

SECTION **GW** GLASS & WINDOW SYSTEM

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

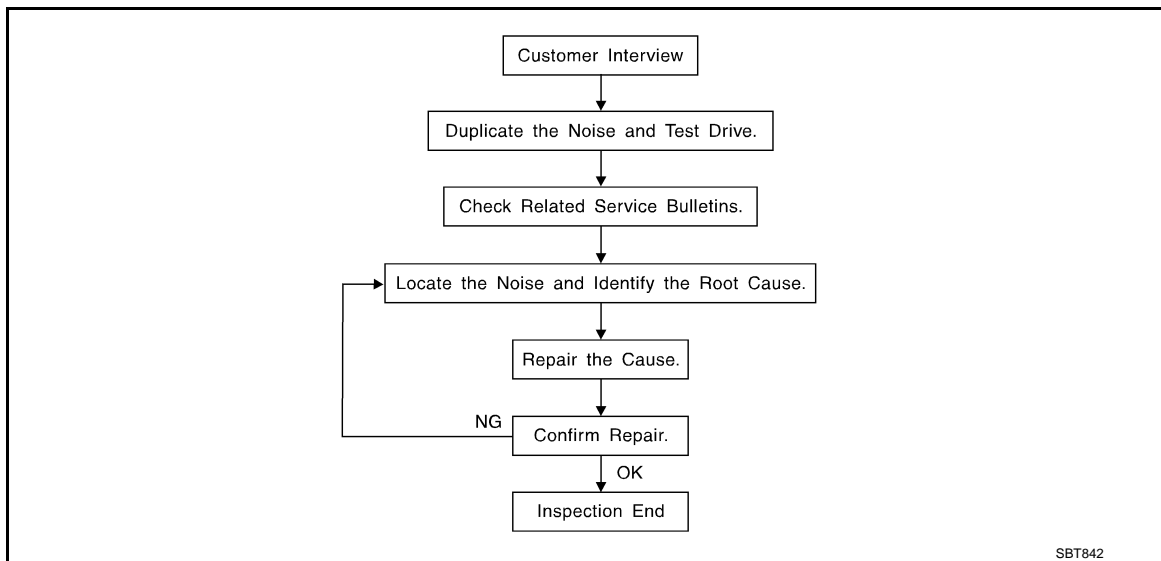
< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:000000005513246



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 [GW-6, "Diagnostic Worksheet"](#). This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, 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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< 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.

If the noise can be duplicated easily during the test drive, do the following with the vehicle stopped to help identify the source of the noise.

- 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 models, drive position on 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 the 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, and mechanics stethoscope).
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(s) 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, creating a new noise.
 - 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.
 - Feeling for a vibration by hand by touching the component(s) that is / are suspected to be the cause of the noise.
 - 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 [GW-4. "Inspection Procedure"](#).

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 components, 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 the authorized NISSAN Parts Department.

CAUTION:

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 ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

- 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)

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 × 50 mm (1.969 × 1.969 in)
- 73982-50Y00: 10 mm (0.394 in) thick, 50 × 50 mm (1.969 × 1.969 in)

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.181 × 1.969 in)

FELT CLOTHTAPE

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

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

- 68370-4B000: 15 × 25 mm (0.591 × 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:000000005513247

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:

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment
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) causing the noise.

SUNROOF/HEADLINING

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

1. Sunroof lid, rail, linkage, or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
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.

SEATS

When isolating seat noise it is important to note the position the seat is in and the load placed on the seat 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
2. A squeak between the seat pad cushion and frame
3. The rear seatback lock and bracket

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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

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GW

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet

INFOID:000000005513248



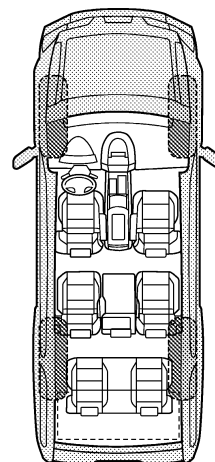
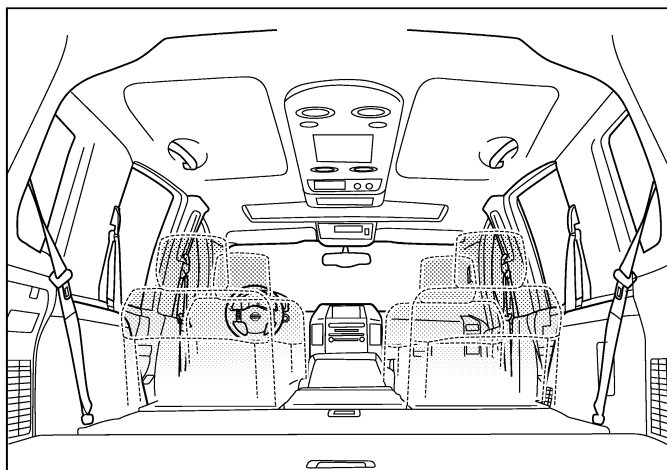
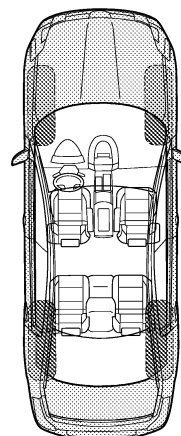
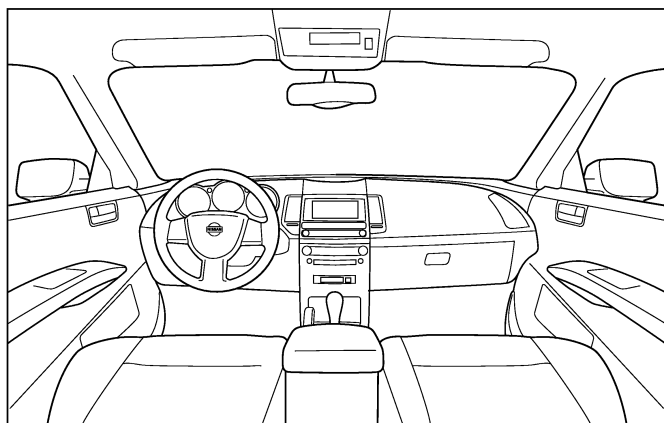
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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.

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

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

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

III. WHEN DRIVING:

- ☐ 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 ____ minutes

IV. WHAT TYPE OF NOISE

- ☐ squeak (like tennis shoes on a clean floor)
- ☐ creak (like walking on an old wooden floor)
- ☐ rattle (like shaking a baby rattle)
- ☐ knock (like a knock 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	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise verified on test drive	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise source located and repaired	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Follow up test drive performed to confirm repair	<input type="checkbox"/>	<input type="checkbox"/>	_____

VIN: _____ Customer Name: _____
W.O.# _____ Date: _____

This form must be attached to Work Order

PIIB8742E

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000005716238

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:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- 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 Air Bag Diagnosis Sensor Unit or other Air Bag 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.

FOR USA AND CANADA : Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:000000005716240

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

2. Turn the push-button ignition switch to ACC position.
(At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.

PRECAUTIONS

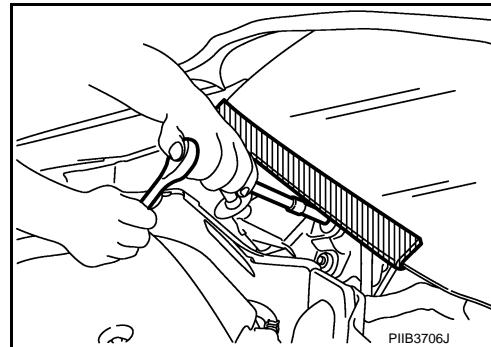
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5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

FOR USA AND CANADA : Precaution for Procedure without Cowl Top Cover

INFOID:000000005513250

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



FOR USA AND CANADA : Handling for Adhesive and Primer

INFOID:000000005513251

- Never 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.

FOR MEXICO

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

INFOID:000000005716239

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

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- 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 Air Bag Diagnosis Sensor Unit or other Air Bag 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.

FOR MEXICO : Precaution Necessary for Steering Wheel Rotation after Battery Dis-

PRECAUTIONS

< PRECAUTION >

connect

INFOID:000000005716241

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

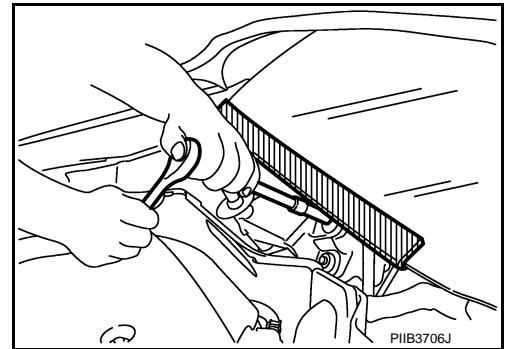
Supply power using jumper cables if battery is discharged.

2. Turn the push-button ignition switch to ACC position.
(At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

FOR MEXICO : Precaution for Procedure without Cowl Top Cover

INFOID:000000005716236

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



FOR MEXICO : Handling for Adhesive and Primer

INFOID:000000005716237

- Never 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

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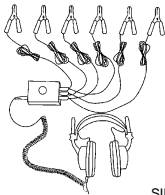

PREPARATION

PREPARATION

Special Service Tools

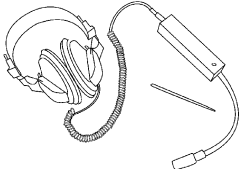
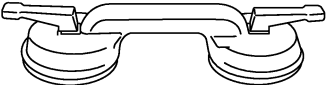
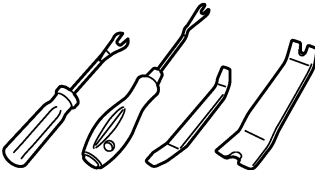
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

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

Commercial Service Tools

INFOID:000000005513253

Tool name	Description
Engine ear  SIIA0995E	Locates the noise
Suction lifter  PIIB1805J	Holds the windshield glass, side window glass, back door window glass and door glass
Remover tools  JMKIA3050ZZ	Removes the clips, pawls and metal clips

WINDSHIELD GLASS

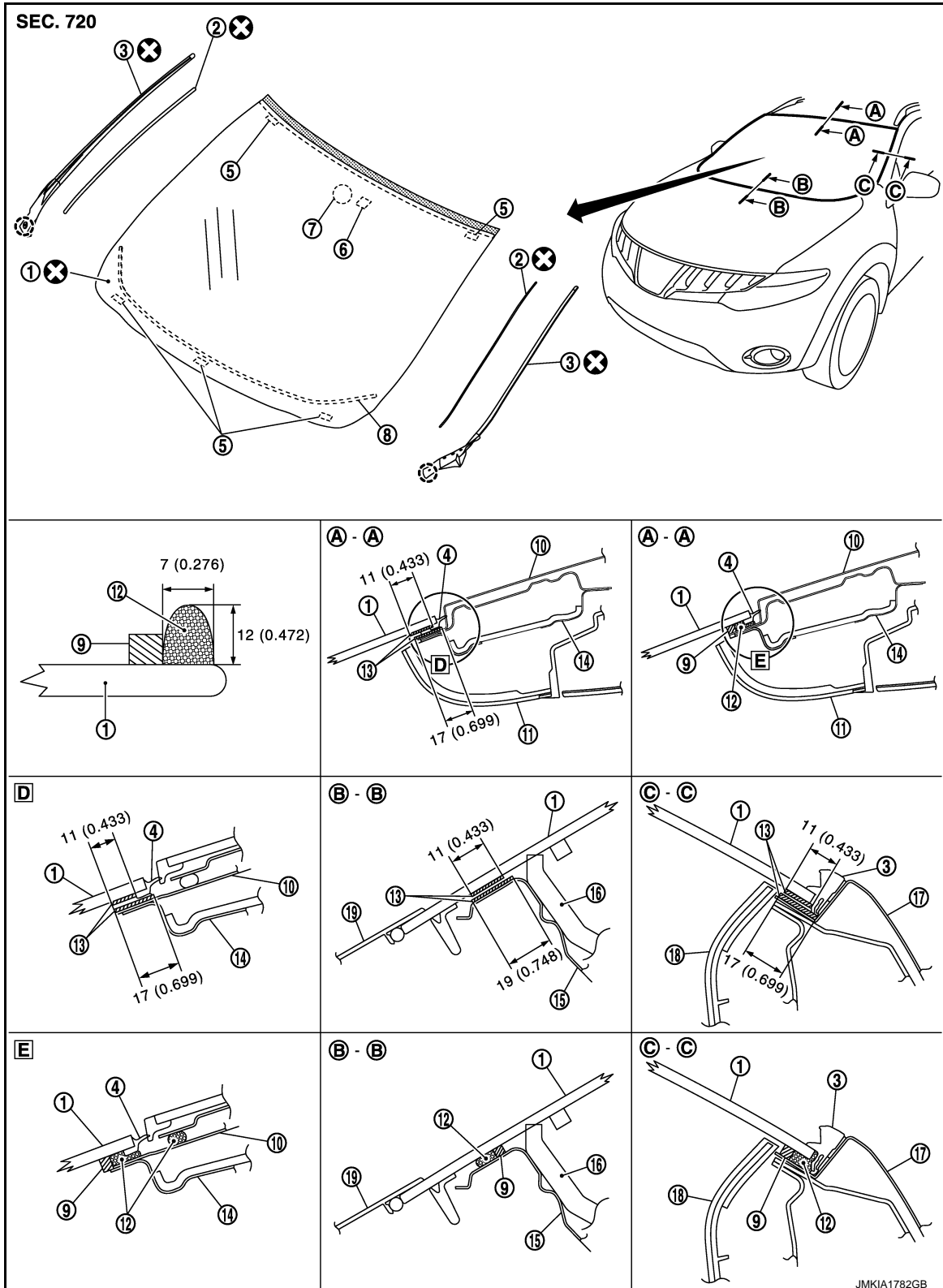
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REMOVAL AND INSTALLATION

WINDSHIELD GLASS

Exploded View

INFOID:000000005513254



WINDSHIELD GLASS

< REMOVAL AND INSTALLATION >

- | | | |
|-------------------------------|---------------------|------------------------------|
| 1. Windshield glass | 2. Fastener | 3. Windshield molding (side) |
| 4. Windshield molding (upper) | 5. Spacer | 6. Mirror base |
| 7. Rain sensor bracket | 8. Insulator | 9. Dam sealant rubber |
| 10. Roof | 11. Headlining ASSY | 12. Adhesive |
| 13. Primer | 14. Roof rail | 15. Cowl top center |
| 16. Insulator dash lower | 17. Body side outer | 18. Front pillar garnish |

○ :Clip

Unit: mm (in)

Note:

- D and E on the exploded view are sections of sunroof models.
- The windshield glass, windshield molding upper, spacer, mirror base, rain sensor bracket, insulator and dam sealant rubber constitute the windshield glass assembly.

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

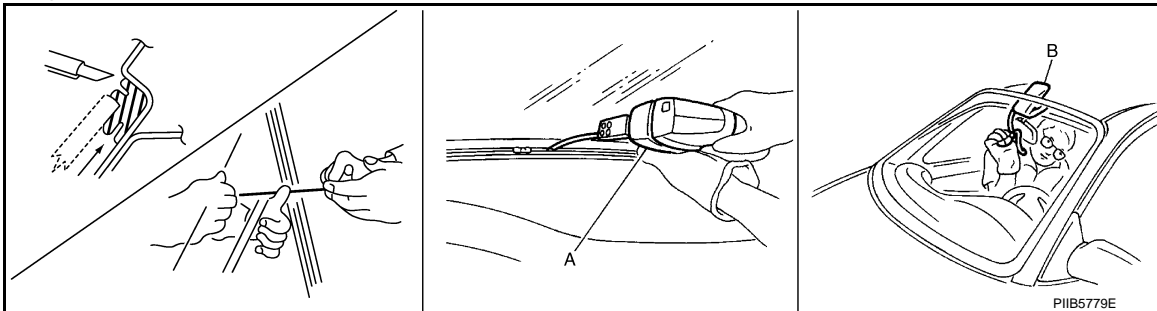
INFOID:000000005513255

REMOVAL

CAUTION:

Replace the windshield glass assembly with a new part after removal as it cannot be reused.

1. Remove the front pillar garnish (LH/RH). Refer to [INT-20, "Removal and Installation"](#).
2. Remove partially the headlining (front edge). Refer to the following.
 - For normal roof. Refer to [INT-27, "NORMAL ROOF : Removal and Installation"](#).
 - For sunroof. Refer to [INT-30, "SUNROOF : Removal and Installation"](#).
3. Remove the front wiper arms (LH/RH). Refer to [WW-130, "Removal and Installation"](#).
4. Remove the cowl top cover. Refer to [EXT-21, "Removal and Installation"](#).
5. Remove the roof side molding. Refer to [EXT-32, "SUNROOF : Removal and Installation"](#).
6. Remove glass using piano wire or power cutting tool (A) and an inflatable pump bag (B) after removing moldings.



WARNING:

Always wear safety glasses and heavy gloves to prevent injury.

CAUTION:

- Be careful not to scratch the glass when removing.
- Never set or stand the glass on its edge. Small chips may develop into cracks.

INSTALLATION

- The dam rubber and insulator should be installed in position.
- Use a genuine Nissan Urethane Adhesive Kit (if available) or equivalent and follow the instructions provided with it.
- 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.
- 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.

WINDSHIELD GLASS

< REMOVAL AND INSTALLATION >

- The materials contained in the kit are harmful if swallowed, and may irritate skin and eyes. Never let them in contact with the skin and eyes.
- Use in an open, well ventilated location. Never breathe 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 windshield in case of an accident.

CAUTION:

- Perform adjustment of front wiper arms stop location. Refer to [WW-130, "Adjustment"](#).
- Never use an adhesive which is past its usable term. Shelf life of this product is limited to six months after the date of manufacture. Carefully adhere to the expiration or manufacture date printed on the box.
- Keep primers and adhesive in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Never leave primers or adhesive cartridge unattended with their caps open or off.
- The vehicle should not be driven for at least 24 hours or until the urethane adhesive is completely cured. Curing time varies depending on temperature and humidity. The curing time increases under lower temperature and lower humidity.

Inspection

INFOID:000000005513256

REPAIRING WATER LEAKAGE FOR WINDSHIELD

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 windshield area while pushing glass outward.

Apply primer (if necessary) and then urethane adhesive to the leakage point to stop the leakage.

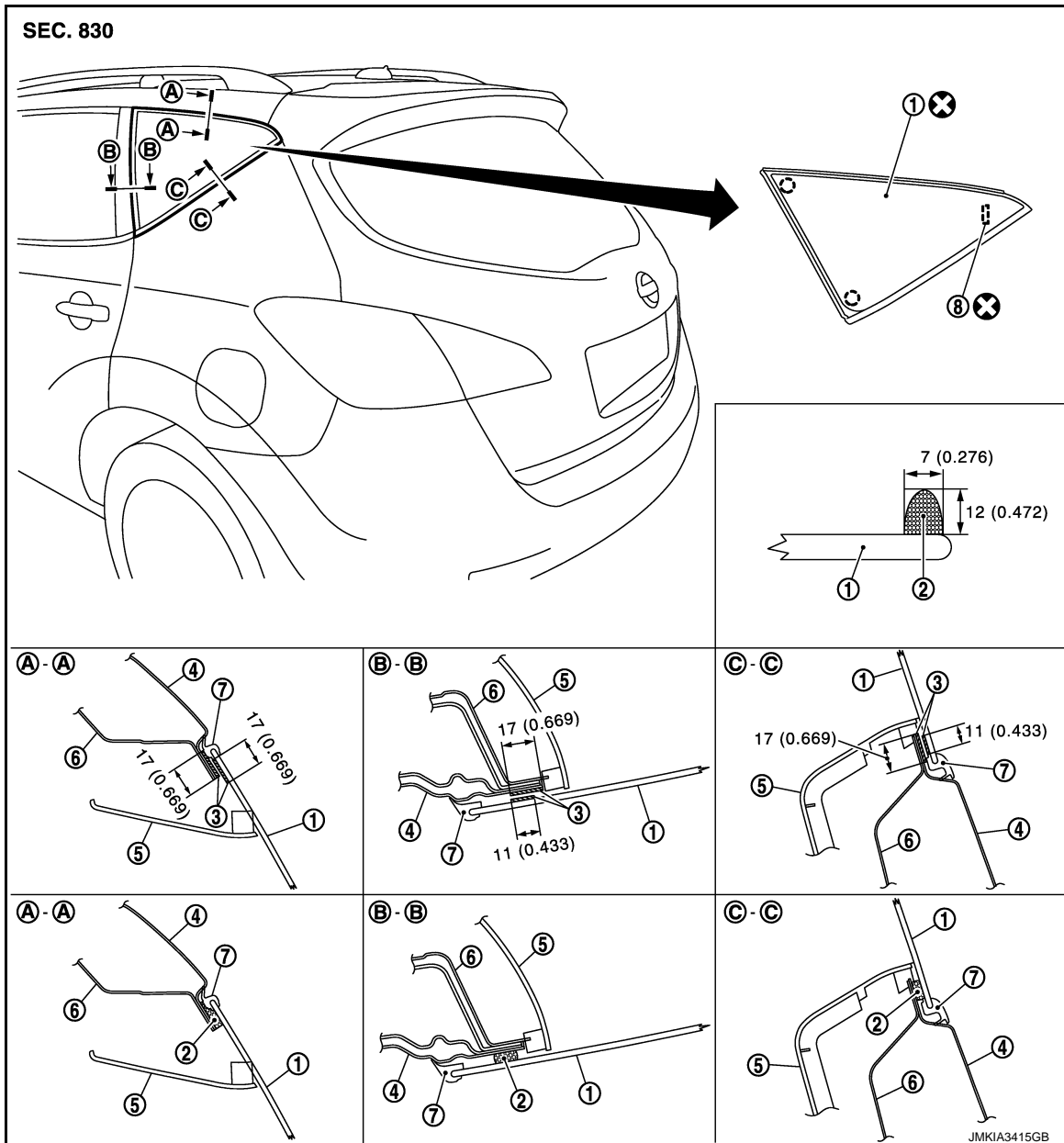
SIDE WINDOW GLASS

< REMOVAL AND INSTALLATION >

SIDE WINDOW GLASS

Exploded View

INFOID:000000005513257



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|--------------------------|--------------------------------|----------------------|
| 1. Side window glass | 2. Adhesive | 3. Primer |
| 4. Body side outer panel | 5. Luggage side upper finisher | 6. Rear pillar inner |
| 7. Molding | 8. Spacer | |

() : Clip

Unit: mm (in)

Note: The side window glass, molding, spacer and clip constitute the side window glass assembly

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005513258

REMOVAL

CAUTION:

Replace the side window glass with a new part after removal as it cannot be reused.

SIDE WINDOW GLASS

< REMOVAL AND INSTALLATION >

1. Remove the luggage side upper finisher. Refer to [INT-20, "Removal and Installation"](#).
2. Apply protective tape around the side window to protect the painted surface from damage.
3. Remove the side window glass using piano wire.

WARNING:

Always wear safety glasses and heavy gloves to prevent injury.

CAUTION:

- Be careful not to scratch the glass when removing.
- Never set or stand the glass on its edge. Small chips may develop into cracks.

INSTALLATION

- Use a genuine Nissan Urethane Adhesive Kit (if available) or equivalent and follow the instructions provided with it.
- 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.
- 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. Never let them in contact with the skin and eyes.
- Use in an open, well ventilated location. Never breathe 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 side window in case of an accident.

CAUTION:

- Never use an adhesive which is past its usable term. Shelf life of this product is limited to six months after the date of manufacture. Carefully adhere to the expiration or manufacture date printed on the box.
- Keep primers and adhesive in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Never leave primers or adhesive cartridge unattended with their caps open or off.
- The vehicle should not be driven for at least 24 hours or until the urethane adhesive is completely cured. Curing time varies depending on temperature and humidity. The curing time will increase under lower temperature and lower humidity.

Inspection

INFOID:0000000005513259

Repairing Water Leakage for side window glass

Leakage can be repaired without removing 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 side window glass area while pushing glass outward.

Apply primer (if necessary) and then urethane adhesive to the leakage point to stop the leakage.

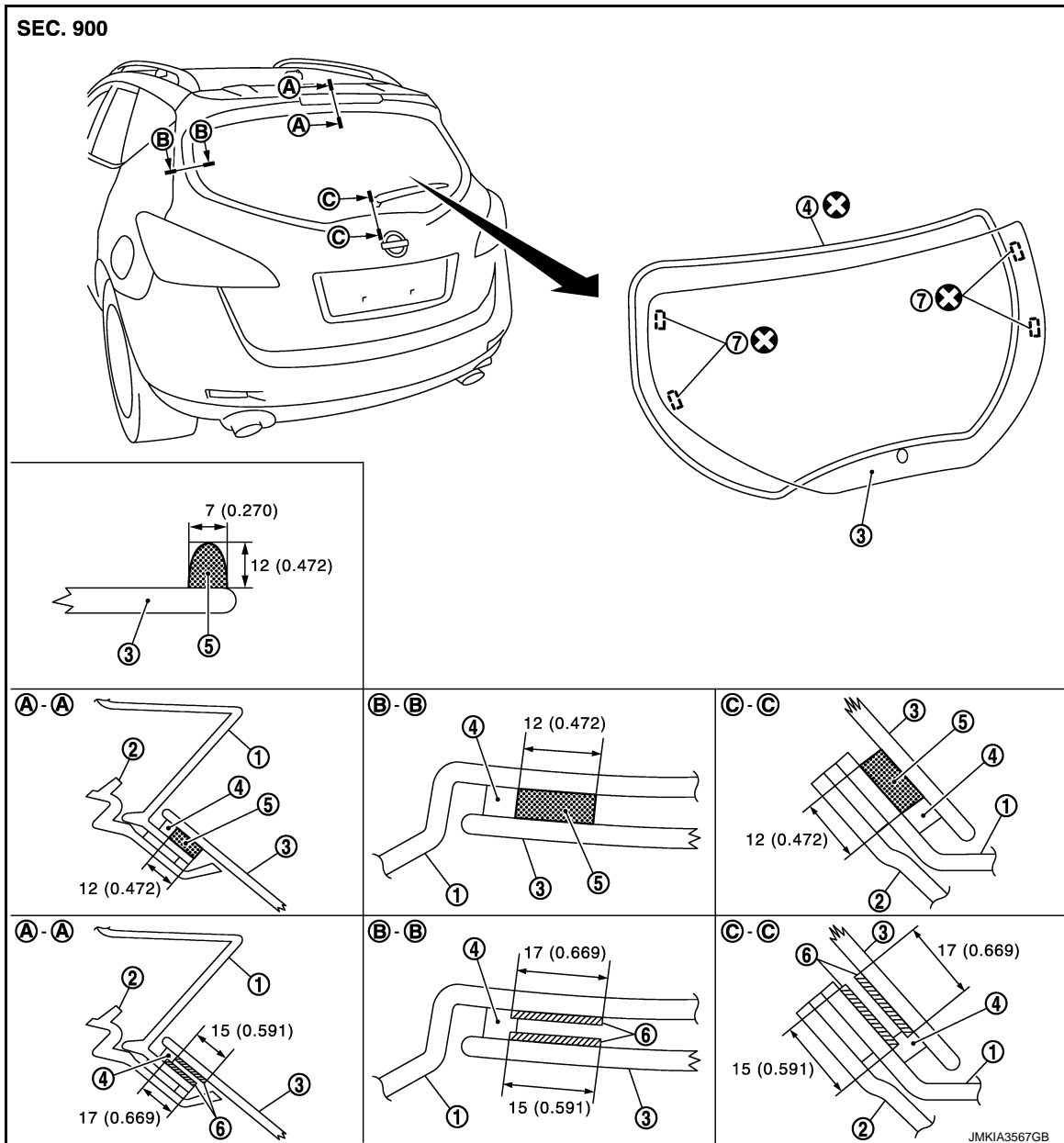
BACK DOOR WINDOW GLASS

< REMOVAL AND INSTALLATION >

BACK DOOR WINDOW GLASS

Exploded View

INFOID:000000005513260



- | | | |
|--------------------|--------------------|---------------------------|
| 1. Back door outer | 2. Back door inner | 3. Back door window glass |
| 4. Dam rubber | 5. Adhesive | 6. Primer |
| 7. Fastener | | |

Unit: mm (in)

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005513261

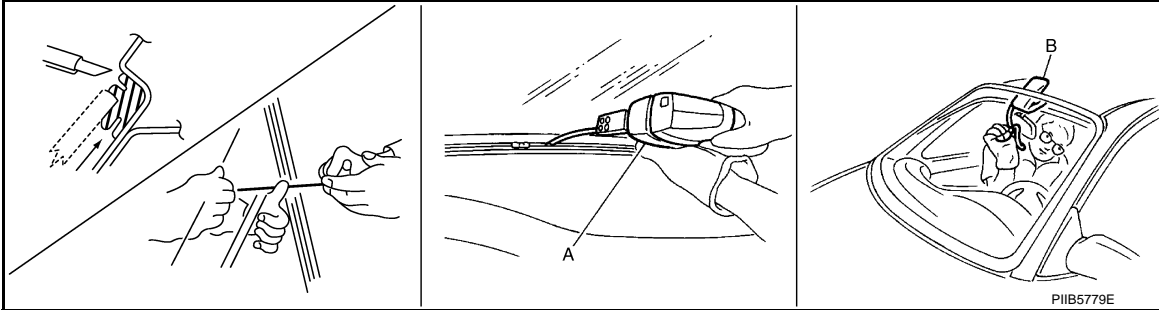
REMOVAL

1. Remove the back door finisher inner. Refer to [INT-38, "Removal and Installation"](#).
2. Remove the connectors and grounds for the back door window defogger.
3. Remove the rear wiper arm and motor. Refer to [WW-138, "Removal and Installation"](#).

BACK DOOR WINDOW GLASS

< REMOVAL AND INSTALLATION >

4. Remove glass using piano wire or power cutting tool (A) and an inflatable pump bag (B) after removing molding using pliers.



• NOTE:

Mark the body and the glass with matching marks if the back door window glass is reused.

WARNING:

Always wear safety glasses and heavy gloves to prevent injury.

CAUTION:

- Never use a cutting knife or power cutting tool when the back door window glass is reused.
- Be careful not to scratch the glass when removing.
- Never set or stand the glass on its edge. Small chips may develop into cracks.

INSTALLATION

- The dam rubber should be installed in position.
- Use a genuine Nissan Urethane Adhesive Kit (if available) or equivalent and follow the instructions provided with it.
- 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.
- 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. Never let them in contact with the skin and eyes.
- Use in an open, well ventilated location. Never breathe 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 in case of an accident.

CAUTION:

- Perform adjustment of rear wiper arm stop location. Refer to [WW-138, "Adjustment"](#).
- Never use an adhesive which is past its usable term. Shelf life of this product is limited to six months after the date of manufacture. Carefully adhere to the expiration or manufacture date printed on the box.
- Keep primers and adhesive in a cool, dry place. Ideally, they should be stored in a refrigerator.
- Never leave primers or adhesive cartridge unattended with their caps open or off.
- The vehicle should not be driven for at least 24 hours or until the urethane adhesive is completely cured. Curing time varies depending on temperature and humidity. The curing time increases under lower temperature and lower humidity.
- If the substrate of the glass joining surface on the back door panel side is exposed to the air, exchange the back door assembly without recoating.
- Never apply paint on the back door panel surface which is in contact with the glass when replacing the back door assembly.

Inspection

INFOID:000000005513262

REPAIRING WATER LEAKAGE FOR BACK DOOR 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 back door window glass area while pushing glass outward.

Apply primer (if necessary) and then urethane adhesive to the leakage point to stop the leakage.

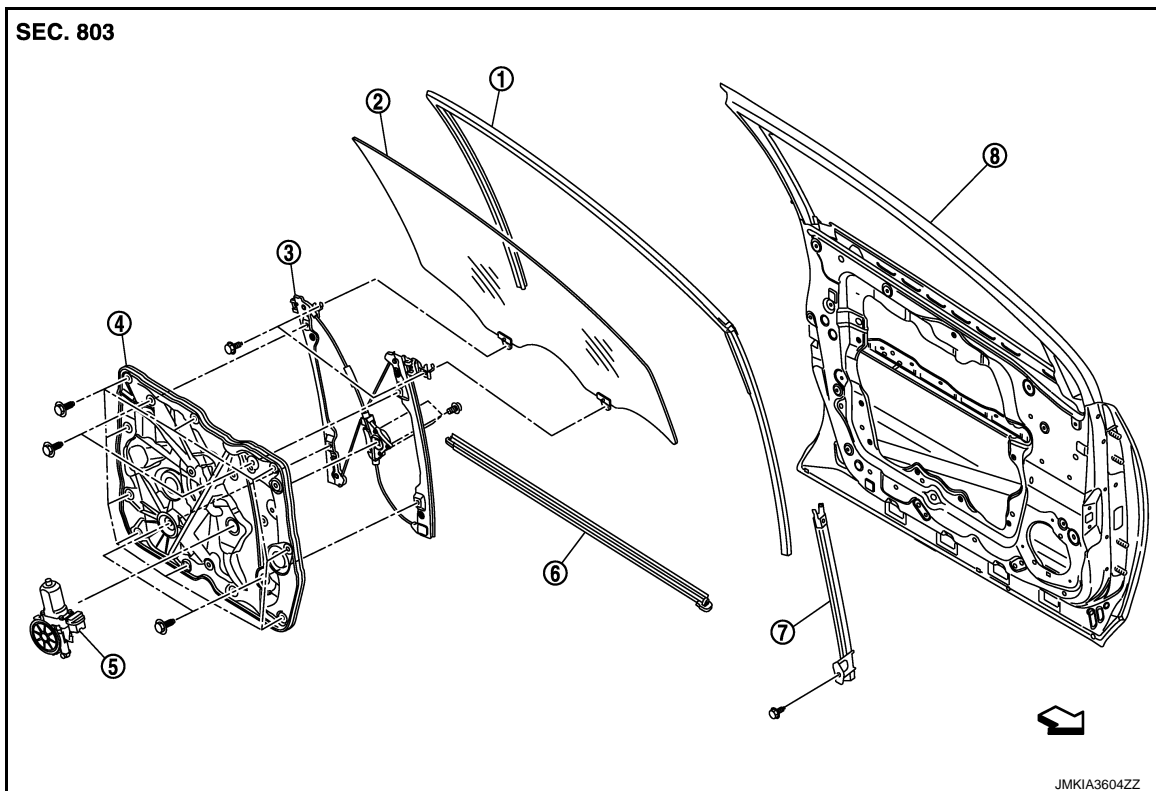
FRONT DOOR GLASS

< REMOVAL AND INSTALLATION >

FRONT DOOR GLASS

Exploded View

INFOID:000000005513263



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|--------------------------|-----------------------|---------------------------|
| 1. Front door glass run | 2. Front door glass | 3. Regulator assembly |
| 4. Module base | 5. Power window motor | 6. Front door inside seal |
| 7. Front door lower sash | 8. Front door panel | |

↩ : Vehicle front

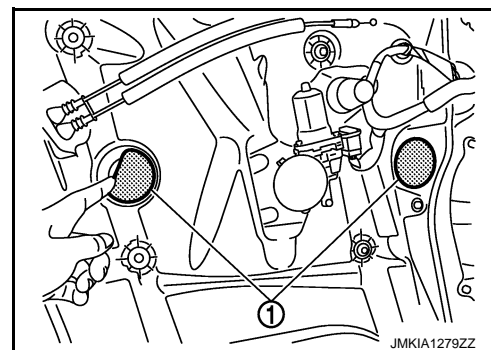
GW

Removal and Installation

INFOID:000000005513264

REMOVAL

1. Remove the front door finisher. Refer to [INT-12. "FRONT DOOR FINISHER : Removal and Installation"](#).
2. Remove both seals (1) as shown in the figure.



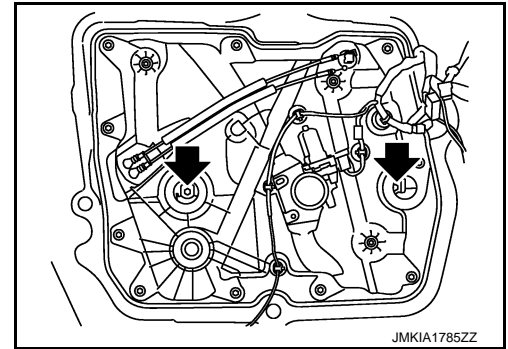
3. Reconnect the power window main switch.

FRONT DOOR GLASS

< REMOVAL AND INSTALLATION >

4. Operate the power window main switch to raise or lower the door window until the glass mounting bolts can be seen.
5. Remove the glass mounting bolts.

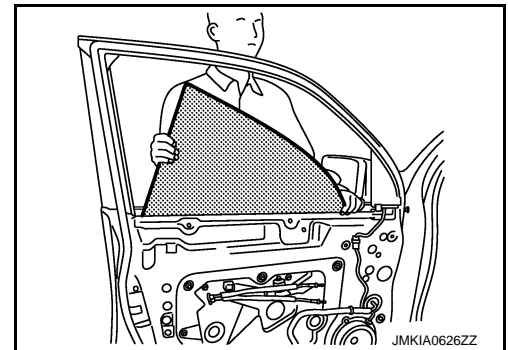
← : Bolt



6. Remove the front door mirror inner cover.
7. Remove the front door inside seal.
8. Hold securely the front door glass and pull it out of the sash to remove the door glass.

NOTE:

Never raise the front glass at the top upper of the door after the door glass is removed.



9. Remove the front door glass run.
10. Remove the front door lower sash lower bolt, then remove the front door lower sash.

INSTALLATION

Install in the reverse order of removal.

Inspection and Adjustment

INFOID:000000005513265

SYSTEM INITIALIZATION

Initialize the system if any of the following work has been done.

- Electric power supply to power window switch or motor is interrupted by blown fuse or disconnecting battery cable, etc.
- Removal and installation of the regulator assembly.
- Removal and installation of the motor from the regulator assembly.
- Removal and installation of the harness connector of the power window switch.
- Removal and installation of the door glass.
- Removal and installation of the front door glass run.
- Disconnection and connection of the minus terminal of the battery.

Initialization

Follow the steps below after installing each component to the vehicle.

1. Disconnect the minus terminal of battery or disconnect power window switch harness connector temporarily. Then reconnect after at least 1 minute.
2. Turn ignition switch ON.
3. Operate power window switch to fully open the window.
4. Draw fully the power window switch in the up direction (auto close position) and hold. Continue holding the switch even when window is completely closed and then release after more than 3 seconds.
5. Inspect the anti-pinch system function.

NOTE:

Initialization may be cancelled with continuous opening and closing operation. In this case, initialize the system.

INSPECT THE FUNCTION OF THE ANTI-PINCH SYSTEM

FRONT DOOR GLASS

< REMOVAL AND INSTALLATION >

1. Fully open the door glass.
 2. Place a wooden piece (wooden hammer handle, etc.) at near fully closed position.
 3. Perform fully closing operation with auto up switch.
 - Check that the glass reverses without pinching the wooden piece, is lowered approximately 150 mm (5.906 in) or for more than 3 seconds and then stops.
 - The glass should not be raised with power window main switch operated while it is reversing or lowering.
- CAUTION:**
- **Be careful not to be pinched.**
 - **Check that the auto up function is normal before the inspection following the system initialization.**

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.

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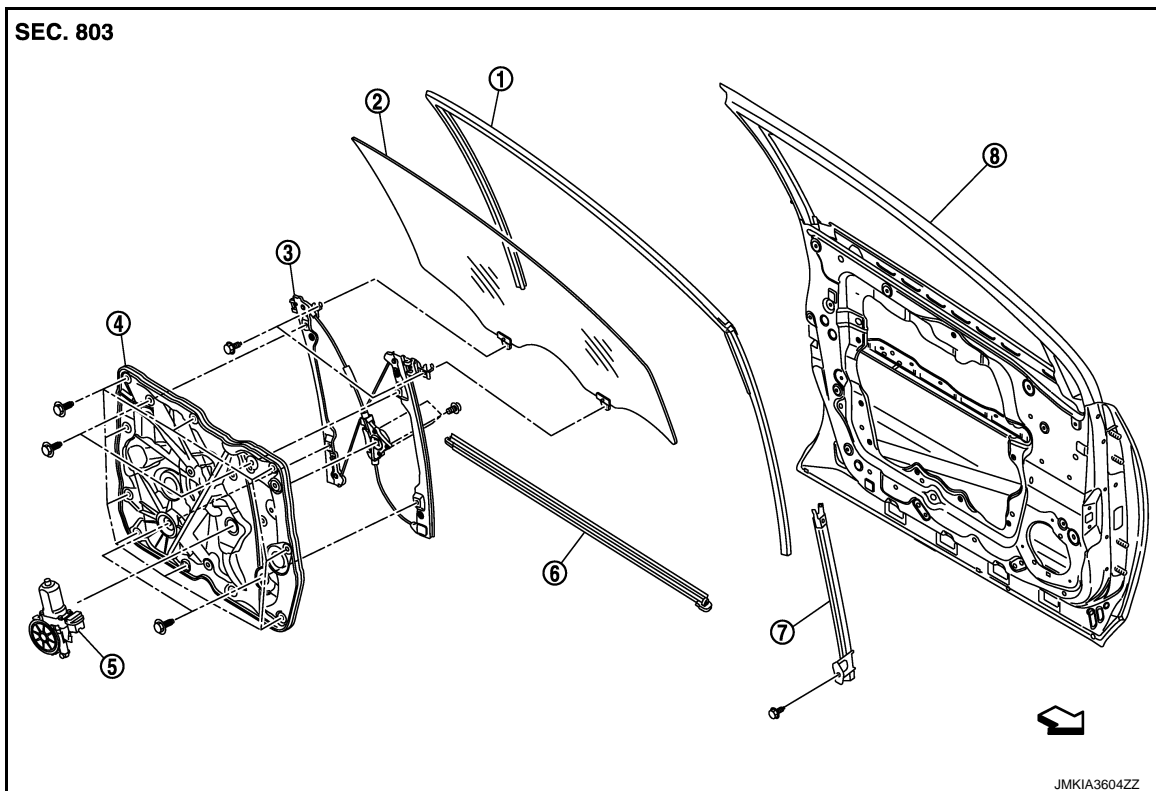
FRONT REGULATOR

< REMOVAL AND INSTALLATION >

FRONT REGULATOR

Exploded View

INFOID:000000005513266



- | | | |
|--------------------------|-----------------------|---------------------------|
| 1. Front door glass run | 2. Front door glass | 3. Regulator assembly |
| 4. Module base | 5. Power window motor | 6. Front door inside seal |
| 7. Front door lower sash | 8. Front door panel | |

↙ : Vehicle front

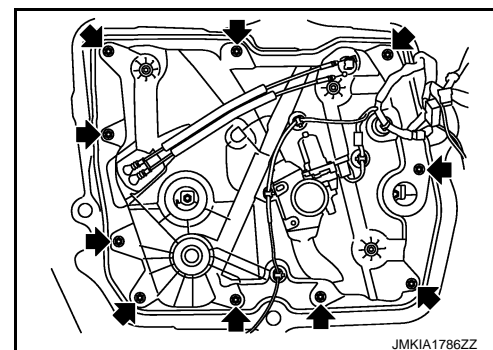
Removal and Installation

INFOID:000000005513267

REMOVAL

1. Remove the front door glass. Refer to [GW-19. "Removal and Installation"](#).
2. Disconnect the power window motor harness connector.
3. Remove the mounting bolts, and pull out the module assembly.
4. Disengage the harness clip from the back of the module assembly, and then remove the module assembly.

⬅ : Bolt



INSTALLATION

Install in the reverse order of removal.

FRONT REGULATOR

< REMOVAL AND INSTALLATION >

Disassembly and Assembly

INFOID:000000005513268

DISASSEMBLY

1. Remove the power window motor from the module assembly.
2. Remove the regulator assembly mounting bolts, then remove the regulator assembly from module base.

ASSEMBLY

Assemble in the reverse order of disassembly.

Inspection and Adjustment

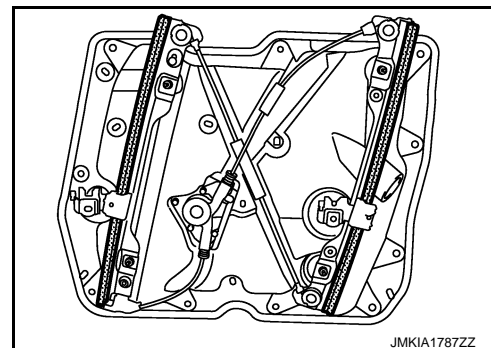
INFOID:000000005513269

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 shadow area in the figure show the application points of the multi-purpose grease.



SYSTEM INITIALIZATION

Initialize the system if any of the following work has been done.

- Electric power supply to power window switch or motor is interrupted by blown fuse or disconnecting battery cable, etc.
- Removal and installation of the regulator assembly.
- Removal and installation of the motor from the regulator assembly.
- Removal and installation of the harness connector of the power window switch.
- Removal and installation of the door glass.
- Removal and installation of the front door glass run.
- Disconnection and connection of the minus terminal of battery.

Initialization

Follow the steps below after installing each component to the vehicle.

1. Disconnect the minus terminal of battery or disconnect power window switch harness connector temporarily. Then reconnect after at least 1 minute.
2. Turn ignition switch ON.
3. Operate power window switch to fully open the window.
4. Draw fully the power window switch in the up direction (auto close position) and hold. Continue holding the switch even when window is completely closed and then release after more than 3 seconds.
5. Inspect the anti-pinch system function.

NOTE:

Initialization may be cancelled with continuous opening and closing operation. In this case, initialize the system.

INSPECT THE FUNCTION OF THE ANTI-PINCH SYSTEM

1. Fully open the door glass.
 2. Place a wooden piece (wooden hammer handle, etc.) at near fully closed position.
 3. Perform fully closing operation with auto up switch.
- Check that the glass reverses without pinching the wooden piece, is lowered approximately 150 mm (5.906 in) or for more than 3 seconds and then stops.
 - The glass should not be raised with power window main switch operated while it is reversing or lowering.

CAUTION:

- Be careful not to be pinched.
- Check that the auto up function is normal before the inspection following the system initialization.

FRONT REGULATOR

< REMOVAL AND INSTALLATION >

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.

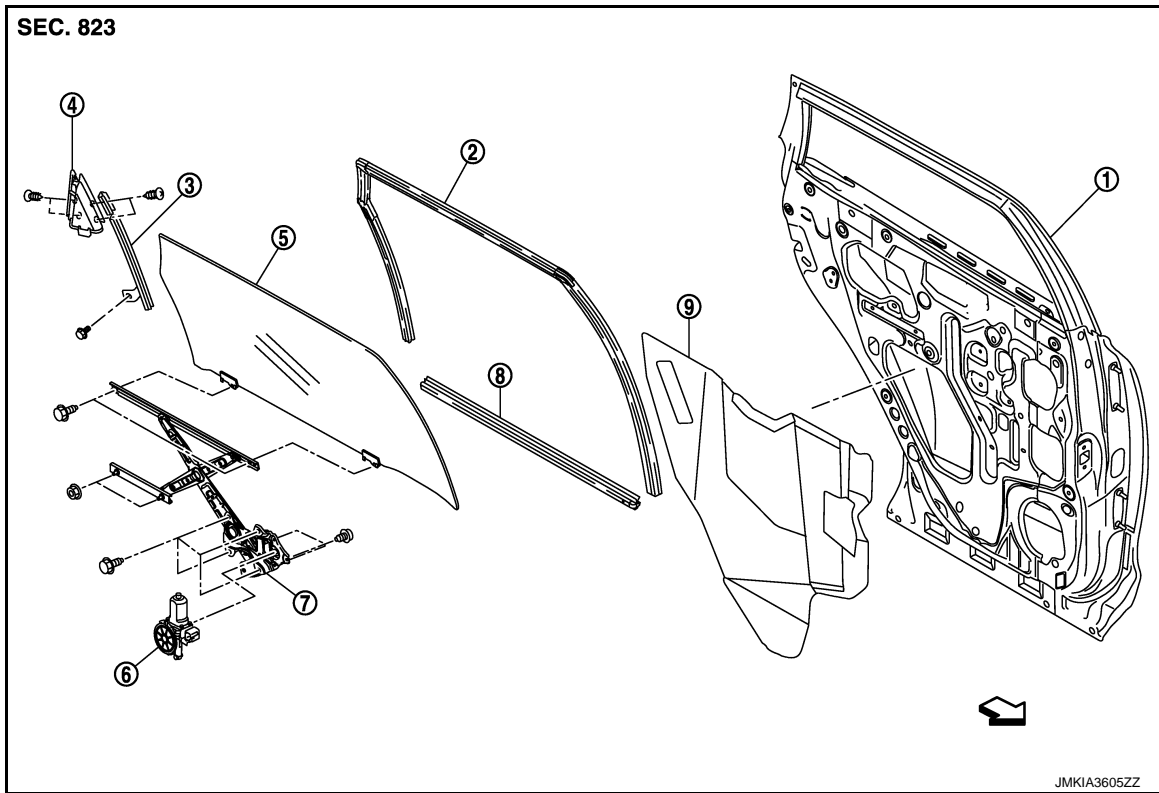
REAR DOOR GLASS

< REMOVAL AND INSTALLATION >

REAR DOOR GLASS

Exploded View

INFOID:000000005513270



- | | | |
|-----------------------|--------------------------|---------------------------|
| 1. Rear door panel | 2. Rear door glass run | 3. Rear door sash (lower) |
| 4. Corner piece | 5. Rear door glass | 6. Power window motor |
| 7. Regulator assembly | 8. Rear door inside seal | 9. Sealing screen |

↶ : Vehicle front

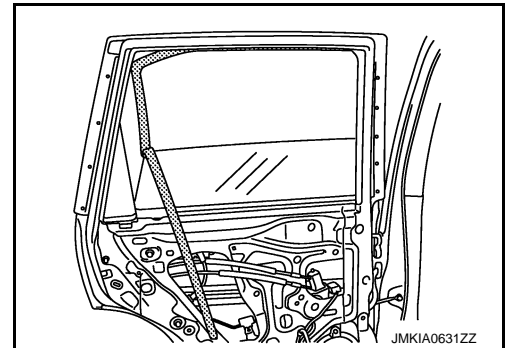
GW

Removal and Installation

INFOID:000000005513271

REMOVAL

1. Remove the rear door finisher. Refer to [INT-20. "Removal and Installation"](#).
2. Disconnect the rear door speaker connector.
3. Remove the rear door outside sash cover. Refer to [EXT-40. "Removal and Installation"](#).
4. Remove partially the rear door glass run.



5. Remove the corner piece assembly fixing screws, then remove the corner piece assembly.
6. Remove the rear door inside seal
7. Remove the sealing screen with a cutter tool.

REAR DOOR GLASS

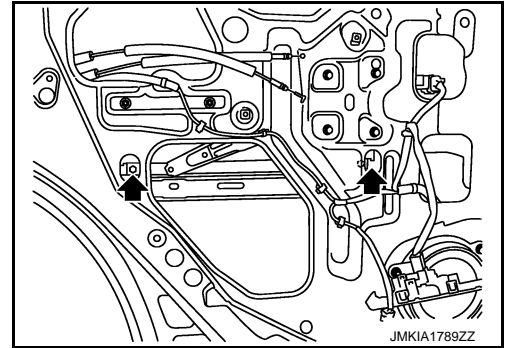
< REMOVAL AND INSTALLATION >

NOTE:

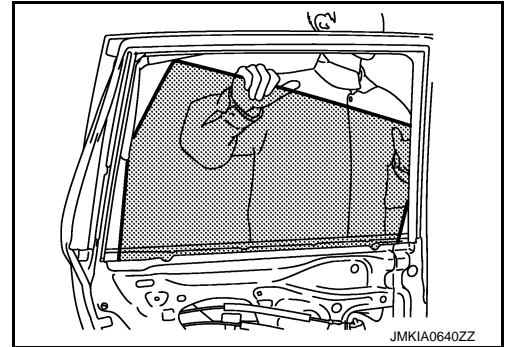
Cut the butyl-tape so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

8. Operate the power window switch to raise/lower the door window until the glass mounting bolts can be seen.
9. Remove the glass mounting bolts.

← : Bolt



10. Remove the rear door glass from inside or outside of door panel.



11. Remove the rear door glass run and rear door sash (lower).

INSTALLATION

Install in the reverse order of removal.

Inspection and Adjustment

INFOID:000000005513272

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 carrier plate mounting bolts to correct the glass position if the clearance between the glass and sash is not parallel.

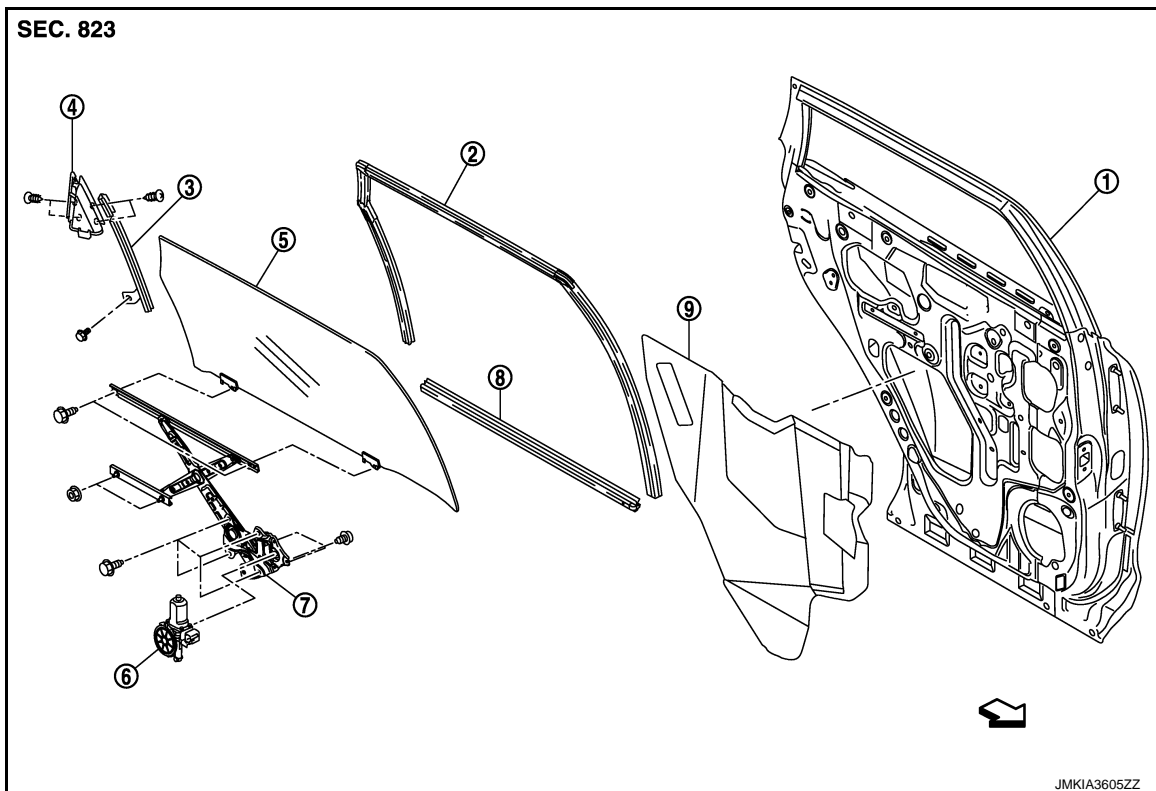
REAR REGULATOR

< REMOVAL AND INSTALLATION >

REAR REGULATOR

Exploded View

INFOID:000000005513273



- | | | |
|-----------------------|--------------------------|---------------------------|
| 1. Rear door panel | 2. Rear door glass run | 3. Rear door sash (lower) |
| 4. Corner piece | 5. Rear door glass | 6. Power window motor |
| 7. Regulator assembly | 8. Rear door inside seal | 9. Sealing screen |

↩ : Vehicle front

GW

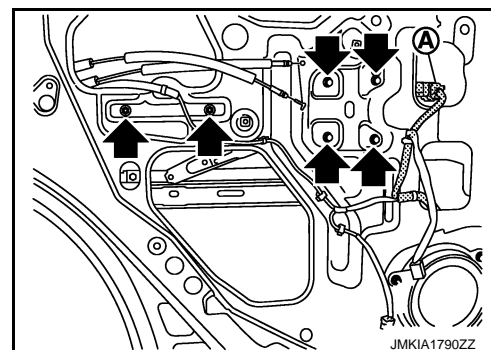
Removal and Installation

INFOID:000000005513274

REMOVAL

1. Remove the rear door glass. Refer to [GW-25, "Removal and Installation"](#).
2. Disconnect the connector for the regulator assembly.
3. Remove the regulator mounting bolts, disconnect the power window motor harness connector (A) and then remove the regulator from the door panel.

⬅ : Bolt



INSTALLATION

Install in the reverse order of removal.

REAR REGULATOR

< REMOVAL AND INSTALLATION >

Disassembly and Assembly

INFOID:000000005513275

DISASSEMBLY

Remove power window motor from regulator assembly.

ASSEMBLY

Assemble in the reverse order of disassembly.

Inspection and Adjustment

INFOID:000000005513276

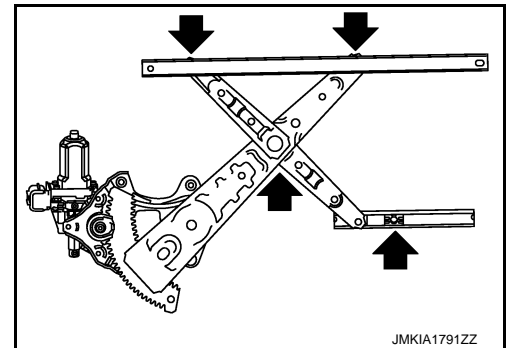
Inspection after Removal

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 multi-purpose grease.

← : Grease application 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 carrier plate mounting bolts to correct the glass position if the clearance between the glass and sash is not parallel.