

**SECTION GW**

**GLASSES, WINDOW SYSTEM & MIRRORS**

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# PRECAUTIONS

## PRECAUTIONS

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### Precautions for Supplemental Restraint System (SRS) “AIR BAG” and “SEAT BELT PRE-TENSIONER”

EIS003KH

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

#### **WARNING:**

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

### Handling for Adhesive and Primer

EIS003KI

- Do not use an adhesive which is past its usable date. Shelf life of this product is limited to six months after the date of manufacture. Carefully adhere to the expiration or manufacture date printed on the box.
- Keep primers and adhesive in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Open the seal of the primer and adhesive just before application. Discard the remainder.
- Before application, be sure to shake the primer container to stir the contents. If any floating material is found, do not use it.
- If any primer or adhesive contacts the skin, wipe it off with gasoline or equivalent and wash the skin with soap.
- When using primer and adhesive, always observe the precautions in the instruction manual.

### Trouble Diagnosis Precaution

EIS003KJ

When you read wiring diagrams, refer to the following:

- [GI-14, "How to Read Wiring Diagrams"](#)
- [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#)

When you perform trouble diagnosis, refer to the following:

- [GI-10, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"](#)
- [GI-26, "How to Perform Efficient Diagnosis for an Electrical Incident"](#)

Check for any service bulletins before servicing the vehicle.

# PREPARATION

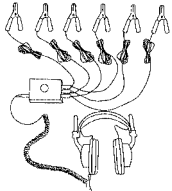
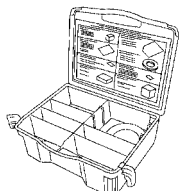
## PREPARATION

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### Special Service Tool

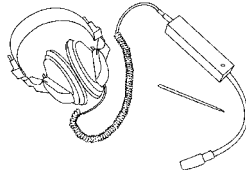
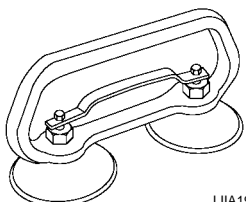
EIS003KK

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

Tool number (Kent-Moore No.) Tool name		Description
— (J-39570) Chassis ear	 SIA0993E	Locating the noise
— (J-43980) NISSAN Squeak and Rattle Kit	 SIA0994E	Repairing the cause of noise

### Commercial Service Tool

EIS003KL

(Kent-Moore No.) Tool name		Description
(J-39565) Engine ear	 SIA0995E	Locating the noise
( — ) Suction Lifter	 LIA1991E	Holding door glass

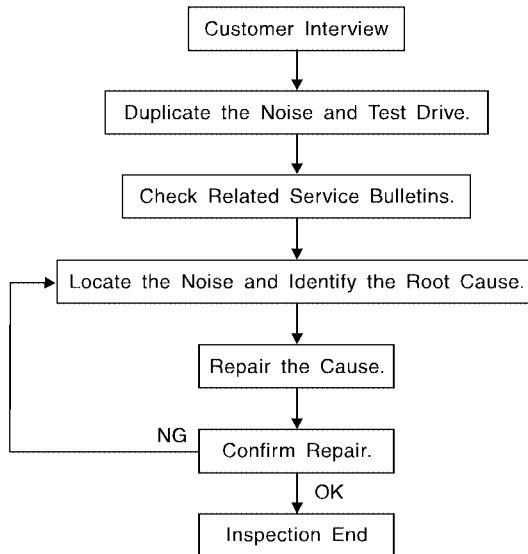
# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## SQUEAK AND RATTLE TROUBLE DIAGNOSES

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### Work Flow

EIS0048A



SBT842

### CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to [GW-9, "Diagnostic Worksheet"](#). This information is necessary to duplicate the conditions that exist when the noise occurs.

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

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## DUPLICATE THE NOISE AND TEST DRIVE

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

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

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

## CHECK RELATED SERVICE BULLETINS

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

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

## LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
  - removing the components in the area that you suspect the noise is coming from. Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
  - tapping or pushing/pulling the component that you suspect is causing the noise. Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
  - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
  - placing a piece of paper between components that you suspect are causing the noise.
  - looking for loose components and contact marks.  
Refer to [GW-7, "Generic Squeak and Rattle Troubleshooting"](#) .

## REPAIR THE CAUSE

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

### CAUTION:

**Do not use excessive force as many components are constructed of plastic and may be damaged.**

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

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

**URETHANE PADS [1.5 mm (0.059 in) thick]**

**Insulates connectors, harness, etc.**

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

**INSULATOR (Foam blocks)**

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

**73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97×1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97×1.97 in)**

**INSULATOR (Light foam block)**

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

**80845-71L00: 30 mm (1.18 in) thick, 30×50 mm (1.18×1.97 in)**

## FELT CLOTH TAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications.

**68370-4B000: 15×25 mm (0.59×0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll.** The following materials not found in the kit can also be used to repair squeaks and rattles.

## UHMW (TEFLON) TAPE

Insulates where slight movement is present. Ideal for instrument panel applications.

## SILICONE GREASE

Used instead of UHMW tape that will be visible or not fit.

**Note: Will only last a few months.**

## SILICONE SPRAY

Use when grease cannot be applied.

## DUCT TAPE

Use to eliminate movement.

## CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

## Generic Squeak and Rattle Troubleshooting

EIS0048B

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 silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

### CAUTION:

**Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.**

## CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

## DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the NISSAN Squeak and Rattle Kit (J-43980) to repair the noise.

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# SQUEAK AND RATTLE TROUBLE DIAGNOSES

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## TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner. In addition look for:

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

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

## SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sun visor shaft shaking in the holder
3. Front or rear windshield touching headliner 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.

## OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage.

In addition look for:

1. Loose harness or harness connectors.
2. Front console map/reading lamp lense loose.
3. Loose screws at console attachment points.

## SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

## UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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



# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## Diagnostic Worksheet

EIS0048C



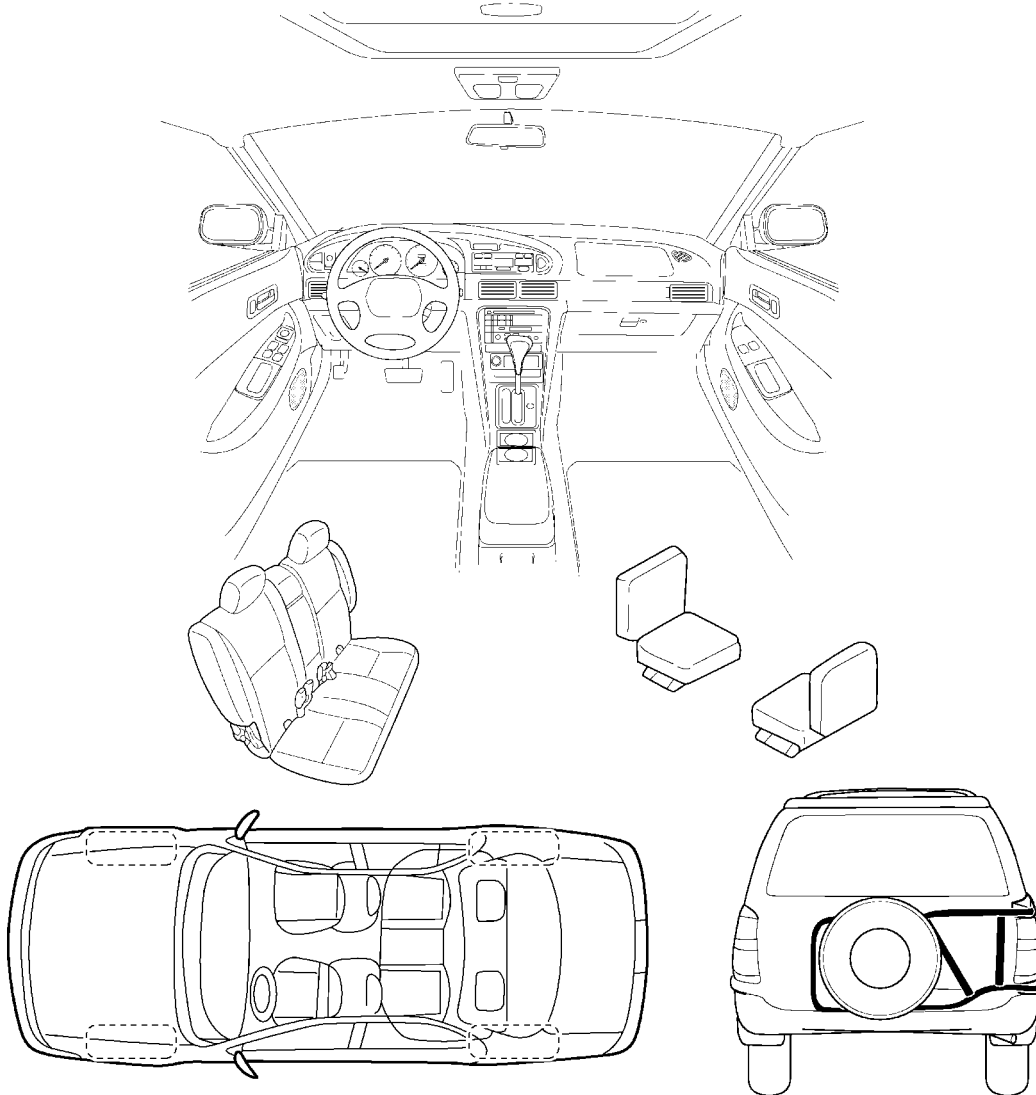
### SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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 the back of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

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# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## SQUEAK & RATTLE DIAGNOSTIC WORKSHEET- page 2

**Briefly describe the location where the noise occurs:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**II. WHEN DOES IT OCCUR? (check the boxes that apply)**

- |   |  |
|---|--|
| <input type="checkbox"/> anytime<br><input type="checkbox"/> 1 <sup>st</sup> time in the morning<br><input type="checkbox"/> only when it is cold outside<br><input type="checkbox"/> only when it is hot outside | <input type="checkbox"/> after sitting out in the sun<br><input type="checkbox"/> when it is raining or wet<br><input type="checkbox"/> dry or dusty conditions<br><input type="checkbox"/> other: _____ |
|---|--|

**III. WHEN DRIVING:**

- through driveways
- over rough roads
- over speed bumps
- only at 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 on a 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:**

\_\_\_\_\_

\_\_\_\_\_

	<u>YES</u>	<u>NO</u>	<u>Initials of person performing</u>
Vehicle test driven with customer	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise verified on test drive	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise source located and repaired	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Follow up test drive performed to confirm repair	<input type="checkbox"/>	<input type="checkbox"/>	_____

VIN: \_\_\_\_\_ Customer Name: \_\_\_\_\_

W.O. #: \_\_\_\_\_ Date: \_\_\_\_\_

SBT844

**This form must be attached to Work Order**

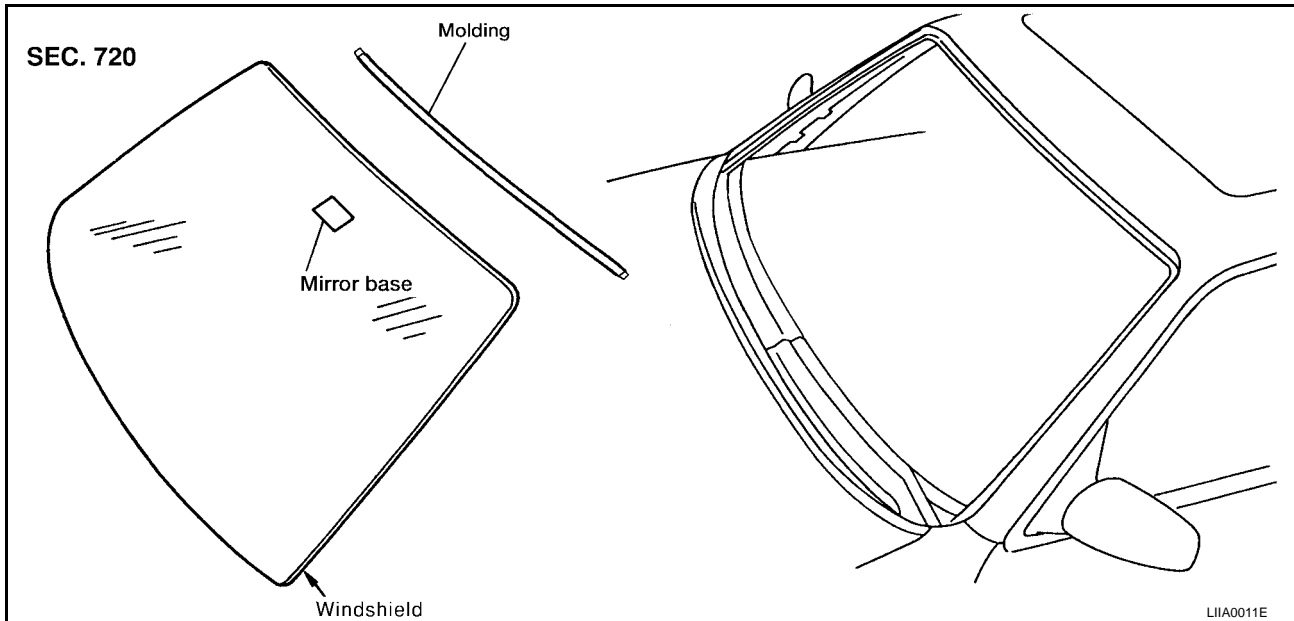
# WINDSHIELD GLASS

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## WINDSHIELD GLASS

### Removal and Installation

EIS003KP



### REMOVAL

1. Partially remove the headlining (front edge). Refer to [EI-36, "HEADLINING"](#).
2. Remove the front wiper arms. Refer to [WW-27, "Removal and Installation of Front Wiper Arms, Adjustment of Wiper Arms Stop Location"](#).
3. Remove drip molding. Refer to [EI-26, "DRIP MOLDING"](#).
4. Apply a protective tape around the windshield glass to protect the painted surface from damage. After removing moldings, remove glass using piano wire or power cutting tool and an inflatable pump bag.
  - If a windshield glass is to be reused, mark the body and the glass with mating marks.

### WARNING:

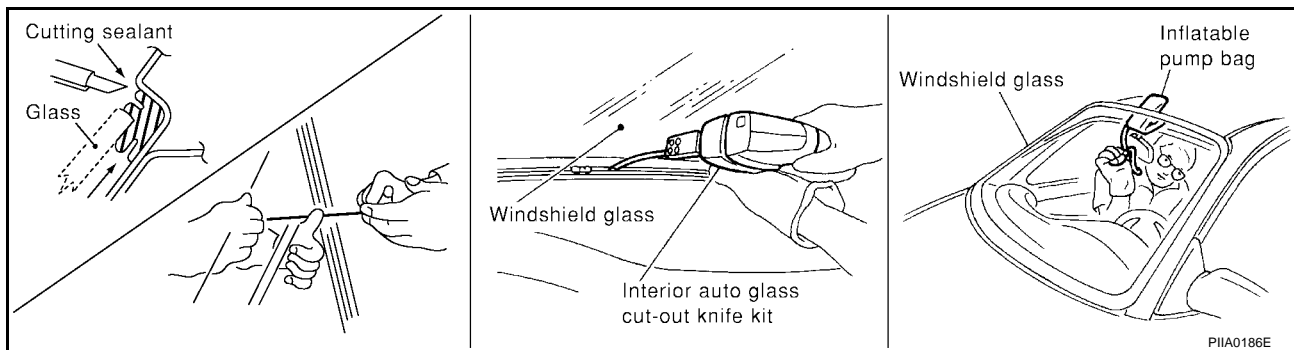
When cutting the glass from the vehicle, always wear safety glasses and heavy gloves to help prevent glass splinters from entering your eyes or cutting your hands.

### CAUTION:

When a windshield glass is to be reused, do not use a cutting knife or power cutting tool.

### NOTE:

- Be careful not to scratch the glass when removing.
- Do not set or stand the glass on its edge. Small chips may develop into cracks.



### INSTALLATION

- Use a genuine Nissan Urethane Adhesive Kit (if available) or equivalent and follow the instructions furnished with it.
- While the urethane adhesive is curing, open a door window. This will prevent the glass from being forced out by passenger compartment air pressure when a door is closed.
- The molding must be installed securely so that it is in position and leaves no gap.

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# WINDSHIELD GLASS

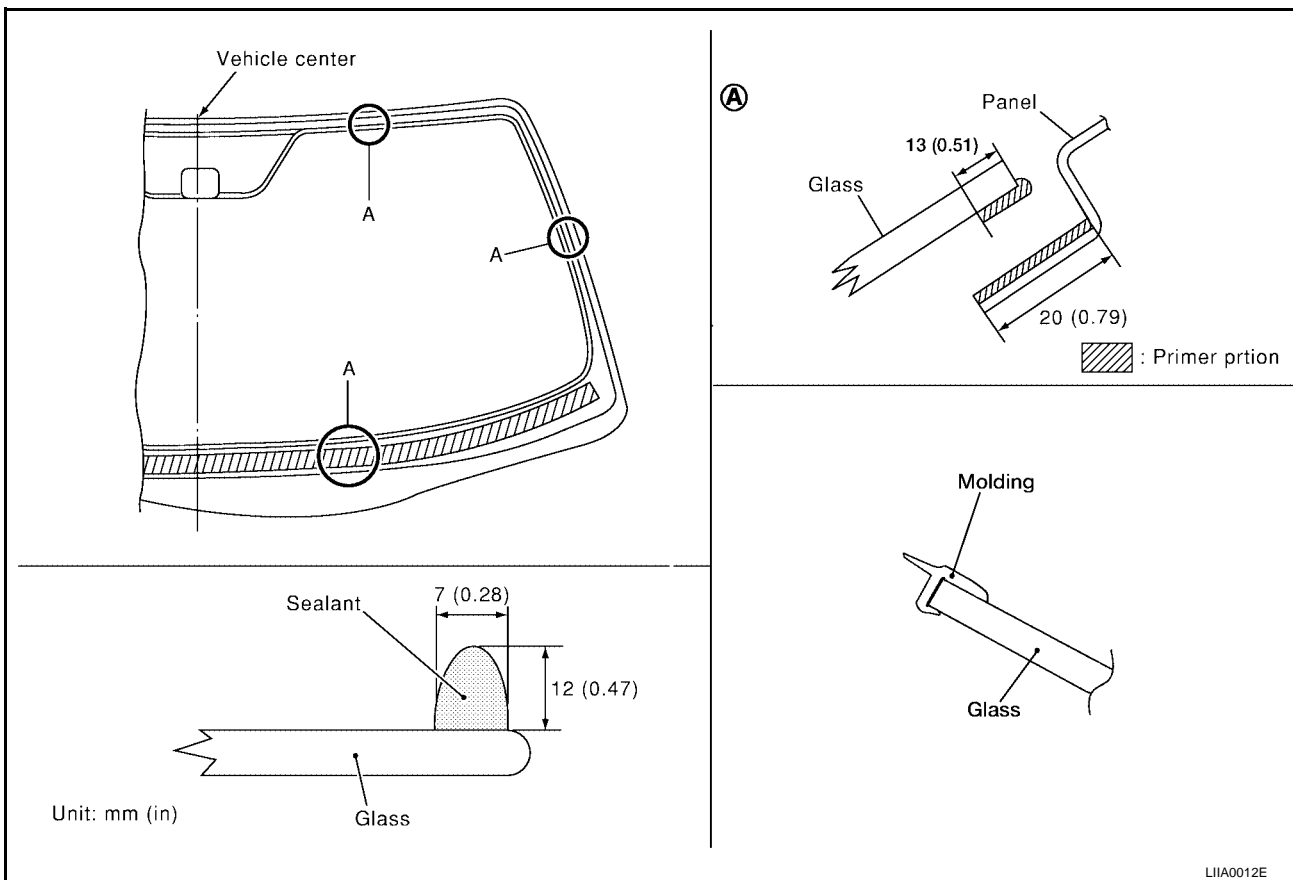
- Inform the customer that the vehicle should remain stationary until the urethane adhesive has completely cured (preferably 24 hours). Curing time varies with temperature and humidity.

## WARNING:

- Keep heat and open flames away as primers and adhesive are flammable.
- The materials contained in the kit are harmful if swallowed, and may irritate skin and eyes. Avoid contact with the skin and eyes.
- Use in an open, well ventilated location. Avoid breathing the vapors. They can be harmful if inhaled. If affected by vapor inhalation, immediately move to an area with fresh air.
- Driving the vehicle before the urethane adhesive has completely cured may affect the performance of the windshield in case of an accident.

## CAUTION:

- Do not use an adhesive which is past its usable term. Shelf life of this product is limited to six months after the date of manufacture. Carefully adhere to the expiration or manufacture date printed on the box.
- Keep primers and adhesive in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Do not leave primers or adhesive cartridge unattended with their caps open or off.
- The vehicle should not be driven for at least 24 hours or until the urethane adhesive has completely cured. Curing time varies depending on temperature and humidity. The curing time will increase under lower temperature and lower humidity.



## Repairing Water Leaks for Windshield

Leaks can be repaired without removing and reinstalling glass.

If water is leaking between the urethane adhesive material and body or glass, determine the extent of leakage.

This can be done by applying water to the windshield area while pushing glass outward.

To stop the leak, apply primer (if necessary) and then urethane adhesive to the leak point.

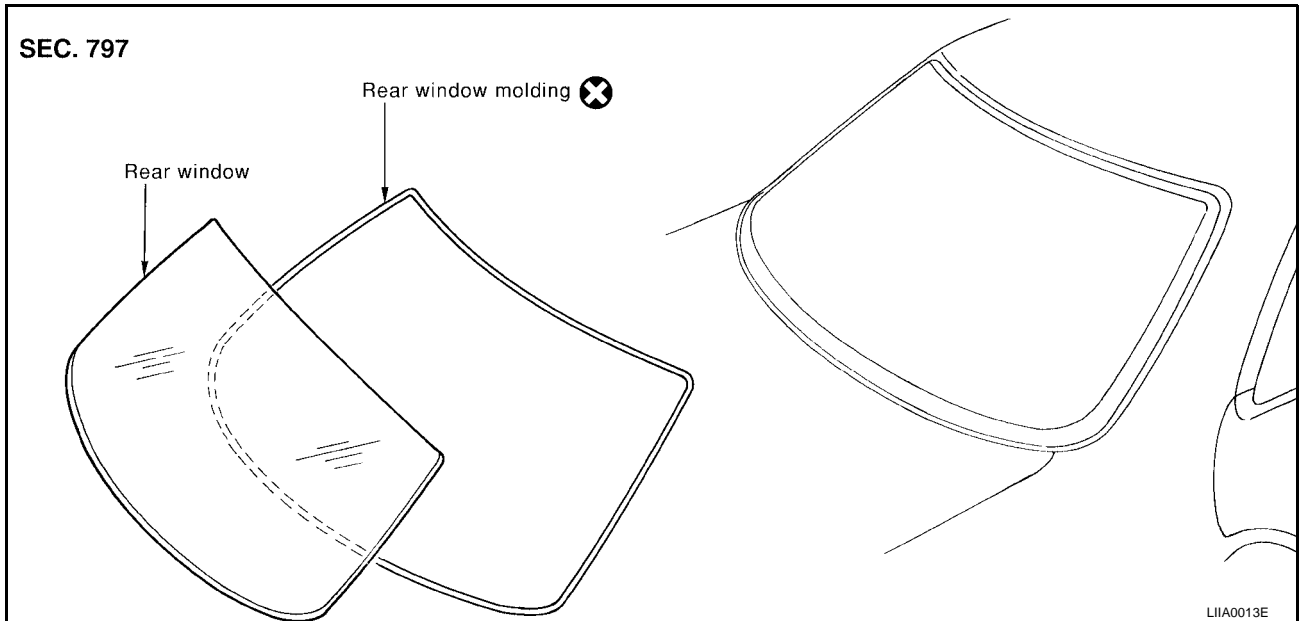
# REAR WINDOW GLASS AND MOLDING

PFP:79712

## REAR WINDOW GLASS AND MOLDING

### Removal and Installation

EIS003KQ



### REMOVAL

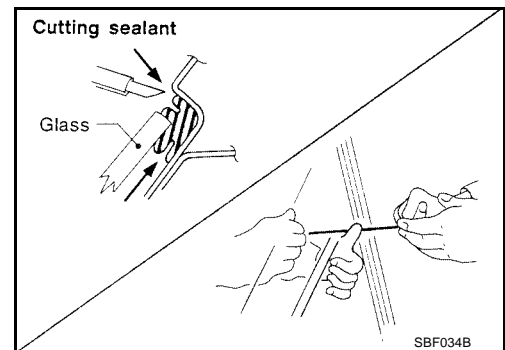
1. Remove the rear of the headliner. Refer to [EI-36, "HEADLINING"](#).
  2. Remove the rear parcel shelf finisher. Refer to [EI-34, "REAR PARCEL SHELF FINISHER"](#).
  3. Remove the connectors and grounds for the rear window defogger and printed antenna.
- After removing moldings, remove glass using piano wire or power cutting tool and an inflatable pump bag.
  - If a windshield glass is to be reused, mark the body and the glass with mating marks.

### WARNING:

When cutting the glass from the vehicle, always wear safety glasses and heavy gloves to help prevent glass splinters from entering your eyes or cutting your hands.

### CAUTION:

- When a windshield glass is to be reused, do not use a cutting knife or power cutting tool.
- Be careful not to scratch the glass when removing.
- Do not set or stand the glass on its edge. Small chips may develop into cracks.



### INSTALLATION

- Use a genuine Nissan Urethane Adhesive Kit (if available) or equivalent and follow the instructions furnished with it.
- While the urethane adhesive is curing, open a door window. This will prevent the glass from being forced out by passenger compartment air pressure when a door is closed.
- The molding must be installed securely so that it is in position and leaves no gap.
- Inform the customer that the vehicle should remain stationary until the urethane adhesive has completely cured (preferably 24 hours). Curing time varies with temperature and humidity.

### WARNING:

- Keep heat and open flames away as primers and adhesive are flammable.
- The materials contained in the kit are harmful if swallowed, and may irritate skin and eyes. Avoid contact with the skin and eyes.
- Use in an open, well ventilated location. Avoid breathing the vapors. They can be harmful if inhaled. If affected by vapor inhalation, immediately move to an area with fresh air.

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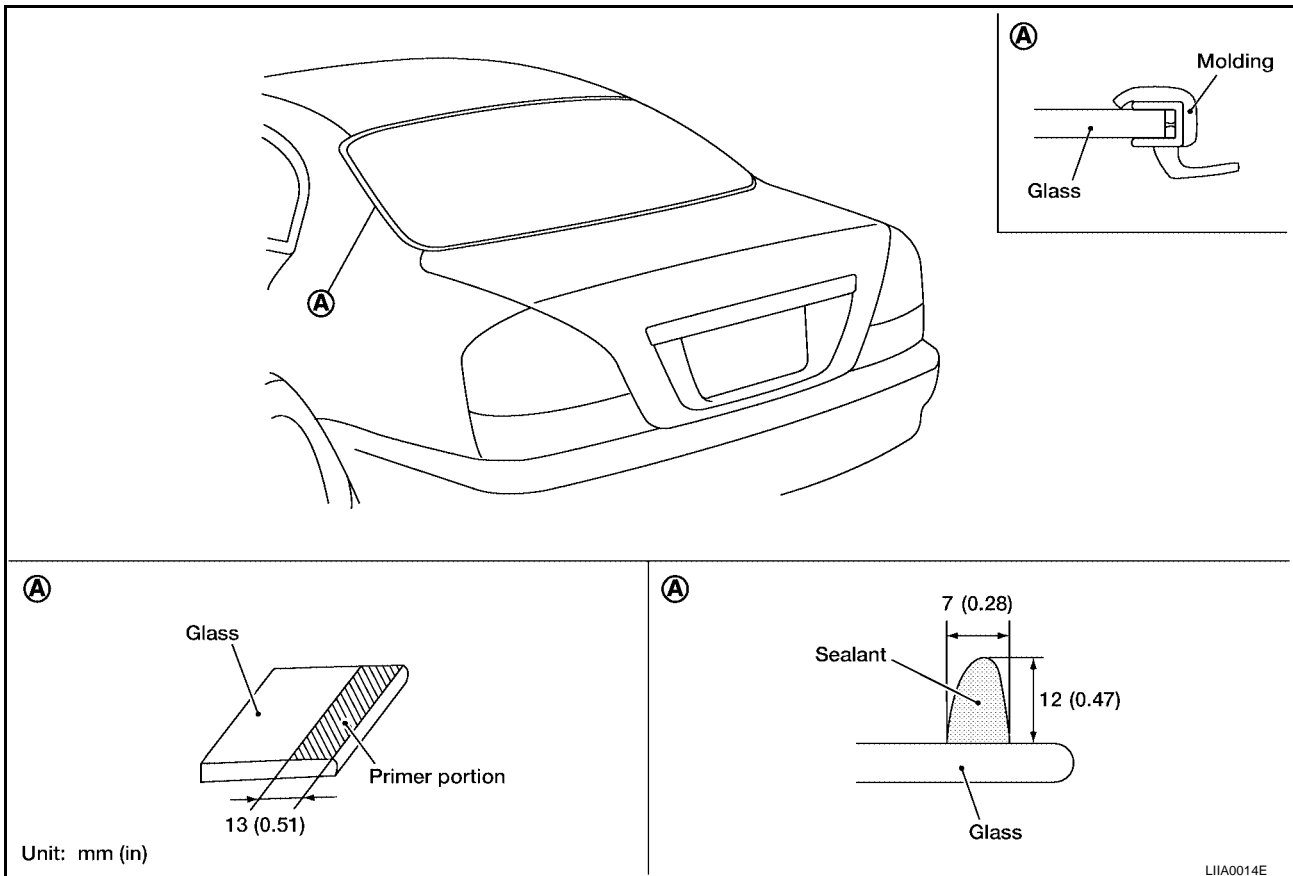
GW

## REAR WINDOW GLASS AND MOLDING

- Driving the vehicle before the urethane adhesive has completely cured may affect the performance of the windshield in case of an accident.

### CAUTION:

- Do not use an adhesive which is past its usable term. Shelf life of this product is limited to six months after the date of manufacture. Carefully adhere to the expiration or manufacture date printed on the box.
- Keep primers and adhesive in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Do not leave primers or adhesive cartridge unattended with their caps open or off.
- The vehicle should not be driven for at least 24 hours or until the urethane adhesive has completely cured. Curing time varies depending on temperature and humidity. The curing time will increase under lower temperature and lower humidity.



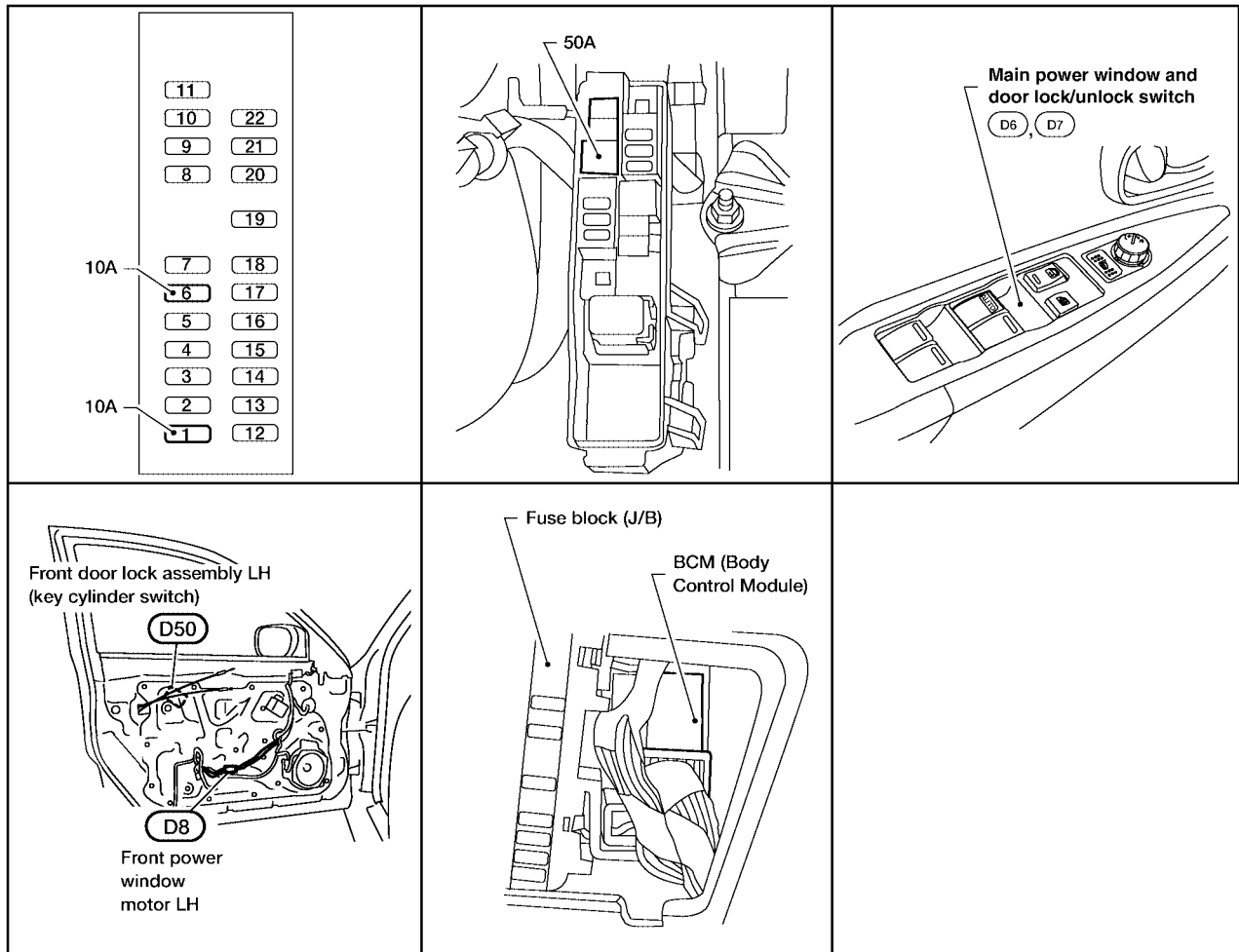
# POWER WINDOW SYSTEM

PFP:25401

E/S003KR

## POWER WINDOW SYSTEM

### Component Parts and Harness Connector Location



LIIA1461E

E/S003KS

## System Description

Power is supplied at all times

- through BCM terminal 69
- to main power window and door lock/unlock switch terminal 5 (16).

With ignition switch in ON or START position, power is supplied

- through BCM terminal 68
- to main power window and door lock/unlock switch terminal 12 (17),
- to front power window switch RH terminal 2 (13),
- to rear power window switch LH and RH terminal 5.

( ): with left and right front power window anti-pinch system.

## AUTO OPERATION

The power window AUTO feature enables the driver (driver and passenger) to open or close the window without holding the window switch in the down or up position.

## POWER WINDOW LOCK

The power window lock is designed to lock operation of all windows except for driver's window. When the lock switch is pressed to lock position, ground of the sub-switches in the main power window and door lock/unlock switch is disconnected. This prevents the power window motors from operating.

## DELAYED POWER OPERATION

When the ignition switch is turned to the OFF position, power windows will still operate for approximately 45 seconds unless either of the front doors is opened.

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# POWER WINDOW SYSTEM

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## **ANTI-PINCH DETECTION FUNCTION**

During raising operation of driver or passenger power window (if equipped), if door control module detects that foreign object is pinched, power window lowers approximately 150 mm (5.91 in).

### **NOTE:**

Depending on environment and driving conditions, if a similar impact or load is applied to power window, it may lower.

### **Operation conditions**

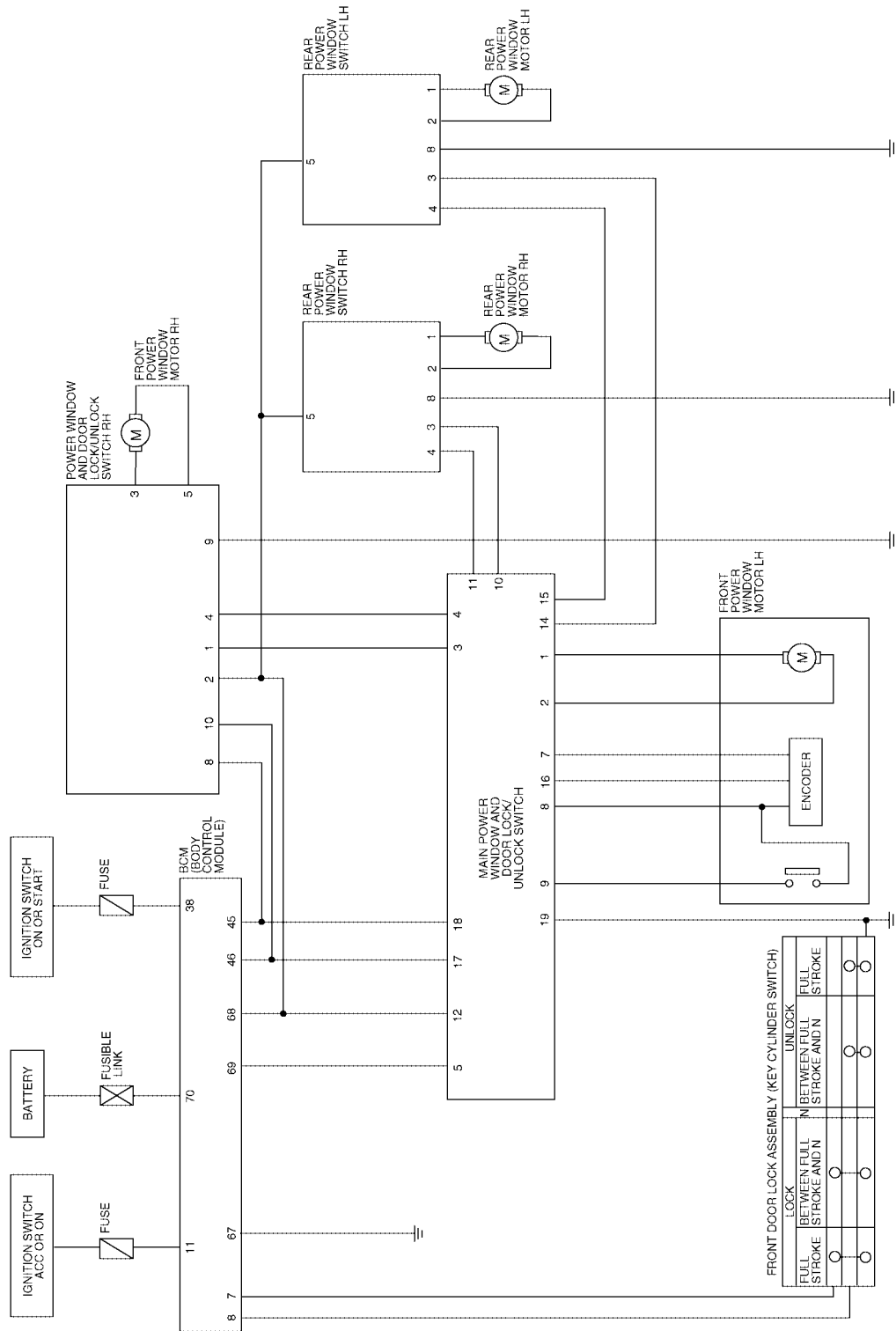
- Driver and passenger door window is between fully-open and just before fully-closed position (when the limit switch is ON).
- During automatic operation when ignition switch is turned ON.
- During automatic or manual operation when ignition switch is other than ON position (when the timer operates).



# POWER WINDOW SYSTEM

## Schematic (With Left Front Only Power Window Anti-pinch System)

EIS003KT

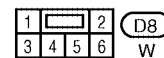
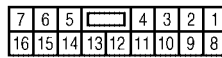
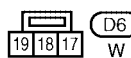
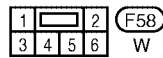
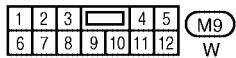
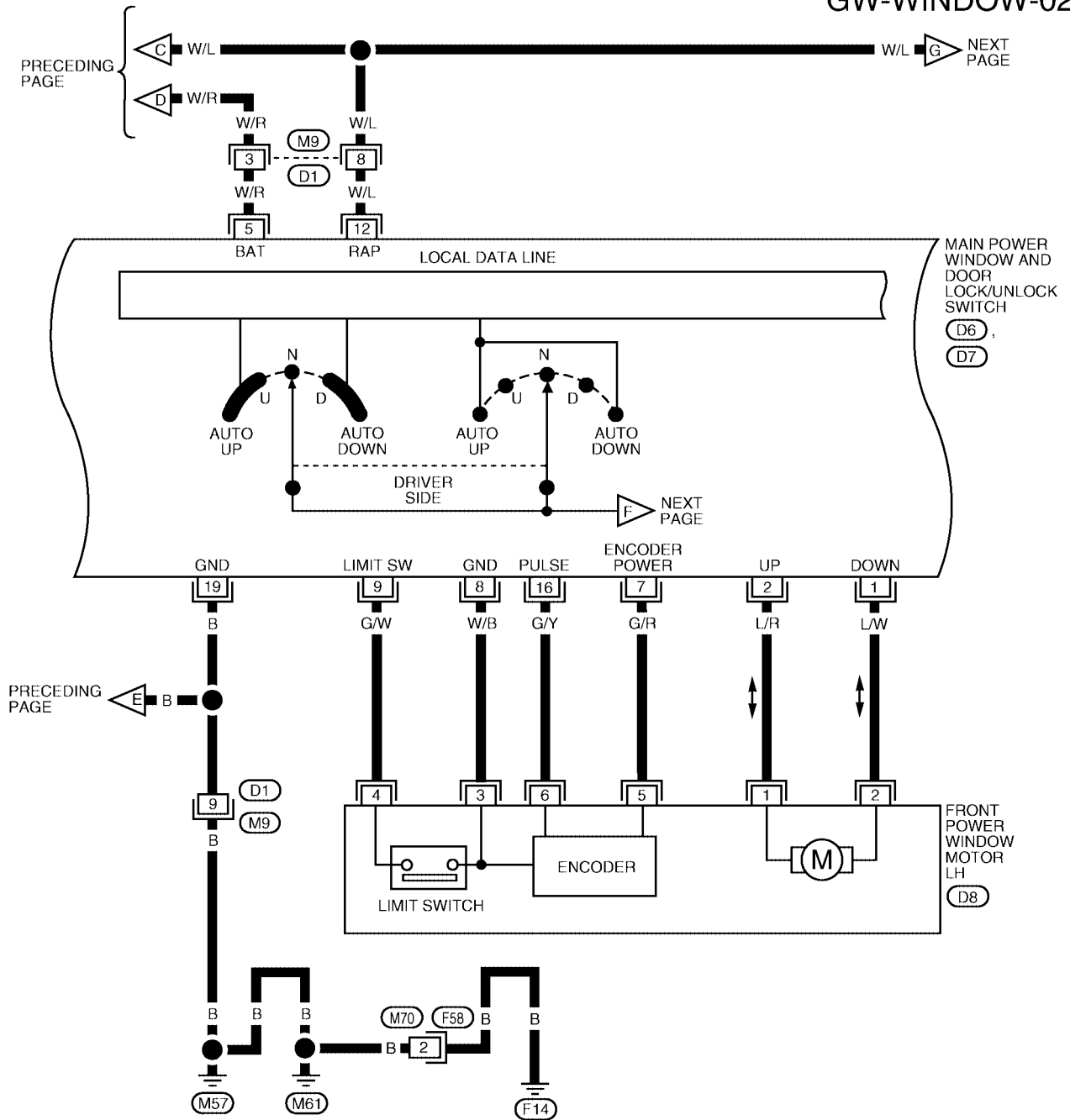


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# POWER WINDOW SYSTEM

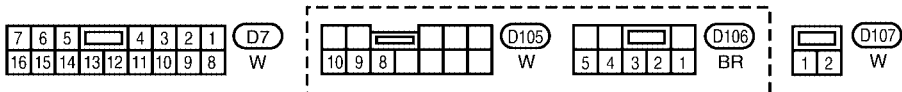
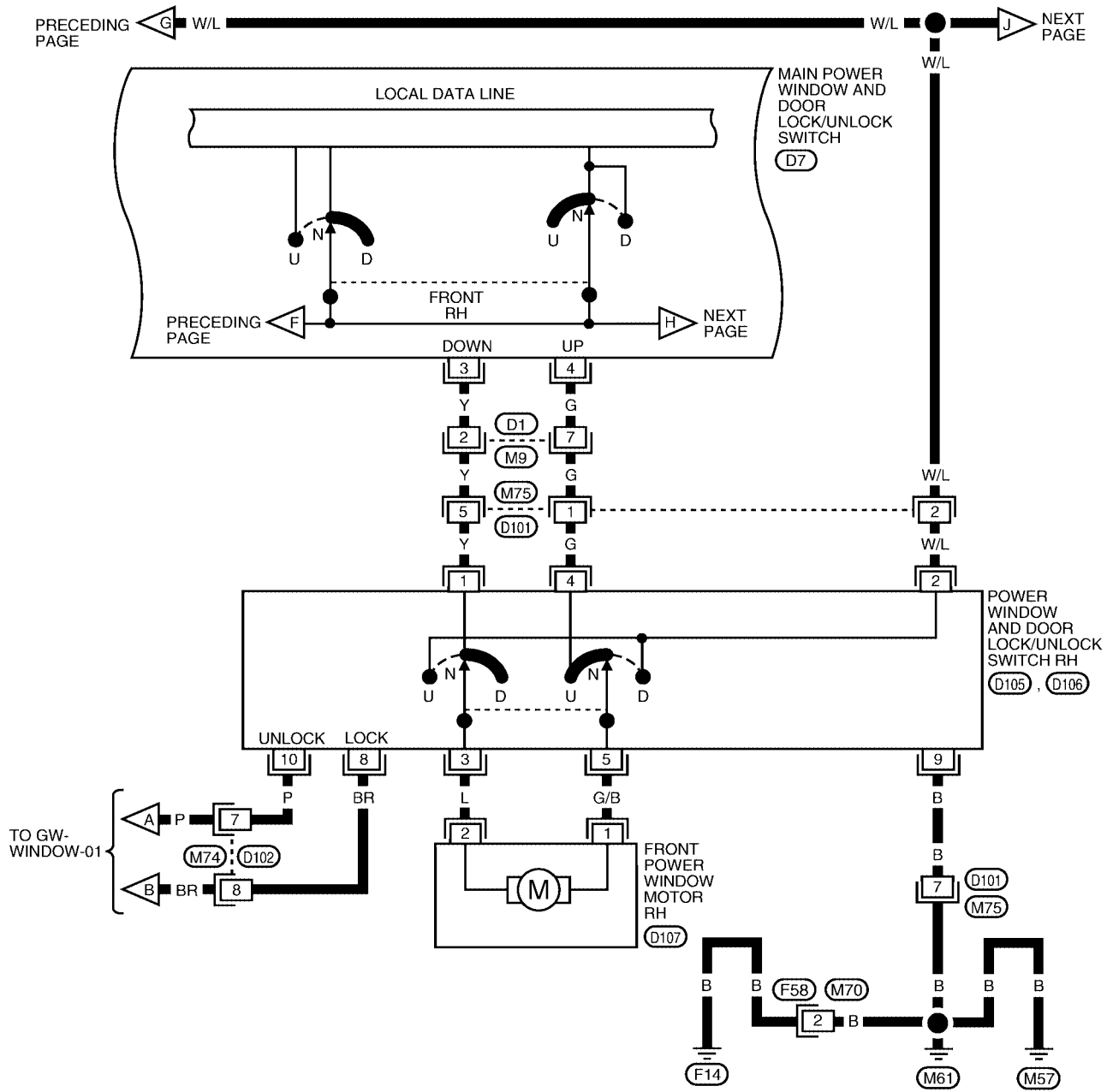
GW-WINDOW-02



LIWA0402E

# POWER WINDOW SYSTEM

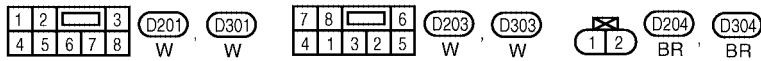
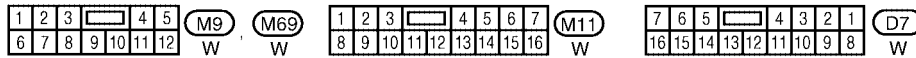
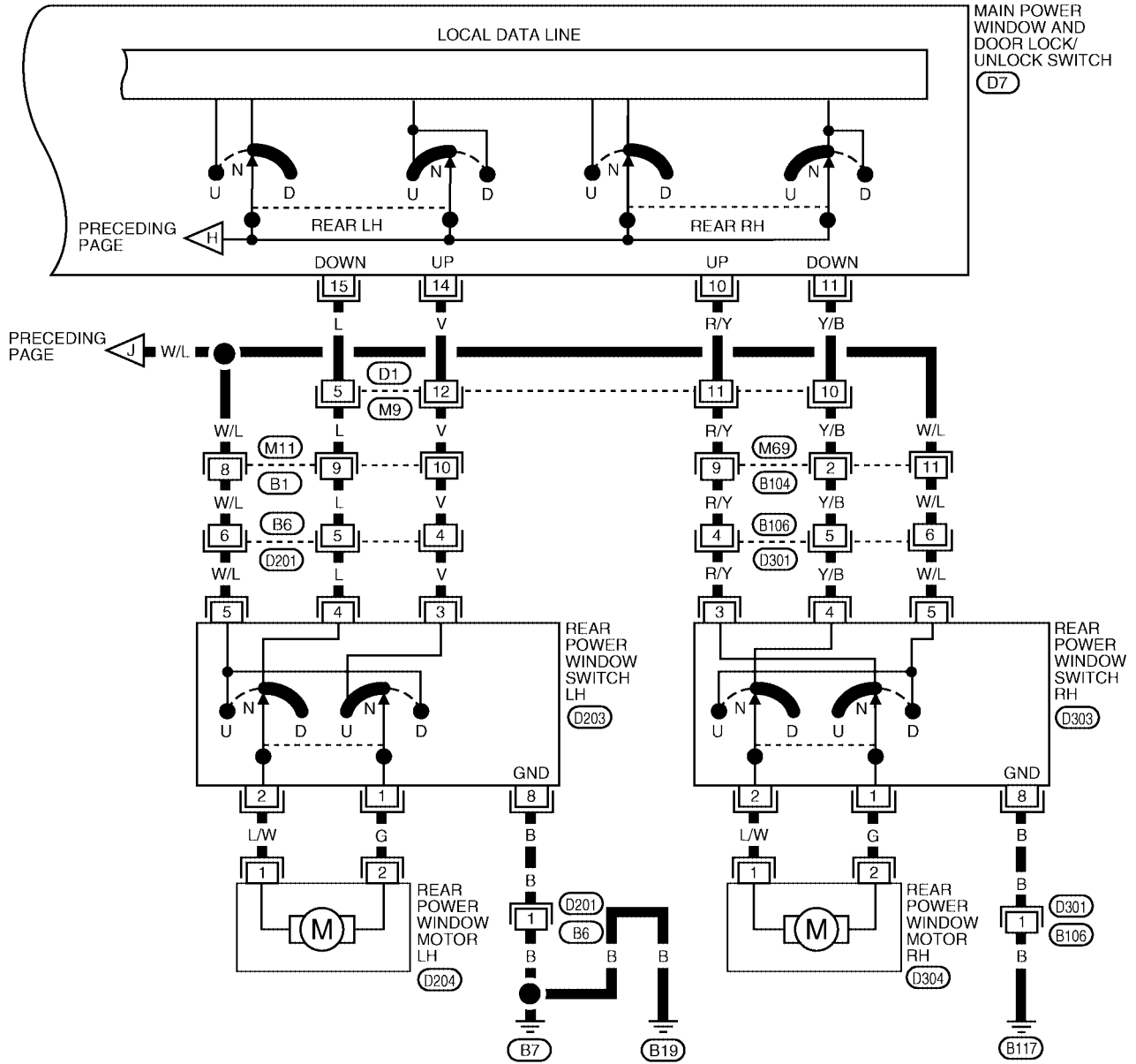
## GW-WINDOW-03



WIWA0979E

# POWER WINDOW SYSTEM

GW-WINDOW-04



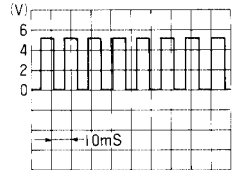
LIWA0404E

# POWER WINDOW SYSTEM

## Terminal and Reference Value for Main Power Window and Door Lock/Unlock Switch

EIS003KV

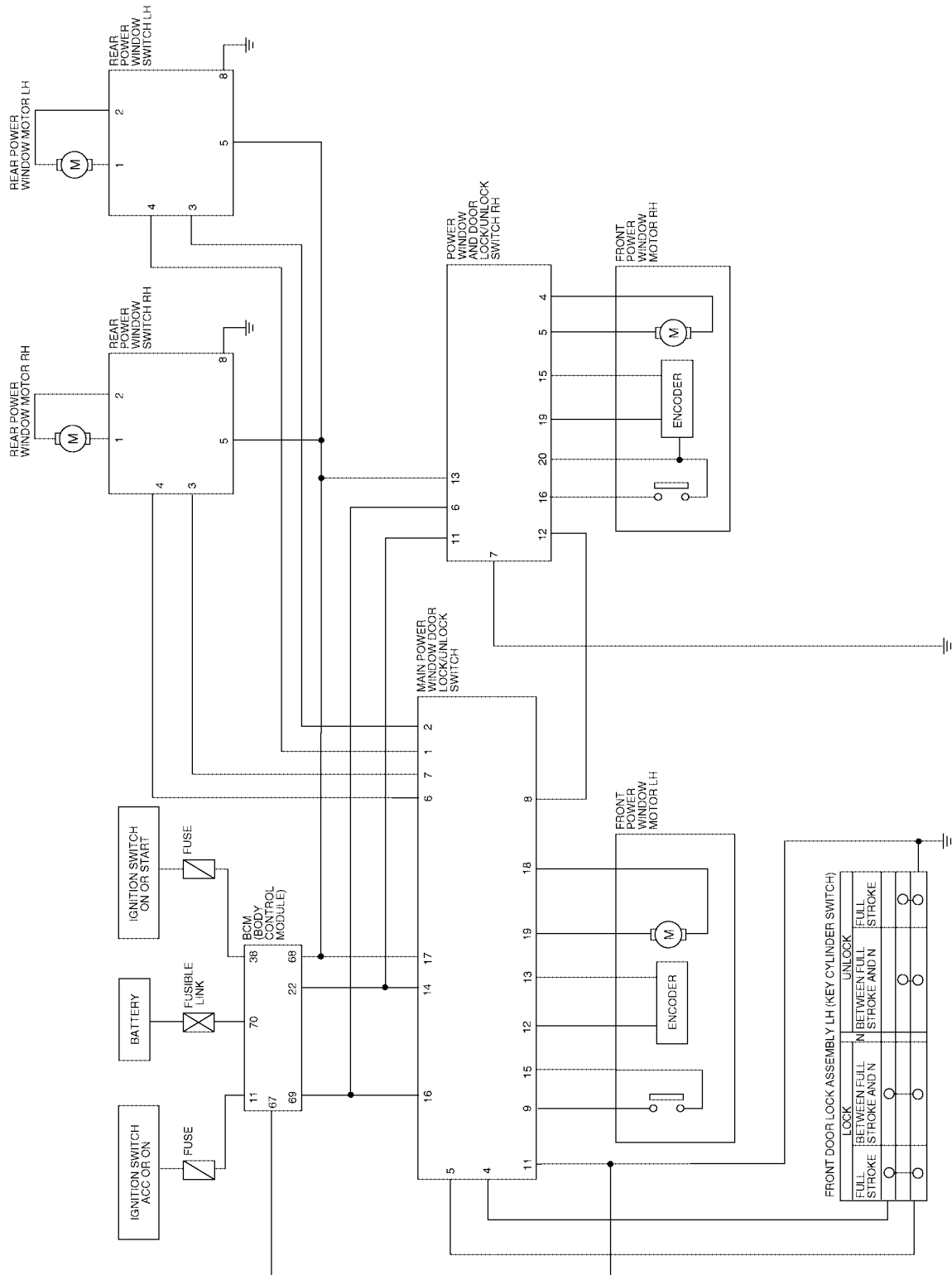
With left front only power window anti-pinch system.

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
1	L/W	Front power window LH DOWN signal	DOWN operation.	0 → Battery voltage
2	L/R	Front power window LH UP signal	UP operation.	0 → Battery voltage
3	Y	Front power window RH DOWN signal	Main power window and door lock/unlock switch front power window RH DOWN operation.	0 → Battery voltage
4	G	Front power window RH UP signal	Main power window and door lock/unlock switch front power window RH UP operation.	0 → Battery voltage
5	W/R	Battery power supply	—	Battery voltage
7	G/R	Encoder power supply	—	5 – Battery voltage
8	W/B	Limit switch encoder ground	—	0
9	G/W	Limit switch signal	Driver door window is between fully-open and just before fully-closed position (ON).	0
			Driver door window is between just before fully-closed position and fully-closed position (OFF).	5
10	R/Y	Rear power window RH UP signal	Main power window and door lock/unlock switch rear power window RH UP operation.	0 → Battery voltage
11	Y/B	Rear power window RH DOWN signal	Main power window and door lock/unlock switch rear power window RH DOWN operation.	0 → Battery voltage
12	W/L	RAP signal	—	Battery voltage
14	V	Rear power window LH UP signal	Main power window and door lock/unlock switch rear power window LH UP operation.	Battery voltage
15	L	Rear power window LH DOWN signal	Main power window and door lock/unlock switch rear power window LH DOWN operation.	Battery voltage
16	G/Y	Encoder pulse signal	Power window motor operation.	 <p style="text-align: right;">OCC3383D</p>
17	P	Power window UNLOCK signal	Power window lock switch in UNLOCK position	Battery voltage
18	BR	Power window LOCK signal	Power window lock switch in LOCK position	Battery voltage
19	B	Ground	—	0

# POWER WINDOW SYSTEM

## Schematic (With Left and Right Front Power Window Anti-pinch System)

EIS003KW



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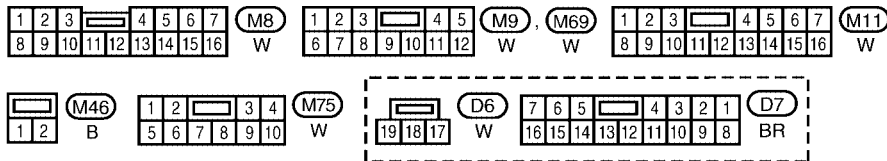
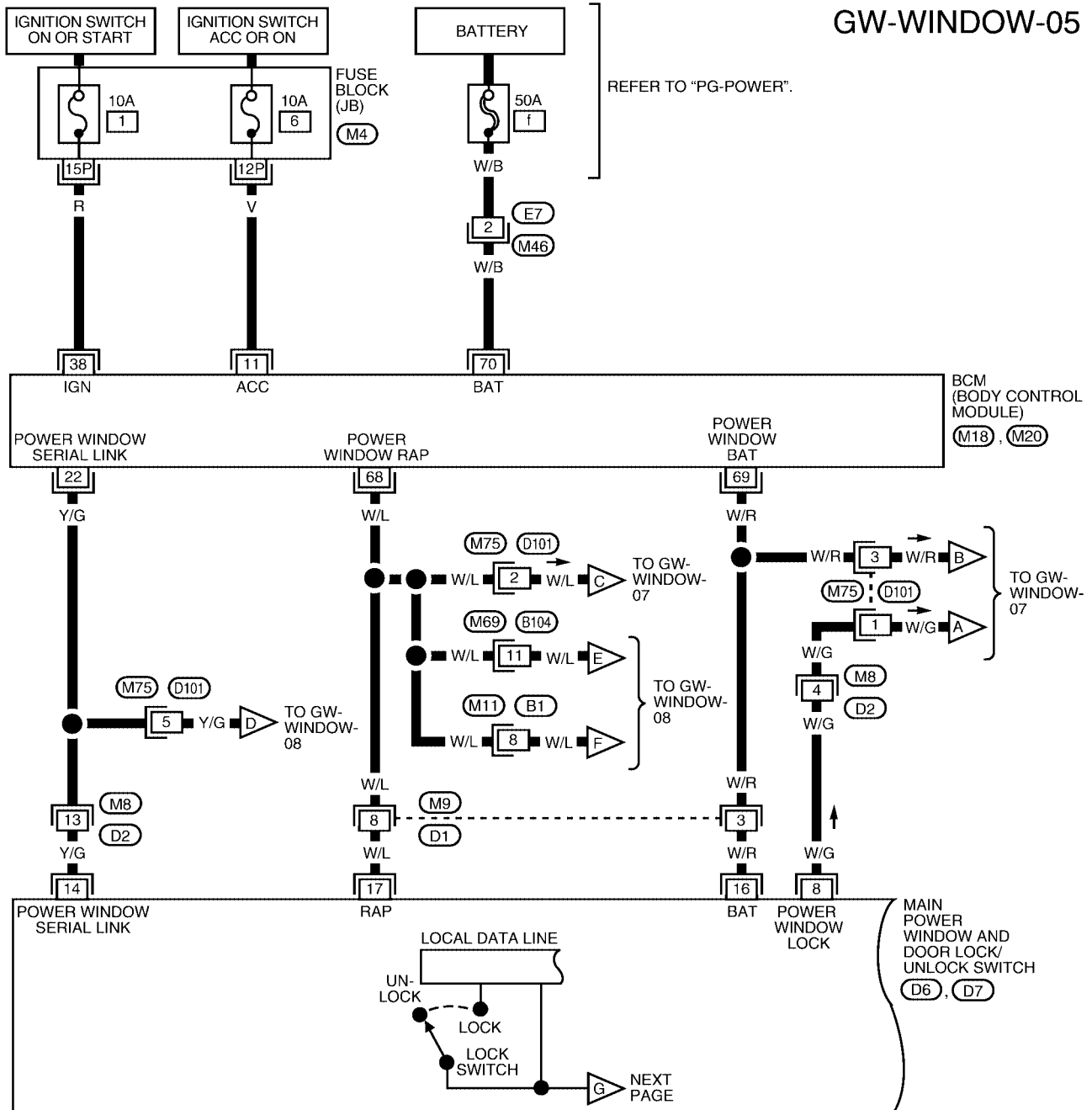
LJWA0405E

# POWER WINDOW SYSTEM

## Wiring Diagram — WINDOW — (With Left and Right Front Power Window Anti-pinch System)

EIS003KX

GW-WINDOW-05

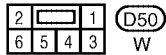
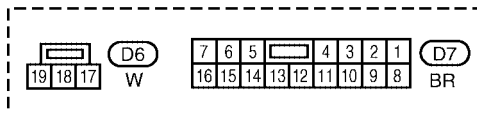
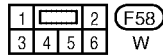
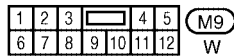
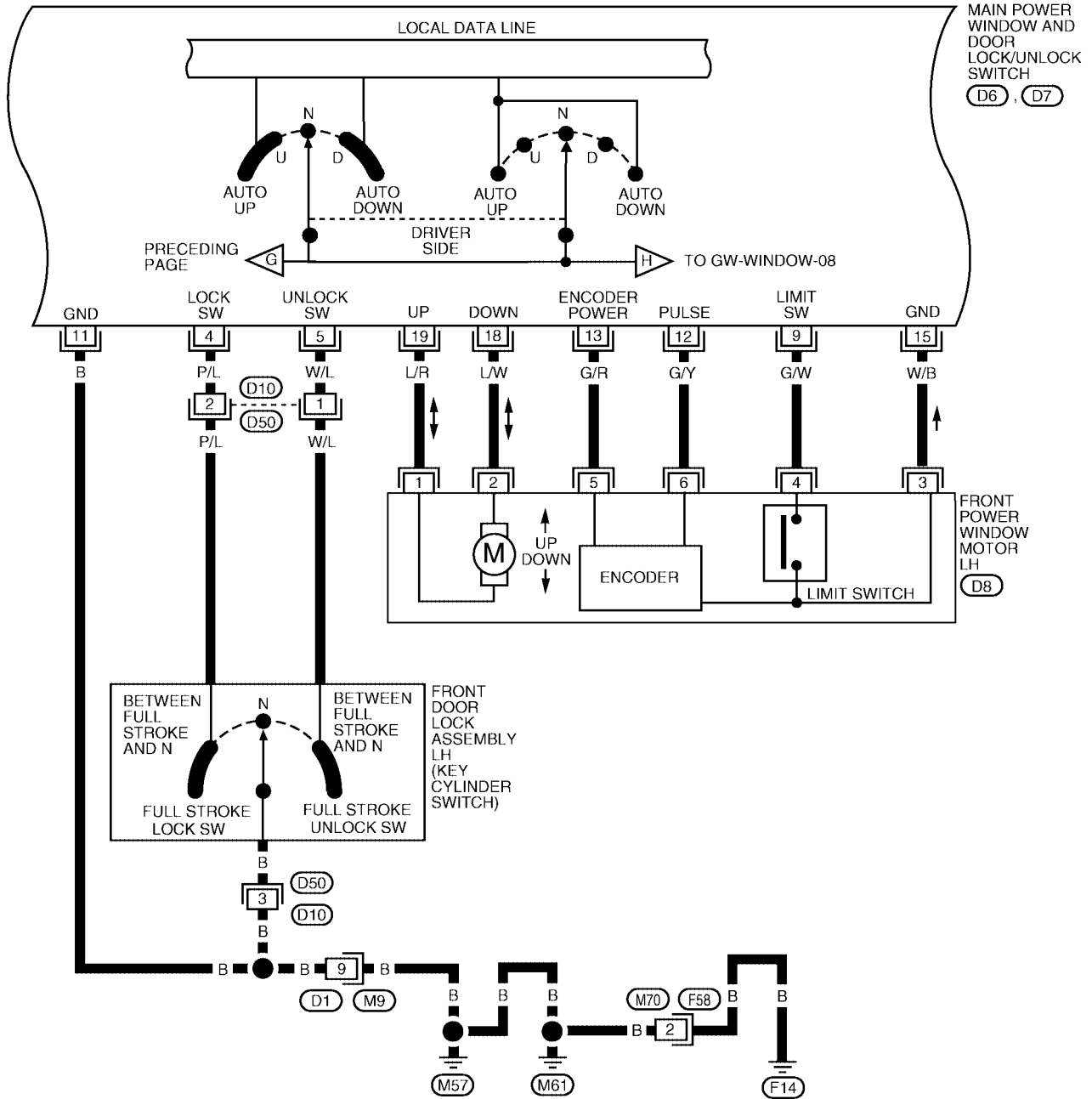


REFER TO THE FOLLOWING.  
 (M4) - FUSE BLOCK - JUNCTION BOX (J/B)  
 (M18), (M20) - ELECTRICAL UNITS



# POWER WINDOW SYSTEM

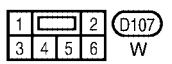
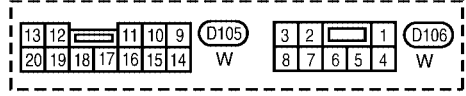
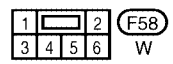
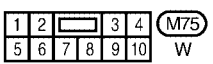
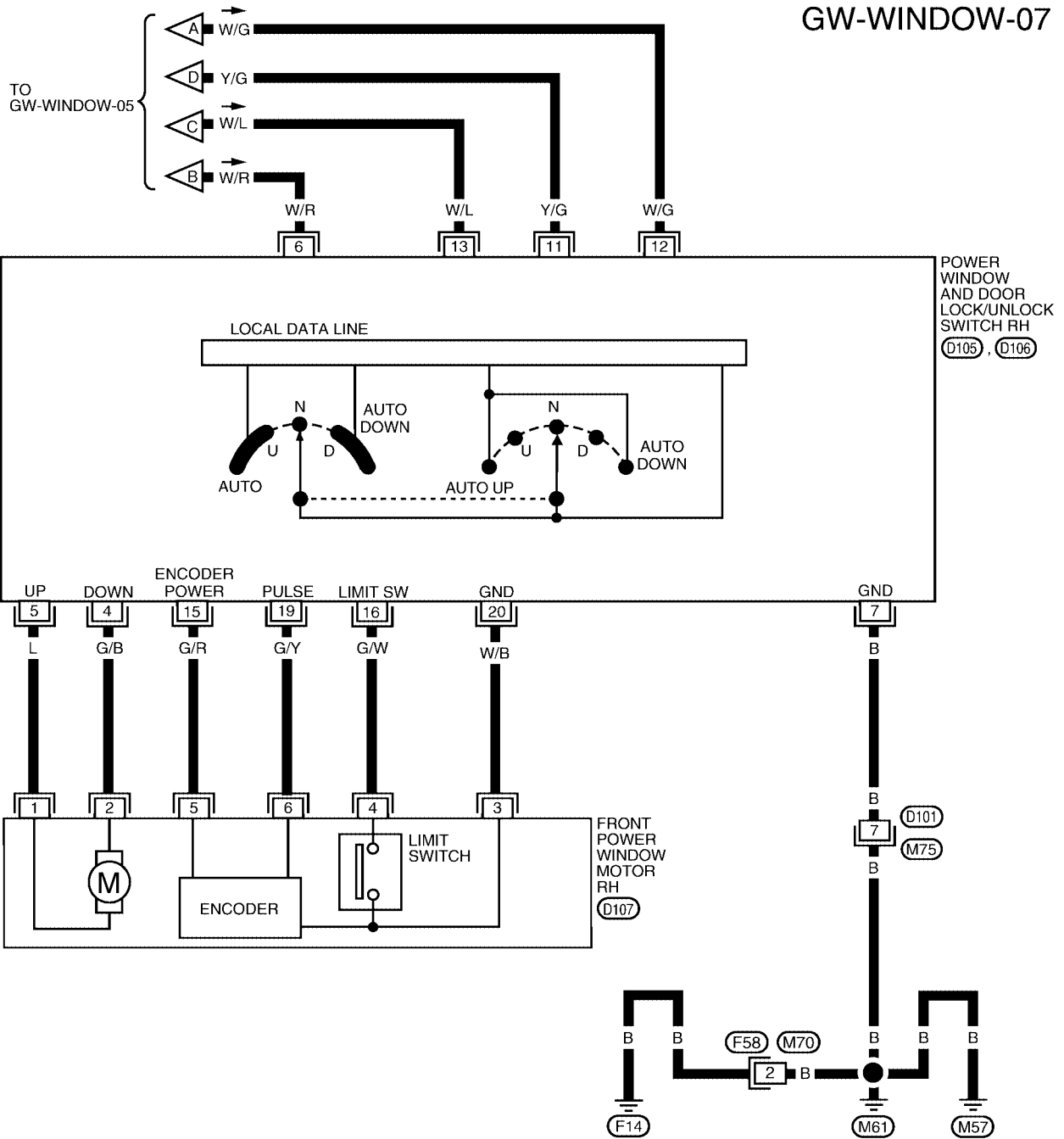
## GW-WINDOW-06



LIWA0407E

# POWER WINDOW SYSTEM

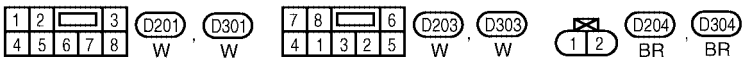
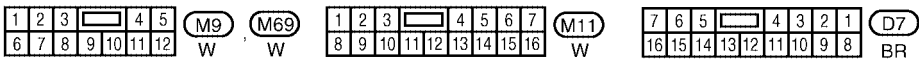
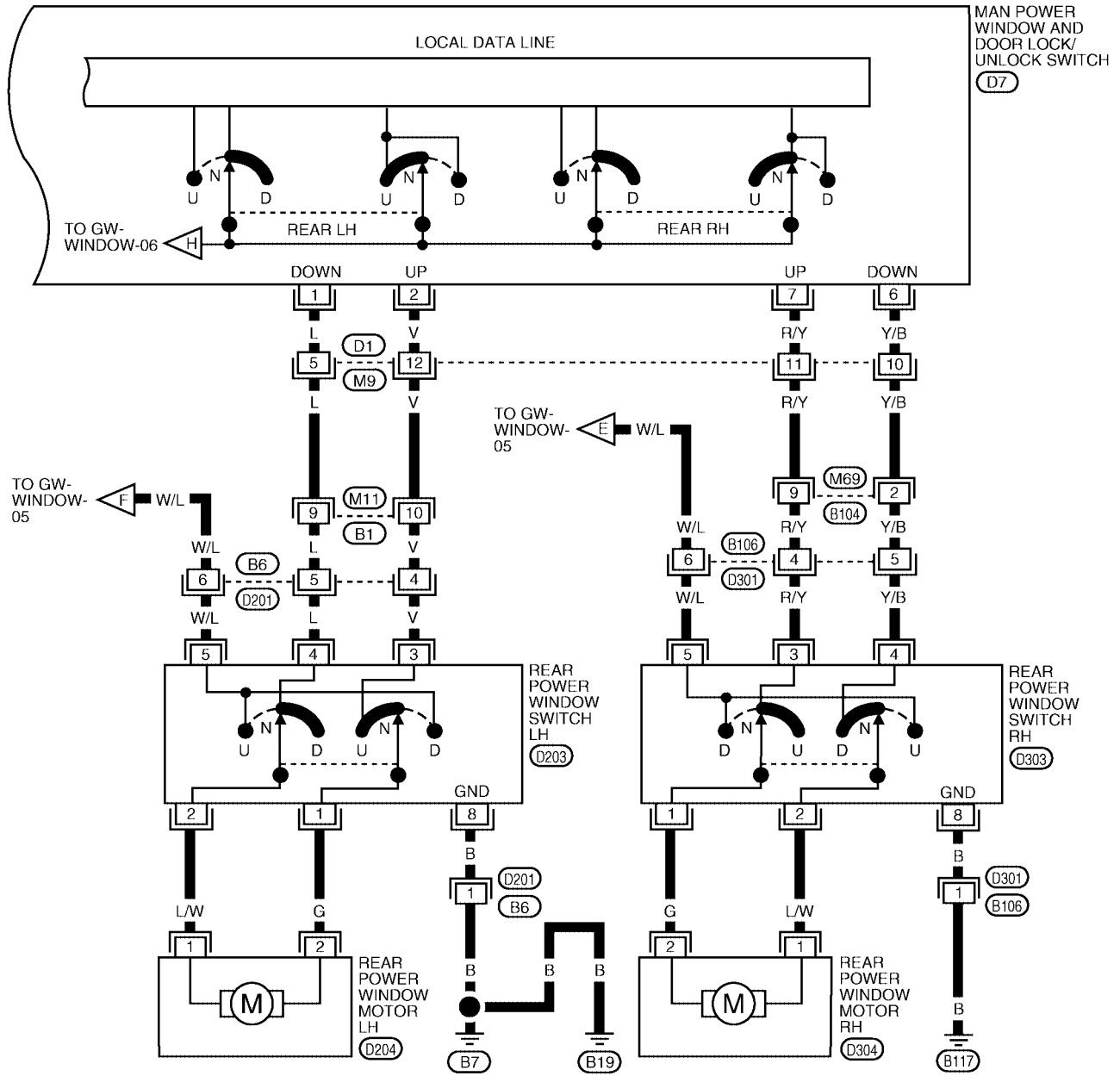
GW-WINDOW-07



WIWA0981E

# POWER WINDOW SYSTEM

## GW-WINDOW-08



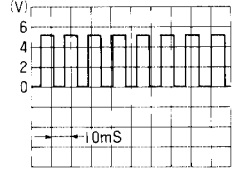
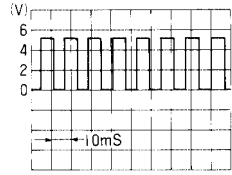
LIWA0409E

# POWER WINDOW SYSTEM

## Terminal and Reference Value for Main Power Window and Door Lock/Unlock Switch

EIS003KY

With left and right front power window anti-pinch system.

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
1	L	Rear power window LH DOWN signal	Main power window and door lock/unlock switch rear power window LH DOWN operation.	Battery voltage
2	V	Rear power window motor LH UP signal	Main power window and door lock/unlock switch rear power window LH UP operation.	Battery voltage
4	P/L	Front door lock assembly LH (key cylinder switch) lock signal	Key position (Neutral → Locked)	5 → 0
5	W/L	Front door lock assembly LH (key cylinder switch) unlock signal	Key position (Neutral → Unlocked)	5 → 0
6	Y/B	Rear power window RH DOWN signal	Main power window and door lock/unlock switch rear power window RH DOWN operation.	0 → Battery voltage
7	R/Y	Rear power window RH UP signal	Main power window and door lock/unlock switch rear power window RH UP operation.	0 → Battery voltage
8	W/G	Power window lock	Power window lock switch UNLOCK operation	Battery voltage
			Power window lock switch LOCK operation	Battery voltage
9	G/W	Limit switch signal	Driver door window is between fully-open and just before fully-closed position (ON).	0
			Driver door window is between just before fully-closed position and fully-closed position (OFF).	5
11	B	Ground	—	0
12	G/Y	Encoder pulse signal	Power window motor operation.	 <p style="text-align: right;">OCC3383D</p>
13	G/R	Encoder power supply	—	5 → Battery voltage
14	Y/G	Power window serial link	—	 <p style="text-align: right;">OCC3383D</p>
15	W/B	Limit switch encoder ground	—	0
16	W/R	Battery power supply	—	Battery voltage
17	W/L	RAP signal	—	Battery voltage

# POWER WINDOW SYSTEM

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
18	L/W	Front power window motor LH DOWN signal	DOWN operation.	0 → Battery voltage
19	L/R	Front power window motor LH UP signal	UP operation.	0 → Battery voltage

## CONSULT-II Function (BCM)

EIS003KZ

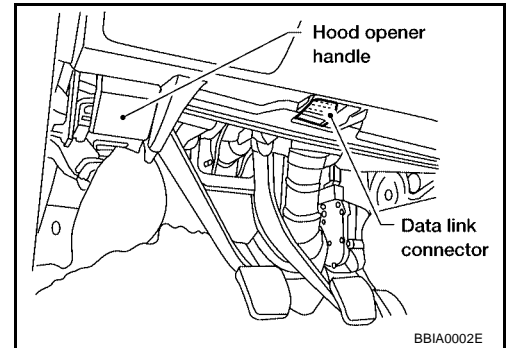
CONSULT-II can display each diagnostic item using the diagnostic test modes shown following.

BCM diagnostic test item	Diagnostic mode	Content
Inspection by part	WORK SUPPORT	Changes setting of each function.
	DATA MONITOR	Displays BCM input/output data in real time.
	ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.
	SELF-DIAG RESULTS	Displays BCM self-diagnosis results.
	CAN DIAG SUPPORT MNTR	The results of transmit/receive diagnosis of CAN communication can be read.
	ECU PART NUMBER	BCM part number can be read.
	CONFIGURATION	Performs BCM configuration read/write functions.

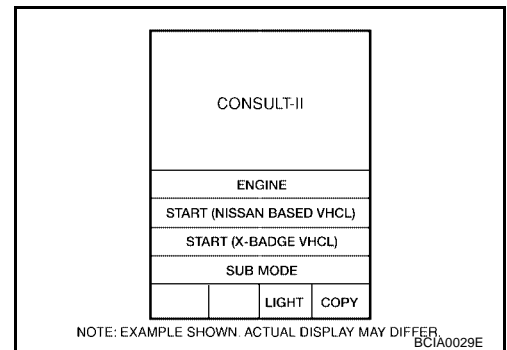
### CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carries out CAN communication.

1. With ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to data link connector and turn ignition switch ON.

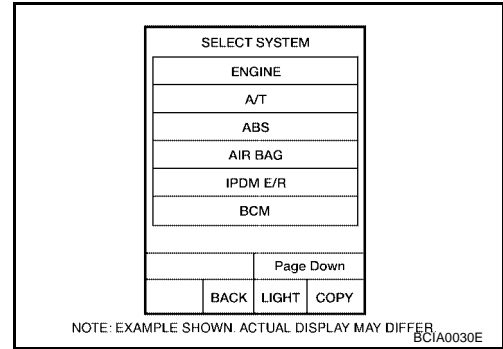


2. Touch "START (NISSAN BASED VHCL)".

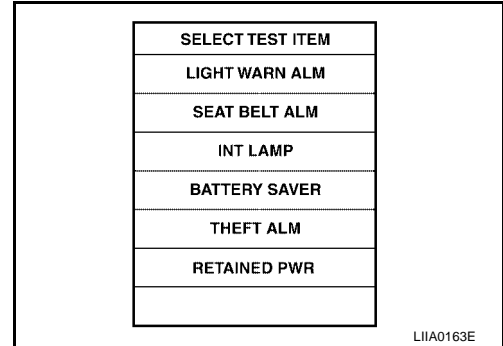


# POWER WINDOW SYSTEM

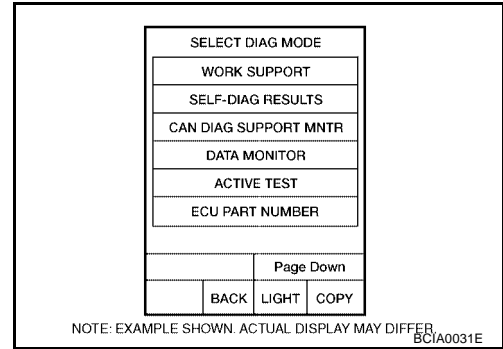
3. Touch "BCM".



4. Touch "RETAINED PWR".



5. Select diagnosis mode.  
"ACTIVE TEST" is available for the power window.



## ACTIVE TEST

Test Item	Description
RETAINED PWR	<p>This test is able to supply RAP signal (power) from BCM (body control module) to power window system and power sunroof system (if equipped). Those systems can be operated when turning on "RETAINED PWR" on CONSULT-II screen even if the ignition switch is turned OFF.</p> <p><b>NOTE:</b> During this test, CONSULT-II can be operated with ignition switch in "OFF" position. "RETAINED PWR" should be turned "ON" or "OFF" on CONSULT-II screen when ignition switch is ON. Then turn ignition switch OFF to check retained power operation. CONSULT-II might be stuck if "RETAINED PWR" is turned "ON" or "OFF" on CONSULT-II screen when ignition switch is OFF.</p>

# POWER WINDOW SYSTEM

## Trouble Diagnoses

EIS003L0

Symptom	Possible cause	Repair order
None of the power windows can be operated using any switch.	1. Power source Battery or RAP	1. Check the following – Check harness between BCM and main power window and door lock/unlock switch for open or short. – Check harness between BCM and power window and door lock/unlock switch RH and rear power window switch LH and RH for open or short.
Driver side power window cannot be operated but other windows can be operated.	1. Power source Battery or RAP 2. Front power window LH circuit 3. Front power window motor LH and regulator 4. Main power window and door lock/unlock switch	1. Check harness between BCM and main power window and door lock/unlock switch for open or short. 2. Check harness between main power window and door lock/unlock switch and front power window motor LH for open or short circuit. 3. Check front power window motor LH and regulator. 4. Check main power window and door lock/unlock switch.
One or more power windows except driver's side window cannot be operated.	1. Power source RAP 2. Power window switches 3. Power window motors and regulators 4. Main power window and door lock/unlock switch 5. Power window circuit	1. Check harness between BCM and power window sub-switches for open or short circuit. 2. Check front power window switch RH and rear power window switch LH and RH. 3. Check power window motors and regulators. 4. Check main power window and door lock/unlock switch. 5. Check harnesses between power window and door lock/unlock switch RH, rear power window switch LH and RH and power window motors for open/short circuit.
Power windows except driver's side window cannot be operated using main power window and door lock/unlock switch but can be operated by power window sub-switch.	1. Main power window and door lock/unlock switch	1. Check main power window and door lock/unlock switch.
Driver side power window automatic operation does not function properly.	1. Main power window and door lock/unlock switch 2. Encoder and limit switch	1. Check main power window and door lock/unlock switch. 2. Check encoder and limit switch. Refer to <a href="#">GW-31. "Encoder and Limit Switch Check (Driver side)"</a> .
Passenger side power window automatic operation does not function properly.	1. Power window and door lock/unlock switch RH 2. Encoder and limit switch	1. Check front power window switch RH. 2. Check encoder and limit switch. Refer to <a href="#">GW-33. "Encoder and Limit Switch Check (Passenger side with left and right front power window anti-pinch system)"</a> .

## Encoder and Limit Switch Check (Driver side)

EIS003L1

### 1. CHECK DOOR WINDOW SLIDE MECHANISM

Check the following.

- Obstacles in window, glass molding, etc.
- Worn or deformed glass molding.
- Door sash tilted too far inward or outward.
- Door window regulator.

OK or NG

OK >> GO TO 2.

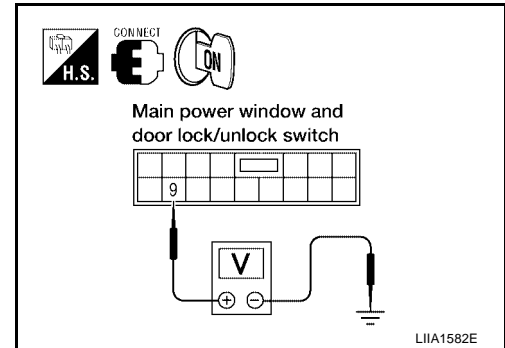
NG >> Remove obstacles or repair door window slide mechanism.

# POWER WINDOW SYSTEM

## 2. CHECK LIMIT SWITCH OPERATION

1. Turn ignition switch ON.
2. Check voltage between main power window and door lock/unlock switch connector D7 terminal 9 and ground.

Terminals		(-)	Condition	Voltage (Approx.)	
(+)	Connector				Terminal
	D7	9 (G/W)	Ground	Driver door window is between fully-open and just before fully-closed position (ON)	0
				Driver door window is between just before fully-closed position and fully-closed position (OFF)	5



OK or NG

OK >> GO TO 3.

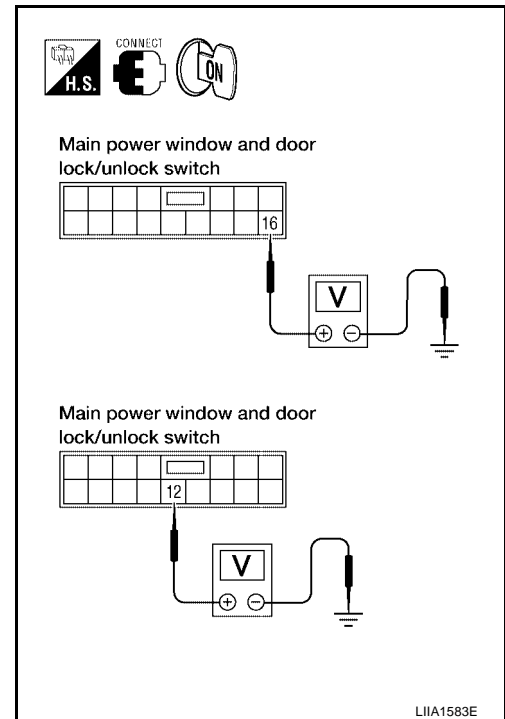
NG >> Check harness between main power window and door lock/unlock switch and front power window motor LH.

- OK: Replace front power window motor LH.
- NG: Replace or repair harness.

## 3. CHECK ENCODER

Measure voltage between main power window and door lock/unlock switch connector D7 terminal 16 (12) and ground with oscilloscope when power window is in automatic closing operation.

Terminals		(-)	Condition	Voltage	
(+)	Connector				Terminal
	D7	16 (G/Y), 12 (G/Y)	Ground	Front power window motor LH operation.	
					OCC3383D



( ): with left and right front power window anti-pinch system

OK or NG

OK >> Replace main power window and door lock/unlock switch.

NG >> Replace front power window motor LH.



# POWER WINDOW SYSTEM

## Encoder and Limit Switch Check (Passenger side with left and right front power window anti-pinch system)

EIS003L2

### 1. CHECK DOOR WINDOW SLIDE MECHANISM

Check the following.

- Obstacles in window, glass molding, etc.
- Worn or deformed glass molding.
- Door sash tilted too far inward or outward.
- Door window regulator.

OK or NG

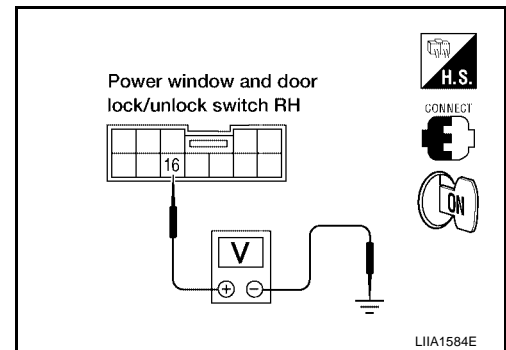
OK >> GO TO 2.

NG >> Remove obstacles or repair door window slide mechanism.

### 2. CHECK LIMIT SWITCH OPERATION

1. Turn ignition switch ON.
2. Check voltage between power window and door lock/unlock switch RH connector D105 terminal 16 and ground.

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
Connector	Terminal		
D105	16 (G/W)	Passenger door window is between fully-open and just before fully-closed position (ON)	0
		Passenger door window is between just before fully-closed position and fully-closed position (OFF)	5



OK or NG

OK >> GO TO 3.

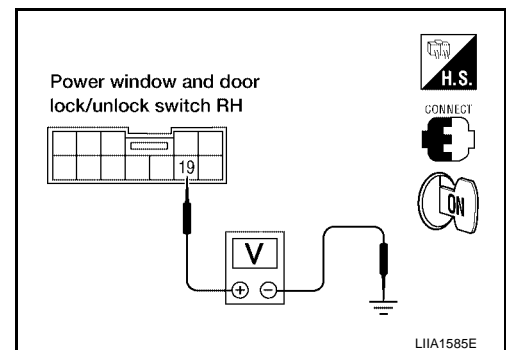
NG >> Check harness between main power window and door lock/unlock switch and front power window motor RH.

- OK: Replace front power window motor RH.
- NG: Replace or repair harness.

### 3. CHECK ENCODER

Measure voltage between power window and door lock/unlock switch RH terminal 19 and ground with oscilloscope when power window is in automatic closing operation.

Terminals		Condition	Voltage
(+)	(-)		
Connector	Terminal		
D105	19 (G/Y)	Front power window motor RH operation.	



OK or NG

OK >> Replace power window and door lock/unlock switch RH.

NG >> Replace front power window motor RH.

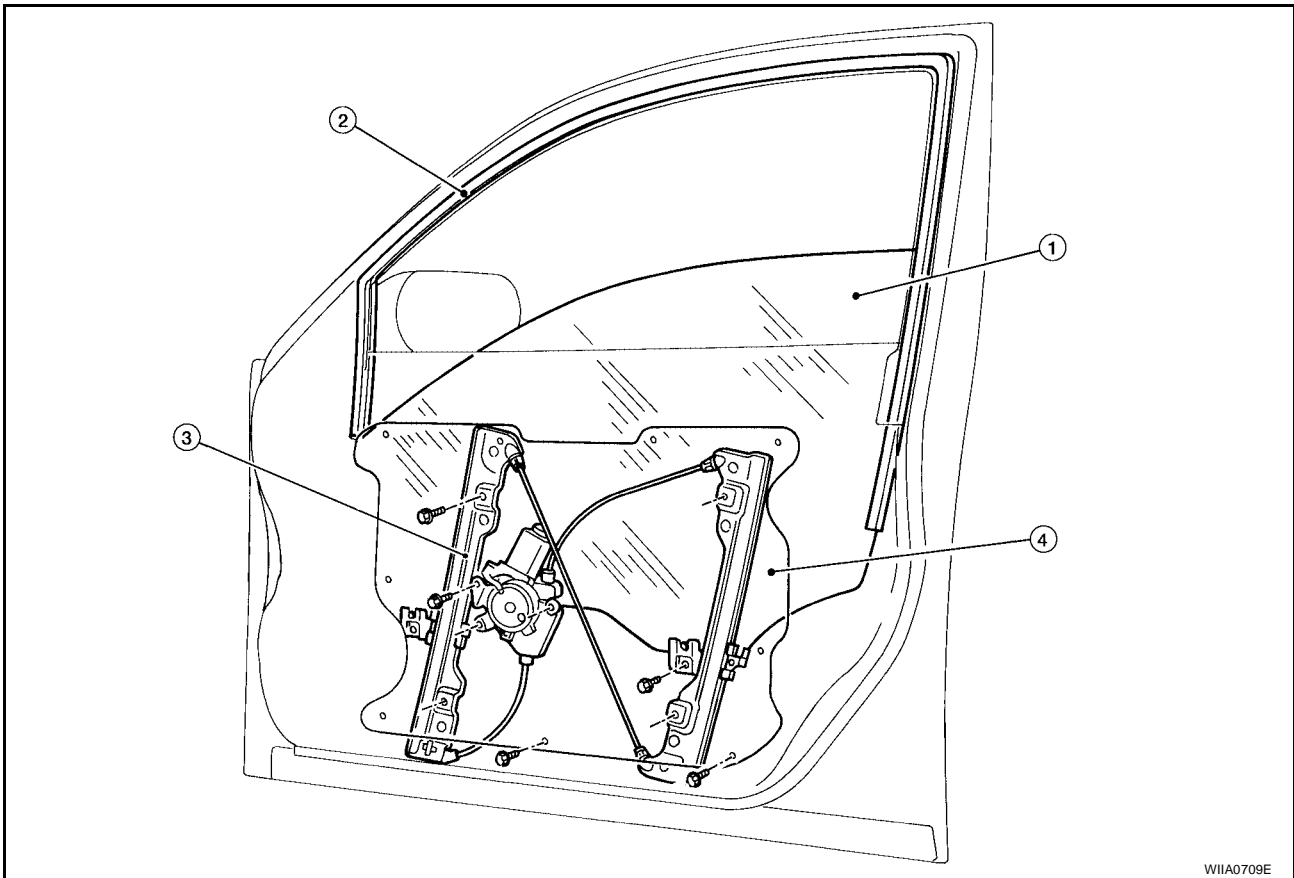
# FRONT DOOR GLASS AND REGULATOR

## FRONT DOOR GLASS AND REGULATOR

PF80300

### Removal and Installation

EIS003L3



1 Door glass

2 Door glass run

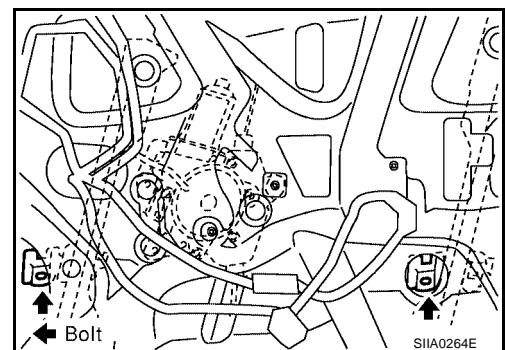
3 Regulator assembly

4 Module assembly

## FRONT DOOR GLASS

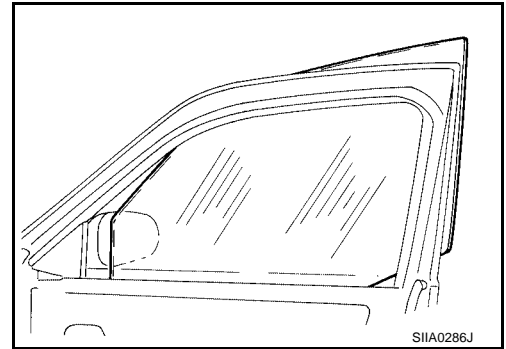
### Removal

1. Remove the door speaker. Refer to [AV-57, "Removal and Installation for Door Speaker"](#).
2. Temporarily reconnect the power window switch to the door harness.
3. Operate the power window switch to raise/lower the door glass until the door glass bolts can be seen.
4. Remove the door glass bolts.



## FRONT DOOR GLASS AND REGULATOR

5. While holding the door glass, raise it at the rear end to pull the door glass out of the sash toward the outside of the door.



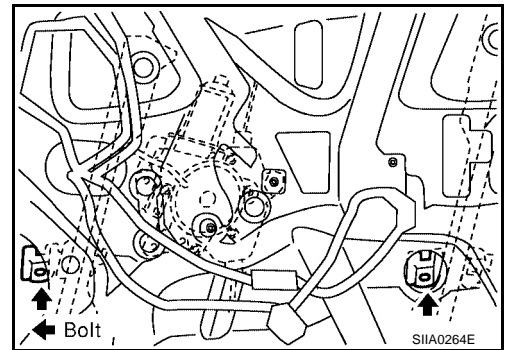
### Installation

Installation is in the reverse order of removal. Refer to [GW-36, "Fitting Inspection and Setting After Installation"](#)

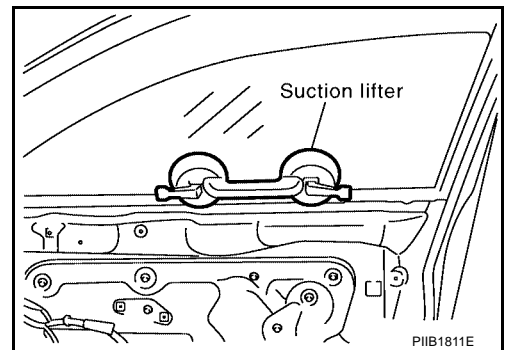
## FRONT DOOR GLASS REGULATOR

### Removal

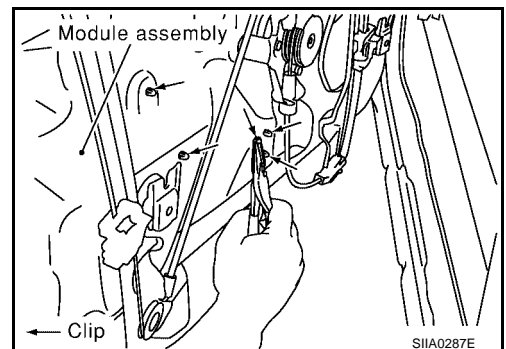
1. Remove the door speaker. Refer to [AV-57, "Removal and Installation for Door Speaker"](#).
2. Operate the power window main switch to raise/lower the door glass until the door glass bolts can be seen.
3. Remove the door glass bolts.



4. Raise the door glass up into the door frame/channel and hold in place with a suitable tool.



5. Remove the module assembly bolts and the module assembly.
6. Disconnect the harness connector for the module assembly, and disconnect the harness clip from the back.

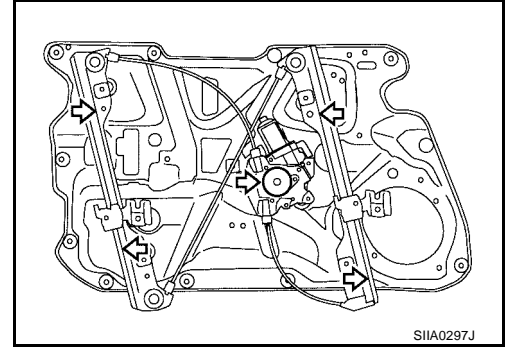


# FRONT DOOR GLASS AND REGULATOR

## Inspection After Removal

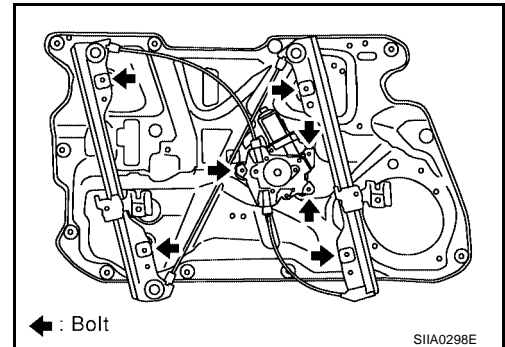
Check the regulator assembly for the following items. If a malfunction is detected, replace or grease it.

- Excessive cable wear.
- Regulator channel deformation.
- Apply grease for each sliding part. Apply grease at the application points indicated by the arrows as shown.



## Disassembly

Remove the regulator motor and guide rail from the module assembly.



## Installation

Installation is in the reverse order of removal. Refer to [GW-36, "Fitting Inspection and Setting After Installation"](#).

## FITTING INSPECTION AND SETTING AFTER INSTALLATION

### Fitting

- Check that the door glass is securely fit into the glass run groove.
- Lower the door glass slightly [approximately 10 to 20 mm (0.39 to 0.79 in)] and check that the clearance to the sash is parallel. If the clearance between the door glass and sash is not parallel, loosen the regulator bolts, guide rail bolts, and door glass and guide rail bolts to correct the glass position.

### Setting of Limit Switch

If any of the following work has been done, set the limit switch (integrated in the motor).

- Removal and installation of the regulator.
- Removal and installation of the motor from the regulator.
- Removal and installation of the door glass.
- Removal and installation of the glass run.

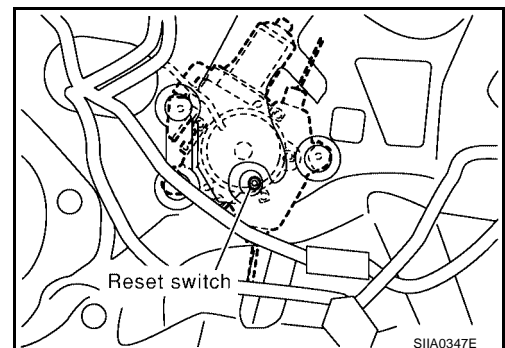
### Resetting

After installing each component to the vehicle, perform the following procedure to reset the limit switch.

1. Raise the door glass to the top position.
2. While pressing and holding the reset switch, lower the door glass to the bottom position.
3. Release the reset switch. Verify that the reset switch returns to the original position, and then raise the door glass to the top position.

### CAUTION:

**Do not operate the door glass automatically to raise the glass to the top position.**



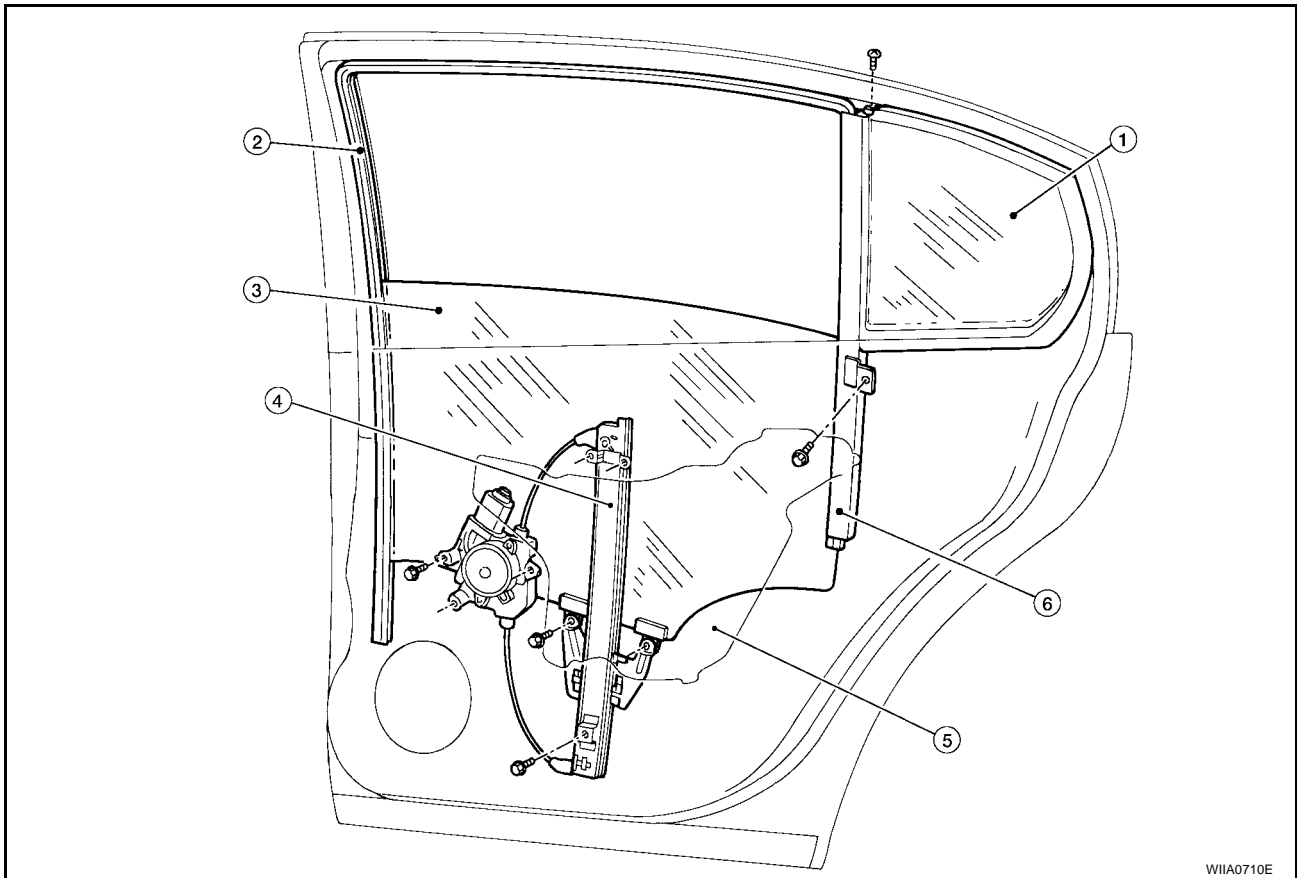
# REAR DOOR GLASS AND REGULATOR

PFP:82300

## REAR DOOR GLASS AND REGULATOR

### Removal and Installation

EIS003L4

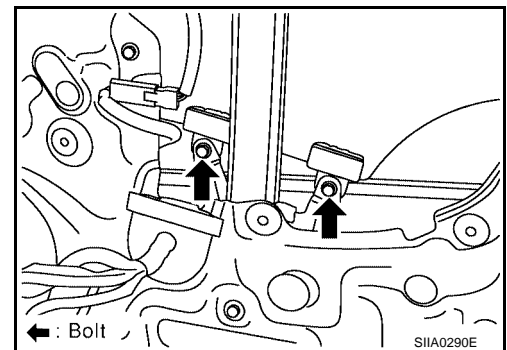


- |                      |                  |                  |
|----------------------|------------------|------------------|
| 1 Partition glass    | 2 Door glass run | 3 Door glass     |
| 4 Regulator assembly | 5 Frame assembly | 6 Partition sash |

### REAR DOOR GLASS

#### Removal

1. Remove the rear door finisher. Refer to [EI-31, "Rear Door"](#).
2. Remove the plastic vapor barrier, being careful not to tear/damage it.
3. Temporarily reconnect the power window switch to the door harness.
4. Operate the power window switch to raise/lower the door glass until the door glass bolts can be seen.
5. Remove the door glass bolts.

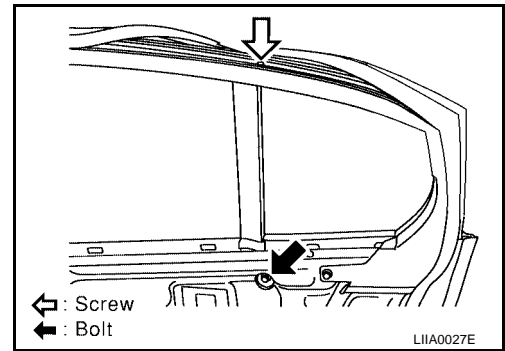


6. Remove the door glass.

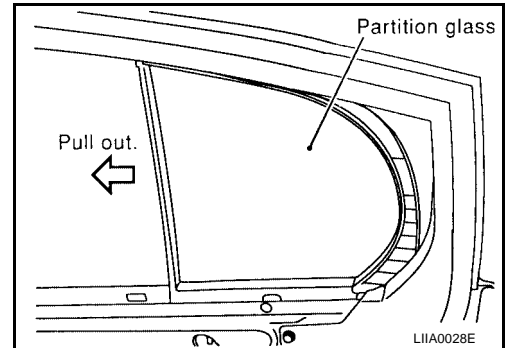
A  
B  
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H  
GW  
J  
K  
L  
M

## REAR DOOR GLASS AND REGULATOR

7. Remove the partition sash from the glass run.
  - Remove the partition sash bolt (lower) and screw (upper) to remove the sash.



8. Remove the partition glass from the inside of the panel.



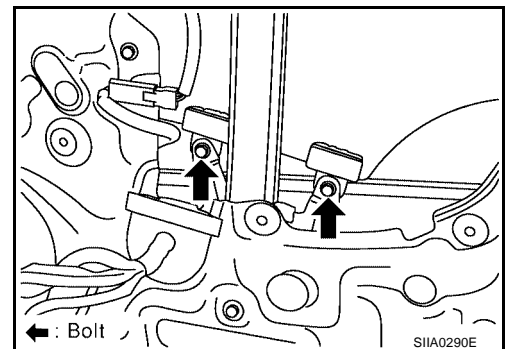
### INSTALLATION

Installation is in the reverse order of removal. Refer to [GW-39, "Fitting Inspection After Installation"](#).

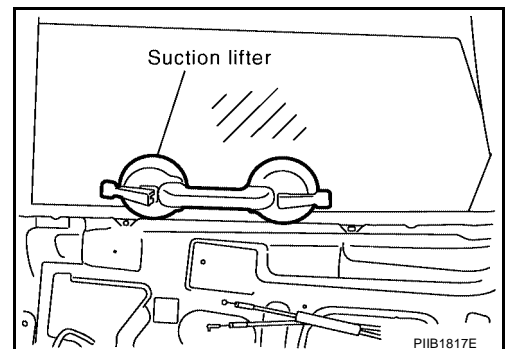
### REAR DOOR GLASS REGULATOR

#### Removal

1. Remove the rear door finisher. Refer to [EI-31, "Rear Door"](#).
2. Remove the plastic vapor barrier, being careful not to tear/damage it.
3. Temporarily reconnect the power window switch to the door harness.
4. Operate the power window switch to raise/lower the door glass until the bolts can be seen.
5. Remove the door glass bolts.

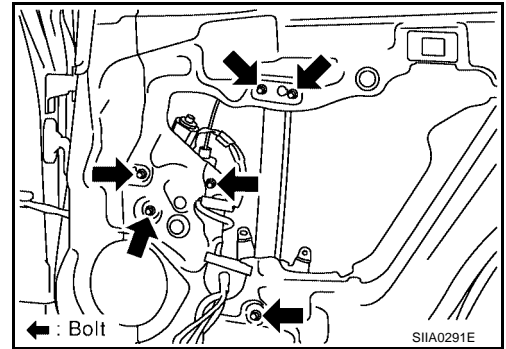


6. Raise the door glass up into the door frame/channel and hold in place with a suitable tool.



## REAR DOOR GLASS AND REGULATOR

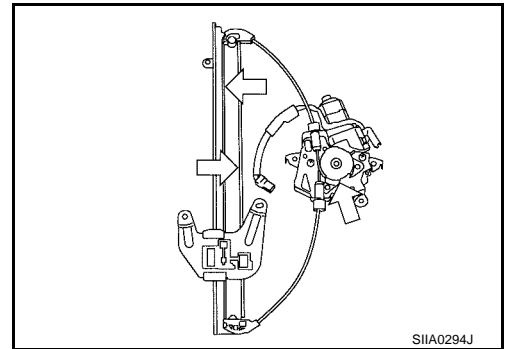
7. Remove the bolts and the regulator and guide channel from the panel.
8. Disconnect the connector for the regulator assembly.



### INSPECTION AFTER REMOVAL

Check the regulator assembly for the following items. If a malfunction is detected, replace it. The arrows in the figure show the application points of the body grease.

- Wire wear
- Regulator deformation
- Grease condition for each sliding part



### INSTALLATION

Installation is in the reverse order of removal Refer to [GW-39. "Fitting Inspection After Installation"](#) .

### FITTING INSPECTION AFTER INSTALLATION

- Check that the door glass is securely fit into the glass run groove.
- Lower the door glass slightly [approximately 10 to 20 mm (0.39 to 0.79 in)], and check that the clearance to the sash is parallel. If the clearance between the door glass and sash is not parallel, loosen the regulator bolts, guide rail bolts, and door glass and carrier plate bolts to correct the door glass position.

A  
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GW

# INSIDE MIRROR

PF9:96321

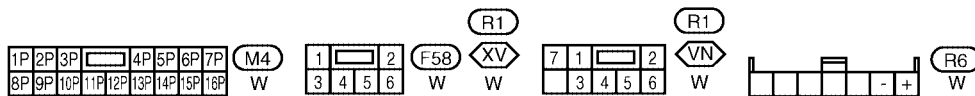
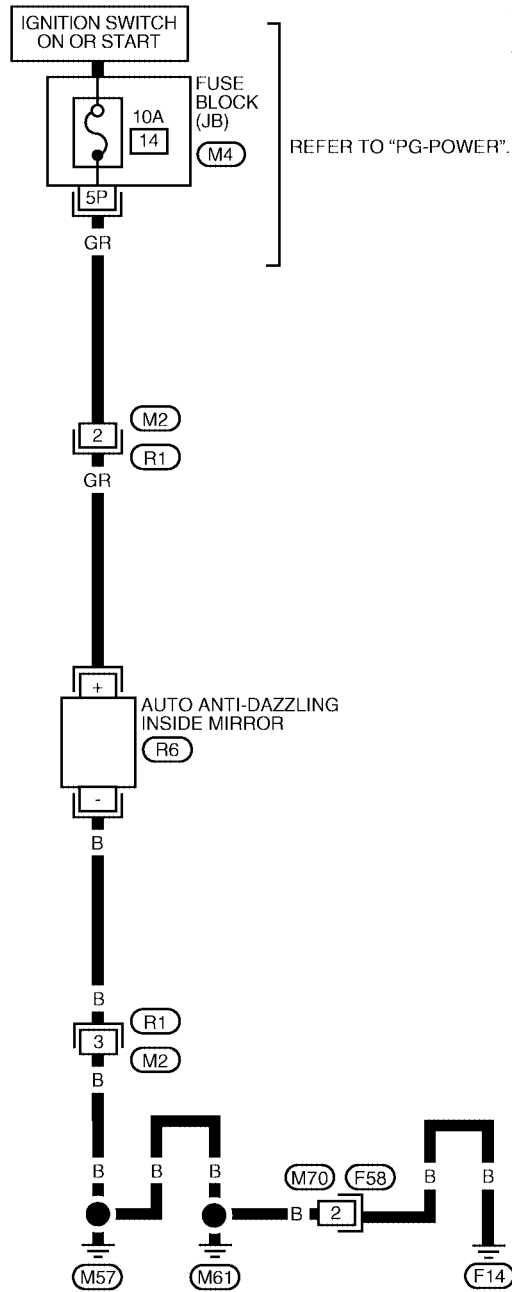
## INSIDE MIRROR

### Wiring Diagram — I/MIRR —

EIS003L5

#### GW-I/MIRR-01

- XV : WITHOUT VANITY LAMPS
- VN : WITH VANITY LAMPS



WIWA0429E

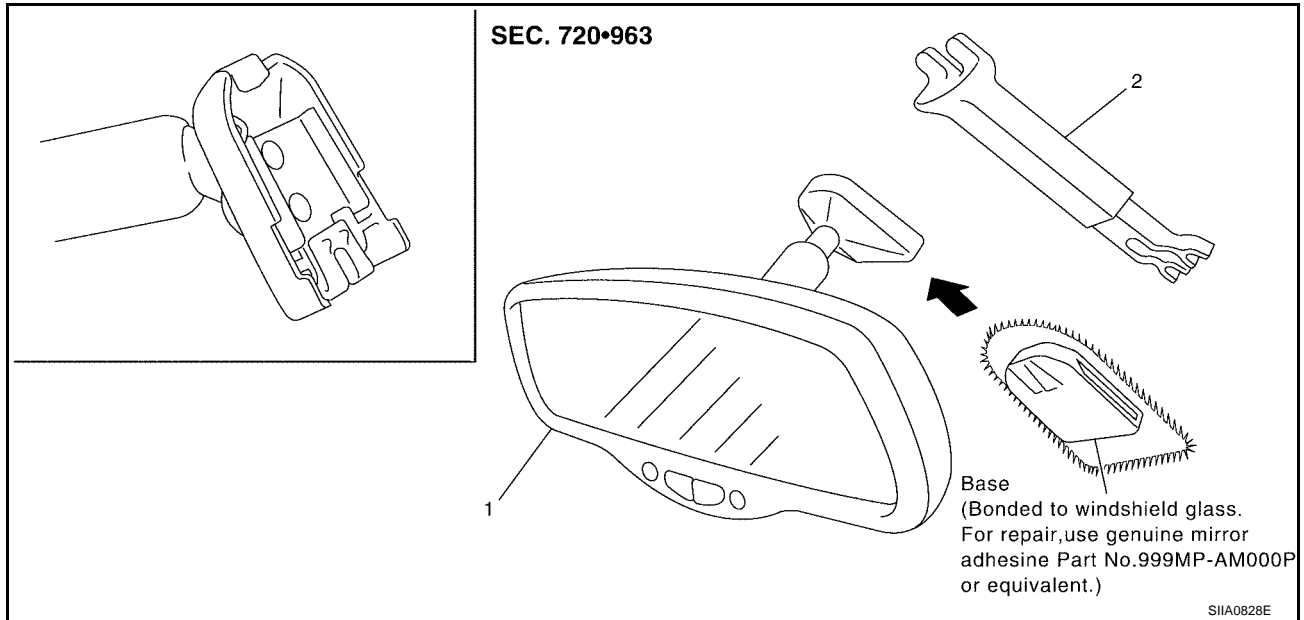


# INSIDE MIRROR

EIS003L6

## Removal and Installation INSIDE MIRROR

1. Remove inside mirror finisher (if equipped).
2. Slide the mirror upward to remove.
3. Disconnect the connector (if equipped).



1. Inside mirror

2. Inside mirror finisher (if equipped)

Installation is in the reverse order of removal.

A  
B  
C  
D  
E  
F  
G  
H

GW

J  
K  
L  
M

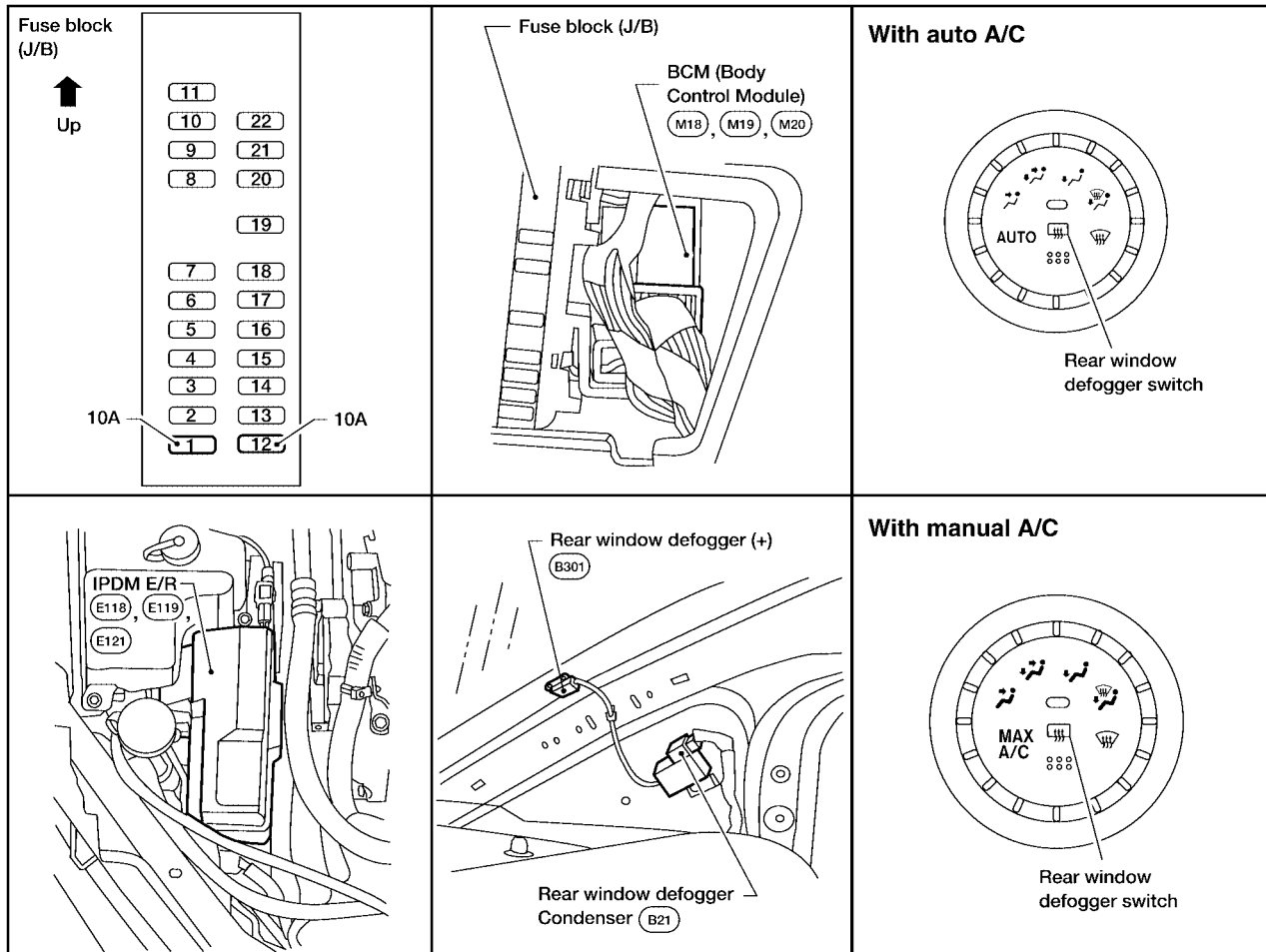
# REAR WINDOW DEFOGGER

PF2:25350

## REAR WINDOW DEFOGGER

### Component Parts and Harness Connector Location

EIS003L7



LIA2131E

## System Description

EIS003L8

The rear window defogger system is controlled by BCM and rear window defogger relay is controlled by IPDM E/R (intelligent power distribution module engine room). The rear window defogger operates for approximately 15 minutes.

Power is supplied at all times

- to rear window defogger relay terminal 3
- through 20A fuse (No. 32, located in the IPDM E/R),
- to rear window defogger relay terminal 6
- through 20A fuse (No. 37, located in the IPDM E/R), and
- to BCM terminal 70
- through 50A fusible link (letter f , located in the fuse and fusible link box).

With the ignition switch in the ON or START position, power is supplied

- to BCM terminal 38
- through 10A fuse [No. 1, located in the fuse block (J/B)].

With the ignition switch in the ON or START position, power is supplied

- through 10A fuse [No.12, located in the fuse block (J/B)]
- to rear window defogger relay terminal 1, and

Ground is supplied

- to terminal 67 of the BCM
- through body grounds F14, M57 and M61, and

# REAR WINDOW DEFOGGER

- to rear window defogger terminal –
- through body ground B202.

BCM is connected to IPDM E/R as DATA LINE (CAN-H and CAN-L).

When the rear window defogger switch is turned ON, ground is supplied

- to BCM terminal 9
- through terminal 22 of the front air control.

BCM outputs rear window defogger switch signal to IPDM E/R via DATA LINE (CAN H line and CAN L line).

Ground is then supplied to terminal 2 of the rear window defogger relay through IPDM E/R terminal 52.

With power and ground supplied, the rear window defogger relay is energized.

Power is supplied

- through terminals 5 and 7 of the rear window defogger relay
- to the rear window defogger, and
- to terminal 23 of the front air control.

The rear window defogger has an independent ground.

With power and ground supplied, the rear window defogger filaments heat and defog the rear window.

When the system is activated, the rear window defogger indicator illuminates in the rear window defogger switch.

## CAN Communication System Description

EIS003L9

Refer to [LAN-21, "CAN COMMUNICATION"](#) .

A  
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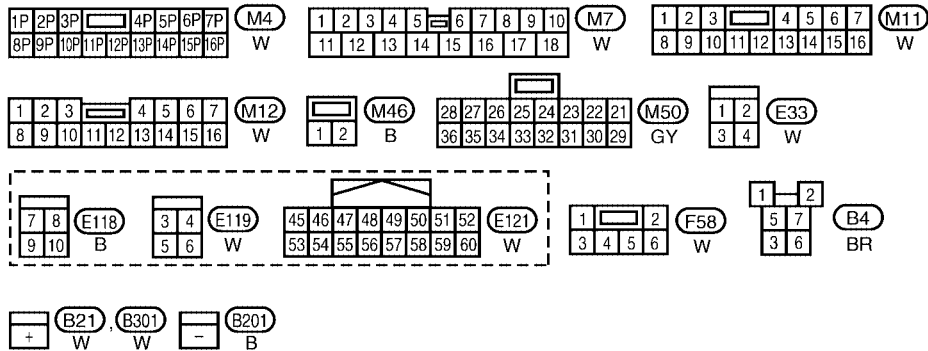
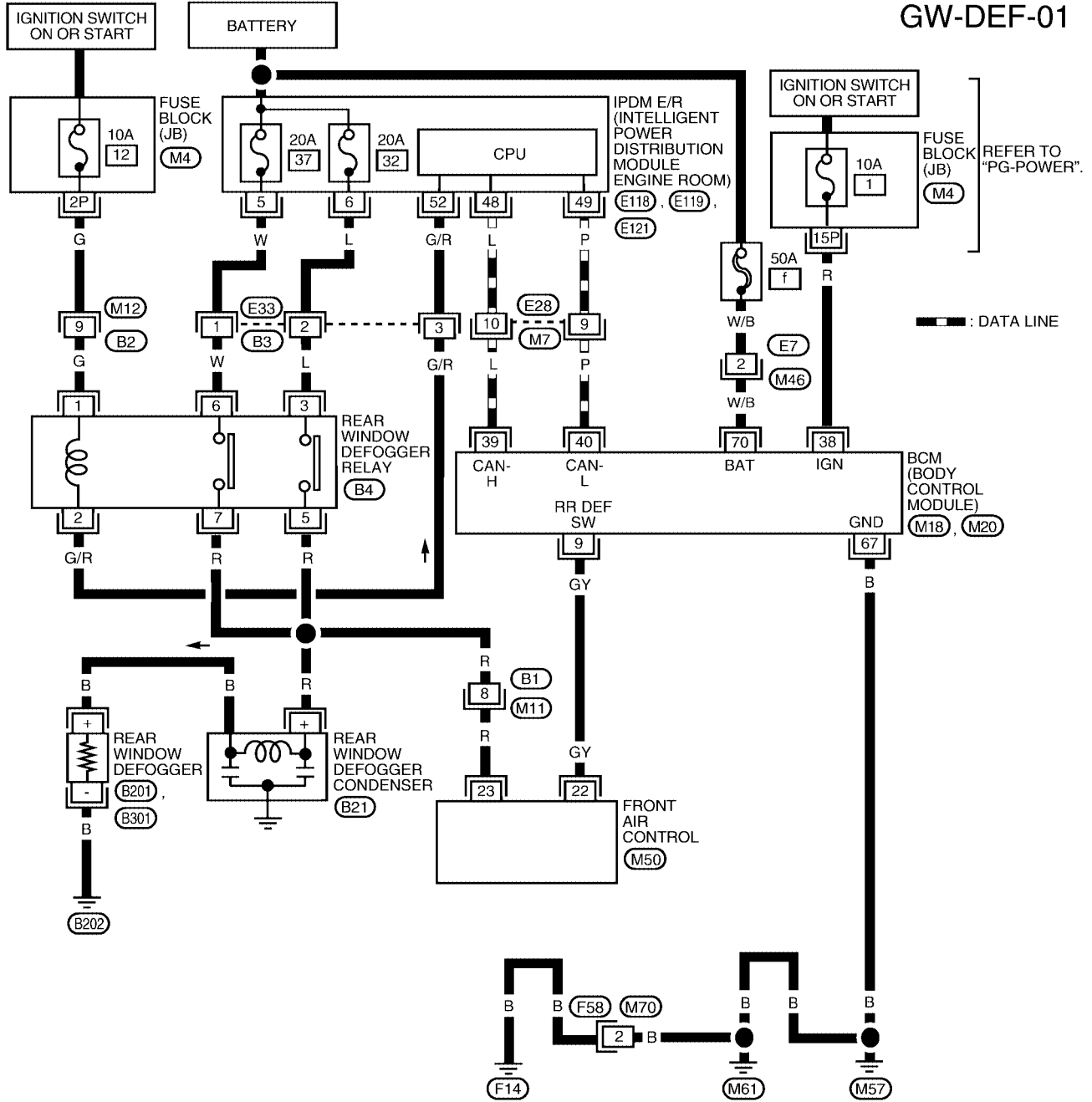
GW

# REAR WINDOW DEFOGGER

EIS003LA

## Wiring Diagram — DEF —

GW-DEF-01



REFER TO THE FOLLOWING.  
 (M18), (M20)  
 ELECTRICAL UNITS

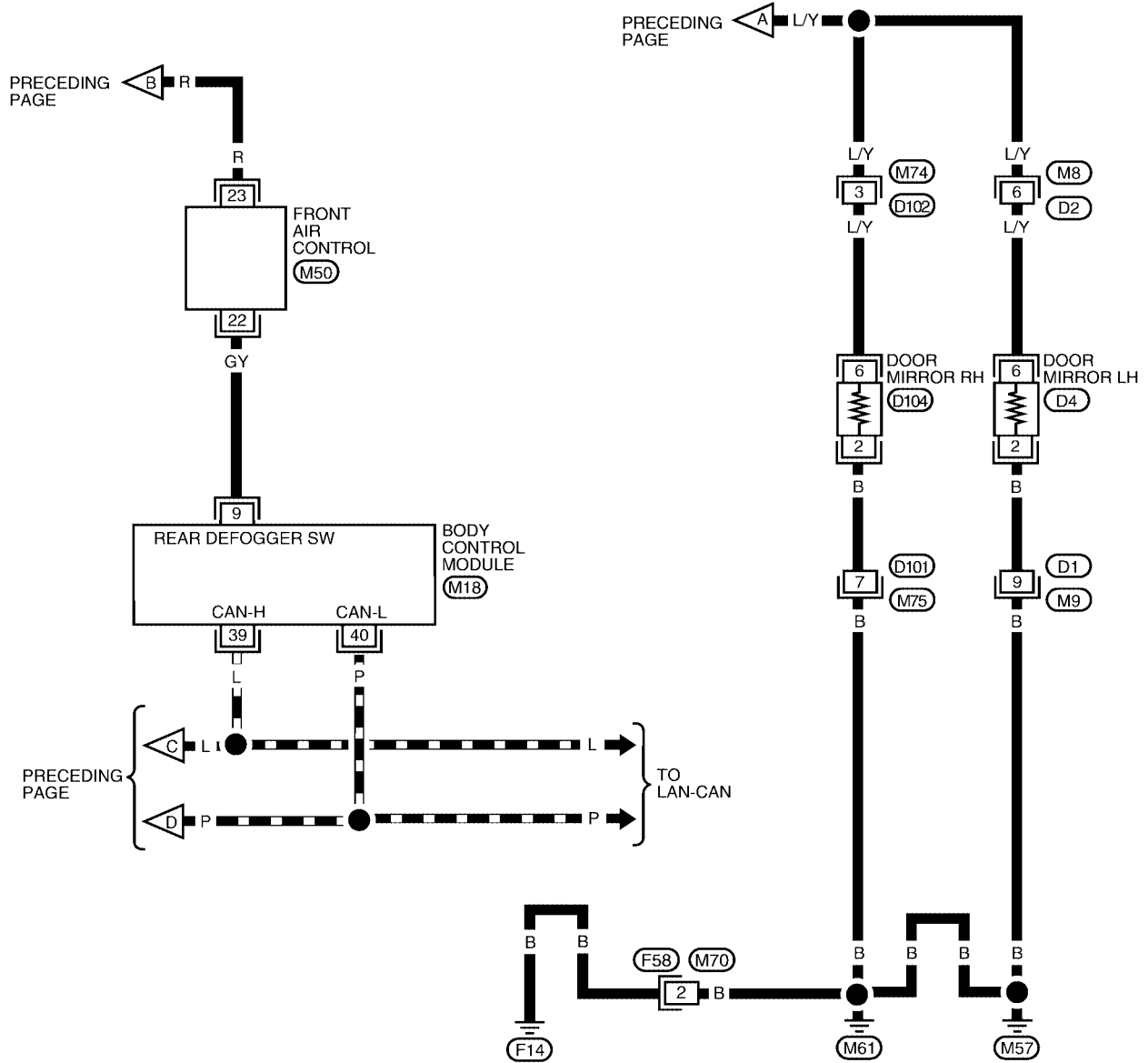
WIWA1939E



# REAR WINDOW DEFOGGER

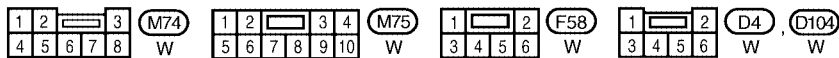
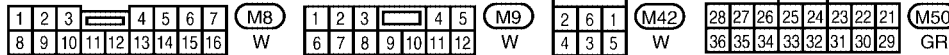
GW-H/MIRR-02

— : DATA LINE



REFER TO THE FOLLOWING.

(M18) - ELECTRICAL UNITS



WIWA0983E

# REAR WINDOW DEFOGGER

## Terminal and Reference Value for BCM

EIS003LC

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
9	GY	Rear window defogger switch signal	Rear window defogger switch is ON.	0
			Rear window defogger switch is OFF.	5
38	R	Ignition switch (ON or START)	Ignition switch (ON or START position)	Battery voltage
39	L	CAN-H	—	—
40	P	CAN-L	—	—
67	B	Ground	—	0
70	W/B	Battery power supply	—	Battery voltage

## Terminal and Reference Value for IPDM E/R

EIS003LD

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
5	W	Rear window defogger power supply	—	Battery voltage
6	L	Rear window defogger power supply	—	Battery voltage
48	L	CAN-H	—	—
49	P	CAN-L	—	—
52	G/R	Rear window defogger relay control signal	Rear window defogger switch is ON.	0
			Rear window defogger switch is OFF.	Battery voltage

## Work Flow

EIS003LE

1. Check the symptom and customer's requests.
2. Understand the outline of system. Refer to [GW-42, "System Description"](#).
3. Perform the preliminary check. Refer to [GW-47, "Preliminary Check"](#).
4. According to the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to [GW-50, "Trouble Diagnosis"](#).
5. Does rear window defogger operate normally? OK: GO TO 6, NG: GO TO 4
6. Inspection End.

## Preliminary Check

EIS003LF

### FUSE CHECK

#### 1. FUSE INSPECTION

- Check if any of the following fuses for BCM and IPDM E/R are blown.

COMPONENT PARTS	TERMINAL NO. (SIGNAL)	AMPERE	FUSE NO.
BCM	38 (Ignition power supply)	10A	1
	70 (Battery power supply)	50A	f
IPDM E/R	5 (Battery power supply)	20A	37
	6 (Battery power supply)	20A	32

#### NOTE:

Refer to [GW-42, "Component Parts and Harness Connector Location"](#).

#### OK or NG

OK >> Inspection End.

NG >> If fuse is blown, be sure to eliminate cause of problem before installing new fuse, refer to [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#).

# REAR WINDOW DEFOGGER

EIS003LG

## CONSULT-II Function (BCM)

CONSULT-II can display each diagnostic item using the diagnostic test modes shown following.

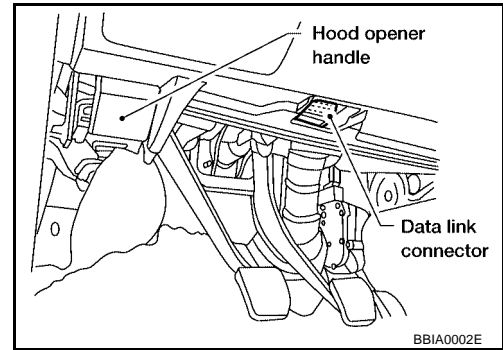
BCM diagnostic test item	Diagnostic mode	Content
Inspection by part	WORK SUPPORT	Changes setting of each function.
	DATA MONITOR	Displays BCM input/output data in real time.
	ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.
	SELF-DIAG RESULTS	Displays BCM self-diagnosis results.
	CAN DIAG SUPPORT MNTR	The results of transmit/receive diagnosis of CAN communication can be read.
	ECU PART NUMBER	BCM part number can be read.
	CONFIGURATION	Performs BCM configuration read/write functions.

## CONSULT-II BASIC OPERATION PROCEDURE

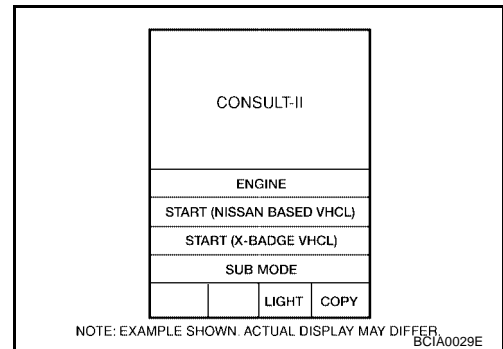
### CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carries out CAN communication.

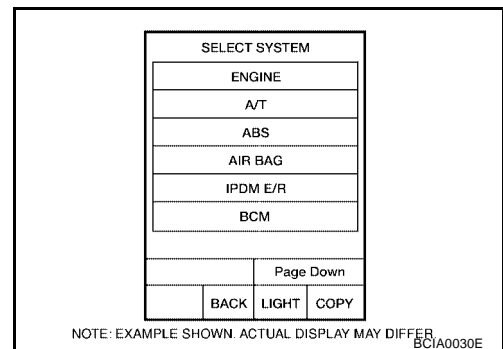
1. With ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector on vehicle, and turn ignition switch ON.



2. Touch "START (NISSAN BASED VHCL)".



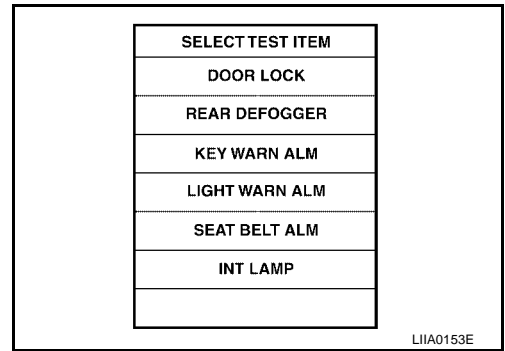
3. Touch "BCM" on "SELECT SYSTEM" screen.





# REAR WINDOW DEFOGGER

4. Select item to be diagnosed on "SELECT TEST ITEM" screen.



## DATA MONITOR

### Operation Procedure

1. Touch "REAR DEFOGGER" on the "SELECT TEST ITEM" screen.
2. Touch "DATA MONITOR" on the "SELECT DIAG MODE" screen.
3. Touch either "ALL SIGNALS" or "SELECTION FROM MENU" on the "DATA MONITOR" screen.

ALL SIGNALS	Monitors all items.
SELECTION FROM MENU	Selects and monitors only the specified item.

4. Touch "START".
5. If "SELECTION FROM MENU" is selected, touch the item desired to monitor. If "ALL SIGNALS" is selected, all items are monitored.
6. During monitoring, touching "COPY" will print the monitored item status.

### Display Item List

Monitor item "OPERATION"		Content
REAR DEF SW	"ON/OFF"	Displays "ON/OFF" status determined with the rear window defogger switch position.
IGN ON SW	"ON/OFF"	Displays "ON/OFF" status determined with the ignition switch position.

## ACTIVE TEST

### Operation Procedure

1. Touch "REAR DEFOGGER" on the "SELECT TEST ITEM" screen.
2. Touch "ACTIVE TEST" on the "SELECT DIAG MODE" screen.
3. Touch the item to be tested, and check the operation.
4. During the operation check, touching "OFF" deactivates the operation.

### Display Item List

Test item	Content
REAR DEFOGGER	Touching "ON" sends a drive signal to activate the rear window defogger.

# REAR WINDOW DEFOGGER

EIS003LH

## Trouble Diagnosis

Rear window defogger does not activate.

### 1. SELF-DIAGNOSTIC RESULT CHECK

Ⓟ With CONSULT-II

- Select "BCM" on "SELECT SYSTEM" screen.
- Select "BCM" on "SELECT TEST ITEM" screen, and select "SELF-DIAG RESULTS".
- Check display content in self-diagnostic results.

CONSULT-II display code	Diagnosis item
U1000	INITIAL DIAG
	TRANSMIT DIAG
	ECM
	IPDM E/R
	METER/M&A

#### Contents displayed

No malfunction>> GO TO 2.

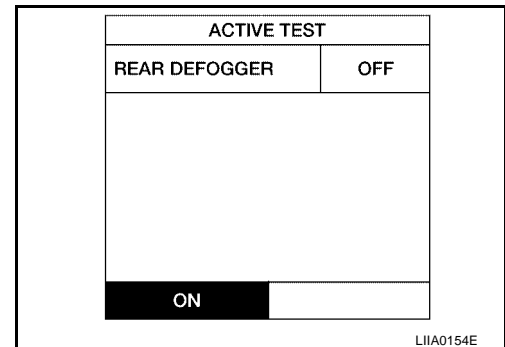
Malfunction in CAN communication system>>After printing the monitored items, go to "CAN System". Refer to [LAN-21, "CAN COMMUNICATION"](#).

### 2. REAR DEFOGGER OPERATES INSPECTION BY ACTIVE TEST

Ⓟ With CONSULT-II

- Check operation with "REAR DEFOGGER" in the ACTIVE TEST. Refer to [GW-49, "ACTIVE TEST"](#).

Does rear window defogger operate properly?



#### OK or NG

OK >> GO TO 3.

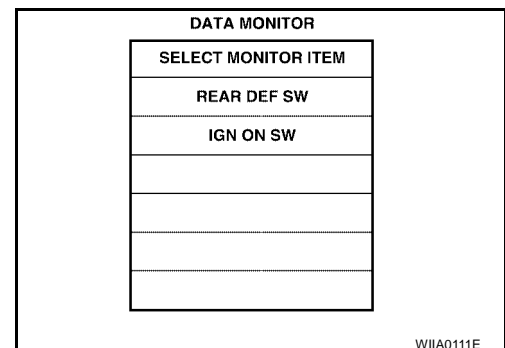
NG >> GO TO 5.

### 3. REAR WINDOW DEFOGGER SWITCH OPERATION INSPECTION BY DATA MONITOR

Ⓟ With CONSULT-II

- Check operation with "REAR DEF SW" in the DATA MONITOR". Refer to [GW-49, "DATA MONITOR"](#).

Does rear window defogger switch operate properly?



# REAR WINDOW DEFOGGER

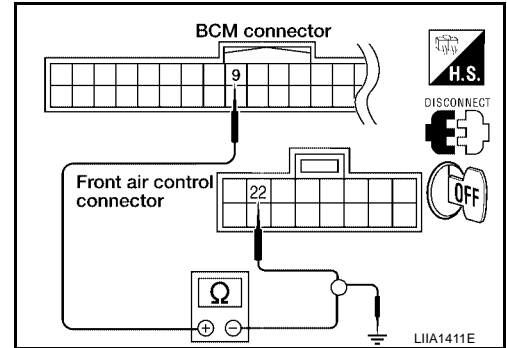
## OK or NG

- OK >> Replace BCM. Refer to [BCS-20, "Removal and Installation of BCM"](#).
- NG >> GO TO 4.

## 4. REAR WINDOW DEFOGGER SWITCH HARNESS CONTINUITY INSPECTION

Check continuity between BCM harness connector M18 terminal 9 and front air control harness connector M50 terminal 22 and between BCM connector terminal 9 and ground.

Terminals				Continuity
(+)		(-)		
Connector	Terminal	Connector	Terminal	
M18	9 (GY)	M50	22 (GY)	Yes
	9 (GY)	Ground		No



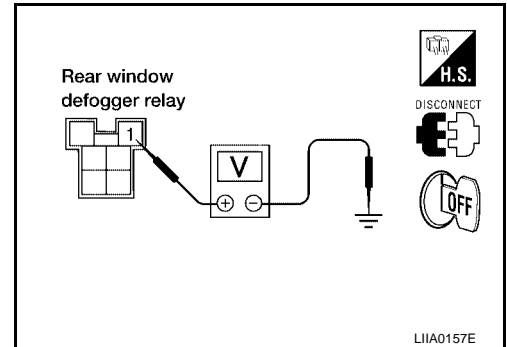
## OK or NG

- OK >> Replace front air control.
- NG >> Repair or replace harness.

## 5. REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT INSPECTION

- Turn the ignition switch ON.
- Check voltage between rear window defogger relay harness connector B4 terminal 1 and ground.

Terminals			Voltage
(+)		(-)	
Connector	Terminal		
B4	1 (G)	Ground	Battery voltage



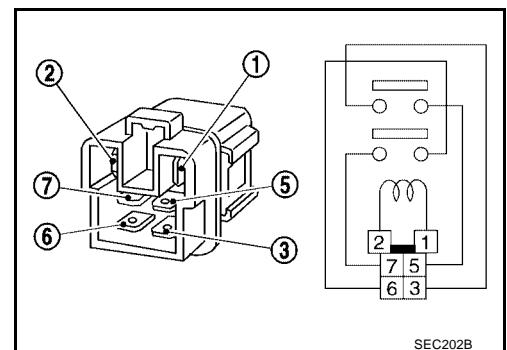
## OK or NG

- OK >> GO TO 6.
- NG >> Repair or replace harness.

## 6. REAR WINDOW DEFOGGER RELAY INSPECTION

- Remove rear window defogger relay.
- Check continuity between terminals 3 and 5, 6 and 7.

Terminal		Condition	Continuity
(+)	(-)		
Terminal	Terminal		
3	5	12V direct current supply between terminals 1 to 2	Yes
		No current supply	No
6	7	12V direct current supply between terminals 1 to 2	Yes
		No current supply	No



## OK or NG

- OK >> GO TO 7.
- NG >> Replace rear window defogger relay.

# REAR WINDOW DEFOGGER

## 7. REAR WINDOW DEFOGGER FILAMENT CHECK

Check rear window defogger filament. Refer to [GW-53, "Filament Check"](#) .

OK or NG

OK >> GO TO 8.

NG >> Repair rear window defogger filament. Refer to [GW-54, "Filament Repair"](#) .

## 8. REAR WINDOW DEFOGGER GROUND HARNESS INSPECTION

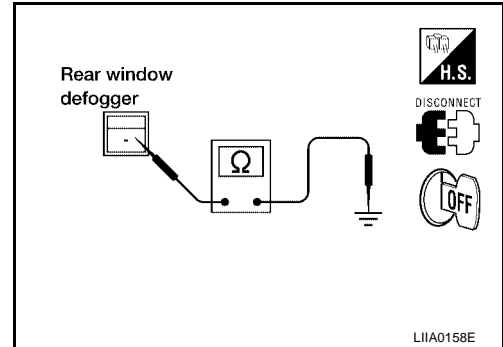
Check continuity between rear window defogger connector B201 terminal – and body harness.

Terminals		Continuity
(+)		
Connector	Terminal	(-)
B201	– (B)	Ground
		Yes

OK or NG

OK >> GO TO 9.

NG >> Repair or replace harness.



## 9. REAR WINDOW DEFOGGER HARNESS INSPECTION

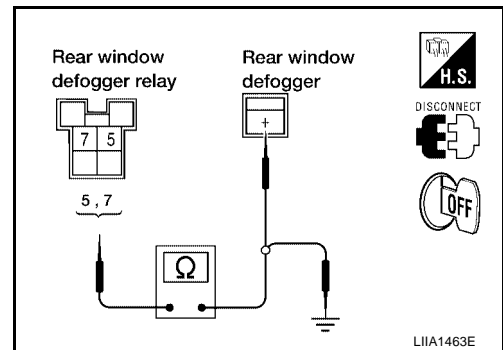
Check continuity between rear window defogger relay harness connector B4 terminal 5 and 7 and rear window defogger condenser, and between rear window defogger relay harness connector B4 terminal 5 and 7 and ground.

Terminals				Continuity
(+)		(-)		
Connector	Terminal	Connector	Terminal	
B4	5 (R)	B21	+ (R)	Yes
	5 (R)	Ground		No
	7 (R)	B21	+ (R)	Yes
	7 (R)	Ground		No

OK or NG

OK >> GO TO 10.

NG >> Repair or replace harness.



# REAR WINDOW DEFOGGER

## 10. IPDM E/R HARNESS INSPECTION

Check continuity between IPDM E/R harness connector E119 terminal 6 and 5 and rear window defogger relay connector B4 terminal 3 and 6, and IPDM E/R harness connector E119 terminal 6, 5 and body ground.

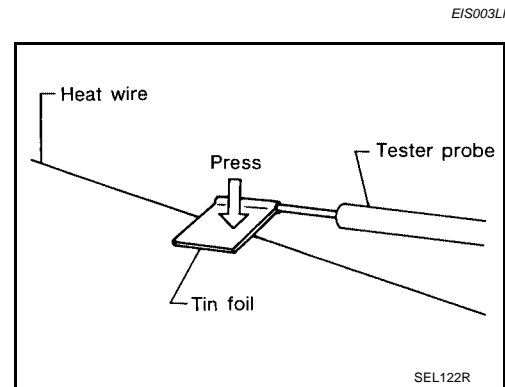
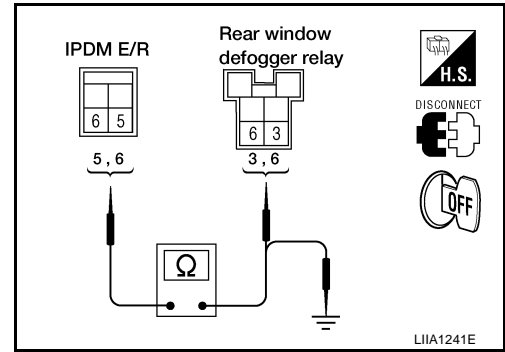
Terminals				Continuity
(+)		(-)		
Connector	Terminal	Connector	Terminal	
E119	5 (W)	B4	6 (W)	Yes
E119	5 (W)	Ground		No
E119	6 (L)	B4	3 (L)	Yes
E119	6 (L)	Ground		No

OK or NG

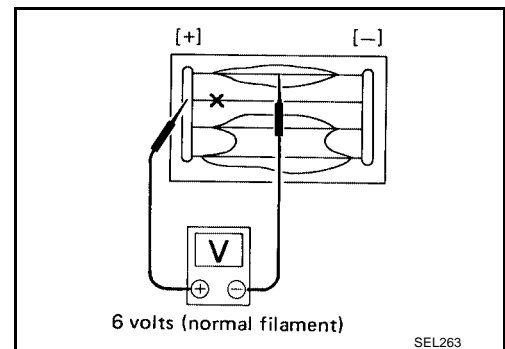
- OK >> Replace IPDM E/R. Refer to [PG-27, "Removal and Installation of IPDM E/R"](#).
- NG >> Repair or replace harness.

### Filament Check

- When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.

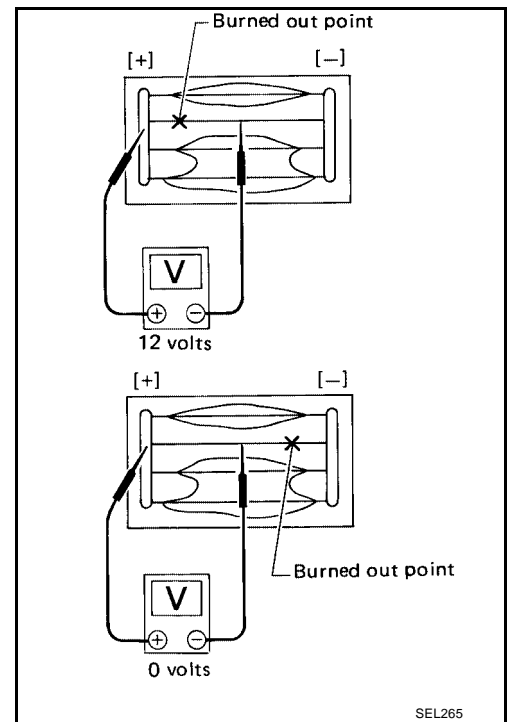


- Attach probe circuit tester (in Volt range) to middle portion of each filament.



# REAR WINDOW DEFOGGER

3. If a filament is burned out, circuit tester registers 0 or battery voltage.
4. To locate burned out point, move probe to left and right along filament. Test needle will swing abruptly when probe passes the point.



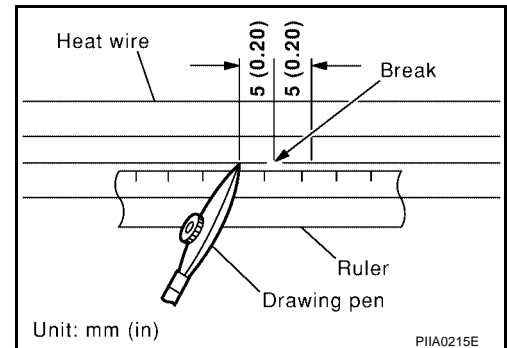
EIS003LJ

## Filament Repair REPAIR EQUIPMENT

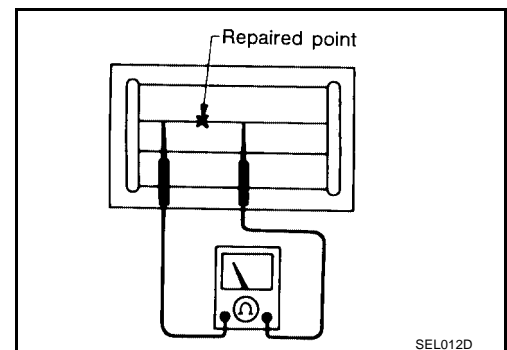
- Conductive silver composition (DuPont No. 4817 or equivalent)
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

## REPAIRING PROCEDURE

1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen. Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition on break with drawing pen. Slightly overlap existing heat wire on both sides [preferably 5 mm (0.20 in)] of the break.

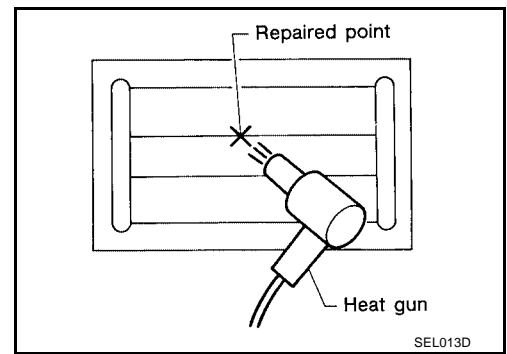


4. After repair has been completed, check repaired wire for continuity. This check should be conducted 10 minutes after silver composition is deposited. Do not touch repaired area while test is being conducted.



## REAR WINDOW DEFOGGER

5. Apply a constant stream of hot air directly to the repaired area for approximately 20 minutes with a heat gun. A minimum distance of 3 cm (1.2 in) should be kept between repaired area and hot air outlet.  
If a heat gun is not available, let the repaired area dry for 24 hours.



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# DOOR MIRROR

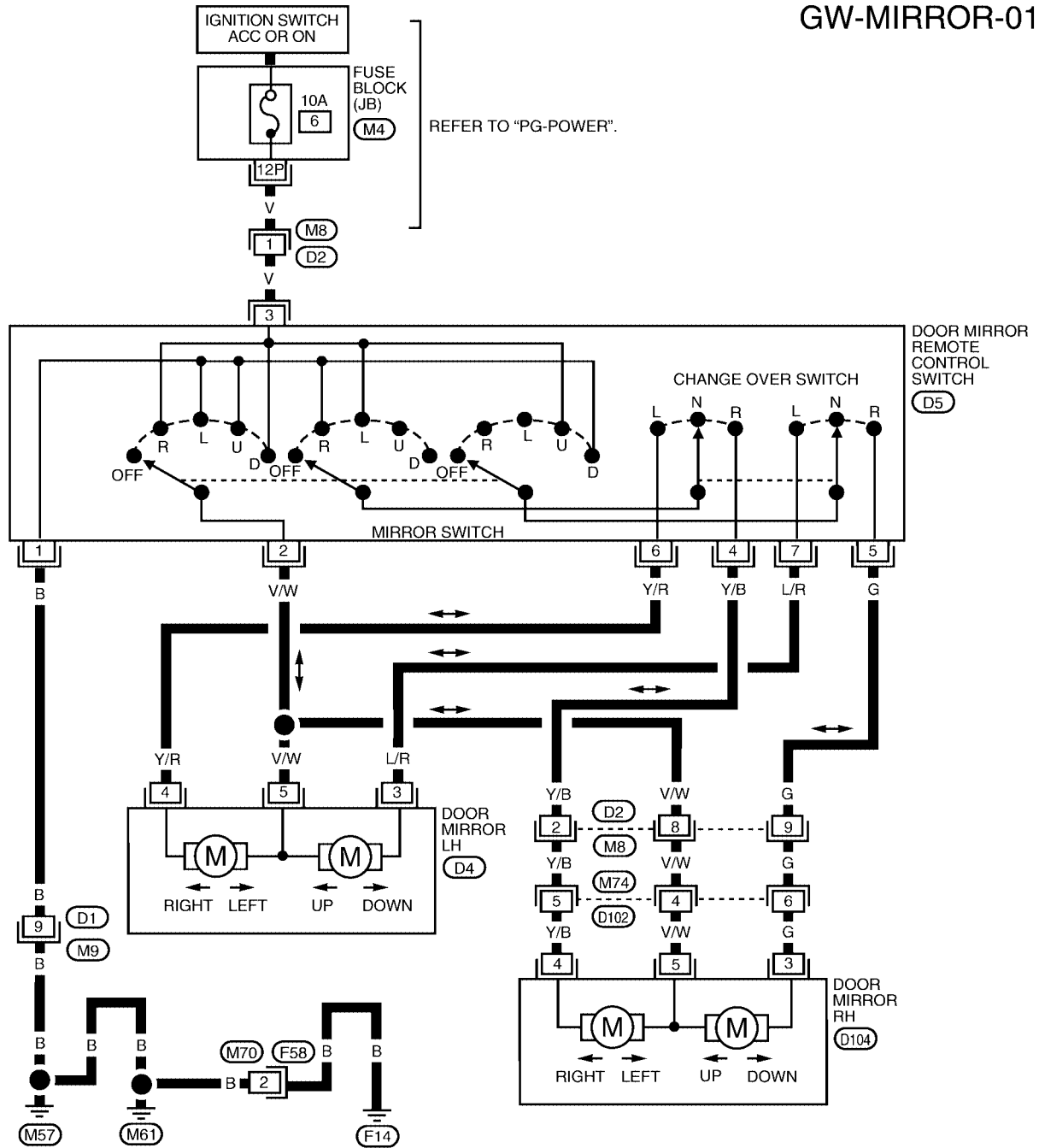
PF9:96301

## DOOR MIRROR

### Wiring Diagram — MIRROR —

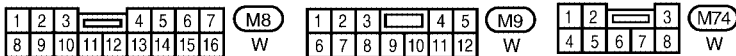
EIS003LK

## GW-MIRROR-01



REFER TO THE FOLLOWING.

(M4) - FUSE BLOCK-JUNCTION BOX (JB)



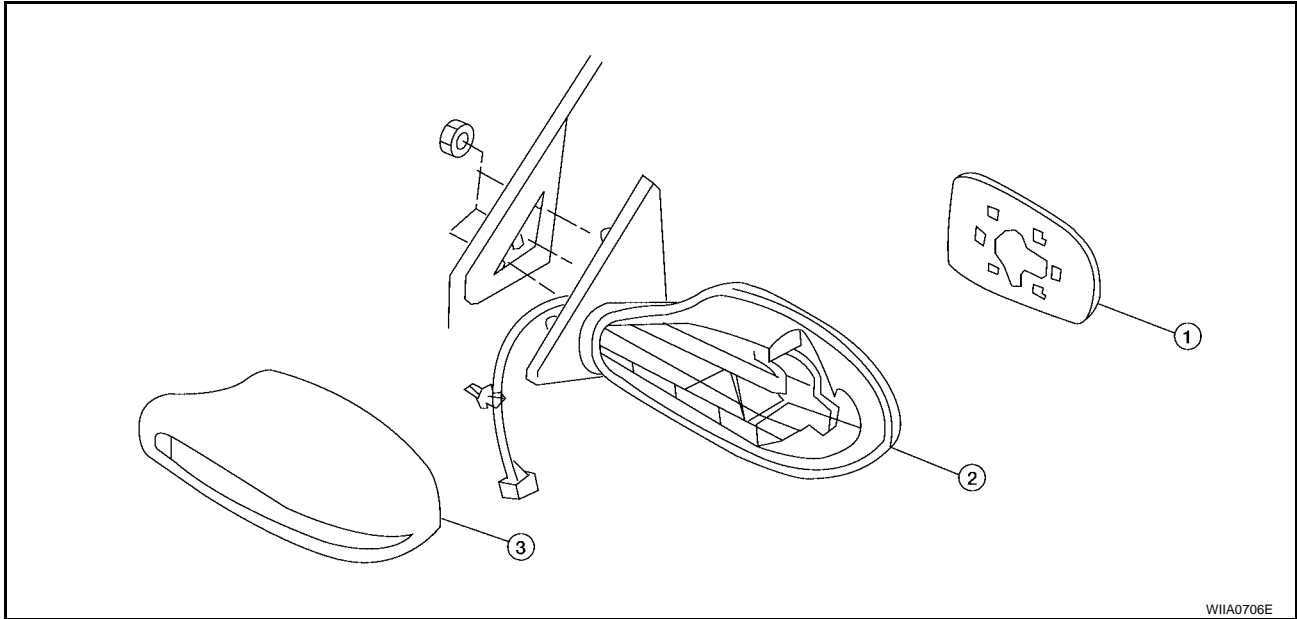
WIWA0984E



# DOOR MIRROR

## Removal and Installation

EIS003LL



1. Mirror glass and holder

2. Mirror assembly

3. Mirror body

### REMOVAL

#### NOTE:

Be careful not to damage the mirror bodies.

1. Remove the front door sash cover. Refer to [EI-30, "Front Door"](#).
2. Remove the door mirror harness connector.
3. Remove the door mirror nuts and the door mirror assembly.

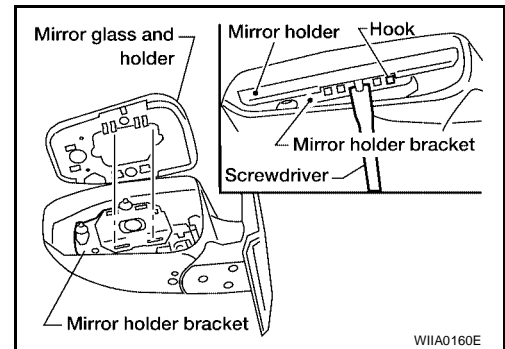
### INSTALLATION

Installation is in the reverse order of removal.

### Door Mirror Glass

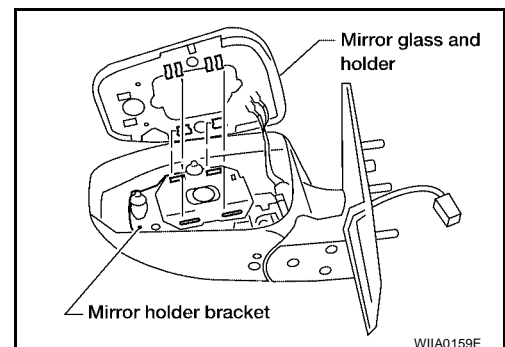
#### REMOVAL

1. Set mirror assembly mirror glass upward.
2. Apply protective tape to mirror housing.
3. Insert a screwdriver as shown and remove mirror glass by pushing up two hooks.
4. Disconnect two electrical connectors from mirror holder.



#### INSTALLATION

1. Set mirror holder bracket and mirror assembly in the horizontal position.
2. Connect two electrical connectors to the back of the mirror holder.
3. Heat lower hooks with a hair dryer to prevent breaking the hooks.
4. Align upper hooks to bracket.
5. Align lower hooks to bracket and push lower part of mirror glass down into bracket until you hear a click. Ensure that mirror glass is secure in door mirror.



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# DOOR MIRROR

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