SECTION GW

GLASSES, WINDOW SYSTEM & MIRRORS

CONTENTS

PRECAUTIONS

PFP:00001

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

EIS003T1

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

WARNING:

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

Handling for Adhesive and Primer

EIS003T2

- 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.

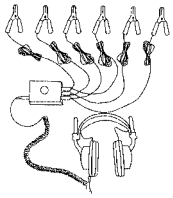
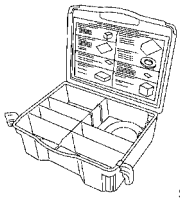
PREPARATION

PFP:00002

Special Service Tool

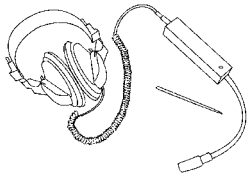
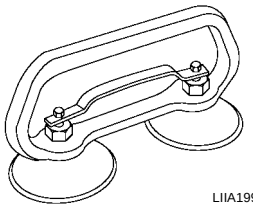
EIS003T4

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

Tool number (Kent-Moore No.) Tool name	Description
(J-39570) Chassis ear  SIIA0993E	Locating the noise
(J-43980) NISSAN Squeak and Rattle Kit  SIIA0994E	Repairing the cause of noise

Commercial Service Tool

EIS003T5

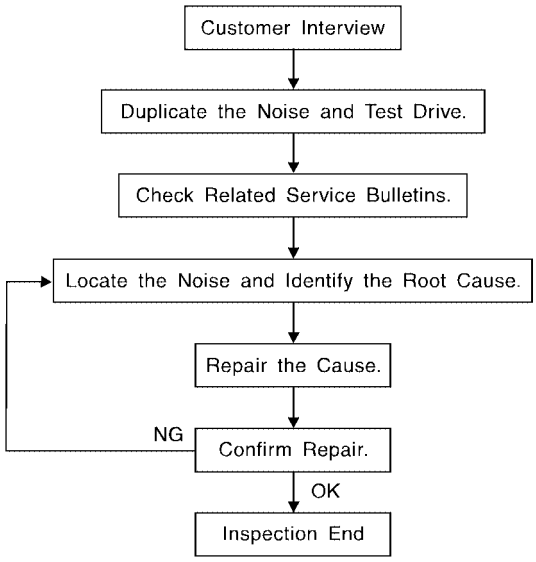
(Kent-Moore No.) Tool name	Description
(J-39565) Engine ear  SIIA0995E	Locating the noise
(—) Suction Lifter  LIIA1991E	Holding door glass

SQUEAK AND RATTLE TROUBLE DIAGNOSES

PFP:00000

Work Flow

EIS0058R



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-10, "Diagnostic Worksheet" . This information is necessary to duplicate the conditions that exist when the noise occurs.

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

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when you confirm the repair.
If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on A/T model).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area.To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: 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-8, "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)

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

EIS0058S

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.

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 lens 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.

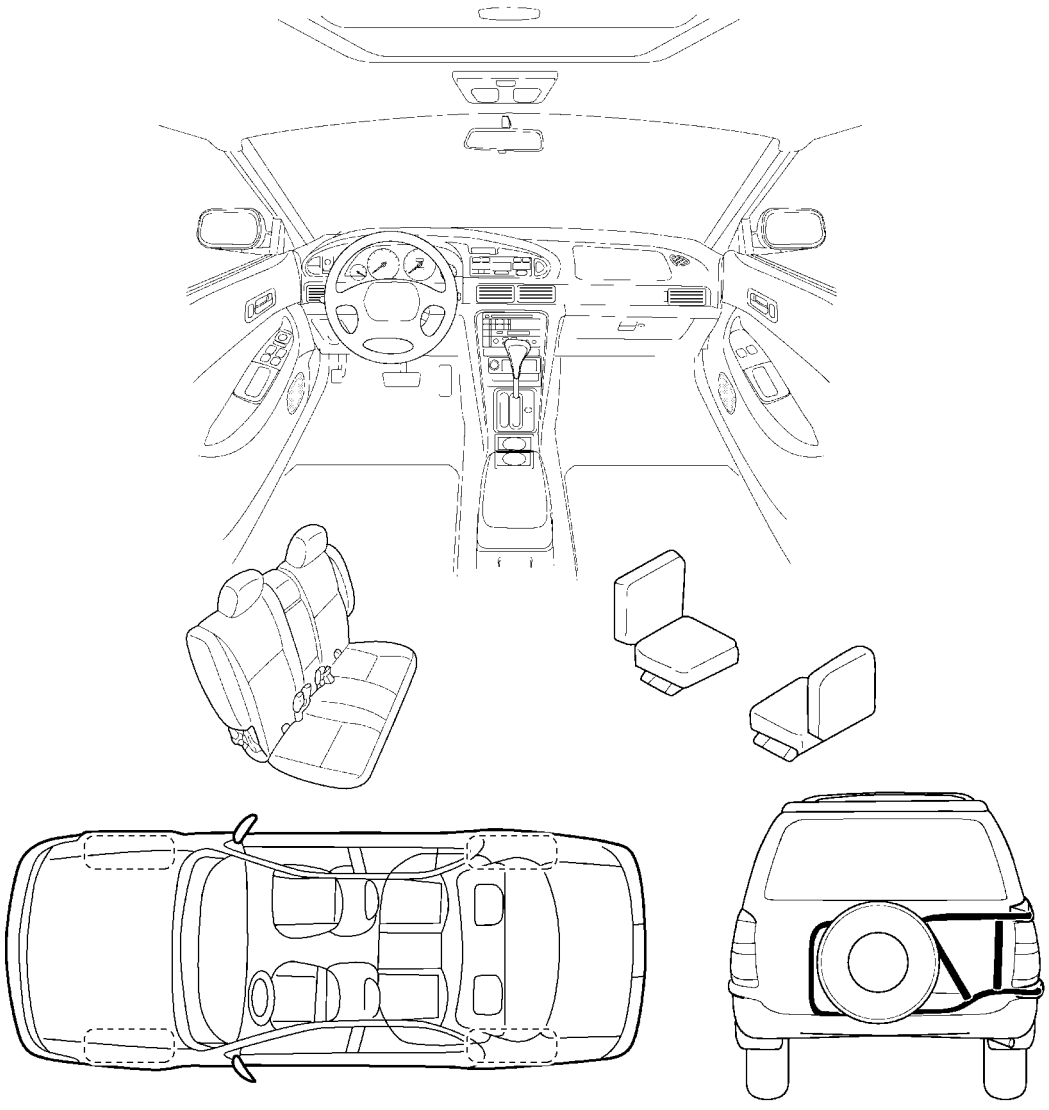
Diagnostic Worksheet

EIS0058T

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 DOESTHE 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.

LIWA0276E

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET- page 2

Briefly describe the location where the noise occurs:

_____

_____

II. WHEN DOES IT OCCUR? (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 sun
❑ when it is raining or wet
❑ dry or dusty conditions
❑ 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:

_____

_____

	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: _____

SBT844

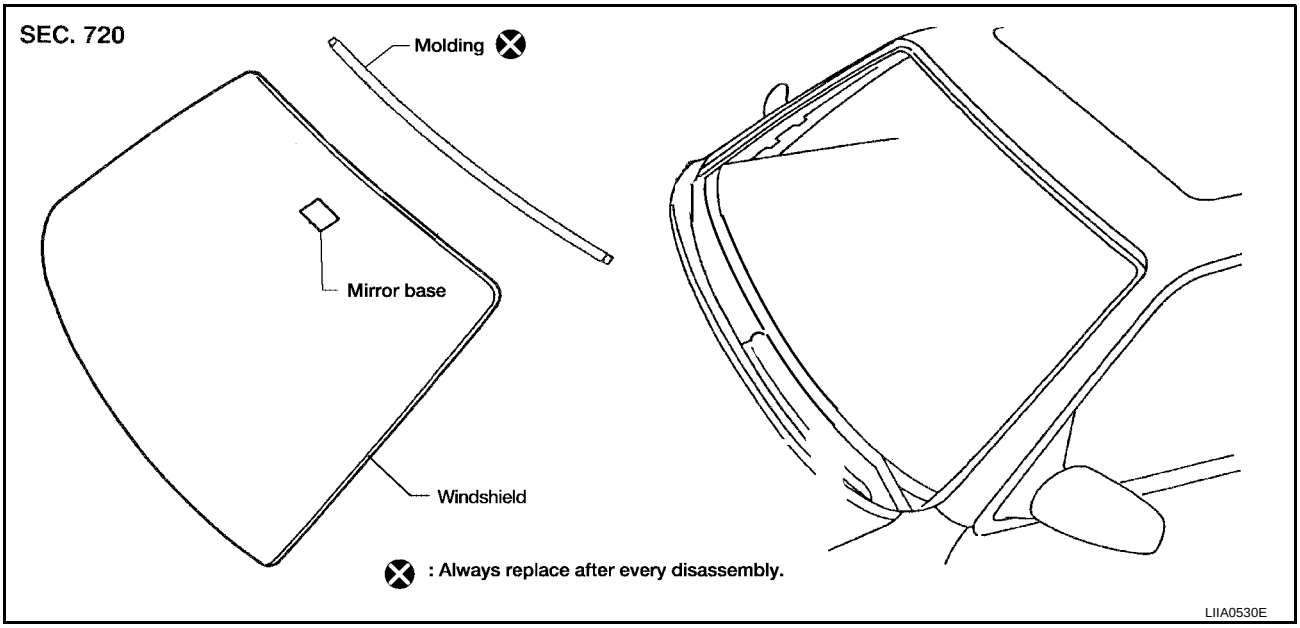
This form must be attached to Work Order

WINDSHIELD GLASS

PFP:72712

Removal and Installation

EIS003T9



REMOVAL

1. Remove the front pillar garnish. Refer to EI-33, "BODY SIDE TRIM" .
2. Remove inside mirror. Refer toGW-95, "Removal and Installation" .
3. Partially remove the headlining (front edge). Refer to EI-42, "HEADLINING" .
4. Remove the front wiper arms. Refer to WW-22, "Removal and Installation of Front Wiper Arms, Adjustment of Wiper Arms Stop Location" .
5. Remove roof side molding. Refer to EI-26, "ROOF SIDE MOLDING" .
6. Remove right and left front fender covers. Refer toEI-19, "Removal and Installation" .
7. Remove cowl top cover. Refer to EI-19, "Removal and Installation" .
8. Apply a protective tape around the windshield glass to protect the painted surface from damage.

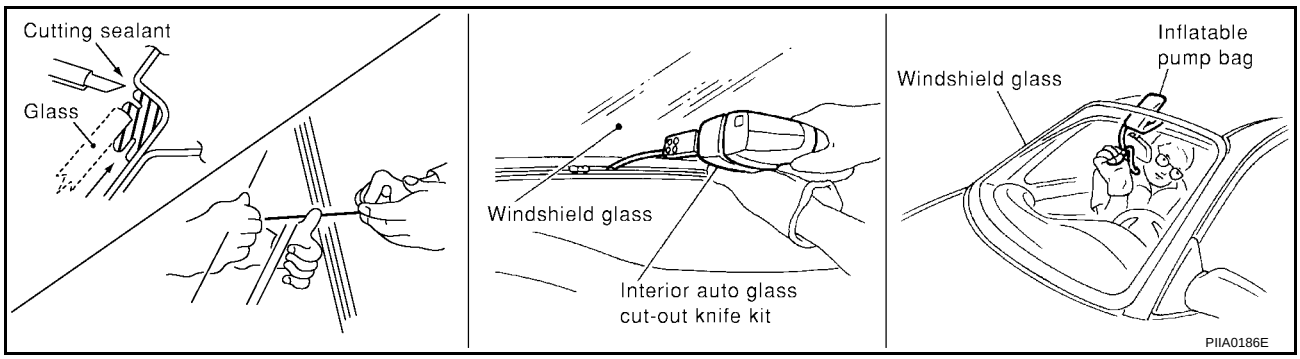
- After removing moldings, remove glass using piano wire or power cutting tool and an inflatable pump bag.
- If a windshield glass is to be reused, mark the body and the glass with mating marks.

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



INSTALLATION

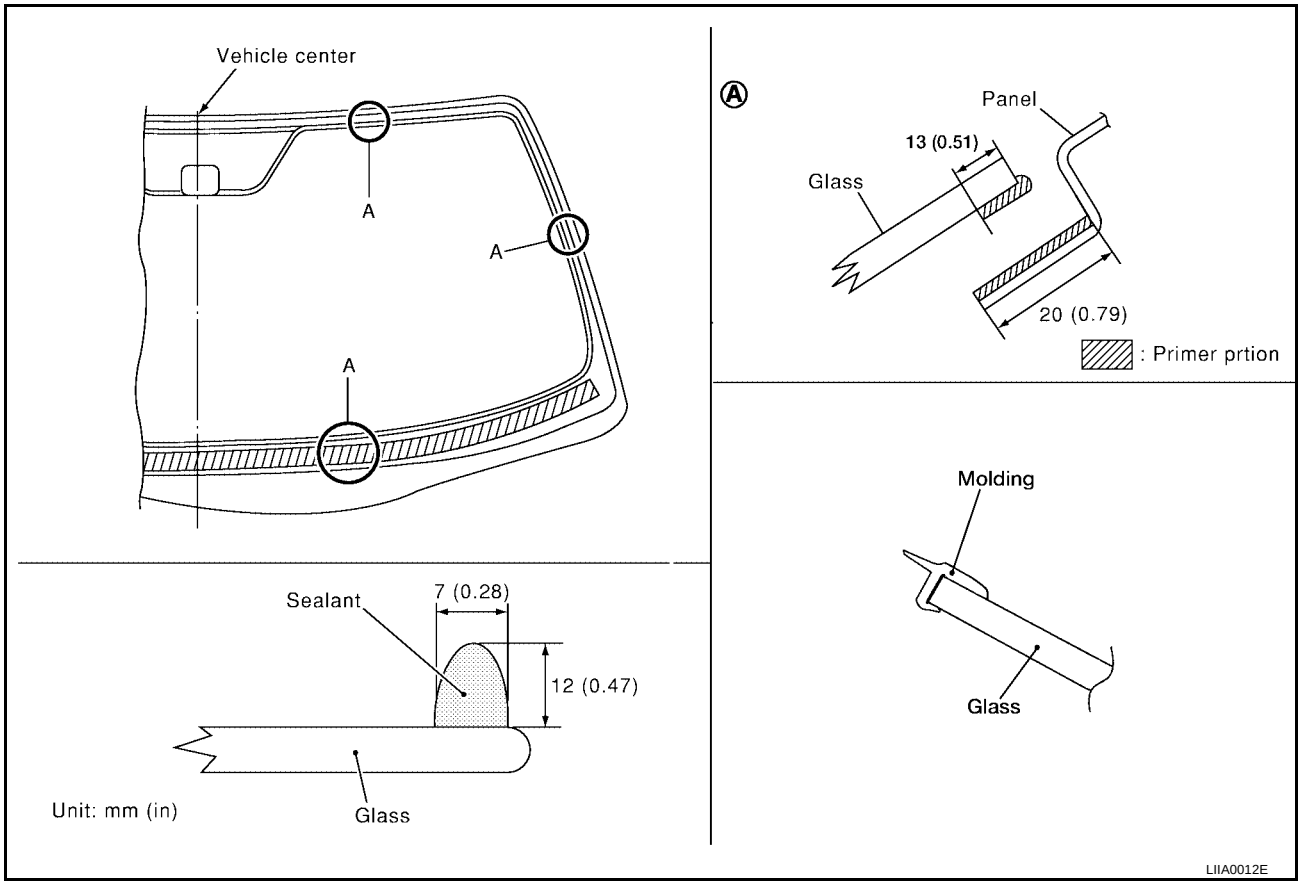
- Use a genuine NISSAN Urethane Adhesive Kit (if available) or equivalent and follow the instructions furnished with it.
- While the urethane adhesive is curing, open a door window. This will prevent the glass from being forced out by passenger compartment air pressure when a door is closed.
- The molding 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.
- Install parts removed.

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 humidities. The curing time will increase under lower temperatures and lower humidities.**



Repairing Water Leaks for Windshield

Leaks can be repaired without removing and reinstalling glass.

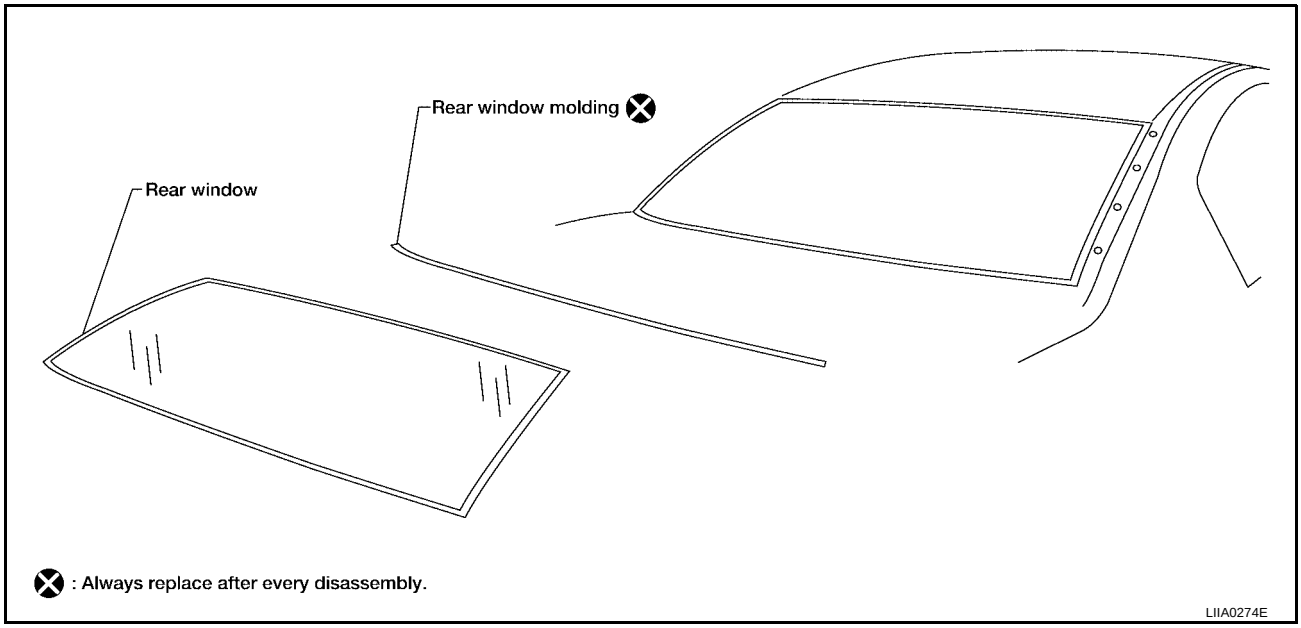
If water is leaking between the urethane adhesive material and body or glass, determine the extent of leakage. This can be done by applying water to the windshield area while pushing glass outward.
To stop the leak, apply primer (if necessary) and then urethane adhesive to the leak point.

REAR WINDOW GLASS AND MOLDING

PFP:79712

Removal and Installation

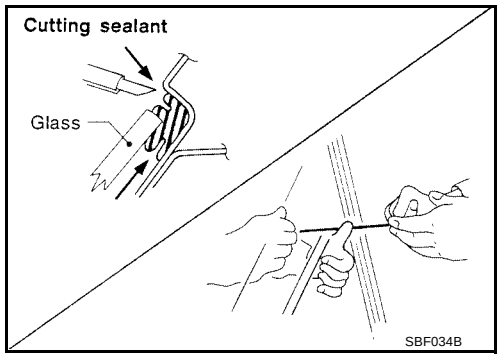
EIS003TA



REMOVAL

1. Remove the rear of the headliner. Refer to EI-42, "HEADLINING" .
2. Remove the rear pillar garnish. Refer to EI-33, "BODY SIDE TRIM" .
3. Remove the rear parcel shelf finisher. Refer to EI-35, "REAR PARCEL SHELF FINISHER" .
4. Remove the connectors and grounds for the rear window defogger and printed antenna.
5. Remove rear pillar finishers. Refer to EI-27, "REAR PILLAR FINISHER" .

- After removing rear pillar finishers, remove glass using piano wire or power cutting tool and an inflatable pump bag.
- If a rear window 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.

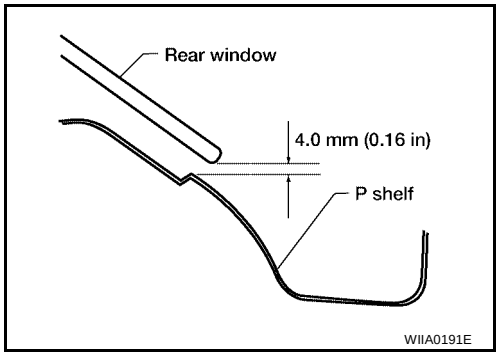
CAUTION:

- **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.

- Check gap along bottom to confirm that glass does not contact sheet metal.
- 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.
- Install parts removed.

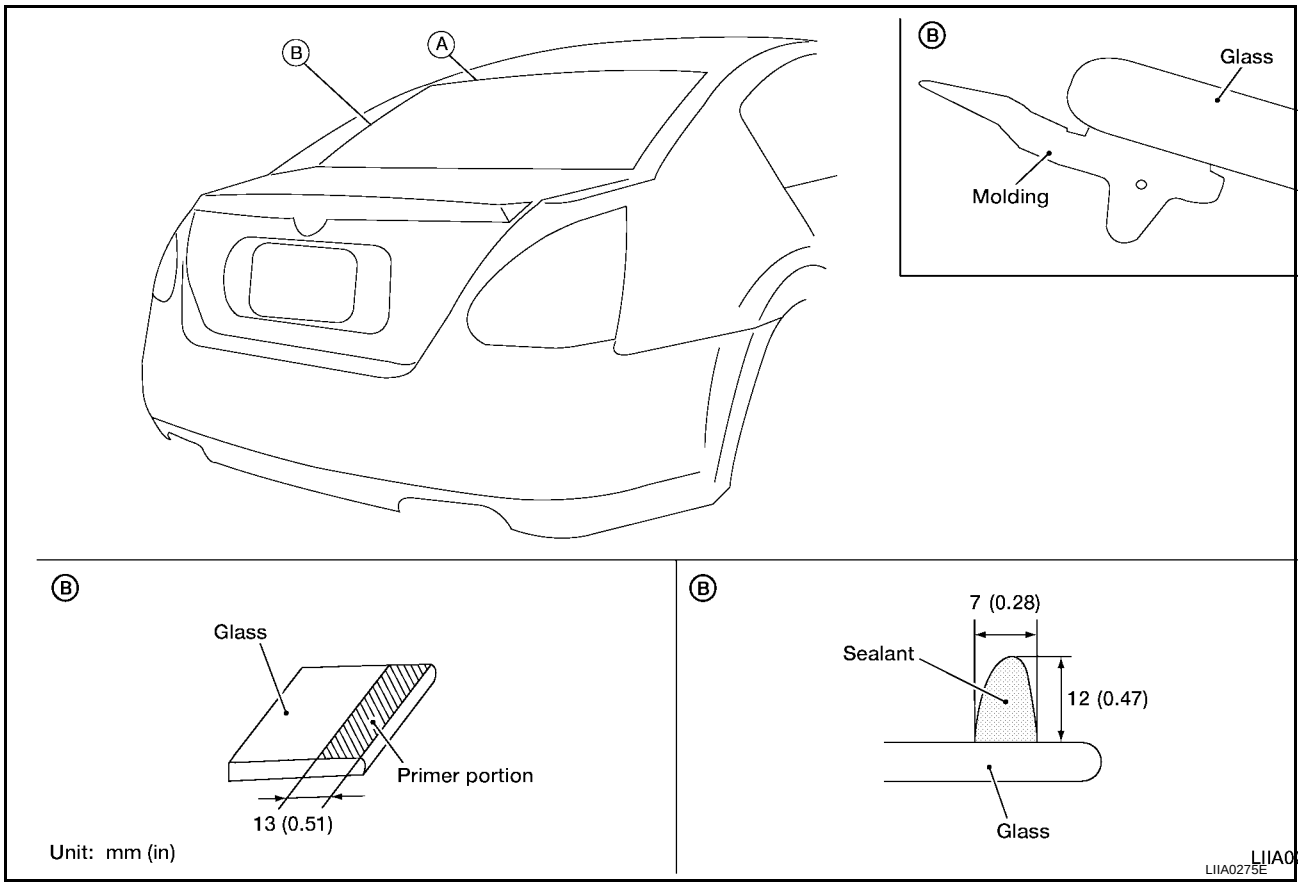


WARNING:

- **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 temperatures and lower humidities.**



Repairing Water leaks for Rear Window Glass

Leaks can be repaired without removing or reinstalling glass.
If water is leaking between urethane adhesive material and body or glass, determine the extent of leakage. This can be done by applying water to the rear window area while pushing glass outward.

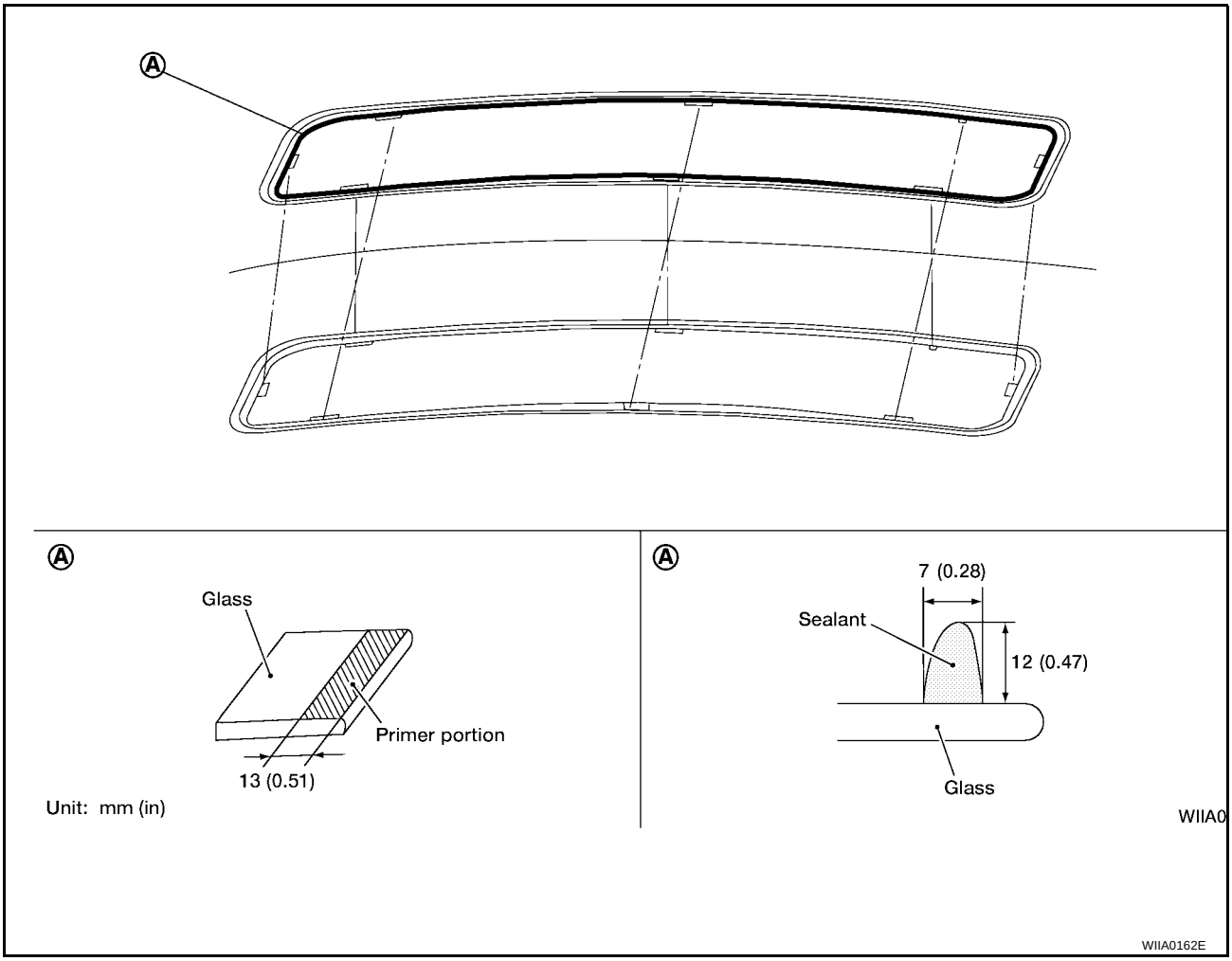
To stop leak, apply primer (if necessary) and then urethane adhesive to the leak point.

SKYVIEW ROOF

PFP:79700

Removal and Installation

EIS003TB



REMOVAL

1. Remove the headlining. Refer to EI-42, "HEADLINING" .
2. Apply protective tape around the skyview roof glass to protect the painted surface from damage.
3. Remove glass using piano wire or power cutting tool and an inflatable pump bag.

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 skyview roof 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 window. This will prevent the glass from being forced out by passenger compartment air pressure when a door is closed.
- The rubber seal must be installed securely so that it is in position and leaves no gap.
- Inform customer that the vehicle should remain stationary until the urethane adhesive has completely cured (preferably 24 hours). Curing time varies with temperature and humidity.
- Install parts removed.

WARNING:

- **Keep heat and open flames away as primers and adhesives 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 area with fresh air.**
- **Driving the vehicle before urethane adhesive has completely cured may affect the performance of the skyview roof 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 adhesives in a cool dry place. ideally they should be stored in a refrigerator.**
- **Do not leave primers and adhesive cartridge unattended with their caps off.**
- **The vehicle should not be driven for at least 24 hours or until the urethane adhesive has completely cured. Curing time depends on temperature and humidity. The curing time will increase under lower temperature and lower humidities.**

Repairing Water Leaks for Skyview Roof Glass

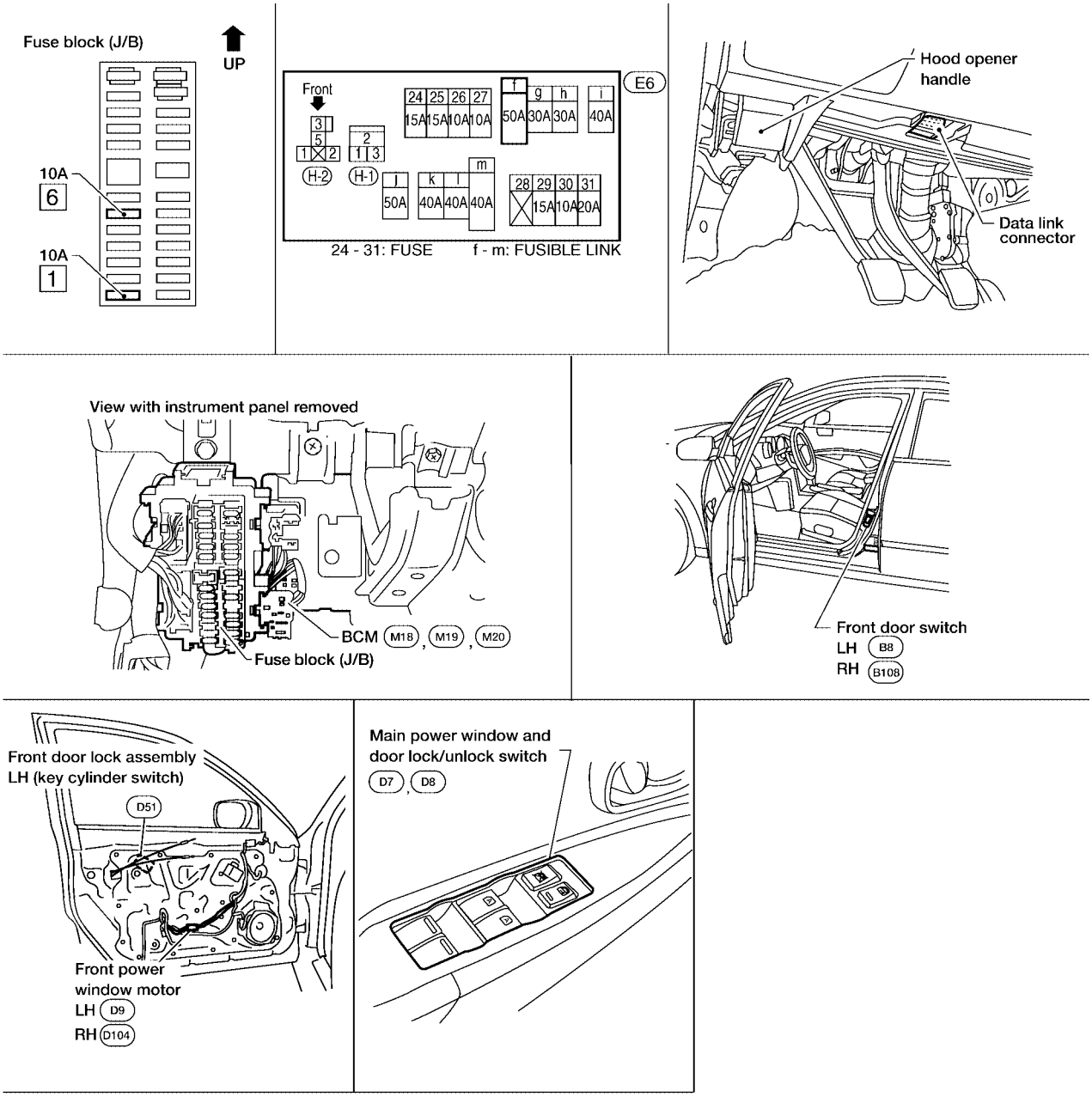
Leaks can be repaired without removing and reinstalling glass.
If water is leaking between the urethane adhesive material and body or glass, determine the extent of leakage. This can be done by applying water to the glass area while pushing glass outward.
To stop the leak, apply primer (if necessary) and then urethane adhesive to the leak point.

POWER WINDOW SYSTEM

PFP:25401

Component Parts and Harness Connector Location

EIS003TC



LIIA1830E

System Description

EIS003TD

Power is supplied at all times (with front left and right only power window anti-pinch system)

- from 50A fusible link (letter **f** , located in the fuse and fusible link box)
- to BCM terminal 55
- through BCM terminal 54
- to main power window and door lock/unlock switch terminal 19
- to power window and door lock/unlock switch RH terminal 10.

Power is supplied at all times (with front and rear window anti-pinch system)

- from 50A fusible link (letter **f** , located in the fuse and fusible link box)
- to BCM terminal 55

- through BCM terminal 54
- to main power window and door lock/unlock switch terminal 19
- to power window and door lock/unlock switch RH terminal 10
- to rear power window switch LH and RH terminal 10.

With ignition switch in ON or START position, power is supplied (with front left and right only power window anti-pinch system)

- through 10A fuse [No.1, located in the fuse block (J/B)]
- to BCM terminal 38
- through BCM terminal 53
- to main power window and door lock/unlock switch terminal 10
- to rear power window switch LH and RH terminal 1 and 6.

With ignition switch in ON or START position, power is supplied (with front and rear power window anti-pinch system)

- through 10A fuse [No.1, located in the fuse block (J/B)]
- to BCM terminal 38
- through BCM terminal 53
- to main power window and door lock/unlock switch terminal 7.

Ground is supplied (with front left and right only power window anti-pinch)

- to BCM terminal 52
- to main power window and door lock/unlock switch terminal 17
- to power window and door lock/unlock switch RH terminal 11
- through body grounds M57, M61 and M79.

Ground is supplied (with front and rear power window anti-pinch)

- to BCM terminal 52
- to main power window and door lock/unlock switch terminal 17
- to front power window switch RH terminal 11
- through body grounds M57, M61 and M79.

MANUAL OPERATION

Front Driver Side Door (With Front Left and Right Only Anti-pinch System)

WINDOW UP

When the front LH switch in the main power window and door lock/unlock switch is pressed in the up position, power is supplied

- through main power window and door lock/unlock switch terminal 8
- to front power window motor LH terminal 1.

Ground is supplied

- through main power window and door lock/unlock switch terminal 11
- to front power window motor LH terminal 2.

Then, the motor raises the window until the switch is released.

WINDOW DOWN

When the front LH switch in the main power window and door lock/unlock switch is pressed in the down position, power is supplied

- through main power window and door lock/unlock switch terminal 11
- to front power window motor LH terminal 2.

Ground is supplied

- through main power window and door lock/unlock switch terminal 8
- to front power window motor LH terminal 1.

Then, the motor lowers the window until the switch is released.

Front Driver Side Door (With Front and Rear Power Window Anti-pinch System)

WINDOW UP

When the front LH switch in the main power window and door lock/unlock switch is pressed in the up position, power is supplied

- through main power window and door lock/unlock switch terminal 8
- to front power window motor LH terminal 1.

Ground is supplied

- through main power window and door lock/unlock switch terminal 11
- to front power window motor LH terminal 2.

Then, the motor raises the window until the switch is released.

WINDOW DOWN

When the front LH switch in the main power window and door lock/unlock switch is pressed in the down position, power is supplied

- through main power window and door lock/unlock switch terminal 11
- to front power window motor LH terminal 2.

Ground is supplied

- through main power window and door lock/unlock switch terminal 8
- to front power window motor LH terminal 1.

Then, the motor lowers the window until the switch is released.

Front Passenger Side Door

POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH OPERATION

WINDOW UP

When the power window and door lock/unlock switch RH is pressed in the up position, power is supplied

- through power window and door lock/unlock switch RH terminal 8
- to front power window motor RH terminal 1.

Ground is supplied

- through power window and door lock/unlock switch RH terminal 9
- to front power window motor RH terminal 2.

Then, the motor raises the window until the switch is released.

WINDOW DOWN

When the power window and door lock/unlock switch RH is pressed in the down position, power is supplied

- through power window and door lock/unlock switch RH terminal 9
- to front power window motor RH terminal 2.

Ground is supplied

- through power window and door lock/unlock switch RH terminal 8
- to front power window motor RH terminal 1.

Then, the motor lowers the window until the switch is released.

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OPERATION

Signal is sent

- though main power window and door lock/unlock switch terminal 14
- to power window and door lock/unlock switch RH terminal 16.

The operation of power window after receiving the signal is the same as operating the power window with power window and door lock/unlock switch RH.

Rear Door LH or RH (With Front Left and Right Only Anti-pinch System)

REAR POWER WINDOW SWITCH LH OR RH OPERATION

WINDOW UP

When the rear power window switch LH or RH is pressed in the up position, power is supplied

- through rear power window switch LH or RH terminal 4
- to rear power window motor LH or RH terminal 1.

Ground is supplied

- through rear power window switch LH or RH terminal 5
- to rear power window motor LH or RH terminal 2.

Then, the motor raises the window until the switch is released.

WINDOW DOWN

When the rear power window switch LH or RH is pressed in the down position, power is supplied

- through rear power window switch LH or RH terminal 5
- to rear power window motor LH or RH terminal 2.

Ground is supplied

- through rear power window switch LH or RH terminal 4
- to rear power window motor LH or RH terminal 1.

Then, the motor lowers the window until the switch is released.

MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OPERATION

Ground is supplied

- to rear power window switch LH terminal 7
- through body grounds B7 and B19 and
- to rear power window switch RH terminal 7
- through body grounds B117 and B132.

WINDOW UP

When the main power window and door lock/unlock switch (rear LH) is pressed in the up position, power is supplied

- through main power window and door lock/unlock switch terminal 3
- to rear power window switch LH terminal 3
- through rear power window switch LH terminal 4
- to rear power window motor LH terminal 1.

Ground is supplied

- through rear power window switch LH terminal 5
- to rear power window motor LH terminal 2
- through rear power window switch LH terminal 2
- to main power window and door lock/unlock switch terminal 1.

Then, the motor raises the window until the switch is released.

When the main power window and door lock/unlock switch (rear RH) is pressed in the up position, power is supplied

- through main power window and door lock/unlock switch terminal 5
- to rear power window switch RH terminal 3
- through rear power window switch RH terminal 4
- to rear power window motor RH terminal 1.

Ground is supplied

- through rear power window switch RH terminal 5
- to rear power window motor RH terminal 2
- through rear power window switch RH terminal 2
- to main power window and door lock/unlock switch terminal 7.

Then, the motor raises the window until the switch is released.

WINDOW DOWN

When the main power window and door lock/unlock switch (rear LH) is pressed in the down position, power is supplied

- through main power window and door lock/unlock switch terminal 1
- to rear power window switch LH terminal 2
- through rear power window switch LH terminal 5
- to rear power window motor LH terminal 2.

Ground is supplied

- through rear power window switch LH terminal 4
- to rear power window motor LH terminal 1
- through rear power window switch LH terminal 3
- to main power window and door lock/unlock switch terminal 3.

Then, the motor raises the window until the switch is released.
When the main power window and door lock/unlock switch (rear RH) is pressed in the down position, power is supplied

- through main power window and door lock/unlock switch terminal 7
- to rear power window switch RH terminal 2
- through rear power window switch RH terminal 5
- to rear power window motor RH terminal 2.

Ground is supplied

- through rear power window switch RH terminal 4
- to rear power window motor RH terminal 1
- through rear power window switch RH terminal 3
- to main power window and door lock/unlock switch terminal 5.

Then, the motor raises the window until the switch is released.

Rear Door LH or RH (With Front and Rear Power Window Anti-pinch System)

REAR POWER WINDOW SWITCH LH OR RH OPERATION
WINDOW UP
When the rear power window switch LH or RH is pressed in the up position, power is supplied

- through rear power window switch LH or RH terminal 8
- to rear power window motor LH or RH terminal 1.

Ground is supplied

- through rear power window switch LH or RH terminal 9
- to rear power window motor LH or RH terminal 2.

Then, the motor raises the window until the switch is released.
WINDOW DOWN
When the rear power window switch LH or RH is pressed in the down position, power is supplied

- through rear power window switch LH or RH terminal 9
- to rear power window motor LH or RH terminal 2.

Ground is supplied

- through rear power window switch LH or RH terminal 8
- to rear power window motor LH or RH terminal 1.

Then, the motor lowers the window until the switch is released.
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OPERATION
Signal is sent

- though main power window and door lock/unlock switch terminal 14
- to rear power window switch LH or RH terminal 16.

The operation of power window after receiving the signal is the same as operating the power window with the rear power window switch LH or RH.

AUTO OPERATION

The power window AUTO feature enables the driver to open or close the window without holding the window switch in the down or up position.
Maxima models have two types of AUTO operation systems.
One is applied only for front doors and the other is for all doors.

POWER WINDOW SERIAL LINK

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

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH, and BCM transmit and receive the signal by power window serial link.
The signal is transmitted from BCM to main power window and door lock/unlock switch and power window and door lock/unlock switch RH

- Keyless power window down signal.

The signal is transmitted from main power window and door lock/unlock switch to power window and door lock/unlock switch RH

- Front door window RH operation signal.
- Power window control by front door lock assembly LH (key cylinder switch) signal.
- Power window lock signal.
- Retained power operation signal.

With front and rear power window anti-pinch system

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH, and BCM transmit and receive the signal by power window serial link.
The signal is transmitted from BCM to main power window and door lock/unlock switch and power window and door lock/unlock switch RH

- Keyless power window down signal.

The signal is transmitted from main power window and door lock/unlock switch to power window and door lock/unlock switch RH

- Front door window RH operation signal.
- Power window control by front door lock assembly LH (key cylinder switch) signal.
- Power window lock signal.
- Retained power operation signal.

The signal is transmitted from main power window and door lock/unlock switch to rear power window switch LH or RH

- Rear door window LH or RH operation signal.

POWER WINDOW LOCK

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

The power window lock is designed to lock operation of all windows except for front door window LH.
When in the lock position, ground of the rear LH and rear RH power window switches in the main power window and door lock/unlock switch is disconnected. The power window lock signal is transmitted to front power window switch RH by power window serial link. This prevents the power window motors from operating.

With front and rear power window anti-pinch system

The power window lock is designed to lock operation of all windows except for front door window LH.
When in the lock position, ground of the rear LH and rear RH power window switches in the main power window and door lock/unlock switch is disconnected. The power window lock signal is transmitted to front power window switch RH rear LH and rear RH power window switches by power window serial link. This prevents the power window motors from operating.

RETAINED POWER OPERATION

When the ignition switch is turned to the OFF position from ON or START position.
Power is supplied for 45 seconds (with front left and right only power window anti-pinch system)

- to main power window and door lock/unlock switch terminal 10
- to rear power window switch (LH and RH) terminals 1 and 6
- from BCM terminal 53.

Power is supplied for 45 seconds (with front and rear power window anti-pinch system)

- to main power window and door lock/unlock switch terminal 7
- from BCM terminal 53.

When power and ground are supplied, the BCM continues to be energized, and the power window can be operated.
The retained power operation is canceled when the front LH or front RH door is opened.
RAP signal period can be changed by CONSULT-II. Refer to GW-47, "CONSULT-II Function (BCM)" .

ANTI-PINCH SYSTEM

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

Main power window and door lock/unlock switch and power window and door lock/unlock switch RH monitor the power window motor operation and the power window position (full closed or other) for front LH and front RH power window by the signals from encoder and limit switch in front power window motor LH and RH.
When main power window and door lock/unlock switch or power window and door lock/unlock switch RH detects interruption during the following close operation,

- automatic close operation when ignition switch is in the ON position
- automatic close operation during retained power operation

Main power window and door lock/unlock switch or power window and door lock/unlock switch RH controls each front power window motor for open and the power window will be lowered about 150mm (5.91 in).

With front and rear power window anti-pinch system

Main power window and door lock/unlock switch, power window and door lock/unlock switch RH and rear power window switch LH and RH monitors the power window motor operation and the power window position (full closed or other) for each power window by the signals from encoder and limit switch in power window motor.
When a window switch detects interruption during the following close operation,

- automatic close operation when ignition switch is in the ON position
- automatic close operation during retained power operation

Main power window and door lock/unlock switch, front power window switch RH and rear power window switch LH and RH controls each power window motor for open and the power window will be lowered about 150mm (5.91 in).

POWER WINDOW CONTROL BY THE KEY CYLINDER SWITCH

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

When ignition switch is OFF, front power window LH and RH can be opened or closed by turning the front door lock assembly LH (key cylinder switch) to the UNLOCK / LOCK position for more than 3 seconds.

- Front power windows can be opened as the door key cylinder is kept fully turning to the UNLOCK position.
- Front power windows can be closed as the door key cylinder is kept fully turning to the LOCK position.

The power window opening stops when the following operations are carried out.

- While performing open/close operation for the windows, power window is stopped when the door key cylinder is placed in the NEUTRAL position.
- When the ignition switch is turned ON while the power window opening operation is performed.

With front and rear power window anti-pinch system

When ignition switch is OFF, front power window LH and RH and rear power window LH and RH can be opened or closed by turning the front door lock assembly LH (key cylinder switch) to the UNLOCK / LOCK position for more than 3 seconds.

- All power windows can be opened as the door key cylinder is kept fully turning to the UNLOCK position.
- All power windows can be closed as the door key cylinder is kept fully turning to the LOCK position.

The power window opening stops when the following operations are carried out.

- While performing open/close operation for the windows, power window is stopped when the door key cylinder is placed in the NEUTRAL position.
- When the ignition switch is turned ON while the power window opening operation is performed.

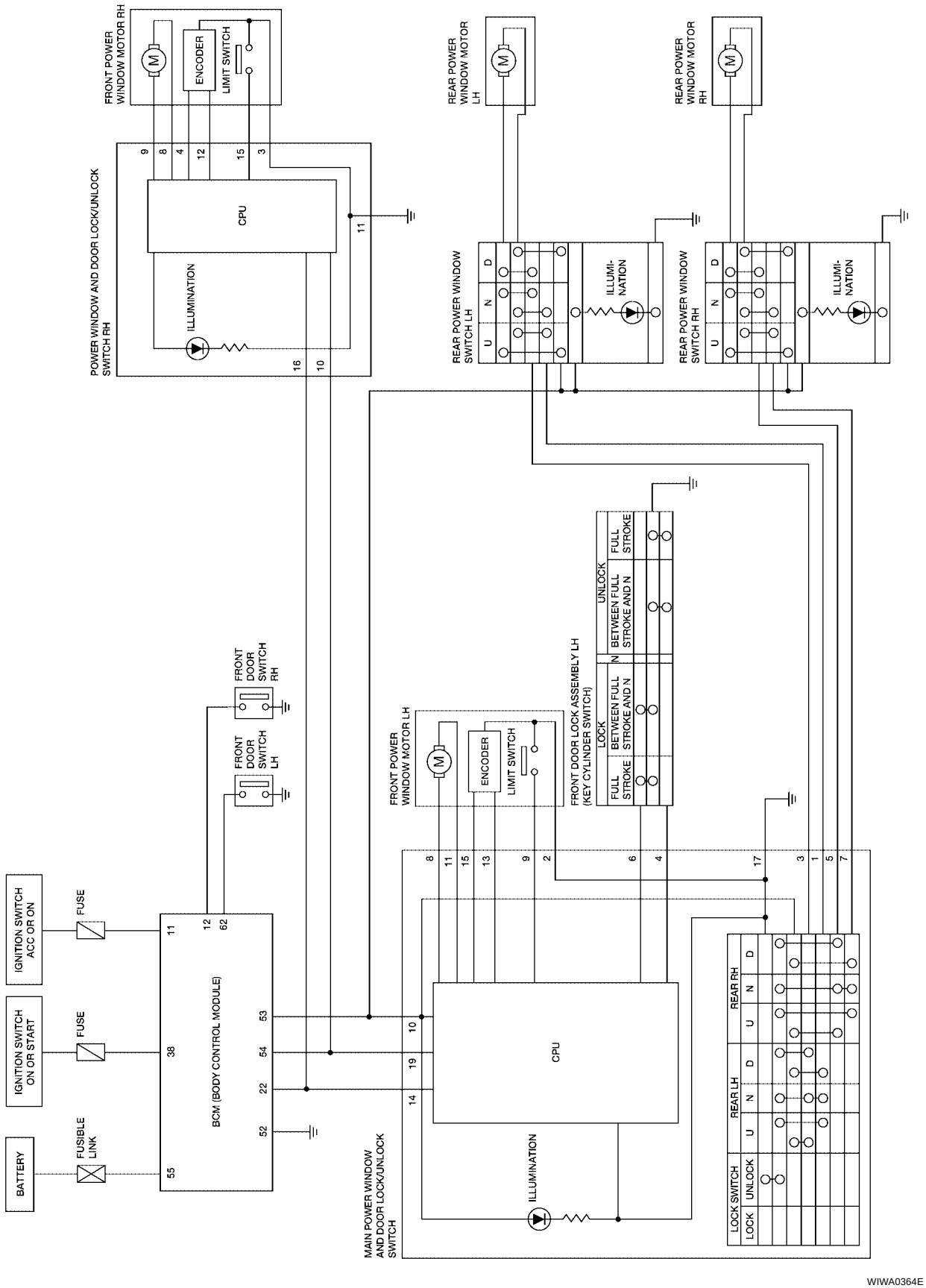
CAN Communication System Description

EIS003TE

Refer to LAN-7, "CAN COMMUNICATION" .

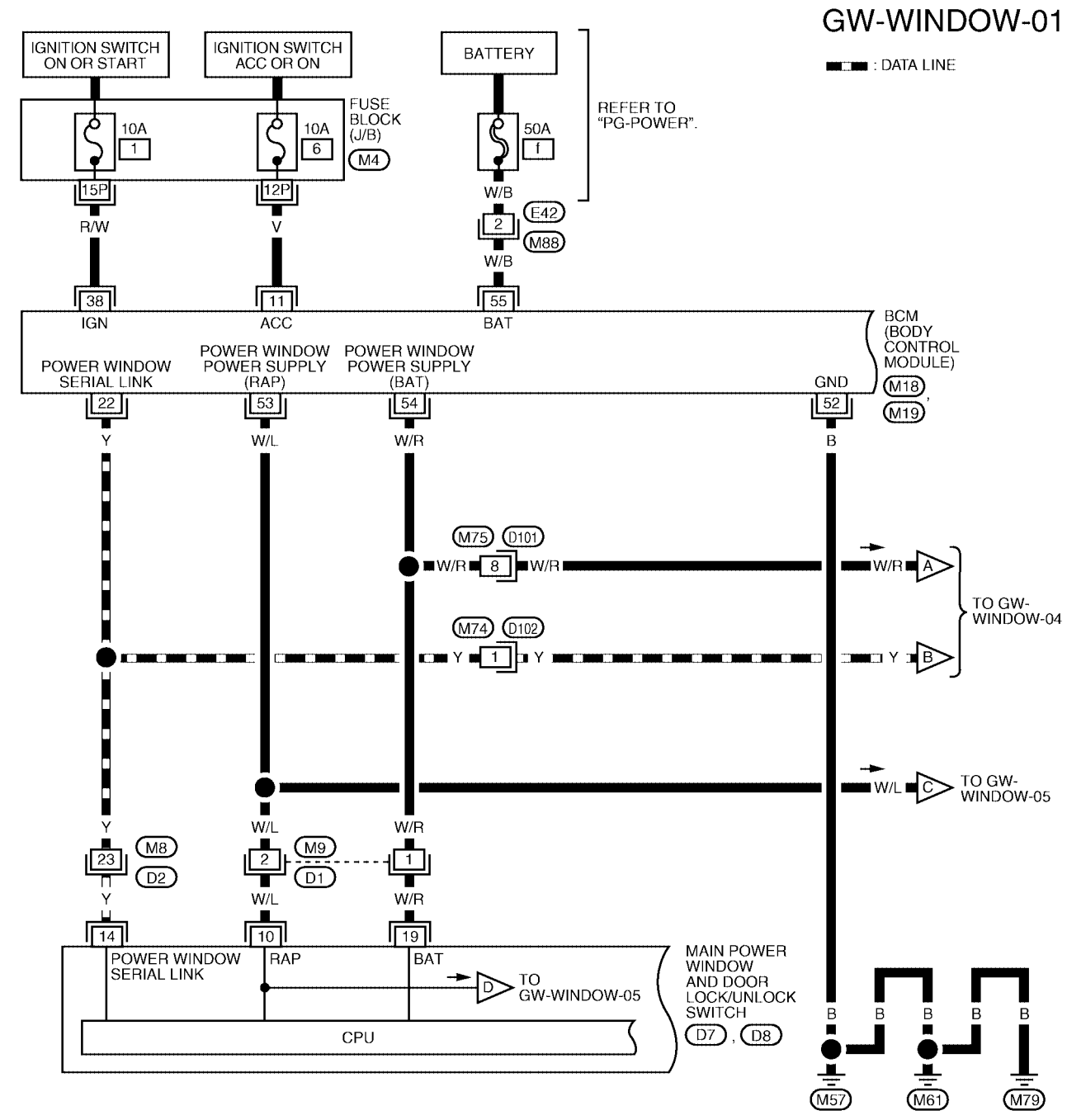
Schematic (With Front Left and Right Power Window Anti-pinch System)

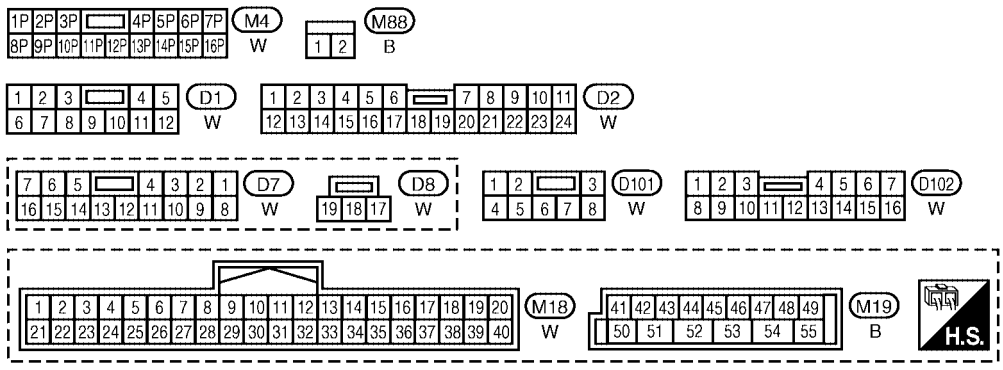
EIS003TF



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

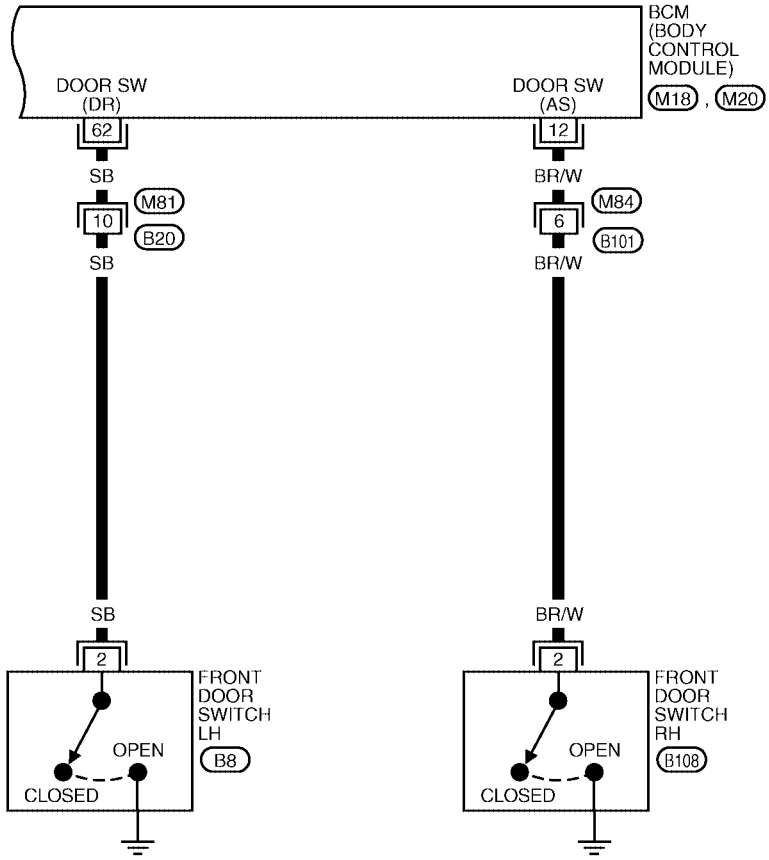
EIS003TG

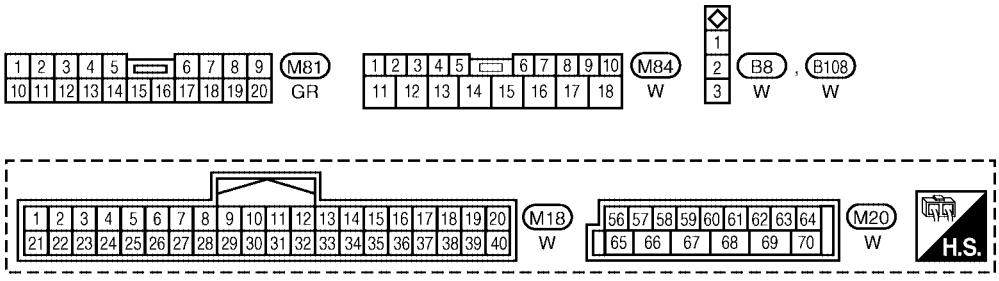




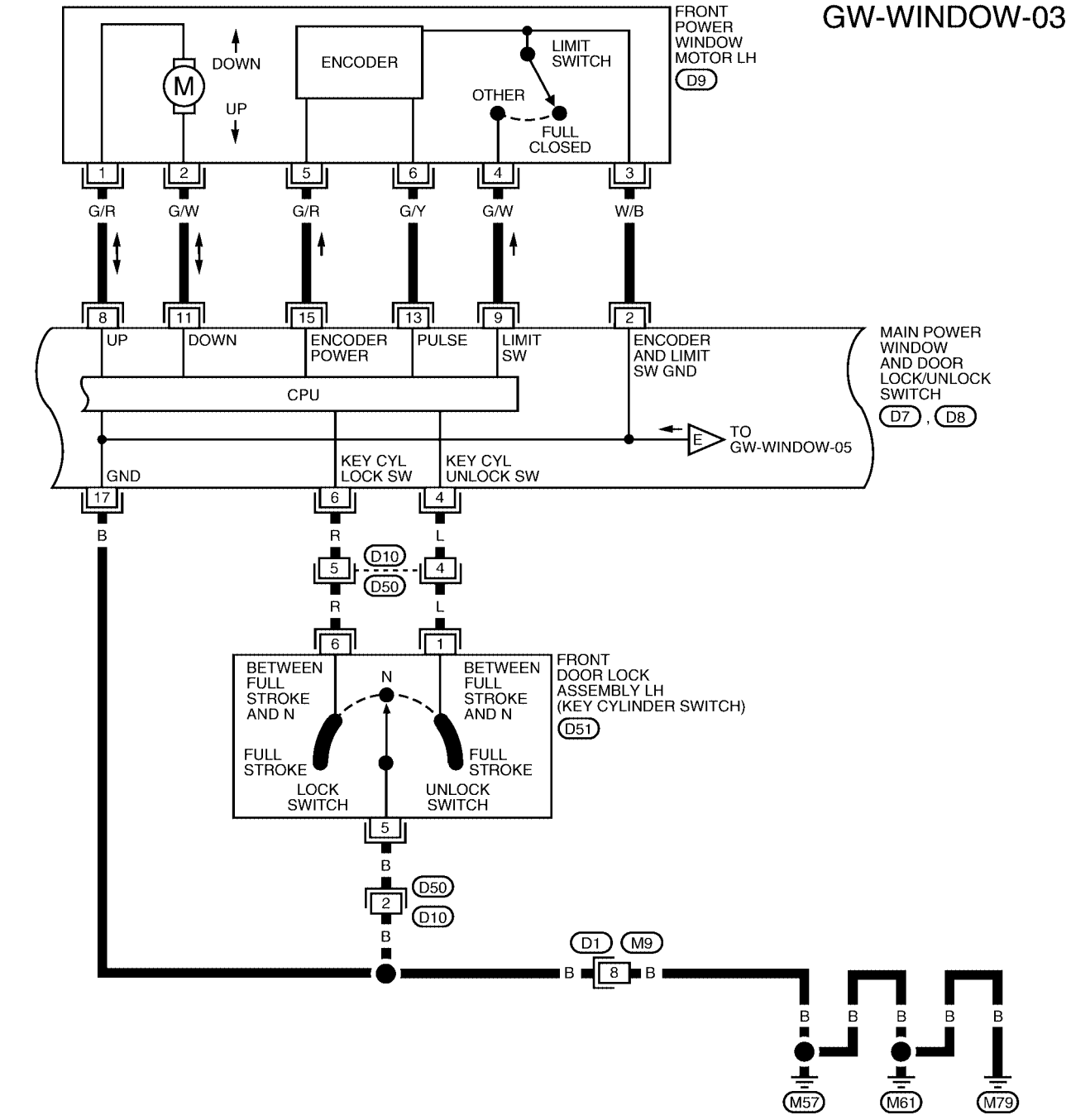
WIWA0366E

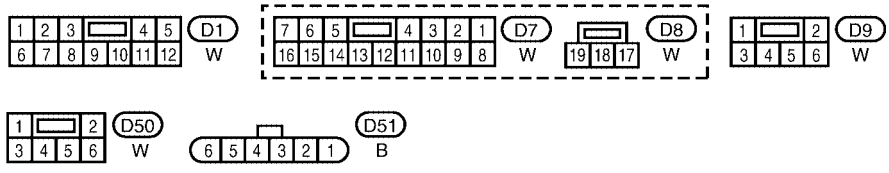
GW-WINDOW-02



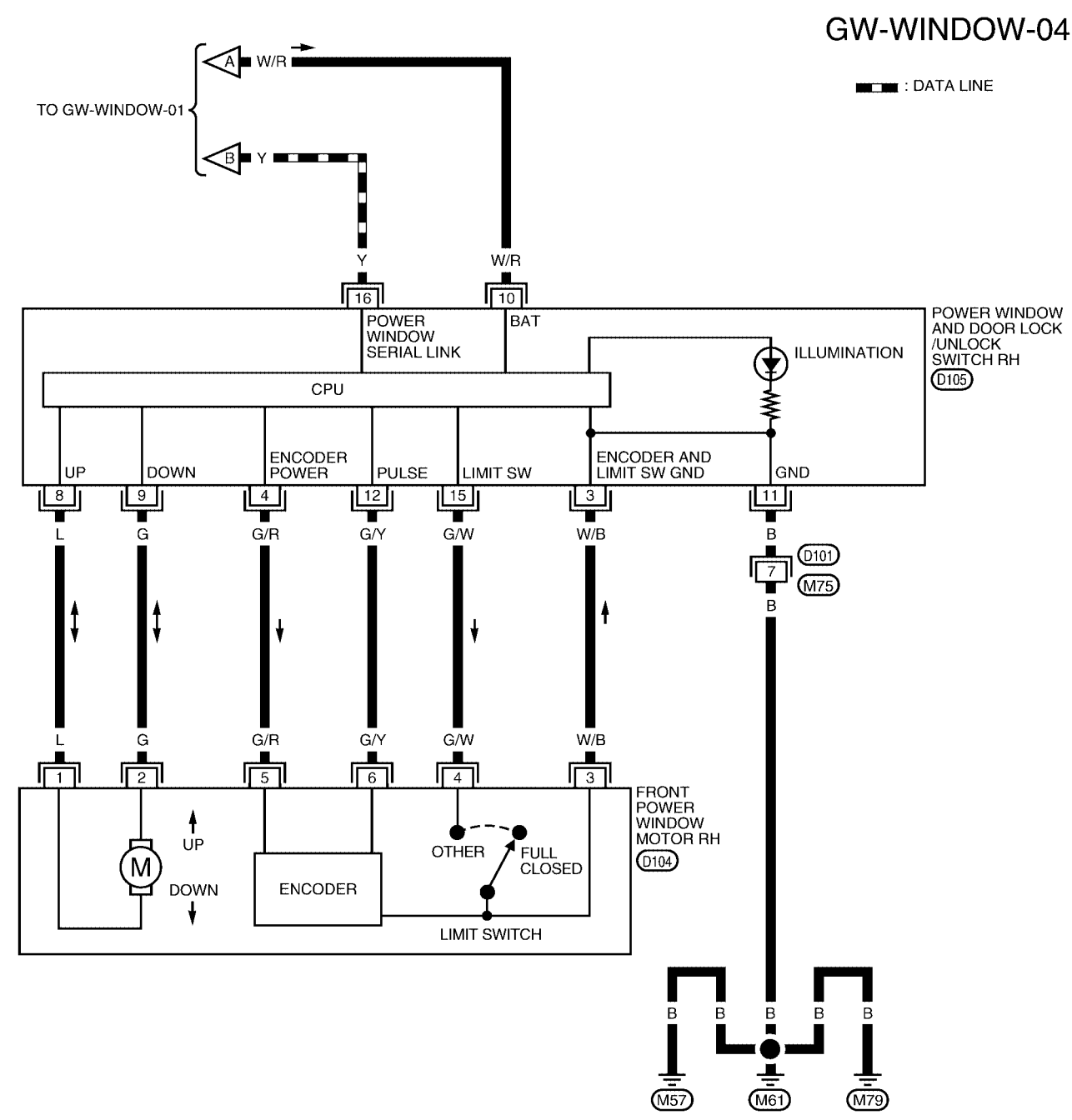


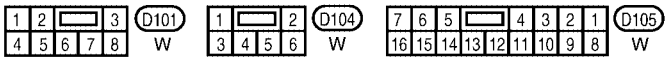
WIWA0367E


GW-WINDOW-03
FRONT POWER WINDOW MOTOR LH
D9
DOWN
UP
ENCODER
LIMIT SWITCH
OTHER
FULL CLOSED
G/R
G/W
G/R
G/Y
G/W
W/B
UP
DOWN
ENCODER POWER
PULSE
LIMIT SW
ENCODER AND LIMIT SW GND
CPU
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
D7 , D8
TO GW-WINDOW-05
GND
KEY CYL LOCK SW
KEY CYL UNLOCK SW
D10
D50
FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH)
D51
BETWEEN FULL STROKE AND N
FULL STROKE
LOCK SWITCH
UNLOCK SWITCH
D1
M9
M57
M61
M79


D1
W
D7
W
D8
W
D9
W
D50
W
D51
B

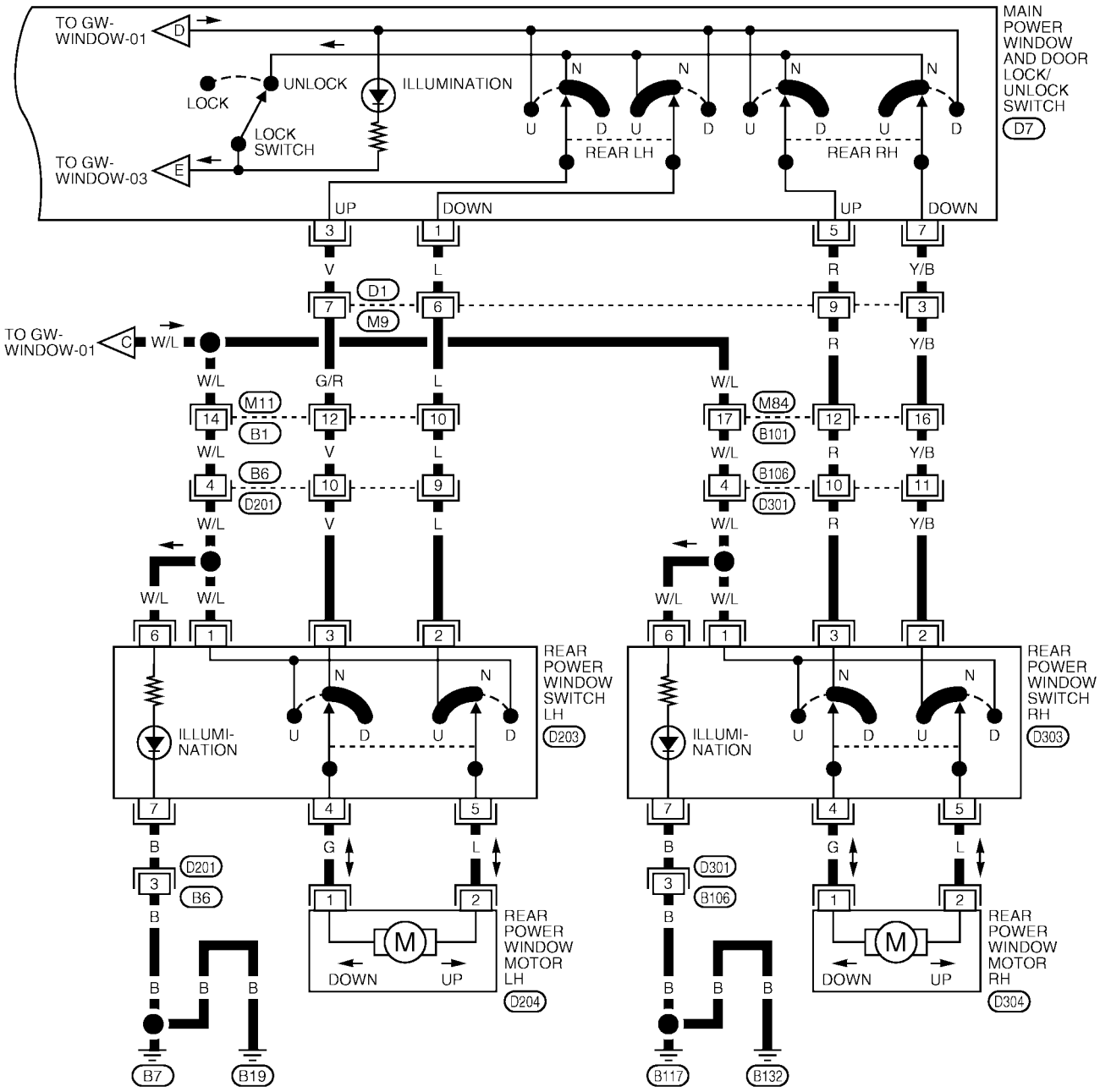
WIWA0368E

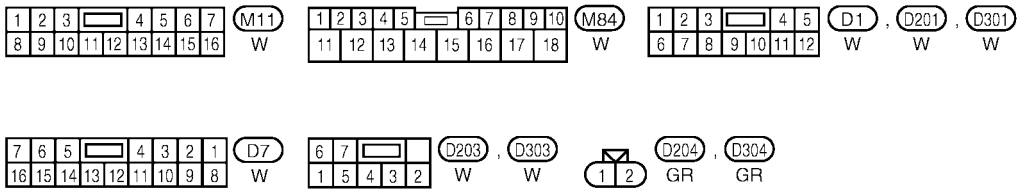

GW-WINDOW-04
: DATA LINE
TO GW-WINDOW-01
A W/R
B Y
Y
W/R
16
10
POWER WINDOW SERIAL LINK
BAT
CPU
ILLUMINATION
POWER WINDOW AND DOOR LOCK /UNLOCK SWITCH RH
D105
UP
DOWN
ENCODER POWER
PULSE
LIMIT SW
ENCODER AND LIMIT SW GND
GND
8
9
4
12
15
3
11
L
G
G/R
G/Y
G/W
W/B
B
D101
7
M75
B
L
G
G/R
G/Y
G/W
W/B
1
2
5
6
4
3
FRONT POWER WINDOW MOTOR RH
D104
M
UP
DOWN
ENCODER
OTHER
FULL CLOSED
LIMIT SWITCH
B
B
B
B
B
M57
M61
M79


D101
W
D104
W
D105
W

WIWA0387E

GW-WINDOW-05

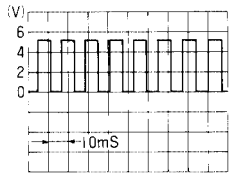
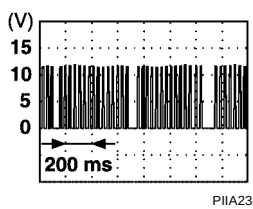




WIWA0369E

Terminal and Reference Value for Main Power Window and Door Lock/Unlock Switch (With Front Left and Right Only Power Window Anti-pinch System)

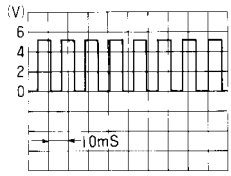
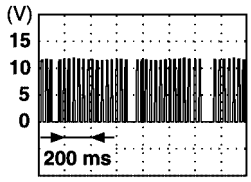
EIS003TH

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
1	L	Rear power window LH DOWN signal	When rear LH switch in main power window and door lock/unlock switch is operated DOWN	Battery voltage
2	W/B	Limit switch and encoder ground	—	0
3	V	Rear power window LH UP signal	When rear LH switch in main power window and door lock/unlock switch is operated UP	Battery voltage
4	L	Front door lock assembly LH (key cylinder switch) unlock signal	Key position (Neutral → Unlocked)	5 → 0
5	R	Rear power window RH UP signal	When rear RH switch in main power window and door lock/unlock switch is operated UP	Battery voltage
6	R	Front door key cylinder LH switch lock signal	Key position (Neutral → Locked)	5 → 0
7	Y/B	Rear power window RH DOWN signal	When rear RH switch in main power window and door lock/unlock switch is operated DOWN	Battery voltage
8	G/R	Front power window motor LH UP signal	When power window motor is operated UP	Battery voltage
9	G/W	Limit switch signal	Front door window LH is between fully-open and just before fully-closed position (ON)	0
			Front door windowLH is between just before fully-closed position and fully-closed position (OFF)	5
10	W/L	RAP signal	When ignition switch ON	Battery voltage
			Within 45 second after ignition switch is turned to OFF	Battery voltage
			More than 45 second after ignition switch is turned to OFF	0
			When front door LH or RH open or power window timer operates	0
11	G/W	Front power window motor LH DOWN signal	When power window motor is operated DOWN	Battery voltage
13	G/Y	Encoder pulse signal	When power window motor operates.	 OCC3383D
14	Y	Power window serial link	When ignition switch ON or power window timer operates	 PIIA2344J

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
15	G/R	Encoder power supply	When ignition switch ON or power window timer operates	10
17	B	Ground	—	0
19	W/R	Battery power supply	—	Battery voltage

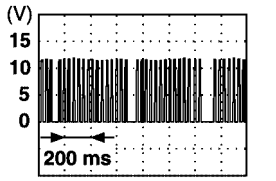
Terminal and Reference Value for Power Window and Door Lock/Unlock Switch RH (With Front Left and Right Only Power Window Anti-pinch System)

EIS003TI

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
3	W/B	Limit switch and encoder ground	—	0
4	G/R	Encoder power supply	When ignition switch ON or power window timer operates	10
8	L	Front power window motor RH UP signal	When power window motor is operated UP	Battery voltage
9	G	Front power window motor RH DOWN signal	When power window motor is operated DOWN	Battery voltage
10	W/R	Battery power supply	—	Battery voltage
11	B	Ground	—	0
12	G/Y	Encoder pulse signal	When power window motor operates	 OCC3383D
15	G/W	Limit switch signal	Front door window RH is between fully-open and just before fully-closed position (ON)	0
			Front door window RH is between just before fully-closed position and fully-closed position (OFF)	5
16	Y	Power window serial link	When ignition switch is ON or power window timer operating	 PIIA2344J

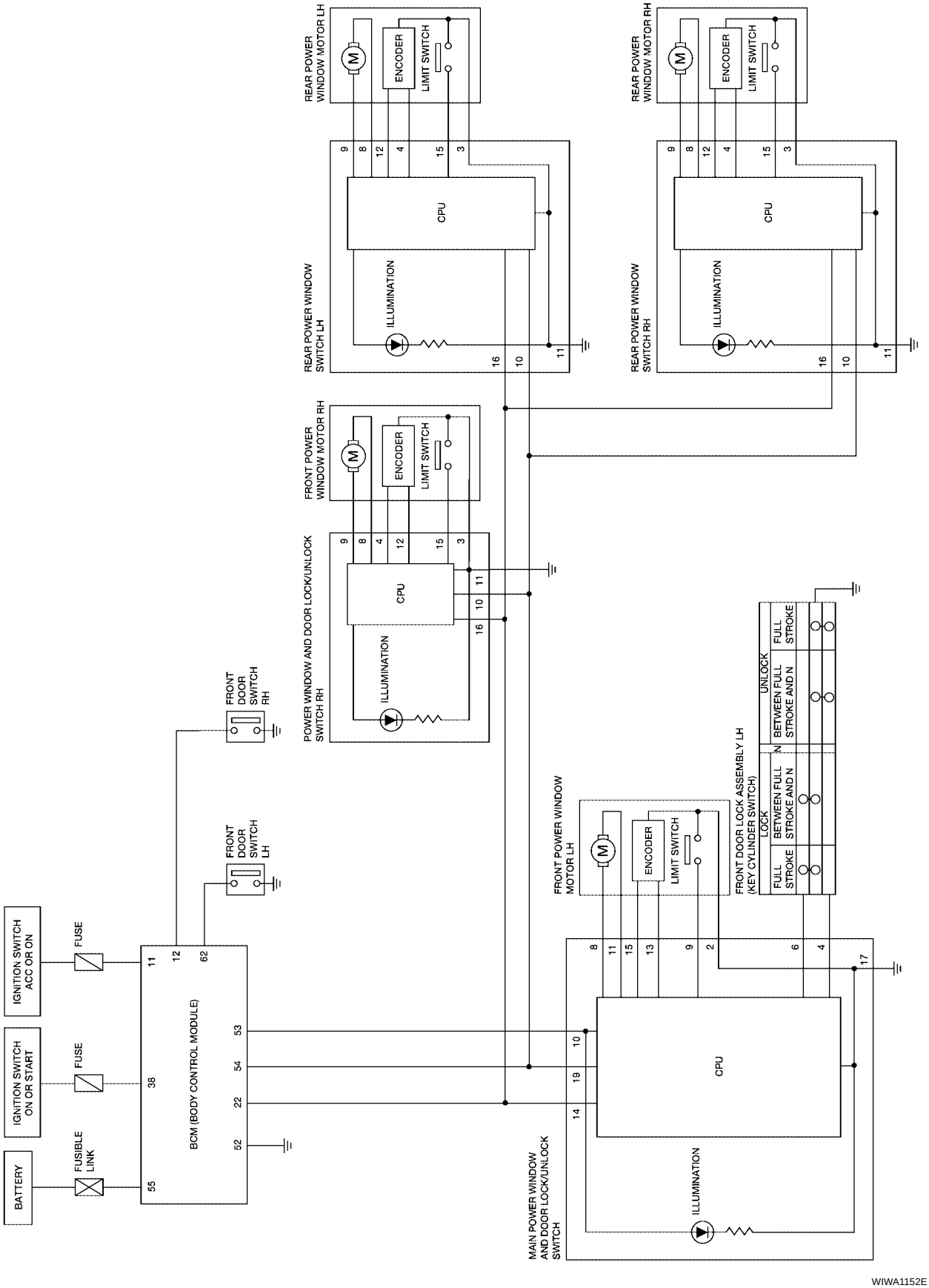
Terminal and Reference Value for BCM (With Front Left and Right Only Power Window Anti-pinch System)

EIS003TJ

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
11	V	Ignition switch (ACC or ON)	Ignition switch (ACC or ON position)	Battery voltage
12	BR/W	Front door switch RH signal	ON (Open)	Battery voltage
			OFF (Close)	0
22	Y	Power window link signal	When ignition switch ON or power window timer operates	 PIIA2344J
38	R/W	Ignition switch (ON or START)	Ignition switch (ON or START position)	Battery voltage
52	B	Ground	—	0
53	W/L	RAP signal	When ignition switch ON	Battery voltage
			Within 45 second after ignition switch is turned to OFF	Battery voltage
			More then 45 second after ignition switch is turned to OFF	0
			When front door LH or RH is open or power window timer operates	0
54	W/R	Power window power supply	—	Battery voltage
55	W/B	Battery power supply	—	Battery voltage
62	SB	Front door switch LH signal	ON (Open)	Battery voltage
			OFF (Close)	0

Schematic (With Front and Rear Power Window Anti-pinch System)

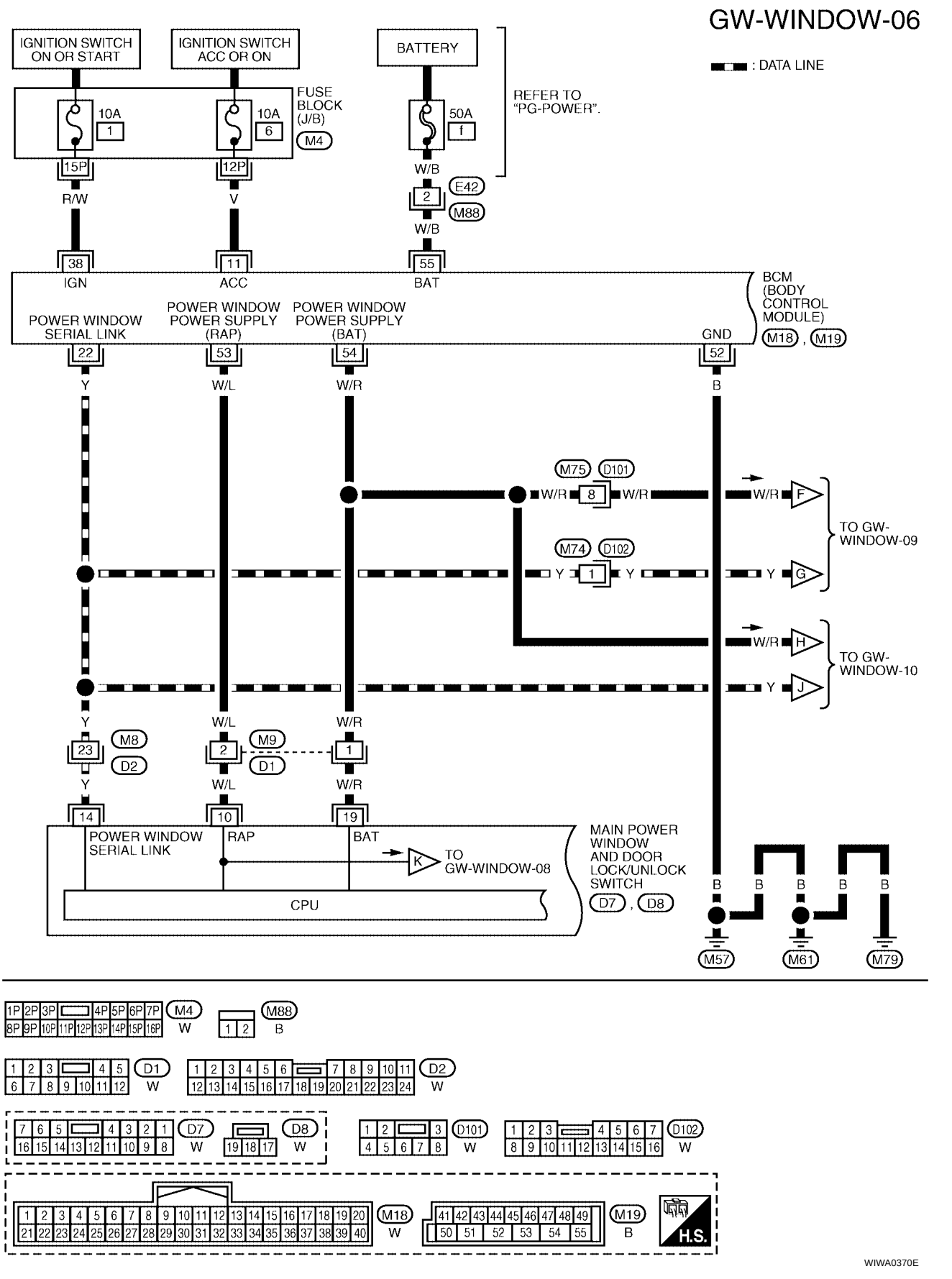
EIS003TK



WIWA1152E

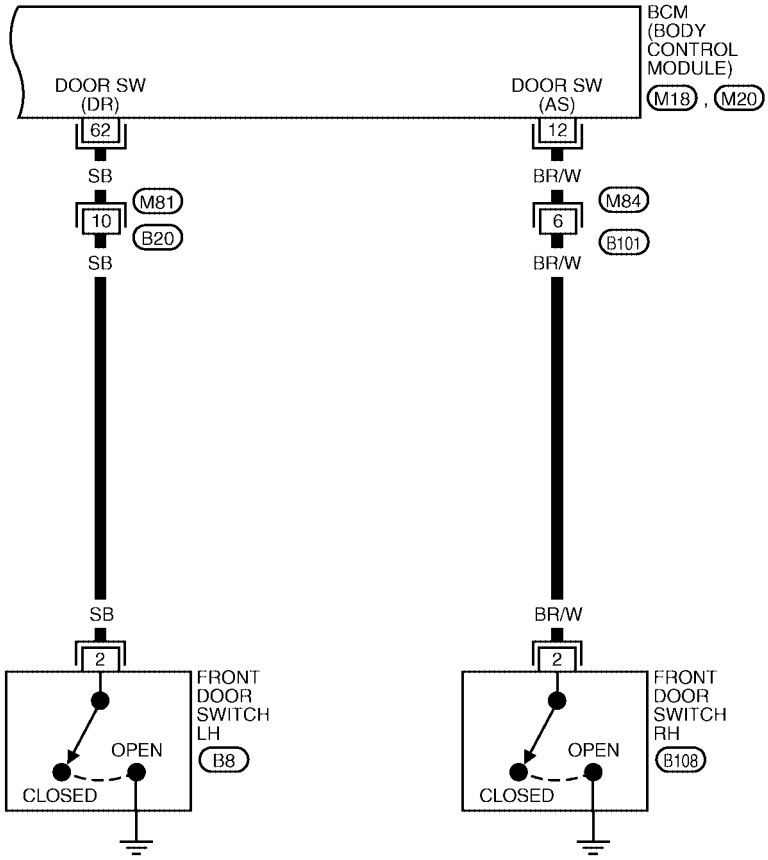
Wiring Diagram — WINDOW — (With Front and Rear Power Window Anti-pinch System)

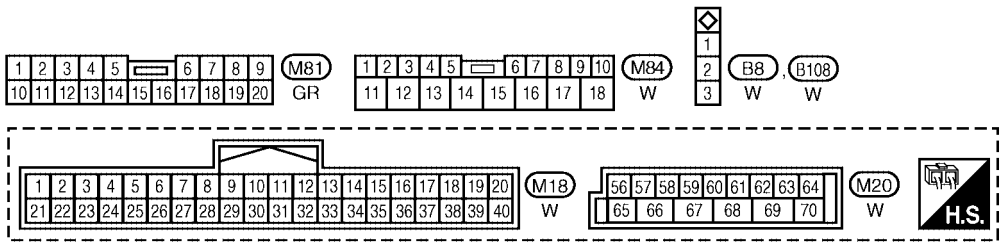
EIS003TL



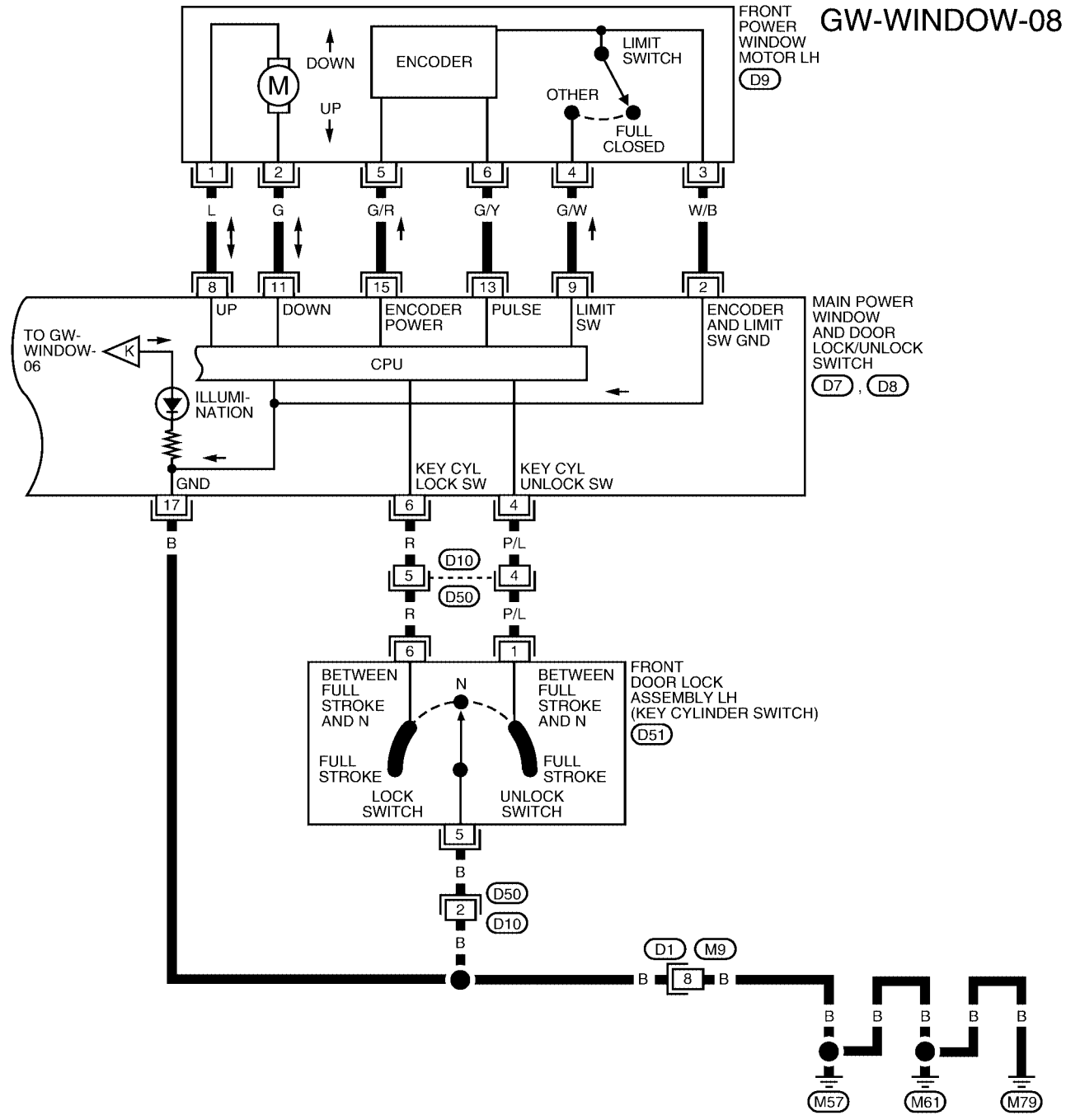
WIWA0370E

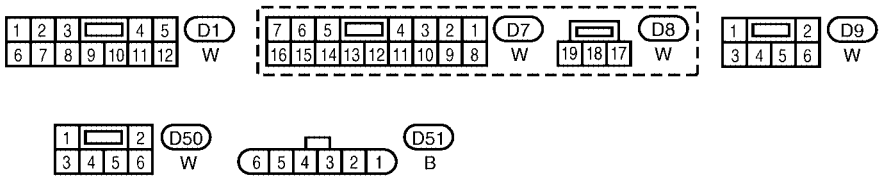
GW-WINDOW-07



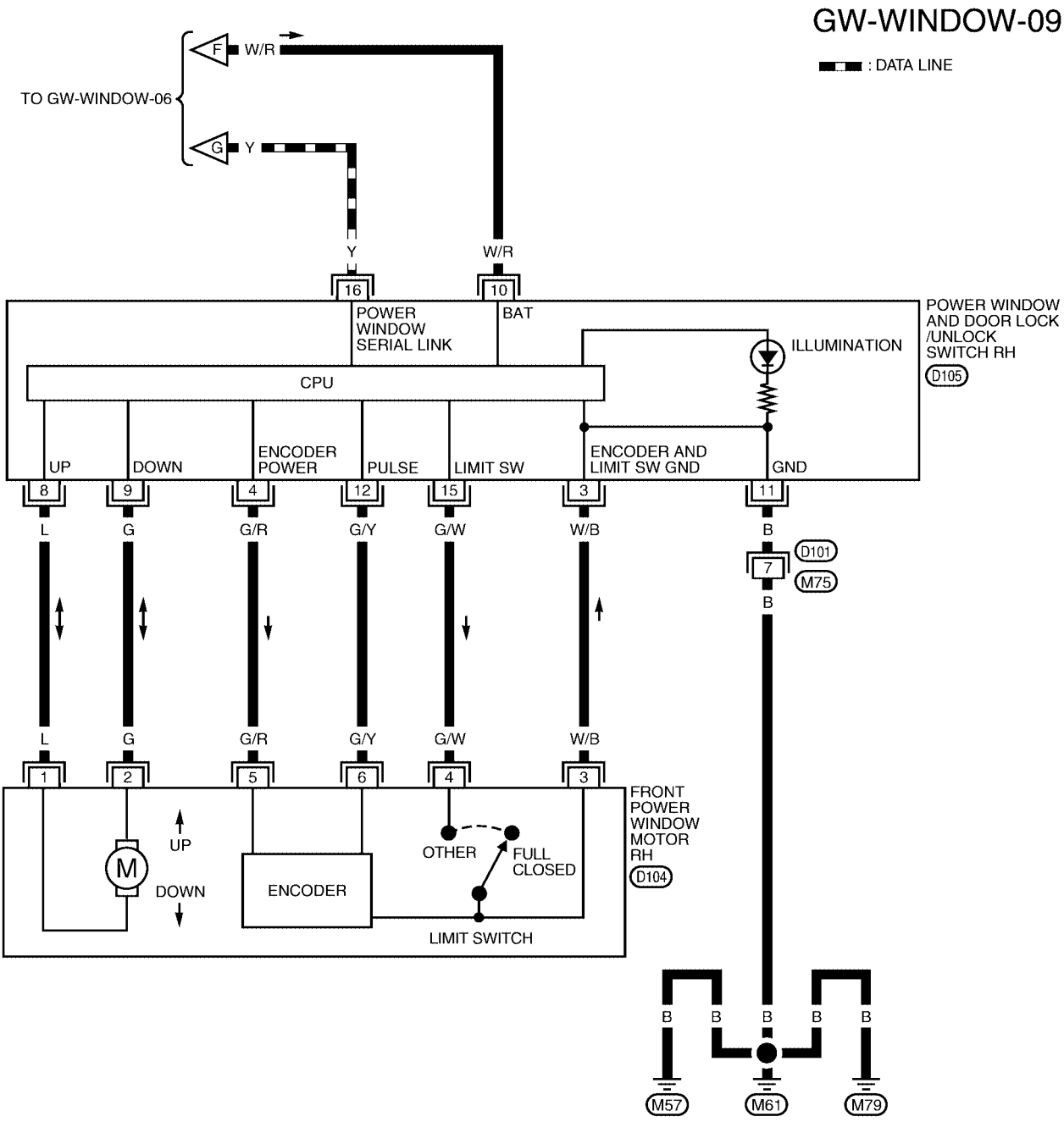


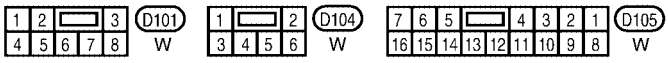
WIWA0371E


GW-WINDOW-08
FRONT POWER WINDOW MOTOR LH
D9
DOWN
UP
ENCODER
LIMIT SWITCH
OTHER
FULL CLOSED
L
G
G/R
G/Y
G/W
W/B
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
D7 , D8
UP
DOWN
ENCODER POWER
PULSE
LIMIT SW
ENCODER AND LIMIT SW GND
TO GW-WINDOW-06
CPU
ILLUMI-NATION
GND
KEY CYL LOCK SW
KEY CYL UNLOCK SW
D10
D50
FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH)
D51
BETWEEN FULL STROKE AND N
FULL STROKE
LOCK SWITCH
UNLOCK SWITCH
D1
M9
M57
M61
M79

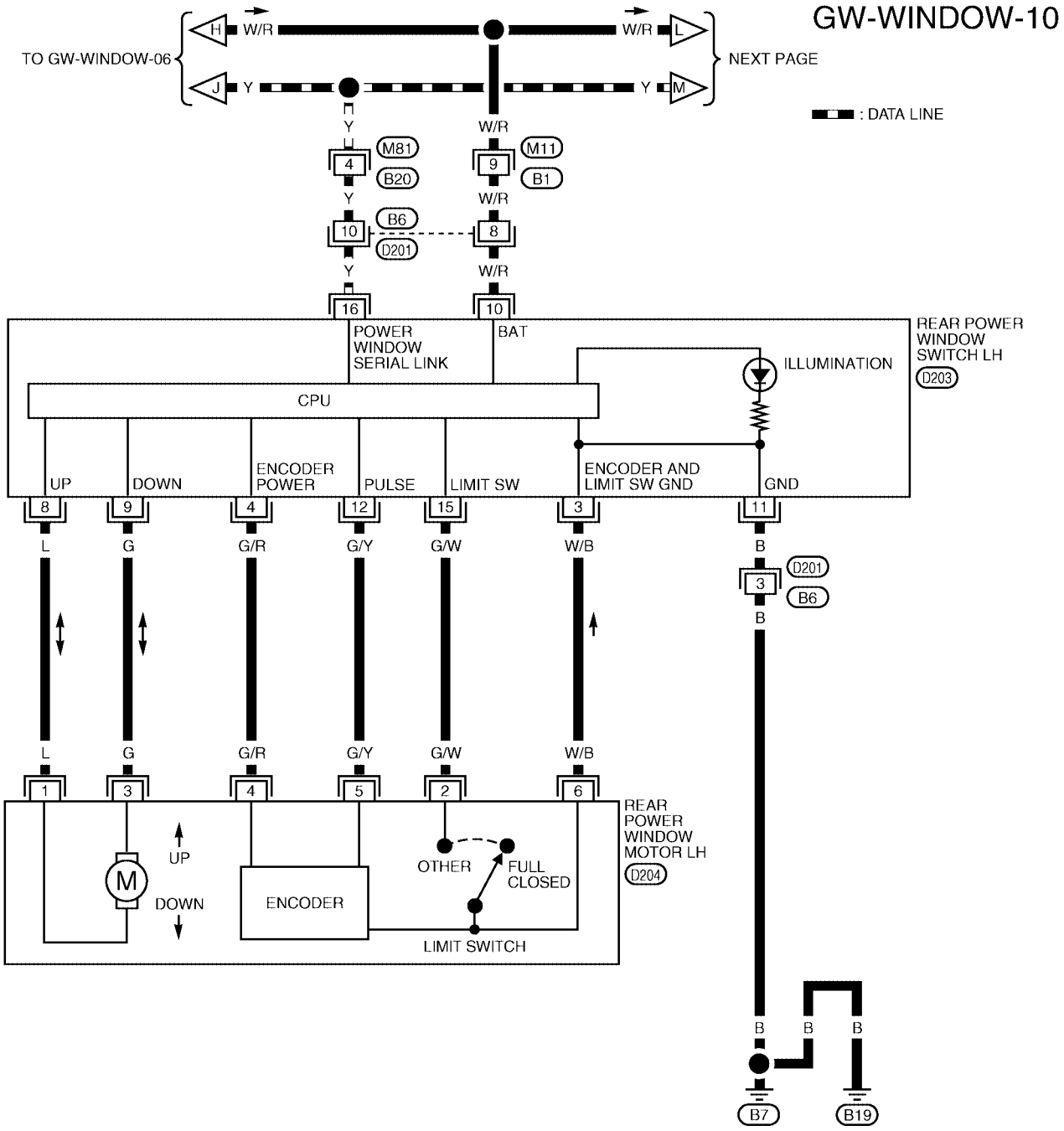

D1
W
D7
W
D8
W
D9
W
D50
W
D51
B

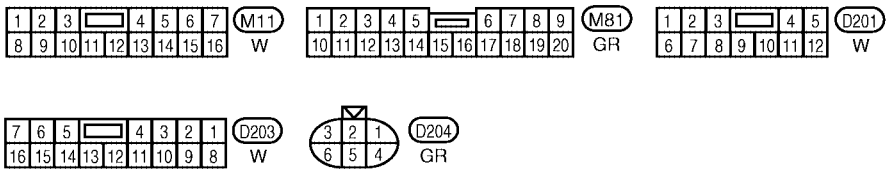
WIWA0372E


GW-WINDOW-09
: DATA LINE
TO GW-WINDOW-06
F W/R
G Y
Y
W/R
16
10
POWER WINDOW SERIAL LINK
BAT
CPU
ILLUMINATION
POWER WINDOW AND DOOR LOCK /UNLOCK SWITCH RH
D105
UP
DOWN
ENCODER POWER
PULSE
LIMIT SW
ENCODER AND LIMIT SW GND
GND
8
9
4
12
15
3
11
L
G
G/R
G/Y
G/W
W/B
B
D101
7
M75
B
L
G
G/R
G/Y
G/W
W/B
1
2
5
6
4
3
FRONT POWER WINDOW MOTOR RH
D104
M
UP
DOWN
ENCODER
OTHER
FULL CLOSED
LIMIT SWITCH
B
B
B
B
B
M57
M61
M79

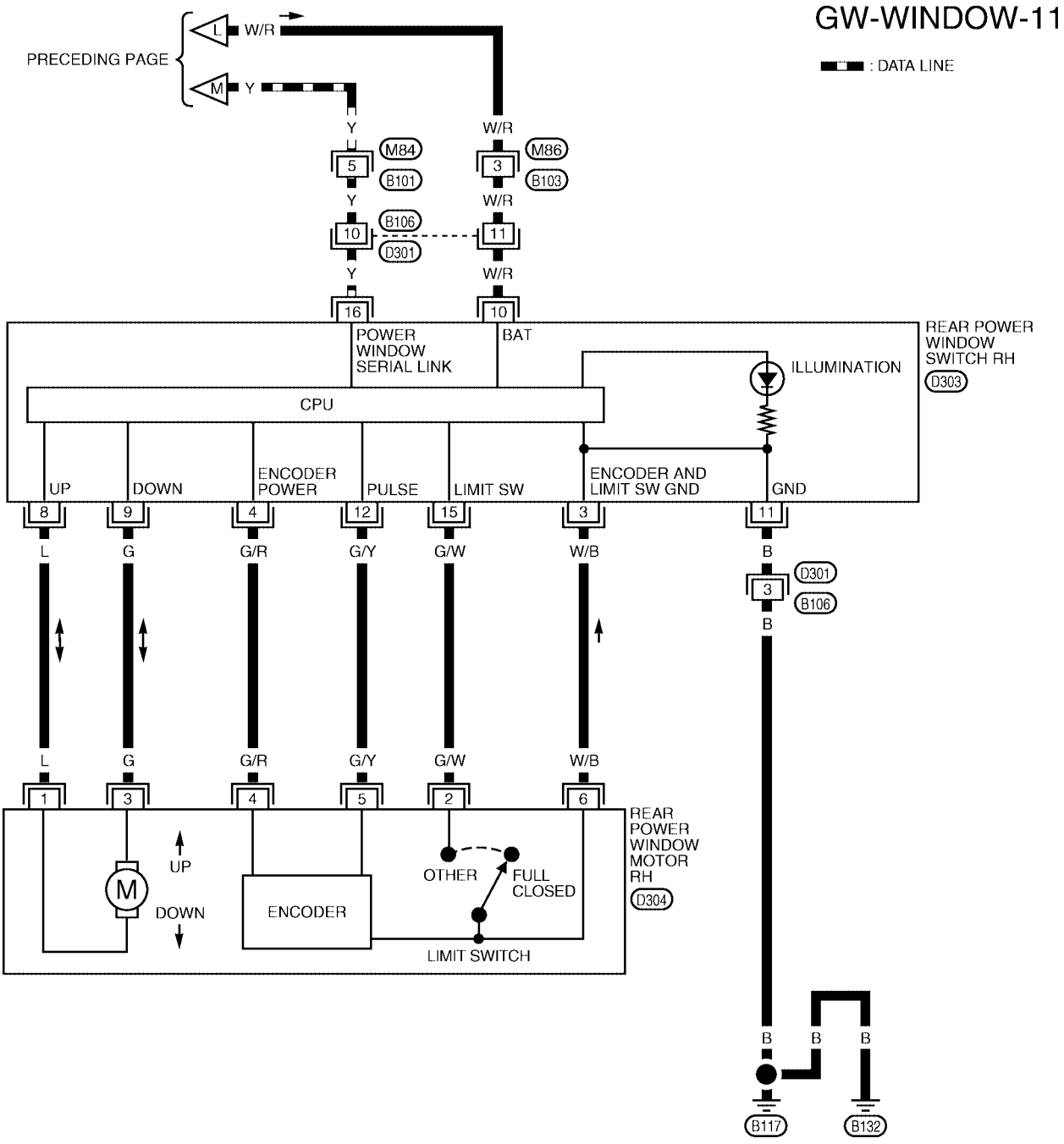

D101
W
D104
W
D105
W

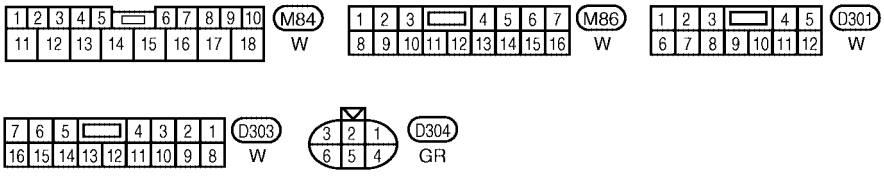
WIWA0373E


GW-WINDOW-10
TO GW-WINDOW-06
NEXT PAGE
: DATA LINE
H
W/R
L
J
Y
M
M81
M11
B20
B1
B6
D201
POWER WINDOW SERIAL LINK
BAT
CPU
ILLUMINATION
REAR POWER WINDOW SWITCH LH
D203
UP
DOWN
ENCODER POWER
PULSE
LIMIT SW
ENCODER AND LIMIT SW GND
GND
REAR POWER WINDOW MOTOR LH
D204
ENCODER
OTHER
FULL CLOSED
LIMIT SWITCH
B7
B19


M11 W
M81 GR
D201 W
D203 W
D204 GR

WIWA0374E

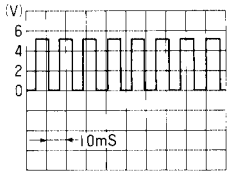
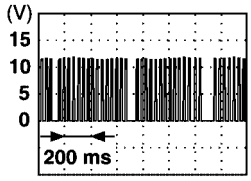

GW-WINDOW-11
: DATA LINE
PRECEDING PAGE
L W/R
M Y
Y
W/R
M84
5
B101
M86
3
B103
Y
W/R
B106
10
D301
11
Y
W/R
16
10
POWER WINDOW SERIAL LINK
BAT
REAR POWER WINDOW SWITCH RH
D303
ILLUMINATION
CPU
UP
DOWN
ENCODER POWER
PULSE
LIMIT SW
ENCODER AND LIMIT SW GND
GND
8
9
4
12
15
3
11
L
G
G/R
G/Y
G/W
W/B
B
D301
3
B106
B
L
G
G/R
G/Y
G/W
W/B
1
3
4
5
2
6
REAR POWER WINDOW MOTOR RH
D304
M
UP
DOWN
ENCODER
OTHER
FULL CLOSED
LIMIT SWITCH
B
B
B
B117
B132


M84
W
M86
W
D301
W
D303
W
D304
GR

WIWA0375E

Terminal and Reference Value for Main Power Window and Door Lock/Unlock Switch (With Front and Rear Power Window Anti-pinch System)

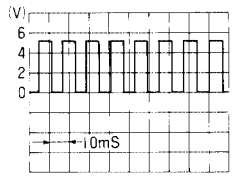
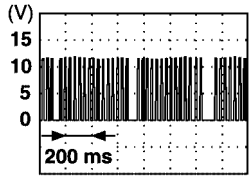
EIS003TM

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
2	W/B	Limit switch and encoder ground	—	0
4	P/L	Front door lock assembly LH (key cylinder switch)	Key position (Neutral → Unlocked)	5 → 0
6	R	Front door lock assembly LH key cylinder switch)	Key position (Neutral → Locked)	5 → 0
8	L	Front power window motor LH UP signal	When power window motor is operated UP	Battery voltage
9	G/W	Limit switch signal	Front door window LH is between fully-open and just before fully-closed position (ON)	0
			Front door window LH is between just before fully-closed position and fully-closed position (OFF)	5
10	W/L	RAP signal	When ignition switch ON	Battery voltage
			Within 45 second after ignition switch is turned to OFF	Battery voltage
			More than 45 second after ignition switch is turned to OFF	0
			When front door LH or RH is open or power window timer operates	0
11	G	Front power window motor LH DOWN signal	When power window motor is operated DOWN	Battery voltage
13	G/Y	Encoder pulse signal	When power window motor operates	 OCC3383D
14	Y	Power window serial link	When ignition switch ON or power window timer operates	 PIIA2344J
15	G/R	Encoder power supply	When ignition switch ON or power window timer operates	10
17	B	Ground	—	0
19	W/R	Battery power supply	—	Battery voltage

Terminal and Reference Value for Power Window and Door Lock/Unlock Switch RH and Rear Power Window Switch LH and RH (With Front and Rear Window Anti-pinch System)

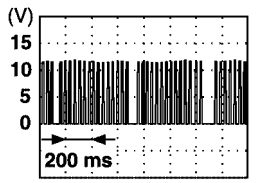
EIS003TN

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
3	W/B	Limit switch and encoder ground	—	0
4	G/R	Encoder power supply	When ignition switch ON or power window timer operates	10

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
8	L	Power window motor UP signal	When power window motor is operated UP	Battery voltage
9	G	Power window motor DOWN signal	When power window motor is operated DOWN	Battery voltage
10	W/R	Battery power supply	—	Battery voltage
11	B	Ground	—	0
12	G/Y	Encoder pulse signal	When power window motor operates	 OCC3383D
15	G/W	Limit switch signal	Door window is between fully-open and just before fully-closed position (ON)	0
			Door window is between just before fully-closed position and fully-closed position (OFF)	5
16	Y	Power window serial link	When ignition switch ON or power window timer operates	 PIIA2344J

Terminal and Reference Value for BCM (With Front and Rear Power Window Anti-pinch)

EIS003TO

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
11	V	Ignition switch (ACC or ON)	Ignition switch (ACC or ON position)	Battery voltage
12	BR/W	Front door switch RH signal	ON (Open)	Battery voltage
			OFF (Close)	0
22	Y	Power window serial link	When ignition switch is ON or power window timer operates	 PIIA2344E
38	R/W	Ignition switch (ON or START)	Ignition switch (ON or START position)	Battery voltage
52	B	Ground	—	0
53	W/L	RAP signal	When ignition switch is ON	Battery voltage
			Within 45 second after ignition switch is turned to OFF	Battery voltage
			More then 45 second after ignition switch is turned to OFF	0
			When front door LH or RH is open in power window timer is operating	0
54	W/R	Power window power supply	—	Battery voltage
55	W/B	Battery power supply	—	Battery voltage
62	SB	Front door switch LH signal	ON (Open)	Battery voltage
			OFF (Close)	0

Work Flow

EIS003TP

1. Check the symptom and customer's requests.
2. Understand the outline of system. Refer to GW-20, "System Description"
3. According to the trouble diagnosis chart, repair or replace the cause of the malfunction.
   Refer to GW-50, "Trouble Diagnoses Symptom Chart (With Front Left and Right Only Power Window Anti-pinch System)" or GW-51, "Trouble Diagnoses Symptom Chart (With Front and Rear Power Window Anti-pinch System)" .
4. Does power window system operate normally? Yes, GO TO 5, If No, GO TO 3.
5. Inspection End.

CONSULT-II Function (BCM)

EIS003TQ

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

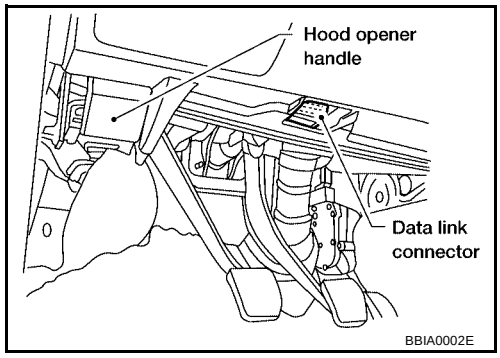
BCM diagnostic test item	Diagnostic mode	Content
Inspection by part	WORK SUPPORT	Changes setting of each function.
	DATA MONITOR	Displays BCM input/output data in real time.
	ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.
	SELF-DIAG RESULTS	Displays BCM self-diagnosis 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 INSPECTION PROCEDURE

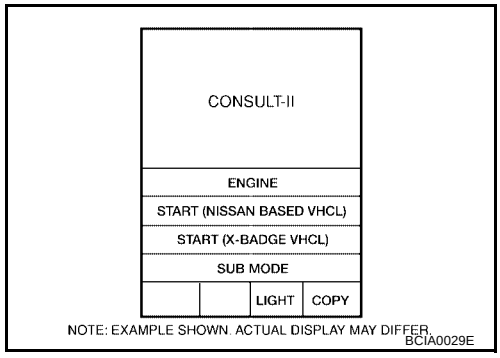
CAUTION:

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

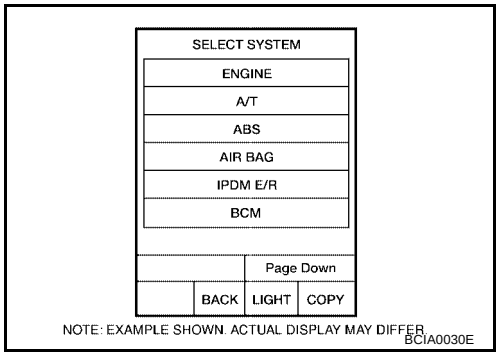
1. Connect CONSULT-II and CONSULT-II CONVERTER to the data link connector.



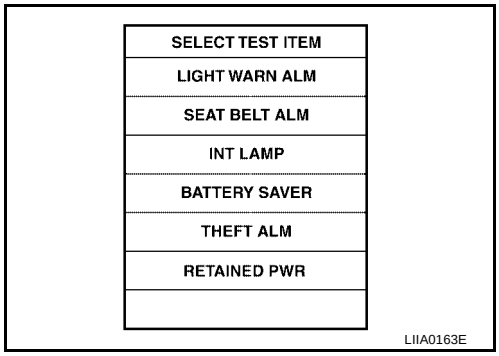
2. Turn ignition switch ON.
3. Touch “START (NISSAN BASED VHCL)”.



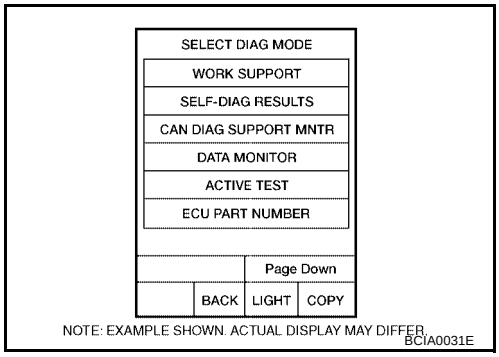
4. Touch “BCM”.
   If “BCM” is not indicated, refer to GI-37, "CONSULT-II Data Link Connector (DLC) Circuit" .



5. Touch “RETAINED PWR”.



6. Select diagnosis mode.



ACTIVE TEST

Test Item	Description
RETAINED PWR	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. **NOTE:** 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.

WORK SUPPORT

Work item	Description
RETAINED PWR	RAP signal’s power supply period can be changed by mode setting. Selects RAP signal’s power supply period between three steps ● MODE1 (45 sec.) / MODE2 (OFF) / MODE 3 (2 min.).

DATA MONITOR

Work item	Description
IGN ON SW	Indicates (ON / OFF) condition of ignition switch

DOOR SW–DR	Indicates (ON / OFF) condition of front door switch LH
DOOR SW–AS	Indicates (ON / OFF) condition of front door switch RH

Trouble Diagnoses Symptom Chart (With Front Left and Right Only Power Window Anti-pinch System)

EIS003TR

- Check that other systems using the signal of the following systems operate normally.

Symptom	Repair order	Refer to page
None of the power windows can be operated using any switch	1. BCM power supply and ground circuit check	GW-52
	2. Main power window and door lock/unlock switch supply and ground circuit check	GW-53
	3. Power window serial link check	GW-85 and GW-87
Front power window LH alone does not operate	1. Front power window motor LH circuit check	GW-56
	2. Replace main power window and door lock/unlock switch	—
Front power window RH alone does not operate	1. Power window and door lock/unlock switch RH power and ground circuit check	GW-54
	2. Power window serial link check	GW-85
	3. Front power window motor RH circuit check	GW-58
	4. Replace BCM	BCS-20
Rear power window LH alone does not operate	1. Rear power window motor LH circuit check	GW-58
Rear power window RH alone does not operate	1. Rear power window motor RH circuit check	GW-60
Anti-pinch system does not operate normally (Front LH)	1. Door window sliding part malfunction ● A foreign material adheres to window glass or glass run rubber. ● Glass run rubber wear or deformation. ● Sash is tilted too much, or not enough.	—
	2. Limit switch adjusting	GW-89
	3. Limit switch circuit check LH	GW-62
	4. Encoder circuit check LH	GW-71
Anti-pinch system does not operate normally (Front RH)	1. Door window sliding part malfunction ● A foreign material adheres to window glass or glass run rubber. ● Glass run rubber wear or deformation. ● Sash is tilted too much, or not enough.	—
	2. Limit switch adjusting	GW-89
	3. Limit switch circuit check RH	GW-67
	4. Encoder circuit check RH	GW-75
Power window retained power operation does not operate properly	1. Check the retained power operation mode setting.	GW-48
	2. Door switch check	GW-79
	3. Replace BCM.	BCS-20
Does not operate by front door lock assembly LH (key cylinder switch)	1. Front door lock assembly LH (key cylinder switch) check	GW-81
	2. Replace main power window and door lock/unlock switch	—
Power window lock switch does not function	1. Power window lock switch circuit check	GW-85 and GW-87

Trouble Diagnoses Symptom Chart (With Front and Rear Power Window Anti-pinch System)

EIS003TS

- Check that other systems using the signal of the following systems operate normally.

Symptom	Repair order	Refer to page
None of the power windows can be operated using any switch	1. BCM power supply and ground circuit check	GW-52
	2. Main power window and door lock/unlock switch power supply and ground circuit check	GW-53
	3. Power window serial link check	GW-85
Front power window LH alone does not operate	1. Front power window motor LH circuit check	GW-57
	2. Replace main power window and door lock/unlock switch	EI-30
Front power window RH alone does not operate	1. Front power window switch RH power and ground circuit check	GW-54
	2. Power window serial link check	GW-85
	3. Front power window motor RH circuit check	GW-58
	4. Replace BCM	BCS-20
Rear power window LH alone does not operate	1. Rear power window switch LH or RH power and ground circuit check	GW-56
	2. Rear power window motor LH circuit check	GW-61
	3. Power window serial link check	GW-87
	4. Replace rear power window switch LH	EI-31
Rear power window RH alone does not operate	1. Rear power window switch LH or RH power and ground circuit check	GW-56
	2. Rear power window motor RH circuit check	GW-62
	3. Power window serial link check	GW-87
	4. Replace rear power window switch RH	EI-31
Anti-pinch system does not operate normally (Front LH)	1. Door window sliding part malfunction ● A foreign material adheres to window glass or glass run rubber. ● Glass run rubber wear or deformation. ● Sash is tilted too much, or not enough.	—
	2. Limit switch adjusting	GW-89
	3. Limit switch circuit check LH	GW-65
	4. Encoder circuit check LH	GW-73
Anti-pinch system does not operate normally (Front RH)	1. Door window sliding part malfunction ● A foreign material adheres to window glass or glass run rubber. ● Glass run rubber wear or deformation. ● Sash is tilted too much, or not enough.	—
	2. Limit switch adjusting	GW-89
	3. Limit switch circuit check RH	GW-67
	4. Encoder circuit check RH	GW-75

Symptom	Repair order	Refer to page
Anti-pinch system does not operate normally (Rear LH or RH)	1. Door window sliding part malfunction ● A foreign material adheres to window glass or glass run rubber. ● Glass run rubber wear or deformation. ● Sash is tilted too much, or no enough.	—
	2. Limit switch adjusting	GW-89
	3. Limit switch circuit check (rear LH or RH)	GW-69
	4. Encoder circuit check (rear LH or RH)	GW-77
Power window retained power operation does not operate properly	1. Check the retained power operation mode setting	GW-48
	2. Door switch check	GW-79
	3. Replace BCM	BCS-20
Does not operate by front door lock assembly LH (key cylinder switch)	1. Front doorlock assembly LH (key cylinder switch) check	GW-81
	2. Replace main power window and door lock/unlock switch	EI-30
Power window lock switch does not function	1. Power window lock switch circuit check	GW-37

BCM Power Supply and Ground Circuit Check

EIS003TT

1. CHECK BCM FUSES AND FUSIBLE LINK

Check 50A fusible link (letter **f** located in the fuse and fusible link box).
Check 10A fuses [No.1 and 6, located in fuse block (J/B)].

NOTE:
Refer to GW-20, "Component Parts and Harness Connector Location" .

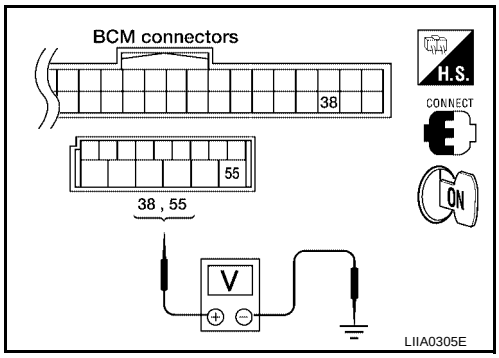
OK or NG

OK >> GO TO 2.
NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.Refer to

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between BCM connector M18, M19 terminal 38, 55 and ground.

38 (R/W) - Ground : Battery voltage
55 (W/B) - Ground : Battery voltage



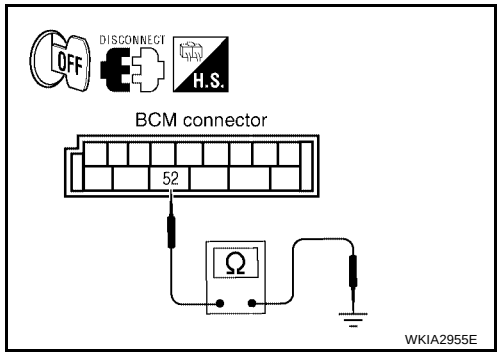
OK or NG

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

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM.
3. Check continuity between BCM connector M19 terminal 52 and ground.

52 (B) - Ground : Continuity should exist.



OK or NG

OK >> Power supply and ground circuit is OK.
NG >> Repair or replace harness.

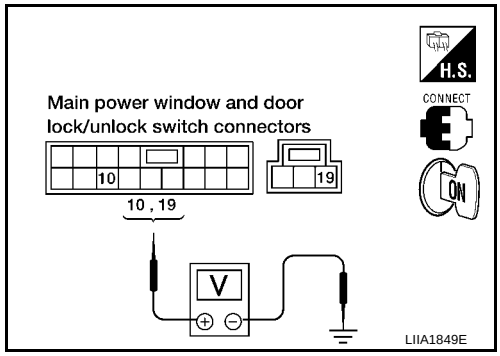
Main Power Window and Door Lock/Unlock Switch Power Supply Circuit Check System

EIS003TU

1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between main power window and door lock/unlock switch connector D7 terminal 10, D8 terminal 19 and ground.

10 (W/L) - Ground : Battery voltage
19 (W/R) - Ground : Battery voltage



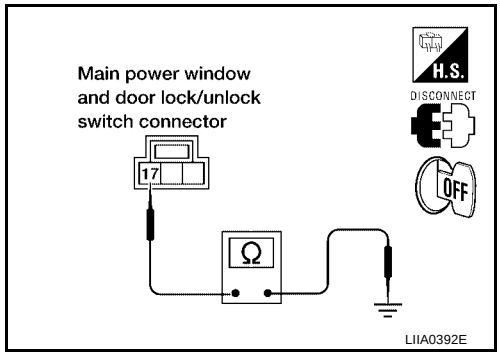
OK or NG

OK >> GO TO 2.
NG >> Repair or replace harness.

2. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch.
3. Check continuity between main power window and door lock/unlock switch connector D8 terminal 17 and ground.

17 (B) - Ground : Continuity should exist.



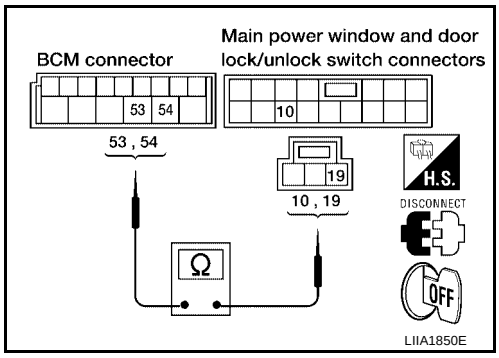
OK or NG

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

3. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH POWER SUPPLY CIRCUIT

1. Disconnect BCM.
2. Check continuity between BCM connector M19 terminal 53, 54 and main power window and door lock/unlock switch connector D7 terminal 10 and D8 terminal 19.

53 (W/L) – 10 (W/L) : Continuity should exist.
54 (W/R) – 19 (W/R) : Continuity should exist.



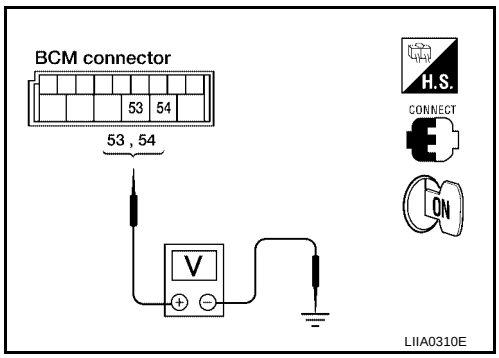
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM.
2. Turn ignition switch ON.
3. Check voltage between BCM connector M19 terminal 53, 54 and ground.

53 (W/L) - Ground : Battery voltage
54 (W/R) - Ground : Battery voltage



OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace BCM. Refer to BCS-20, "Removal and Installation of BCM" .

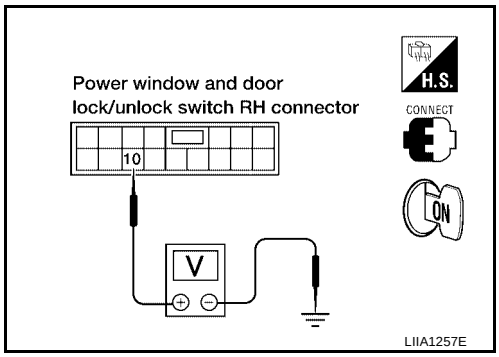
Power Window and Door Lock/Unlock Switch RH Power Supply and Ground Circuit Check

EIS003TV

1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between power window and door lock/unlock switch RH connector D105 terminal 10 and ground.

10 (W/R) - Ground : Battery voltage



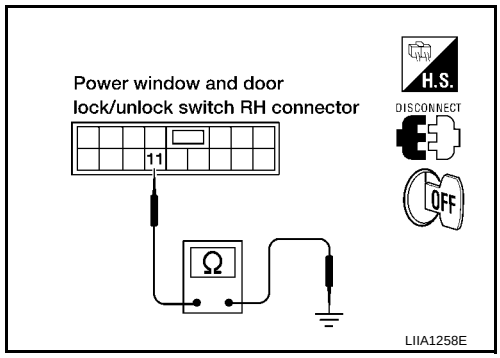
OK or NG

OK >> GO TO 2.
NG >> Repair or replace harness.

2. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front power window switch RH.
3. Check continuity between power window and door lock/unlock switch RH connector D105 terminal 11 and ground.

11 (B) - Ground : Continuity should exist.



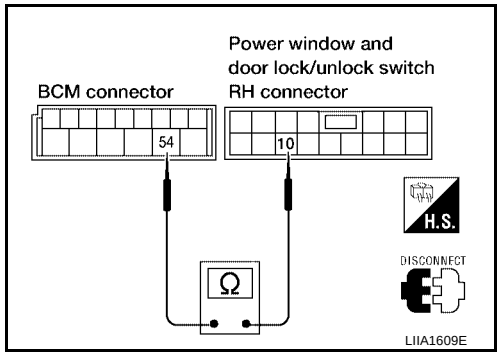
OK or NG

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

3. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH POWER SUPPLY CIRCUIT

1. Disconnect BCM.
2. Check continuity between BCM connector M19 terminal 54 and power window and door lock/unlock switch RH connector D105 terminal 10.

54 (W/R) - 10 (W/R) : Continuity should exist.



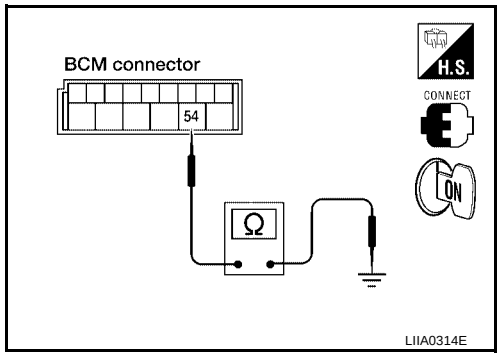
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM.
2. Turn ignition switch ON.
3. Check voltage between BCM connector M19 terminal 54 and ground.

54 (W/R) - Ground : Battery voltage



OK or NG

OK >> Replace power window and door lock/unlock switch RH.
NG >> Replace BCM. Refer to BCS-20, "Removal and Installation of BCM" .

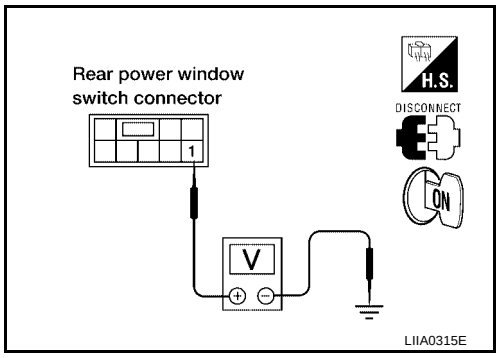
Rear Power Window Switch LH or RH Power Supply and Ground Circuit Check (With Front Left and Right Only Power Window Anti-pinch System)

EIS003TW

1. CHECK POWER WINDOW POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between rear power window switch LH or RH connector D203 (LH), D303 (RH) terminal 10 and ground.

1 (W/L) - Ground : Battery voltage



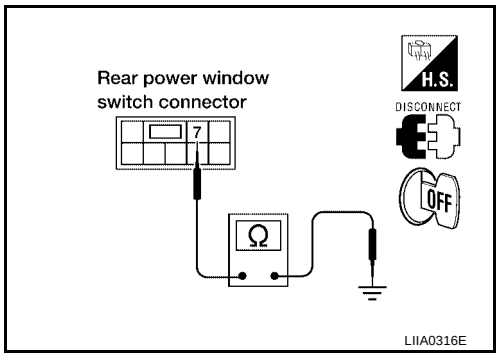
OK or NG

OK >> GO TO 2.
NG >> Repair or replace harness.

2. CHECK POWER WINDOW GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH or RH.
3. Check continuity between rear power window switch LH or RH connector D203 (LH), D303 (RH) terminal 7 and ground.

7 (B) - Ground : Continuity should exist.



OK or NG

OK >> Rear power window switch LH or RH power supply and ground circuit is OK. Refer to symptom chart.
NG >> Repair or replace harness.

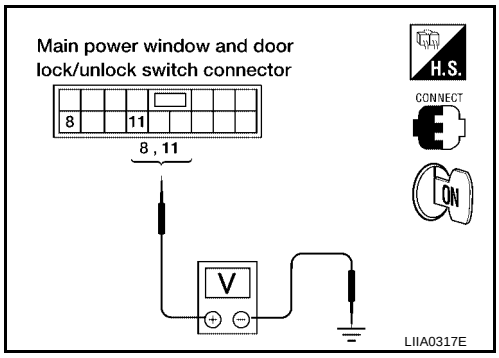
Front Power Window Motor LH Circuit Check (With Front Left and Right Only Power Window Anti-pinch System)

EIS003TX

1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between main power window and door lock/unlock switch connector D7 terminal 8, 11 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D7	8 (G/R)	Ground	Closing	Battery voltage
			Opening	0
	11 (G/W)		Closing	0
			Opening	Battery voltage



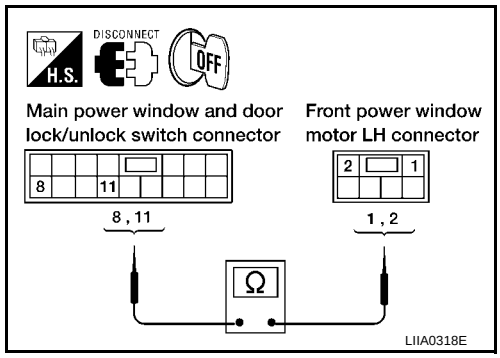
OK or NG

OK >> GO TO 2.
NG >> Replace main power window and door lock/unlock switch.

2. CHECK POWER WINDOW MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch and front power window motor LH.
3. Check continuity between main power window and door lock/unlock switch connector D7 terminal 8, 11 and front power window motor LH connector D9 terminal 1, 2.

8 (G/R) - 1 (G/R) : Continuity should exist.
11 (G/W) - 2 (G/W) : Continuity should exist.



OK or NG

OK >> Replace front power window motor LH. Refer to GW-88, "FRONT DOOR GLASS AND REGULATOR" .
NG >> Repair or replace harness.

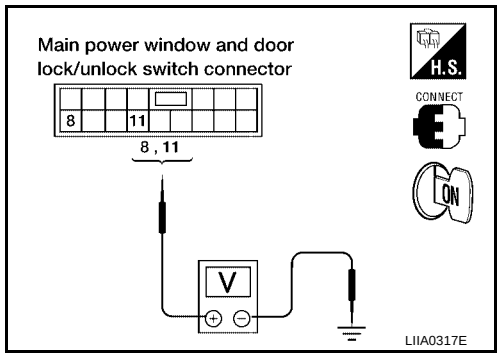
Front Power Window Motor LH Circuit Check (With Front and Rear Window Anti-pinch System)

EIS003TY

1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between main power window and door lock/unlock switch connector D7 terminal 8, 11 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D7	8 (L)	Ground	Closing	Battery voltage
			Opening	0
	11 (G)		Closing	0
			Opening	Battery voltage



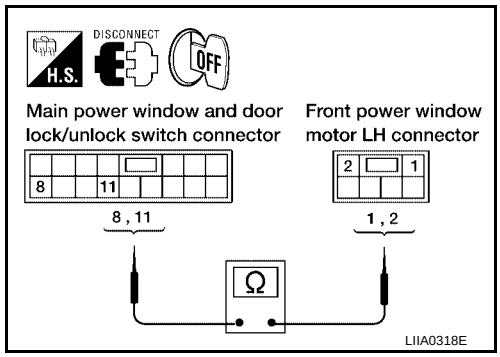
OK or NG

OK >> GO TO 2.
NG >> Replace main power window and door lock/unlock switch.

2. CHECK POWER WINDOW MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch and front power window motor LH.
3. Check continuity between main power window and door lock/unlock switch connector D7 terminal 8, 11 and front power window motor LH connector D9 terminal 1, 2.

8 (L) - 1(L) : Continuity should exist.
11 (G) - 2 (G) : Continuity should exist.



OK or NG

OK >> Replace front power window motor LH. Refer to GW-88, "FRONT DOOR GLASS AND REGULATOR" .
NG >> Repair or replace harness.

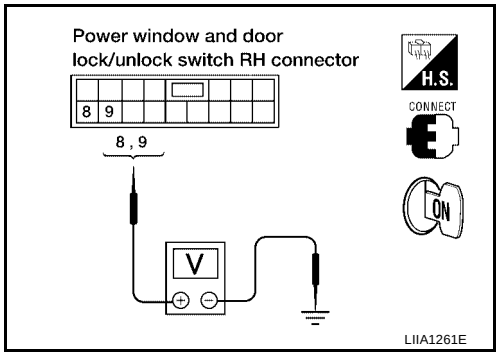
Front Power Window Motor RH Circuit Check

EIS003TZ

1. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between power window and door lock/unlock switch RH connector D105 terminal 8, 9 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D105	9 (G)	Ground	Closing	0
			Opening	Battery voltage
	8 (L)		Closing	Battery voltage
			Opening	0



OK or NG

OK >> GO TO 2

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

2. CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front power window motor RH and power window and door lock/unlock switch RH.
3. Check continuity between front power window switch RH connector D105 terminals 8, 9 and front power window motor RH connector D104 terminals 1, 2.

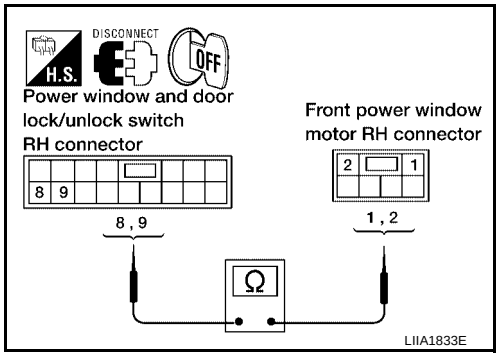
8 (L) - 1 (L) : Continuity should exist.

9 (G) - 2 (G) : Continuity should exist.

OK or NG

OK >> Replace front power window motor RH. Refer to GW-88, "FRONT DOOR GLASS AND REGULATOR" .

NG >> Repair or replace harness.



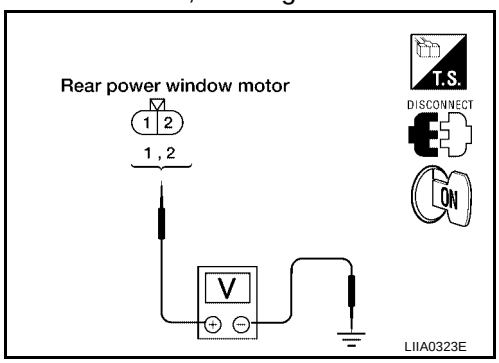
Rear Power Window Motor LH Circuit Check (With Front Left and Right Only Anti-pinch System)

EIS003U0

1. CHECK REAR POWER WINDOW SWITCH LH OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear power window motor LH.
3. Turn ignition switch ON.
4. Check voltage between rear power window motor LH connector D204 terminal 1, 2 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D204	1 (G)	Ground	Closing	Battery voltage
			Opening	0
	2 (L)		Closing	0
			Opening	Battery voltage



OK or NG

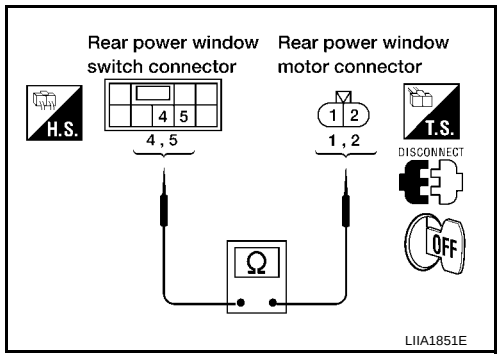
OK >> Replace rear power window motor LH. Refer to GW-91, "REAR DOOR GLASS AND REGULATOR" .

NG >> GO TO 2.

2. CHECK REAR POWER WINDOW MOTOR LH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH.
3. Check continuity between rear power window switch LH connector D203 terminal 4, 5 and rear power window motor LH connector D204 terminal 1, 2.

4 (G) - 1 (G) : Continuity should exist.
5 (L) - 2 (L) : Continuity should exist.



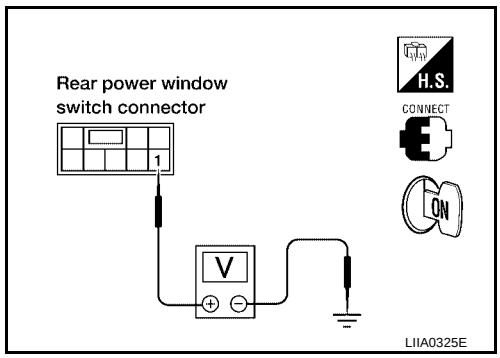
OK or NG

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

3. CHECK POWER SUPPLY

1. Connect rear power window switch LH.
2. Turn ignition switch ON.
3. Check voltage between rear power window switch LH connector D203 terminal 1 and ground.

1 (W/L) - Ground : Battery voltage



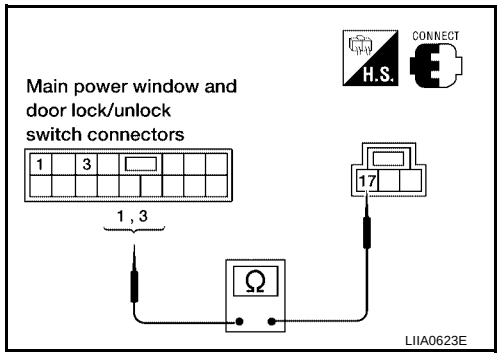
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness.

4. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

1. Confirm that power window lock switch is in unlocked position.
2. Check continuity between main power window and door lock/unlock switch connector D7 terminal 1, 3 and connector D8 terminal 17.

1 (L) - 17 (B) : Continuity should exist.
3 (V) - 17 (B) : Continuity should exist.



OK or NG

OK >> Repair or replace harness.
NG >> Replace main power window and door lock/unlock switch.

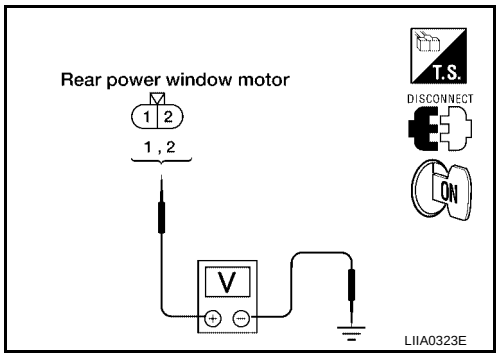
Rear Power Window Motor RH Circuit Check (With Front Left and Right Only Anti-pinch System)

EIS003U1

1. CHECK REAR POWER WINDOW SWITCH RH OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear power window motor RH.
3. Turn ignition switch ON.
4. Check voltage between rear power window motor RH connector D304 terminal 1, 2 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D304	1 (G)	Ground	Closing	Battery voltage
			Opening	0
	2 (L)		Closing	0
			Opening	Battery voltage



OK or NG

OK >> Replace rear power window motor RH. Refer to GW-91, "REAR DOOR GLASS AND REGULATOR" .

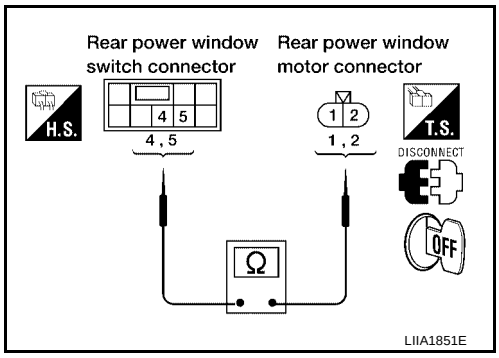
NG >> GO TO 2.

2. CHECK REAR POWER WINDOW MOTOR RH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch RH.
3. Check continuity between rear power window switch RH connector D303 terminal 4, 5 and rear power window motor RH connector D304 terminal 1, 2.

4 (G) - 1 (G) : Continuity should exist.

5 (L) - 2 (L) : Continuity should exist.



OK or NG

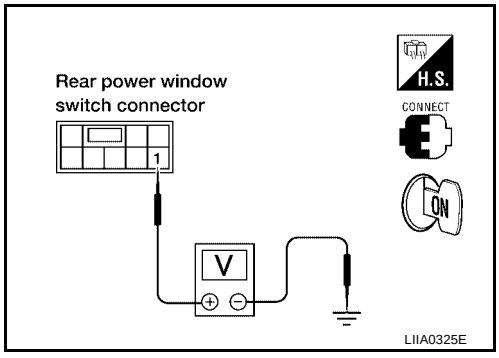
OK >> GO TO 3.

NG >> Repair or replace harness.

3. CHECK POWER SUPPLY

1. Connect rear power window switch RH.
2. Turn ignition switch ON.
3. Check voltage between rear power window switch RH connector D303 terminal 1 and ground.

1 (W/L) - Ground : Battery voltage



OK or NG

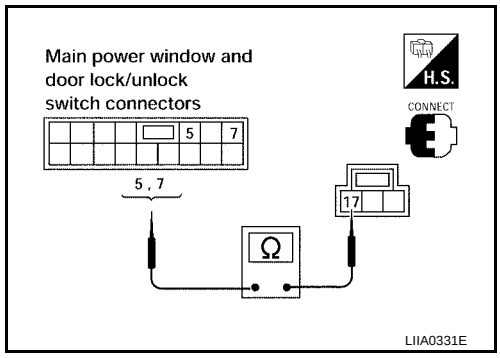
OK >> GO TO 4.

NG >> Repair or replace harness.

4. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

1. Confirm that power window lock switch is in unlocked position.
2. Check continuity between main power window and door lock/unlock switch connector D7 terminal 5, 7 and connector D8 terminal 17.

5 (R) - 17 (B) : Continuity should exist.
7 (Y/B) - 17 (B) : Continuity should exist.



OK or NG

OK >> Repair or replace harness.
NG >> Replace main power window and door lock/unlock switch.

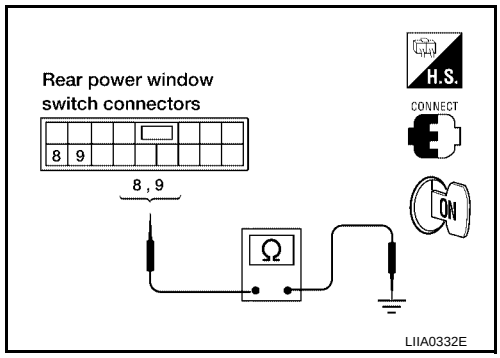
Rear Power Window Motor LH Circuit Check (With Front and Rear Power Window Anti-pinch System)

EIS003U2

1. CHECK REAR POWER WINDOW SWITCH LH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between rear power window switch LH connector D203 terminal 8, 9 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D203	9 (G)	Ground	Closing	0
			Opening	Battery voltage
	8 (L)		Closing	Battery voltage
			Opening	0



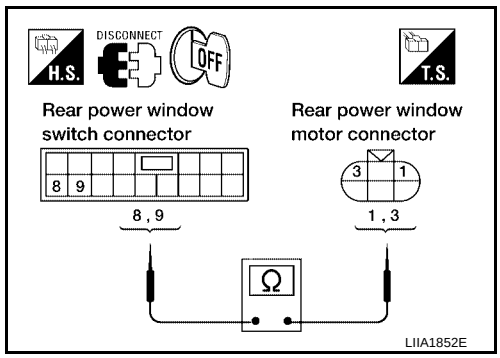
OK or NG

OK >> GO TO 2.
NG >> Replace rear power window switch LH.

2. CHECK REAR POWER WINDOW MOTOR LH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH and rear power window motor LH.
3. Check continuity between rear power window switch LH connector D203 terminal 8, 9 and rear power window motor LH connector D204 terminal 1, 3.

9 (G) - 3 (G) : Continuity should exist.
8 (L) - 1 (L) : Continuity should exist.



OK or NG

OK >> Replace rear power window motor LH. Refer to GW-91, "REAR DOOR GLASS AND REGULATOR" .
NG >> Repair or replace harness.

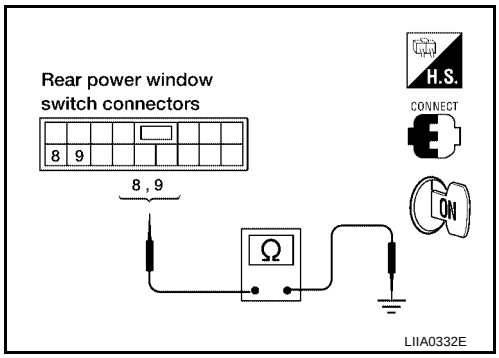
Rear Power Window Motor RH Circuit Check (With Front and Rear Power Window Anti-pinch System)

EIS003U3

1. CHECK REAR POWER WINDOW SWITCH RH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between rear power window switch RH connector D303 terminal 8, 9 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D303	9 (G)	Ground	Closing	0
			Opening	Battery voltage
	8 (L)		Closing	Battery voltage
			Opening	0



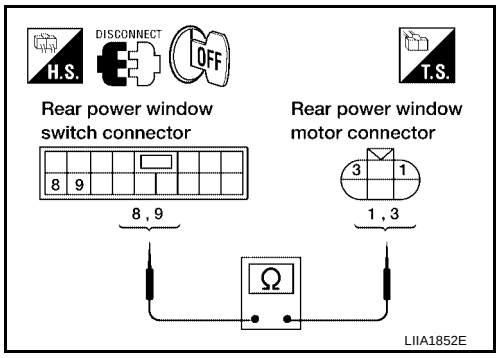
OK or NG

OK >> GO TO 2.
NG >> Replace rear power window switch RH.

2. CHECK REAR POWER WINDOW MOTOR RH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch RH and rear power window motor RH.
3. Check continuity between rear power window switch RH connector D303 terminal 8, 9 and rear power window motor RH connector D304 terminal 1, 3.

9 (G) - 3 (G) : Continuity should exist.
8 (L) - 1 (L) : Continuity should exist.



OK or NG

OK >> Replace rear power window motor RH. Refer to GW-91, "REAR DOOR GLASS AND REGULATOR" .
NG >> Repair or replace harness.

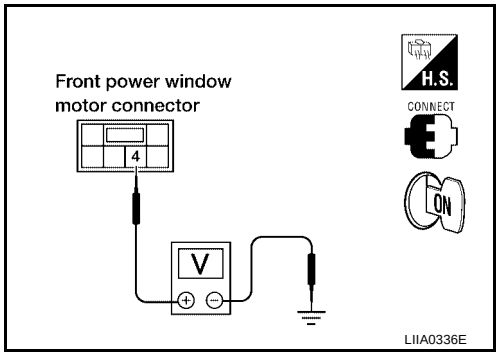
Limit Switch Circuit Check Front LH (With Front Left and Right Only Power Window Anti-pinch System)

EIS003U4

1. CHECK FRONT POWER WINDOW MOTOR LH LIMIT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between front power window motor LH connector D9 terminal 4 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D9	4 (G/W)	Ground	Front door window LH is between fully-open and just before fully-closed position (ON)	0
			Front door window LH is between just before fully-closed position and fully-closed position (OFF)	5



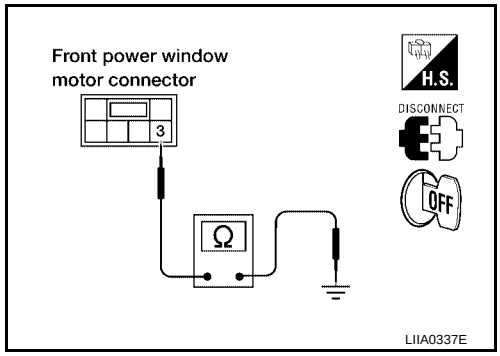
OK or NG

OK >> Limit switch circuit is OK.
NG >> GO TO 2.

2. CHECK LIMIT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front power window motor LH.
3. Check continuity between front power window motor LH connector D9 terminal 3 and ground.

3 (W/B) - Ground : Continuity should exist.



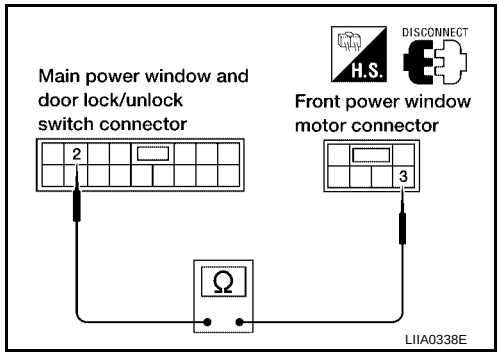
OK or NG

OK >> GO TO 4.
NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY

1. Disconnect main power window and door lock/unlock switch.
2. Check continuity between front power window motor LH connector D9 terminal 3 and main power window and door lock/unlock switch connector D7 terminal 2.

3 (W/B) - 2 (W/B) : Continuity should exist.



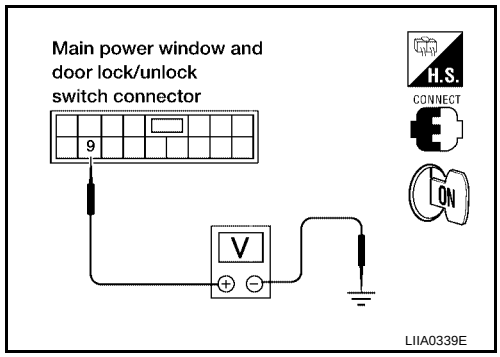
OK or NG

OK >> Replace main power window and door lock/unlock switch.
NG >> Repair or replace harness.

4. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

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

9 (G/W) - Ground : Approx. 5V



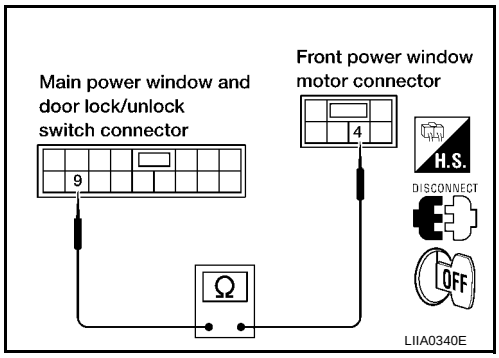
OK or NG

OK >> GO TO 5.
NG >> Replace main power window and door lock/unlock switch.

5. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch.
3. Check continuity between front power window motor LH connector D9 terminal 4 and main power window and door lock/unlock switch connector D7 terminal 9.

4 (G/W) - 9 (G/W) : Continuity should exist.



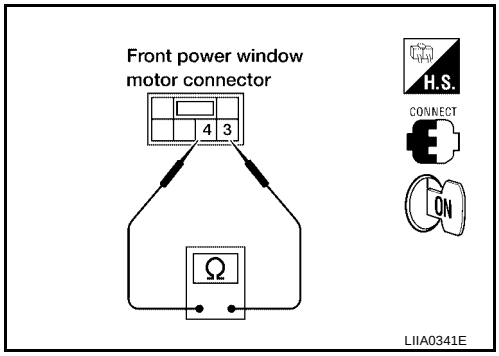
OK or NG

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

6. CHECK LIMIT SWITCH

1. Connect front power window motor LH and main power window and door lock/unlock switch.
2. Turn ignition switch ON.
3. Check continuity between front power window motor LH connector D9 terminal 3 and 4.

Connector	Terminals (Wire color)		Condition	Continuity
D9	4 (G/W)	3 (W/B)	Driver side door window is between fully-open and just before fully-closed position (ON)	Yes
			Driver side door window is between just before fully-closed position and fully-closed position (OFF)	No



OK or NG

OK >> Repair or replace harness.
NG >> Replace front power window motor LH. Refer to GW-88, "FRONT DOOR GLASS AND REGULATOR" .

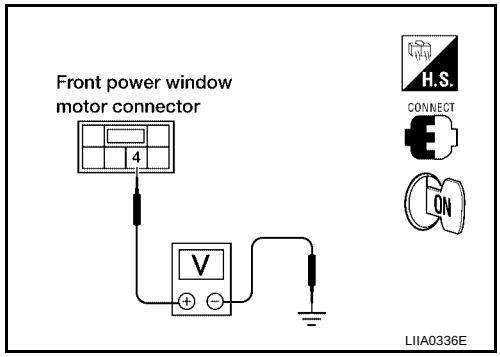
Limit Switch Circuit Check Front LH (With Front and Rear Power Window Anti-pinch System)

EIS003U5

1. CHECK FRONT POWER WINDOW MOTOR LH LIMIT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between front power window motor LH connector D9 termimal 4 and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D9	4 (G/W)	Ground	Front door window LH is between fully-open and just before fully-closed position (ON)	0
			Front door window LH is between just before fully-closed position and fully-closed position (OFF)	5



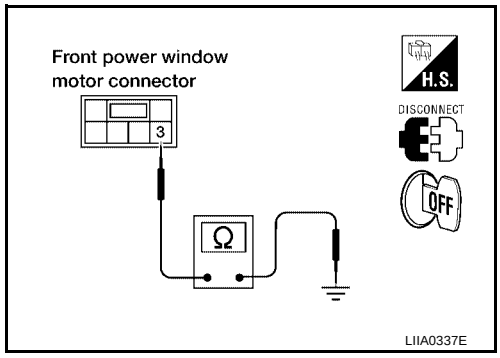
OK or NG

OK >> Limit switch circuit is OK.
NG >> GO TO 2.

2. CHECK LIMIT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front power window motor LH.
3. Check continuity between front power window motor LH connector D9 terminal 3 and ground.

3 (W/B) - Ground : Continuity should exist.



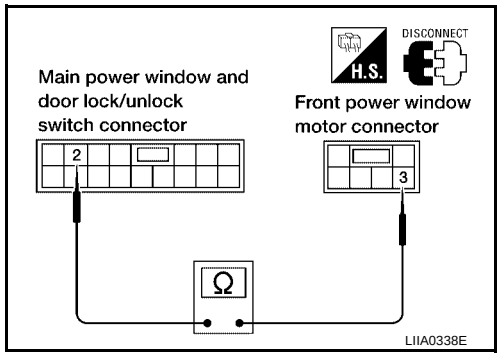
OK or NG

OK >> GO TO 4.
NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY

1. Disconnect main power window and door lock/unlock switch.
2. Check continuity between front power window motor LH connector D9 terminal 3 and main power window and door lock/unlock switch connector D7 terminal 2.

3 (W/B) - 2 (W/B) : Continuity should exist.



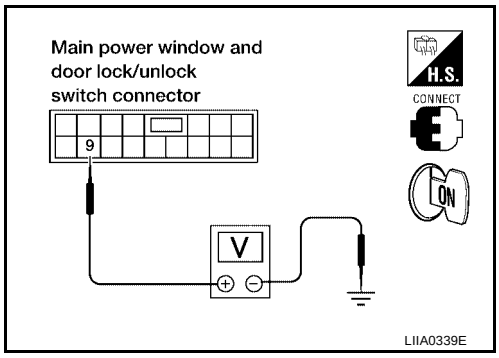
OK or NG

OK >> Replace main power window and door lock/unlock switch.
NG >> Repair or replace harness.

4. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OUTPUT SIGNAL

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

9 (G/W) - Ground : Approx. 5V



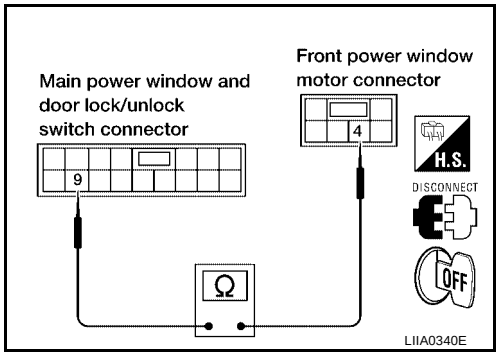
OK or NG

OK >> GO TO 5.
NG >> Replace main power window and door lock/unlock switch.

5. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch.
3. Check continuity between front power window motor LH connector D9 terminal 4 and main power window and door lock/unlock switch connector D7 terminal 9.

4 (G/W) - 9 (G/W) : Continuity should exist.



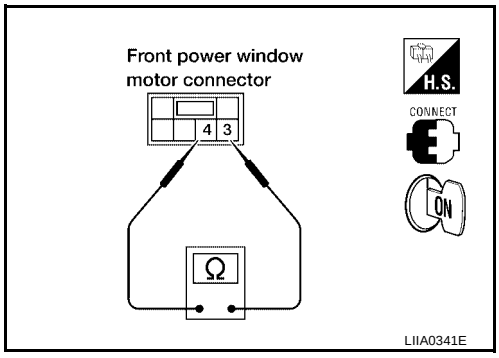
OK or NG

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

6. CHECK LIMIT SWITCH

1. Connect front power window motor LH and main power window and door lock/unlock switch.
2. Turn ignition switch ON.
3. Check continuity between front power window motor LH connector D9 terminal 3 and 4.

Terminals	Terminals (Wire color)		Condition	Continuity
D9	4 (G/W)	3 (W/B)	Front door window LH is between fully-open and just before fully-closed position (ON)	Yes
			Front door window LH is between just before fully-closed position and fully-closed position (OFF)	No



OK or NG

OK >> Repair or replace harness.
NG >> Replace front power window motor LH. Refer to GW-88, "FRONT DOOR GLASS AND REGULATOR" .

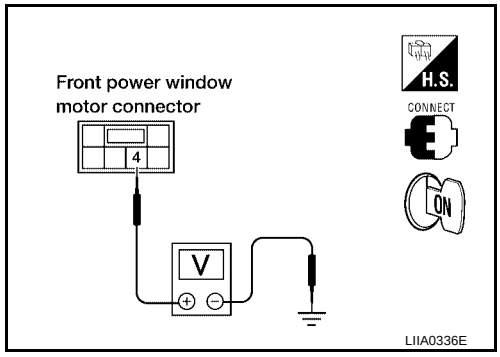
Limit Switch Circuit Check Front RH

EIS003U6

1. CHECK FRONT POWER WINDOW MOTOR RH LIMIT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between front power window motor RH connector D104 terminal 4 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D104	4 (G/W)	Ground	Front door window RH is between fully-open and just before fully-closed position (ON)	0
			Front door window RH is between just before fully-closed position and fully-closed position (OFF)	5



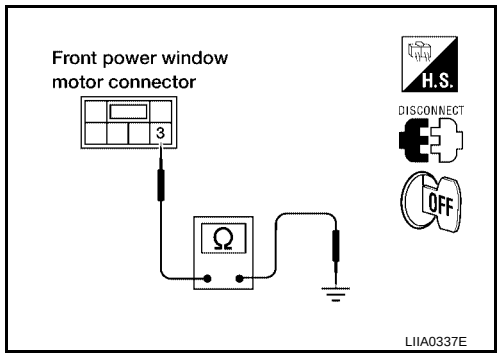
OK or NG

OK >> Limit switch circuit is OK.
NG >> GO TO 2.

2. CHECK LIMIT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front power window motor RH.
3. Check continuity between front power window motor RH connector D104 terminal 3 and ground.

3 (W/B) - Ground : Continuity should exist.



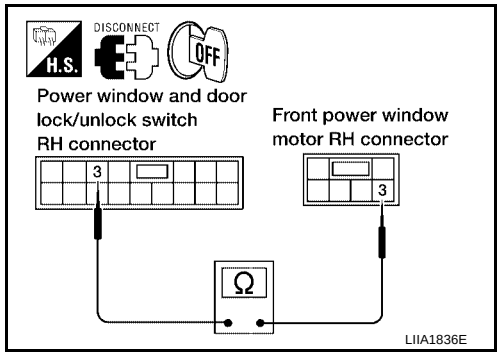
OK or NG

OK >> GO TO 4.
NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY

1. Disconnect power window and door lock/unlock switch RH.
2. Check continuity between front power window motor RH connector D104 terminal 3 and power window and door lock/unlock switch RH connector D105 terminal 3.

3 (W/B) - 3 (W/B) : Continuity should exist.



OK or NG

OK >> Replace power window and door lock/unlock switch RH.
NG >> Repair or replace harness.

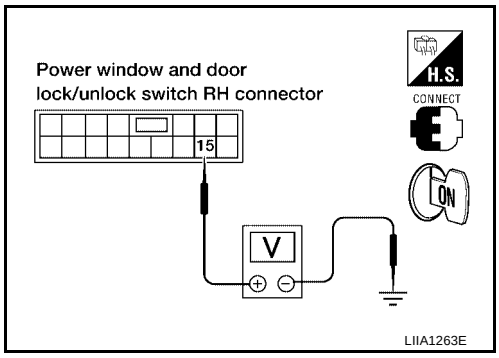
4. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between power window and door lock/unlock switch RH connector D105 terminal 15 and ground.

15 (G/W) - Ground : Approx. 5V

OK or NG

OK >> GO TO 5.
NG >> Replace power window and door lock/unlock switch RH.



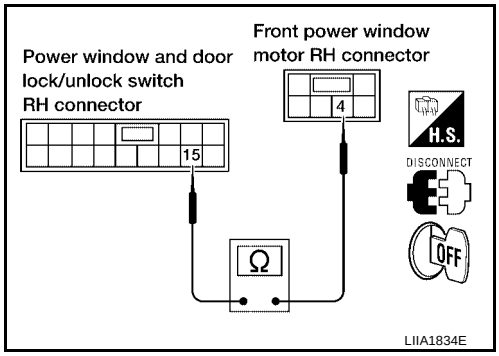
5. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH.
3. Check continuity between power window and door lock/unlock switch RH connector D105 terminal 15 and front power window motor RH connector D104 terminal 4.

15 (G/W) - 4 (G/W) : Continuity should exist.

OK or NG

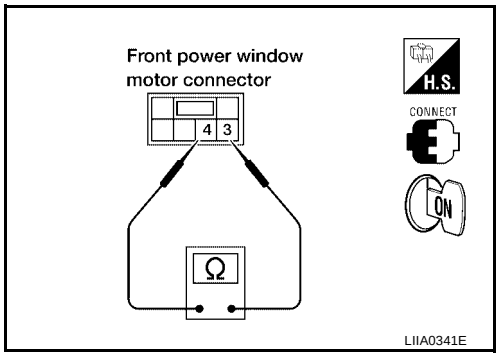
OK >> GO TO 6.
NG >> Repair or replace harness.



6. CHECK LIMIT SWITCH

1. Connect front power window motor RH and power window and door lock/unlock switch RH connector.
2. Turn ignition switch ON.
3. Check continuity between front power window motor RH connector D104 terminal 3 and 4.

Connector	Terminals (Wire color)		Condition	Continuity
D104	4 (G/W)	3 (W/B)	Front door window RH is between fully-open and just before fully-closed position (ON)	Yes
			Front door window RH is between just before fully-closed position and fully-closed position (OFF)	No



OK or NG

OK >> Repair or replace harness.
NG >> Replace front power window motor RH. Refer to GW-88, "FRONT DOOR GLASS AND REGULATOR" .

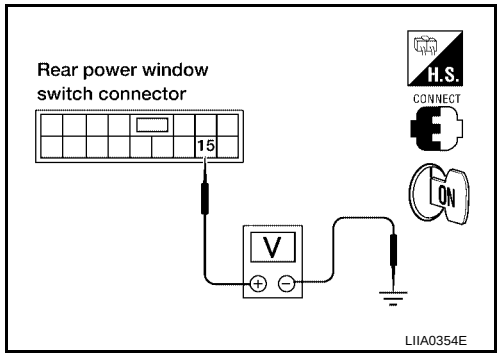
Limit Switch Circuit Check Rear LH and RH (With Front and Rear Anti-pinch System)

EIS003U7

1. CHECK REAR POWER WINDOW MOTOR LH AND RH LIMIT SWITCH SIGNAL

1. Turn ignition switch ON.
2. Check voltage between rear power window switch LH or RH connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D203 (LH) D303 (RH)	15 (G/W)	Ground	Rear door window LH or RH is between fully-open and just before fully-closed position (ON)	0
			Rear door window LH or RH is between just before fully-closed position and fully-closed position (OFF)	5



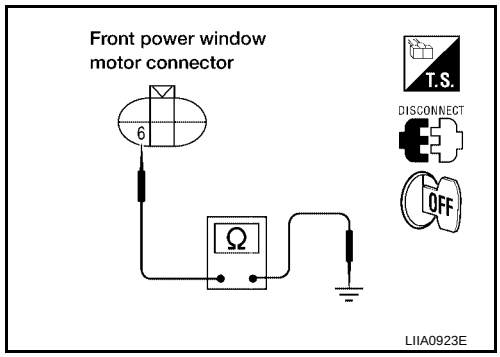
OK or NG

OK >> Limit switch circuit is OK.
NG >> GO TO 2.

2. CHECK LIMIT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH or RH.
3. Check continuity between rear power window motor LH or RH connector D204 (LH), D304 (RH) terminal 6 and ground.

6 (W/B) - Ground : Continuity should exist.



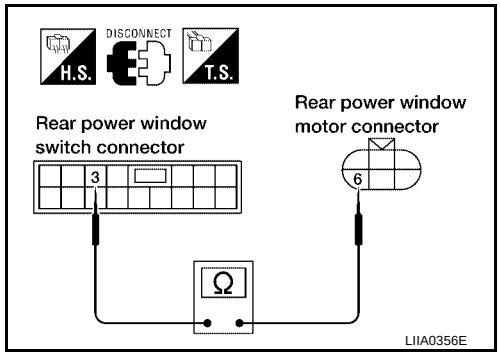
OK or NG

OK >> GO TO 4.
NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY

1. Disconnect rear power window switch LH or RH.
2. Check continuity between rear power window motor LH or RH connector D204 (LH), D304 (RH) terminal 6 and rear power window switch LH or RH connector D203 (LH), D303 (RH) terminal 3.

6 (W/B) - 3 (W/B) : Continuity should exist.



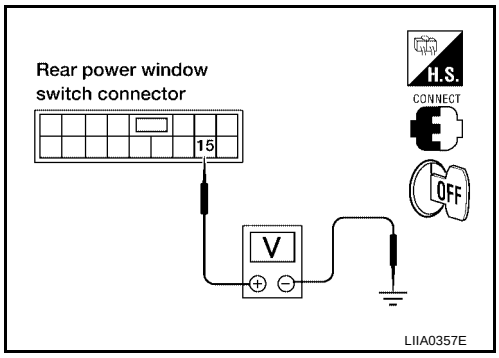
OK or NG

OK >> Replace rear power window switch LH or RH.
NG >> Repair or replace harness.

4. CHECK REAR POWER WINDOW SWITCH LH OR RH OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between rear power window switch LH or RH harness connector D203 (LH) or D303 (RH) terminal 15 (G/W) and ground.

15 (G/W) - Ground : Approx. 5V



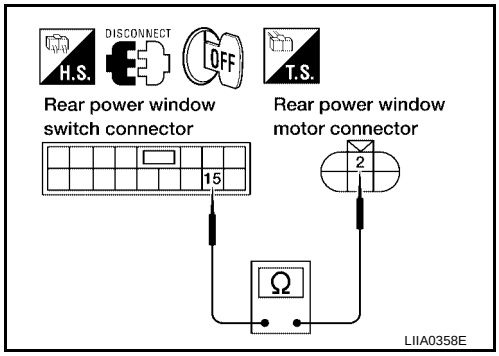
OK or NG

OK >> GO TO 5.
NG >> Replace rear power window switch LH or RH.

5. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH or RH.
3. Check continuity between rear power window switch LH or RH connector D203 (LH), D303 (RH) terminal 15 and rear power window motor LH or RH connector D204 (LH), D304 (RH) terminal 2.

15 (G/W) - 2 (G/W) : Continuity should exist.



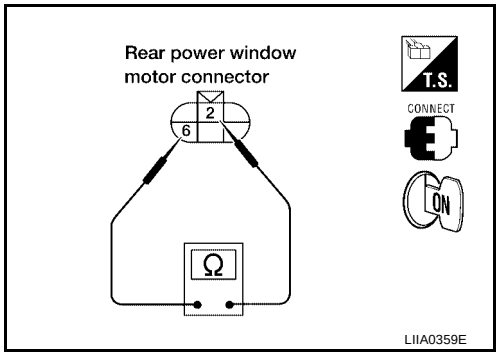
OK or NG

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

6. CHECK LIMIT SWITCH

1. Connect rear power window motor LH or RH and rear power window switch LH or RH.
2. Turn ignition switch ON.
3. Check continuity between rear power window motor LH or RH connector D204 (LH), D304 (RH) terminal 2 and 6.

Connector	Terminals (Wire color)		Condition	Continuity
D204 (LH) D304 (RH)	2 (G/W)	6 (W/B)	Rear door window LH or RH is between fully-open and just before fully-closed position (ON)	Yes
			Rear door window LH or RH is between just before fully-closed position and fully-closed position (OFF)	No



OK or NG

OK >> Repair or replace harness.
NG >> Replace rear power window motor LH or RH. Refer to GW-91, "REAR DOOR GLASS AND REGULATOR" .

Encoder Circuit Check Front LH (With Front Left and Right Only Power Window Anti-pinch System)

EIS003U8

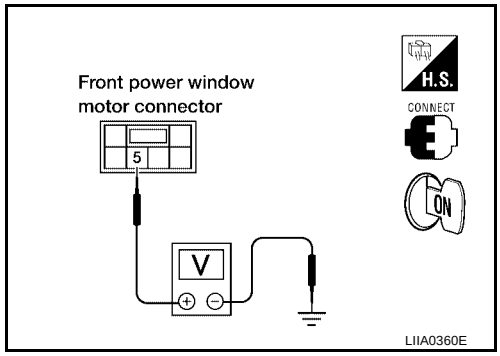
1. CHECK FRONT POWER WINDOW MOTOR LH POWER SUPPLY

1. Turn ignition switch ON.
2. Check voltage between front power window motor LH connector D9 terminal 5 and ground.

5 (G/R) - Ground : Approx. 10V

OK or NG

OK >> GO TO 3.
NG >> GO TO 2.



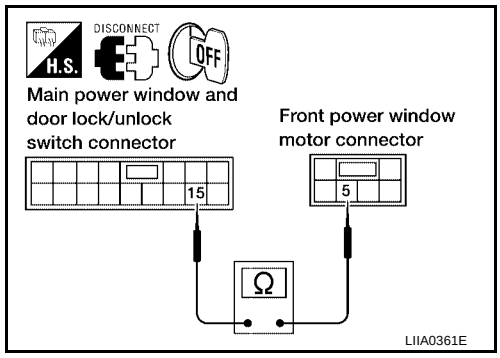
2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect front power window motor LH and main power window and door lock/unlock switch.
3. Check continuity between front power window motor LH connector D9 terminal 5 and main power window and door lock/unlock switch connector D7 terminal 15.

5 (G/R) - 15 (G/R) : Continuity should exist.

OK or NG

OK >> Replace main power window and door lock/unlock switch.
NG >> Repair or replace harness.



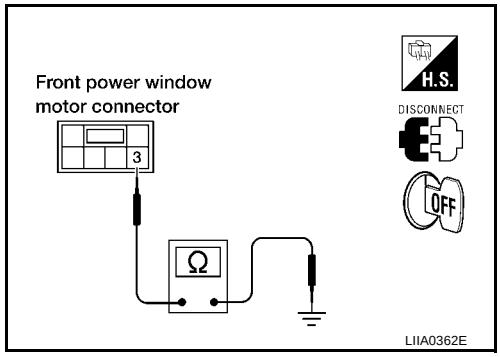
3. CHECK ENCODER GROUND

1. Turn ignition switch OFF.
2. Disconnect front power window motor LH.
3. Check continuity between front power window motor LH connector D9 terminal 3 and ground.

3 (W/B) - Ground : Continuity should exist.

OK or NG

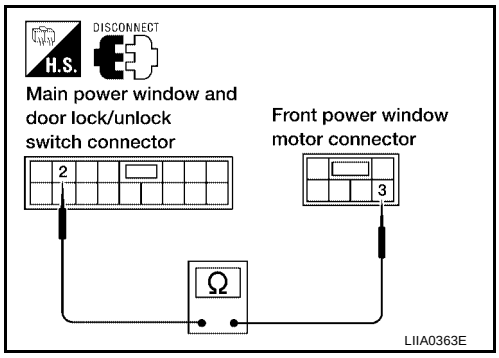
OK >> GO TO 5.
NG >> GO TO 4.



4. CHECK ENCODER GROUND CIRCUIT

1. Disconnect main power window and door lock/unlock switch.
2. Check continuity between front power window motor LH connector D9 terminal 3 and main power window and door lock/unlock switch connector D7 terminal 2.

3 (W/B) - 2 (W/B) : Continuity should exist.

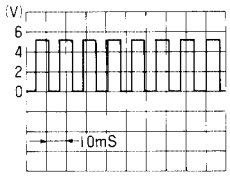


OK or NG

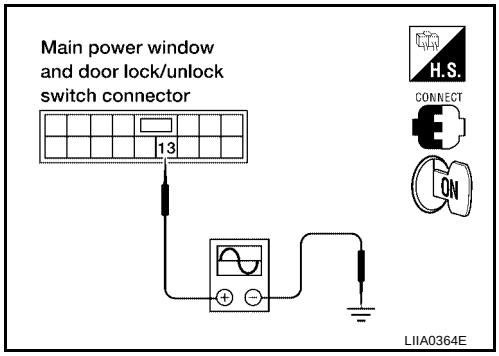
OK >> Replace main power window and door lock/unlock switch.
NG >> Repair or replace harness.

5. CHECK ENCODER SIGNAL

1. Connect front power window motor LH.
2. Turn ignition switch ON.
3. Check the signal between main power window and door lock/unlock switch connector and ground with oscilloscope.

Connector	Terminals (Wire color)		Condition	Signal
	(+)	(-)		
D7	13 (G/Y)	Ground	Operating	

OCC3383D



OK or NG

OK >> Replace main power window and door lock/unlock switch.
NG >> GO TO 6.

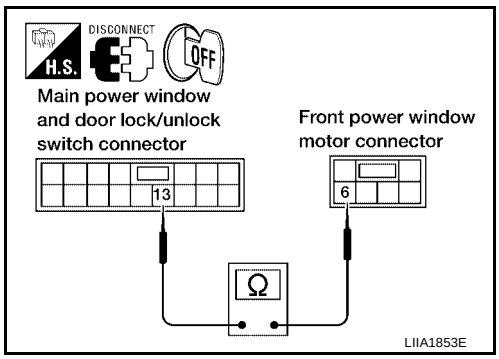
6. CHECK ENCODER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front power window motor LH and main power window and door lock/unlock switch.
3. Check continuity between front power window motor LH connector D9 terminal 6 and main power window and door lock/unlock switch connector D7 terminal 13.

6 (G/Y) - 13 (G/Y) : Continuity should exist.

OK or NG

OK >> Replace front power window motor LH. Refer to GW-88, "FRONT DOOR GLASS AND REGULATOR" .
NG >> Repair or replace harness.



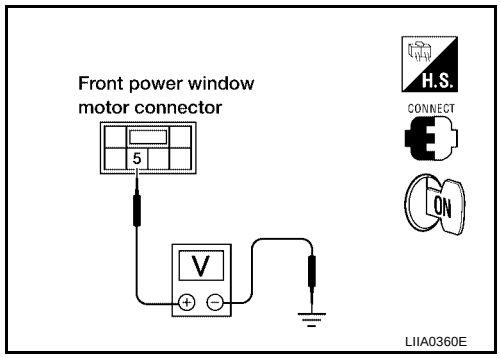
Encoder Circuit Check Front LH (With Front and Rear Power Window Anti-pinch System)

EIS003U9

1. CHECK FRONT POWER WINDOW MOTOR LH POWER SUPPLY

1. Turn ignition switch ON.
2. Check voltage between front power window motor LH connector D9 terminal 5 and ground.

5 (G/R) - Ground : Approx. 10V



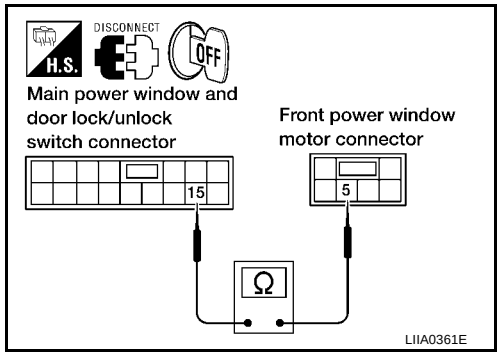
OK or NG

OK >> GO TO 3.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect front power window motor LH and main power window and door lock/unlock switch.
3. Check continuity between front power window motor LH connector D9 terminal 5 and main power window and door lock/unlock switch connector D7 terminal 15.

5 (G/R) - 15 (G/R) : Continuity should exist.



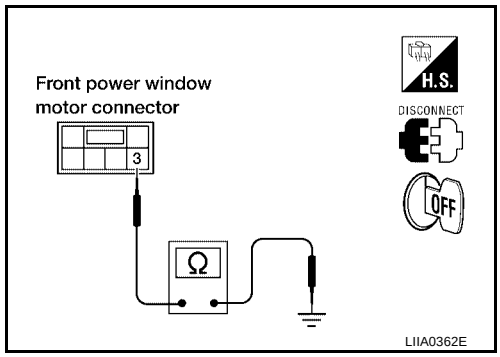
OK or NG

OK >> Replace main power window and door lock/unlock switch.
NG >> Repair or replace harness.

3. CHECK ENCODER GROUND

1. Turn ignition switch OFF.
2. Disconnect front power window motor LH.
3. Check continuity between front power window motor LH connector D9 terminal 3 and ground.

3 (W/B) - Ground : Continuity should exist.



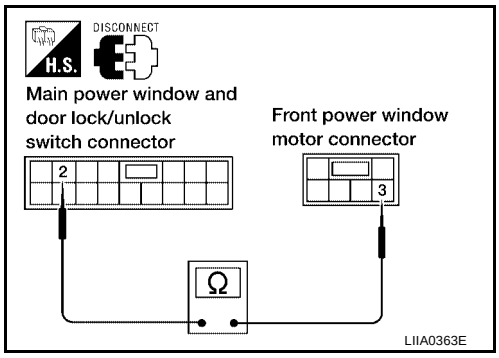
OK or NG

OK >> GO TO 5.
NG >> GO TO 4.

4. CHECK ENCODER GROUND CIRCUIT

1. Disconnect main power window and door lock/unlock switch.
2. Check continuity between front power window motor LH connector D9 terminal 3 and main power window and door lock/unlock switch connector D7 terminal 2.

3 (W/B) - 2 (W/B) : Continuity should exist.

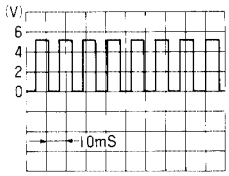


OK or NG

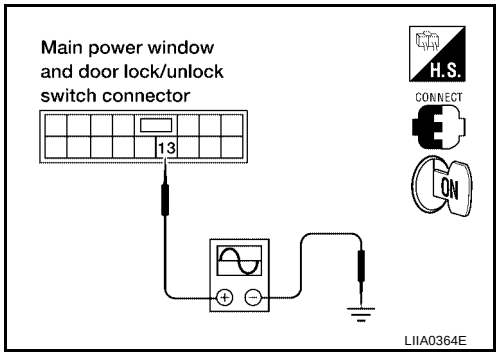
OK >> Replace main power window and door lock/unlock switch.
NG >> Repair or replace harness.

5. CHECK ENCODER SIGNAL

1. Connect front power window motor LH.
2. Turn ignition switch ON.
3. Check the signal between main power window and door lock/unlock switch connector and ground with oscilloscope.

Connector	Terminals (Wire color)		Condition	Signal
	(+)	(-)		
D7	13 (G/Y)	Ground	Operating	

OCC3383D



OK or NG

OK >> Replace main power window and door lock/unlock switch.
NG >> GO TO 6.

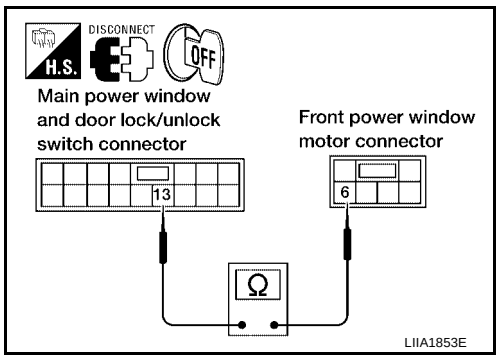
6. CHECK ENCODER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front power window motor LH and main power window and door lock/unlock switch.
3. Check continuity between front power window motor LH connector D9 terminal 6 and main power window and door lock/unlock switch connector D7 terminal 13.

6 (G/Y) - 13 (G/Y) : Continuity should exist.

OK or NG

OK >> Replace front power window motor LH. Refer to GW-88, "FRONT DOOR GLASS AND REGULATOR" .
NG >> Repair or replace harness.



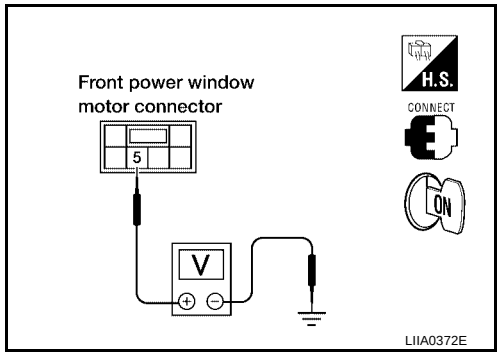
Encoder Circuit Check Front RH

EIS003UA

1. CHECK FRONT POWER WINDOW MOTOR RH POWER SUPPLY

1. Turn ignition switch ON.
2. Check voltage between front power window motor RH connector D104 terminal 5 and ground.

5 (G/R) - Ground : Approx. 10V



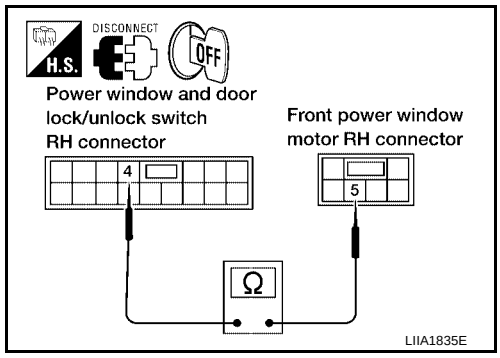
OK or NG

OK >> GO TO 3.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect front power window motor RH and power window and door lock/unlock switch RH.
3. Check continuity between front power window motor RH connector D104 terminal 5 and power window and door lock/unlock switch RH connector D105 terminal 4.

5 (G/R) - 4 (G/R) : Continuity should exist.



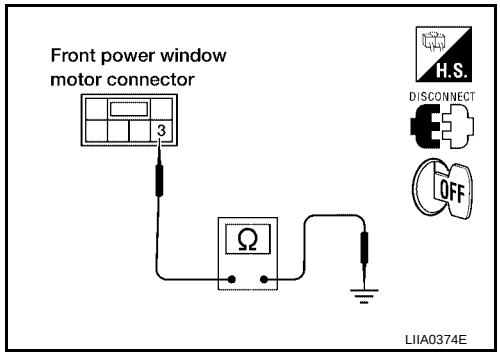
OK or NG

OK >> Replace power window and door lock/unlock switch RH.
NG >> Repair or replace harness.

3. CHECK ENCODER GROUND

1. Turn ignition switch OFF.
2. Disconnect front power window motor RH.
3. Check continuity between front power window motor RH connector D104 terminal 3 and ground.

3 (W/B) – Ground : Continuity should exist.



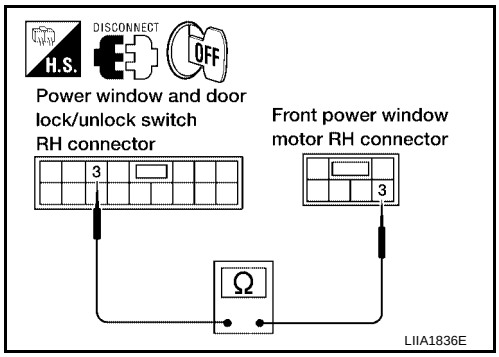
OK or NG

OK >> GO TO 5.
NG >> GO TO 4.

4. CHECK ENCODER GROUND CIRCUIT

1. Disconnect power window and door lock/unlock switch RH.
2. Check continuity between front power window motor RH connector D104 terminal 3 and power window and door lock/unlock switch RH connector D105 terminal 3.

3 (W/B) - 3 (W/B) : Continuity should exist.

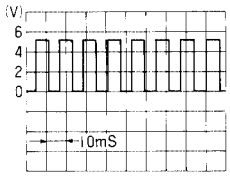


OK or NG

OK >> Replace power window and door lock/unlock switch RH.
NG >> Repair or replace harness.

5. CHECK ENCODER SIGNAL

1. Connect front power window motor RH.
2. Turn ignition switch ON.
3. Check the signal between power window and door lock/unlock switch RH connector and ground with oscilloscope.

Connector	Terminals (Wire color)		Condition	Signal
	(+)	(-)		
D105	12 (G/Y)	Ground	Operating	

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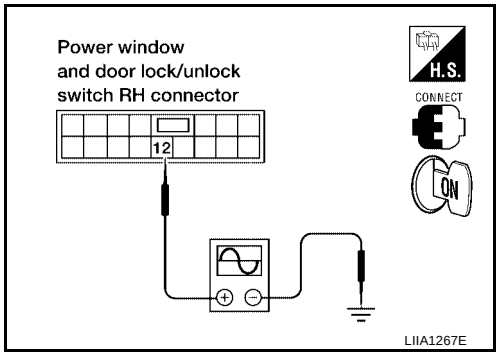


OK or NG

OK >> Replace power window and door lock/unlock switch RH.
NG >> GO TO 6.

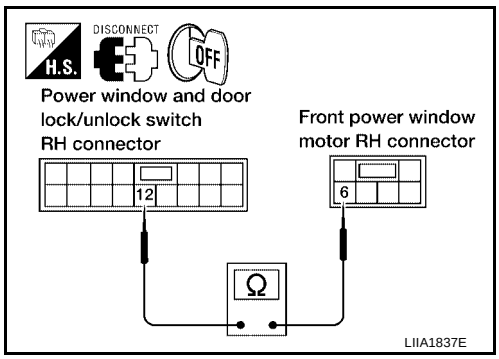
6. CHECK ENCODER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front power window motor RH and power window and door lock/unlock switch RH.
3. Check continuity between front power window motor RH connector D104 terminal 6 and power window and door lock/unlock switch RH connector D105 terminal 12.

6 (G/Y) - 12 (G/Y) : Continuity should exist.

OK or NG

OK >> Replace front power window motor RH. Refer to GW-88, "FRONT DOOR GLASS AND REGULATOR" .
NG >> Repair or replace harness.



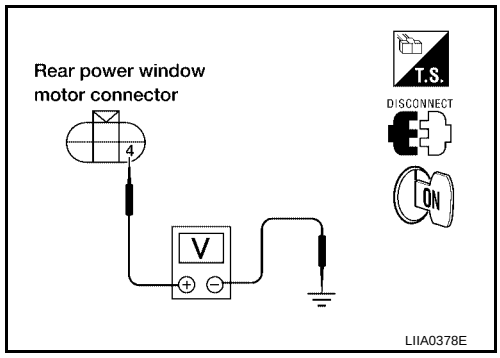
Encoder Circuit Check Rear LH or RH (With Front and Rear Power Window Anti-pinch System)

EIS003UB

1. CHECK REAR POWER WINDOW MOTOR LH OR RH POWER SUPPLY

1. Turn ignition switch ON.
2. Check voltage between rear power window motor LH or RH connector D204 (LH) or D304 (RH) terminal 4 and ground.

4 (G/R) - Ground : Approx. 10V



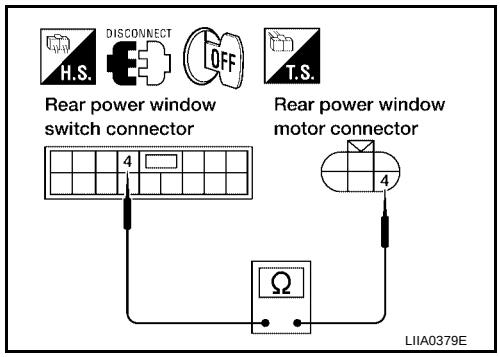
OK or NG

OK >> GO TO 3.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect rear power window motor LH or RH and rear power window switch LH or RH.
3. Check continuity between rear power window motor LH or RH connector D204 (LH) or D304 (RH) terminal 4 and rear power window switch LH or RH connector D203 (LH) or D303 (RH) terminal 4.

4 (G/R) - 4 (G/R) : Continuity should exist.



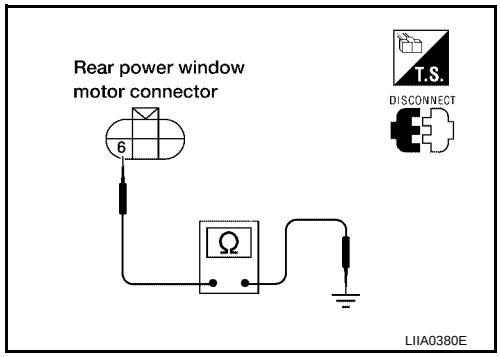
OK or NG

OK >> Replace rear power window switch LH or RH.
NG >> Repair or replace harness.

3. CHECK ENCODER GROUND

1. Turn ignition switch OFF.
2. Disconnect rear power window motor LH or RH.
3. Check continuity between rear power window motor LH or RH connector D204 (LH) or D304 (RH) terminal 6 and ground.

6 (W/B) - Ground : Continuity should exist.



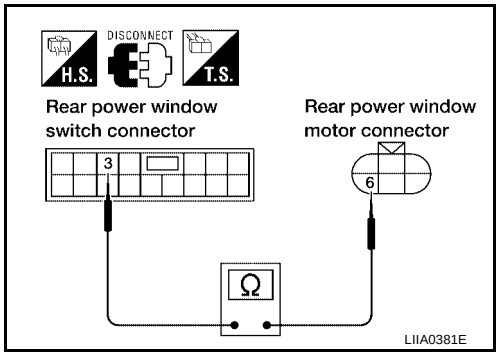
OK or NG

OK >> GO TO 5.
NG >> GO TO 4.

4. CHECK ENCODER GROUND CIRCUIT

1. Disconnect rear power window motor LH or RH.
2. Check continuity between rear power window motor LH or RH connector D204 (LH) or D304 (RH) terminal 6 and rear power window switch LH or RH connector D203 (LH), D303 (RH) terminal 3.

6 (W/B) - 3 (W/B) : Continuity should exist.

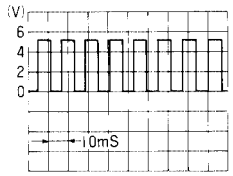


OK or NG

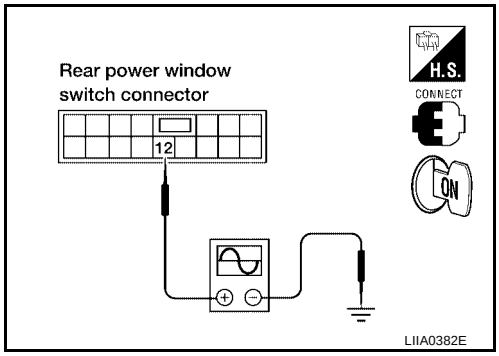
OK >> Replace rear power window switch LH or RH.
NG >> Repair or replace harness.

5. CHECK ENCODER SIGNAL

1. Connect rear power window motor LH or RH.
2. Turn ignition switch ON.
3. Check the signal between rear power window switch LH or RH connector D203 (LH) or D303 (RH) terminal 12 and ground with oscilloscope.

Connector	Terminals (Wire color)		Condition	Signal
	(+)	(-)		
D203 (LH) D303 (RH)	12 (G/Y)	Ground	Operating	

OCC3383D



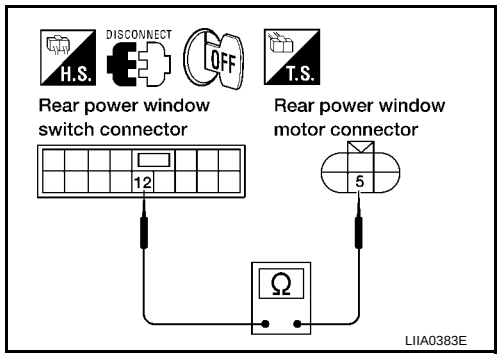
OK or NG

OK >> GO TO 6.
NG >> Replace rear power window switch LH or RH.

6. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect rear power window switch LH or RH and rear power window motor LH or RH.
3. Check continuity between rear power window switch LH or RH connector D203 (LH) or D303 (RH) terminal 12 and rear power window motor LH or RH connector D204 (LH), D304 (RH) terminal 5.

12 (G/Y) - 5 (G/Y) : Continuity should exist.



OK or NG

OK >> Replace rear power window motor LH or RH. Refer to GW-91, "REAR DOOR GLASS AND REGULATOR" .

NG >> Repair or replace harness.

Door Switch Check

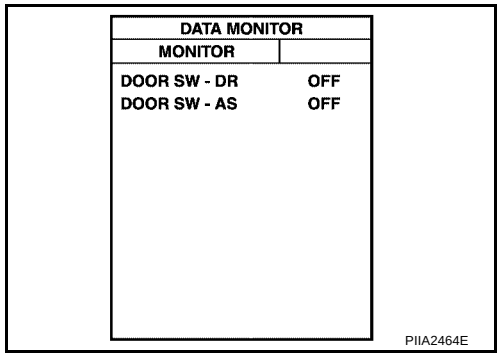
EIS003UC

1. CHECK FRONT DOOR SWITCH INPUT SIGNAL

With CONSULT-II

Check front door switches (“DOOR SW-DR” and “DOOR SW-AS”) in “DATA MONITOR” mode with CONSULT-II.

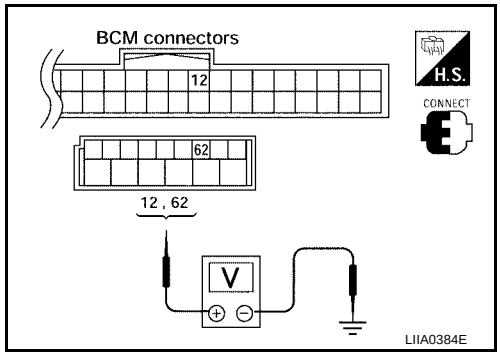
Monitor item	Condition	
DOOR SW-DR	OPEN	: ON
	CLOSE	: OFF
DOOR SW-AS	OPEN	: ON
	CLOSE	: OFF



Without CONSULT-II

Check voltage between BCM connector and ground.

Item	Connector	Terminals (Wire color) (+)	Terminals (Wire color) (-)	Condition	Voltage (V) (Approx.)
Front RH	M18	12 (BR/W)	Ground	OPEN	0
				CLOSE	Battery voltage
Front LH	M20	62 (SB)		OPEN	0
				CLOSE	Battery voltage



OK or NG

OK >> Front door switch is OK.

NG >> GO TO 2.

2. CHECK FRONT DOOR SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front door switch LH or RH and BCM connector.
3. Check continuity between front door switch connector B8 (LH) or B108 (RH) terminal 2 and BCM connector M18 terminal 12 and connector M20 terminal 62.

Front LH

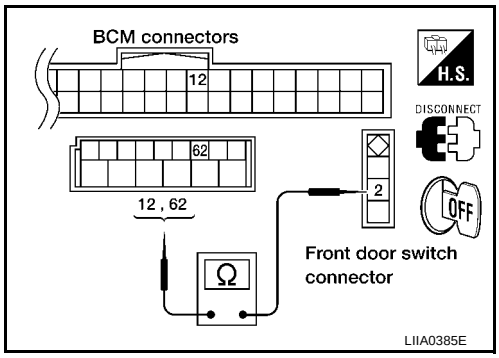
2 (SB) - 62 (SB) : Continuity should exist.

Front RH

2 (BR/W) - 12 (BR/W) : Continuity should exist.

4. Check continuity between front door switch connector B8 (LH) or B108 (RH) terminal 2 and ground.

2 (SB or BR/W) - Ground : Continuity should not exist.



OK or NG

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

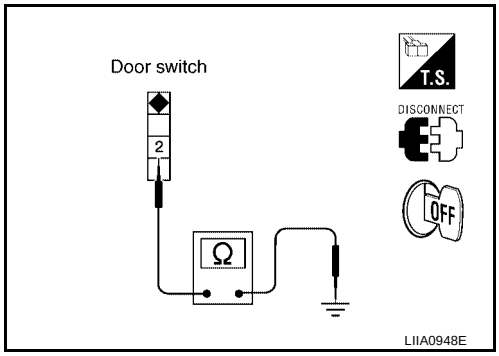
3. CHECK DOOR SWITCH

1. Disconnect front door switch LH or RH.
2. Check continuity between each front door switch terminal 2 and body ground part of front door switch.

Terminal		Door switch	Continuity
2	Body ground part of front door switch	Pushed	No
		Released	Yes

OK or NG

OK >> Further inspection is necessary. Refer to symptom chart.
NG >> Replace malfunctioning front door switch.



Front Door Lock Assembly LH (Key Cylinder Switch) Check (With Front Left and Right only Anti-pinch System)

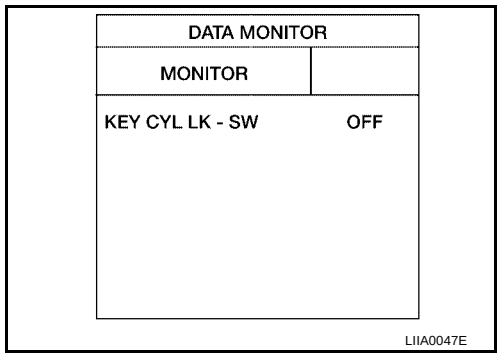
EIS003UD

1. CHECK FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH) INPUT SIGNAL

With CONSULT-II

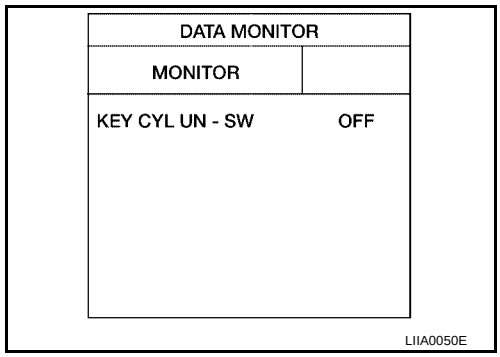
- Check front door lock assembly LH (key cylinder switch) (“KEY CYL LK SW”) in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT-II.

  “KEY CYL LK-SW” should be “ON” when key inserted in door key cylinder is turned to lock.



- Check front door lock assembly LH (key cylinder switch) (“KEY CYL UN-SW”) in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT-II.

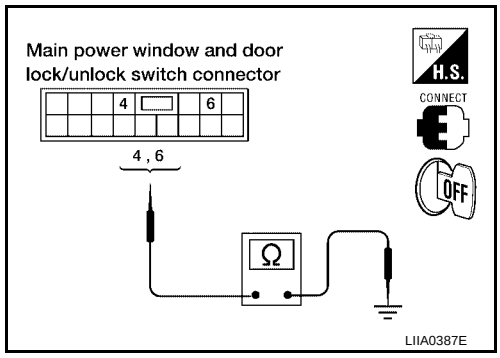
  “KEY CYL UN-SW” should be “ON” when key inserted in door key cylinder was turned to unlock.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Key position	Voltage (V) (Approx.)
	(+)	(–)		
D7	6 (R)	Ground	Neutral / Lock	5
			Lock	0
	4 (L)		Neutral / Unlock	5
			Unlock	0



OK or NG

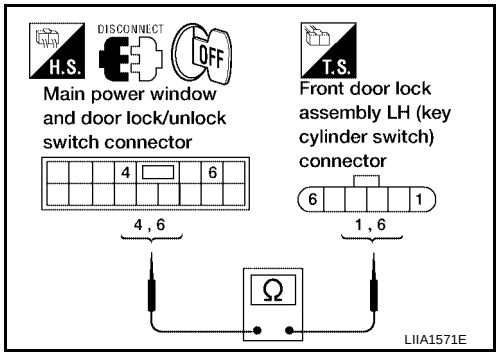
OK >> Further inspection is necessary. Refer to symptom chart.

NG >> GO TO 2.

2. CHECK FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch and front door lock assembly LH (key cylinder switch) connector.
3. Check continuity between main power window and door lock/unlock switch connector D7 terminals 4, 6 and front door lock assembly LH (key cylinder switch) connector D51 terminals 1, 6.

6 (R) - 6 (R) : Continuity should exist.
4 (L) - 1 (L) : Continuity should exist.



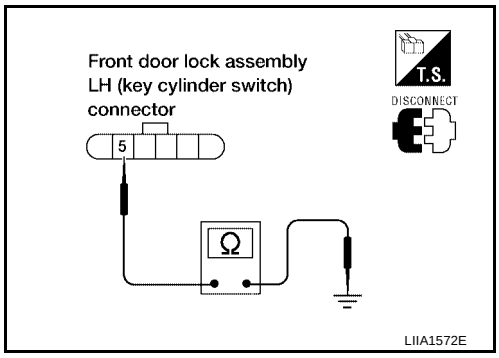
OK or NG

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

3. CHECK FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH) GROUND

Check continuity between front door lock assembly LH (key cylinder switch) connector D51 terminal 5 and ground.

5 (B) - Ground : Continuity should exist.



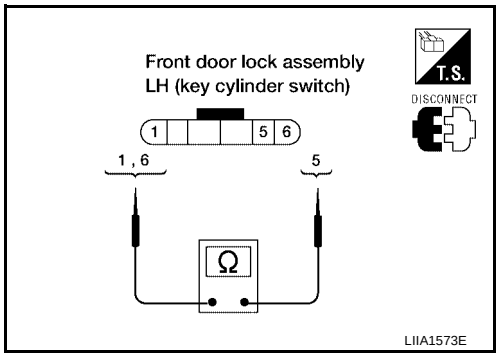
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness.

4. CHECK FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH)

Check continuity between front door lock assembly LH (key cylinder switch) terminal 1, 6 and 5.

Terminals		Key position	Continuity
6	5	Neutral/Unlock	No
		Lock	Yes
1		Neutral/Lock	No
		Unlock	Yes



OK or NG

OK >> Further inspection is necessary. Refer to symptom chart.
NG >> Replace front door lock assembly LH (key cylinder switch).

Front Door Lock Assembly LH (Key Cylinder Switch) Check (With Front and Rear Power Window Anti-pinch System)

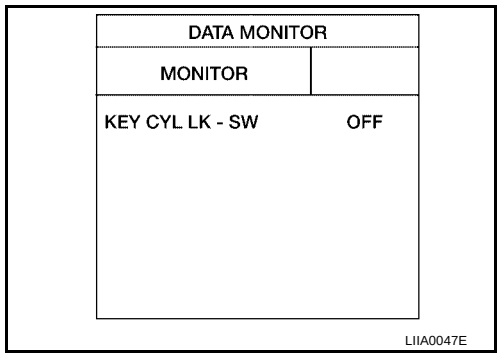
EIS003UE

1. CHECK FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH) INPUT SIGNAL

With CONSULT-II

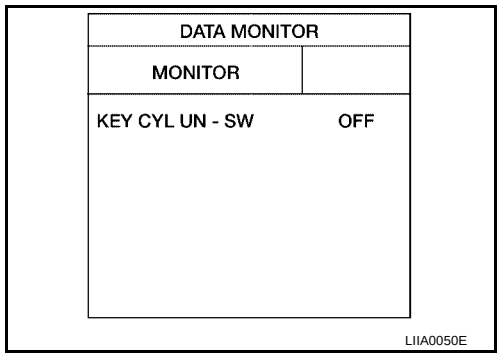
- Check front door lock assembly LH (key cylinder switch) (“KEY CYL LK SW”) in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT-II.

  “KEY CYL LK-SW” should be “ON” when key inserted in door key cylinder is turned to lock.



- Check front door lock assembly LH (key cylinder switch) (“KEY CYL UN-SW”) in “DATA MONITOR” mode for “POWER DOOR LOCK SYSTEM” with CONSULT-II.

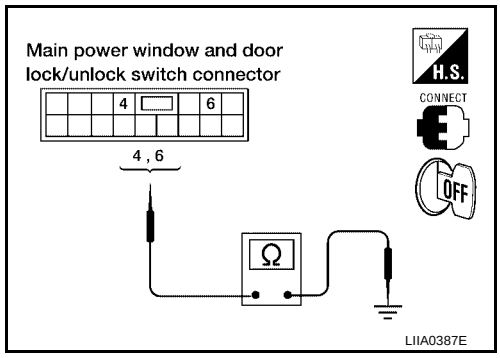
  “KEY CYL UN-SW” should be “ON” when key inserted in door key cylinder was turned to unlock.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Key position	Voltage (V) (Approx.)
	(+)	(–)		
D7	6 (R)	Ground	Neutral / Lock	5
			Lock	0
	4 (P/L)		Neutral / Unlock	5
			Unlock	0



OK or NG

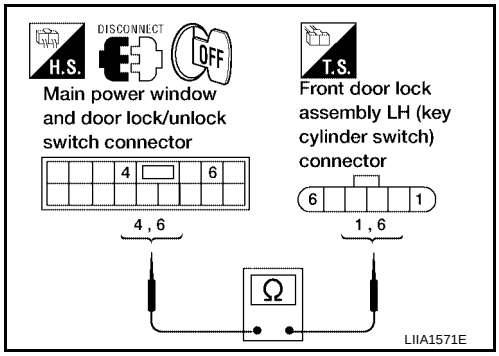
OK >> Further inspection is necessary. Refer to symptom chart.

NG >> GO TO 2.

2. CHECK FRONT DOOR KEY CYLINDER SWITCH LH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch and front door lock assembly LH (key cylinder switch) connector.
3. Check continuity between main power window and door lock/unlock switch connector D7 terminals 4, 6 and front door lock assembly LH (key cylinder switch) connector D51 terminals 1, 6.

6 (R) - 6 (R) : Continuity should exist.
4 (P/L) - 1 (P/L) : Continuity should exist.



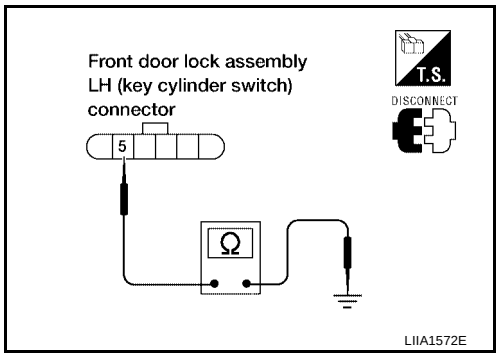
OK or NG

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

3. CHECK FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH) GROUND

Check continuity between front door lock assembly LH (key cylinder switch) connector D51 terminal 5 and ground.

5 (B) - Ground : Continuity should exist.



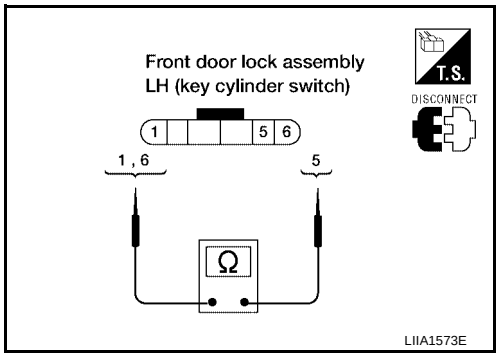
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness.

4. CHECK FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH)

Check continuity between front door lock assembly LH (key cylinder switch) terminal 1, 6 and 5.

Terminals		Key position	Continuity
6	5	Neutral/Unlock	No
		Lock	Yes
1		Neutral/Lock	No
		Unlock	Yes



OK or NG

OK >> Further inspection is necessary. Refer to symptom chart.
NG >> Replace front door lock assembly LH (key cylinder switch).

Power Window Serial Link Check Front LH and RH

EIS003UF

1. CHECK SERIAL LINK OUTPUT SIGNAL

With CONSULT-II

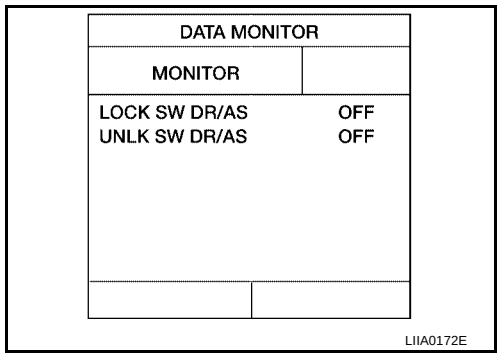
Check door lock and unlock switch (“LOCK SW DR/AS”, “UNLK SW DR/AS”) in DATA MONITOR mode for “REMOTE KEYLESS ENTRY SYSTEM” with CONSULT-II.

- When door lock and unlock switch is turned to LOCK

  LOCK SW DR/AS : ON

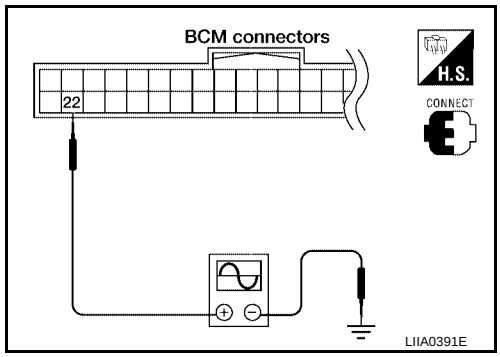
- When door lock and unlock switch is turned to UNLOCK

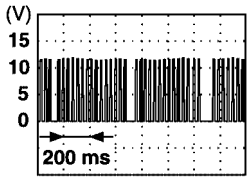
  UNLK SW DR/AS : ON



Without CONSULT-II

1. Remove key from ignition switch and close driver side and passenger side.
2. Check the signal between BCM connector and ground with oscilloscope when door lock and unlock switch (front LH and front RH) is turned “LOCK” or “UNLOCK”.
3. Make sure signals which are shown in the figure below can be detected during 10 second just after door lock and unlock switch (front LH and front RH) is turned “LOCK” or “UNLOCK”.



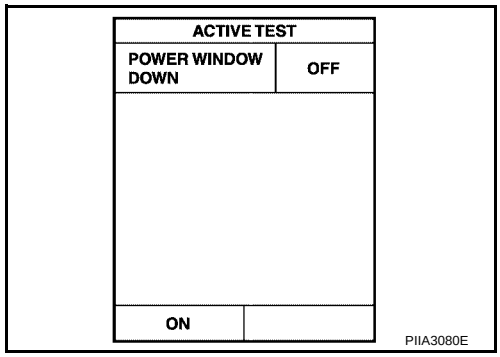
Connector	Terminals (Wire color)		Signal
	(+)	(–)	
M18	22 (Y)	Ground	

OK or NG

OK >> GO TO 2.
NG >> GO TO 3.

2. CHECK BCM OUTPUT SIGNAL

Check power window serial link (“POWER WINDOW DOWN”) in “ACTIVE TEST” mode with CONSULT-II. When “ACTIVE TEST” is executed, is the window of driver side and passenger side lowered.



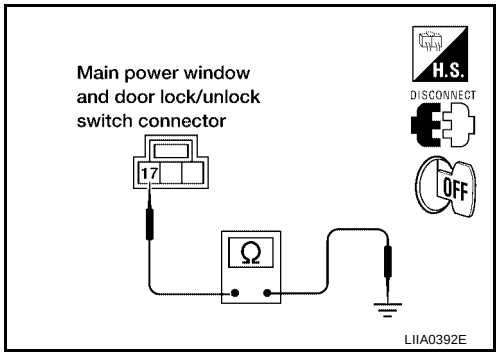
OK or NG

OK >> Further inspection is necessary. Refer to symptom chart.
NG >> Replace BCM. Refer to BCS-20, "Removal and Installation of BCM" .

3. CHECK POWER WINDOW SWITCH GROUND

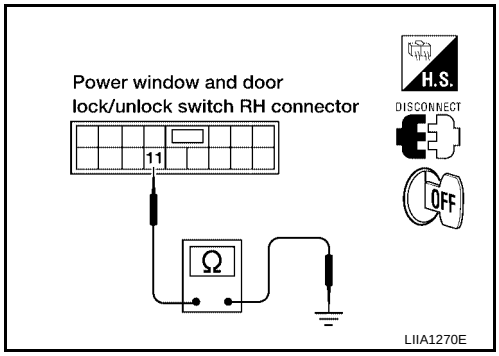
1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch and power window and door lock/unlock switch RH.
3. Check continuity between main power window and door lock/unlock switch connector D8 terminal 17 and ground.

17 (B) - Ground : Continuity should exist.



4. Check continuity between power window and door lock/unlock switch RH connector D105 terminal 11 and ground.

11 (B) - Ground : Continuity should exist.



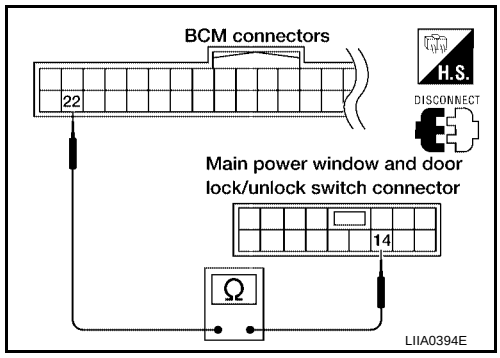
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness.

4. CHECK POWER WINDOW SERIAL LINK CIRCUIT

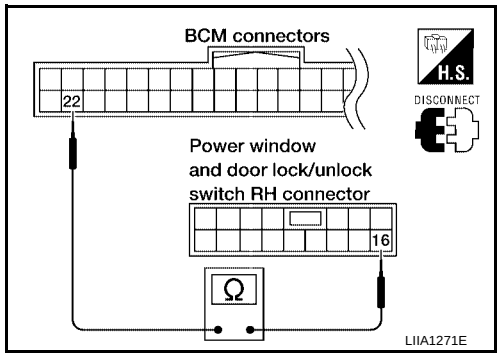
1. Disconnect BCM.
2. Check continuity between BCM connector M18 terminal 22 and main power window and door lock/unlock switch connector D7 terminal 14.

22 (Y) - 14 (Y) **: Continuity should exist.**



3. Check continuity between BCM connector M18 terminal 22 and power window and door lock/unlock switch RH connector D105 terminal 16.

22 (Y) - 16 (Y) **: Continuity should exist.**



OK or NG

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

NG >> Repair or replace harness.

Power Window Serial Link Check Rear LH or RH (With Front and Rear Power Window Anti-pinch System)

EIS003UG

1. CHECK REAR POWER WINDOW SWITCH LH OR RH

1. Replace with operative rear power window switch LH or RH.
2. Does window operates normally?

OK or NG

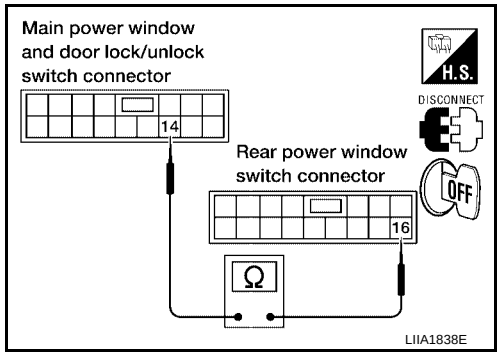
OK >> Replace rear power window switch LH or RH.

NG >> GO TO 2.

2. CHECK POWER WINDOW SERIAL LINK CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch and rear power window switch LH or RH.
3. Check continuity between main power window and door lock/unlock switch connector D7 terminal 14 and rear power window switch connector D203 (LH) or D303 (RH) terminal 16.

14 (Y) - 16 (Y) **: Continuity should exist.**



OK or NG

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

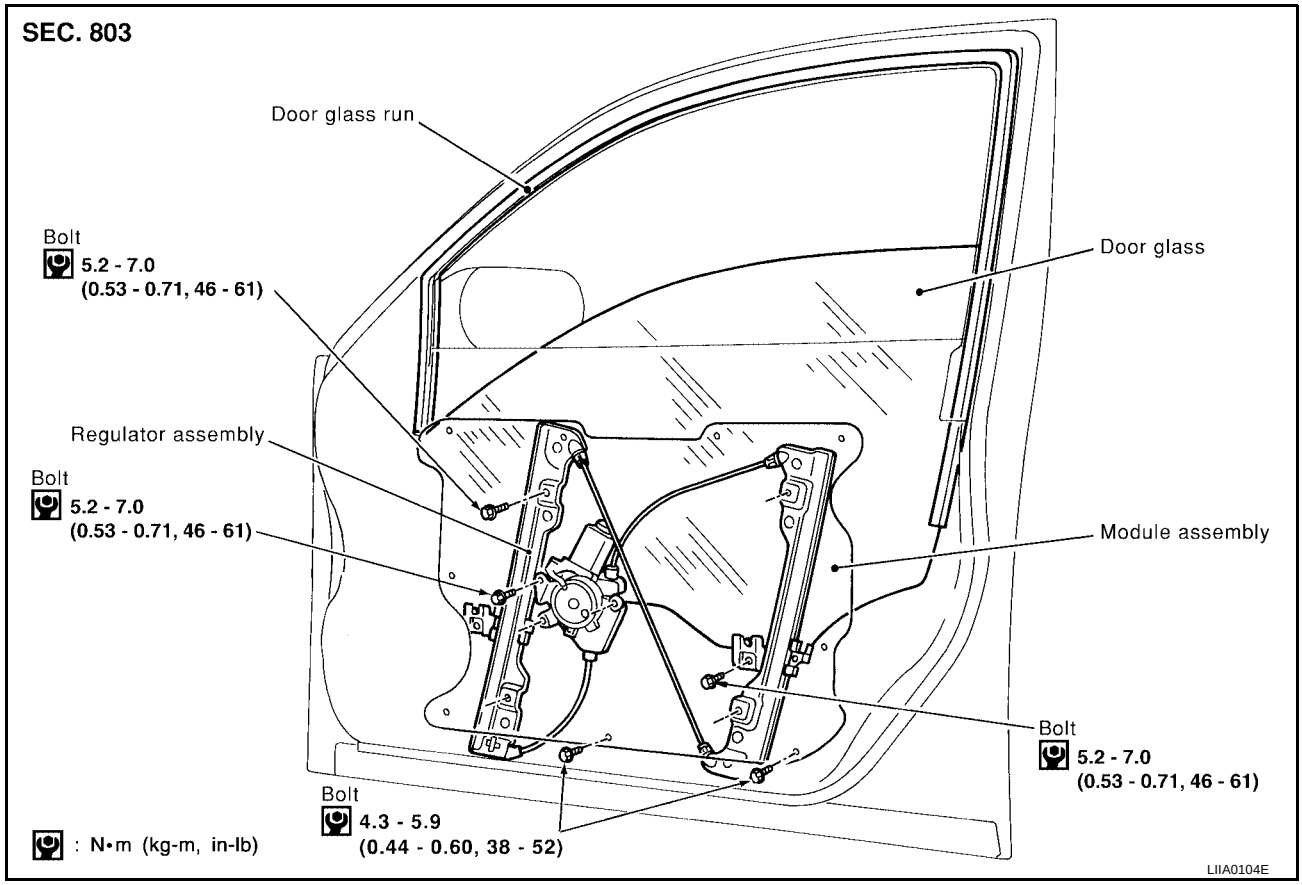
NG >> Repair or replace harness.

FRONT DOOR GLASS AND REGULATOR

PFP:80300

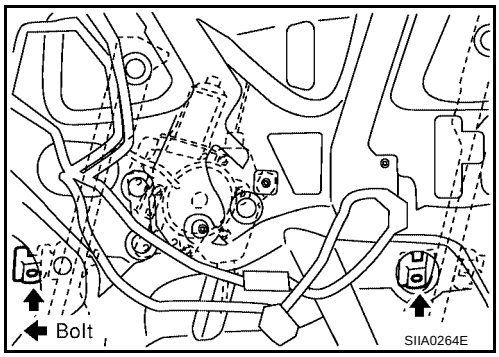
Front Door Glass

EIS007NQ



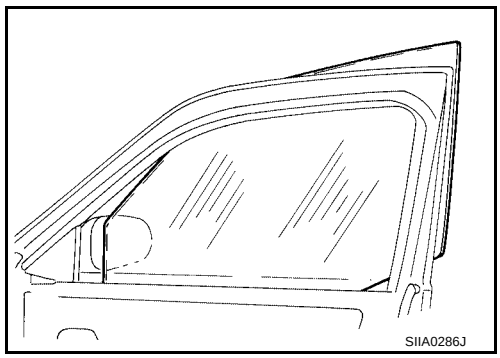
REMOVAL

1. Remove the front door speaker. Refer to AV-57, "Removal and Installation of Front Door Speaker" .
2. Remove 2 hole covers over glass bolts.
3. Remove the glass bolts.
4. Temporarily reconnect the power window main switch and raise/ lower the door window until the glass bolts can be seen.



5. Remove the inside seal.

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



INSTALLATION

Installation is in the reverse order of removal.

FITTING INSPECTION

- Check that the glass is securely fit into the glass run groove.
- Lower the 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 glass and sash is not parallel, loosen the regulator bolts, guide rail bolts, and glass and guide rail bolts to correct the glass position.

SETTING AFTER INSTALLATION

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 glass.
- Removal and installation of the glass run.

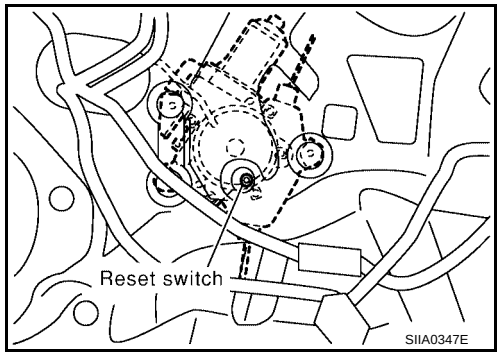
Resetting

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

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

CAUTION:

Do not operate the glass automatically to raise the glass to the top dead center position.

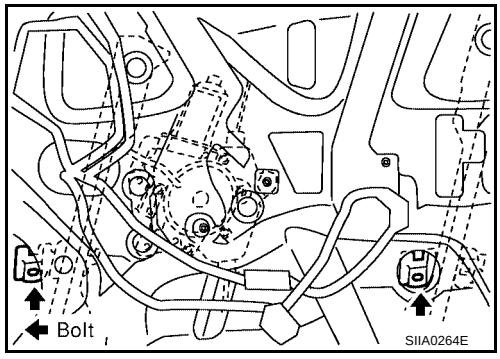


Door Module Assembly

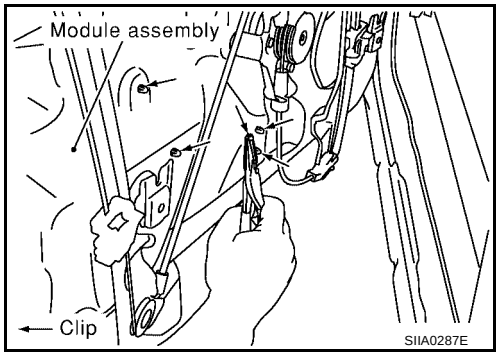
EIS003UH

REMOVAL

1. Remove the front door speaker. Refer to AV-57, "Removal and Installation of Front Door Speaker" .
2. Remove 2 hole covers over glass bolts.
3. Temporarily reconnect the power window main switch and raise/lower the door window until the glass bolts can be seen.



4. Remove the glass bolts.
5. Raise the front door glass and hold in place with suitable tool.
6. Remove the bolts and the module assembly.
7. Remove the inside seal.
8. Disconnect the harness connector for the module assembly, and unclip the harness from the back.

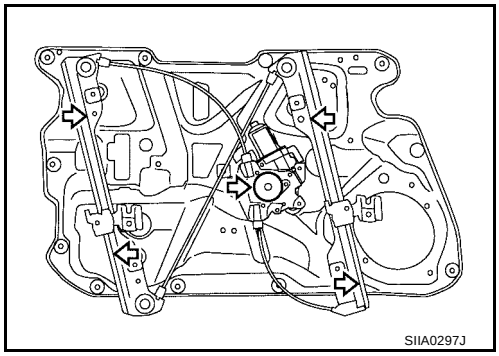


INSPECTION AFTER REMOVAL

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

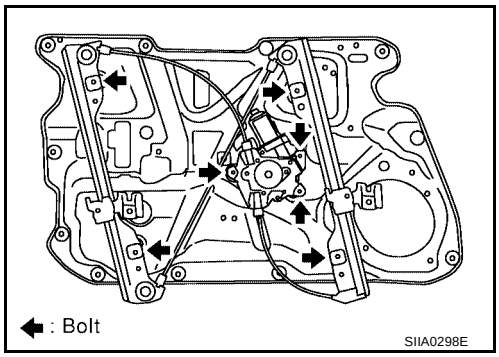
- Wire wear
- Regulator deformation
- Grease condition for each sliding part

The arrows in the figure show the application points of the body grease.



DISASSEMBLY AND ASSEMBLY

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



INSTALLATION

1. Installation is in the reverse order of removal.

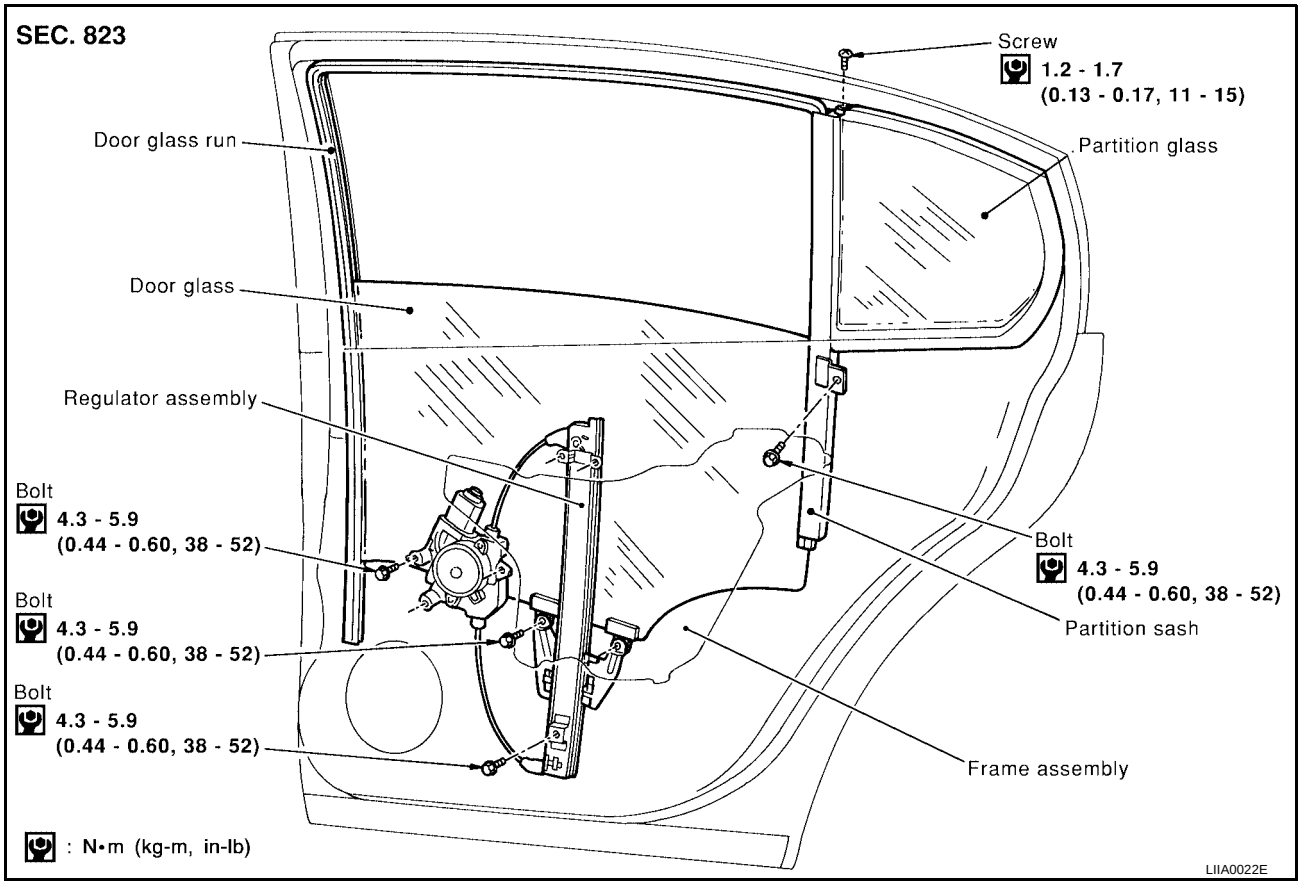
Glass bolts : 5.2 - 7.0 N·m (0.53 - 0.71 kg-m, 46 - 61 in-lb)

REAR DOOR GLASS AND REGULATOR

PFP:82300

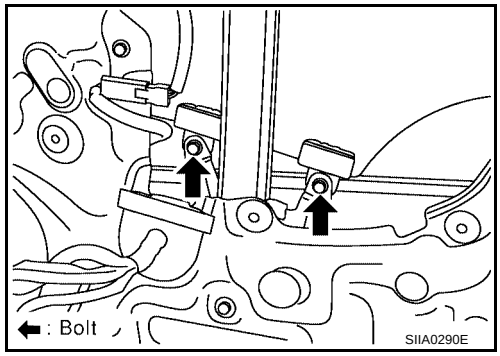
Rear Door Glass

EIS003UI

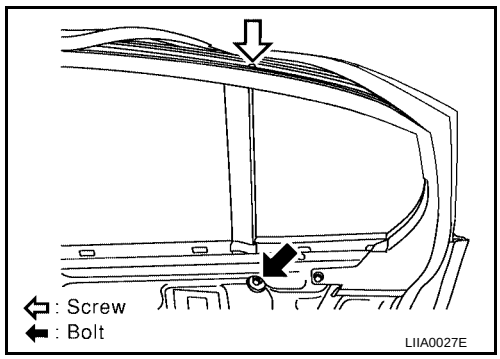


REMOVAL

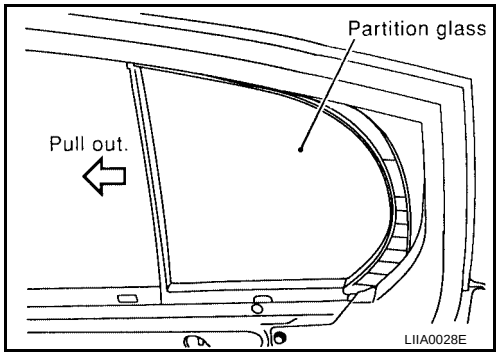
1. Remove the rear door finisher. Refer to EI-31, "REAR DOOR" .
2. Temporarily reconnect the power window switch and raise/lower the door window until the glass bolts can be seen.
3. Remove the inside seal.
4. Remove the glass bolts, and place the glass on the inner bottom of the panel.



5. Remove the partition sash from the glass run.
6. Remove the partition sash bolt (lower) and screw (upper) to remove the sash.
7. Remove the glass from the inside of the panel.



8. Remove the partition glass from the panel.



INSTALLATION

Installation is in the reverse order of removal.

Glass bolts : 4.3 - 5.9 N·m (0.44 - 0.60 kg-m, 38 - 52 in-lb)

FITTING INSPECTION

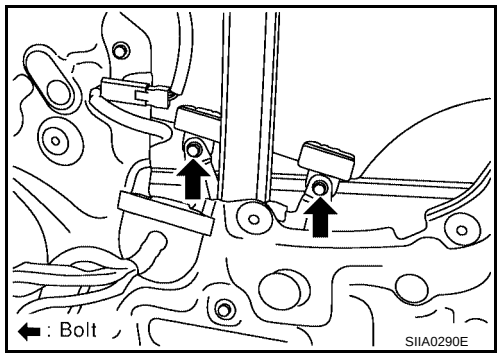
- Check that the glass is securely fit into the glass run groove.
- Lower the glass slightly [approximately 10 to 20 mm (0.39 to 0.79 in)], and check that the clearance to the sash is parallel. If the clearance between the glass and sash is not parallel, loosen the regulator bolts, guide rail bolts,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

Rear door Glass Regulator

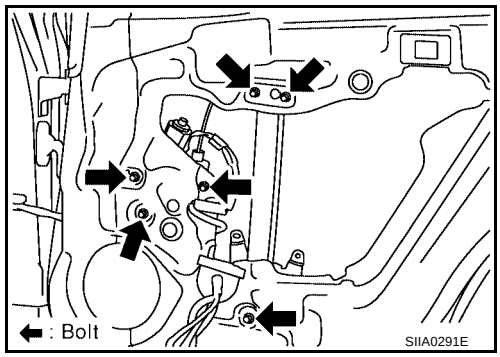
EIS007NR

REMOVAL (REGULATOR)

1. Remove the rear door finisher. Refer to EI-31, "REAR DOOR" .
2. Temporarily reconnect the power window switch and raise/lower the door window until the glass bolts can be seen.
3. Remove the inside seal.
4. Remove the glass bolts.
5. Raise the door glass and hold with a suitable tool.



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

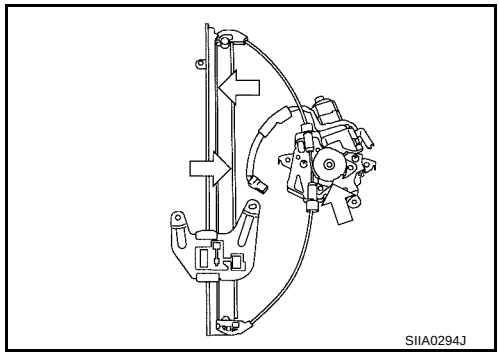


INSPECTION AFTER REMOVAL

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

- Gear wear
- Regulator deformation
- Spring damage
- Grease condition for each sliding part

The arrows in the figure show the application points of the grease "Dow Corning Moly Coat SK 623".



INSTALLATION

Installation is in the reverse order of removal.

- Perform fitting inspection. Refer to GW-92, "Fitting inspection" .

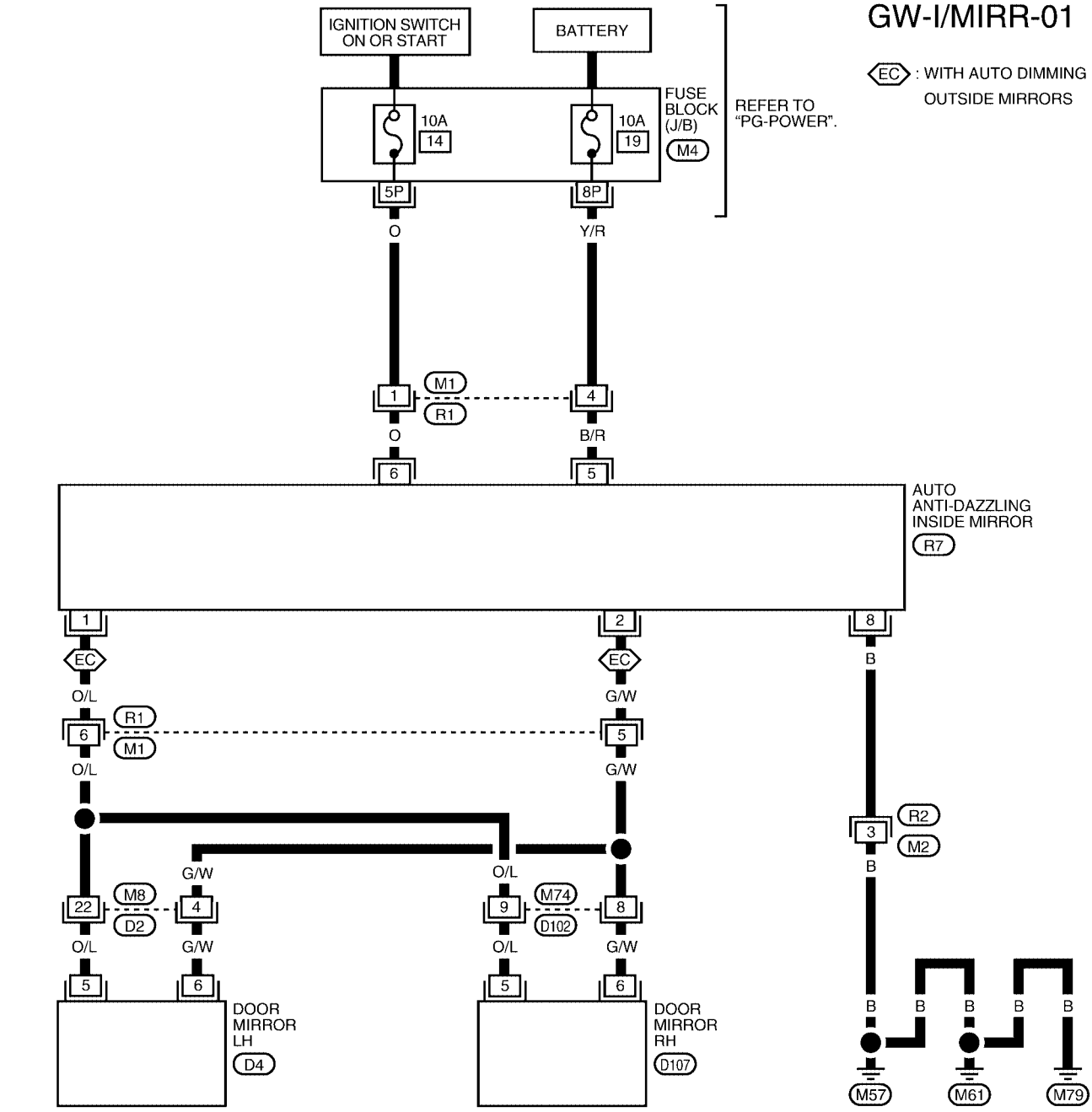
Glass bolts : 4.3 - 5.9 N·m (0.44 - 0.60 kg-m, 38 - 52 in-lb)

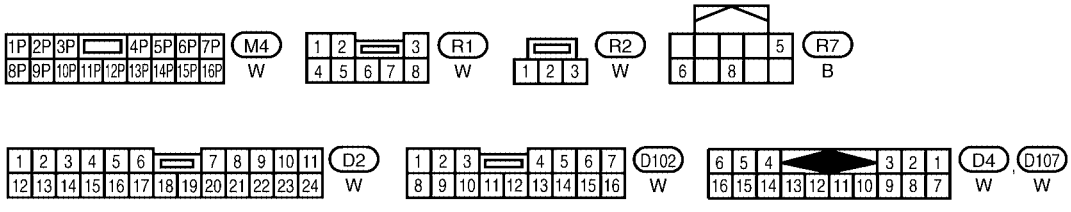
INSIDE MIRROR

PFP:96321

Wiring Diagram — I/MIRR —

EIS003UJ





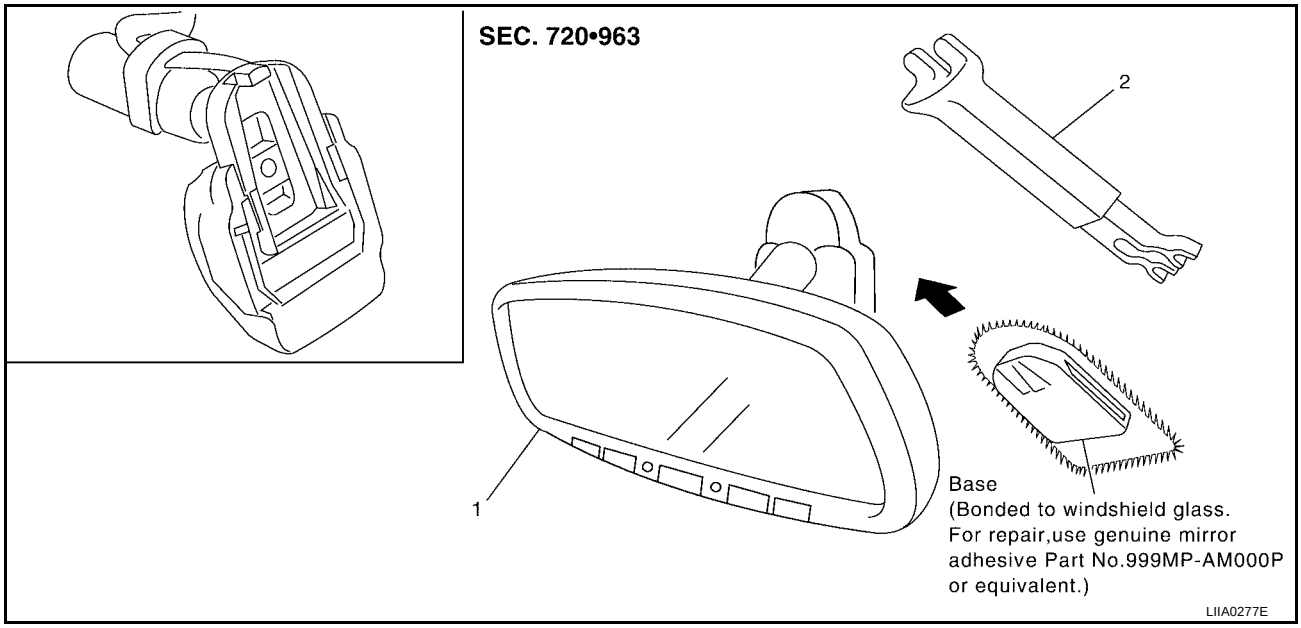
WIWA1153E

Removal and Installation

EIS003UK

INSIDE MIRROR

1. Remove inside mirror finisher.
2. Slide the mirror upward to remove.
3. Disconnect the connector.



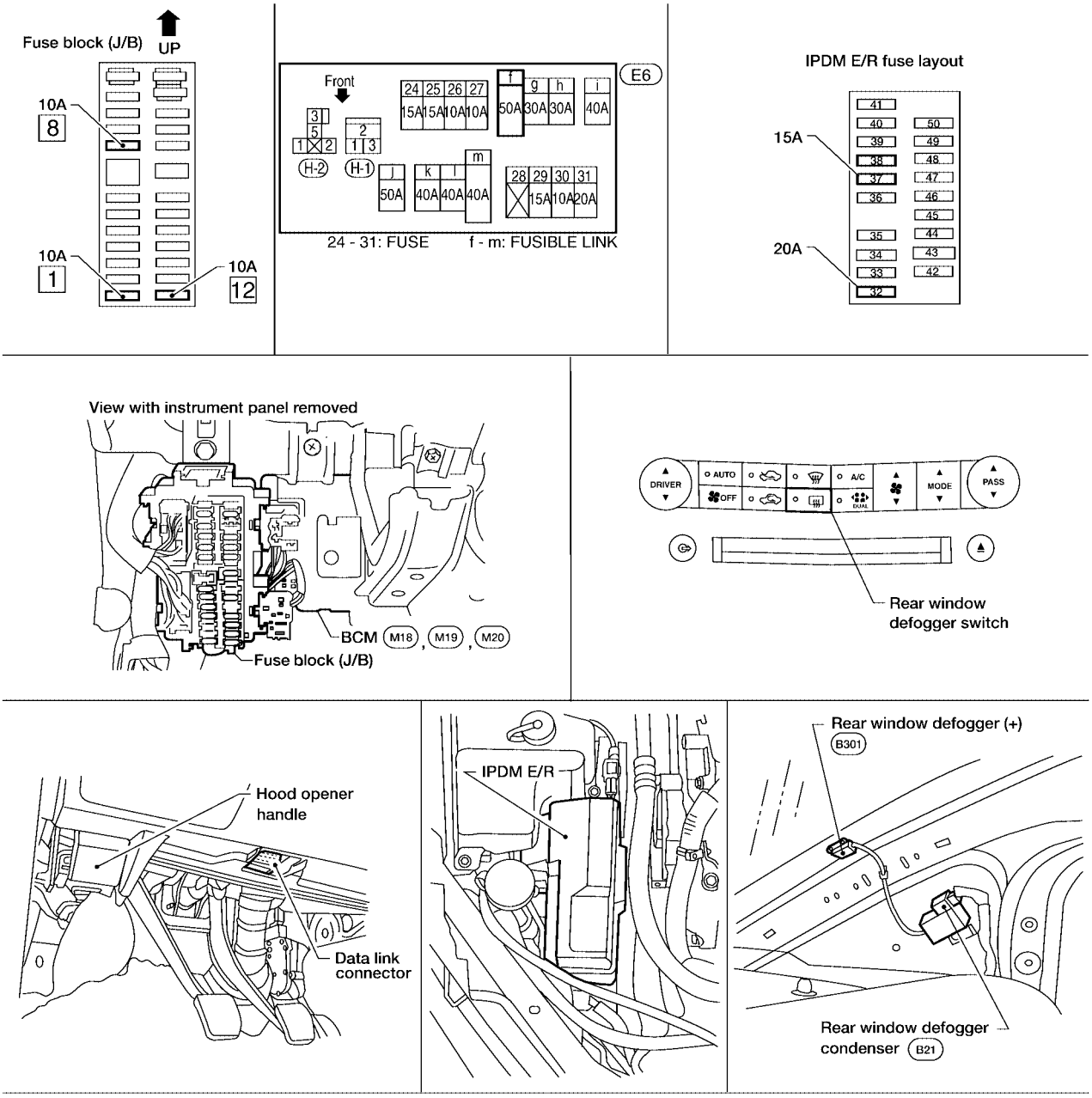
1. Inside mirror
2. Inside mirror finisher

REAR WINDOW DEFOGGER

PFP:25350

Component Parts and Harness Connector Location

EIS003UL



LIIA1839E

System Description

EIS003UM

The rear window defogger system is controlled by BCM (body control module) and IPDM E/R (intelligent power distribution module engine room).
The rear window defogger operates only for approximately 15 minutes.
Power is supplied at all times

- through 20A fuses (No. 32, and 37, located in the IPDM E/R)
- to rear window defogger relay terminals 3 and 6
- through 50A fusible link (letter **f** , located in the fuse and fusible link box)
- to BCM terminal 55.

With the ignition switch turned to 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
- to unified meter and A/C amp. terminal 22
- through 10A fuse [No. 1, located in the fuse block (J/B)]
- to BCM terminal 38.

Ground is supplied

- to BCM terminal 52
- to unifed meter and A/C amp. terminal 29 and 30
- through body grounds M57, M61 and M79
- to IPDM E/R terminals 38 and 60
- through body grounds E15 and E24.

When unified meter and A/C amp. (rear window defogger switch) is turned to ON, ground is supplied

- to BCM terminal 9
- through unified meter and A/C amp. terminal 38
- through unified meter and A/C amp. terminal 29 and 30
- through body grounds M57, M61 and M79.

Then rear window defogger switch is illuminated.
Then BCM recognizes that rear window defogger switch is turned to ON.
Then it sends rear window defogger switch signals to IPDM E/R and display control unit (with navigation) or display unit (without navigation) via data line (CAN-H, CAN-L).
When display control unit (with navigation) or display unit (without navigation) receives rear window defogger switch signals, and display on the screen.
When IPDM E/R receives rear window defogger switch signals, ground is supplied

- to rear window defogger relay terminal 2
- through IPDM E/R terminal 52
- through IPDM E/R terminal 60
- through body grounds E15 and E24.

Then rear window defogger relay is energized.
With power and ground supplied, rear window defogger filaments heat and defog the rear window.
When rear window defogger relay is turned to ON (with door mirror defogger), power is supplied

- through rear window defogger relay terminals 5 and 7
- through fuse block (J/B) terminal 2Q
- through 10A fuse [No. 8, located in the fuse block (J/B)]
- through fuse block (J/B) terminal 5N
- to door mirror (LH and RH) terminal 2.

Door mirror (LH and RH) terminal 1 is grounded through body grounds M57, M61 and M79.
With power and ground supplied, rear window defogger filaments heat and defog the rear window and door mirror defogger filaments heat and defog the mirror.

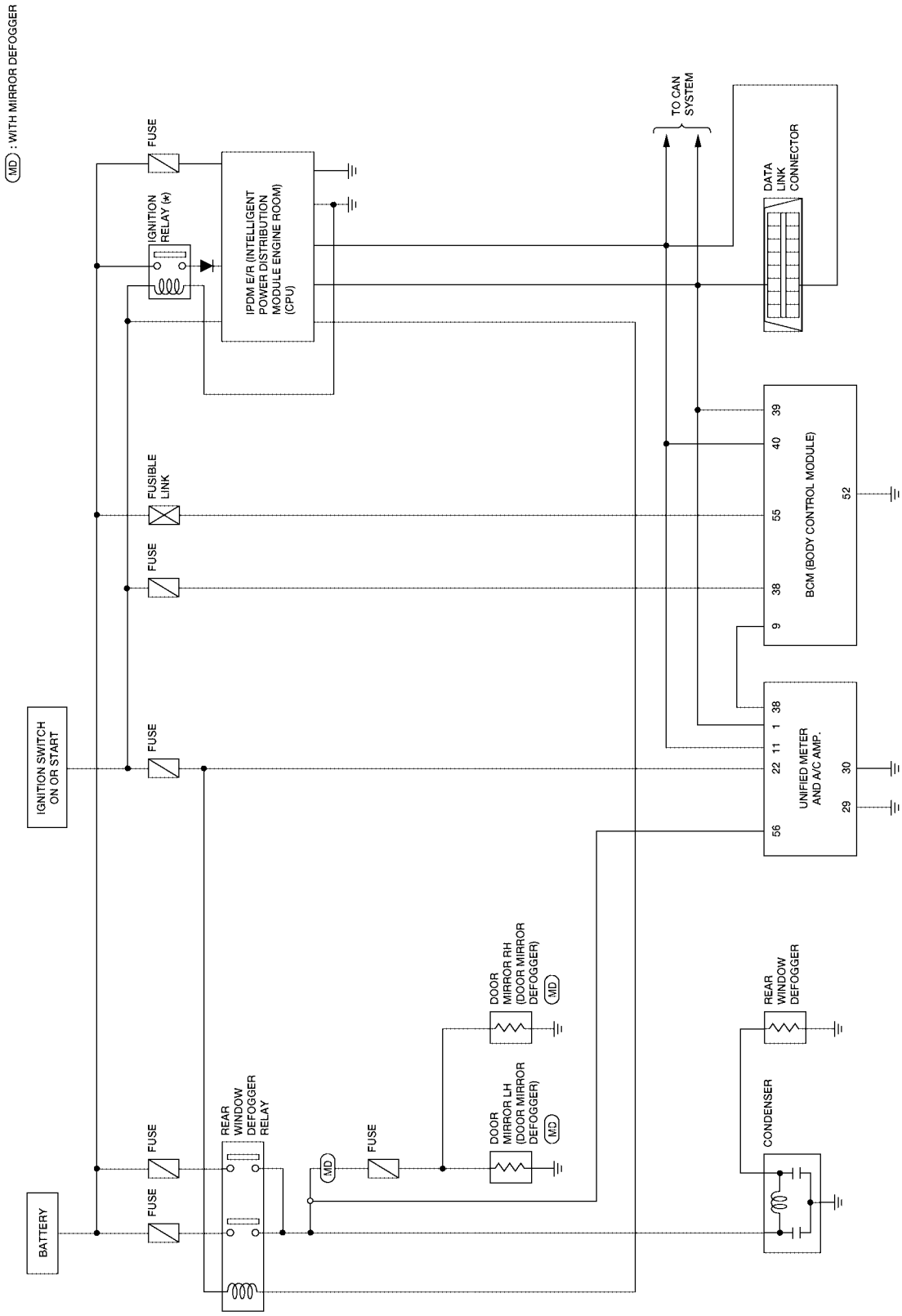
CAN Communication System Description

EIS003UN

Refer to LAN-7, "CAN COMMUNICATION" ..

Schematic

EIS003UO

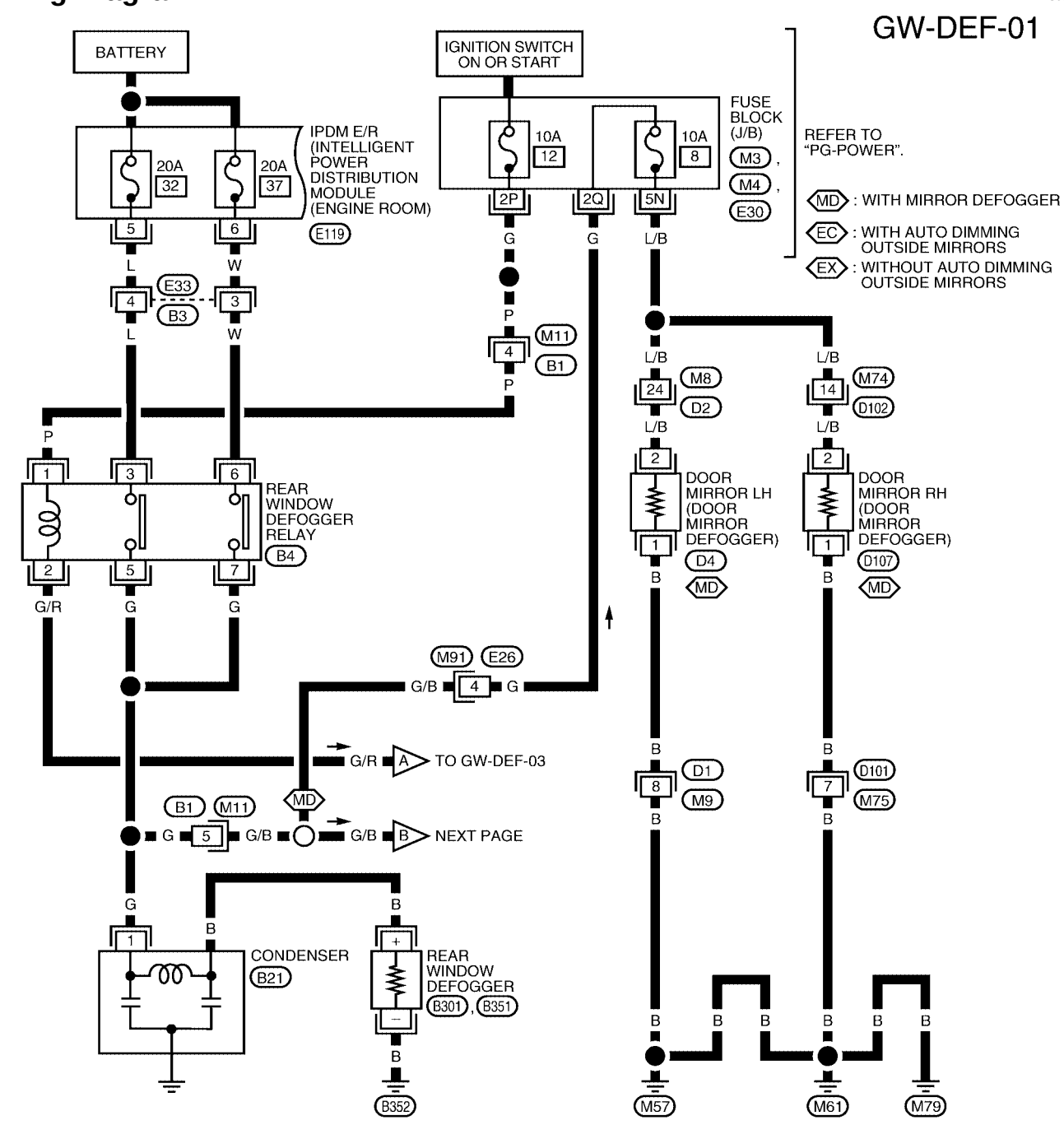


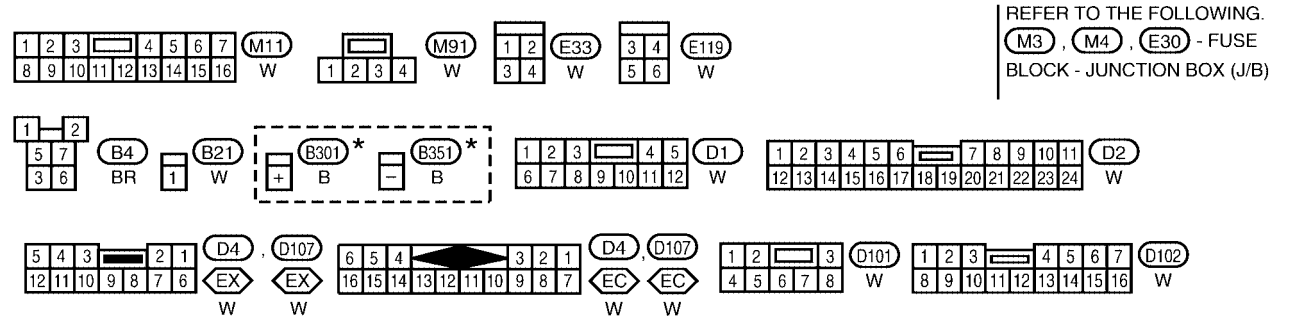
*: THIS RELAY IS BUILT INTO IDPM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM).

WIWA0377E

Wiring Diagram — DEF —

EIS003UP

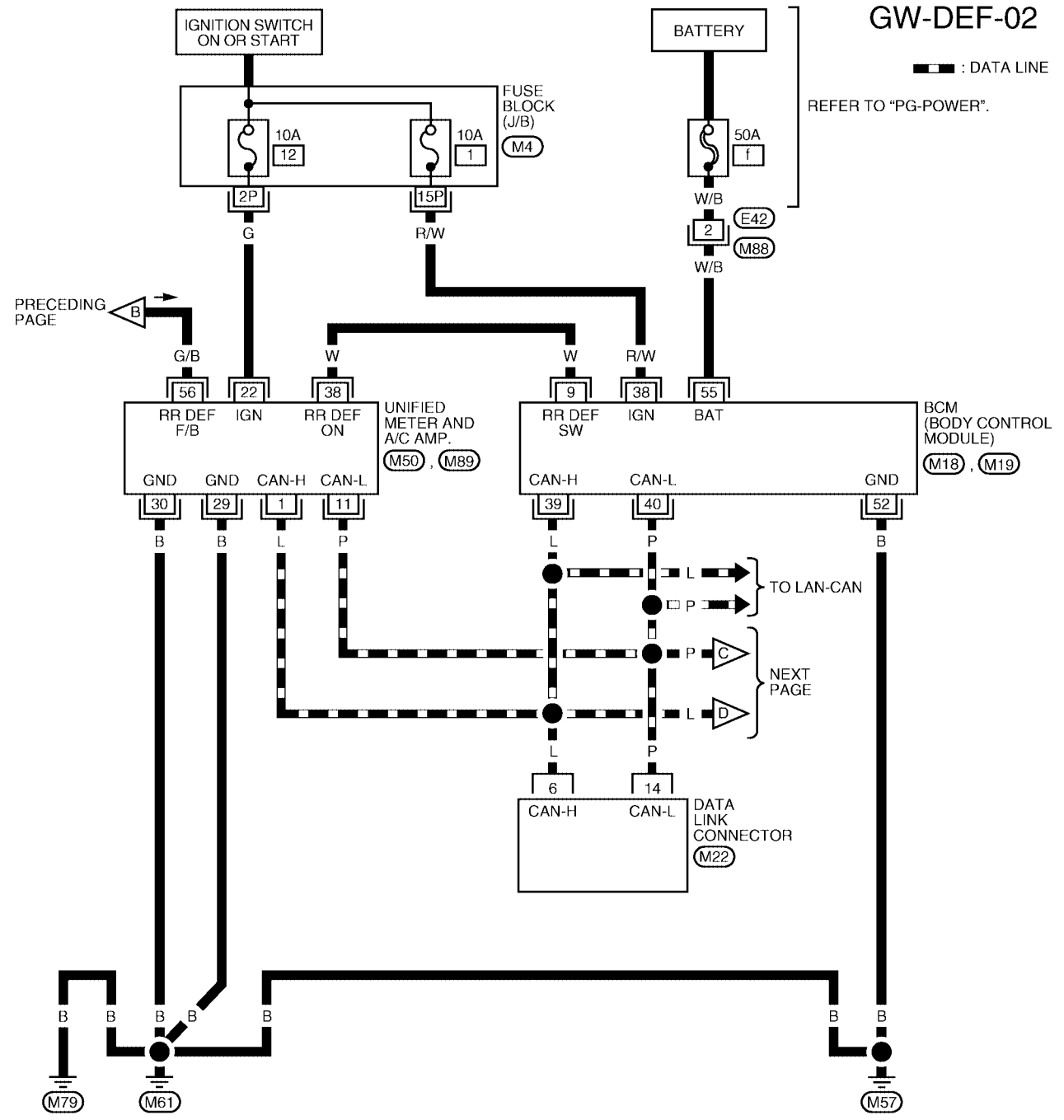




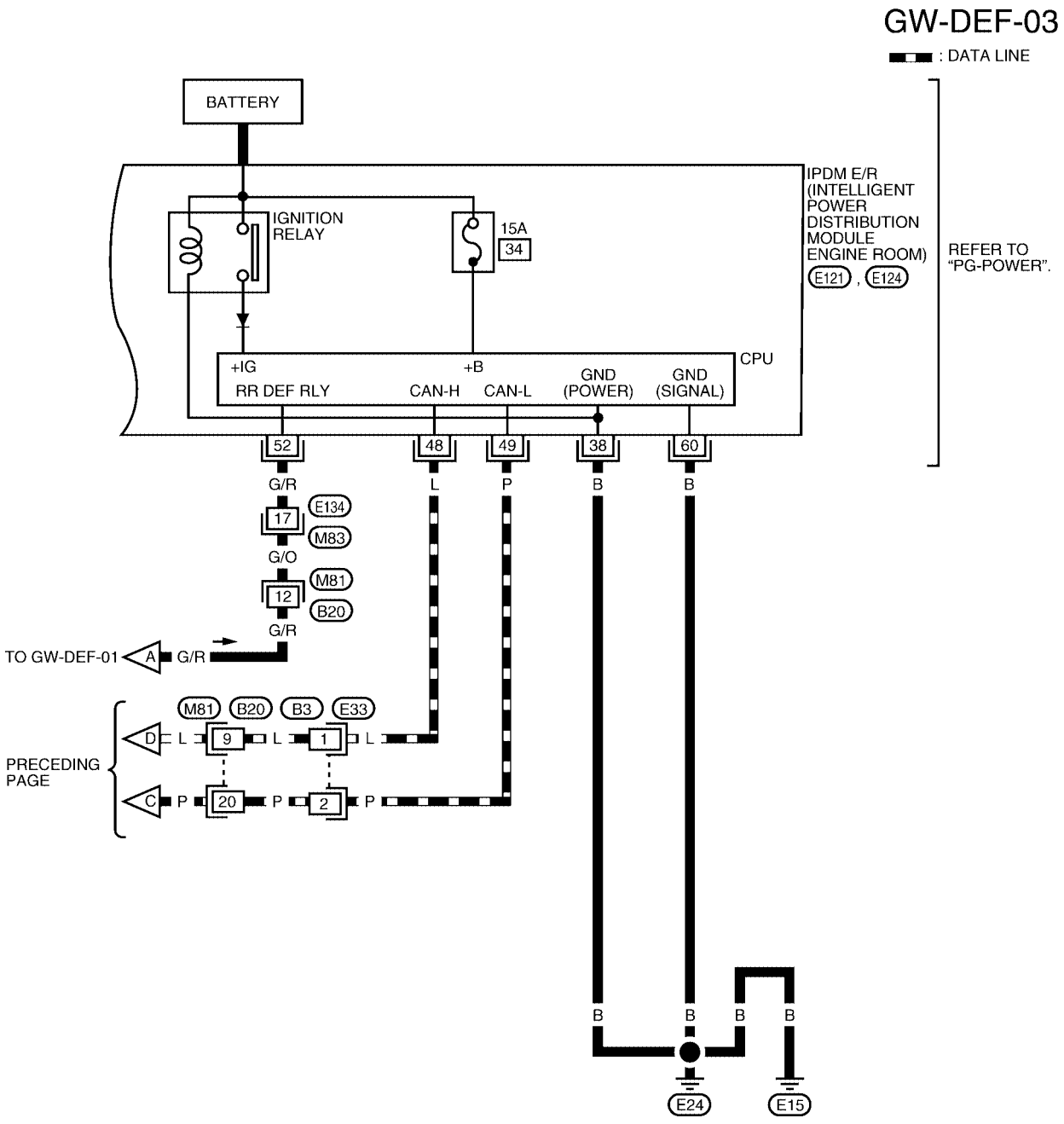
REFER TO THE FOLLOWING.
M3, M4, E30 - FUSE BLOCK - JUNCTION BOX (J/B)

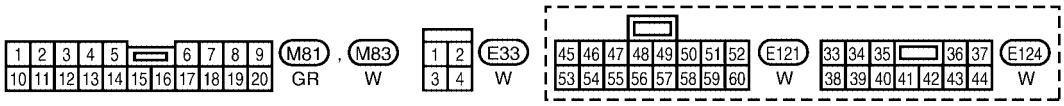
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

WIWA1154E


GW-DEF-02
: DATA LINE
IGNITION SWITCH ON OR START
BATTERY
FUSE BLOCK (J/B) M4
10A 12
10A 1
50A f
REFER TO "PG-POWER".
2P
15P
W/B
E42
2
M88
G
R/W
W/B
PRECEDING PAGE B
G/B
W
W
R/W
56
22
38
9
38
55
RR DEF F/B
IGN
RR DEF ON
UNIFIED METER AND A/C AMP. M50, M89
RR DEF SW
IGN
BAT
BCM (BODY CONTROL MODULE) M18, M19
GND
GND
CAN-H
CAN-L
CAN-H
CAN-L
GND
30
29
1
11
39
40
52
B
B
L
P
L
P
B
TO LAN-CAN
NEXT PAGE
C
D
6
14
CAN-H
CAN-L
DATA LINK CONNECTOR M22
M79
M61
M57
M4
W
M18
W
M19
B
H.S.
M22
W
M50
GR
M89
W
M88
B

WIWA0379E


GW-DEF-03
: DATA LINE
BATTERY
IGNITION RELAY
15A
34
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E121 , E124
REFER TO "PG-POWER".
CPU
+IG
RR DEF RLY
+B
CAN-H
CAN-L
GND (POWER)
GND (SIGNAL)
52
48
49
38
60
G/R
L
P
B
B
E134
17
M83
G/O
M81
12
B20
G/R
TO GW-DEF-01
A
G/R
PRECEDING PAGE
M81
B20
B3
E33
D
L
9
L
1
L
C
P
20
P
2
P
B
B
B
B
E24
E15


M81
M83
GR
W
E33
W
E121
W
E124
W

WIWA1155E

Terminal and Reference Value for BCM

EIS003UQ

Terminal	Wire color	Item	Condition	Voltage (V) (Approx.)
9	W	Rear window defogger switch signal	When rear window defogger switch is pressed.	0
			When rear window defogger switch is OFF.	5
38	R/W	Ignition switch ON or START	Ignition switch (ON or START position)	Battery voltage
39	L	CAN-H	—	—
40	P	CAN-L	—	—
49	B	Ground	—	0
52	B	Ground	—	0
55	W/B	Battery power supply	—	Battery voltage

Terminal and Reference Value for IPDM E/R

EIS003UR

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

Work Flow

EIS003US

1. Check the symptom and customer's requests.
2. Understand the outline of system. Refer to GW-96, "System Description" .
3. According to the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to GW-104, "Trouble Diagnoses Symptom Chart" .
4. Does rear window defogger operate normally? YES: GO TO 5, NO: GO TO 3.
5. Inspection End.

CONSULT-II Function (BCM)

EIS003UT

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

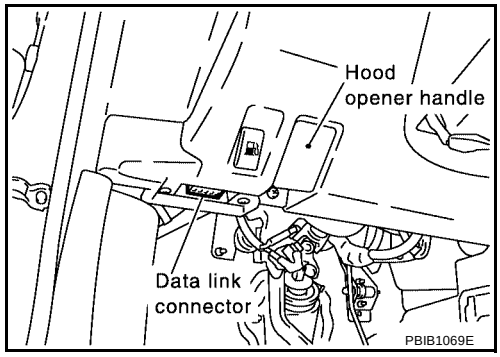
BCM diagnostic test item	Diagnostic mode	Content
Inspection by part	WORK SUPPORT	Changes setting of each function.
	DATA MONITOR	Displays BCM input/output data in real time.
	ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.
	SELF-DIAG RESULTS	Displays BCM self-diagnosis 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 INSPECTION PROCEDURE

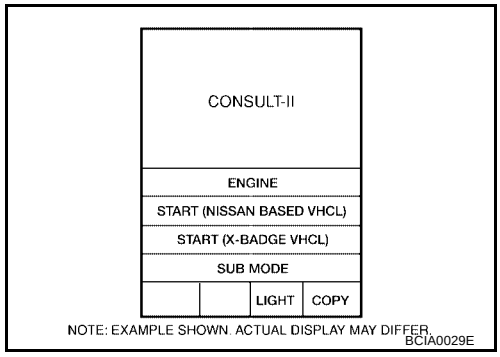
CAUTION:

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

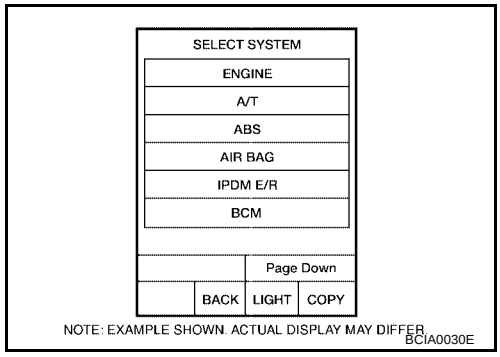
1. Turn ignition switch OFF.
2. Connect CONSULT-II and CONSULT-II CONVERTER to data link connector.



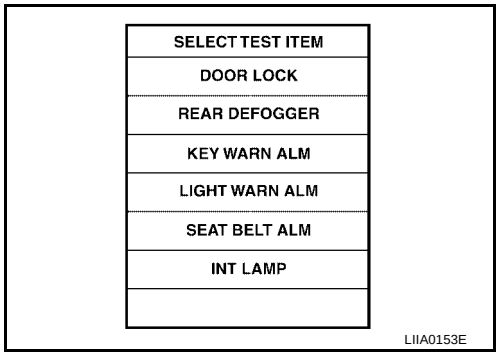
3. Turn ignition switch ON.
4. Touch “START (NISSAN BASED VHCL)”.



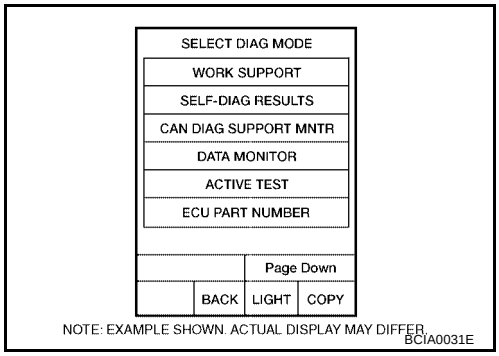
5. Touch “BCM”.
   If “BCM” is not indicated, go to GI-37, "CONSULT-II Data Link Connector (DLC) Circuit" .



6. Touch “REAR DEFOGGER”.



7. Select diagnosis mode.



DATA MONITOR

Display Item List

Monitor item “Operation”		Content
REAR DEF SW	“ON/OFF”	Displays “Press (ON)/others (OFF)” status determined with the rear window defogger switch.
IGN ON SW	“ON/OFF”	Displays “IGN (ON)/OFF” status determined with the ignition switch signal.

ACTIVE TEST

Display Item List

Test item	Content
REAR DEFOGGER	Gives a drive signal to the rear window defogger to activate it.

Trouble Diagnoses Symptom Chart

EIS003UU

- Make sure other systems using the signal of the following systems operate normally.

Symptom	Diagnoses / Service procedure	Refer to page
Rear window defogger and door mirror defoggers do not operate. (With door mirror defogger)	1. BCM power supply and ground circuitcheck	GW-106
	2. IPDM E/R auto active test check	PG-21
	3. Rear window defogger switch circuit check	GW-107
	4. Rear window defogger power supply circuit check	GW-108
	5. Replace IPDM E/R	PG-27
Rear window defogger does not operate. (Without door mirror defogger)	1. BCM power supply and ground circuit check	GW-106
	2. IPDM E/R auto active test check	PG-21
	3. Rear window defogger switch circuit check	GW-107
	4. Rear window defogger power supply circuit check	GW-108
	5. Rear window defogger circuit check	GW-110
	6. Filament check	GW-120
	7. Replace IPDM E/R	PG-27
Rear window defogger does not operate but both of door mirror defoggers operate. (With door mirror defogger)	1. Rear window defogger circuit check	GW-110
	2. Filament check	GW-120

Symptom	Diagnoses / Service procedure	Refer to page
Both door mirror defoggers do not operate but, rear window defogger operates. (With door mirror defogger)	1. Door mirror defogger power supply circuit check	GW-111
Door mirror LH defogger does not operate.	1. Door mirror LH defogger circuit check	GW-113
Door mirror RH defogger does not operate.	1. Door mirror RH defogger circuit check	GW-114
Rear window defogger switch does not light and rear window defogger is not displayed on the display, but rear window defogger operates.	1. Rear window defogger signal check	GW-119

BCM Power Supply and Ground Circuit Check

EIS003UV

1. CHECK FUSE AND FUSIBLE LINK

- Check 10A fuse [No. 1, located in fuse block (J/B)]
- Check 50A fusible link (letter **f** , located in the fuse and fusible link box)

NOTE:
Refer to GW-96, "Component Parts and Harness Connector Location" .

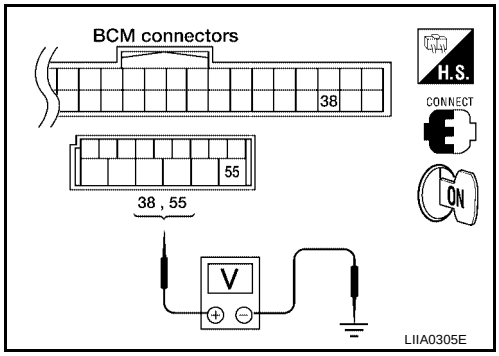
OK or NG

OK >> GO TO 2.
NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to PG-4, "POWER SUPPLY ROUTING CIRCUIT" .

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between BCM connector M18, M19 terminal 38, 55 and ground.

55 (W/B) - Ground : Battery voltage
38 (R/W) - Ground : Battery voltage



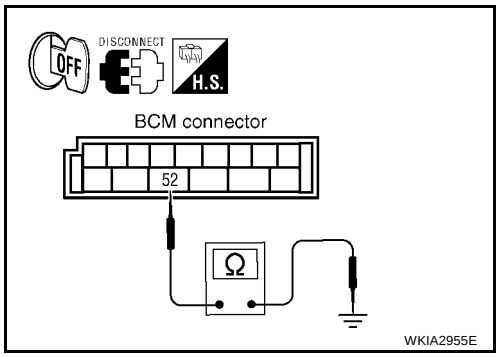
OK or NG

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

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM.
3. Check continuity between BCM connector M19 terminal 52 and ground.

52 (B) - Ground : Continuity should exist.



OK or NG

OK >> BCM power supply and ground circuit is OK.
NG >> Repair or replace harness.

Rear Window Defogger Switch Circuit Check

EIS003UW

1. CHECK REAR WINDOW DEFOGGER SWITCH OPERATION

With CONSULT-II

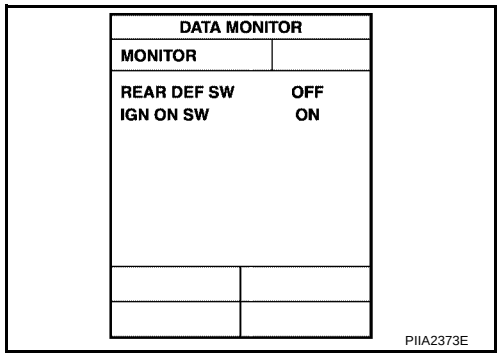
Check (“REAR DEF SW”, “IGN ON SW”) in DATA MONITOR mode with CONSULT-II.

When rear window defogger switch is turned to ON

REAR DEF SW : ON

When ignition switch is turned to ON

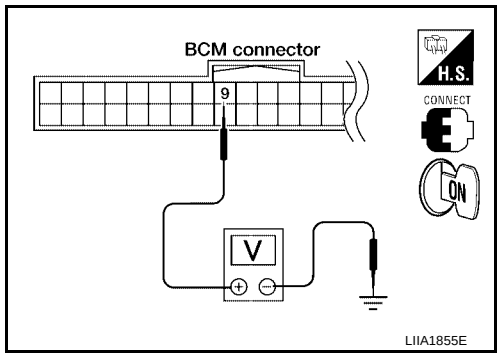
IGN ON SW : ON



With out CONSULT-II

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

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M18	9 (W)	Ground	Rear window defogger switch is pressed.	0
			Rear window defogger switch is OFF.	5



OK or NG

OK >> Rear window defogger switch check is OK.

NG >> GO TO 2.

2. CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and unified meter and A/C amp.
3. Check continuity between BCM connector M18 terminal 9 and unified meter and A/C amp. connector M89 terminal 38.

9 (W) - 38 (W) : Continuity should exist.

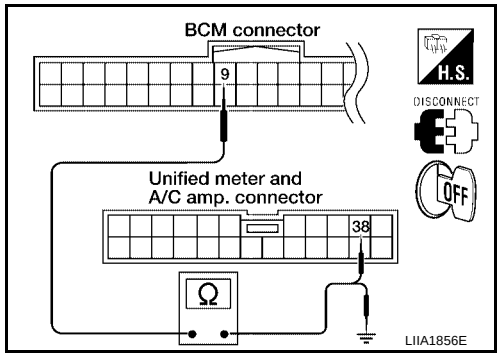
4. Check continuity between BCM connector M18 terminal 9 and ground

9 (W) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

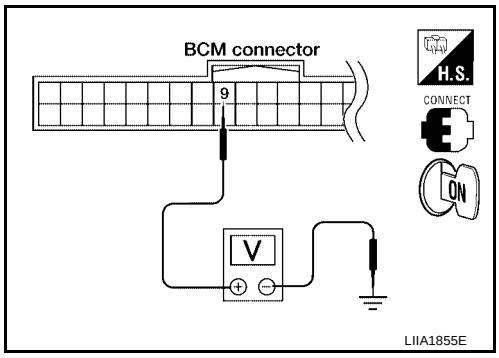
NG >> Repair or replace harness.



3. CHECK BCM OUTPUT SIGNAL

1. Connect BCM.
2. Turn ignition switch ON.
3. Check voltage between BCM connector M18 terminal 9 and ground.

9 (W) - Ground : Approx. 5



OK or NG

OK >> Replace unifed meter and A/C amp. Refer to ATC-102, "UNIFIED METER AND A/C AMP." .

NG >> Replace BCM. Refer to BCS-20, "Removal and Installation of BCM" .

Rear Window Defogger Power Supply Circuit Check

EIS003UX

1. CHECK FUSE

Check if any of the following fuses for fuse block (J/B) and IPDM E/R are blown.

COMPONENT PARTS	TERMINAL NO. (SIGNAL)	AMPERE	FUSE NO.
Fuse block (J/B)	2P (Ignition power supply)	10A	12
IPDM E/R	5 (Battery power supply)	20A	37
	6 (Battery power supply)	20A	32

NOTE:

Refer to GW-96, "Component Parts and Harness Connector Location" .

OK or NG

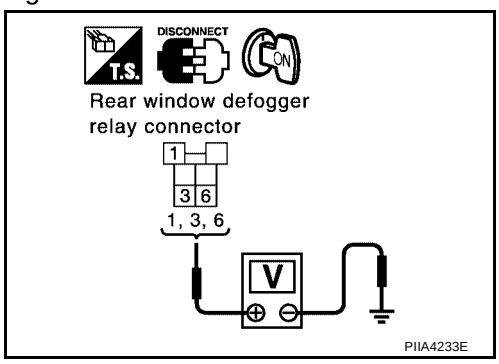
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse, refer to GW-96, "Component Parts and Harness Connector Location" .

2. CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect rear window defogger relay.
3. Turn ignition switch ON.
4. Check voltage between rear window defogger relay connector and ground.

Connector	Terminals (Wire color)		Voltage (V) (Approx.)
	(+)	(-)	
B4	1 (P)	Ground	Battery voltage
	3 (L)		
	6 (W)		



OK or NG

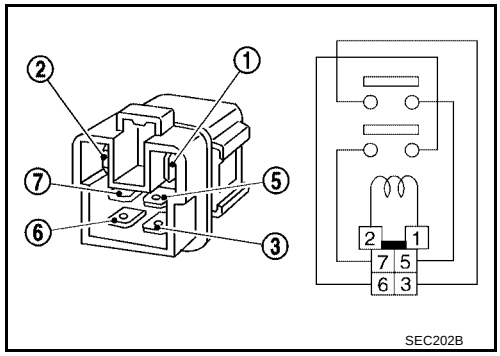
OK >> GO TO 3.

NG >> Repair or replace harness.

3. CHECK REAR WINDOW DEFOGGER RELAY

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

Terminal		Condition	Continuity
3	5	12V direct current supply between terminals 1 and 2	Yes
		No current supply	No
6	7	12V direct current supply between terminals 1 and 2	Yes
		No current supply	No



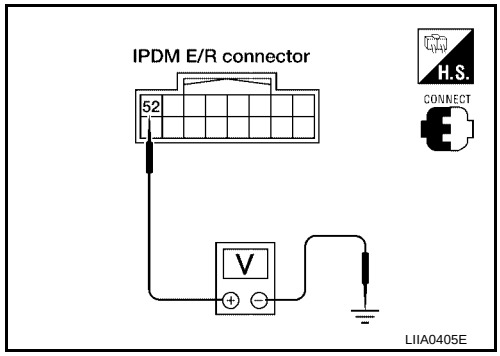
OK or NG

OK >> GO TO 4.
NG >> Replace rear window defogger relay.

4. CHECK REAR WINDOW DEFOGGER RELAY GROUND CIRCUIT

1. Install rear window defogger relay.
2. Turn ignition switch ON.
3. Check voltage between IPDM E/R connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
E121	52 (G/R)	Ground	When rear window defogger switch ON	0
			When rear window defogger switch OFF	Battery voltage



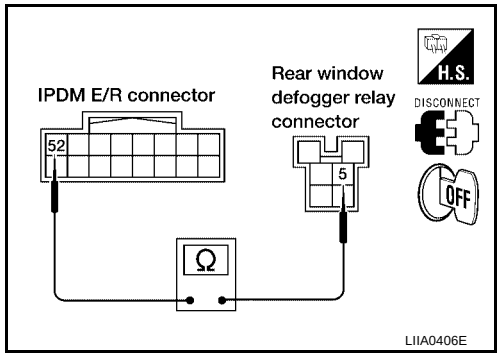
OK or NG

OK >> Rear window defogger power supply circuit check is OK.
NG >> GO TO 5.

5. CHECK IPDM E/R HARNESS

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R and rear window defogger relay.
3. Check continuity between IPDM E/R connector E121 terminal 52 and rear window defogger relay connector B4 terminal 2.

52 (G/R) - 2 (G/R) : Continuity should exist.



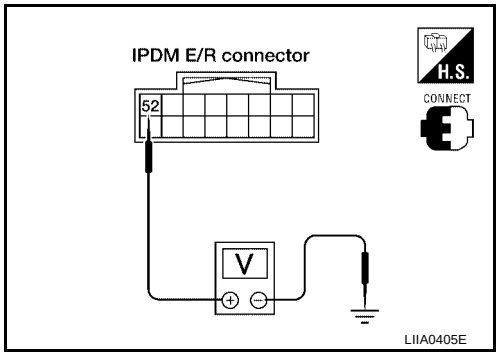
OK or NG

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

6. CHECK REAR WINDOW DEFOGGER RELAY OUTPUT SIGNAL

1. Connect IPDM E/R and rear window defogger relay.
2. Turn ignition switch ON.
3. Check voltage between IPDM E/R connector E121 terminal 52 and ground.

52 (G/R) - Ground : Battery voltage



OK or NG

OK >> Replace IPDM E/R. Refer to PG-27, "Removal and Installation of IPDM E/R" .

NG >> Repair or replace harness.

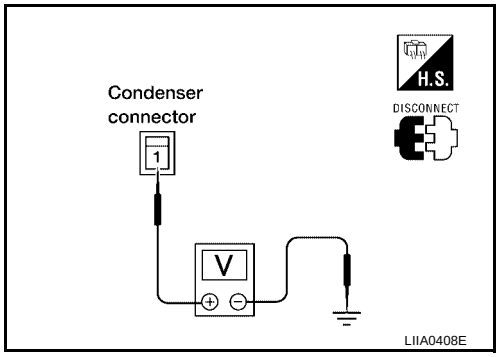
Rear Window Defogger Circuit Check

EIS003UY

1. CHECK REAR WINDOW DEFOGGER POWER SUPPLY CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect condenser.
3. Turn ignition switch ON.
4. Check voltage between condenser connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B21	1 (G)	Ground	Rear window defogger switch ON.	Battery voltage
			Rear window defogger switch OFF.	0



OK or NG

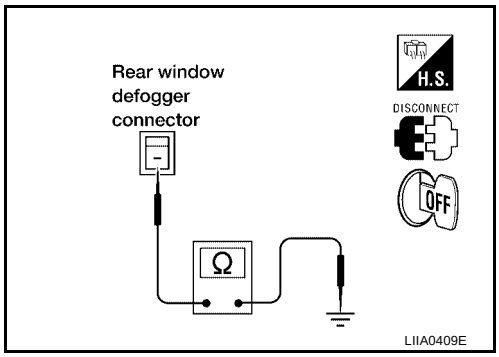
OK >> GO TO 2.

NG >> GO TO 3.

2. CHECK REAR WINDOW DEFOGGER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between rear window defogger connector B351 terminal - and ground.

- (B) - Ground : Continuity should exist.



OK or NG

OK >> Check filament. Refer to GW-120, "Filament Check" .

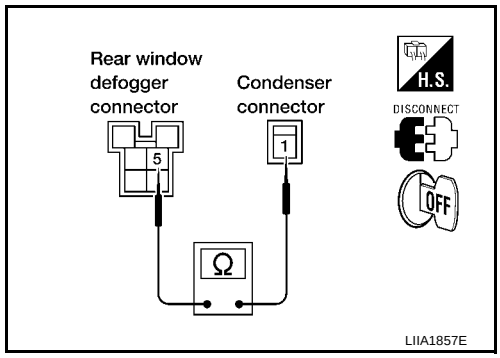
- If filament is OK.
  Check the condition of the harness and the connector.
- If filament is NG.
  Repair filament.

NG >> Repair or replace harness.

3. CHECK CONDENSER HARNESS

1. Turn ignition switch OFF.
2. Disconnect rear window defogger relay.
3. Check continuity between rear window defogger relay connector B4 terminal 5 and condenser connector B21 terminal 1.

5 (G) - 1 (G) : Continuity should exist.



OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.

Door Mirror Defogger Power Supply Circuit Check (Without Auto Dimming Outside Mirrors)

EIS003UZ

1. CHECK FUSE

Check if any of the following fuses for fuse block (J/B) are blown.

COMPONENT PARTS	TERMINAL NO. (SIGNAL)	AMPERE	FUSE NO.
Fuse block (J/B)	5N (Battery power supply)	10A	8

NOTE:
Refer to GW-96, "Component Parts and Harness Connector Location" .

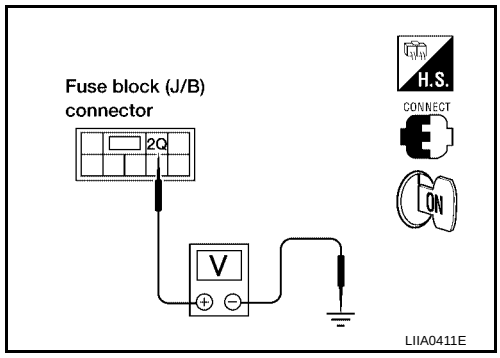
OK or NG

OK >> GO TO 2.
NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to GW-96, "Component Parts and Harness Connector Location" .

2. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT 1

1. Turn ignition switch ON.
2. Check voltage between fuse block (J/B) connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
E30	2Q (G)	Ground	Rear window defogger switch ON	Battery voltage
			Rear window defogger switch OFF	0



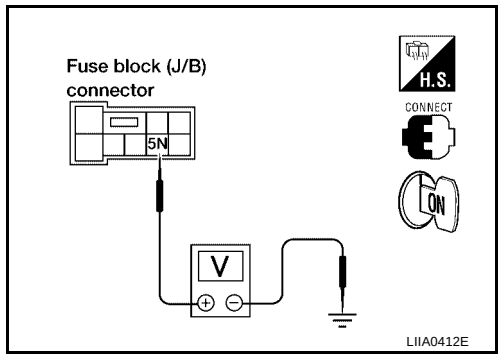
OK or NG

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

3. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY 2

Check voltage between fuse block (J/B) connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M3	5N (L/B)	Ground	Rear window defogger switch ON	Battery voltage
			Rear window defogger switch OFF	0



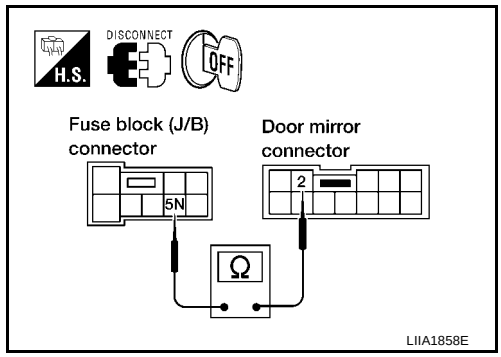
OK or NG

OK >> GO TO 4.
NG >> Replace fuse block (J/B). Refer to PG-58, "ELECTRICAL UNITS LOCATION" .

4. CHECK DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) and door mirror LH or RH.
3. Check continuity between fuse block (J/B) connector M3 terminal 5N and door mirror connector D4 (LH) or D107 (RH) terminal 2.

5N (L/B) - 2 (L/B) : Continuity should exist.



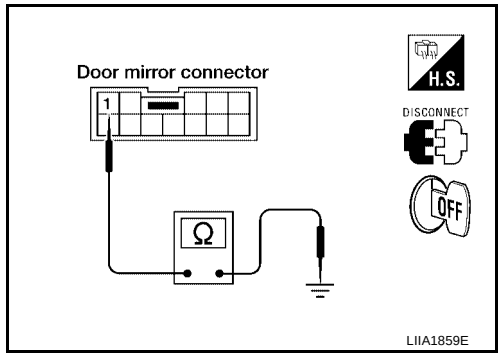
OK or NG

OK >> GO TO 5.
NG >> Repair or replace harness.

5. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

Check continuity between each door mirror connector D4 (LH) or D107 (RH) terminal 1 and ground.

1 (B) - Ground : Continuity should exist.



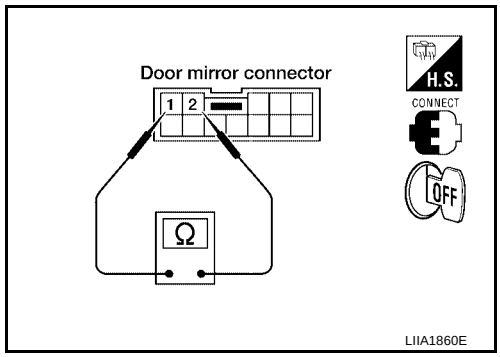
OK or NG

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

6. CHECK DOOR MIRROR DEFOGGER

1. Connect door mirror LH or RH.
2. Check continuity between each door mirror connector D4 (LH), D107 (RH) terminals 1 and 2.

2 (L/B) - 1 (B) : Continuity should exist.



OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace malfunctioning door mirror LH or RH. Refer to GW-122, "DOOR MIRROR" .

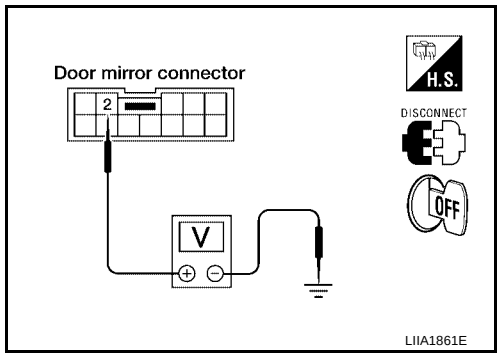
Door Mirror LH Defogger Circuit Check (Without Auto Dimming Outside Mirrors)

EIS003V0

1. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror LH.
3. Turn ignition switch ON.
4. Check voltage between door mirror LH connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
D4	2 (L/B)	Ground	Rear window defogger switch ON	Battery voltage
			Rear window defogger switch OFF	0



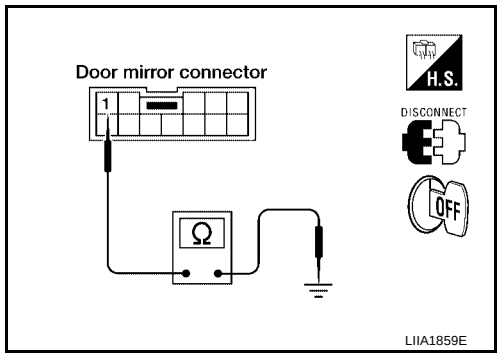
OK or NG

OK >> GO TO 2
NG >> Repair or replace harness.

2. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror LH connector D4 terminal 1 and ground.

1 (B) - Ground : Continuity should exist.



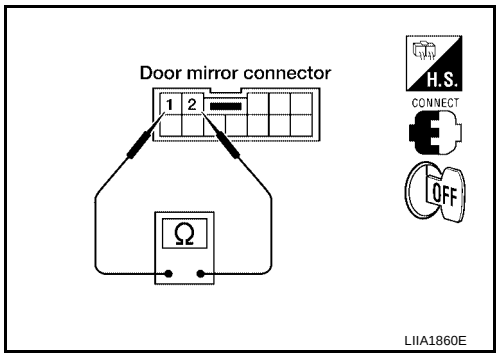
OK or NG

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

3. CHECK DOOR MIRROR DEFOGGER

1. Connect door mirror LH.
2. Check continuity between door mirror LH connector D4 terminals 1 and 2.

2 (L/B) - 1 (B) : Continuity should exist.



OK or NG

OK >> Repair or replace harness.
NG >> Replace door mirror LH. Refer to GW-122, "DOOR MIRROR" .

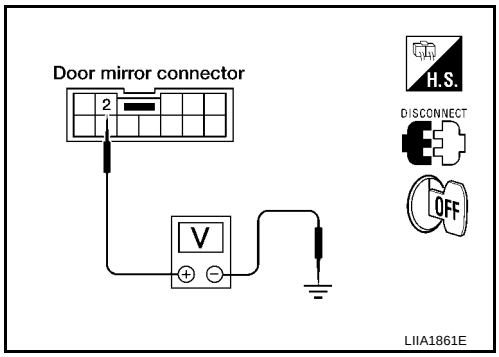
Door Mirror RH Defogger Circuit Check (Without Auto Dimming Outside Mirrors)

EIS003V1

1. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror RH.
3. Turn ignition switch ON.
4. Check voltage between door mirror RH connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
D107	2 (L/B)	Ground	Rear window defogger switch ON	Battery voltage
			Rear window defogger switch OFF	0



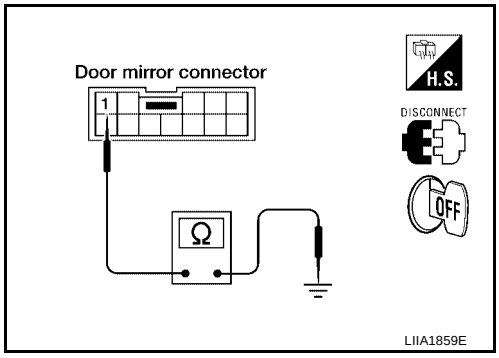
OK or NG

OK >> GO TO 2.
NG >> Repair or replace harness.

2. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror RH connector D107 terminal 1 and ground.

1 (B) - Ground : Continuity should exist.



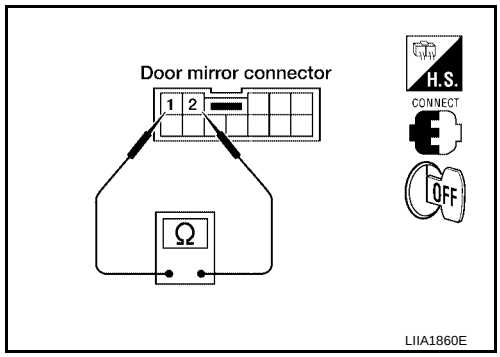
OK or NG

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

3. CHECK DOOR MIRROR DEFOGGER

1. Connector door mirror RH.
2. Check continuity between each door mirror RH connector D107 terminals 1 and 2.

2 (L/B) - 1 (B) : Continuity should exist.



OK or NG

OK >> Repair or replace harness.
NG >> Replace door mirror RH. Refer to GW-122, "DOOR MIRROR" .

Door Mirror Defogger Power Supply Circuit Check (With Auto Dimming Outside Mirrors)

EIS005AF

1. CHECK FUSE

Check if any of the following fuses for fuse block (J/B) are blown.

COMPONENT PARTS	TERMINAL NO. (SIGNAL)	AMPERE	FUSE NO.
Fuse block (J/B)	5N (Battery power supply)	10A	8

NOTE:
Refer to GW-96, "Component Parts and Harness Connector Location" .

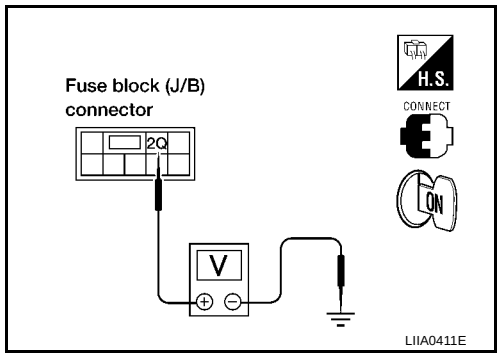
OK or NG

OK >> GO TO 2.
NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to GW-96, "Component Parts and Harness Connector Location" .

2. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT 1

1. Turn ignition switch ON.
2. Check voltage between fuse block (J/B) connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
E30	2Q (G)	Ground	Rear window defogger switch ON	Battery voltage
			Rear window defogger switch OFF	0



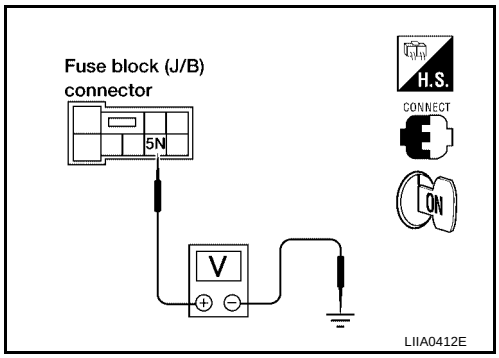
OK or NG

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

3. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY 2

Check voltage between fuse block (J/B) connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M3	5N (L/B)	Ground	Rear window defogger switch ON	Battery voltage
			Rear window defogger switch OFF	0



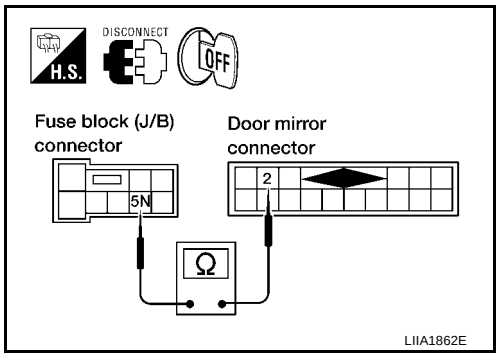
OK or NG

OK >> GO TO 4.
NG >> Replace fuse block (J/B). Refer to PG-58, "ELECTRICAL UNITS LOCATION" .

4. CHECK DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) and door mirror LH or RH.
3. Check continuity between fuse block (J/B) connector M3 terminal 5N and door mirror connector D4 (LH) or D107 (RH) terminal 2.

5N (L/B) - 2 (L/B) : Continuity should exist.



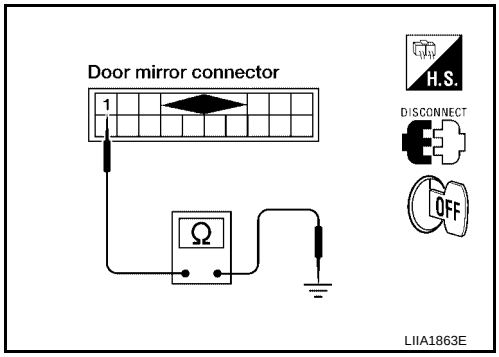
OK or NG

OK >> GO TO 5.
NG >> Repair or replace harness.

5. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

Check continuity between each door mirror connector D4 (LH) or D107 (RH) terminal 1 and ground.

1 (B) - Ground : Continuity should exist.



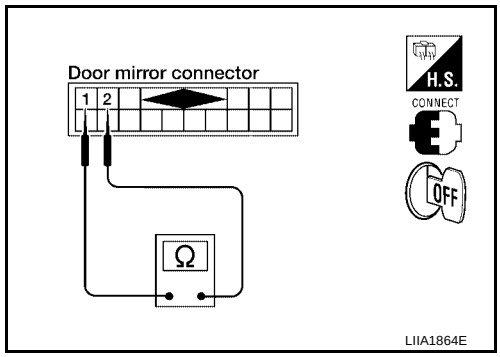
OK or NG

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

6. CHECK DOOR MIRROR DEFOGGER

1. Connect door mirror LH or RH.
2. Check continuity between each door mirror connector D4 (LH), D107 (RH) terminals 1 and 2.

2 (L/B) - 1 (B) : Continuity should exist.



OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace malfunctioning door mirror LH or RH. Refer to GW-122, "DOOR MIRROR" .

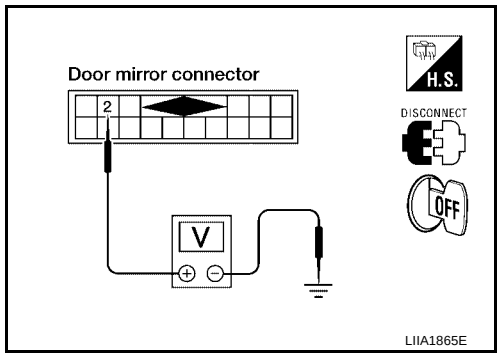
Door Mirror LH Defogger Circuit Check (With Auto Dimming Outside Mirrors)

EIS005AG

1. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror LH.
3. Turn ignition switch ON.
4. Check voltage between door mirror LH connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
D4	2 (L/B)	Ground	Rear window defogger switch ON	Battery voltage
			Rear window defogger switch OFF	0



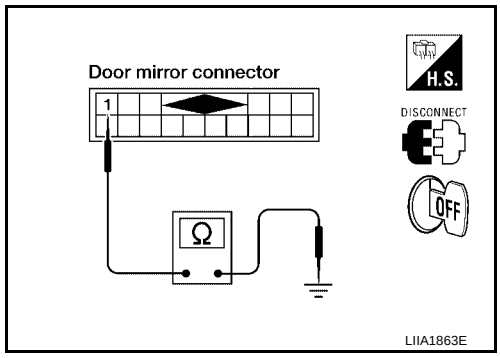
OK or NG

OK >> GO TO 2
NG >> Repair or replace harness.

2. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror LH connector D4 terminal 1 and ground.

1 (B) - Ground : Continuity should exist.



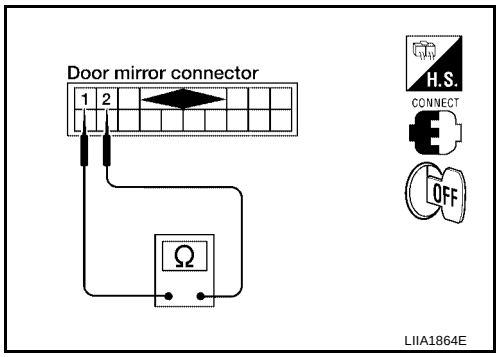
OK or NG

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

3. CHECK DOOR MIRROR DEFOGGER

1. Connect door mirror LH.
2. Check continuity between door mirror LH connector D4 terminals 1 and 2.

2 (L/B) - 1 (B) : Continuity should exist.



OK or NG

OK >> Repair or replace harness.
NG >> Replace door mirror LH. Refer to GW-122, "DOOR MIRROR" .

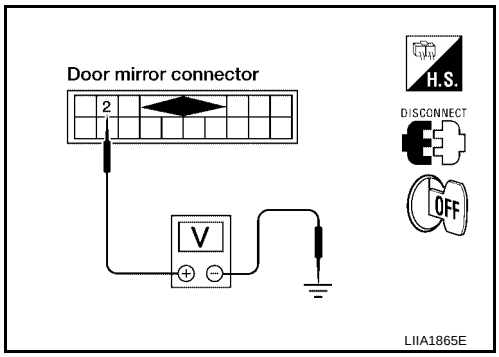
Door Mirror RH Defogger Circuit Check (With Auto Dimming Outside Mirrors)

EIS005AH

1. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror RH.
3. Turn ignition switch ON.
4. Check voltage between door mirror RH connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
D107	2 (L/B)	Ground	Rear window defogger switch ON	Battery voltage
			Rear window defogger switch OFF	0



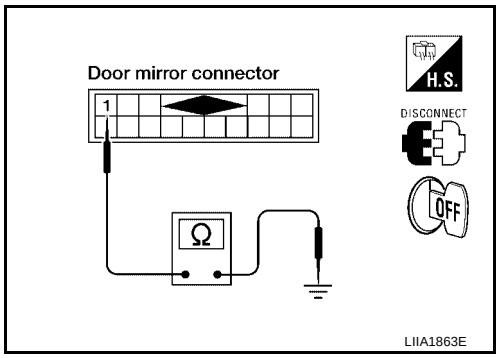
OK or NG

OK >> GO TO 2.
NG >> Repair or replace harness.

2. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between door mirror RH connector D107 terminal 1 and ground.

1 (B) - Ground : Continuity should exist.



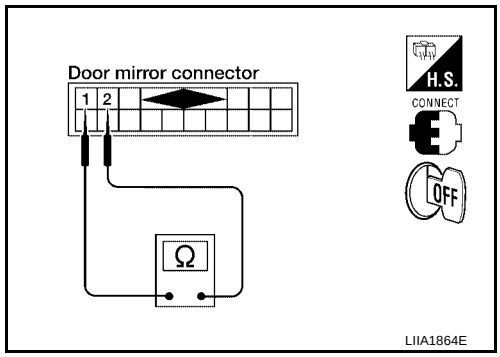
OK or NG

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

3. CHECK DOOR MIRROR DEFOGGER

1. Connector door mirror RH.
2. Check continuity between each door mirror RH connector D107 terminals 1 and 2.

2 (L/B) - 1 (B) : Continuity should exist.



OK or NG

OK >> Repair or replace harness.
NG >> Replace door mirror RH. Refer to GW-122, "DOOR MIRROR" .

Rear Window Defogger Signal Check

EIS003V2

1. CHECK REAR WINDOW DEFOGGER SWITCH LAMP

Unified meter and A/C amp. self-diagnosis is executed. Refer to AV-83, "AV Switch Self-Diagnosis Function"

Does rear window defogger switch light?

OK or NG

OK >> GO TO 2.
NG >> Replace unified meter and A/C amp. Refer to ATC-102, "UNIFIED METER AND A/C AMP." .

2. CHECK AV COMMUNICATION LINE

Check AV communication line. Refer to AV-90, "AV Communication Line Check"

Is rear window defogger displayed on the display?

OK or NG

OK >> GO TO 3.
NG >> Replace display control unit. Refer to AV-93, "Removal and Installation of Display Unit" .

3. CHECK CAN COMMUNICATION LINE

CAN communication line check is executed. Refer to AV-91, "CAN Communication Line Check"

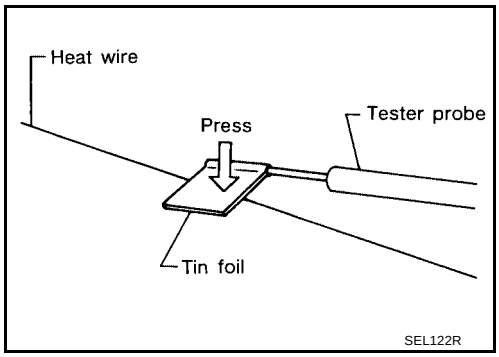
OK or NG

OK >> Check the condition of the harness and the connector.
NG >> In addition, it is necessary to check CAN communication line. Refer to AV-91, "CAN Communication Line Check"

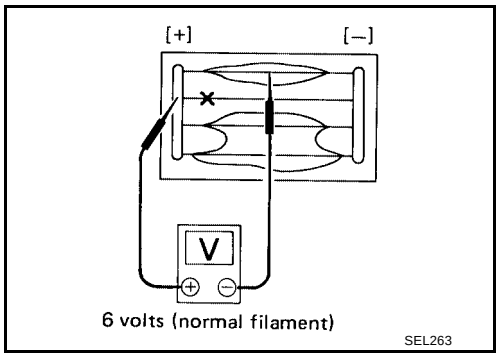
Filament Check

EIS003V3

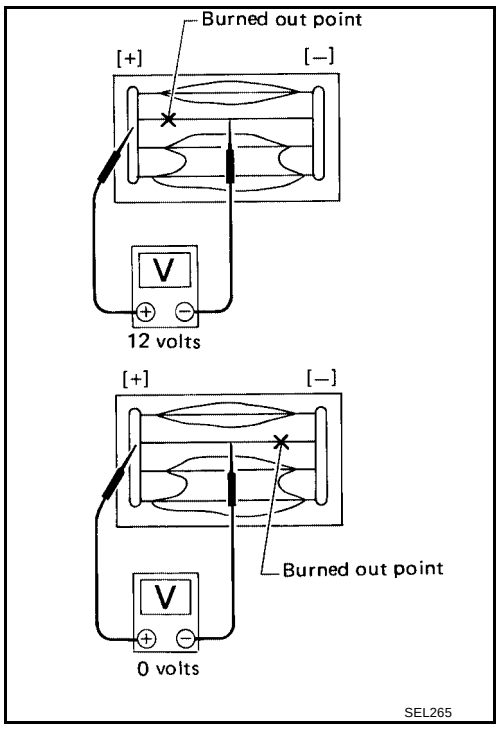
1. When measuring voltage, wrap tin foil around the top of the negative probe.Then press the foil against the wire with your finger.



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



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.



Filament Repair

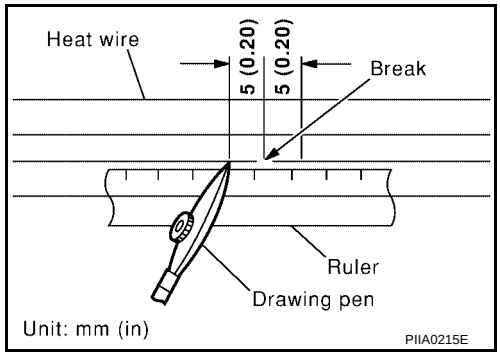
EIS003V4

REPAIR EQUIPMENT

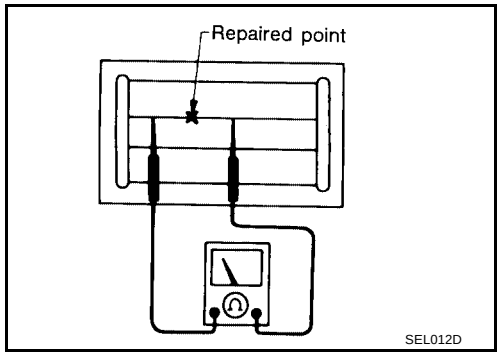
- Conductive silver composition (DuPont No. 4817 or equivalent)
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

REPAIRING PROCEDURE

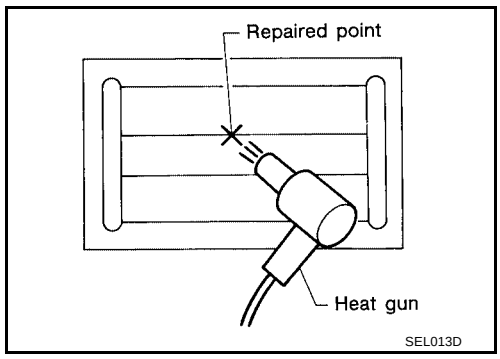
1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen.
   Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition 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.



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.



DOOR MIRROR

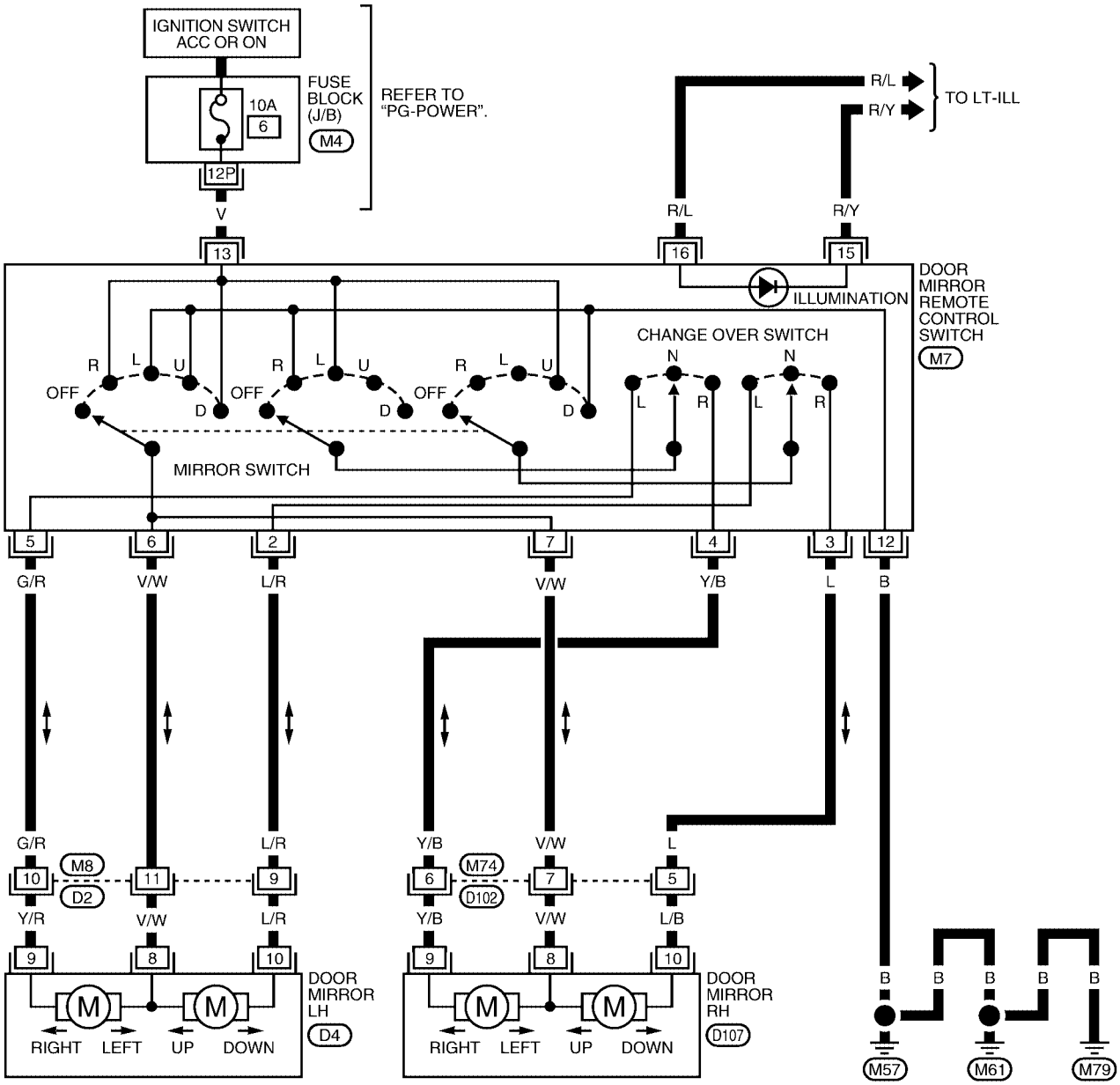
PFP:96301

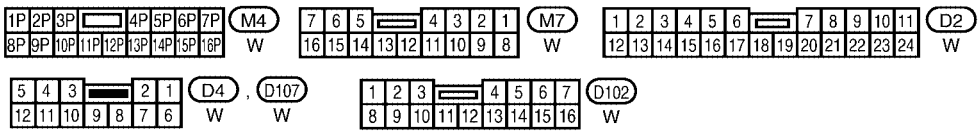
Wiring Diagram — MIRROR —

EIS003V5

LATE PRODUCTION

GW-MIRROR-01

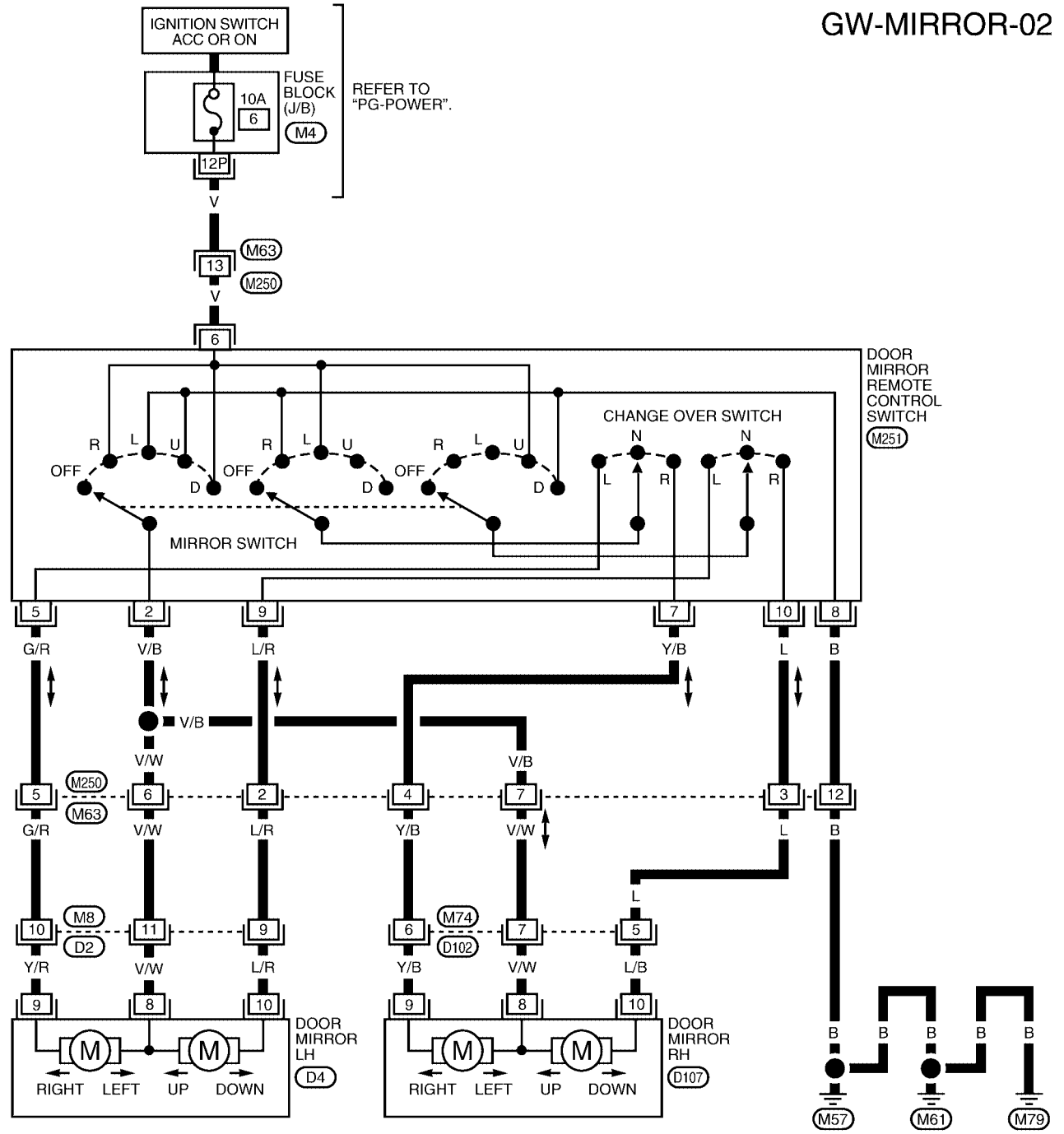




WIWA0381E

EARLY PRODUCTION

GW-MIRROR-02



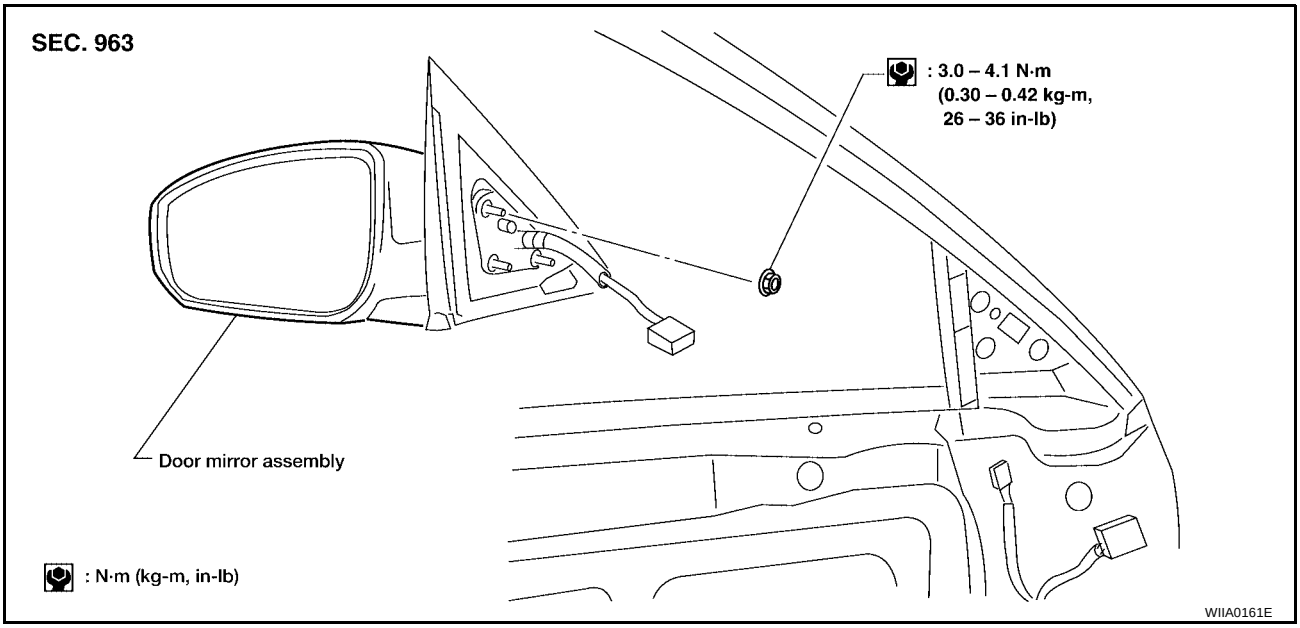
WIWA1156E

POWER FOLDING MIRROR

For power folding mirror information, refer to SE-11, "AUTOMATIC DRIVE POSITIONER" .

Door Mirror Assembly

EIS003V6



REMOVAL AND INSTALLATION

NOTE:

Be careful not to damage the mirror bodies.

1. Remove the front door sash cover. Refer to AV-57, "Removal and Installation of Tweeter" .
2. Remove the door mirror harness connector.
3. Remove the door mirror nuts and the door mirror assembly.

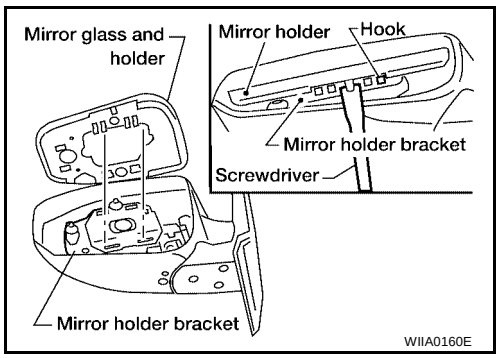
Installation is in the reverse order of removal.

Door Mirror Glass

EIS003V7

REMOVAL

1. Set mirror assembly mirror glass upward.
2. Apply protective tape to mirror housing as shown.
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.