# SECTION GLASS & WINDOW SYSTEM

# CONTENTS

PRECAUTION2
<b>PRECAUTIONS</b> 2Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN- SIONER"2Precaution for Procedure without Cowl Top Cover2 Handling for Adhesive and Primer2Precaution for Work3
PREPARATION4
PREPARATION
CLIP LIST5 Descriptions for Clips5
SYMPTOM DIAGNOSIS9
SQUEAK AND RATTLE TROUBLE DIAG- NOSES 9 Work Flow 9 Generic Squeak and Rattle Troubleshooting 11 Diagnostic Worksheet 13
REMOVAL AND INSTALLATION15
WINDSHIELD GLASS15 Exploded View

Removal and Installation16 Inspection17	F
REAR WINDOW GLASS18Exploded View18Removal and Installation19Inspection20	G
FRONT DOOR GLASS       21         Exploded View       21         Removal and Installation       21         Inspection and Adjustment       22	I
FRONT REGULATOR23Exploded View23Removal and Installation23Disassembly and Assembly23Inspection and Adjustment24	J GW
REAR DOOR GLASS25Exploded View25Removal and Installation25Inspection and Adjustment26	L
REAR REGULATOR27Exploded View27Removal and Installation27Disassembly and Assembly28Inspection and Adjustment28	M

0

Ρ

А

В

С

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 SR and SB section of this Service Man-

#### ual. 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 SR 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.

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

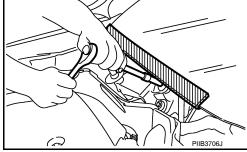
#### WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT 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:000000007207272

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

INFOID:000000007207273

- Never use an adhesive that 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 an equivalent and wash the skin with soap.
- When using primer and adhesive, always observe the precautions in the instruction manual.

# PRECAUTIONS

#### < PRECAUTION >

#### Precaution for Work

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component В with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- · Follow the steps below to clean components.
- D - Water soluble dirt: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the dirty area.

Then rub with a soft and dry cloth.

Ε - Oily dirt: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the dirty area.

Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol, or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

F

INFOID:000000007759108

А

Μ

Ν

Ο

# PREPARATION

#### < PREPARATION >

# PREPARATION PREPARATION

# Special Service Tools

INFOID:000000007759109

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	SILAO993E	Locating the noise
( — ) (J-43980) NISSAN Squeak and Rat- tle Kit	SIIA0994E	Repairing the cause of noise

# Commercial Service Tools

INFOID:000000007759110

Tool name		Description
Engine ear		Locating the noise
	SIIA0995E	
Suction lifter		Holding the door glass
	PIIB1805J	

# **CLIP LIST**

А

# Descriptions for Clips

# Replace any clips and fasteners which are damaged during removal or installation

ciips anu iasu	eners which are damaged during remova		E
Symbol No.	Shapes	Removal & Installation	
C101		Removal: Remove by bending up with flat-bladed screwdrivers or clip remover.	E
C103	TTTT	Removal: Remove with a clip remover.	F
C203 [ 8786		Removal: Push center pin to catching position. (Do not remove center pin by hitting it.) Push Push Installation:	G
C205		Removal: Flat-bladed screwdriver	L
C206		Removal:	۲ F

SIIA0315E

#### < PREPARATION >

Symbol No.	Shapes	Removal & Installation
CE103		Removal:
CF110	Clip A Clip B	Removal: Finisher Clip A Flat-bladed screwdrivers Clip B
CF118	Clip A Clip B (Grommet)	Removal: Flat-bladed Finisher screwdrivers Body panel Clip A Clip B (Grommet)
CR103		Removal: Holder portion of clip must be spread out to remove rod.
CS101		Removal: <ol> <li>Screw out with a Phillips         screwdriver.</li> <li>Remove female         portion with         flat-bladed         screwdriver.</li> </ol>

SIIA0316E

#### < PREPARATION >

OG101     Installation:     B       Image: Construction of cloper connection cloper clo	Symbol No.	. Shapes Removal & Installation			
CS102       Image:			Rotate 45° to remove	С	
Image: Construction of clip       Image: Construction of clip         CS113       Image: Construction of clip         Image: CS113       Image: CS113         Image: CS113 <td< td=""><td></td><td></td><td></td><td>E</td></td<>				E	
CS113       Image:				F	
CS113       Image: CS113         Image: CS111       Image: CS113         Image: CS113       Image: CS113         Image: CS113       Image: CS113         Image: CS113       Image: CS113         <		¥	(J)	G	
CS113       Image:			<b>W</b>	Н	
C111       Image: C111       <	CS113		Disconnect upper connection of clip with a flat-bladed screwdriver, then remove clip while inserting a flat-bladed screwdriver between	I	
				J	
C111 C111 C111 N N		Y		GW	
				L	
		$\bigcirc$		Μ	
0			(B)	Ν	
				0	

SIIA0317E

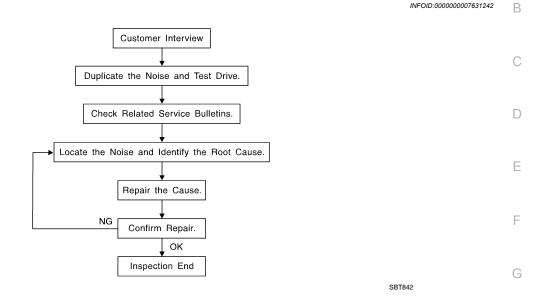
Symbol No.	Shapes	Removal & Installation
CG104		Removal: Remove by bending up with flat-bladed screwdrivers. Radiator grille Body panel
CE114	ST REAL	
CF118	Clip A Clip B (Grommet)	Removal: Flat-bladed Finisher screwdrivers Body panel Clip A Clip B (Grommet)

ALJIA0564GB

#### < 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's comments; refer to <u>GW-13</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, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak —(Like tennis shoes on a clean floor)
   Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
   higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping.
- Creak—(Like walking on an old wooden floor) Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle) Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock —(Like a knock on a door) Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
   Tick—(Like a clock second hand)
- Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump—(Heavy, muffled knock noise) Thump characteristics include softer knock/dead sound often brought on by activity.
  Buzz—(Like a bumble bee)
- Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

#### DUPLICATE THE NOISE AND TEST DRIVE

А

Н

J

L

Μ

Ν

#### < 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 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 CVT and A/T models).
- 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.
- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

#### CHECK RELATED SERVICE BULLETINS

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

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

#### LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: 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-11, "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: 100×135 mm (3.94×5.31 in)/76884-71L01: 60×85 mm (2.36×3.35 in)/76884-71L02: 15×25 mm (0.59×0.98 in)

INSULATOR (Foam blocks)

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

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

INSULATOR (Light foam block)

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

#### FELT CLOTH TAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications. 68370-4B000: 15×25 mm (0.59×0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll. The following materials not found in the kit can also be used to repair squeaks and rattles.

< SYMPTOM DIAGNOSIS >

< SYMPTOM DIAGNOSIS >	
UHMW (TEFLON) TAPE	
Insulates where slight movement is present. Ideal for instrument panel applications.	А
SILICONE GREASE Used instead of UHMW tape that will be visible or not fit.	
Note: Will only last a few months.	_
SILICONE SPRAY	В
Use when grease cannot be applied.	
DUCT TAPE Use to eliminate movement.	С
	0
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.	D
Generic Squeak and Rattle Troubleshooting	
Refer to Table of Contents for specific component removal and installation information.	E
INSTRUMENT PANEL	
Most incidents are caused by contact and movement between:	_
1. The cluster lid A and instrument panel	F
2. Acrylic lens and combination meter housing	
3. Instrument panel to front pillar garnish	G
4. Instrument panel to windshield	0
5. Instrument panel pins	
6. Wiring harnesses behind the combination meter	Н
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 apply-	
ing felt cloth tape or silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring har-	
ness. CAUTION:	1
Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will	0
not be able to recheck the repair.	
CENTER CONSOLE	GW
Components to pay attention to include:	
1. Shift selector assembly cover to finisher	
2. A/C control unit and cluster lid C	L
3. Wiring harnesses behind audio and A/C control unit	
The instrument panel repair and isolation procedures also apply to the center console.	в. Л
DOORS	Μ
Pay attention to the:	
1. Finisher and inner panel making a slapping noise	Ν
2. Inside handle escutcheon to door finisher	
3. Wiring harnesses tapping	
4. Door striker out of alignment causing a popping noise on starts and stops	0
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.	Ρ
TRUNK	
Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.	
In addition look for:	
1. Trunk lid bumpers out of adjustment	

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

#### < SYMPTOM DIAGNOSIS >

#### 4. A loose license plate or bracket

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

#### SUNROOF/HEADLINING

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

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

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

#### OVERHEAD CONSOLE (FRONT AND REAR)

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

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

#### SEATS

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

Cause of seat noises include:

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

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

#### UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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

< SYMPTOM DIAGNOSIS >

#### **Diagnostic Worksheet**

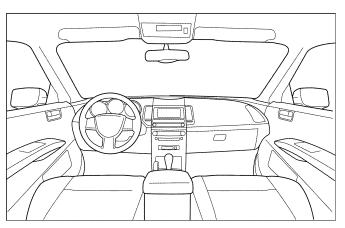
#### Dear Customer:

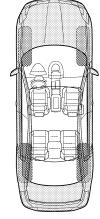
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked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

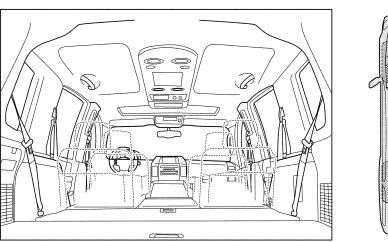
#### SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

#### 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.

LAIA0072E

INFOID:000000007631244

А

В

D

Ε

F

Н

J

GW

L

Μ

Ν

Ο

#### < SYMPTOM DIAGNOSIS >

#### SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

II.	II. WHEN DOES IT OCCUR? (please check the boxes that apply)						
	Anytime 1 st time in the morning Only when it is cold outside Only when it is hot outside		After sitting out in the rain When it is raining or wet Dry or dusty conditions Other:				
III.	WHEN DRIVING:	IV.	WHAT TYPE OF NOISE				
	Through driveways Over rough roads Over speed bumps Only about mph On acceleration Coming to a stop On turns: left, right or either (circle) With passengers or cargo Other: After driving miles or minute		Squeak (like tennis shoes on a clean floor) Creak (like walking on an old wooden floor) Rattle (like shaking a baby rattle) Knock (like a knock at the door) Tick (like a clock second hand) Thump (heavy muffled knock noise) Buzz (like a bumble bee)				

#### TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

	YES	NO	Initials of person performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm rep	air		
VIN: W.O.#	Customer Name Date:		

This form must be attached to Work Order

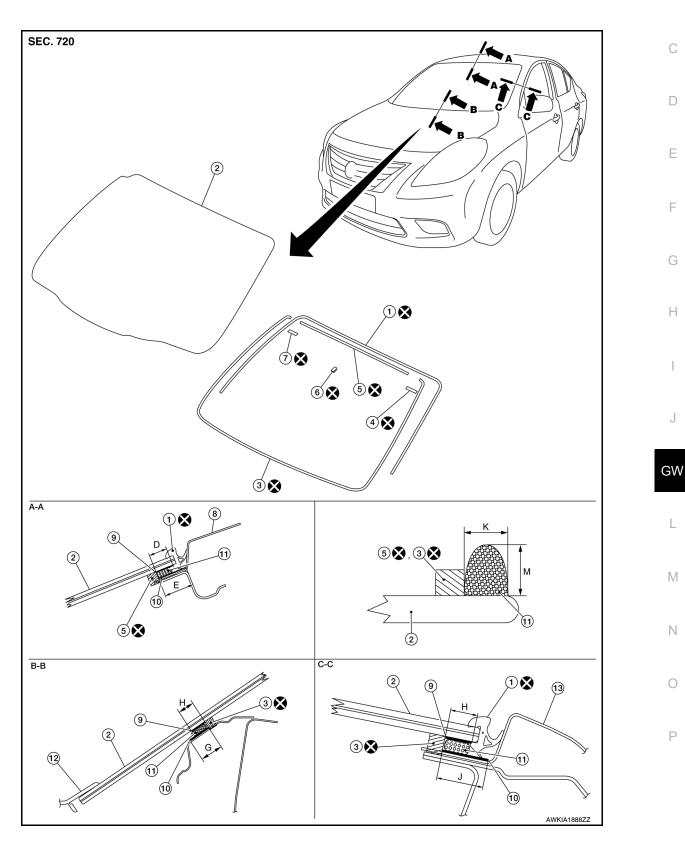
LAIA0071E

# < REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION WINDSHIELD GLASS

# Exploded View

INFOID:000000007207278

А



# WINDSHIELD GLASS

#### < REMOVAL AND INSTALLATION >

- Windshield glass molding 1.
- 4. Windshield glass holder (LH)
- 7. Windshield glass holder (RH)
- 10. Body primer
- 13. Body side outer panel
- Η. 8.0 (0.31)
- Μ 12.0 (0.47)

# Removal and Installation

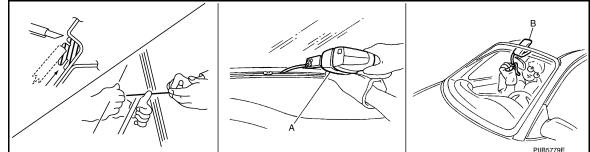
#### REMOVAL

- Windshield glass 2.
- 5. Dam sealant rubber (upper)
- 8. Roof assembly
- 11. Adhesive
- D. 10.0 (0.39)
- 19.0 (0.75) J.

- Unit: mm (in)
- 3. Dam sealant rubber (lower)
- 6. Inside mirror base
- 9. Glass primer
- 12. Cowl top cover
- G. 19.5 (0.77)
- 7.0 (0.28) Κ

INFOID:000000007207279

- Remove front pillar finishers (LH/RH). Refer to INT-19. "FRONT PILLAR FINISHER : Removal and Instal-1. lation".
- Partially remove the headlining (front edge). Refer to INT-29, "Removal and Installation". 2.
- Remove front wiper arms (LH/RH). Refer to <u>WW-35</u>, "WIPER ARM : Removal and Installation".
- Remove front fender covers (LH/RH). Refer to EXT-24, "Removal and Installation".
- Remove cowl top covers. Refer to EXT-24, "Removal and Installation". 5.
- Remove glass using piano wire or power cutting tool (A) and an inflatable pump bag (B) after removing 6. moldings.



- Mark the body and the glass with matching marks if the windshield glass is reused.
- Apply protective tape around the windshield glass to protect the painted surface from damage.

#### WARNING:

Always wear safety glasses and heavy gloves to help prevent injuries. **CAUTION:** 

- Never use a cutting knife or power cutting tool to prevent damage to the parts.
- Be careful not to scratch the glass when removing.
- Be careful not to set or stand the glass on its edge. Small chips may develop into cracks.

#### INSTALLATION

Installation is in reverse order of removal

#### **CAUTION:**

Be sure the adjustments of front wiper arms stop location. Refer to WW-36, "WIPER ARM : Adjustment".

- Use a genuine Nissan Urethane Adhesive Kit (if available) or an equivalent and follow the instructions provided with it.
- The start and finish of the adhesive application shall be located at the middle of glass bottom to assure watertightness.
- Open a door window while the urethane adhesive is curing. This prevents the glass from being forced out by passenger room air pressure when all door windows are closed.
- Inform the customer that the vehicle should remain stationary until the urethane adhesive is completely cured (approximately 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 may be harmful if inhaled. Move immediately to an area with fresh air if affected by vapor inhalation.

#### **GW-16**

#### WINDSHIELD GLASS

#### < REMOVAL AND INSTALLATION >

· Driving the vehicle before the urethane adhesive is completely cured may affect the performance of the windshield in an accident.

#### CAUTION:

- Never use an adhesive that is past its usable term. Shelf life of this product is limited to six months after the date of manufacture. Adhere carefully 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.
- Never leave primers or adhesive cartridge unattended with their caps open or off.
- The vehicle should not be driven for 24 hours or more or until the urethane adhesive is completely cured. Curing time varies depending on temperature and humidity. The curing time increases under lower temperature and lower humidity.

#### Inspection

Inspection	00007207280	D
REPAIRING WATER LEAKAGE FOR WINDSHIELD GLASS Leakage can be repaired without removing the windshield glass. Determine the extent of leakage if water is leaking between the urethane adhesive material and body or This can be done by applying water to the windshield area while pushing glass outward.		E
Apply primer (if necessary) and then urethane adhesive to the leakage point to stop the leakage.	I	F
	(	G
	ŀ	Η

А

В

L

Μ

Ν

Ο

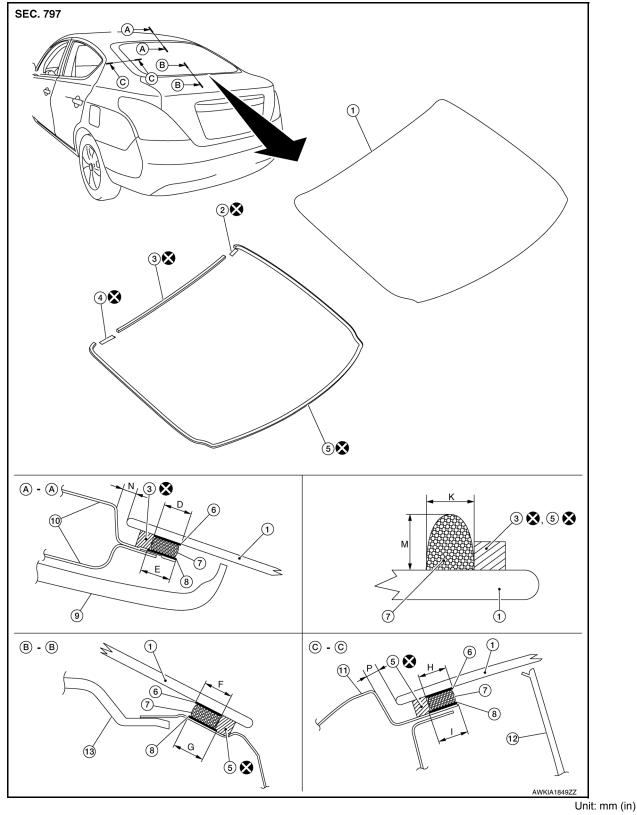
# **REAR WINDOW GLASS**

# < REMOVAL AND INSTALLATION >

**REAR WINDOW GLASS** 

# Exploded View

INFOID:000000007207281



- Rear window glass 1.
- 4. Rear window glass holder (LH)
- 7. Adhesive

- Rear window glass holder (RH) 2. Dam sealant rubber (lower)
- 5. 8.
  - Body primer
- Dam sealant rubber (upper) 3.
  - 6. Glass primer
  - 9. Headlining assembly

# **REAR WINDOW GLASS**

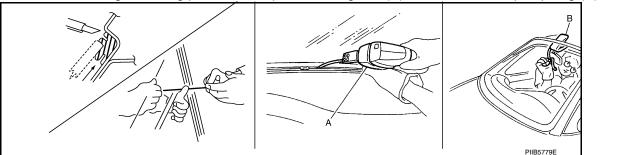
#### < REMOVAL AND INSTALLATION >

10.	Roof panel assembly	11.	Body side outer panel	12.	Rear pillar finisher	
13.	Rear parcel shelf finisher	D.	13.0 (0.51)	Ε.	14.0 (0.55)	A
F.	13.0 (0.51)	G.	14.0 (0.55)	Н.	13.0 (0.51)	
J.	14.0 (0.55)	K.	7.0 (0.28)	М.	12.0 (0.47)	
Ν.	4.5 (0.18)	P.	5.0 (0.20)			В
<b>D</b>						

# Removal and Installation

#### REMOVAL

- 1. Remove rear pillar finishers (LH/R/H). Refer to <u>INT-24, "REAR PILLAR FINISHER : Removal and Installa-</u> tion".
- 2. Remove rear parcel shelf finisher. Refer to INT-25, "Removal and Installation".
- 3. Remove the connectors and grounds for the rear window glass defogger.
- 4. Remove rear window glass using piano wire or power cutting tool (A) and an inflatable pump bag (B).



- Mark the body and glass with a matching marks if the rear window glass is reused
- Apply protective tape around the rear window glass to protect the painted surface from damage. **WARNING:**

#### WARNING: Alwaya waar cafaty a

Always wear safety glasses and heavy gloves to help prevent injuries. CAUTION:

- Never use a cutting knife or power cutting tool when the rear window glass is reused.
- Be careful not to scratch the glass when removing.
- Be careful not to set or stand the glass on its edge. Small chips may develop into cracks.
- Protect the painted surface around the rear window glass from damage.

#### IINSTALLATION

Installation is in reverse order of removal

- Use a Genuine Nissan Urethane Adhesive Kit (if available) or an equivalent and follow the instructions provided with it.
- The start and finish of the adhesive application shall be located at the middle of the glass bottom to assure watertightness.
- Open a door window while the urethane adhesive is curing. This prevents the glass from being forced out by passenger compartment air pressure when all door windows are closed.
- The molding must be installed securely so that it is in position and leaves no clearance.
- Inform the customer that the vehicle should remain stationary until the urethane adhesive is completely cured (approximately 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 may be harmful if inhaled. Move immediately to an area with fresh air if affected by vapor inhalation.
- Driving the vehicle before the urethane adhesive is completely cured may affect the performance of the rear window glass in an accident.

#### **CAUTION:**

- Never use an adhesive that is past its usable term. Shelf life of this product is limited to six months after the date of manufacture. Pay attention 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.
- Never leave primers or adhesive cartridge unattended with their caps open or off.

INFOID:000000007207282

D

Ε

Н

GW

Ν

# **REAR WINDOW GLASS**

#### < REMOVAL AND INSTALLATION >

• The vehicle should not be driven for 24 hours or more or until the urethane adhesive is completely cured. Curing time varies depending on temperature and humidity. The curing time increases under lower temperature and lower humidity.

#### Inspection

INFOID:000000007207283

#### REPAIRING WATER LEAKAGE FOR REAR WINDOW GLASS

Leakage can be repaired without removing the glass.

Determine the extent of leakage if water is leaking between the urethane adhesive material and body or glass. This can be done by applying water to the rear window glass area while pushing glass outward. Apply primer (if necessary) and then urethane adhesive to the leakage point to stop the leakage.

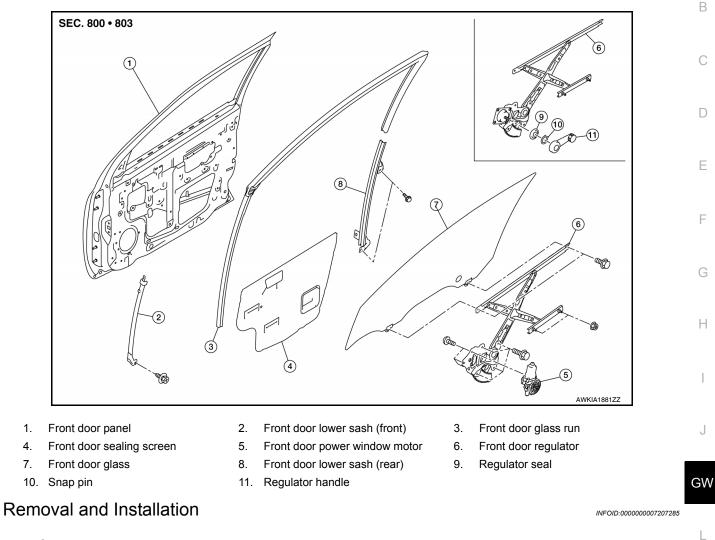
# < REMOVAL AND INSTALLATION >

FRONT DOOR GLASS

# **Exploded View**

INFOID:000000007207284

А



- REMOVAL
- 1. Fully open front door glass.
- 2. Remove front door finisher. Refer to INT-15, "Removal and Installation".
- 3. Disconnect door mirror harness connector and remove the clip.
- Remove front door sealing screen.
   NOTE:
   Cut the butyl-tape so that some parts of the butyl-tape will remain on the sealing screen, if the sealing screen is reused.
- 5. Partially remove front door glass run.

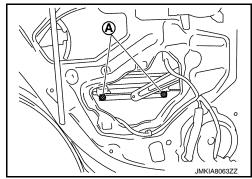
Ο

Μ

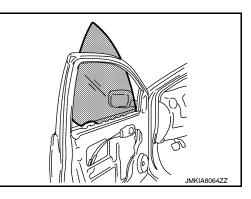
# FRONT DOOR GLASS

#### < REMOVAL AND INSTALLATION >

6. Operate the main power window or power window and door lock and unlock motor switch to raise the regulator handle (manual) to lower the door window until the glass bolts (A) can be seen.



- 7. Remove the glass bolts.
- 8. Correctly position the front door glass to pull it out of the sash and remove the door glass from the door.



- 9. Remove front door outside molding. Refer to EXT-29. "Removal and Installation".
- 10. Remove front door glass run.
- 11. Remove front door lower sash (rear).
  - 1. Remove lower sash (rear) bolts.
  - 2. Hold the upper part of lower sash and then pull it up to remove.
- 12. Remove front door lower sash (front).
  - 1. Remove lower sash (front) bolt.
  - 2. Hold the upper part of lower sash and then pull it up to remove.

#### INSTALLATION

Installation is in the reverse order of removal.

#### Inspection and Adjustment

INFOID:000000007207286

#### FITTING INSPECTION

- Make sure that the glass fits 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 bolts, guide rail bolts, and glass and guide rail bolts to correct the glass position if the clearance between the glass and sash is not parallel.

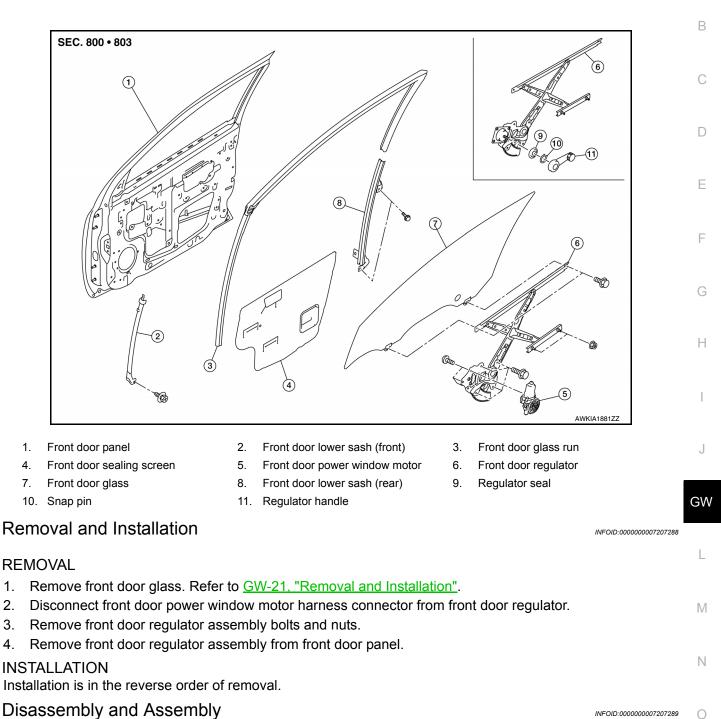
# < REMOVAL AND INSTALLATION >

FRONT REGULATOR

# **Exploded View**

INFOID:000000007207287

А



#### DISASSEMBLY

Remove the power window motor from the regulator assembly.

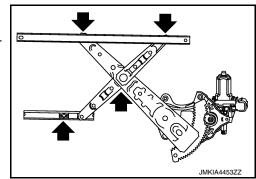
#### INSPECTION AFTER REMOVAL

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

# FRONT REGULATOR

#### < REMOVAL AND INSTALLATION >

- Wire wear
- Regulator deformation
- The arrows in the figure show the application points of the multipurpose grease.



ASSEMBLY Assembly is in the reverse order of disassembly.

#### Inspection and Adjustment

INFOID:000000007207290

#### FITTING INSPECTION

- Check that the glass fits 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 bolts, guide rail bolts, and glass and guide rail bolts to correct the glass position if the clearance between the glass and sash is not parallel.

#### < REMOVAL AND INSTALLATION >

# REAR DOOR GLASS

# Exploded View

INFOID:000000007207291

А

В

D

Е

F

Н

J

GW

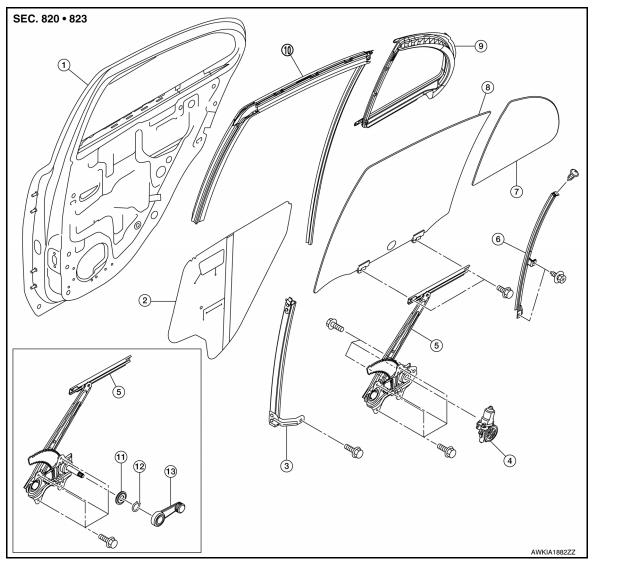
L

Μ

Ν

Ο

Ρ



- 1. Rear door panel
- 4. Power window motor
- 7. Partition glass
- 10. Rear door glass run
- 13. Regulator handle

# Removal and Installation

#### REMOVAL

- 1. Fully open rear door glass.
- 2. Remove rear door finisher. Refer to INT-17, "Removal and Installation".

2.

5.

8.

11.

Sealing screen

Rear door glass

Regulator seal

Regulator assembly

- 3. Disconnect rear door speaker harness connector.
- Remove rear door sealing screen. NOTE:

Cut the butyl-tape so that some parts of the butyl-tape will remain on the sealing screen, if the sealing screen is reused.

3.

6.

9.

Rear door sash

Partition weather-strip

Partition sash

12. Retaining clip

5. Remove partition sash bolts and screw.

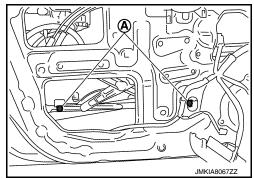
# GW-25

INFOID:000000007207292

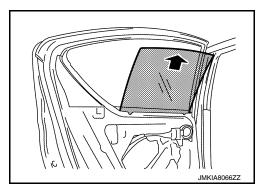
# **REAR DOOR GLASS**

#### < REMOVAL AND INSTALLATION >

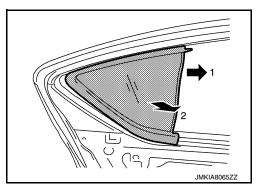
- 6. Remove partition sash.
  - 1. Remove rear door glass run from partition sash.
  - 2. Pull partition sash slightly and straight down.
  - 3. From the upper side, slope partition sash toward the vehicle and then remove.
- Operate the rear power window main switch or regulator handle (manual) to raise or lower the door window until the glass bolts (A) can be seen.



- 8. Remove rear door glass bolts.
- 9. Remove the rear door glass, carefully pulling inward to remove.



- 10. Remove partition glass.
  - 1. Slide partition glass toward the direction of arrow 1.
  - 2. Pull partition glass toward the direction of arrow 2 to remove.
  - 3. Remove partition weather strip from the partition glass.



INSTALLATION Installation is in the reverse order of removal.

#### Inspection and Adjustment

INFOID:000000007207293

#### FITTING INSPECTION

- · Check that the glass fits 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 bolts, guide rail bolts, and glass and guide rail bolts to correct the glass position if the clearance between the glass and sash is not parallel.

# < REMOVAL AND INSTALLATION >

# REAR REGULATOR

# Exploded View

INFOID:000000007207294

А

В

D

Е

F

Н

GW

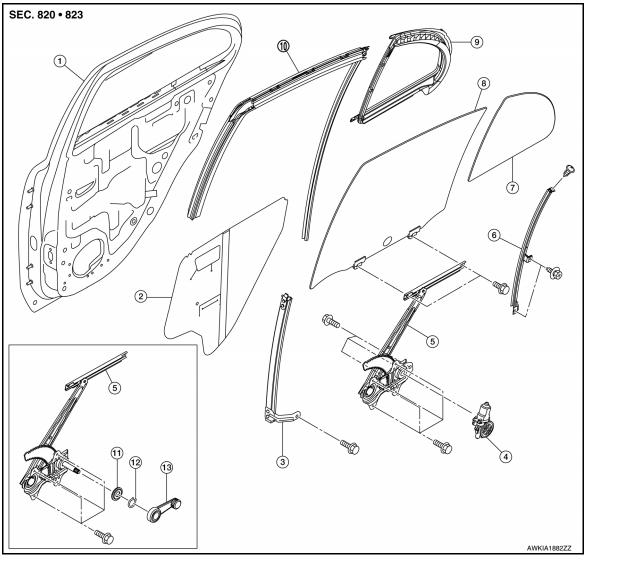
L

Μ

Ν

Ο

Ρ



3.

6.

9.

Rear door sash

Partition weather-strip

Partition sash

12. Retaining clip

- 1. Rear door panel
- 4. Rear power window motor
- 7. Partition glass
- 10. Rear door glass run
- 13. Regulator handle

# Removal and Installation

#### REMOVAL

1. Remove rear door glass. Refer to GW-25. "Removal and Installation".

2.

5.

8.

11.

- 2. Disconnect the rear door power window motor harness connector.
- 3. Remove rear door regulator assembly bolts and then regulator assembly from rear door panel.

Sealing screen

Rear door glass

Regulator seal

Regulator assembly

#### INSTALLATION

Installation is in the reverse order of removal.

INFOID:000000007207295

# **REAR REGULATOR**

#### < REMOVAL AND INSTALLATION >

#### **Disassembly and Assembly**

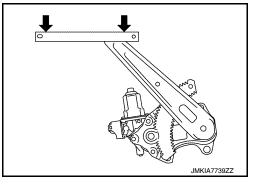
#### DISASSEMBLY

Remove the power window motor from the regulator assembly.

#### INSPECTION AFTER REMOVAL

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

- Wire wear
- Regulator deformation
- The arrows in the figure show the application points of the multipurpose grease.



#### ASSEMBLY

Assembly is in the reverse order of disassembly.

## Inspection and Adjustment

INFOID:000000007207297

#### FITTING INSPECTION

- Check that the glass fits 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 bolts, guide rail bolts, and glass and guide rail bolts to correct the glass position if the clearance between the glass and sash is not parallel.