DDECALITIONS

# SECTION GW

D

Е

Н

GW

M

## GLASSES, WINDOW SYSTEM & MIRRORS

## **CONTENTS**

PRECAUTIONS	Component Parts and Harness Connector Location.	. 17
Precautions for Supplemental Restraint System	System Description	
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	MANUAL OPERATION	
SIONER" 3	AUTO OPERATION	
Handling for Adhesive and Primer	POWER WINDOW SERIAL LINK	. 19
PREPARATION 4	POWER WINDOW LOCK	. 20
Special Service Tool 4	RETAINED POWER OPERATION	. 20
Commercial Service Tool 4	ANTI-PINCH SYSTEM	. 20
SQUEAK AND RATTLE TROUBLE DIAGNOSES 5	POWER WINDOW CONTROL BY THE FRONT	
Work Flow 5	DOOR LOCK ASSEMBLY LH (KEY CYLINDER	
CUSTOMER INTERVIEW 5	SWITCH)	. 20
DUPLICATE THE NOISE AND TEST DRIVE 6	CAN Communication System Description	. 20
CHECK RELATED SERVICE BULLETINS 6	Schematic (Without Rear Power Vent Windows)	. 21
LOCATE THE NOISE AND IDENTIFY THE	Wiring Diagram — WINDOW — (Without Rear	
ROOT CAUSE 6	Power Vent Windows)	. 22
REPAIR THE CAUSE 6	Terminal and Reference Value for Main Power Win-	
CONFIRM THE REPAIR 7	dow and Door Lock/Unlock Switch (Without Rear	
Generic Squeak and Rattle Troubleshooting 7	Power Vent Windows)	. 26
INSTRUMENT PANEL 7	Terminal and Reference Value for Power Window	
CENTER CONSOLE 7	and Door Lock/ Unlock Switch RH (Without Rear	
DOORS 7	Power Vent Windows)	. 27
TRUNK 8	Terminal and Reference Value for BCM (Without	
SUNROOF/HEADLINER 8	Rear Power Vent Windows)	. 28
OVERHEAD CONSOLE (FRONT AND REAR) 8	Schematic (With Rear Power Vent Windows)	. 29
SEATS 8	Wiring Diagram — WINDOW — (With Rear Power	
UNDERHOOD 8	Vent Windows)	. 30
Diagnostic Worksheet9	Terminal and Reference Value for Main Power Win-	
WINDSHIELD GLASS11	dow and Door Lock/Unlock Switch (With Rear	
Removal and Installation11	Power Vent Windows)	. 35
REMOVAL11	Terminal and Reference Value for Power Window	
INSTALLATION11	and Door Lock/Unlock Switch RH (With Rear Power	
REAR WINDOW GLASS AND MOLDING 13	Vent Windows)	. 36
Removal and Installation13	Terminal and Reference Value for BCM (With Rear	
REMOVAL 13	Power Vent Windows)	. 37
INSTALLATION13	Work Flow	. 38
SKYVIEW ROOF 15	CONSULT-II Function (BCM)	. 38
Removal and Installation15	CONSULT-II INSPECTION PROCEDURE	
REMOVAL 15	ACTIVE TEST	
INSTALLATION15	WORK SUPPORT	
POWER WINDOW SYSTEM 17	DATA MONITOR	30

Symptom Chart (Without Rear Power Vent Win-		SLIDE DOOR GLASS	86
dows)	40	Removal and Installation	86
Symptom Chart (With Rear Power Vent Windows)	41	REMOVAL	86
BCM Power Supply and Ground Circuit Check		INSTALLATION	86
Main Power Window and Door Lock/Unlock Switch		SIDE WINDOW GLASS	88
Power Supply Circuit Check (Without Rear Power		Removal and Installation (without Rear Power Vent	
Vent Windows)	42	Windows)	
Main Power Window and Door Lock/Unlock Switch		REMOVAL	
Power Supply Circuit Check (With Rear Power Vent		INSTALLATION	
Windows)	43	Removal and Installation (with Rear Power Vent	
Power Window and Door Lock/Unlock Switch RH		Windows)	89
Power Supply and Ground Circuit Check	44	REMOVAL	
Front Power Window Motor LH Circuit Check		INSTALLATION	
Front Power Window Motor RH Circuit Check (With-	_	INSIDE MIRROR	
out Rear Power Vent Windows)	46	Wiring Diagram — I/MIRR —	
Front Power Window Motor RH Circuit Check (With	_	Inside Mirror	
Rear Power Vent Windows)	47	REMOVAL AND INSTALLATION	
Limit Switch Circuit Check Front LH (Without Rear		REMOVAL	
Power Vent Windows)	48	INSTALLATION	
Limit Switch Circuit Check Front LH (With Rear	. •	REAR WINDOW DEFOGGER	
Power Vent Windows)	50	Component Parts and Harness Connector Location	
Limit Switch Circuit Check Front RH (Without Rear	00	System Description	
Power Vent Windows)	53	CAN Communication System Description	
Limit Switch Circuit Check Front RH (With Rear	00	Schematic	
Power Vent Windows)	55	Wiring Diagram — DEF —	
Encoder Circuit Check Front LH (Without Rear	00	Terminal and Reference Value for BCM	
Power Vent Windows)	58	Terminal and Reference Value for IPDM E/R	
Encoder Circuit Check Front LH (With Rear Power	00	Work Flow	
Vent Windows)	60	CONSULT-II Function (BCM)	
Encoder Circuit Check Front RH (Without Rear	00	CONSULT-IIBASICOPERATION PROCEDURE	
Power Vent Windows)	63		99
Encoder Circuit Check Front RH (With Rear Power	00	DATA MONITOR	
Vent Windows)	65	ACTIVE TEST	
Door Switch Check		Trouble Diagnoses Symptom Chart	
FrontDoorLockAssemblyLH(KeyCylinderSwitch)	00	BCM Power Supply and Ground Circuit Check	
Check (Without Rear Power Vent Windows)	70	Rear Window Defogger Switch Circuit Check	
FrontDoorLockAssemblyLH(KeyCylinderSwitch)	, 0	Rear Window Defogger Power Supply Circuit	. 100
Check (With Rear Power Vent Windows)	72	Check	104
Power Window Serial Link Check Front LH and RH	12	Rear Window Defogger Circuit Check	
(Without Rear Power Vent Windows)	74	Door Mirror Defogger Power Supply Circuit Check	
Power Window Serial Link Check Front LH and RH	, ,	Door Mirror LH Defogger Circuit Check	
(With Rear Power Vent Windows)	77	Door Mirror RH Defogger Circuit Check	
Rear Power Vent Window Motor LH Circuit Check		Rear Window Defogger Signal Check	
Rear Power Vent Window Motor RH Circuit Check	-	Filament Check	
FRONT DOOR GLASS AND REGULATOR		Filament Repair	
Removal and Installation		REPAIR EQUIPMENT	
FRONT DOOR GLASS		REPAIRING PROCEDURE	
INSTALLATION		DOOR MIRROR	
FRONT DOOR GLASS REGULATOR		Automatic Drive Positioner Reverse Tilt Mirror	
INSPECTION AFTER REMOVAL		Wiring Diagram — MIRROR —	
INSTALLATION DISASSEMBLY		Door Mirror Assembly REMOVAL AND INSTALLATION	
ASSEMBLY		REMOVAL AND INSTALLATION	
FITTING INSPECTION AND SETTING AFTER	04	Door Mirror Glass	
INSTALLATION	QΛ	REMOVAL AND INSTALLATION	
SETTING OF LIMIT SWITCH		INSTALLATION	
SETTING OF LIMIT SWITCH	oo	INOTALLATION	. 110

#### **PRECAUTIONS**

PRECAUTIONS PFP:00001

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

IS007H8

Α

D

Е

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**

EIS007H9

- 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.

GW

Н

#### **PREPARATION**

PREPARATION PFP:00002

## **Special Service Tool**

EIS007HB

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

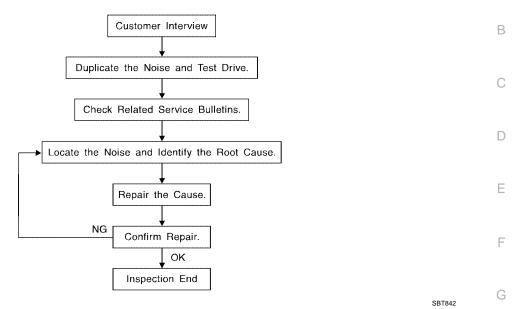
	,	•
Tool number (Kent-Moore No.) Tool name		Description
— (J-39570) Chassis ear	SIIA0993E	Locating the noise
— (J-43980) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairing the cause of noise

## **Commercial Service Tool**

EIS007HC

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

## SQUEAK AND RATTLE TROUBLE DIAGNOSES Work Flow EISO07HD



#### **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 <a href="GW-9">GW-9</a>, "Diagnostic Worksheet"</a>. 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.

GW

Α

#### **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 <u>GW-7</u>, "<u>Generic Squeak and Rattle Troubleshooting</u>".

#### 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:  $100\times135$  mm  $(3.94\times5.31 \text{ in})/76884-71L01$ :  $60\times85$  mm  $(2.36\times3.35 \text{ in})/76884-71L02$ :  $15\times25$  mm  $(0.59\times0.98 \text{ in})$ 

INSULATOR (Foam blocks)

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

73982-9E000: 45 mm (1.77 in) thick,  $50\times50$  mm (1.97×1.97 in)/73982-50Y00: 10 mm (0.39 in) thick,  $50\times50$  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

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
- Instrument panel to front pillar garnish
- 4. Instrument panel to windshield
- Instrument panel mounting pins
- 6. Wiring harnesses behind the combination meter
- 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
- Inside handle escutcheon to door finisher
- 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.

GW

Н

Α

D

Е

#### **TRUNK**

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

- Trunk lid bumpers out of adjustment
- 2. Trunk lid striker out of adjustment
- 3. The trunk lid torsion bars knocking together
- 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/HEADLINER

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

- 1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
- 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:

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

#### **SEATS**

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

Cause of seat noise include:

- Headrest rods and holder
- 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
- 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**

ISAN<del>T</del>UE

Α

В

D

Е

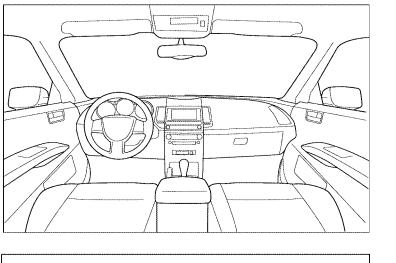
Dear Customer:

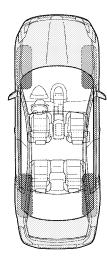
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service advisor or technician to ensure we confirm the noise you are hearing.

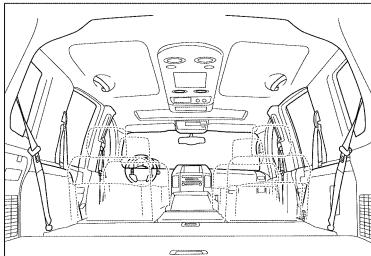
#### **SQUEAK & RATTLE DIAGNOSTIC WORKSHEET**

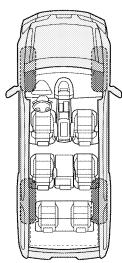
I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.









Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

GW

Н

ı

M

-1-

Briefly describe the location where the n	oise occu	urs:		
II. WHEN DOES IT OCCUR? (please clean strength of the morning of t		boxes that app After sitting ou When it is rain Dry or dusty c Other:	it in the rai	
<ul> <li>□ Through driveways</li> <li>□ Over rough roads</li> <li>□ Over speed bumps</li> <li>□ Only about mph</li> <li>□ On acceleration</li> <li>□ Coming to a stop</li> <li>□ On turns: left, right or either (circle)</li> <li>□ With passengers or cargo</li> <li>□ Other: miles or miles</li> </ul>		Squeak (like tennis shoes on a clean floor) Creak (like walking on an old wooden floor) Rattle (like shaking a baby rattle) Knock (like a knock at the door) Tick (like a clock second hand) Thump (heavy muffled knock noise) Buzz (like a bumble bee)		
TO BE COMPLETED BY DEALERSHIP Test Drive Notes:	PERSON	NNEL		
		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 conf	rm repair		NO	Initials of person performing
<ul><li>Noise verified on test drive</li><li>Noise source located and repaired</li></ul>				performing

This form must be attached to Work Order

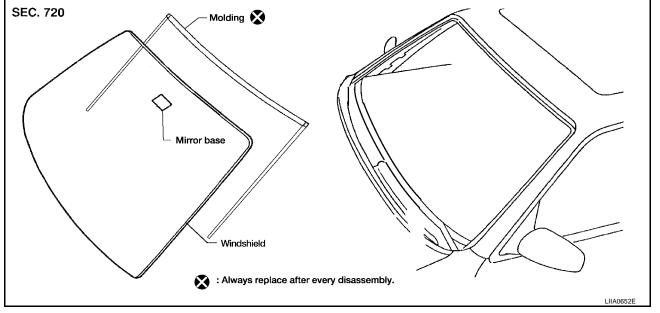
LAIA0071E

#### WINDSHIELD GLASS

PFP:72712

#### Removal and Installation

EIS007HG



#### **REMOVAL**

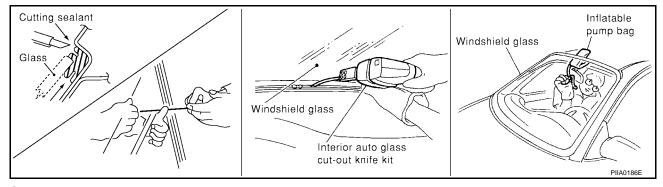
- Remove inside mirror. Refer to GW-91, "Inside Mirror".
- 2. Partially remove the headliner (front edge). Refer to EI-40, "HEADLINING" .
- 3. Remove cowl top cover. Refer to EI-19, "Removal and Installation".
- 4. Apply protective tape around the windshield glass to protect the painted surface from damage.
- Remove glass using piano wire or power cutting tool and an inflatable pump bag.
- If the 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

Installation is in the reverse order of removal.

- 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.

GW

Н

Е

Κ

#### WINDSHIELD GLASS

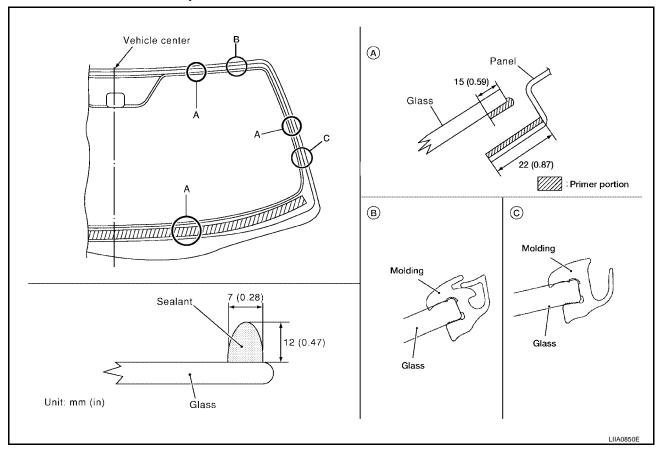
- The molding must be installed securely so that it is in position and leaves no gap.
- Inform the customer that the vehicle should remain stationary until the urethane adhesive has completely cured (preferably 24 hours). Curing time varies with temperature and humidity.

#### **WARNING:**

- Keep heat and open flames away as primers and adhesive are flammable.
- The materials contained in the kit are harmful if swallowed, and may irritate skin and eyes. Avoid contact with the skin and eyes.
- Use in an open, well ventilated location. Avoid breathing the vapors. They can be harmful if inhaled. If affected by vapor inhalation, immediately move to an area with fresh air.
- 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 EIS007HH : Primer Primer area (Upper) Primer area (Lower) Bond area : Primer 15 (0.59)(0.59)12 (0.47) (0.59)15 (0.59)LIIA1562E 1. Foam dam Back door window glass Bond

Back door outer panel

#### **REMOVAL**

- 1. Remove the rear wiper arm and motor. Refer to EI-32, "BODY SIDE TRIM".
- 2. Remove the connectors and grounds for the rear window defogger.
- Remove glass using piano wire or power cutting tool and an inflatable pump bag.
- If the 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.

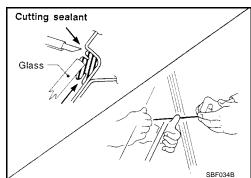
#### **CAUTION:**

- 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

Installation is in the reverse order of removal.

- 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.



Е

Н

GW

M

Revision: July 2006 GW-13 2006 Quest

#### REAR WINDOW GLASS AND MOLDING

- 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.

#### **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.

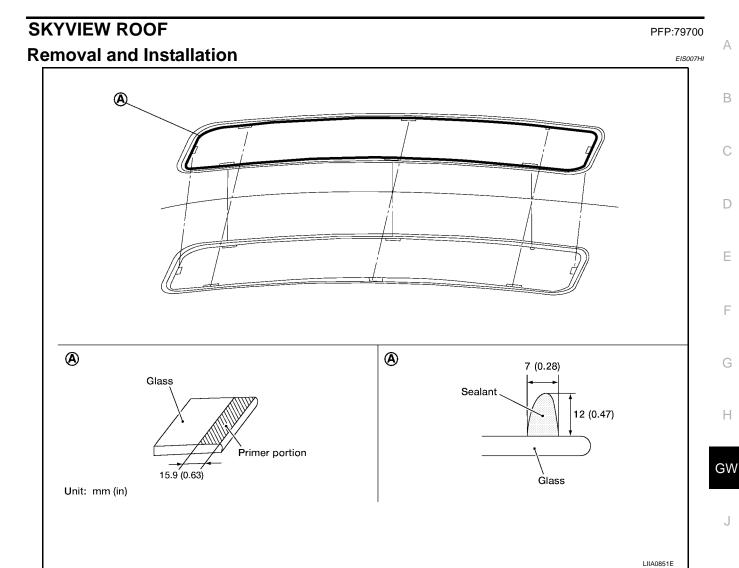
#### **Repairing Water leaks for Rear Window Glass**

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.



#### **REMOVAL**

- Remove the headliner. Refer to <u>EI-40, "HEADLINING"</u>.
- 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

Installation is in the reverse order of removal.

- 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.

#### **SKYVIEW ROOF**

#### **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

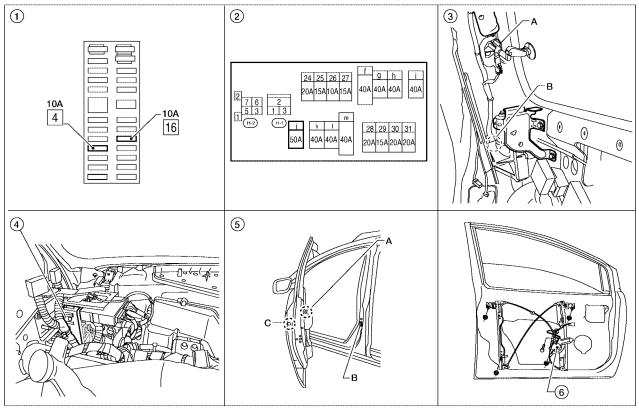
### **Component Parts and Harness Connector Location**

EIS007HJ

В

D

Е



LIIA2311E

1. Fuse block (J/B)

- Fuse and fusible link box
- A. Rear power vent window motor LH B52 Rear power vent window motor RH B147 B. Condenser-3 B65

Condenser-4 B68
(View with rear finishers removed)

 Front power window motor LH D9 Front power window RH D104 (View with door finisher removed)

4. BCM M18, M19, M20 (View with instrument panel removed)

 A. Main power window and door lock/unlock switch D7, D8
 Power window and door lock/unlock switch RH D105
 B. Front door switch LH B8
 Front door switch RH B108
 C. Front door lock assembly LH (key cylinder switch) D14

## **System Description**

EIS007HK

Power is supplied at all time

- from 50A fusible link (letter j, 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 1 (without rear power vent windows) or 19 (with rear power vent windows)
- to power window and door lock/unlock switch RH terminal 10.

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

- through 10A fuse [No.16, located in the fuse block (J/B)]
- to BCM terminal 38

Revision: July 2006 GW-17 2006 Quest

Н

GW

1 \

L

- through BCM terminal 53
- to main power window and door lock/unlock switch terminal 10.

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

- through 10A fuse [No. 4, located in the fuse block (J/B)]
- to BCM terminal 11.

#### Ground is supplied

- to BCM terminal 52
- to main power window and door lock/unlock switch terminal 15 (without rear power vent windows) or 17 (with rear power vent windows)
- to power window and door lock/unlock switch RH terminal 11
- through body grounds M57, M61 and M79.

#### MANUAL OPERATION

#### Front Door LH

#### **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 2.

#### Ground is supplied

- through main power window and door lock/unlock switch terminal 11
- to front power window motor LH terminal 1.

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 1.

#### Ground is supplied

- through main power window and door lock/unlock switch terminal 8
- to front power window motor LH terminal 2.

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

#### **Front Door RH**

## 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 3.

#### Ground is supplied

- through power window and door lock/unlock switch RH terminal 9
- to front power window motor RH terminal 1.

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 1.

#### Ground is supplied

- through power window and door lock/unlock switch RH terminal 8
- to front power window motor RH terminal 3.

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

#### MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH OPERATION

Power window serial link signal is sent

- though main power window and door lock/unlock switch terminal 12 (without rear power vent windows) or 14 (with rear power vent windows) Α 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. В **VENT WINDOW CLOSE (WITH REAR POWER VENT WINDOWS)** When the main power window and door lock/unlock switch (rear LH) is pressed in the close position, power is supplied through main power window and door lock/unlock switch terminal 1 to rear power vent window motor LH terminal 1. Ground is supplied D through main power window and door lock/unlock switch terminal 3 to rear power vent window motor LH terminal 2. Then, the motor closes the window until the switch is released. When the main power window and door lock/unlock switch (rear RH) is pressed in the close position, power is supplied through main power window and door lock/unlock switch terminal 7 to rear power vent window motor RH terminal 1. Ground is supplied through main power window and door lock/unlock switch terminal 5 to rear power window motor RH terminal 2. Then, the motor closes the window until the switch is released. Н **VENT WINDOW OPEN (WITH REAR POWER VENT WINDOWS)** When the main power window and door lock/unlock switch (rear LH) is pressed in the open position, power is supplied through main power window and door lock/unlock switch terminal 3 to rear power vent window motor LH terminal 2. Ground is supplied through main power window and door lock/unlock switch terminal 1 to rear power vent window motor LH terminal 1. Then, the motor opens the window until the switch is released. When the main power window and door lock/unlock switch (rear RH) is pressed in the open position, power is supplied through main power window and door lock/unlock switch terminal 5
- to rear power vent window motor RH terminal 2.

Ground is supplied

- through main power window and door lock/unlock switch terminal 7
- to rear power vent window motor RH terminal 1.

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

#### 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.

#### POWER WINDOW SERIAL LINK

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 and BUS signal.

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

**GW-19** 

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

GW

Е

Retained power operation signal.

#### **POWER WINDOW LOCK**

The power window lock is designed to lock operation of all windows except for front door window LH. When in the lock position, the power window lock signal is transmitted to power window and door lock/unlock switch RH by power window serial link. This prevents the power window motor 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

- to main power window and door lock/unlock switch terminal 10
- 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.

Retained power operation period can be changed by CONSULT-II. Refer to <u>GW-38</u>, <u>"CONSULT-II Function</u> (BCM)".

#### **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 150 mm (5.91 in).

## POWER WINDOW CONTROL BY THE FRONT DOOR LOCK ASSEMBLY LH (KEY CYLINDER SWITCH)

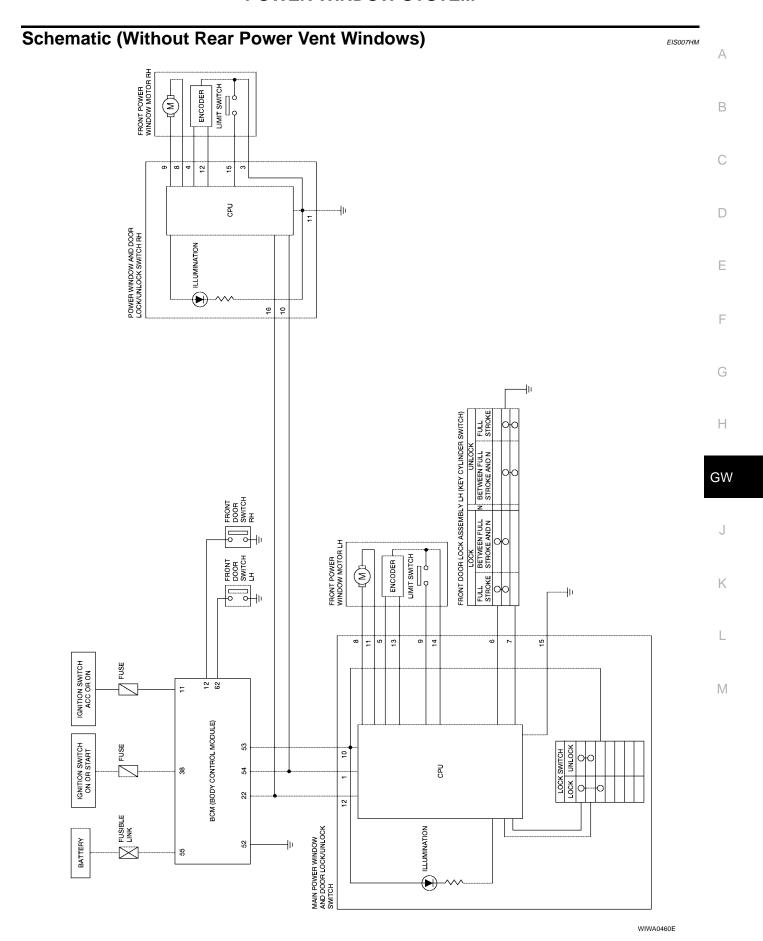
When ignition switch is OFF, front power window LH and RH can be opened or closed by turning the front door lock assembly LH (key cylinder switch) to the UNLOCK/LOCK position for more than 3 seconds.

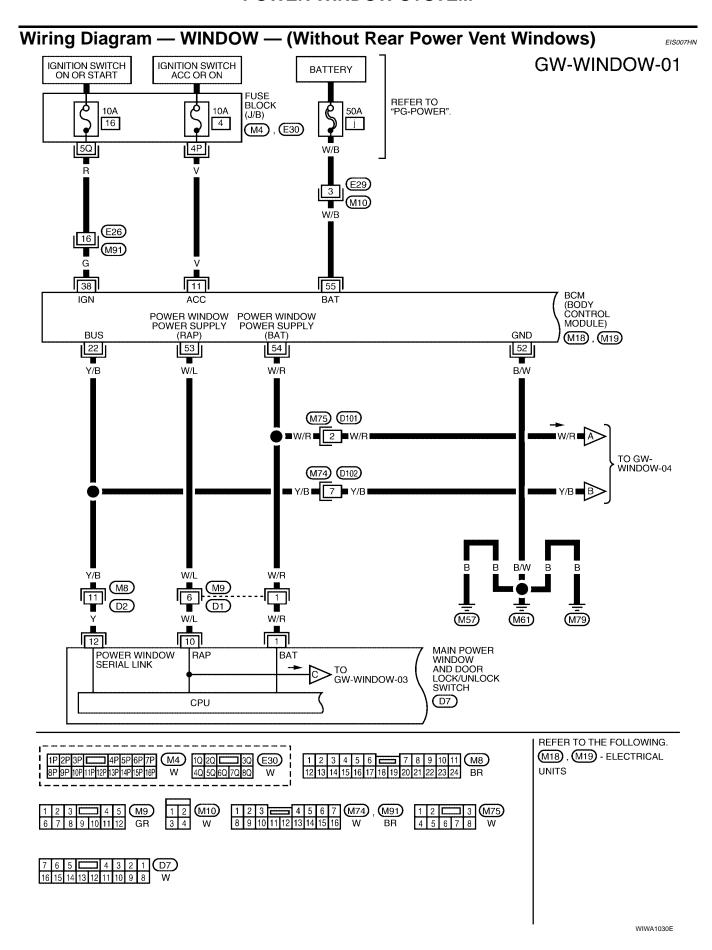
- Front power windows can be opened as the front door lock assembly LH (key cylinder switch) is kept fully turned to the UNLOCK position.
- Front power windows can be closed as the front door lock assembly LH (key cylinder switch) is kept fully turned to the LOCK position.
- While performing open/close operation for the windows, power window is stopped when the front door lock assembly LH (key cylinder switch) is placed in the NEUTRAL position.
- When the ignition switch is turned ON while the power window opening operation is performed, the power window opening stops.

## **CAN Communication System Description**

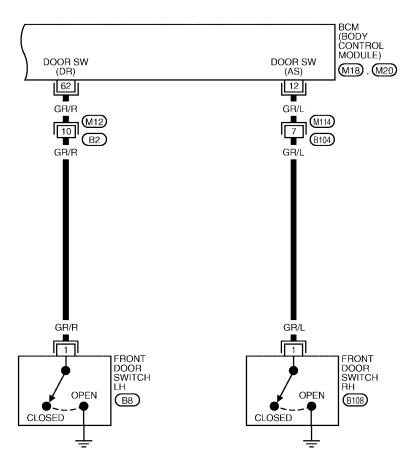
EIS007HL

Refer to LAN-24, "CAN COMMUNICATION" .





### **GW-WINDOW-02**



GW

Н

Α

В

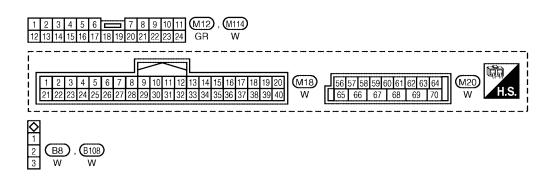
C

D

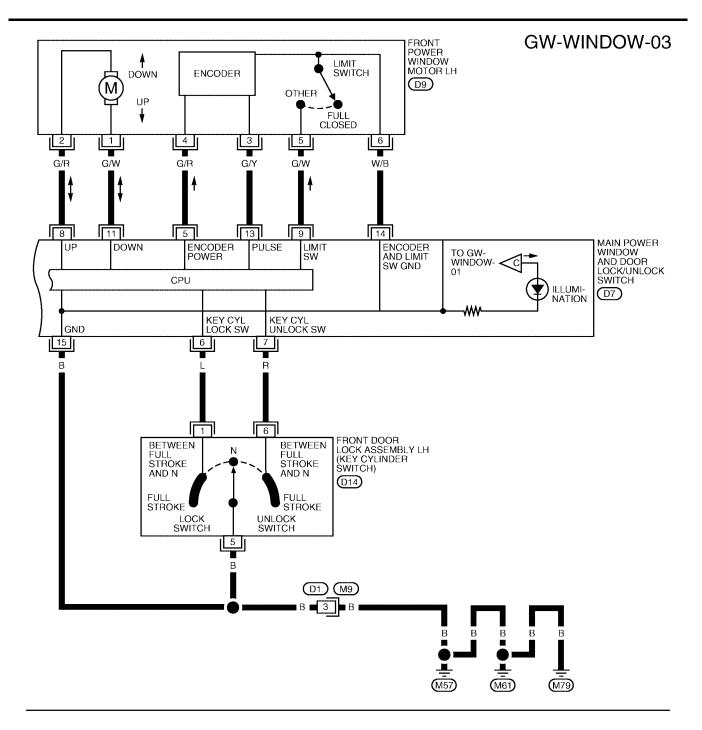
Е

K

M

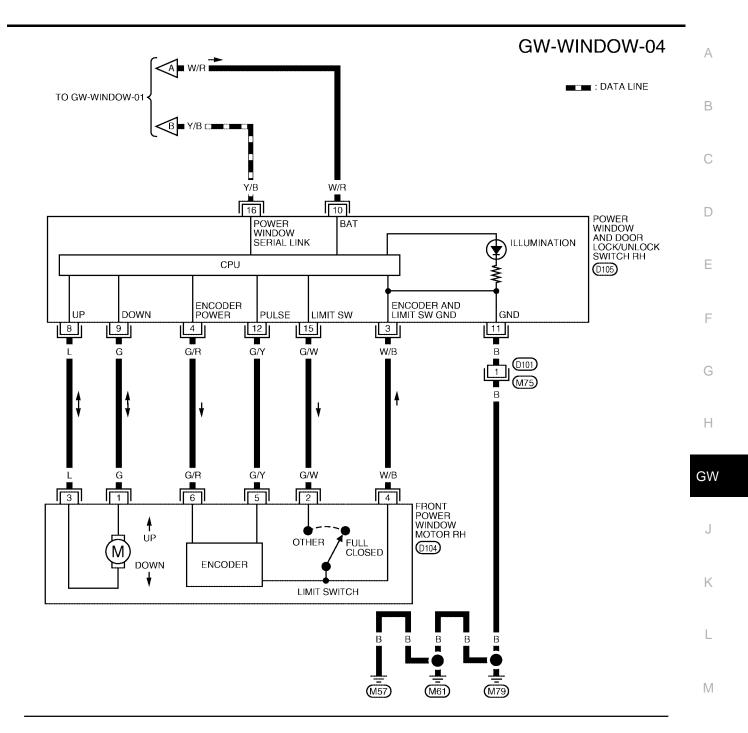


WIWA0462E





WIWA0463E





WIWA0464E

### Terminal and Reference Value for Main Power Window and Door Lock/Unlock Switch (Without Rear Power Vent Windows)

	(			Listoffic
Terminal	Wire Color	ltem	Condition	Voltage (V) (Approx.)
1	W/R	Battery power supply	_	Battery voltage
5	G/R	Encoder power supply	Ignition switch ON or power window timer operates	10
6	L	Front door lock assembly LH (key cylinder switch) lock signal	Key position (Neutral → Locked)	5 → 0
7	R	Front door lock assembly LH (key cylinder switch) unlock signal	Key position (Neutral → Unlocked)	5 → 0
8	G/R	Front power window motor LH UP signal	Front power window motor LH 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
9	G/VV	Limit Switch Signal	Front door window LH is between just before fully-closed position and fully-closed position (OFF)	5
-			Ignition switch ON	Battery voltage
		W/L RAP signal	Within 45 second after ignition switch is turned to OFF	Battery voltage
10	W/L		More than 45 second after ignition switch is turned to OFF	0
				Front door LH or RH open or power window timer operates
11	G/W	Front power window motor LH DOWN signal	Front power window motor LH is operated DOWN	Battery voltage
12	Y	Power window serial link	Ignition switch ON or power window timer operates	(V) 15 10 5 0 200 ms
13	G/Y	Encoder pulse signal	Front power window motor LH operates	(V) 6 4 2 0
14	W/B	Limit switch and encoder ground		OCC3383D
	W/B B	Ground	_	0
15	В	Ground	_	U

## Terminal and Reference Value for Power Window and Door Lock/ Unlock Switch RH (Without Rear Power Vent Windows)

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
3	W/B	Limit switch and encoder ground	_	0
4	G/R	Encoder power supply	Ignition switch ON or power window timer operates	10
8	L	Front power window motor RH UP signal	Front power window motor RH is operated UP	Battery voltage
9	G	Front power window motor RH DOWN signal	Front power window motor RH is operated DOWN	Battery voltage
10	W/R	Battery power supply	_	Battery voltage
11	В	Ground	_	0
12	G/Y	Encoder pulse signal	Front power window motor RH operates	(V) 6 4 2 0 0 0 OCC3383D
15	G/W	Limit quitab cignal	Front door window RH is between fully-open and just before fully-closed position (ON)	0
15	G/VV	G/W Limit switch signal	Front door window RH is between just before fully-closed position and fully-closed position (OFF)	5
16	Y/B	Power window serial link	Ignition switch ON or power window timer operates	(V) 15 10 5 0 200 ms

GW

В

С

D

Е

F

G

Н

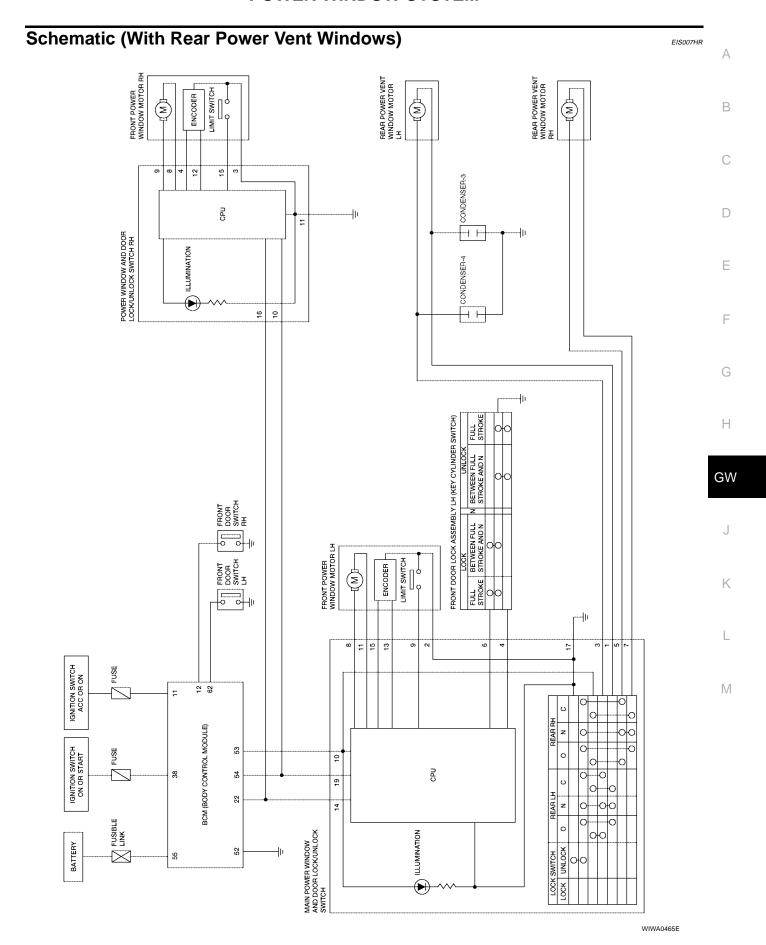
J

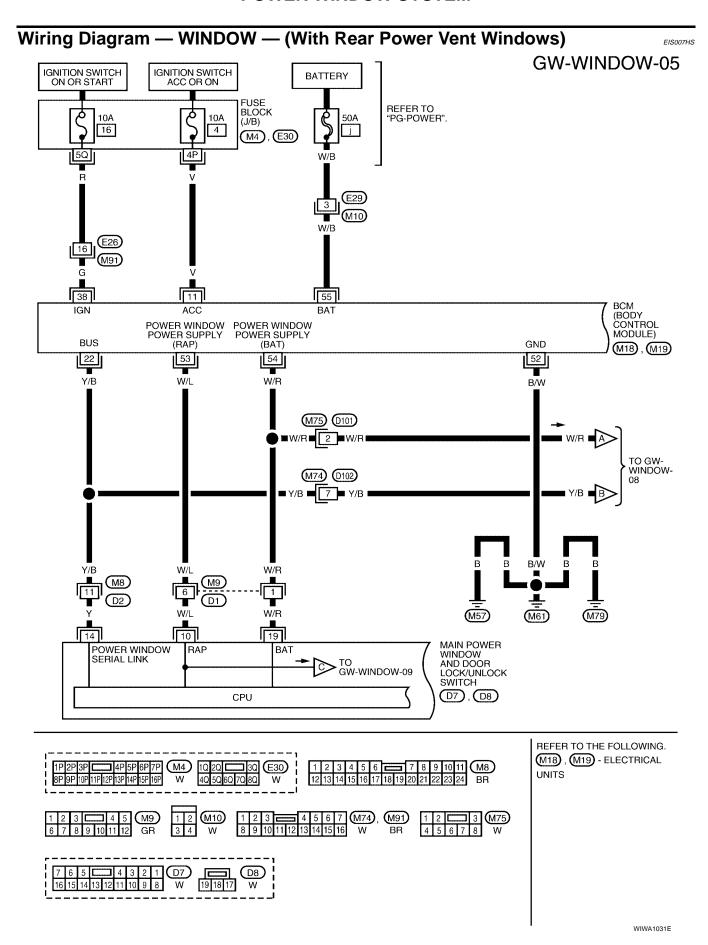
K

L

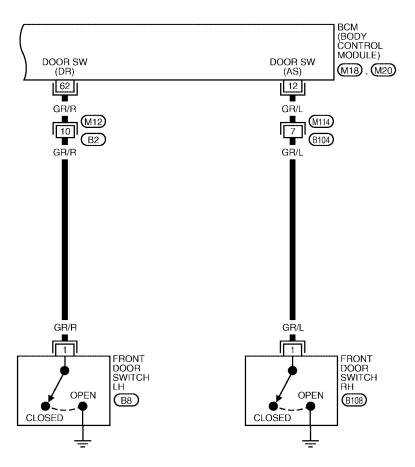
## Terminal and Reference Value for BCM (Without Rear Power Vent Windows) EISOOTHIA

	1				
Terminal	Wire Color	ltem	Condition	Voltage (V) (Approx.)	
11	V	Ignition switch (ACC or ON)	Ignition switch (ACC or ON position)	Battery voltage	
12	GR/L	Front door quitab DI Laissal	ON (Open)	0	
12	GR/L	Front door switch RH signal	OFF (Close)	Battery voltage	
22	Y/B	BUS signal	Ignition switch is ON or power window timer operates	(V) 15 10 5 0 200 ms	
38	G	Ignition switch (ON or START)	Ignition switch (ON or START position)	Battery voltage	
52	B/W	Ground	_	0	
		W/L RAP signal	Ignition switch is ON	Battery voltage	
			Within 45 second after ignition switch is turned to OFF	Battery voltage	
53	W/L		More then 45 second after ignition switch is turned to OFF	0	
			Front door LH or RH is open or power window timer is operating	0	
54	W/R	Power window power supply	_	Battery voltage	
55	W/B	Battery power supply	_	Battery voltage	
62	CD/D	Front door quitab I H gianal	ON (Open)	0	
62	GK/K	62 GR/R	Front door switch LH signal	OFF (Close)	Battery voltage





### **GW-WINDOW-06**



GW

Н

Α

В

C

D

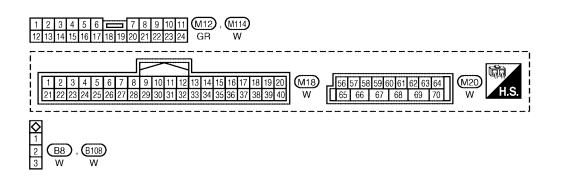
Е

J

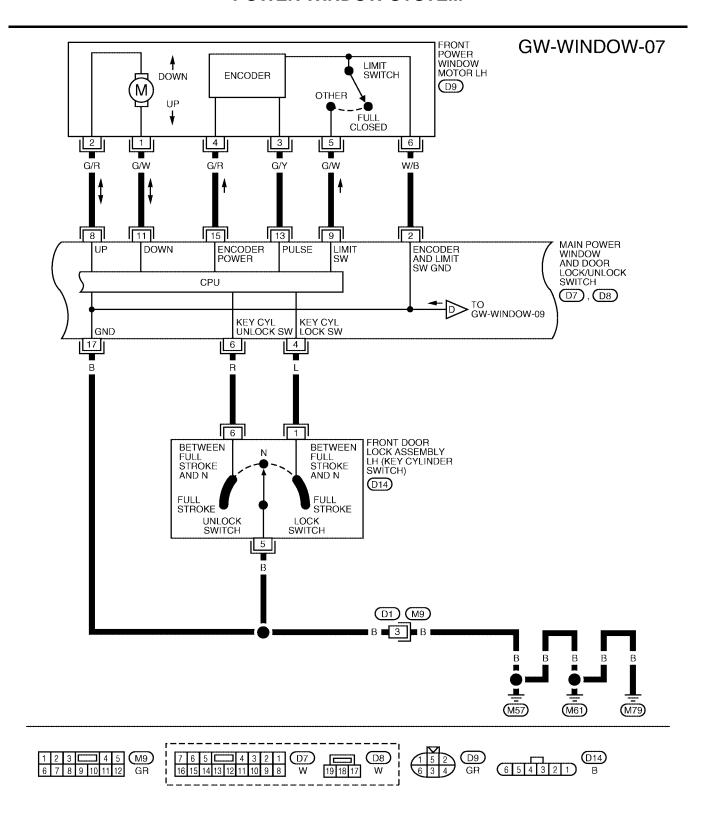
Κ

ı

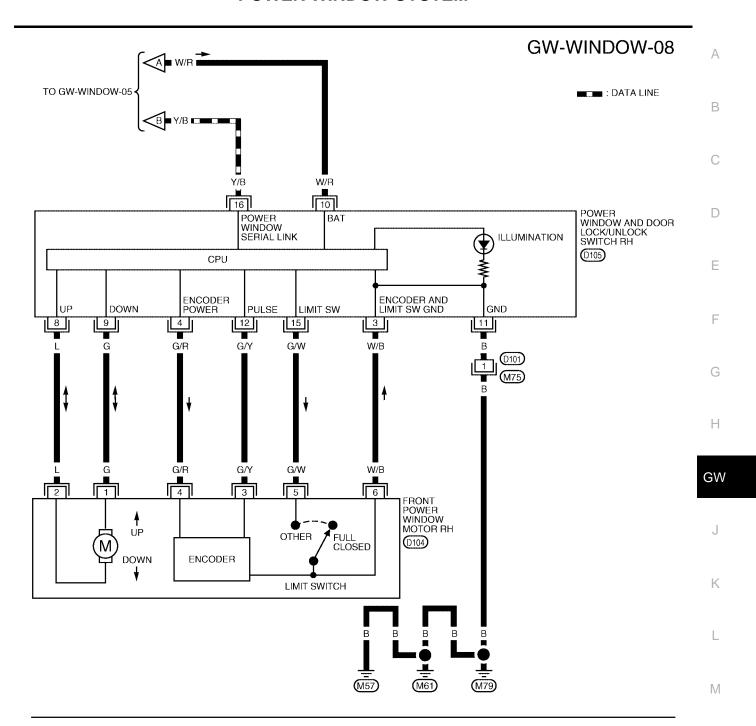
M



WIWA0467E



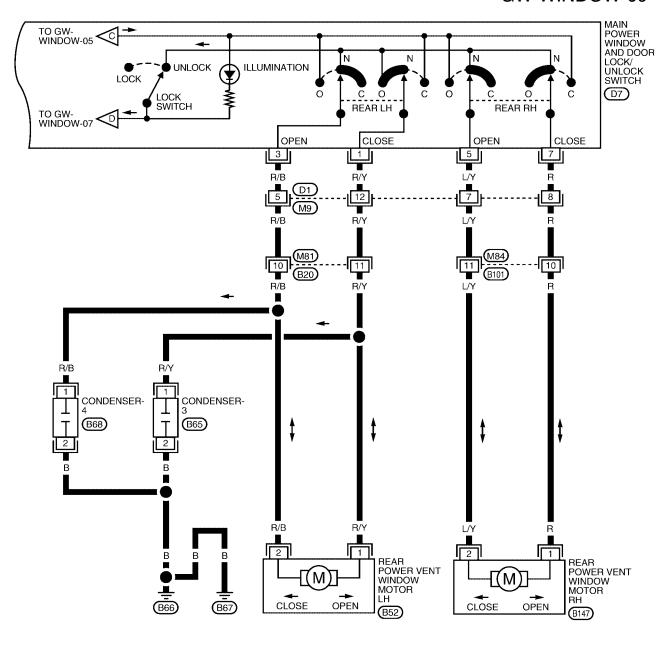
WIWA0468E

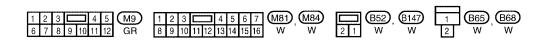


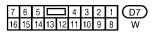


WIWA0469E

### **GW-WINDOW-09**







WIWA1032E

#### Terminal and Reference Value for Main Power Window and Door Lock/Unlock **Switch (With Rear Power Vent Windows)** EIS007HT

<u> </u>	1	ear Fower vent vindo		EIS007HT
Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
1	R/Y	Rear power vent window LH CLOSE signal	Rear LH switch in main power window and door lock/unlock switch is operated CLOSE	Battery voltage
2	W/B	Limit switch and encoder ground	_	0
3	R/B	Rear power vent window LH OPEN signal	Rear LH switch in main power window and door lock/unlock switch is operated OPEN	Battery voltage
4	L	Front door lock assembly LH (key cylinder switch) lock signal	Key position (Neutral → Locked)	5 → 0
5	L/Y	Rear power window vent OPEN signal	Rear RH switch in main power window and door lock/unlock switch is operated OPEN	Battery voltage
6	R	Front door lock assembly LH (key cylinder switch) unlock signal	Key position (Neutral → Unlocked)	5 → 0
7	R	Rear power window RH CLOSE signal	Rear RH switch in main power window and door lock/unlock switch is operated CLOSE	Battery voltage
8	G/R	Front power window motor LH UP signal	Front power window motor LH is operated UP	Battery voltage
		Front door window LH is between fully-open and just before fully-closed position (ON)	0	
9	G/W Limit switch signal	Front door window LH is between just before fully-closed position and fully-closed position (OFF)	5	
			Ignition switch ON	Battery voltage
			Within 45 seconds after ignition switch is turned to OFF	Battery voltage
10	W/L	RAP signal	More than 45 seconds after ignition switch is turned to OFF	0
			Front door LH or RH open or power window timer operates	0
11	G/W	Front power window motor LH DOWN signal	Front power window motor LH is operated DOWN	Battery voltage
13	G/Y	Encoder pulse signal	Front power window motor LH operates	(V) 6 4 2 0 
				(V)
14	Y	Power window serial link	Ignition switch ON or power window timer operates	10 5 0 200 ms

**GW-35** Revision: July 2006 2006 Quest

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

## Terminal and Reference Value for Power Window and Door Lock/Unlock Switch RH (With Rear Power Vent Windows)

KLI (AAII	ii Keai i	Power vent windows)		EIS007HU
Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
3	W/B	Limit switch and encoder ground	_	0
4	G/R	Encoder power supply	Ignition switch ON or power window timer operates	10
8	L	Front power window motor RH UP signal	Front power window motor RH is operated UP	Battery voltage
9	G	Front power window motor RH DOWN signal	Front power window motor RH is operated DOWN	Battery voltage
10	W/R	Battery power supply	_	Battery voltage
11	В	Ground	_	0
12	G/Y	Encoder pulse signal	Front power window motor RH operates	(V) 6 4 2 0 0 OCC3383D
			Front door window RH is between fully-open and just before fully-closed position (ON)	0
15	G/W	Limit switch signal	Front door window RH is between just before fully-closed position and fully-closed position (OFF)	5
16	Y/B	Power window serial link	Ignition switch is ON or power window timer operating	(V) 15 10 5 0 200 ms

# Terminal and Reference Value for BCM (With Rear Power Vent Windows)

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)	
11	V	Ignition switch (ACC or ON)	Ignition switch (ACC or ON position)	Battery voltage	
12	GR/L	Front door switch RH signal	ON (Open)	0	
12	GIVL	Tioni door switch it i signal	OFF (Close)	Battery voltage	
22	Y/B	BUS signal	Ignition switch ON or power window timer operates	(V) 15 10 5 0 200 ms	
38	G	Ignition switch (ON or START)	Ignition switch (ON or START position)	Battery voltage	
52	B/W	Ground	_	0	
			Ignition switch ON	Battery voltage	
			Within 45 seconds after ignition switch is turned to OFF	Battery voltage	
53	W/L	W/L RAP signal	More than 45 seconds after ignition switch is turned to OFF	0	
			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	GR/R	Front door switch LH signal	ON (Open)	0	
	GIVIX	TION GOOD SWILON EN SIGNAL	OFF (Close)	Battery voltage	

GW

Н

Α

В

С

 $\mathsf{D}$ 

Е

K

L

Work Flow

- 1. Check the symptom and customer's requests.
- 2. Understand the outline of system. Refer to GW-17, "System Description".
- 3. According to the trouble diagnosis chart, repair or replace the cause of the malfunction.

  Refer to <u>GW-40</u>, "Symptom Chart (Without Rear Power Vent Windows)" or <u>GW-41</u>, "Symptom Chart (With Rear Power Vent Windows)".
- 4. Does power window system operate normally? Yes, GO TO 5, If No, GO TO 3.
- 5. Inspection End.

#### **CONSULT-II Function (BCM)**

EIS007HX

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

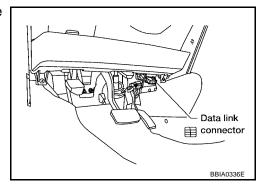
BCM diagnostic test item	Diagnostic mode	Content	
	WORK SUPPORT	Changes setting of each function.	
	DATA MONITOR	Displays BCM input/output data in real time.	
	ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.	
Inspection by part	SELF-DIAG RESULTS	Displays BCM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

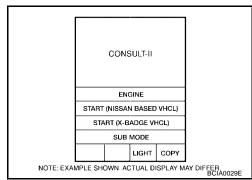
#### **CAUTION:**

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

- Connect CONSULT-II and CONSULT-II CONVERTER to the data link connector.
- 2. Turn ignition switch ON.

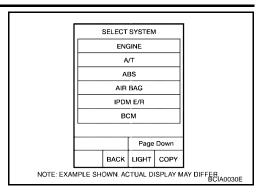


3. Touch "START (NISSAN BASED VHCL)".



4. Touch "BCM".

If "BCM" is not indicated, refer to GI-38, "CONSULT-II Data Link Connector (DLC) Circuit".



Α

В

D

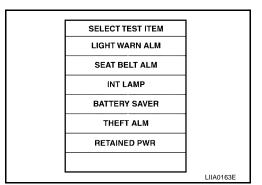
Е

Н

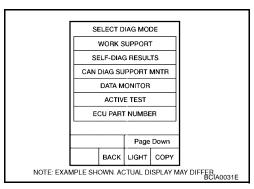
GW

M

Touch "RETAINED PWR".



6. Select diagnosis mode. "ACTIVE TEST", "WORK SUPPORT" and "DATA MONITOR" are available.



#### **ACTIVE TEST**

Test Item	Description
	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.
RETAINED PWR	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 driver side
DOOR SW-AS	Indicates (ON / OFF) condition of front door switch passenger side

# **Symptom Chart (Without Rear Power Vent Windows)**

EIS007H

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

Symptom	Repair order	Refer to page
	1. BCM power supply and ground circuit check	<u>GW-42</u>
None of the power windows can be operated using any switch	Main power window and door lock/unlock supply and ground circuit check	<u>GW-42</u>
	3. Power window serial link check	<u>GW-74</u>
	1. Front power window motor LH circuit check	<u>GW-46</u>
Front power window LH alone does not operate	2. Replace main power window and door lock/ unlock switch	<u>El-29</u>
	Power window and door lock/unlock switch RH power and ground circuit check	<u>GW-44</u>
Front power window RH alone does not operate	2. Power window serial link check	<u>GW-74</u>
	3. Front power window motor RH circuit check	<u>GW-46</u>
	4. Replace BCM	BCS-20
Anti-pinch system does not operate normally (Front LH)	<ol> <li>Door window sliding part malfunction</li> <li>A foreign material adheres to window glass or glass run rubber.</li> <li>Glass run rubber wear or deformation.</li> <li>Sash is tilted too much, or not enough.</li> </ol>	_
	2. Limit switch adjusting	<u>GW-85</u>
	3. Limit switch circuit check LH	<u>GW-48</u>
	4. Encoder circuit check LH	<u>GW-58</u>
Anti-pinch system does not operate normally (Front RH)	<ol> <li>Door window sliding part malfunction</li> <li>A foreign material adheres to window glass or glass run rubber.</li> <li>Glass run rubber wear or deformation.</li> <li>Sash is tilted too much, or not enough.</li> </ol>	_
	Limit switch adjusting	<u>GW-85</u>
	3. Limit switch circuit check RH	<u>GW-53</u>
	4. Encoder circuit check RH	GW-63
	Check the retained power operation mode setting.	<u>GW-39</u>
Power window retained power operation does not operate properly	2. Door switch check	<u>GW-68</u>
	3. Replace BCM.	BCS-20
Front power windows do not operate by front door lock assembly	Front door lock assembly LH (key cylinder switch) check	<u>GW-70</u>
LH (key cylinder switch)	2. Replace main power window and door lock/ unlock switch	<u>EI-29</u>
Power window lock switch does not function	1. Power window lock switch circuit check	<u>GW-74</u>

# **Symptom Chart (With Rear Power Vent Windows)**

EIS007HZ

Α

В

С

D

Е

F

G

Н

GW

Κ

L

M

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

Symptom	Repair order	Refer to page
	1. BCM power supply and ground circuit check	<u>GW-42</u>
None of the power windows can be operated using any switch	Main power window and door lock/unlock supply and ground circuit check	<u>GW-43</u>
	3. Power window serial link check	<u>GW-74</u>
	1. Front power window motor LH circuit check	<u>GW-46</u>
Front power window LH alone does not operate	2. Replace main power window and door lock/ unlock switch	El-29
	Power window and door lock/unlock switch RH power and ground circuit check	<u>GW-44</u>
Front power window RH alone does not operate	2. Power window serial link check	<u>GW-77</u>
	3. Front power window motor RH circuit check	<u>GW-46</u>
	4. Replace BCM	BCS-20
Rear power vent window LH alone does not operate	Rear power vent window motor LH circuit check	<u>GW-79</u>
Rear power vent window RH alone does not operate	Rear power vent window motor RH circuit check	<u>GW-80</u>
	Door window sliding part malfunction	
	<ul> <li>A foreign material adheres to window glass or glass run rubber.</li> </ul>	_
	Glass run rubber wear or deformation.	
Anti-pinch system does not operate normally (Front LH)	Sash is tilted too much, or not enough.	
	2. Limit switch adjusting	<u>GW-85</u>
	3. Limit switch circuit check LH	<u>GW-50</u>
	4. Encoder circuit check LH	<u>GW-58</u>
Anti-pinch system does not operate normally (Front RH)	<ul> <li>1. Door window sliding part malfunction</li> <li>A foreign material adheres to window glass or glass run rubber.</li> <li>Glass run rubber wear or deformation.</li> <li>Sash is tilted too much, or not enough.</li> </ul>	_
	2. Limit switch adjusting	<u>GW-85</u>
	3. Limit switch circuit check RH	<u>GW-53</u>
	4. Encoder circuit check RH	<u>GW-63</u>
	Check the retained power operation mode setting.	<u>GW-39</u>
Power window retained power operation does not operate properly	2. Door switch check	<u>GW-68</u>
	3. Replace BCM.	BCS-20
Front power windows do not operate by front door lock assembly	1.Front door lock assembly LH (key cylinder switch) check	<u>GW-72</u>
LH (key cylinder switch)	2. Replace main power window and door lock/ unlock switch	<u>EI-29</u>
Power window lock switch does not function	Power window lock switch circuit check	<u>GW-77</u>

#### **BCM Power Supply and Ground Circuit Check**

#### 1. CHECK FUSE AND FUSIBLE LINK

Check 50A fusible link (letter j, located in the fuse and fusible link box).

Check 10A fuse [No.16, located in fuse block (J/B)].

#### NOTE:

Refer to GW-17, "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-3, "PRECAUTIONS".

# 2. CHECK POWER SUPPLY CIRCUIT

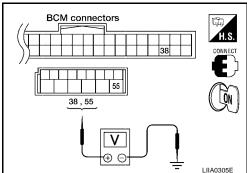
- Turn ignition switch ON.
- Check voltage between BCM connector M18, M19 terminals 38, 55 and ground.

38 - Ground : Battery voltage 55 - Ground : Battery voltage

#### OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



EIS00710

# 3. CHECK GROUND CIRCUIT

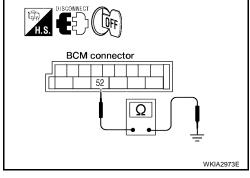
- Turn ignition switch OFF.
- 2. Disconnect BCM.
- Check continuity between BCM connector M19 terminal 52 and ground.

52 - Ground : Continuity should exist.

#### OK or NG

OK >> Power supply and ground circuits are OK.

NG >> Repair or replace harness.



#### Main Power Window and Door Lock/Unlock Switch Power Supply Circuit Check (Without Rear Power Vent Windows) EIS00711

# 1. CHECK POWER SUPPLY CIRCUIT

Turn ignition switch ON. 1.

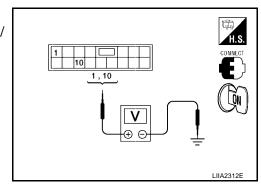
Check voltage between main power window and door lock/ unlock switch connector D7 terminals 1, 10 and ground.

> 10 - Ground : Battery voltage 1 - Ground : Battery voltage

#### OK or NG

OK >> GO TO 2.

NG >> Repair or replace harness.



# 2. CHECK GROUND CIRCUIT

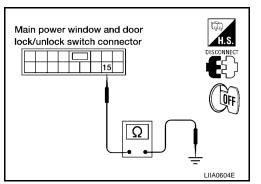
- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector D7 terminal 15 and ground.

15 - 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

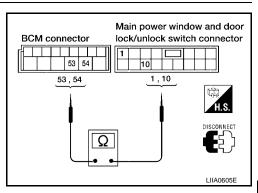
- Disconnect BCM. 1.
- 2. Check continuity between BCM connector M19 terminals 53, 54 and main power window and door lock/unlock switch connector D7 terminals 1, 10.

53 - 10 : Continuity should exist. 54 - 1 : Continuity should exist.

#### OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.



# 4. CHECK BCM OUTPUT SIGNAL

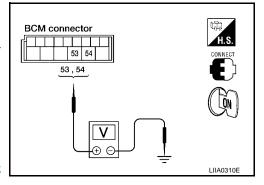
- Connect BCM. 1.
- 2. Turn ignition switch ON.
- Check voltage between BCM connector M19 terminals 53, 54 and ground.

53 - Ground : Battery voltage 54 - Ground : Battery voltage

#### OK or NG

OK >> Check the condition of the harness and the connector.

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



# Main Power Window and Door Lock/Unlock Switch Power Supply Circuit Check (With Rear Power Vent Windows)

#### 1. CHECK POWER SUPPLY CIRCUIT

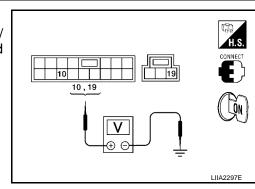
- Turn ignition switch ON. 1.
- Check voltage between main power window and door lock/ 2. unlock switch connector D7 terminal 10, D8 terminal 19 and ground.

10 - Ground : Battery voltage 19 - Ground : Battery voltage

#### OK or NG

OK >> GO TO 2.

NG >> Repair or replace harness.



GW

Н

Α

D

Е

K

# 2. CHECK GROUND CIRCUIT

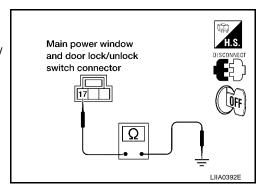
- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector D8 terminal 17 and ground.

17 - 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

- Disconnect BCM.
- Check continuity between BCM connector (A) M19 terminals 53, 54 and main power window and door lock/unlock switch connectors (B) D7 terminal 10 and D8 terminal 19.

53 - 10 : Continuity should exist.54 - 19 : 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 terminals 53, 54 and ground.

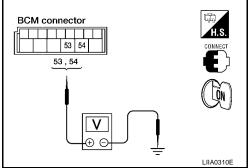
53 - Ground : Battery voltage54 - Ground : Battery voltage

#### OK or NG

NG

OK >> Check the condition of the harness and the connector.

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



EIS00713

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

# 1. CHECK POWER SUPPLY CIRCUIT

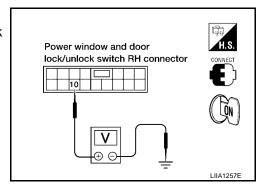
- 1. Turn ignition switch ON.
- Check voltage between power window and door lock/unlock switch RH connector D105 terminal 10 and ground.

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

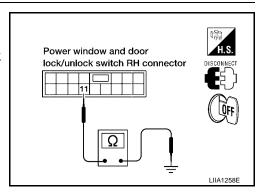
11 - Ground

: 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

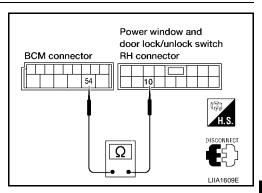
- Disconnect BCM.
- Check continuity between BCM connector M19 terminal 54 and power window and door lock/unlock switch RH connector D105 terminal 10.

54 - 10 : 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.
- Check voltage between BCM connector M19 terminal 54 and ground.

54 - Ground : Battery voltage

#### OK or NG

OK >> Check the condition of the harness and the connector

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

BCM connector

H.S.

CONNECT

WIIA0668E

GW

Н

Α

В

D

Е

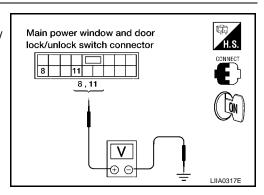
#### Front Power Window Motor LH Circuit Check

EIS00714

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

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

Connector	Terminals		Condition	Voltage (V)	
Connector	(+)	(-)	Condition	(Approx.)	
	8	Ground	Closing	Battery voltage	
D7	0		Opening	0	
D1	11		Closing	0	
	11		Opening	Battery voltage	



#### OK or NG

OK >> GO TO 2.

NG >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR".

# 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.
- Check continuity between main power window and door lock/ unlock switch connector D7 terminals 8, 11 and front power window motor LH connector D9 terminals 1, 2.

8 - 2

: Continuity should exist.

11 - 1

: Continuity should exist.

#### OK or NG

OK >> Replace front power window motor LH. Refer to <u>GW-82</u>, <u>"Removal and Installation"</u>.

NG >> Repair or replace harness.

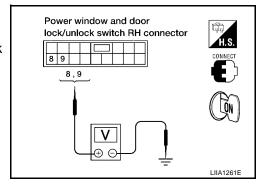
# Main power window and door lock/unlock switch connector 8,11 1,2 LIIA1260E

# Front Power Window Motor RH Circuit Check (Without Rear Power Vent Windows)

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

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

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



#### OK or NG

OK >> GO TO 2.

NG >> Replace power window and door lock/unlock switch RH. Refer to EI-29, "FRONT DOOR".

# 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 power window and door lock/unlock switch RH connector D105 terminals 8, 9 and front power window motor RH connector D104 terminals 1, 3.

8 - 3

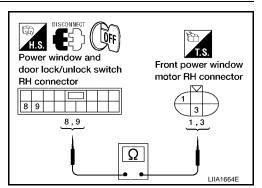
: Continuity should exist.

9 - 1 : Continuity should exist.

#### OK or NG

OK >> Replace front power window motor RH. Refer to GW-82, "Removal and Installation".

NG >> Repair or replace harness.

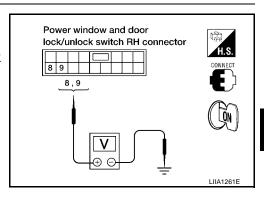


#### Front Power Window Motor RH Circuit Check (With Rear Power Vent Windows)

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

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

Connector	Terminals		Condition	Voltage (V)	
Connector	(+)	(-)	Condition	(Approx.)	
	8	- Ground	Closing	Battery voltage	
D105	O O		Opening	0	
D103	9		Closing	0	
	9		Opening	Battery voltage	



#### OK or NG

OK >> GO TO 2.

NG >> Replace power window and door lock/unlock switch RH. Refer to EI-29, "FRONT DOOR".

# $2.\,$ CHECK FRONT POWER WINDOW MOTOR RH CIRCUIT

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

8 - 2

: Continuity should exist.

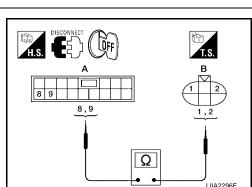
9 - 1

: Continuity should exist.

#### OK or NG

OK >> Replace front power window motor RH. Refer to GW-82, "Removal and Installation".

NG >> Repair or replace harness.



**GW-47** Revision: July 2006 2006 Quest

D

Е

Н

GW

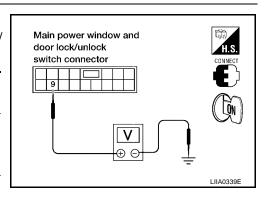
K

# Limit Switch Circuit Check Front LH (Without Rear Power Vent Windows)

E150071

- 1. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH LIMIT SIGNAL
- Turn ignition switch ON.
- 2. Check voltage between main power window and door lock/ unlock switch connector D7 terminal 9 and ground.

Connector	Terminals		Condition	Voltage (V)	
Comicolor	(+)	(-)	Condition	(Approx.)	
D7	9	Ground	Front door window LH is between fully-open and just before fully-closed position (ON)	0	
	9	Giodila	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 6 and ground.

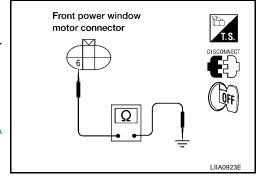
#### 6 - Ground

: Continuity should exist.

#### OK or NG

OK >> Replace front power window motor LH. Refer to <u>GW-82</u>, "Removal and Installation" .

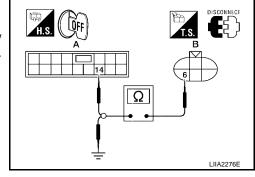
NG >> GO TO 3.



# 3. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector and front power window motor LH connector.

Connector	Terminal	Connector	Terminal	Continuity	
A	Terrilliai	В	Terrilliai		
Main power window and door lock/unlock switch: D7	14	Front power win- dow motor LH: D9	6	Yes	



4. Check continuity between front power window motor LH connector and ground.

Connector	- Terminal		Continuity
В		Ground	Continuity
Front power window motor LH: D9	6		No

#### OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.

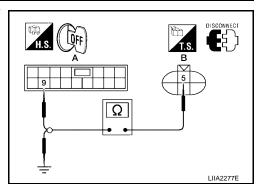
# 4. CHECK HARNESS CONTINUITY

 Check continuity between main power window and door lock/ unlock switch connector and front power window motor LH connector.

Connector	Terminal	Connector	Terminal	Continuity
А	Terriiriai	В	Terrima	Continuity
Main power window and door lock/unlock switch: D7	9	Front power window motor LH: D9	5	Yes

Check continuity between front power window motor LH connector and ground.

Connector	Terminal		Continuity
В		Ground	Continuity
Front power window motor LH: D9	5		No



OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness.

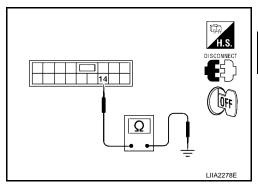
# 5. CHECK LIMIT SWITCH GROUND

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

Connector	Terminal		Continuity
Main power window door lock/unlock switch: D7	14	Ground	Yes

#### OK or NG

OK >> GO TO 7. NG >> GO TO 6.



# 6. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH GROUND CIRCUIT

Check continuity between main power window and door lock/unlock switch connector D7 terminal 15 and ground.

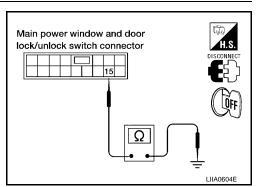
15 - Ground

: Continuity should exist.

#### OK or NG

OK >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR" .

NG >> Repair or replace harness.



Е

D

Α

В

Н

GW

J

1 \

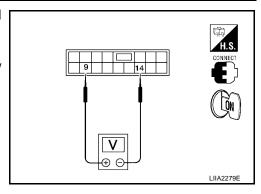
M

IVI

# 7. CHECK FRONT POWER WINDOW MOTOR LH LIMIT SIGNAL

- Connect main power window and door lock/unlock switch and front power window motor LH.
- 2. Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connector.

Connector	Term	ninals	Condition	Voltage (V)
Comicolor	(+)	(-)	Condition	(Approx.)
Main power win- dow and	9	14	Front door window LH is between fully-open and just before fully-closed position (ON)	0
door lock/ unlock switch: D7	9	14	Front door window LH is between just before fully- closed position and fully- closed position (OFF)	5



#### OK or NG

OK >> Check the condition of the harness and connector.

NG >> Replace front power window motor LH. Refer to <u>GW-82, "Removal and Installation"</u>.

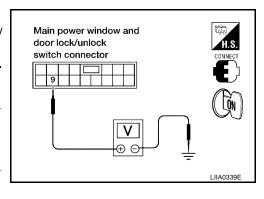
# Limit Switch Circuit Check Front LH (With Rear Power Vent Windows)

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

1. Turn ignition switch ON.

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

Connector	Term	ninals	Condition	Voltage (V)
Connector	(+)	(-)	Condition	(Approx.)
D7	9	Ground	Front door window LH is between fully-open and just before fully-closed position (ON)	0
DI.	y	Giodila	Front door window LH is between just before fully- closed position and fully- closed position (OFF)	5



EIS00717

#### 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 6 and ground.

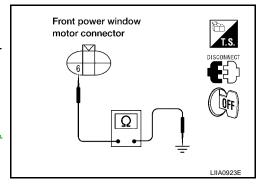
#### 6 - Ground

: Continuity should exist.

#### OK or NG

OK >> Replace front power window motor LH. Refer to <u>GW-82</u>, "Removal and Installation" .

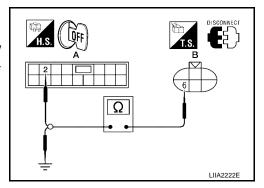
NG >> GO TO 3.



# 3. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector and front power window motor LH connector.

Connector	Terminal	Connector	Terminal	Continuity
A	Terrinia	В	Terrinia	Continuity
Main power window and door lock/unlock switch: D7	2	Front power win- dow motor LH: D9	6	Yes



4. Check continuity between front power window motor LH connector and ground.

Connector	- Terminal		Continuity
В		Ground	Continuity
Front power window motor LH: D9	6		No

#### OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.

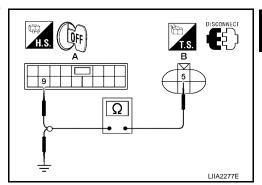
# 4. CHECK HARNESS CONTINUITY

 Check continuity between main power window and door lock/ unlock switch connector and front power window motor LH connector.

Connector	Terminal	Connector	Terminal	Continuity	
A	Terrilliai	В	Terrilliai	Continuity	
Main power window and door lock/unlock switch: D7	9	Front power window motor LH: D9	5	Yes	

Check continuity between front power window motor LH connector and ground.

Connector	Terminal		Continuity
В	TOTTILIA	Ground	Continuity
Front power window motor LH: D9	5		No



#### OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness.

GW

Н

Α

В

D

Е

J

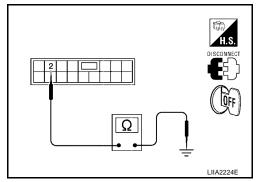
# 5. CHECK LIMIT SWITCH GROUND

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

Connector	Terminal		Continuity
Main power window door lock/unlock switch: D7	2	Ground	Yes

#### OK or NG

OK >> GO TO 7. NG >> GO TO 6.



#### 6. CHECK MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH GROUND CIRCUIT

Check continuity between main power window and door lock/unlock switch connector D8 terminal 17 and ground.

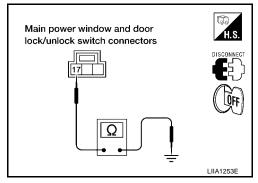
17 - Ground

: Continuity should exist.

#### OK or NG

OK >> Replace main power window and door lock/unlock switch. Refer to <u>EI-29</u>, "FRONT DOOR".

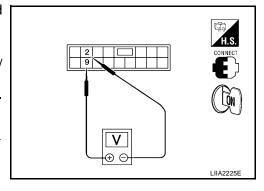
NG >> Repair or replace harness.



# 7. CHECK FRONT POWER WINDOW MOTOR LH LIMIT SIGNAL

- 1. Connect main power window and door lock/unlock switch and front power window motor LH.
- 2. Turn ignition switch ON.
- Check voltage between main power window and door lock/ unlock switch connector.

Connector	Term	ninals	Condition	Voltage (V)
Connector	(+)	(-)	Condition	(Approx.)
Main power win- dow and	9	2	Front door window LH is between fully-open and just before fully-closed position (ON)	0
door lock/ unlock switch: D7	9	2	Front door window LH is between just before fully- closed position and fully- closed position (OFF)	5



#### OK or NG

OK >> Check the condition of the harness and connector.

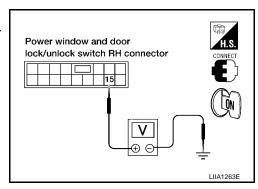
NG >> Replace front power window motor LH. Refer to <u>GW-82</u>, "Removal and Installation".

# **Limit Switch Circuit Check Front RH (Without Rear Power Vent Windows)**

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

- Turn ignition switch ON.
- 2. Check voltage between power window motor RH connector D105 terminal 15 and ground.

Connector	Connector		Condition	Voltage (V)
Commodia	(+)	(-)	Containon	(Approx.)
D105	15	Ground	Front door window RH is between fully-open and just before fully-closed position (ON)	0
D103	13	Glodila	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

- Turn ignition switch OFF.
- 2. Disconnect front power window motor RH.
- 3. Check continuity between front power window motor RH connector D104 terminal 4 and ground.

#### 4 - Ground

#### : Continuity should exist.

#### OK or NG

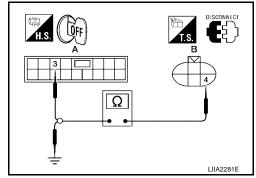
OK >> Replace front power window motor RH. Refer to GW-82, "Removal and Installation".

NG >> GO TO 3.

# 3. 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 and front power window motor RH connector.

Connector	Terminal	Connector	Terminal	Continuity
A	Terrinia	В	Terrinia	Continuity
Power window and door lock/unlock switch RH: D105	3	Front power win- dow motor RH: D104	4	Yes



Check continuity between front power window motor RH connector and ground.

Connector	Terminal		Continuity	
В	Terrinia	Ground	Continuity	
Front power window motor RH: D104	4		No	

#### OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.

**GW-53** 2006 Quest Revision: July 2006

D

GW

EIS00718

В

Α

Е

Н

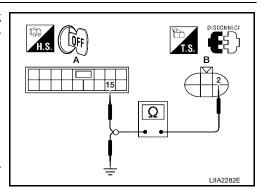
# 4. CHECK HARNESS CONTINUITY

 Check continuity between power window and door lock/unlock switch RH connector and front power window motor RH connector.

Connector	Terminal	Connector	Terminal	Continuity
A	Terrinia	В	Terrima	Continuity
Power window and door lock/unlock switch RH: D105	15	Front power window motor RH: D104	2	Yes

2. Check continuity between front power window motor RH connector and ground.

Connector	Terminal		Continuity	
В	Terriniai	Ground	Continuity	
Front power window motor RH: D104	2		No	



#### OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness.

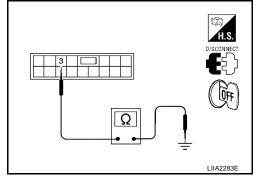
# 5. CHECK LIMIT SWITCH GROUND

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

Connector	Terminal		Continuity
Power window door lock/ unlock switch RH: D105	3	Ground	Yes

#### OK or NG

OK >> GO TO 7. NG >> GO TO 6.



# 6. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH GROUND CIRCUIT

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

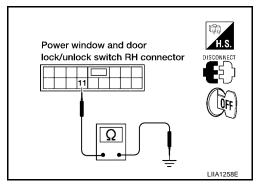
11 - Ground

: Continuity should exist.

#### OK or NG

OK >> Replace power window and door lock/unlock switch RH. Refer to EI-29, "FRONT DOOR".

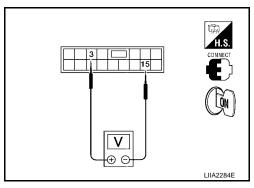
NG >> Repair or replace harness.



# $7.\,$ check front power window motor RH limit signal

- Connect power window and door lock/unlock switch RH and front power window motor RH.
- 2. Turn ignition switch ON.
- Check voltage between power window and door lock/unlock switch RH connector.

Connector	ninals	Condition	Voltage (V)	
Connector	(+)	(-)	Condition	(Approx.)
Power window and door lock/	15	3	Front door window RH is between fully-open and just before fully-closed position (ON)	0
unlock switch RH: D105	13	3	Front door window RH is between just before fully- closed position and fully- closed position (OFF)	5



#### OK or NG

OK >> Check the condition of the harness and connector.

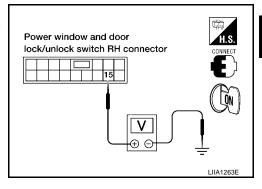
NG >> Replace front power window motor RH. Refer to <u>GW-82</u>, "<u>Removal and Installation</u>".

# Limit Switch Circuit Check Front RH (With Rear Power Vent Windows)

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

- 1. Turn ignition switch ON.
- Check voltage between power window motor RH connector D105 terminal 15 and ground.

Connector	Term	ninals	Condition	Voltage (V)
Commodia	(+)	(-)	Containon	(Approx.)
D105	15	Ground	Front door window RH is between fully-open and just before fully-closed position (ON)	0
D105	13	Giodila	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 6 and ground.

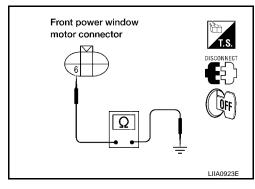
#### 6 - Ground

: Continuity should exist.

#### OK or NG

OK >> Replace front power window motor RH. Refer to <u>GW-82</u>, <u>"Removal and Installation"</u>.

NG >> GO TO 3.



GW

Н

EIS007WR

Α

В

D

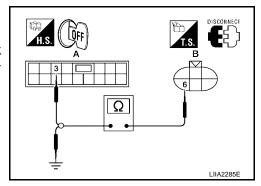
Е

L

# 3. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect power window and door lock/unlock switch RH.
- Check continuity between power window and door lock/unlock switch RH connector and front power window motor RH connector.

Connector	Terminal	Connector	Terminal	Continuity
А	Terrinia	В		Continuity
Power window and door lock/unlock switch RH: D105	3	Front power win- dow motor RH: D104	6	Yes



4. Check continuity between front power window motor RH connector and ground.

Connector	Terminal		Continuity
В	Terrimai	Ground	Continuity
Front power window motor RH: D104	6		No

#### OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.

# 4. CHECK HARNESS CONTINUITY

 Check continuity between power window and door lock/unlock switch RH connector and front power window motor RH connector.

Connector	Terminal	Connector	Terminal	Continuity
А	Terrinia	В	Terrilliai	Continuity
Power window and door lock/unlock switch RH: D105	15	Front power window motor RH: D104	5	Yes

Check continuity between front power window motor RH connector and ground.

Connector	Terminal		Continuity	
В	Tommai	Ground	Continuity	
Front power window motor RH: D104	5		No	

# DISCONNECT A B C LIIA2286E

#### OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness.

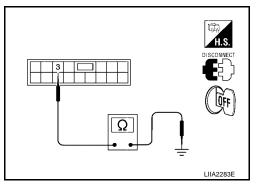
# 5. CHECK LIMIT SWITCH GROUND

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

Connector	Terminal		Continuity
Power window door lock/ unlock switch RH: D105	3	Ground	Yes

#### OK or NG

OK >> GO TO 7. NG >> GO TO 6.



# 6. CHECK POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH GROUND CIRCUIT

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

11 - Ground

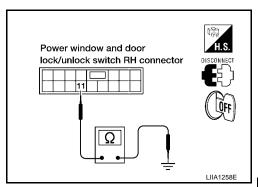
: Continuity should exist.

#### OK or NG

OK

>> Replace power window and door lock/unlock switch RH. Refer to EI-29, "FRONT DOOR" .

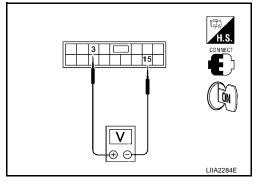
NG >> Repair or replace harness.



# 7. CHECK FRONT POWER WINDOW MOTOR RH LIMIT SIGNAL

- Connect power window and door lock/unlock switch RH and front power window motor RH.
- 2. Turn ignition switch ON.
- Check voltage between power window and door lock/unlock switch RH connector.

Connector	Term	ninals	Condition	Voltage (V)
Oomiccion	(+)	(-)	Condition	(Approx.)
Power window and door lock/	15	3	Front door window RH is between fully-open and just before fully-closed position (ON)	0
unlock switch RH: D105	13	3	Front door window RH is between just before fully- closed position and fully- closed position (OFF)	5



#### OK or NG

OK >> Check the condition of the harness and connector.

NG >> Replace front power window motor RH. Refer to <u>GW-82</u>, "Removal and Installation".

GW

Н

Α

В

D

Е

K

M

Revision: July 2006 GW-57 2006 Quest

# **Encoder Circuit Check Front LH (Without Rear Power Vent Windows)**

#### 1. CHECK FRONT POWER WINDOW MOTOR LH POWER SUPPLY

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

4 - Ground : Approx. 10V

#### OK or NG

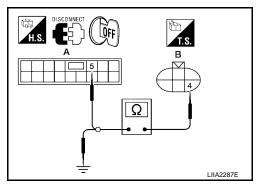
OK >> GO TO 3. NG >> GO TO 2.

# LIIA2299E

# 2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch.
- Check continuity between front power window motor LH connector and main power window and door lock/unlock switch connector.

Connector	Terminal	Connector		Continuity
А	Terriniai	В	Terminal	Continuity
Main power window and door lock/unlock switch: D7	5	Front power win- dow motor LH: D9	4	Yes



EIS00719

4. Check continuity between front power window motor LH connector and ground.

Connector B	Terminal	Ground	Continuity
Front power window motor LH: D9	4		No

#### OK or NG

OK >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR".

NG >> Repair or replace harness.

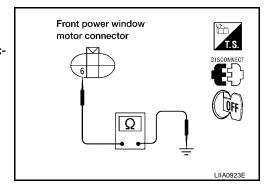
# 3. CHECK ENCODER GROUND

- Turn ignition switch OFF.
- 2. Disconnect front power window motor LH.
- Check continuity between front power window motor LH connector D9 terminal 6 and ground.

6 - Ground : Continuity should exist.

#### OK or NG

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



# 4. CHECK ENCODER GROUND CIRCUIT

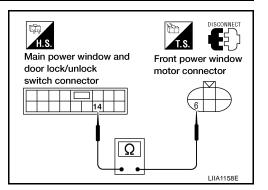
- 1. Disconnect main power window and door lock/unlock switch.
- Check continuity between front power window motor LH connector D9 terminal 6 and main power window and door lock/unlock switch connector D7 terminal 14.

6 - 14 : Continuity should exist.

#### OK or NG

OK >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR".

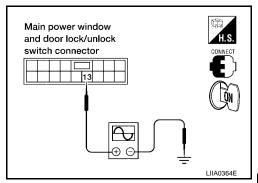
NG >> Repair or replace harness.



# 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.

Connec-	Terminals	Condition	Signal	
tor	(+)	(-)	Condition	Signal
D7	13	Ground	Opening	(V) 6 4 2 0 0 OCC3383D



GW

Н

Α

В

D

Е

#### OK or NG

OK >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR".

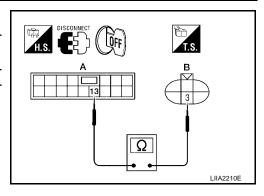
NG >> GO TO 6.

k

# 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.
- Check continuity between front power window motor LH connector and main power window and door lock/unlock switch connector.

Connector	Terminal	Connector	Terminal	Continuity
A	Terrilliai	В	Terriniai	Continuity
Main power win- dow and door lock/ unlock switch: D7	13	Front power win- dow motor LH: D9	3	Yes



4. Check continuity between front power window motor LH connector and ground.

Connector	Terminal		Continuity	
В	Terrinia	Ground	Continuity	
Front power window motor LH: D9	3		No	

#### OK or NG

OK >> Replace front power window motor LH. Refer to <u>GW-82</u>, "<u>Removal and Installation</u>".

NG >> Repair or replace harness.

# **Encoder Circuit Check Front LH (With Rear Power Vent Windows)**

EIS007IA

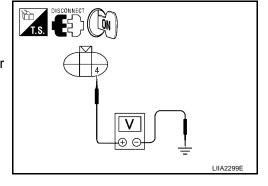
# 1. CHECK FRONT POWER WINDOW MOTOR LH POWER SUPPLY

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

4 - Ground : Approx. 10V

#### OK or NG

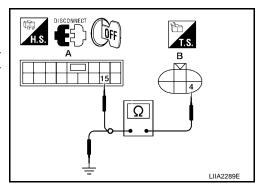
OK >> GO TO 3. NG >> GO TO 2.



# 2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch.
- Check continuity between front power window motor LH connector and main power window and door lock/unlock switch connector

Connector	Terminal	Connector		Continuity	
А	Terrilliai	В	Terminal	Continuity	
Main power window and door lock/unlock switch: D7	15	Front power window motor LH:	4	Yes	



4. Check continuity between front power window motor LH connector and ground.

Connector	Terminal		Continuity	
В	reminai	Ground	Continuity	
Front power window motor LH: D9	4		No	

#### OK or NG

OK >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR".

NG >> Repair or replace harness.

# 3. CHECK ENCODER GROUND

- Turn ignition switch OFF.
- 2. Disconnect front power window motor LH.
- Check continuity between front power window motor LH connector D9 terminal 6 and ground.

#### 6 - Ground

: Continuity should exist.

#### OK or NG

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

# Front power window motor connector DISCONNECT OFF LIIA0923E

#### 4. CHECK ENCODER GROUND CIRCUIT

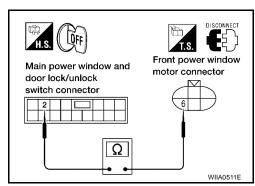
- Disconnect main power window and door lock/unlock switch.
- Check continuity between front power window motor LH connector D9 terminal 6 and main power window and door lock/unlock switch connector D7 terminal 2.

6 - 2 : Continuity should exist.

#### OK or NG

OK >> Replace main power window and door lock/unlock switch. Refer to <u>EI-29</u>, "<u>FRONT DOOR</u>".

NG >> Repair or replace harness.



GW

Н

Α

D

Е

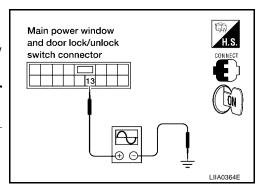
J

1 \

# 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.

Connec-	Terminals		Condition	Signal	
tor	(+)	(-)	Condition	Signal	
D7	13	Ground	Opening	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	



#### OK or NG

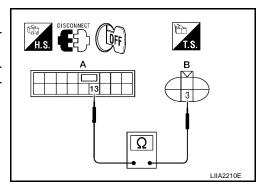
OK >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR".

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.
- Check continuity between front power window motor LH connector and main power window and door lock/unlock switch connector.

Connector	Terminal Connector		Terminal	Continuity
A			Terrinia	Continuity
Main power win- dow and door lock/ unlock switch: D7	13	Front power win- dow motor LH: D9	3	Yes



4. Check continuity between front power window motor LH connector and ground.

Connector	Terminal	l Ground	Continuity
В			
Front power window motor LH: D9	3		No

#### OK or NG

OK >> Replace front power window motor LH. Refer to <u>GW-82</u>, "Removal and Installation".

NG >> Repair or replace harness.

# **Encoder Circuit Check Front RH (Without Rear Power Vent Windows)**

#### 1. CHECK FRONT POWER WINDOW MOTOR RH POWER SUPPLY

- Turn ignition switch OFF.
- 2. Disconnect front power window motor RH.
- Turn ignition switch ON.
- Check voltage between front power window motor RH connector D104 terminal 6 and ground.

6 - Ground : Approx. 10V

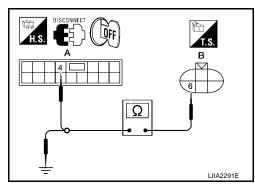
#### OK or NG

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

# 2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF. 1.
- 2. Disconnect power window and door lock/unlock switch RH.
- Check continuity between front power window motor RH connector and power window and door lock/unlock switch RH connector.

Connector	Terminal Connector		Terminal	Continuity
A	Terrinia	В	Terriniai	Continuity
Power window and door lock/unlock switch RH: D105	4	Front power win- dow motor RH: D104	6	Yes



Check continuity between front power window motor LH connector and ground.

Connector	Terminal		Continuity	
В	Tellillai	Ground	Continuity	
Front power window motor RH: D104	6		No	

#### OK or NG

OK >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR".

NG >> Repair or replace harness.

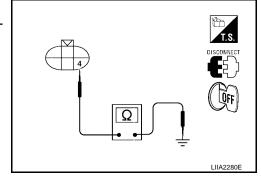
# 3. CHECK ENCODER GROUND

- Turn ignition switch OFF.
- Check continuity between front power window motor RH connector D104 terminal 4 and ground.

4 - Ground : Continuity should exist.

#### OK or NG

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



LIIA2314E

GW

Н

Α

В

D

Е

# 4. CHECK ENCODER GROUND CIRCUIT

- 1. Disconnect power window and door lock/unlock switch RH.
- 2. Check continuity between power window and door lock/unlock switch RH (A) connector D105 terminal 14 and front power window motor RH (B) connector D104 terminal 6.

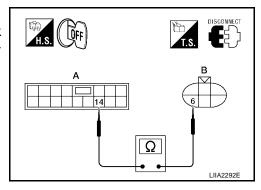
6 - 14 : Con

: Continuity should exist.

#### OK or NG

OK >> Replace power window and door lock/unlock switch RH. Refer to <u>EI-29</u>, "FRONT <u>DOOR"</u>.

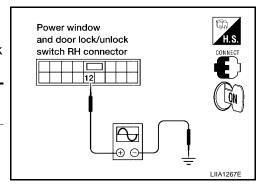
NG >> Repair or replace harness.



# 5. CHECK ENCODER SIGNAL

- 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.

Connec-	Terminals		Condition	Signal
tor	(+)	(-)	Condition	Signal
D105	12	Ground	Opening	(V) 6 4 2 0 0 OCC3383D



#### OK or NG

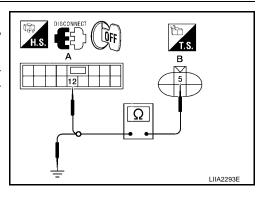
OK >> Replace power window and door lock/unlock switch RH. Refer to EI-29, "FRONT DOOR".

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.
- Check continuity between front power window motor RH connector and power window and door lock/unlock switch RH connector.

Connector	Terminal	Connector	Terminal	Continuity
А	Terrima	В	Terrimai	Continuity
Power window and door lock/unlock switch RH: D105	12	Front power win- dow motor RH: D104	5	Yes



4. Check continuity between front power window motor LH connector and ground.

Connector	Terminal		Continuity
В		Ground	Continuity
Front power window motor RH: D104	5		No

#### OK or NG

OK >> Replace front power window motor RH. Refer to <u>GW-82</u>, "<u>Removal and Installation</u>".

NG >> Repair or replace harness.

# **Encoder Circuit Check Front RH (With Rear Power Vent Windows)**

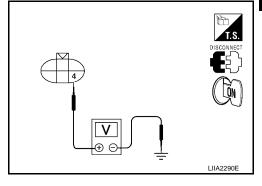
#### 1. CHECK FRONT POWER WINDOW MOTOR RH POWER SUPPLY

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

4 - Ground : Approx. 10V

#### OK or NG

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



M

Revision: July 2006 GW-65 2006 Quest

Α

В

D

Е

G

EIS007WS

GW

Н

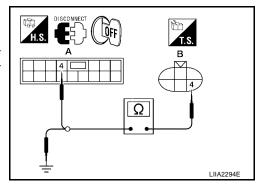
.1

Κ

# 2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect power window and door lock/unlock switch RH.
- Check continuity between front power window motor RH connector and power window and door lock/unlock switch RH connector.

Connector	Terminal	Connector	Terminal	Continuity
A	Terrinia	В	Terrilliai	
Power window and door lock/unlock switch RH: D105	4	Front power win- dow motor RH: D104	4	Yes



4. Check continuity between front power window motor LH connector and ground.

Connector	Terminal		Continuity	
В	Terrilliai	Ground	Continuity	
Front power window motor RH: D104	4		No	

#### OK or NG

OK >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR".

NG >> Repair or replace harness.

# 3. CHECK ENCODER GROUND

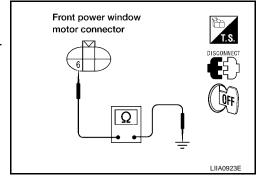
- 1. Turn ignition switch OFF.
- 2. Disconnect front power window motor RH.
- 3. Check continuity between front power window motor RH connector D104 terminal 6 and ground.



: Continuity should exist.

#### OK or NG

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



#### 4. CHECK ENCODER GROUND CIRCUIT

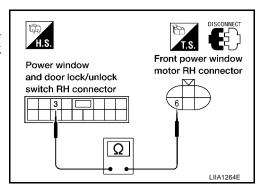
- Disconnect power window and door lock/unlock switch RH.
- 2. Check continuity between front power window motor RH connector D104 terminal 6 and power window and door lock/unlock switch RH connector D105 terminal 3.

6 - 3 : Continuity should exist.

#### OK or NG

OK >> Replace power window and door lock/unlock switch RH. Refer to EI-29, "FRONT DOOR".

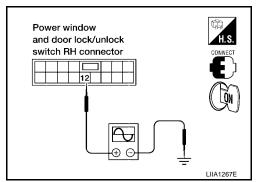
NG >> Repair or replace harness.



# 5. CHECK ENCODER SIGNAL

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

Connec-	Connec- Terminals Condition	Condition	Signal	
tor	(+)	(-)	Condition	Signal
D105	12	Ground	Opening	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0



Α

В

D

Е

Н

GW

K

M

#### OK or NG

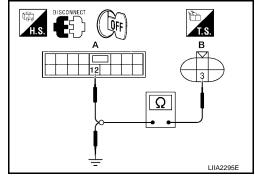
OK >> Replace power window and door lock/unlock switch RH. Refer to EI-29, "FRONT DOOR".

NG >> GO TO 6.

# 6. CHECK ENCODER CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect front power window motor RH and power window and door lock/unlock switch RH.
- Check continuity between front power window motor RH connector and power window and door lock/unlock switch RH connector.

Connector	Terminal	Connector	Terminal	Continuity
А	Tommai	В	Tommai	Continuity
Power window and door lock/unlock switch RH: D105	12	Front power win- dow motor RH: D104	3	Yes



Check continuity between front power window motor LH connector and ground.

Connector	Terminal		Continuity
В		Ground	Continuity
Front power window motor RH: D104	3		No

#### OK or NG

OK >> Replace front power window motor RH. Refer to GW-82, "Removal and Installation".

NG >> Repair or replace harness.

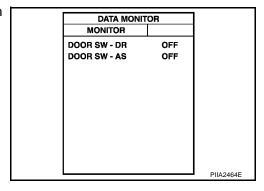
Door Switch Check

# 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.

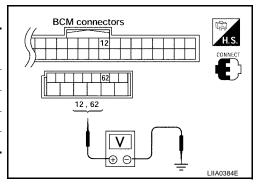
Monitor item	Condition		
DOOR SW-DR	OPEN	: ON	
DOOR SW-DR	CLOSE	: OFF	
DOOR SW-AS	OPEN	: ON	
	CLOSE	: OFF	



#### Without CONSULT-II

Check voltage between BCM connector and ground.

Item	Connector	Terminals		Condition	Voltage (V)
пеш	Connector	(+)	(-)	Condition	(Approx.)
Front RH M18	M1Q	8 12	Ground	OPEN	0
	IVITO			CLOSE	Battery voltage
Front LH M	M20	62		OPEN	0
	IVIZU	02		CLOSE	Battery voltage



#### OK or NG

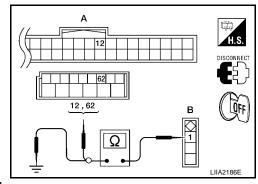
OK >> Front door switch is OK.

NG >> GO TO 2.

# 2. CHECK DOOR SWITCH CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front door switch LH or RH and BCM.
- 3. Check continuity between front door switch LH or RH and BCM.

Connector	Terminal	Connector	Terminal	Continuity
А	Terrinia	В	Terrinia	
BCM: M18	12	Front door switch RH: B108	1	Yes
BCM: M20	62	Front door switch LH: B8	1	Yes



Check continuity between front door switch LH or RH and ground.

Connector	Terminal		Continuity
А	Terrimai		Continuity
Front door switch LH: B8	1	Ground	No
Front door switch RH: B108	1		No

#### 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 1 and body ground part of front door switch.

Terr	minal	Door switch	Continuity
1	Body ground part of front door switch	Pushed	No
		Released	Yes

# Door switch PIIA3351E

#### OK or NG

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

NG >> Replace malfunctioning front door switch.

Е

Α

В

C

D

F

Н

GW

L

# Front Door Lock Assembly LH (Key Cylinder Switch) Check (Without Rear Power Vent Windows)

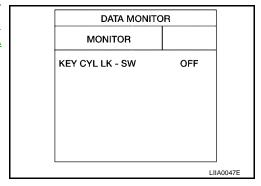
1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

EIS007ID

#### **With CONSULT-II**

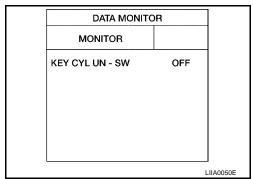
 Check front door lock assembly LH (key cylinder switch) ("KEY CYL LK-SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-II. Refer to <u>GW-39</u>, "<u>DATA MONITOR</u>".

"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. Refer to <u>GW-39</u>, "DATA MONITOR".

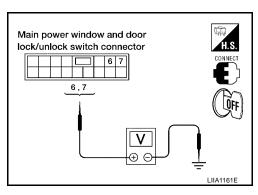
"KEY CYL UN-SW" should be "ON" when key inserted in door key cylinder is turned to unlock.



#### **Without CONSULT-II**

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

Connector	Terminals		Key position	Voltage (V)
00111100101	(+)	(-)		(Approx.)
D7	7	Ground	Neutral/Unlock	5
	,		Unlock	0
	6	Ground	Neutral/Lock	5
			Lock	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).
- Check continuity between main power window and door lock/ unlock switch connector D7 terminals 6, 7 and front door lock assembly LH (key cylinder switch) connector D14 terminals 1, 6.

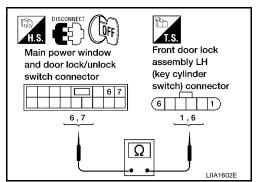
7 - 6 6 - 1 : Continuity should exist.

: 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 D14 terminal 5 and ground.

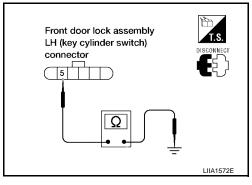
5 - Ground

: Continuity should exist.

#### OK or NG

OK >> GO TO 4.

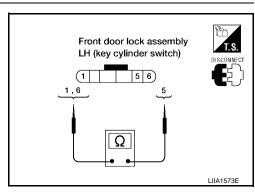
NG >> Repair or replace harness.



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

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

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



#### OK or NG

NG

OK >> Further inspection is necessary. Refer to symptom

>> Replace front door lock assembly LH (key cylinder switch). Refer to <u>BL-197, "Removal and Installation"</u>.

Revision: July 2006 GW-71 2006 Quest

В

Α

D

Е

F

G

Н

GW

K

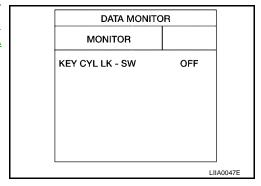
# Front Door Lock Assembly LH (Key Cylinder Switch) Check (With Rear Power Vent Windows)

#### 1. CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

#### (II) With CONSULT-II

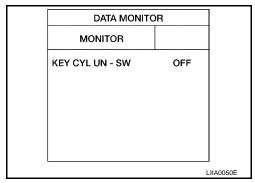
 Check front door lock assembly LH (key cylinder switch) ("KEY CYL LK-SW") in "DATA MONITOR" mode for "POWER DOOR LOCK SYSTEM" with CONSULT-II. Refer to <u>GW-39</u>, "<u>DATA MONITOR</u>".

"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. Refer to <u>GW-39</u>, "DATA MONITOR".

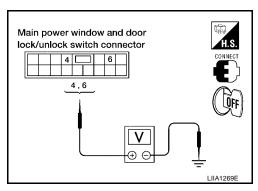
"KEY CYL UN-SW" should be "ON" when key inserted in door key cylinder is turned to unlock.



#### **Without CONSULT-II**

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

Connector	Terminals		Key position	Voltage (V)
00111100101	(+)	(-)	riey pooliion	(Approx.)
D7	6	Ground	Neutral/Lock	5
			Lock	0
	4	Ground	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).
- 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 D14 terminals 1, 6.

6 - 6

: Continuity should exist.

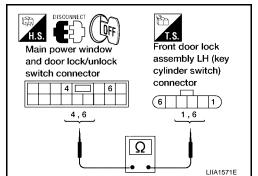
: Continuity should exist.

#### OK or NG

OK >> GO TO 3.

4 - 1

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 D14 terminal 5 and ground.

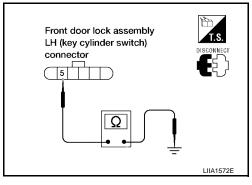
5 - Ground

: Continuity should exist.

#### OK or NG

OK >> GO TO 4.

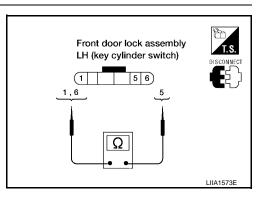
NG >> Repair or replace harness.



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

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

Tern	ninals	Key position	Continuity
6	_	Neutral/Lock	No
0		Unlock	Yes
1	5	Neutral/Unlock	No
ı		Lock	Yes



#### OK or NG

NG

OK >> Further inspection is necessary. Refer to symptom

>> Replace front door lock assembly LH (key cylinder switch). Refer to <u>BL-197, "Removal and Installation"</u>.

Revision: July 2006 GW-73 2006 Quest

В

Α

D

Е

F

G

Н

GW

K

# Power Window Serial Link Check Front LH and RH (Without Rear Power Vent Windows)

## 1. CHECK BUS OUTPUT SIGNAL

#### (P)With CONSULT-II

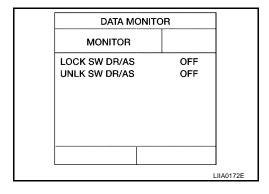
Check door lock and unlock switch ("LOCK SW DR/AS", "UNLK SW DR/AS") in DATA MONITOR mode for "MULTI REMOTE ENT" with CONSULT-II. Refer to <u>BL-68</u>, "Data Monitor".

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

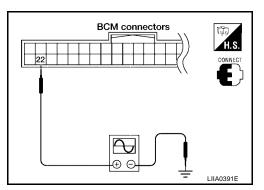
UNLK SW DR/AS : ON



#### Without CONSULT-II

- 1. Remove key from ignition switch, and close front door LH and RH.
- Check the signal between BCM connector and ground with oscilloscope when door lock and unlock switch (front LH and front RH) is turned to "LOCK" or "UNLOCK".
- Make sure signals which are shown in the figure below can be detected during 10 seconds just after door lock and unlock switch (front LH and front RH) is turned to "LOCK" or "UNLOCK".

Connector	Terminals		Signal	
Connector	(+)	(-)	Signal	
M18	22	Ground	(V) 15 10 5 0	



#### OK or NG

OK >> GO TO 2.

NG >> GO TO 3.

## 2. CHECK BCM BUS SIGNAL

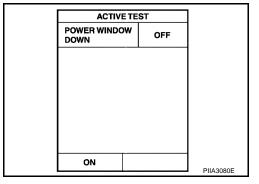
Check power window serial link ("POWER WINDOW DOWN") in "ACTIVE TEST" mode for "MULTI REMOTE ENT" with CONSULT-II. Refer to <u>BL-68</u>, "<u>Active Test"</u>.

When "ACTIVE TEST" is executed, is the front power window LH and RH lowered?

#### OK or NG

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

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

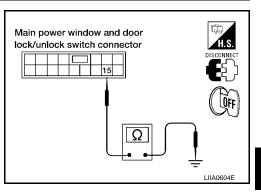


## 3. CHECK POWER WINDOW SWITCH GROUND

- 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 D7 terminal 15 and ground.

15 - Ground

: Continuity should exist.



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

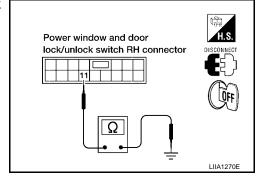
11 - Ground

: Continuity should exist.

#### OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.



F

Е

Α

В

Н

GW

K

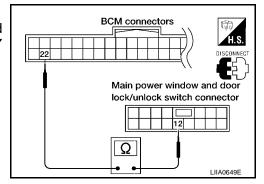
L

## 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 12.

22 - 12

: 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 - 16

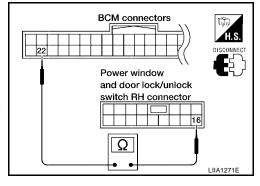
: Continuity should exist.

#### OK or NG

OK :

>> Replace main power window and door lock/unlock switch or power window and door lock/unlock switch RH. Refer to EI-29, "Removal and Installation".

NG >> Repair or replace harness.



#### Power Window Serial Link Check Front LH and RH (With Rear Power Vent Windows) EIS007IG

#### 1. CHECK BUS SIGNAL

#### (P)With CONSULT-II

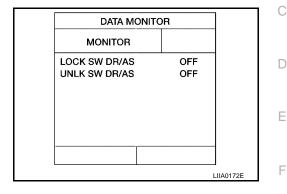
Check door lock and unlock switch ("LOCK SW DR/AS", "UNLK SW DR/AS") in DATA MONITOR mode for "MULTI REMOTE ENT" with CONSULT-II. Refer to BL-68, "Data Monitor".

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



В

Н

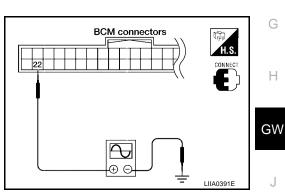
K

M

#### Without CONSULT-II

- Remove key from ignition switch, and close front door LH and RH.
- 2. Check the signal between BCM connector and ground with oscilloscope when door lock and unlock switch (front LH and front RH) is turned to "LOCK" or "UNLOCK".
- Make sure signals which are shown in the figure below can be detected during 10 seconds just after door lock and unlock switch (front LH and front RH) is turned to "LOCK" or "UNLOCK".

Connector	Term	inals	Signal	
Connector	(+)	(-)	Olgital	
M18	22	Ground	(V) 15 10 5 0 10 ms	



OK or NG

OK >> GO TO 2.

NG >> GO TO 3.

**GW-77** 2006 Quest Revision: July 2006

## 2. CHECK BCM BUS OUTPUT SIGNAL

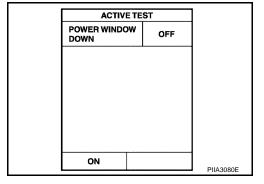
Check power window serial link ("POWER WINDOW DOWN") in "ACTIVE TEST" mode for "MULTI REMOTE ENT" with CONSULT-II. Refer to <u>BL-68</u>, "Active Test".

When "ACTIVE TEST" is executed, is the front power window LH and RH 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".

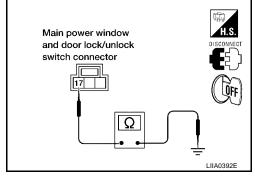


## 3. CHECK POWER WINDOW SWITCH GROUND

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

17 - Ground

: Continuity should exist.



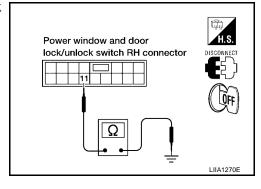
- Check continuity between power window and door lock/unlock switch RH connector D105 terminal 11 and ground.
  - 11 Ground

: Continuity should exist.

#### OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.

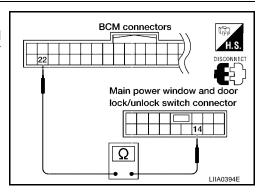


## 4. CHECK POWER WINDOW SERIAL LINK CIRCUIT

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

22 - 14

: 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 - 16

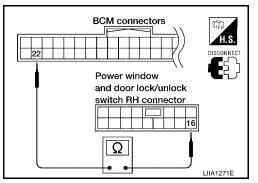
: Continuity should exist.

#### OK or NG

OK

>> Replace main power window and door lock/unlock switch or power window and door lock/unlock switch RH. Refer to EI-29, "FRONT DOOR".

NG >> Repair or replace harness.



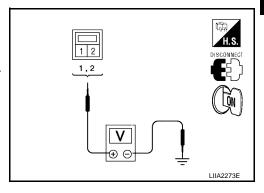
EIS007IH

#### Rear Power Vent Window Motor LH Circuit Check

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

- 1. Turn ignition switch OFF.
- 2. Disconnect rear power vent window motor LH.
- 3. Turn ignition switch ON.
- 4. Check voltage between rear power vent window motor LH connector B52 terminals 1, 2 and ground.

Connector	Terminals		Condition	Voltage (V)	
Connector	(+)	(-)	Condition	(Approx.)	
Rear power vent window motor LH: B52	1 Ground		Closing	Battery voltage	
		Ground	Opening	0	
	2	Glound	Closing	0	
			Opening	Battery voltage	



OK or NG

OK >> Replace rear power vent window motor LH. Refer to <u>GW-89</u>, "<u>Removal and Installation (with Rear Power Vent Windows)</u>".

NG >> GO TO 2.

GW

Н

Α

В

D

Е

J

K

L

## $2. \ \mathsf{CHECK} \ \mathsf{REAR} \ \mathsf{POWER} \ \mathsf{VENT} \ \mathsf{WINDOW} \ \mathsf{MOTOR} \ \mathsf{LH} \ \mathsf{CIRCUIT}$

- 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 (A) D7 terminals 1, 3 and rear power vent window motor LH (B) connector B52 terminals 1, 2.

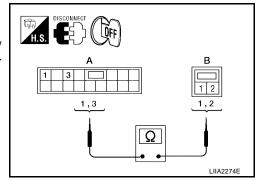
3 - 2 : Continuity should exist.

1 - 1 : 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 OUTPUT SIGNAL

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

1 - 17 : Continuity should exist.

3 - 17 : Continuity should exist.

#### OK or NG

OK >> Repair or replace harness.

NG >> Replace main power window and door lock/unlock switch. Refer to El-29. "FRONT DOOR".

# Main power window and door lock/unlock switch connectors 1,3 1,3 LIIA0623E

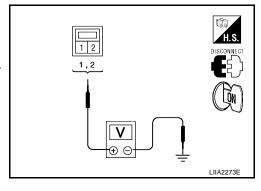
EIS007II

#### Rear Power Vent Window Motor RH Circuit Check

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

- 1. Turn ignition switch OFF.
- 2. Disconnect rear power vent window motor RH.
- 3. Turn ignition switch ON.
- 4. Check voltage between rear power vent window motor RH connector B147 terminals 1, 2 and ground.

Connector	Terminals		Condition	Voltage (V)	
Connector	(+)	(-)	Condition	(Approx.)	
Rear power vent window motor RH: B147	1		Closing	Battery voltage	
	<b>'</b>	Ground		0	
	2	Ground	Closing	0	
			Opening	Battery voltage	



#### OK or NG

OK >> Replace rear power vent window motor RH. Refer to <u>GW-89</u>, "Removal and Installation (with Rear Power Vent Windows)".

NG >> GO TO 2.

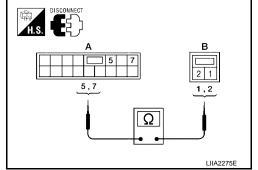
## 2. CHECK REAR POWER VENT WINDOW MOTOR RH CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect main power window and door lock/unlock switch.
- Check continuity between main power window and door lock/ unlock switch connector (A) D7 terminals 5, 7 and rear power vent window motor RH connector (B) B147 terminals 1, 2.

5 - 2 : Continuity should exist. 7 - 1 : Continuity should exist.

# **7 - 1**OK or NG

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



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

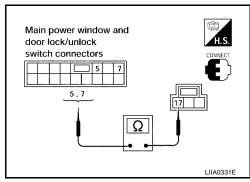
- 1. Confirm that power window lock switch is in unlocked position.
- Check continuity between main power window and door lock/ unlock switch connector D7 terminals 5, 7 and connector D8 terminal 17.

5 - 17 : Continuity should exist. 7 - 17 : Continuity should exist.

#### OK or NG

OK >> Repair or replace harness.

NG >> Replace main power window and door lock/unlock switch. Refer to EI-29, "FRONT DOOR".



GW

Н

Α

В

D

Е

K

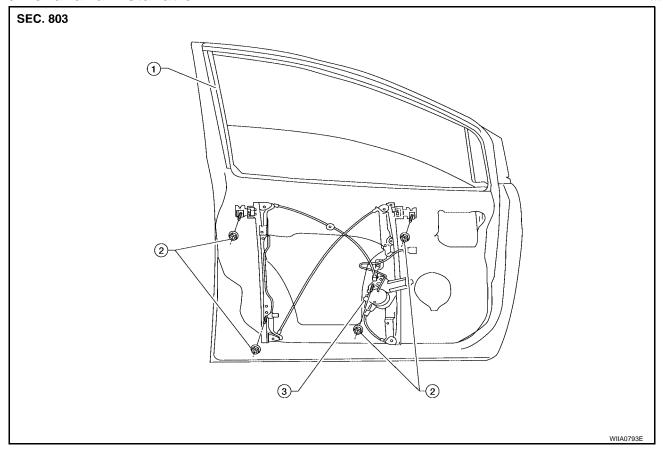
L

#### FRONT DOOR GLASS AND REGULATOR

PFP:80300

#### **Removal and Installation**

EIS007IJ



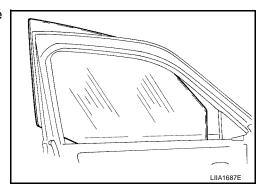
Door glass run

- 2. Door glass regulator nuts
- 3. Regulator motor

#### FRONT DOOR GLASS

#### Removal

- 1. Remove the front door speaker. Refer to AV-78, "Front Door Speaker".
- 2. Remove the hole cover over rear glass bolt.
- 3. Connect the battery negative cable.
- 4. Temporarily reconnect the power window switch to the door harness.
- 5. Operate the power window main switch to raise/lower the door glass until the door glass bolts can be seen.
- 6. Disconnect the battery negative cable.
- 7. Remove the inside seal.
- 8. Remove the door glass bolts.
- 9. 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.

Α

В

С

 $\mathsf{D}$ 

Е

F

G

Н

GW

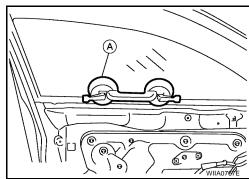
J

K

#### FRONT DOOR GLASS REGULATOR

#### Removal

- 1. Remove the front door speaker. Refer to AV-78, "Front Door Speaker".
- 2. Remove the hole cover over rear glass bolt.
- Connect the battery negative cable.
- 4. Temporarily reconnect the power window switch to the door harness.
- 5. Operate the power window main switch to raise/lower the door glass until the door glass bolts can be seen.
- 6. Disconnect the battery negative cable.
- 7. Remove the door glass bolts.
- 8. Raise the door glass up into the door frame/channel and hold in place with a suitable tool (A).



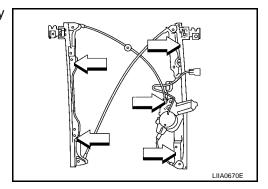
- 9. Disconnect the harness connector for the regulator assembly.
- 10. Remove the regulator nuts, and remove the regulator assembly.

#### INSPECTION AFTER REMOVAL

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

- Wire wear
- Regulator deformation

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



#### **INSTALLATION**

Installation is in the reverse order of removal. Refer to  $\underline{\mathsf{GW-84}}$ , "FITTING INSPECTION AND SETTING AFTER INSTALLATION" .

Door glass bolts : 6.1 N·m (0.62 kg-m, 54 in-lb)

#### **DISASSEMBLY**

- 1. Remove the regulator motor bolts.
- 2. Remove the regulator motor from the regulator assembly.

#### **ASSEMBLY**

Assembly is in the reverse order of disassembly.

#### FITTING INSPECTION AND SETTING AFTER INSTALLATION

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 nuts, guide rail bolts, and glass and guide rail bolts to correct the glass position.

#### SETTING OF LIMIT SWITCH

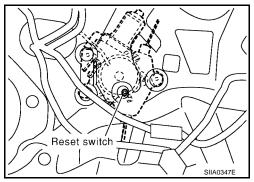
If any of the following work has been done, set the limit switch (integrated in the motor).

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

#### Resetting

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

- 1. Raise the door glass to the top position.
- 2. While pressing and holding the reset switch, lower the door glass to the bottom position.



Release the reset switch. Verify that the reset switch returns to the original position, and then raises the door glass to the top position.

#### **CAUTION:**

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

GW

Н

В

D

Е

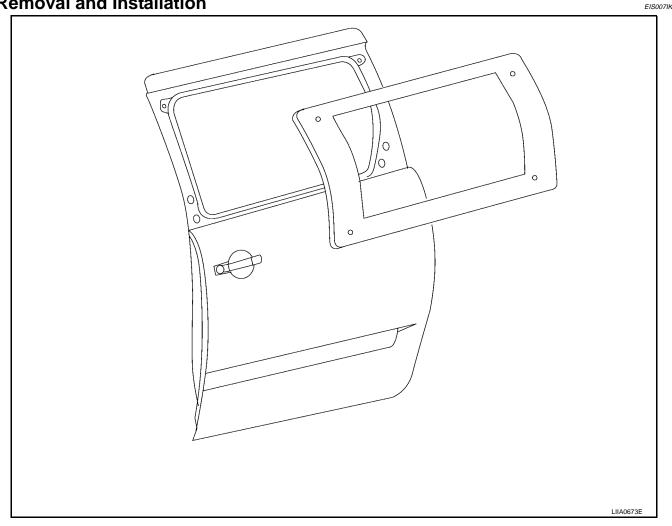
K

L

#### SLIDE DOOR GLASS

PFP:82300

#### Removal and Installation



#### **REMOVAL**

- Apply protective tape around the slide door glass to protect the painted surface from damage.
- Remove glass using piano wire or power cutting tool and an inflatable pump bag.

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.

- When a slide door 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**

Installation is in the reverse order of removal.

- 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.

#### ARNING:

Keep heat and open flames away as primers and adhesives are flammable.

#### SLIDE DOOR GLASS

- 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 slide door glass 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 Slide Door 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.

GW

Н

Α

D

Е

F

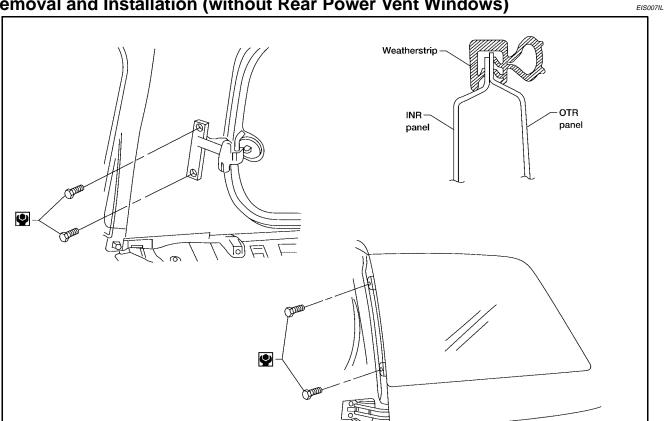
L

#### SIDE WINDOW GLASS

#### SIDE WINDOW GLASS

PFP:83300

#### Removal and Installation (without Rear Power Vent Windows)



#### **REMOVAL**

- Remove the rear pillar upper finisher. Refer to EI-32, "BODY SIDE TRIM".
- Remove the rear side window latch bolts.
- 3. Disconnect the antenna.

: N·m (kg-m, in-lb)

4. Remove the side window front bolts and glass.

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

#### **INSTALLATION**

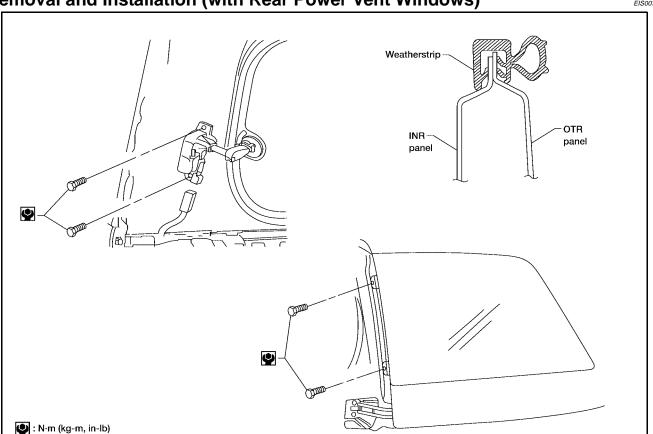
Install the glass from outside to insure that it is even with the top and bottom of the opening. Tighten side window front bolts to the specified torque.

: 3.5 N·m (0.35 kg-m, 31 in-lb) **Glass bolts** 

- 2. Install rear side window latch bolts.
- Connect the antenna.
- Install rear pillar upper finisher. Refer to EI-32, "BODY SIDE TRIM".

#### SIDE WINDOW GLASS





#### **REMOVAL**

- 1. Remove the rear pillar upper finisher. Refer to EI-32, "BODY SIDE TRIM".
- 2. Disconnect the antenna.
- Disconnect the rear side window motor harness.
- Remove the rear side window motor bolts.
- Remove the side window front bolts and glass.

#### **CAUTION:**

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

#### INSTALLATION

1. Install the glass from outside to insure that it is even with the top and bottom of the opening. Tighten side window front bolts to the specified torque.

#### : 3.5 N·m (0.35 kg-m, 31 in-lb) **Glass bolts**

- 2. Install rear side window motor bolts.
- Connect the rear side window motor harness.
- 4. Connect the antenna.
- Install rear pillar upper finisher. Refer to EI-32, "BODY SIDE TRIM".

В

D

Е

Н

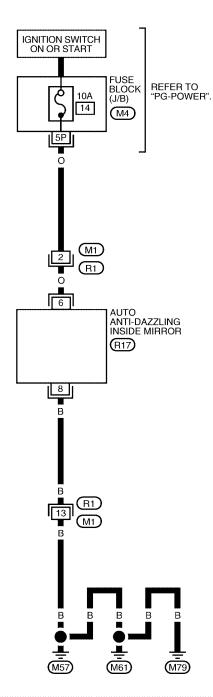
GW

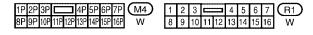
#### **INSIDE MIRROR** PFP:96321

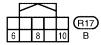
## Wiring Diagram — I/MIRR —

EIS007IN

GW-I/MIRR-01







WIWA1033E

#### **INSIDE MIRROR**



IS007IO

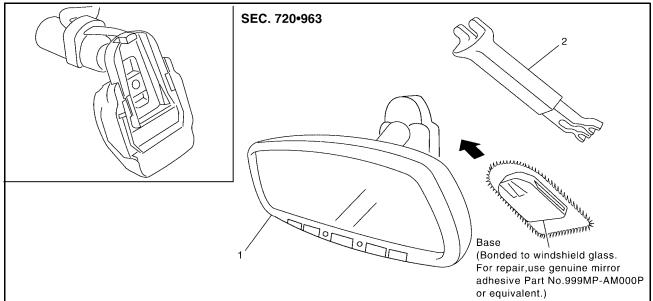
Α

В

C

D

Е



1. Inside mirror

2. Inside mirror finisher

#### **REMOVAL**

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

#### **INSTALLATION**

Installation is in the reverse order of removal.

GW

Н

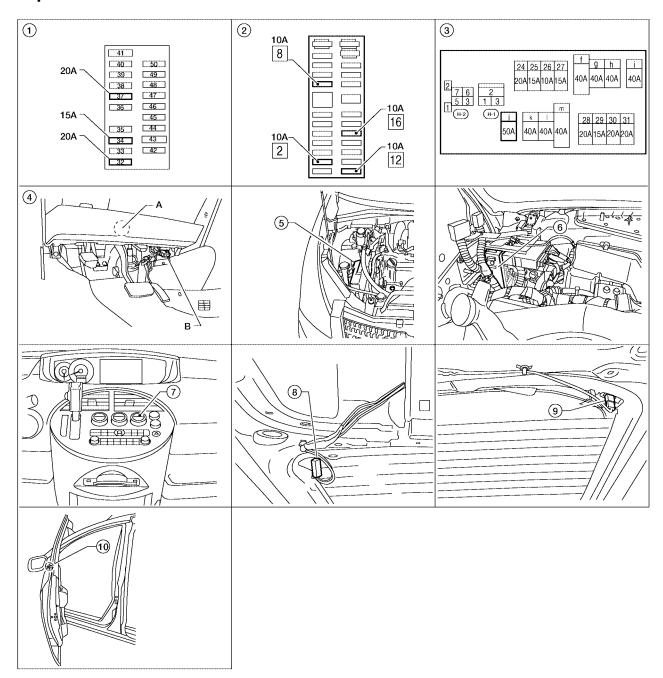
L

#### **REAR WINDOW DEFOGGER**

PFP:25350

## **Component Parts and Harness Connector Location**

EIS007IP



LIIA2250E

- 1. IPDM E/R fuse layout
- A. Rear window defogger relay B4
   B. Data link connector M22
- 7. Front air control M49
- 2. Fuse block (J/B)
- 5. IPDM E/R E119, E121, E124
- Rear window defogger D504 (View of back door LH with back door upper finisher removed)
- 3. Fuse and fusible link box
- BCM M18, M19 (View with instrument panel removed)
- Rear window defogger ground connector D515 (View of back door RH with back door upper finisher removed)

 Door mirror LH (door mirror defogger) D13
 Door mirror RH (door mirror defogger) D113

#### **System Description** 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. В 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 j, 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 D through 10A fuse [No.12, located in the fuse block (J/B)] to rear window defogger relay terminal 1 through 10A fuse [No.16, located in the fuse block (J/B)] Е to BCM terminal 38 through 10A fuse [No. 2, located in the fuse block (J/B)] to front air control terminal 14. Ground is supplied to BCM terminal 52 to front air control terminal 1 through body grounds M57, M61 and M79 to IPDM E/R terminals 38 and 60 Н through body grounds E9, E15 and E24. When front air control (rear window defogger switch) is turned to ON, ground is supplied to BCM terminal 9 GW through front air control terminal 11 through front air control terminal 1 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 CAN communication (CAN-H, CAN-L). 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 M through body grounds E9, 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 terminal 5 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 defogger (LH and RH) terminal 6.

**CAN Communication System Description** 

Refer to LAN-24, "CAN COMMUNICATION".

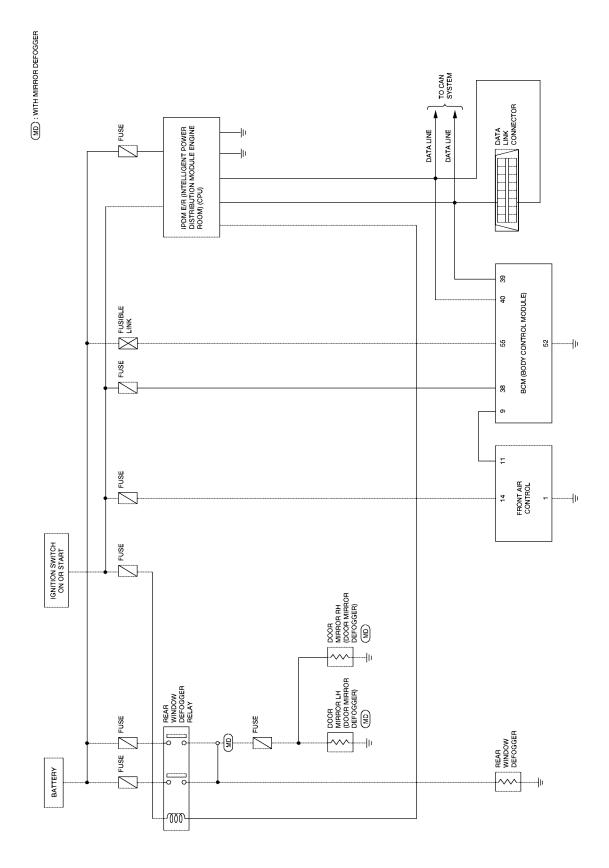
Revision: July 2006 GW-93 2006 Quest

FIS007IR

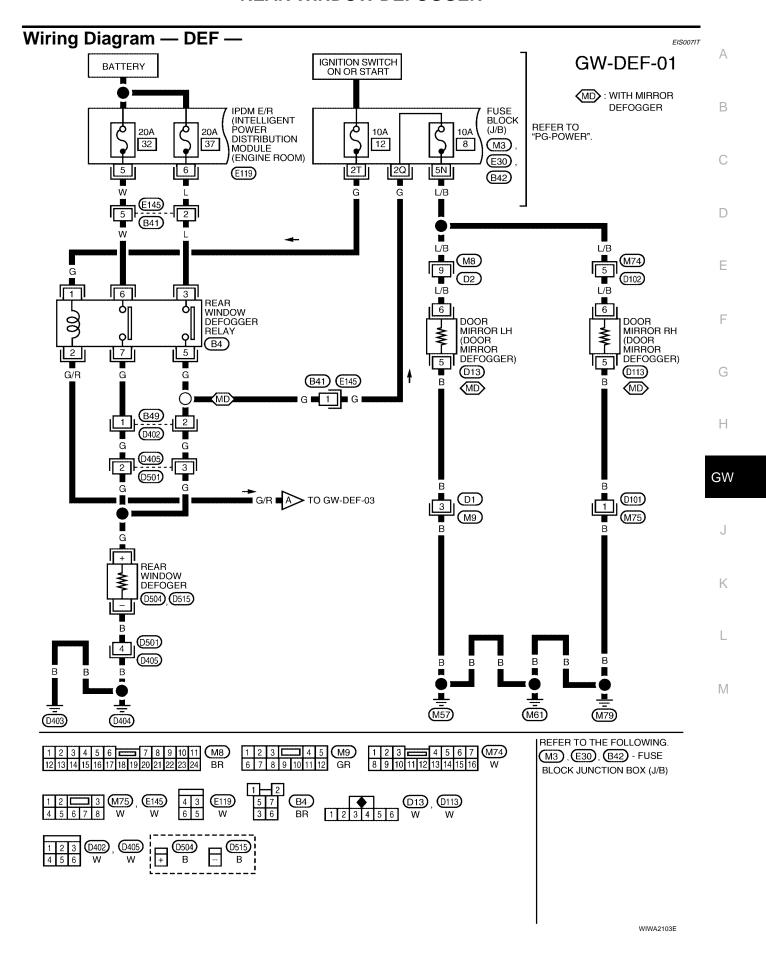
Door mirror defogger (LH and RH) terminal 5 is grounded through body grounds M57, M61 and M79.

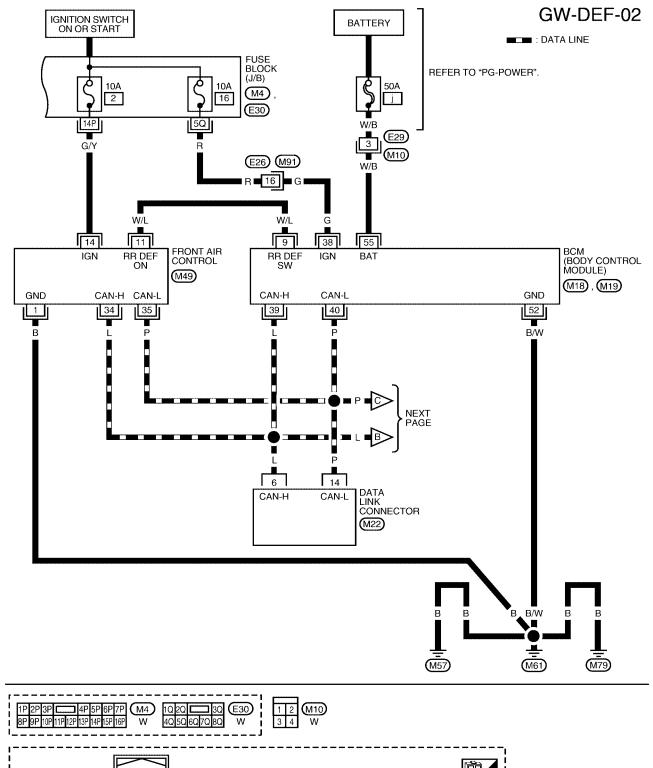
With power and ground supplied, door mirror defogger filaments heat and defog the mirror.

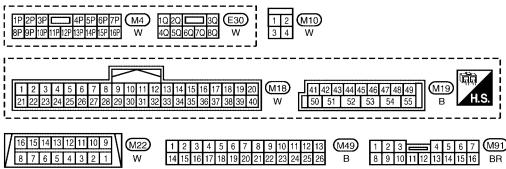
Schematic EIS007/S



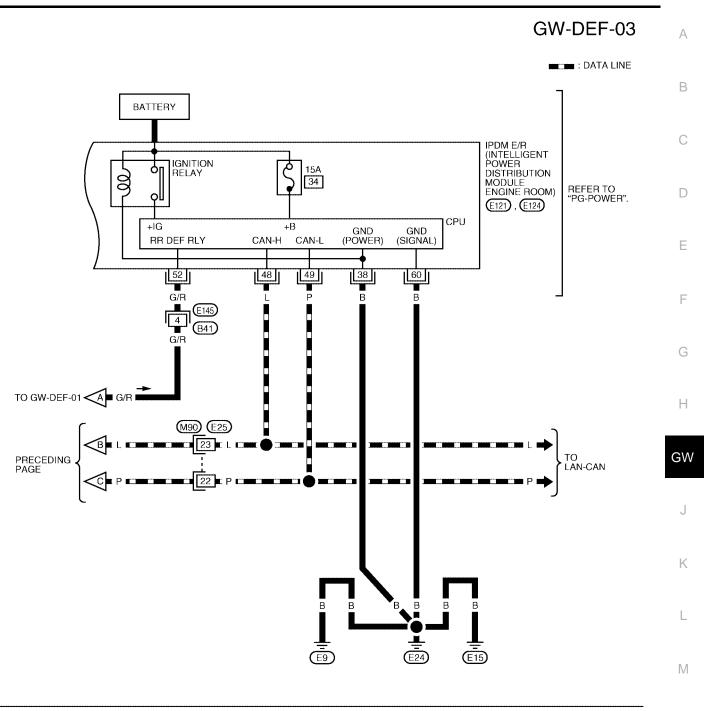
WIWA0472E

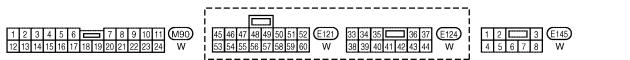






WIWA1035E





WIWA0475E

#### **Terminal and Reference Value for BCM**

EIS007IU

Terminal	Wire color	Item	Condition	Voltage (V) (Approx.)
9	\A//I	W/L Rear window defogger switch is pressed.  When rear window defogger switch is pressed.  When rear window defogger switch is OFF.	When rear window defogger switch is pressed.	0
9	VV/L		When rear window defogger switch is OFF.	5
38	G	Ignition switch (ON or START)	Ignition switch (ON or START position)	Battery voltage
39	L	CAN-H	_	_
40	Р	CAN-L	_	_
52	B/W	Ground	_	0
55	W/B	Battery power supply	_	Battery voltage

#### Terminal and Reference Value for IPDM E/R

EIS007IV

Terminal	Wire color	Item	Condition	Voltage (V) (Approx.)
38	В	Ground (Power)	_	0
48	L	CAN-H	_	_
49	Р	CAN-L	_	_
52	G/R	Rear window defogger relay	When rear window defogger switch is ON.	0
32	control signal		When rear window defogger switch is OFF.	Battery voltage
60	В	Ground (Signal)	_	0

Work Flow

- 1. Check the symptom and customer's requests.
- 2. Understand the outline of system. Refer to GW-93, "System Description".
- 3. According to the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to <u>GW-100</u>, <u>"Trouble Diagnoses Symptom Chart"</u>.
- 4. Does rear window defogger operate normally? YES: GO TO 5, NO: GO TO 3.
- 5. Inspection End.

## **CONSULT-II Function (BCM)**

EIS007IX

Α

В

D

Е

Н

GW

M

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

BCM diagnostic test item	Diagnostic mode	Content
	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.
Inspection by part	SELF-DIAG RESULTS	Displays BCM self-diagnosis results.
	CAN DIAG SUPPORT MNTR	The results of transmit/receive diagnosis of CAN communication can be read.
	ECU PART NUMBER	BCM part number can be read.
	CONFIGURATION	Performs BCM configuration read/write functions.

#### **CONSULT-II BASIC OPERATION PROCEDURE**

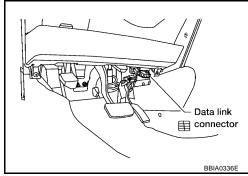
#### **CAUTION:**

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

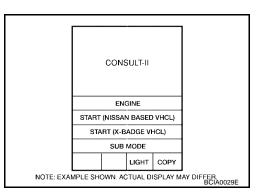
Turn ignition switch OFF.

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

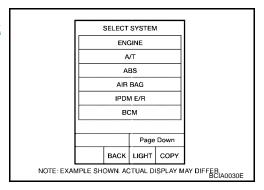
3. Turn ignition switch ON.



Touch "START (NISSAN BASED VHCL)".

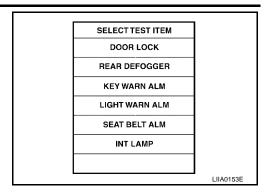


 Touch "BCM".
 If "BCM" is not indicated, go to GI-38, "CONSULT-II Data Link Connector (DLC) Circuit".

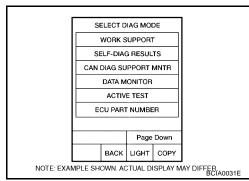


Revision: July 2006 GW-99 2006 Quest

6. Touch "REAR DEFOGGER".



7. Select diagnosis mode, "DATA MONITOR" and "ACTIVE TEST".



# 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 WINDOW DEFOGGER	Gives a drive signal to the rear window defogger to activate it.

## **Trouble Diagnoses Symptom Chart**

EIS007IY

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

Symptom	Diagnoses / Service procedure	Refer to page
	1. BCM power supply and ground circuit check	<u>GW-102</u>
	2. IPDM E/R auto active test check	PG-22
Rear window defogger and door mirror defoggers do not operate. (With door mirror defogger)	3. Rear window defogger switch circuit check	<u>GW-103</u>
operator (This does him of delegger)	4. Rear window defogger power supply circuit check	<u>GW-104</u>
	5. Replace IPDM E/R	PG-29
	1. BCM power supply and ground circuit check	<u>GW-102</u>
	2. IPDM E/R auto active test check	PG-22
Rear window defogger does not operate.	3. Rear window defogger switch circuit check	<u>GW-103</u>
(Without door mirror defogger)	4. Rear window defogger power supply circuit check	<u>GW-104</u>
	5. Rear window defogger circuit check	<u>GW-106</u>
	6. Filament check	<u>GW-111</u>
	7. Replace IPDM E/R	PG-29
Rear window defogger does not operate but both door mir-	Rear window defogger circuit check	<u>GW-106</u>
ror defoggers operate. (With door mirror defogger)	2. Filament check	<u>GW-111</u>

Symptom	Diagnoses / Service procedure	Refer to page
Both door mirror defoggers do not operate but rear window defogger operates. (With door mirror defogger)	Door mirror defogger power supply circuit check	<u>GW-107</u>
Door mirror LH defogger does not operate.	Door mirror LH defogger circuit check	<u>GW-108</u>
Door mirror RH defogger does not operate.	Door mirror RH defogger circuit check	<u>GW-109</u>
Rear window defogger switch does not light, and rear window defogger is not displayed on the display, but rear window defogger operates.		<u>GW-110</u>

Α

В

С

D

Е

F

G

Н

GW

K

#### **BCM Power Supply and Ground Circuit Check**

#### 1. CHECK FUSE AND FUSIBLE LINK

- Check 10A fuse [No.16, located in fuse block (J/B)]
- Check 50A fusible link (letter **j** , located in the fuse and fusible link box)

#### NOTE:

Refer to GW-92, "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

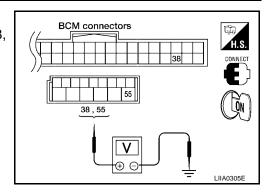
- 1. Turn ignition switch ON.
- 2. Check voltage between BCM connector M18, M19 terminals 38, 55 and ground.

55 - Ground : Battery voltage 38 - Ground : Battery voltage

#### OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



EIS007IZ

## 3. CHECK GROUND CIRCUIT

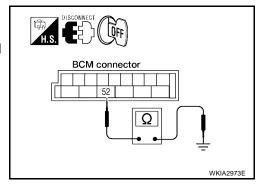
- 1. Turn ignition switch OFF.
- 2. Disconnect BCM.
- 3. Check continuity between BCM connector M19 terminal 52 and ground.

52 - 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**

#### 1. CHECK REAR WINDOW DEFOGGER SWITCH OPERATION

(II) With CONSULT-II

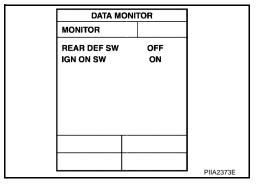
Check ("REAR DEF SW", "IGN ON SW") in DATA MONITOR mode with CONSULT-II.

When rear window defogger switch is turned to ON

**REAR DEF SW: ON** 

When ignition switch is turned to ON

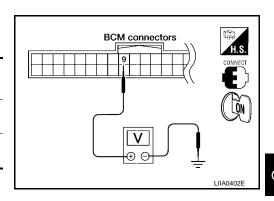
**IGN ON SW: ON** 



#### **⋈** Without CONSULT-II

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

Connector	Terminals		Condition	Voltage (V)
Connector	(+)	(-)	Containon	(Approx.)
M18	9 Ground	Rear window defogger switch is pressed.	0	
WITO	9	Ground	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 front air control.
- 3. Check continuity between BCM connector M18 terminal 9 and front air control connector M49 terminal 11.
  - 9 11 : Continuity should exist.
- 4. Check continuity between BCM connector M18 terminal 9 and ground
  - 9 Ground : Continuity should not exist.

# BCM connector H.S. DISCONNECT Front air control Ω IIIA2047E

#### OK or NG

OK >> GO TO 3.

Revision: July 2006

NG >> Repair or replace harness.

**GW-103** 2006 Quest

Α

EIS007J0

В

D

Е

F

G

Н

GW

. .

M

1 7 1

## 3. CHECK BCM OUTPUT SIGNAL

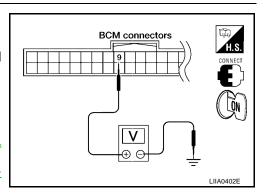
- 1. Connect BCM.
- 2. Turn ignition switch ON.
- Check voltage between BCM connector M18 terminal 9 and ground.

9 - Ground : Approx. 5V

#### OK or NG

OK >> Replace front air control. Refer to <u>ATC-143, "CONTROL UNIT"</u>.

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



EIS007J1

## Rear Window Defogger Power Supply Circuit Check

#### 1. CHECK FUSES

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

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

#### NOTE:

Refer to GW-92, "Component Parts and Harness Connector Location" .

#### OK or NG

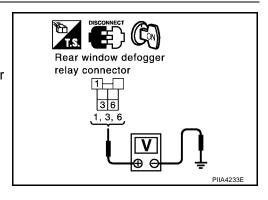
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse, refer to <u>GW-92</u>, "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	Term	ninals	Voltage (V)
Connector	(+)	(-)	(Approx.)
	1		
B4	3	Ground	Battery voltage
	6		



#### OK or NG

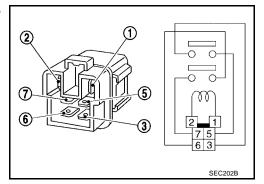
OK >> GO TO 3.

NG >> Repair or replace harness.

## 3. CHECK REAR WINDOW DEFOGGER RELAY

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

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



#### OK or NG

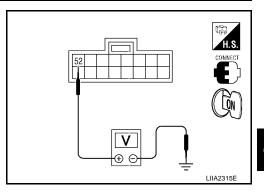
OK >> GO TO 4.

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 E121 terminal 52 and ground.

Connector	Terminals		Condition	Voltage (V)
Comicolor	(+)	(-)	Condition	(Approx.)
E121	E121 52 Ground	When rear window defog- ger switch ON	0	
LIZI		Ground	When rear window defog- ger 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.
- Check continuity between IPDM E/R connector E121 (A) terminal 52 and rear window defogger relay connector B4 (B) terminal 2.

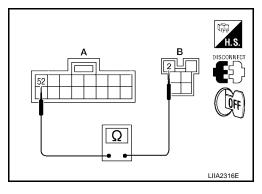
52 - 2

: Continuity should exist.

#### OK or NG

OK >> Replace IPDM E/R. Refer to <u>PG-29, "Removal and Installation of IPDM E/R"</u>.

NG >> Repair or replace harness.



Α

В

 $\mathbb{C}$ 

D

Е

F

G

Н

GW

J

K

L

M

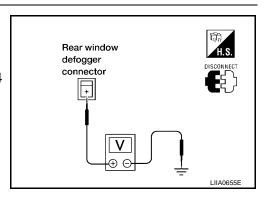
IVI

#### **Rear Window Defogger Circuit Check**

#### 1. CHECK REAR WINDOW DEFOGGER POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect rear window defogger.
- 3. Turn ignition switch ON.
- 4. Check voltage between rear window defogger connector D504 terminal + and ground.

Connector (+	Terminals		Condition	Voltage (V)
	(+)	(-)	Condition	(Approx.)
DE04	_	Ground	Rear window defogger switch ON.	Battery voltage
D304	D504 + Ground	Rear window defogger switch OFF.	0	



EIS007J2

#### OK or NG

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

## 2. CHECK REAR WINDOW DEFOGGER GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- Check continuity between rear window defogger connector D515 terminal - and ground.

#### -- Ground

#### : Continuity should exist.

#### OK or NG

OK >> Check filament. Refer to <u>GW-111</u>, "<u>Filament Check</u>".

- 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 REAR WINDOW DEFOGGER 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 rear window defogger connector D504 terminal +.

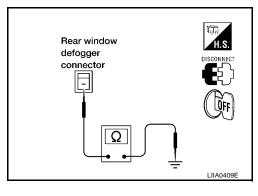


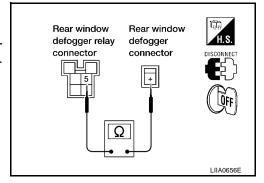
#### : Continuity should exist.

#### 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**

#### 1. CHECK FUSE

Check if the following fuse in fuse block (J/B) is blown.

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

#### NOTE:

Refer to GW-92, "Component Parts and Harness Connector Location".

#### OK or NG

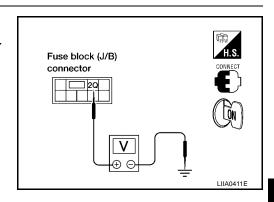
OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to GW-92, "Component Parts and Harness Connector Location".

## 2. CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT 1

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

Connector	Terminals		Condition	Voltage (V)
Connector	(+)	(-)	Condition	(Approx.)
E30 2Q	20 Ground	Rear window defogger switch ON	Battery voltage	
	Ground	Rear window defogger switch OFF	0	



#### OK or NG

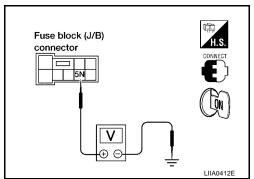
OK >> GO TO 3.

NG >> Repair or replace harness.

## $oldsymbol{3}$ . CHECK DOOR MIRROR DEFOGGER POWER SUPPLY CIRCUIT 2

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

Connector	Terminals		Condition	Voltage (V)
	(+)	(-)	Condition	(Approx.)
M3 5N	5N Ground –	Rear window defogger switch ON	Battery voltage	
	JIV	Glound	Rear window defogger switch OFF	0



#### OK or NG

OK >> GO TO 4.

NG >> Replace fuse block (J/B).

## 4. CHECK DOOR MIRROR DEFOGGER CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect fuse block (J/B) and door mirror LH or RH.
- Check continuity between fuse block (J/B) connector M3 terminal 5N and door mirror connector D13 (LH) or D113 (RH) terminal 6.

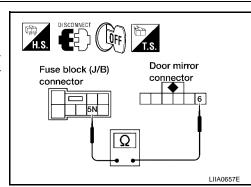


: Continuity should exist.

#### OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness.



GW

M

Н

EIS007J3

Α

В

Е

**GW-107** 2006 Quest Revision: July 2006

## 5. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

Check continuity between each door mirror connector D13 (LH) or D113 (RH) terminal 5 and ground.

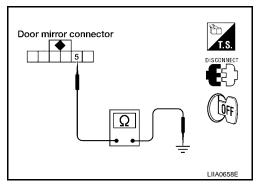
5 - Ground

: Continuity should exist.

#### OK or NG

OK >> GO TO 6.

NG >> Repair or replace harness.



## 6. CHECK DOOR MIRROR DEFOGGER

- Connect door mirror LH or RH.
- 2. Check continuity between each door mirror connector D13 (LH), D113 (RH) terminals 5 and 6.

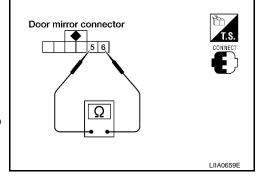
6 - 5

: Continuity should exist.

#### OK or NG

OK NG >> Check the condition of the harness and the connector.

>> Replace malfunctioning door mirror LH or RH. Refer to <u>GW-115, "Door Mirror Assembly"</u>.



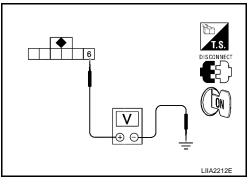
EIS007J4

### **Door Mirror LH Defogger Circuit Check**

## 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 (+)	Terminals		Condition	Voltage (V)
	(+)	(-)	Condition	(Approx.)
D13 6	Ground	Rear window defogger switch ON	Battery voltage	
	0	Ground	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

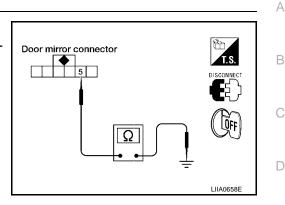
- 1. Turn ignition switch OFF.
- 2. Check continuity between door mirror LH connector D13 terminal 5 and ground.
  - 5 Ground

: 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 D13 terminals 5 and 6.

6 - 5

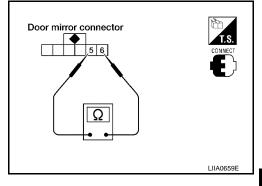
: Continuity should exist.

#### OK or NG

OK >> Repair or replace harness.

NG

>> Replace door mirror LH. Refer to <u>GW-115, "Door Mirror Assembly"</u>.



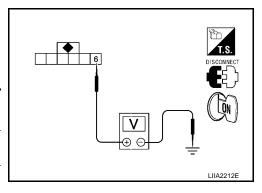
EIS007J5

## **Door Mirror RH Defogger Circuit Check**

## 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	Terminals		Condition	Voltage (V)
	(+)	(–)	Condition	(Approx.)
D113	D113 6 Ground	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.

GW

M

Н

Е

Revision: July 2006 GW-109 2006 Quest

## 2. CHECK DOOR MIRROR DEFOGGER GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Check continuity between door mirror RH connector D113 terminal 5 and ground.

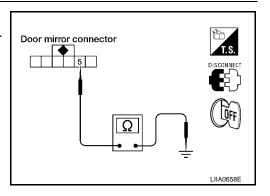
5 - Ground

: Continuity should exist.

#### OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



## 3. CHECK DOOR MIRROR DEFOGGER

- Connect door mirror RH.
- 2. Check continuity between each door mirror RH connector D113 terminals 5 and 6.

6 - 5

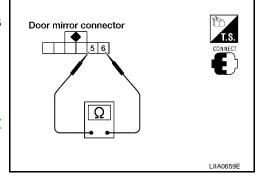
: Continuity should exist.

#### OK or NG

OK >> Repair or replace harness.

NG

>> Replace door mirror RH. Refer to <u>GW-115, "Door Mirror Assembly"</u>.



FIS007.16

### **Rear Window Defogger Signal Check**

#### 1. CHECK AV COMMUNICATION LINE

AV communication line check is executed. Refer to <u>AV-150, "AV Communication Line Check (With Monochrome Display Unit)"</u>

Is rear window defogger displayed on the display?

#### OK or NG

OK >> GO TO 2.

NG >> Replace display control unit. Refer to AV-162, "Display Unit".

## 2. CHECK CAN COMMUNICATION LINE

CAN communication line check is executed. Refer to AV-159, "CAN Communication Line Check (With Monochrome Display Unit)" .

#### OK or NG

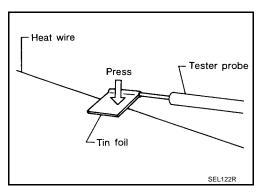
NG

OK >> Check the condition of the harness and the connector.

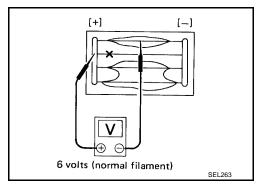
>> In addition, it is necessary to check CAN communication line. Refer to <u>AV-159</u>, "CAN Communication Line Check (With Monochrome Display Unit)".

Filament Check

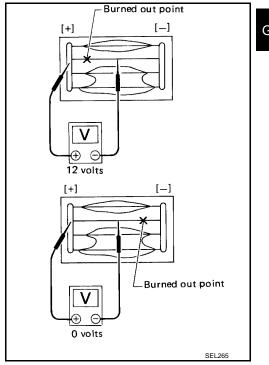
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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 REPAIR EQUIPMENT

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

GW

Н

Α

В

D

Е

17

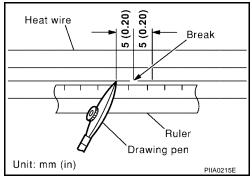
L

M

EIS007J8

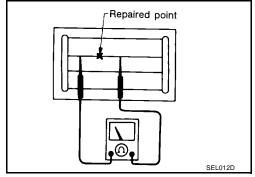
#### REPAIRING PROCEDURE

- 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.
- 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.



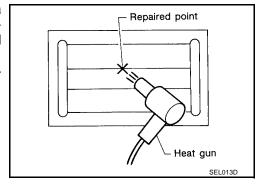
After repair has been completed, check repaired wire for continuity. This check should be conducted 10 minutes after silver composition is deposited.

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**

# DOOR MIRROR Automatic Drive Positioner Reverse Tilt Mirror

Automatic drive positioner reverse tilt mirror. Refer to <u>SE-11, "AUTOMATIC DRIVE POSITIONER"</u> .

Α

В

С

D

Е

F

G

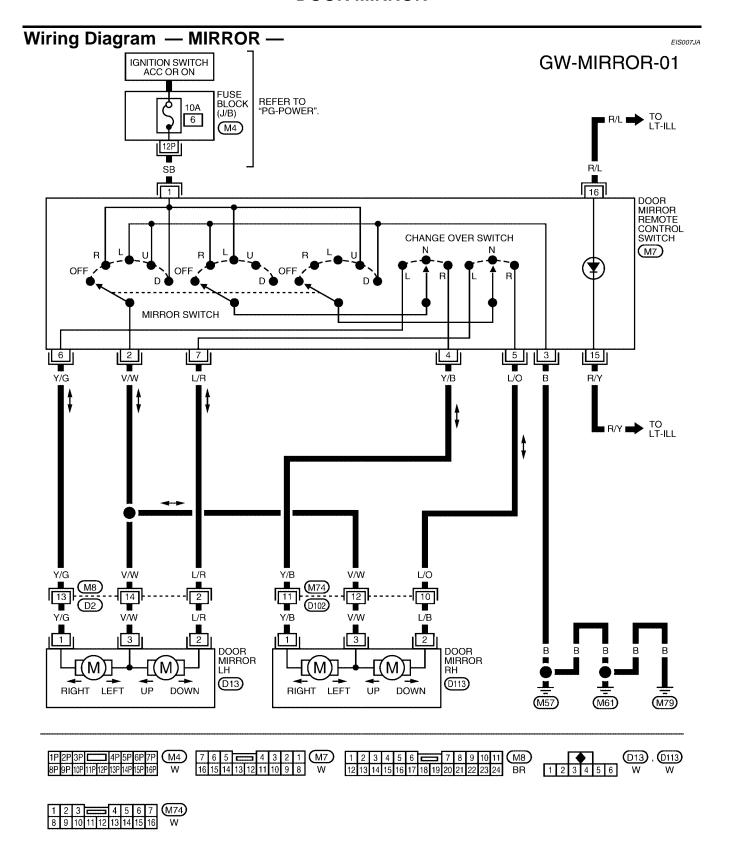
Н

GW

K

L

#### **DOOR MIRROR**



WIWA0476E

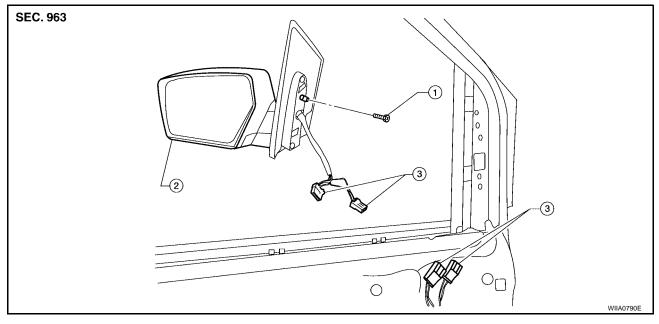
## Door Mirror Assembly REMOVAL AND INSTALLATION



Α

В

D



- 1. Door mirror bolts
- 2. Door mirror assembly
- Door mirror connectors

#### **REMOVAL**

#### NOTE:

Be careful not to damage the door mirror assembly.

- Remove the front door finisher. Refer to <u>EI-29, "DOOR FINISHER"</u>.
- 2. Disconnect the door mirror connectors.
- 3. Remove the door mirror bolts and the door mirror assembly.

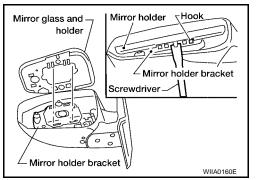
#### Installation

Installation is in the reverse order of removal.

#### Door Mirror Glass REMOVAL AND INSTALLATION

#### Removal

- 1. Set mirror assembly mirror glass upward.
- Apply tape to protect mirror housing.
- Insert a screwdriver as shown and remove mirror glass by pushing up two hooks.



Disconnect electrical connectors from mirror holder.

GW

Н

EIS007JC

#### **DOOR MIRROR**

#### **INSTALLATION**

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

