SECTION GLASS & WINDOW SYSTEM

CONTENTS

PRECAUTION2	
PRECAUTIONS 2 Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN-SIONER" SIONER" 2 Precaution for Procedure without Cowl Top Cover2 Handling for Adhesive and Primer 2	
PREPARATION3	
PREPARATION 3 Special Service Tools 3 Commercial Service Tools 3	
SYMPTOM DIAGNOSIS4	
SQUEAK AND RATTLE TROUBLE DIAG- NOSES 4 Work Flow 4 Inspection Procedure 6 Diagnostic Worksheet 8	
REMOVAL AND INSTALLATION10	
WINDSHIELD GLASS10Exploded View10Removal and Installation11Inspection14	
OPERA WINDOW15 Exploded View	

Removal and Installation16

Inspection1	7 F
SIDE WINDOW GLASS18 Exploded View	8 9 G
BACK DOOR WINDOW GLASS	1 2
FRONT DOOR GLASS 20 Exploded View 20 Removal and Installation 20 Inspection and Adjustment 21	6 6 J
FRONT REGULATOR2	_
Exploded View	8 8 9
Removal and Installation20 Disassembly and Assembly	B B B D D D D D D D D D D D D D D D D D
Removal and Installation 22 Disassembly and Assembly 22 Inspection and Adjustment 22 SLIDE DOOR GLASS 3 Exploded View 3 Removal and Installation 3	B C C C C C C C C C C C C C C C C C C C

Ρ

А

D

Е

< PRECAUTION >

PRECAUTION PRECAUTIONS

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

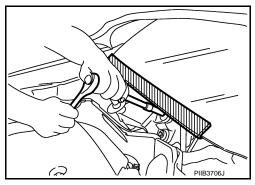
Always observe the following items for preventing accidental activation.

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

Precaution for Procedure without Cowl Top Cover

INFOID:000000008380775

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



Handling for Adhesive and Primer

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

PREPARATION

< PREPARATION >

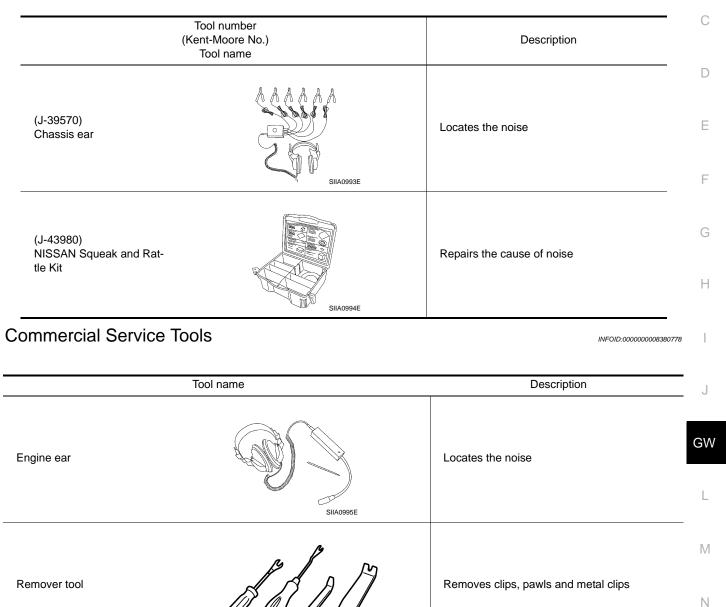
PREPARATION PREPARATION

Special Service Tools

INFOID:00000008380777 B

А

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



Р

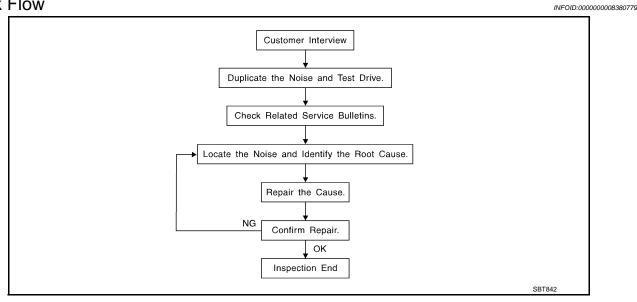
0

JMKIA3050ZZ

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow



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 comments. Refer to <u>GW-8</u>, "<u>Diagnostic Worksheet</u>". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a test drive with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so that the customer, service adviser, and technician use the same language when describing 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 = high-pitched noise / softer surfaces = low-pitched 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 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 sounds / 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 / dull sounds often brought on by activity.
- Buzz (Like a bumblebee) Buzz characteristics include high frequency rattle / firm contact.
- Often the degree of acceptable noise level varies depending upon the person. A noise that a technician may judge as acceptable may be very irritating to a customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

< SYMPTOM DIAGNOSIS >

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when the repair is reconfirmed.	А
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 items: 1) Close a door.	В
2) Tap or push/pull around the area where the noise appears to be coming from.3) Rev the engine.	
 4) Use a floor jack to recreate vehicle "twist". 5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models). 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer. 	С
 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. 	D
CHECK RELATED SERVICE BULLETINS After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to the concern or symptom.	Е
If a TSB relates to the symptom, follow the procedure to repair the noise.	F
LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE	
 Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, engine ear, and mechanics stethoscope). 	G
2. Narrow down the noise to a more specific area and identify the cause of the noise by:Removing the component(s) in the area that is / are suspected to be the cause of the noise.	
Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.	Η
 Tapping or pushing/pulling the component(s) that is / are suspected to be the cause of the noise. Do not tap or push/pull the component(s) with excessive force, otherwise the noise is eliminated only temporarily. 	I
• Feeling for a vibration by hand by touching the component(s) that is / are suspected to be the cause of the	
 Placing a piece of paper between components that are suspected to be the cause of the noise. Looking for loose components and contact marks. Refer to <u>GW-6</u>, "Inspection Procedure". 	J
REPAIR THE CAUSE	GW
 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 components, if possible. Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape, or ure-thane tape. A NISSAN Squeak and Rattle Kit (J-43980) is available through the authorized NISSAN Parts 	L
Department. CAUTION:	M
Never use excessive force as many components are constructed of plastic and may be damaged.	
NOTE: Always check with the Parts Department for the latest parts information. The following materials are contained in the NISSAN Squeak and Rattle Kit (J-43980). Each item can be	Ν
ordered separately as needed. URETHANE PADS [1.5 mm (0.059 in) thick]	-
Insulates connectors, harness, etc.	0
 76268-9E005: 100 × 135 mm (3.937 × 5.315 in) 76884-71L01: 60 × 85 mm (2.362 × 3.346 in) 	
• 76884-71L02: 15 × 25 mm (0.591 × 0.984 in)	Ρ
INSULATOR (Foam blocks) Insulates components from contact. Can be used to fill space behind a panel.	
• 73982-9E000: 45 mm (1.772 in) thick, 50 $ imes$ 50 mm (1.969 $ imes$ 1.969 in)	
• 73982-50Y00: 10 mm (0.394 in) thick, 50 \times 50 mm (1.969 \times 1.969 in) INSULATOR (Light foam block)	
80845-71L00: 30 mm (1.181 in) thick, 30 \times 50 mm (1.181 \times 1.969in) FELT CLOTHTAPE	

GW-5

< SYMPTOM DIAGNOSIS >

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

• 68370-4B000: 15 imes 25 mm (0.591 imes 0.984 in) pad

• 68239-13E00: 5 mm (0.197 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 in place of UHMW tape that is visible or does not fit. Only lasts a few months. SILICONE SPRAY Used when grease cannot be applied. DUCT TAPE Used to eliminate movement.

CONFIRM THE REPAIR

After repair is complete, test drive the vehicle to confirm that the cause of noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:000000008380780

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

- 1. The cluster lid A and instrument panel
- 2. Acrylic lens and combination meter housing
- 3. Instrument panel to front pillar garnish
- 4. Instrument panel to windshield
- 5. Instrument panel mounting pins
- 6. Wiring harnesses behind the combination meter
- 7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.

CENTER CONSOLE

Components to check 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

Check the following items:

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

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

TRUNK

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

GW-6

< SYMPTOM DIAGNOSIS >

1. Trunk lid dumpers out of adjustment	-
2. Trunk lid striker out of adjustment	А
3. Trunk lid torsion bars knocking together	
4. A loose license plate or bracket	_
Most of these incidents can be repaired by adjusting, securing, or insulating the item(s) or component(s) caus	- B
ing the noise.	
SUNROOF/HEADLINING	С
Noises in the sunroof / headlining area can often be traced to one of the following items:	0
1. Sunroof lid, rail, linkage, or seals making a rattle or light knocking noise	
2. Sunvisor shaft shaking in the holder	D
3. Front or rear windshield touching headlining and squeaking	
Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.	e E
SEATS	
When isolating seat noise it is important to note the position the seat is in and the load placed on the sea when the noise occurs. These conditions should be duplicated when verifying and isolating the cause of the noise.	
Causes of seat noise include:	
1. Headrest rods and holder	G
2. A squeak between the seat pad cushion and frame	
3. The rear seatback lock and bracket	
These noises can be isolated by moving or pressing on the suspected components while duplicating the con ditions under which the noise occurs. Most of these incidents can be repaired by repositioning the componen 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 the	r
transmitted into the passenger compartment.	
Causes of transmitted underhood noise include:	J
1. Any component mounted to the engine wall	
 Components that pass through the engine wall Engine wall mounts and connectors 	GW
 Engine wall mounts and connectors Loose radiator mounting pins 	
5. Hood bumpers out of adjustment	
6. Hood striker out of adjustment	L
These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The bes	t
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, o	r
insulating the component causing the noise.	
	Ν
	0

Ρ

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet



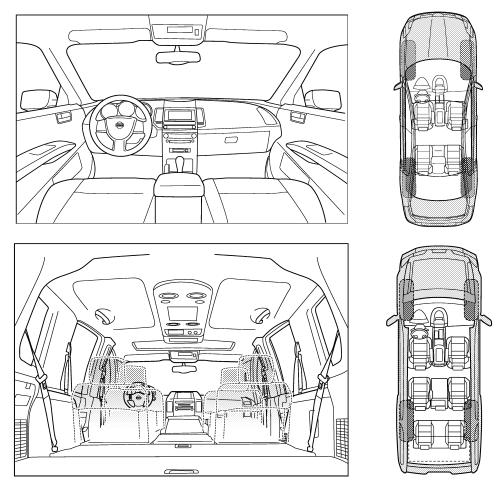
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Nissan Customer:

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

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

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



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

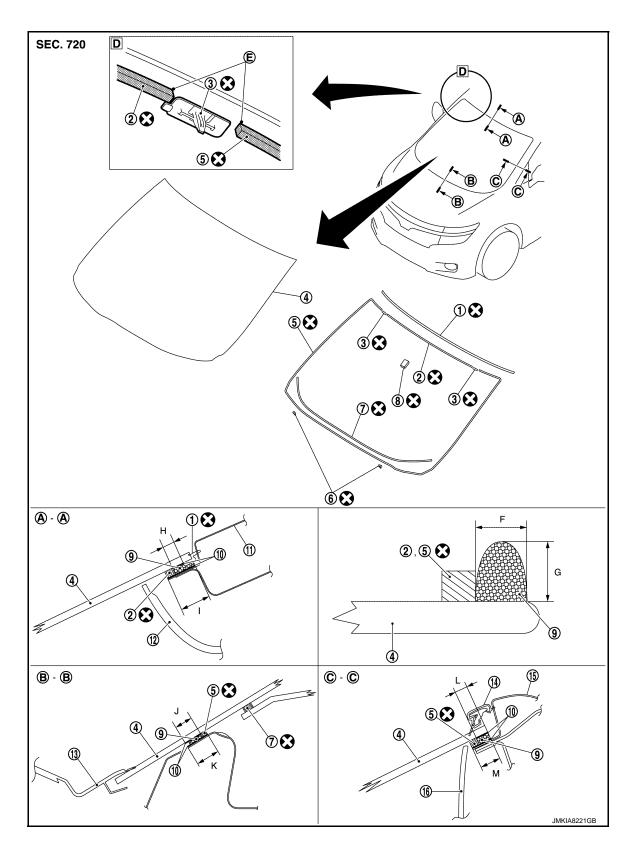
PIIB8740E

< SYMPTOM DIAGNOSIS >

	e noise occurs:	
II. WHEN DOES IT OCCUR? (please	check the boxes that apply)	
 anytime 1st time in the morning only when it is cold outside 	 after sitting out in the rain when it is raining or wet dry or dusty conditions 	
\Box only when it is hot outside	☐ other:	
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE	
 through driveways over rough roads over speed bumps 	 squeak (like tennis shoes on a clean floor) creak (like walking on an old wooden floor) rattle (like shaking a baby rattle) 	
 only about mph on acceleration coming to a stop 	 knock (like a knock at the door) tick (like a clock second hand) thump (heavy, muffled knock noise) 	
on turns: left, right or either (circle)	buzz (like a bumble bee)	
<pre>d other: miles or</pre>	 minutes	
other:		
other: miles or TO BE COMPLETED BY DEALERS	HIP PERSONNEL YES NO Initials of person performing	
Other: miles or TO BE COMPLETED BY DEALERS Test Drive Notes: Vehicle test driven with customer Noise verified on test drive Noise source located and repaired	HIP PERSONNEL YES NO Initials of person performing Initials of person performing In	

< REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION WINDSHIELD GLASS

Exploded View



WINDSHIELD GLASS

< REMOVAL AND INSTALLATION >

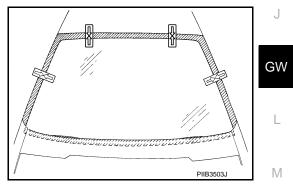
1.	Windshield glass molding	2.	Dam sealant rubber (upper)	3.	Upper clip	А
4.	Windshield glass	5.	Dam sealant rubber (lower)	6.	Lower clip	
7.	Insulator	8.	Mirror base	9.	Adhesive	
10.	Primer	11.	Roof	12.	Headlining assembly	В
13.	Cowl top cover	14.	Roof side molding	15.	Body side outer panel	
16.	Front pillar garnish					
Е	: Black print mark					С
F	: 7 (0.276)	G	: 12 (0.472)	Н	: 8 (0.315)	
Т	: 20 (0.787)	J	: 15 (0.591)	к	: 20 (0.787)	
L	: 8 (0.315)	М	: 17 (0.669)			D
Unit	: mm (in)					

Always replace after every disassembly.

Removal and Installation

REMOVAL

- 1. Remove front pillar garnish (LH and RH). Refer to <u>INT-20, "FRONT PILLAR GARNISH : Removal and</u> <u>Installation"</u>.
- 2. Remove partially headlining (front edge). Refer to INT-34, "Removal and Installation".
- 3. Remove front wiper arm (LH and RH). Refer to WW-44, "WIPER ARM : Removal and Installation".
- 4. Remove front fender cover. Refer to EXT-21, "Removal and Installation".
- 5. Remove cowl top cover. Refer to EXT-21, "Removal and Installation".
- 6. Remove the roof side molding (LH and RH). Refer to EXT-28, "Removal and Installation".
- 7. Apply protective tape around windshield to prevent painted surface from being damaged.
- 8. Guiding a cutter knife along glass, cut the windshield molding.
- 9. Using a pair of pliers, pull molding remaining at the body flange out of bonded area of glass.
- 10. Paint matching marks on the body and glass if the windshield is reused.
 - NOTE:
 - Positioning during installation can be easily performed.
 - When installing a new windshield glass mount the glass on the body and put the matching marks after clearing the body side.



11. Cut the adhesive.

Depending on the tool in use, follow the procedures below: CAUTION:

Never use a windshield cutter if the windshield is reused. (It may scratch the glass surface)

a. With piano wire (when reusing glass).

P

Ν

Е

F

Н

WINDSHIELD GLASS

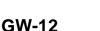
< REMOVAL AND INSTALLATION >

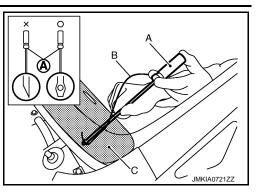
- i. Pass the piano wire (B) from the passenger room to the bonded area of glass using a wire pierce (A). CAUTION:
 - Never press the piano wire excessively against the edge of the glass.
 - Always use a Standish cover (C) to keep the piano wire clear of plastic parts such as the instrument panel.
 - For the corner area, never insert the piano wire into the mating surfaces of glass.
 - Never damage the harness around the glass.
- ii. Tie both ends of the piano wire (B) to the wire grip (A), etc.

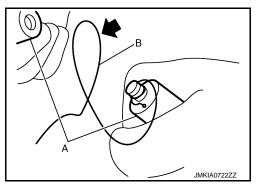
iii. With 2 persons, one holding the piano wire (B) inside the vehicle along with the glass and the other holding it outside the vehicle along with the gap between the body and glass, pull it to cut off the adhesive.

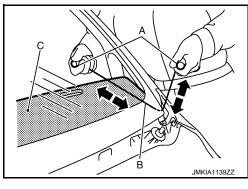
CAUTION: Always use a Standish cover (C) to keep the piano wire clear of plastic parts such as the instrument panel.

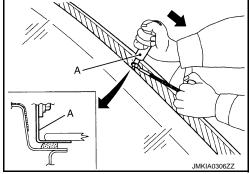
- b. With a windshield cutter (A) (when replacing glass)
- i. Apply soapy water around the bonded area on the body for smooth movement of the windshield cutter.
- ii. Insert the windshield cutter into the bonded area. Cut the adhesive by pulling the knife, keeping the tip parallel to the edge of the glass.
- 12. Use rubber suction cups or suction lifter (A), etc. to remove glass from the vehicle.

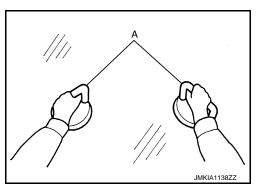












< REMOVAL AND INSTALLATION >

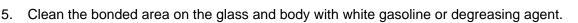
INSTALLATION

 Using a scraper, remove remaining adhesive (sealant) on the body side down to approximately a depth that is 2 mm (0.079 in) thick (a) so that entire contour becomes smooth.
 CAUTION:

If the bonded area on the body is scratched, repair it with a two-liquid type urethane paint. Never use lacquer type paint.

2. When reusing the glass (2), use the cutter (A) to remove the remaining adhesive (1) (sealant) and smooth out the surface.

- 3. Mount the glass onto the vehicle and paint matching marks on the body and glass when installing new glass. Then remove the glass again.
- Use the rubber suction cups or suction lifter (A) to set the glass (1) on the glass stand (B).



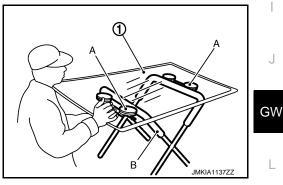
- 6. Install new glass insulator.
- 7. Install new clips (lower and upper).
- Apply primer for the glass along the entire circumference of the glass.
 Use the sealing kit for glass application and the special holder for cartridge or similar tools.
 CAUTION:
 - There are 2 types of primer. Never confuse the application methods.
 - Primer for painted surfaces
 - Primer for glass

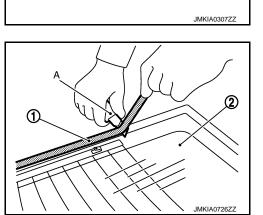
NOTE:

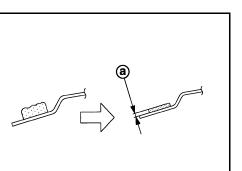
The essential function of primers is to strengthen adhesion between the glass and the painted surface.

- Apply primer for the painted surface to the body side bonding surface.
 CAUTION:
 - If the body side bonding surface is repaired with a two-liquid type urethane paint, always apply the primer after drying the paint.
 - If primer for painted surfaces adheres to a painted surface other than the bonding area, or if it overflows, quickly remove it with white gasoline or degreasing agent.
 - Always use a Standish cover (stainless plate) to prevent primer for painted surfaces from adhering to the instrument panel.

GW-13







.

D

F

Н

M

Ν

Ρ

А

В

WINDSHIELD GLASS

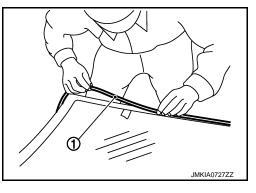
< REMOVAL AND INSTALLATION >

- 10. Affix the dam sealant rubber and apply adhesive along the edge of the glass within the time period indicated in the service manual after applying primer.
 - When reusing the glass, affix new dam sealant rubber at the same place where old dam rubber is affixed.
 - When installing new glass, apply the dam sealant rubber from the edge of the glass so as to hide the black print.

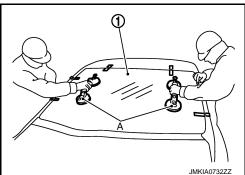
CAUTION:

- Apply the dam sealant rubber (1) from the outline mark of black print as shown in Exploded View.
- Start to apply the dam sealant rubber at the outline mark of black print. Apply it so as to only place it without pulling. Stop applying at another outline mark of black print.
 NOTE:

Open adhesive by cutting off the nozzle tip and set it in a sealant gun.



11. Use rubber suction cups or suction lifter (A) that are installed in advance, align the matching marks between the spacer and roof panel hole and between the body and glass (1) to install them on the vehicle.
CAUTION:
2 or more workers are required when installing the glass.



- 12. Press the entire surface of the glass lightly to fit it completely.
- 13. Correct any adhesive overflow or shortage using a spatula to make the surface smooth.
- 14. Remove the protective tape.
- 15. Install new windshield glass molding. NOTE:

Lightly affix the center of molding. Affix the whole length while checking the length on the left and right. CAUTION:

- Always install the windshield molding before the adhesive hardens.
- After installing glass, keep the front door glass open until the adhesive is completely cured. Never drive the vehicle.
- 16. Install the removed parts.

CAUTION:

- Adjust the front wiper arms stop position. Refer to <u>WW-45, "WIPER ARM : Adjustment"</u>.
- Check the mating area with surrounding parts. Adjust if necessary.

Inspection

INFOID:000000008380784

WATER LEAKAGE INSPECTION

CAUTION:

Wait at least 2 hours after installing the glass because the adhesive must be cured before performingthe leakage test.

OPERA WINDOW

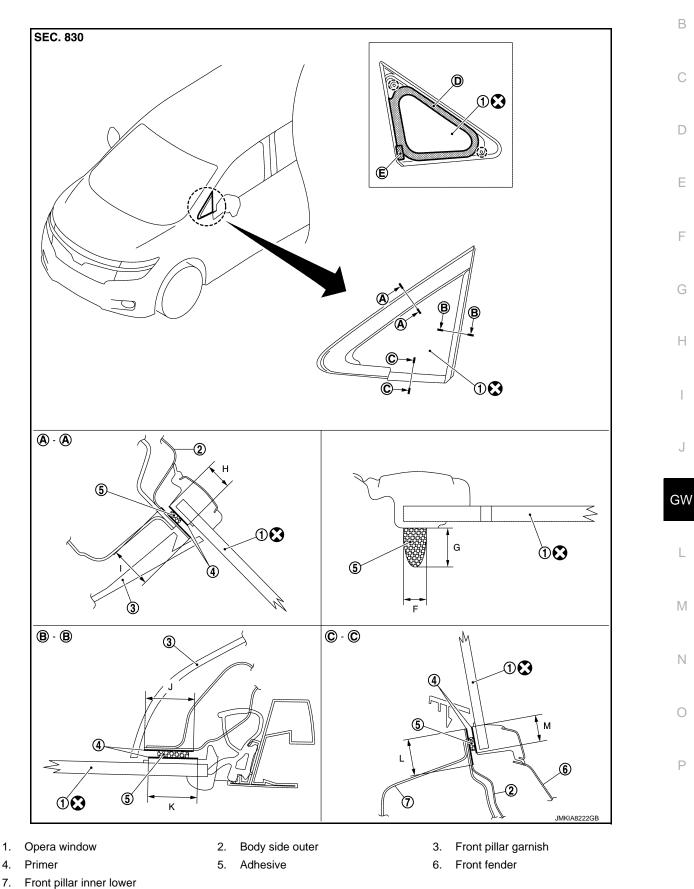
< REMOVAL AND INSTALLATION >

OPERA WINDOW

Exploded View

INFOID:00000008380785

А



OPERA WINDOW

< REMOVAL AND INSTALLATION >

D : Glass primer application area		
E : Double sided tape		
F : 6 (0.236)	G : 10 (0.394)	H : 13 (0.512)
l : 20 (0.787)	J : 20 (0.787)	K : 20 (0.787)
L : 20 (0.787)	M : 14 (0.551)	
Unit: mm (in)		
() : Clip		

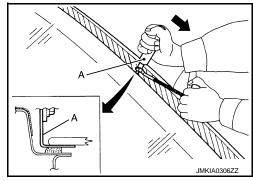
: Always replace after every disassembly.

Removal and Installation

INFOID:000000008380786

REMOVAL

- 1. Remove front pillar garnish. Refer to INT-20, "FRONT PILLAR GARNISH : Removal and Installation".
- 2. Remove front fender assembly. Refer to DLK-398, "FRONT FENDER : Removal and Installation".
- 3. Apply protective tape on body panel around opera window glass to protect painted surfaces from damage.
- Cut the adhesive. Use a windshield cutter for straight section. For the area that the windshield cutter cannot be used, use piano wire or a cutter knife.
- a. With a windshield cutter
- i. Apply soapy water around the bonded area on the body for smooth movement of the windshield cutter (A).
- ii. Insert windshield cutter into the bonded area. Cut adhesive by pulling the knife, keeping the tip parallel to body flange edge.
- b. With piano wire
- i. Pass both sides of piano wire through each room side from the area cut by the windshield cutter.



- ii. Tie both ends of the piano wire (B) to the wire grip (A), etc.
- Lift up the molding using a plastic spatula, pass the piano wire through the inside of molding, and then cut the adhesive by pulling the wire grips alternately.
 CAUTION:

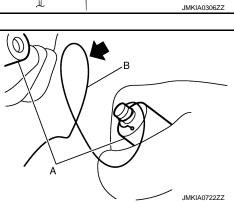
Never contact the piano wire with the coated panel surface.

- c. With a cutter knife
- Working from inside vehicle, insert cutter knife between opera window glass and body panel. Guide cutter edge along molding to cut off adhesive.
 CAUTION:

Never contact painted surfaces with the cutter knife tip.

5. Use piano wire to cut the opera window glass mounting clip. Use rubber suction cups or suction lifter to remove the glass from the vehicle.

INSTALLATION

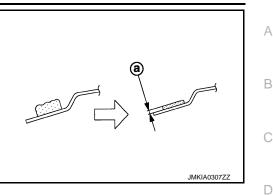


OPERA WINDOW

< REMOVAL AND INSTALLATION >

 Using a scraper, remove remaining adhesive on the body side down to approximately a depth that is 2 mm thick (a) so that entire contour becomes smooth.
 CAUTION:

If the bonded area on the body is scratched, repair it with a two-liquid type urethane paint. Never use lacquer type paint.



- 2. Clean bonded and surrounding area on glass with white gasoline or degreasing agent.
- 3. Apply primer for the glass along the entire circumference of the glass. Refer to <u>GW-15, "Exploded View"</u>.
 Use the sealing kit for glass application and the special holder for cartridge or similar tools.
 CAUTION:

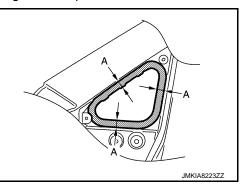
There are 2 types of primer. Never confuse the application methods.

- Primer for painted surfaces
- Primer for glass

NOTE:

The essential function of primers is to strengthen adhesion between glass and painted surface.

- Apply primer for the painted surface to the body side bonding surface as shown in the figure (A=20mm (0.787in)).
 CAUTION:
 - If the body side bonding surface is repaired with a two-liquid type urethane paint, always apply the primer after drying the paint.
 - If primer for painted surfaces adheres to a painted surface other than the bonding area, or if it overflows, quickly remove it with white gasoline or degreasing agent.



F

Н

Μ

Ν

C

Ρ

5. Apply adhesive along glass edge within the time period indicated in the service manual after applying primer with the procedure shown in the exploded view. Refer to <u>GW-15, "Exploded View"</u>. **WOTE:**

Open adhesive by cutting off the nozzle tip and set it in a sealant gun.

- After setting rubber suction cups or suction lifter to glass, align matching marks on body and glass. Install glass to the body.
- 7. Press the entire surface of the glass lightly to fit it completely.
- Correct any adhesive overflow or shortage using a spatula to make the surface smooth. CAUTION:

After installing glass, keep the front door glass open until the adhesive has completely cured. Avoid driving the vehicle.

- Remove the protective tape.
- 10. Install the removed parts.

Inspection

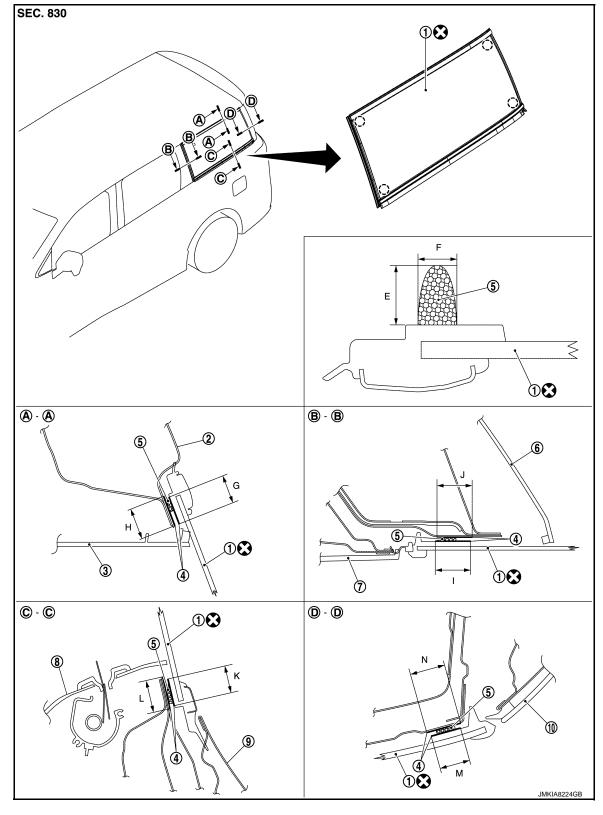
WATER LEAKAGE INSPECTION CAUTION:

Wait at least 2 hours after installing the glass because the adhesive must be cured before performingthe leakage test.

< REMOVAL AND INSTALLATION >

SIDE WINDOW GLASS

Exploded View



- 1. Side window glass
- 4. Primer
- 7. Slide door corner cover outer
- 2. Body side outer
- 5. Adhesive
- 8. Luggage side lower finisher
- 3. Roof side garnish
- 6. Rear pillar garnish
- 9. Rear door slide rail cover

SIDE \	WINDOW	GLASS
--------	--------	-------

< REMOVAL AND INSTALLATION >

10.	Back door window glass					
(_)	: Clip					А
E	: 12 (0.472)	F	: 7 (0.276)	G	: 17 (0.669)	
н	: 20 (0.787)	I	: 25 (0.984)	J	: 25 (0.984)	R
К	: 17 (0.669)	L	: 20 (0.787)	М	: 17 (0.787)	D
Ν	: 20 (0.787)					
Unit	:mm (in)					C

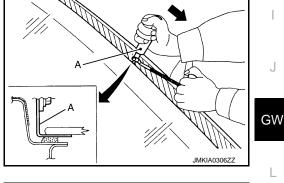
: Always replace after every disassembly.

Removal and Installation

REMOVAL

1.	Remove luggage side lower finisher. Refer to INT-42, "LUGGAGE SIDE LOWER FINISHER : Removal	
	and Installation".	

- 2. Remove back pillar garnish. Refer to INT-26, "BACK PILLAR GARNISH : Removal and Installation".
- Remove rear pillar garnish. Refer to <u>INT-26, "REAR PILLAR GARNISH : Removal and Installation"</u>.
- Remove roof side garnish. Refer to INT-27, "ROOF SIDE GARNISH : Removal and Installation".
- 5. Disconnect rear side antenna harness connector.
- Remove slide door rail cover. Refer to EXT-42, "Removal and Installation".
- 7. Apply protective tape on body panel around side window glass to protect painted surfaces from damage.
- 8. Cut the adhesive from passenger room side. Use a windshield cutter for straight section. For the area that the windshield cutter cannot be used, use Н piano wire or a cutter knife.
- With a windshield cutter
- Apply soapy water around the bonded area on the body for i. smooth movement of the windshield cutter (A).
- Insert windshield cutter into the bonded area. Cut adhesive by ii. pulling the knife, keeping the tip parallel to body flange edge.
- b. With piano wire
- i. Pass both sides of piano wire through each passenger room side from the area cut by the windshield cutter.

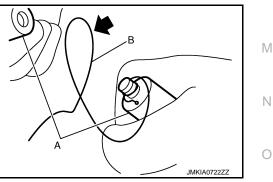


INFOID-00000008380789

Е

F

L



- ii. Tie both ends of the piano wire (B) to the wire grip (A), etc.
- iii. Lift up the molding using a plastic spatula, pass the piano wire through the inside of molding, and then cut the adhesive by pulling the wire grips alternately. CAUTION:

Never contact the piano wire with the coated panel surface.

- c. With a cutter knife
- Working from inside vehicle, insert cutter knife between side i. window glass and body panel. Guide cutter edge along molding to cut off adhesive. CAUTION:

Never contact painted surfaces with the cutter knife tip.

Ρ 9. Use piano wire to cut the side window glass mounting clip. Use rubber suction cups or suction lifter to remove the glass from the vehicle.

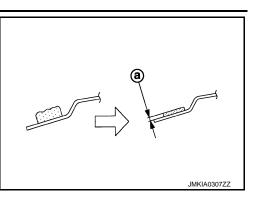
INSTALLATION

SIDE WINDOW GLASS

< REMOVAL AND INSTALLATION >

 Using a scraper, remove remaining adhesive on the body side down to approximately a depth that is 2 mm thick (a) so that entire contour becomes smooth.
 CAUTION:

If the bonded area on the body is scratched, repair it with a two-liquid type urethane paint. Never use lacquer type paint.



- 2. Clean bonded and surrounding area on glass with white gasoline or degreasing agent.
- 3. Apply primer for the glass along the entire circumference of the glass.
 - Use the sealing kit for glass application and the special holder for cartridge or similar tools. CAUTION:

There are 2 types of primer. Never confuse the application methods.

- Primer for painted surfaces
- Primer for glass

NOTE:

The essential function of primers is to strengthen adhesion between glass and painted surface.

4. Apply primer for the painted surface to the body side bonding surface.

CAUTION:

- If the body side bonding surface is repaired with a two-liquid type urethane paint, always apply the primer after drying the paint.
- If primer for painted surfaces adheres to a painted surface other than the bonding area, or if it overflows, quickly remove it with white gasoline or degreasing agent.
- 5. Apply adhesive along glass edge within the time period indicated in the service manual after applying primer with the procedure shown in the Exploded View. **NOTE:**

Open adhesive by cutting off the nozzle tip and set it in a sealant gun.

- 6. After setting rubber suction cups or suction lifter to glass, align matching marks on body and glass. Install glass to the body.
- 7. Press the entire surface of the glass lightly to fit it completely.
- Correct any adhesive overflow or shortage using a spatula to make the surface smooth. CAUTION:
 After installing glass, keep the front door glass, open until the adhesive has control of the surface short door glass.

After installing glass, keep the front door glass open until the adhesive has completely cured. Avoid driving the vehicle.

- 9. Remove the protective tape.
- 10. Install the removed parts.

Inspection

INFOID:000000008380790

WATER LEAKAGE INSPECTION

CAUTION:

Wait at least 2 hours after installing the glass because the adhesive must be cured before performingthe leakage test.

< REMOVAL AND INSTALLATION >

BACK DOOR WINDOW GLASS

Exploded View

INFOID:000000008380791

А

В

С

D

Е

F

Н

J

GW

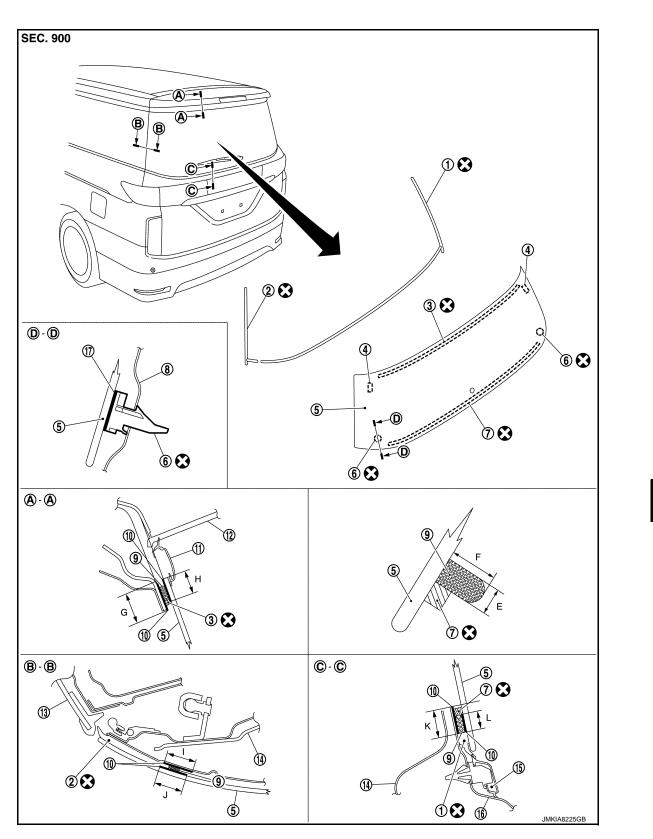
L

Μ

Ν

Ο

Ρ



- 1. Back door window glass molding RH 2.
- 4. Fastener
- 7. Dam sealant rubber (lower)
- Back door window glass molding LH 3.

GW-21

- 5. Back door window glass
- 8. Back door panel
- -H 3. Dam sealant rubber (upper)
 - 6. Clip
 - 9. Adhesive

< REMOVAL AND INSTALLATION >

10.	Primer	11.	Back door upper molding	12.	Rear spoiler
13.	Side window glass	14.	Back door inner	15.	Back door lower molding
16.	Back door outer	17.	Adhesive for clip		
Е	: 7 (0.276)	F	: 12 (0.472)	G	: 22 (0.866)
н	: 15 (0.591)	I	: 22 (0.866)	J	: 22 (0.866)
К	: 22 (0.866)	L	: 15.7 (0.618)		
Unit	: mm (in)				

Always replace after every disassembly.

Removal and Installation

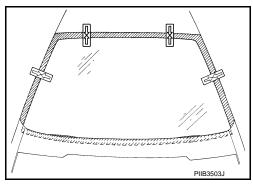
INFOID:00000008380792

REMOVAL

- 1. Remove back door molding upper and lower. Refer to EXT-38, "Removal and Installation".
- 2. Remove back door upper finisher. Refer to <u>INT-47, "BACK DOOR LOWER FINISHER : Removal and Installation"</u>.
- 3. Remove back door side finisher (LH and RH). Refer to <u>INT-48, "BACK DOOR SIDE FINISHER : Removal</u> and Installation".
- 4. Remove back door lower finisher. Refer to <u>INT-47, "BACK DOOR LOWER FINISHER : Removal and Installation"</u>.
- 5. Remove connectors and grounds for rear window defogger and printed antenna.
- 6. Remove rear wiper arm. Refer to WW-48, "WIPER ARM : Removal and Installation".
- 7. Apply protective tape around back door window glass to prevent painted surface from being damaged.
- 8. If back door window glass will be reused, paint matching marks on the body and glass.

NOTE:

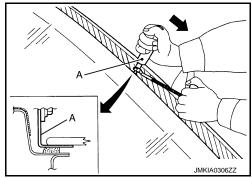
Positioning during installation can be easily performed. Mount the glass on the body and put the matching marks after clearing the body side especially when installing new glass.



9. Cut the adhesive.

Use a windshield cutter for straight section. For the area that the windshield cutter cannot be used, use piano wire or a cutter knife.

- a. With a windshield cutter
- i. Apply soapy water around the bonded area on the body for smooth movement of the windshield cutter (A).
- ii. Insert windshield knife into the bonded area from the passenger room side. Cut adhesive by pulling the knife, keeping the tip parallel to the edge of the glass.



b. With piano wire

For the area that the windshield cutter cannot be used, use piano wire.

- i. From the area cut by the windshield cutter, pass the piano wire through the passenger room side and tie both sides to wire grips.
- ii. Cut the adhesive by alternately pulling the piano wire along with the glass. **CAUTION:**

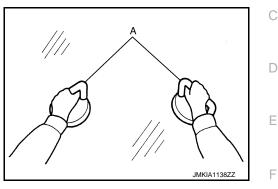
GW-22

< REMOVAL AND INSTALLATION >

- Never press the piano wire excessively against the edge of the glass.
- Always use a Standish cover (stainless plate) to keep the piano wire clear of plastic parts.
- c. With a cutter knife
- i. Working from inside cabin, insert a cutter knife between back door window glass and body side outer panel. Work the cutter knife along the edge of the back door window glass to cut off the adhesive. CAUTION:

Never contact painted surfaces with the cutter knife tip.

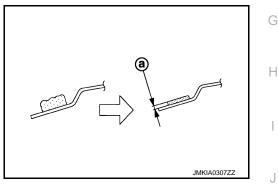
10. Use rubber suction cups or suction lifter (A), etc. to remove glass from the vehicle.



INSTALLATION

 Using a scraper, remove remaining adhesive (sealant) on the body side down to approximately a depth that is 2 mm (0.08 in) thick (a) so that entire contour becomes smooth.
 CAUTION:

If the bonded area on the body is scratched, repair it with a two-liquid type urethane paint. Never use lacquer type paint.



2. When reusing the glass (2), use the cutter (A) to remove the remaining adhesive (1) (sealant) and smooth out the surface.



Ν

Ρ

Μ

GW

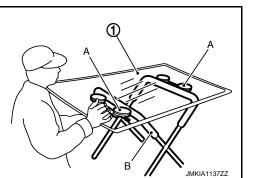
L

2

А

В

- 3. Mount the glass onto the vehicle and paint matching marks on the body and glass when installing new glass. Then remove the glass again.
- Use the rubber suction cups or suction lifter (A) to set the glass (1) on the glass stand (B).



< REMOVAL AND INSTALLATION >

- 5. Clean the bonded area on the glass and body with white gasoline or degreasing agent.
- 6. Install new fastener.
- 7. Install new clips.
- 8. Apply primer for the glass along the entire circumference of the glass.

Use the sealing kit for glass application and the special holder for cartridge or similar tools. CAUTION:

There are 2 types of primer. Never confuse the application methods.

- Primer for painted surfaces
- Primer for glass
- NOTE:

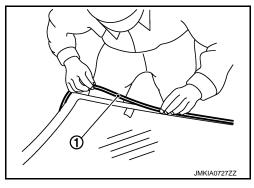
The essential function of primers is to strengthen adhesion between glass and painted surface.

- 9. Apply primer for the painted surface to the body side bonding surface.
 - CAUTION:
 - If the body side bonding surface is repaired with a two-liquid type urethane paint, always apply the primer after drying the paint.
 - If primer for painted surfaces adheres to a painted surface other than the bonding area, or if it overflows, quickly remove it with white gasoline or degreasing agent.
- 10. Affix the dam sealant rubber and apply adhesive along the edge of the glass within the time period indicated in the instruction manual after applying primer.
 - When reusing the glass, affix new dam sealant rubber at the same place where old dam sealant rubber was affixed.
 - When installing new glass, apply the dam sealant rubber from the edge of the glass so as to hide the black print.

CAUTION:

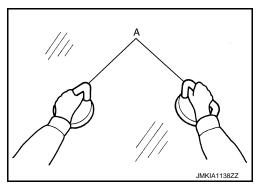
Apply the dam sealant rubber (1) to the outer edge of the outline mark of black print as shown in Exploded View. Apply it so as to only place it without pulling. NOTE:

Open adhesive by cutting off the nozzle tip and set it in a sealant gun.



 Use rubber suction cups or suction lifter (A) that are installed in advance, align the matching marks to install.
 CAUTION:

2 or more workers are required when installing the glass.



- 12. Press the entire surface of the glass lightly to fit it completely.
- 13. Correct any adhesive overflow or shortage using a spatula to make the surface smooth. CAUTION:

After installing glass, keep the front door glass open until the adhesive is completely cured. Avoid driving the vehicle.

- 14. Remove the protective tape.
- 15. Install both new back door window glass molding.
- Install the removed parts. CAUTION:

<u>Check the mating area with surrounding parts. Adjust if necessary.</u> Inspection WATER LEAKAGE INSPECTION <u>CAUTION:</u> Wait at least 2 hours after installing the glass because the adhesive must be cured before performing the leakage test.

J

GW

А

В

С

D

Е

F

G

Н

Μ

Ν

0

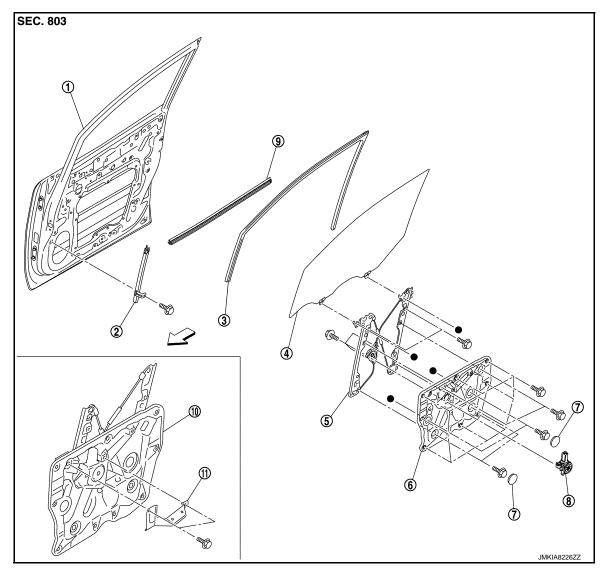
Ρ

< REMOVAL AND INSTALLATION >

FRONT DOOR GLASS

Exploded View

INFOID:00000008380794



- Front door panel 1.
- 4. Front door glass
- 7. Front door hole seal
- 10. Front door module assembly

Removal and Installation

REMOVAL

- 1. Fully open front door glass.
- Remove front door finisher. Refer to INT-13, "Removal and Installation". 2.

8.

- 3. Remove front door inside seal.
- Remove the front door hole seal. 4.
- Reconnect the power window main switch and then operate the power window main switch to raise or 5. lower the door window until the glass mounting bolts can be seen.
- Remove the glass mounting bolts. 6.

Front door sash 2.

11. Pull handle bracket

- 5. Front door regulator assembly Power window motor
- Front door glass run 3. 6. Front door module base
- 9. Front door inside seal

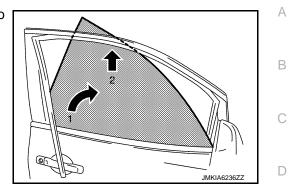
INFOID:000000008380795

GW-26

FRONT DOOR GLASS

< REMOVAL AND INSTALLATION >

- 7. Remove front door glass run from front door panel.
- 8. Hold securely the front door glass and pull it out of the sash to remove the door glass as shown in the figure.



9. Remove front door lower sash.

10. Remove front door glass run.

INSTALLATION

Install in the reverse order of removal.

Inspection and Adjustment

SYSTEM INITIALIZATION

Initialize the system if any of the following work is complete. Refer to PWC-25, "Work Procedure".

FITTING INSPECTION

- Check that the glass is fit securely into the sash groove.
- Lower the glass slightly [approximately 10 to 20 mm (0.394 to 0.787 in)], and check that the clearance to the sash is parallel. Loosen the regulator mounting bolts, guide rail mounting bolts, and glass and guide rail mounting bolts to correct the glass position if the clearance between the glass and sash is not parallel.

Ε

F

Н

INFOID:00000008380796

L

Μ

Ν

Ρ

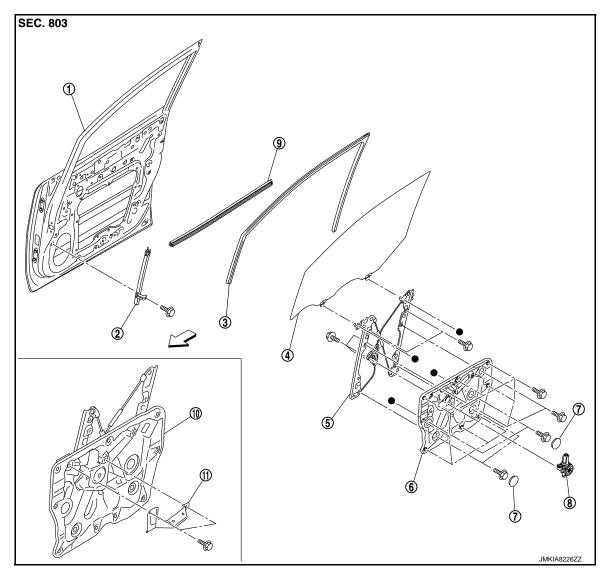
FRONT REGULATOR

< REMOVAL AND INSTALLATION >

FRONT REGULATOR

Exploded View

INFOID:000000008380797



- 1. Front door panel
- 4. Front door glass
- 7. Front door hole seal
- 10. Front door module assembly

Removal and Installation

REMOVAL

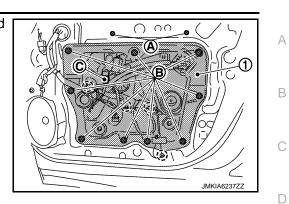
1. Remove front door glass. Refer to <u>GW-26, "Removal and Installation"</u>.

- 2. Front door sash
- 5. Front door regulator assembly
- 8. Power window motor
- 11. Pull handle bracket
- 3. Front door glass run
- 6. Front door module base
- 9. Front door inside seal

FRONT REGULATOR

< REMOVAL AND INSTALLATION >

- Disconnect the power window motor harness connector (C) and harness fixing clip from front door module assembly (1).
- 3. Remove front door regulator assembly mounting bolts (A).
- 4. Remove front door module assembly mounting bolts (B).
 - () : Clip



- 5. Remove front door module assembly from front door panel.
- 6. Remove pull handle bracket mounting bolts and then remove pull handle bracket from front door module assembly.
- 7. Remove regulator assembly mounting bolts and then remove front door regulator assembly from front door module base.

INSTALLATION Install in the reverse order of removal. Disassembly and Assembly DISASSEMBLY 1. Remove front door module assembly. Refer to <u>GW-28, "Removal and Installation"</u>. 2. Remove front door power window motor from front door module base. 3. Remove front door regulator assembly from front door module base. INSPECTION AFTER REMOVAL Check the front door regulator assembly for the following items. Replace or grease it if a malfunction is

detected.

- Wire wear
- Regulator deformation

ASSEMBLY

Assemble in the reverse order of disassembly.

Inspection and Adjustment

Inspection after removal

Check the front regulator for the following items. Replace or grease it if a malfunction is detected.

• Wire wear

Front regulator deformation

J

GW

L

Μ

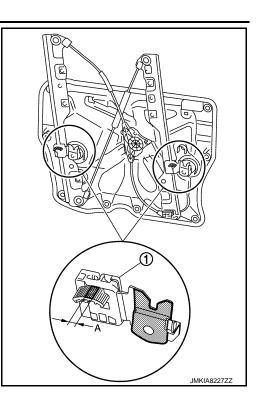
Ν

Ρ

FRONT REGULATOR

< REMOVAL AND INSTALLATION >

- Apply 0.1 to 0.2 g of grease to the surface of carrier plate (1) and on the surface in contact with glass.
 - A : 5 mm (0.197in)



SYSTEM INITIALIZATION

Initialize the system if any of the following work is complete. Refer to PWC-25, "Work Procedure".

FITTING INSPECTION

- Check that the glass is fit securely into the sash groove.
- Lower the glass slightly [approximately 10 to 20 mm (0.394 to 0.787 in)], and check that the clearance to the sash is parallel. Loosen the regulator mounting bolts, guide rail mounting bolts, and glass and guide rail mounting bolts to correct the glass position if the clearance between the glass and sash is not parallel.

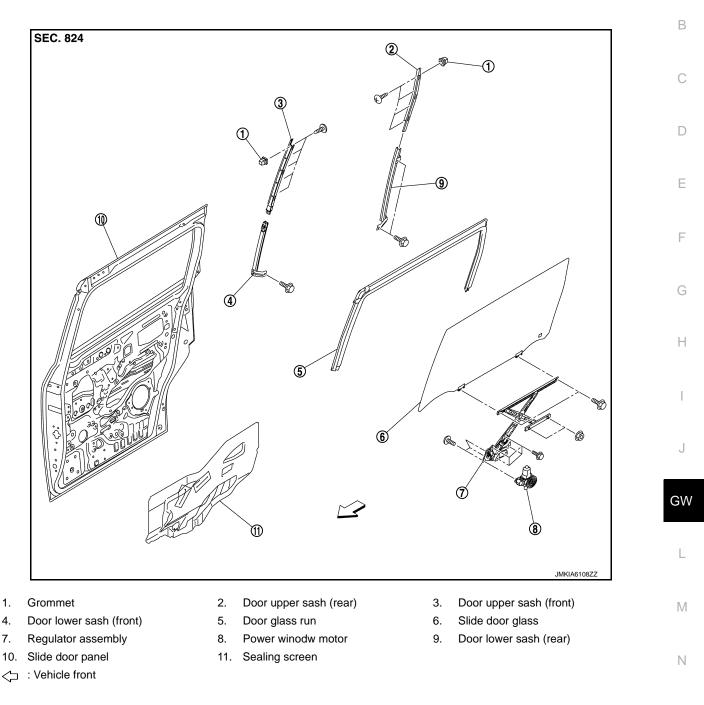
< REMOVAL AND INSTALLATION >

SLIDE DOOR GLASS

Exploded View

INFOID:000000008380801

А



Removal and Installation

REMOVAL

- 1. Remove slide door finisher. Refer to INT-16. "Removal and Installation".
- 2. Fully open slide door glass.
- Remove slide door lock release actuator. Refer to <u>DLK-442, "LOCK RELEASE ACTUATOR : Removal</u> and Installation".
- 4. Remove remote control assembly. Refer to <u>DLK-441, "REMOTE CONTROL ASSEMBLY : Removal and</u> <u>Installation"</u>.
- 5. Remove sliding door control unit.

Revision: 2012 August

GW-31

2013 QUEST

INFOID:000000008380802

Ρ

SLIDE DOOR GLASS

< REMOVAL AND INSTALLATION >

- For RH: Refer to DLK-468. "RH : Removal and Installation".
- For LH: Refer to <u>DLK-468, "LH : Removal and Installation"</u>.
- 6. Remove slide door speaker harness connector.
- 7. Remove partially the sealing screen.

NOTE:

Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

- 8. Reconnect the power window switch and then operate the power window switch to raise the door window until the slide door glass mounting bolts can be seen.
- 9. Remove slide door glass mounting bolts.
- 10. Remove slide door outside molding. Refer to EXT-32, "Removal and Installation".
- 11. Remove slide door sash cover. Refer to EXT-42, "Removal and Installation".
- 12. Remove slide door corner outer cover. Refer to EXT-35, "Removal and Installation".
- 13. Remove slide door glass run from partition sash.
- 14. Remove slide door upper sash (rear). Refer to GW-31, "Exploded View".
- 15. Remove slide door lower sash (rear). Refer to <u>GW-31, "Exploded View"</u>.
- 16. Pull out slide door glass out off front door panel to remove.

INSTALLATION

Install in the reverse order of removal.

Inspection and Adjustment

INFOID:000000008380803

FITTING INSPECTION

- Check that the glass is fit securely into the sash groove.
- Lower the glass slightly [approximately 10 to 20 mm (0.394 to 0.787 in)], and check that the clearance to the sash is parallel. Loosen the regulator mounting bolts, guide rail mounting bolts, and glass and guide rail mounting bolts to correct the glass position if the clearance between the glass and sash is not parallel.

SLIDE DOOR REGULATOR

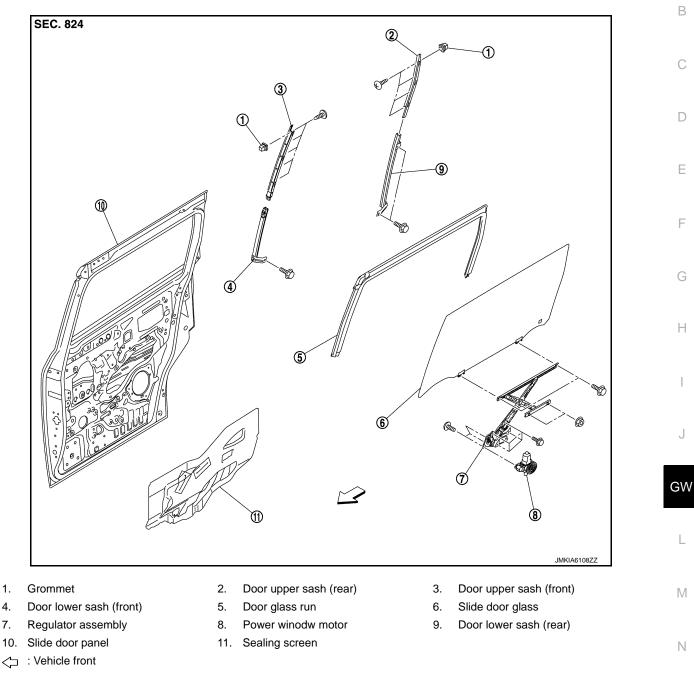
< REMOVAL AND INSTALLATION >

SLIDE DOOR REGULATOR

Exploded View

INFOID:000000008380804

А



Removal and Installation

REMOVAL

1.

4.

7.

Remove slide door glass. Refer to GW-31, "Removal and Installation". 1.

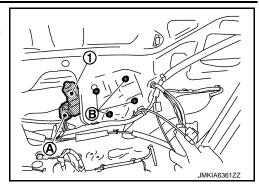
INFOID:000000008380805

Ρ

SLIDE DOOR REGULATOR

< REMOVAL AND INSTALLATION >

- 2. Disconnect the power window motor (1) harness connector (A).
- Remove the slide door regulator assembly mounting bolts (B) and then remove slide door regulator assembly from door panel.



4. Remove slide door upper sash (front). Refer to GW-31. "Exploded View".

5. Remove slide door lower sash (front). Refer to GW-31. "Exploded View".

INSTALLATION

Install in the reverse order of removal.

Disassembly and Assembly

DISASSEMBLY

Remove the power window motor from the slide door regulator.

INSPECTION AFTER REMOVAL

Check the slide door regulator assembly for the following items. Replace or grease it if a malfunction is detected.

- Wire wear
- Regulator deformation

ASSEMBLY

Assemble in the reverse order of disassembly.

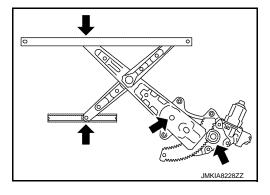
Inspection and Adjustment

Inspection after removal

Check the slide regulator assembly for the following items. Replace or grease it if a malfunction is detected.

- Wire wear
- Slide door regulator deformation
- Grease condition for each sliding part

: Grease point



FITTING INSPECTION

- Check that the glass is fit securely into the sash groove.
- Lower the glass slightly [approximately 10 to 20 mm (0.394 to 0.787 in)], and check that the clearance to the sash is parallel. Loosen the regulator mounting bolts, guide rail mounting bolts, and glass and guide rail mounting bolts to correct the glass position if the clearance between the glass and sash is not parallel.

INFOID:000000008380807