.



3. Remove the sliding door open/close switch (front side) (2) from switch bracket lower (1) using flat-head screw driver (A).

: Pawl



INSTALLATION

Install in the reverse order of removal.

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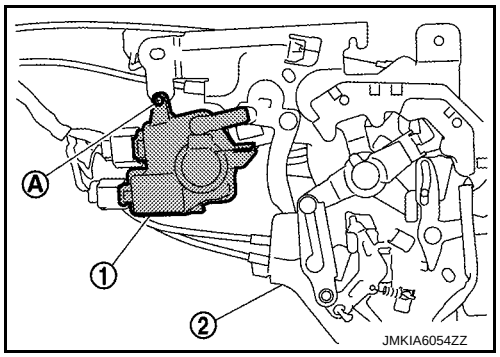
SLIDING DOOR LOCK ACTUATOR

Removal and Installation

INFOID:0000000012409015

REMOVAL

1. Remove the remote control assembly. Refer to DLK-472, "REMOTE CONTROL ASSEMBLY : Removal and Installation".
2. Remove the sliding door lock actuator mounting screw (A), and then remove the sliding door lock actuator (1) from remote control assembly (2).



INSTALLATION

Install in the reverse order of removal.

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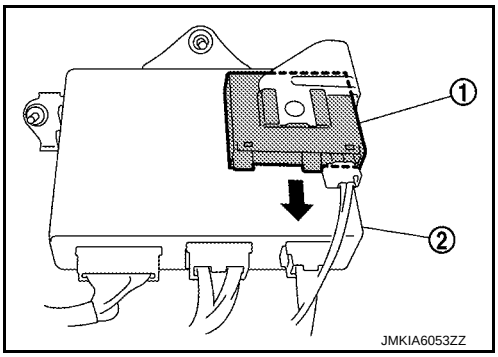
AUTOMATIC SLIDING DOOR WARNING BUZZER

Removal and Installation

INFOID:0000000012409016

REMOVAL

1. Remove the luggage side lower finisher. Refer to INT-43, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
2. Remove automatic sliding door warning buzzer (1) from sliding door control unit (2).



INSTALLATION

Install in the reverse order of removal.

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SLIDING DOOR ONE-TOUCH OPEN/CLOSE SWITCH

Removal and Installation

INFOID:0000000012409017

REMOVAL

Remove outside handle escutcheon. Refer to DLK-470, "OUTSIDE HANDLE : Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

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