
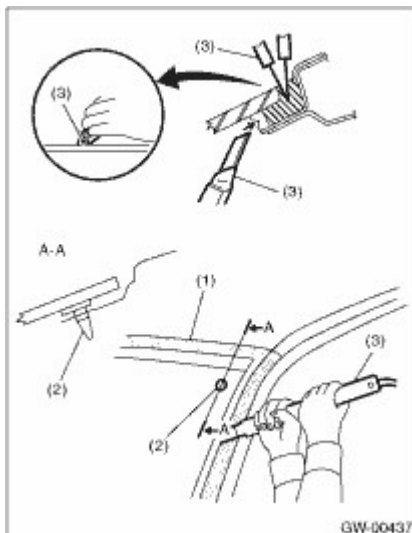


**GLASS/WINDOWS/MIRRORS > Windshield Glass****REMOVAL****1. WHEN USING WINDSHIELD GLASS KNIFE**

- 1.** Remove the cowl panel. 
- 2.** Remove the glass molding.
- 3.** Tape the body side of the circumference of windshield glass for protection.
- 4.** Apply sufficient amount of soapy water to the adhesive part.
- 5.** Make a cut in the adhesive part using a putty knife so that windshield glass knife can be inserted easily.
- 6.** Insert the windshield glass knife into the adhesive.
- 7.** While holding the knife edge and windshield glass edge at a right angle, move the windshield glass knife parallel to the windshield glass edge along the surface and edge of windshield glass to cut the adhesive.

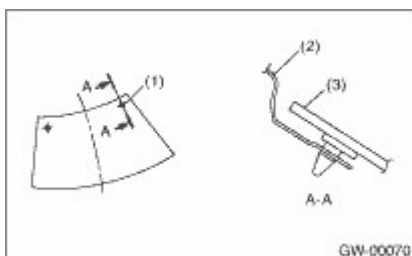
**NOTE:**

- **Do not twist the windshield glass knife.**
- **Cutting of adhesive part shall be started with wider gap between windshield glass and body.**



- (1) Tape for protection  
(2) Locating pin  
(3) Windshield glass knife

- **The locating pins are bonded to the corners of glass. Use piano wire to disconnect the pins.**




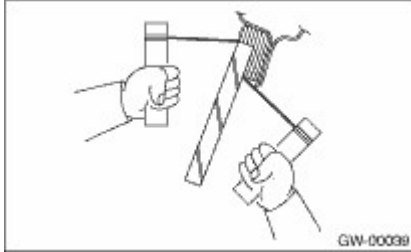
- (1) Locating pin

(2) Body panel

(3) Windshield glass

## 2. WHEN USING PIANO WIRE

1. Remove the cowl panel. 
2. Remove the glass molding.
3. Tape the body side of the circumference of windshield glass for protection.
4. Make a hole in the adhesive part using drill or knife.
5. Pass the piano wire through the hole, and attach both the wire ends securely to pieces of wood.



6. Pull the wire ends alternately to cut off the adhesive part.

### CAUTION:

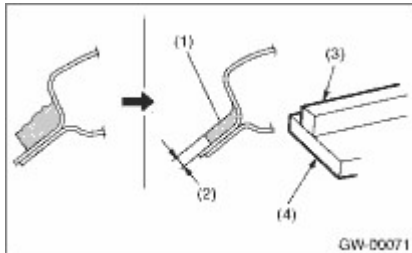
- Do not tightly pull the piano wire against the windshield glass edge.
- Be careful not to damage interior and exterior parts.
- When removal is made with area close to instrument panel, place a protection plate over it. Pay particular attention to the removal.
- Do not cross piano wires. Otherwise they may be cut.

**GLASS/WINDOWS/MIRRORS > Windshield Glass****INSTALLATION**

1. Clean the external circumference of windshield glass with alcohol or white gasoline.
2. Remove the adhesive layer on the body using cutter knife to obtain smooth face of 2 mm (0.08 in) thick.

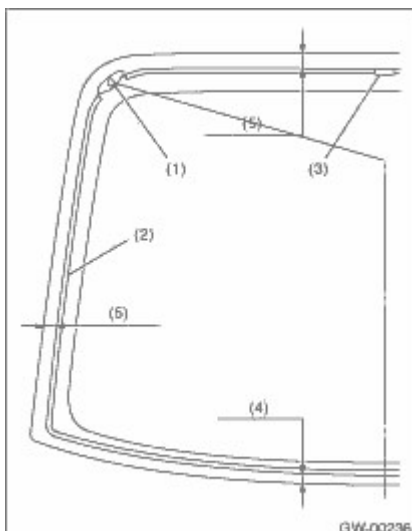
**CAUTION:**

**Be careful not to damage the body and paint surface.**



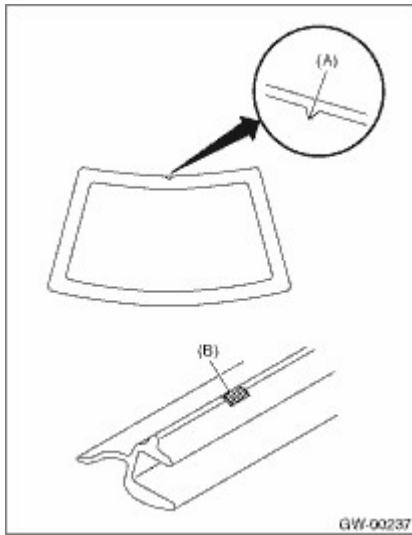
- (1) Adhesive
- (2) 2 mm (0.08 in)
- (3) Dam rubber
- (4) Glass

3. Clean the body with alcohol or white gasoline to eliminate cutting powder, dust and dirt completely from body.
4. Install the dam rubber.



- (1) Locating pin
- (2) Dam rubber
- (3) Fastener
- (4) 15 mm (0.591 in)
- (5) 11 mm (0.433 in)

5. Fit the molding mark (B) to notch (A) and install it.



**6.** Apply the primer to the adhesive surface of glass using sponge.

**Glass primer:**

Betawipe VP 04604 or Betaprime 5001 or equivalent

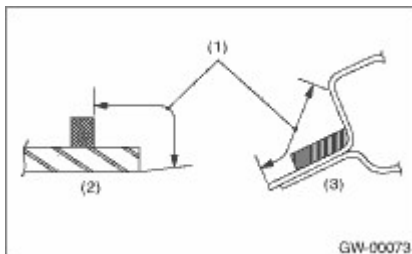
**7.** Apply the primer to the adhesive layer of body.

**Painted surface primer:**

Betaprime 5402 or equivalent

**NOTE:**

- **Primer once attached to the painted surface of the body and internal trim is hard to wipe off. Mask the circumference of such area.**
- **Let primer dry for about ten minutes before installing the glass.**
- **Do not touch the surface coated with primer.**

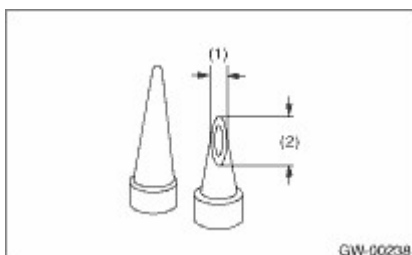


(1) Application of primer

(2) Glass side

(3) Body side

**8.** Cut off the cartridge nozzle tip as shown and set it in sealant gun.



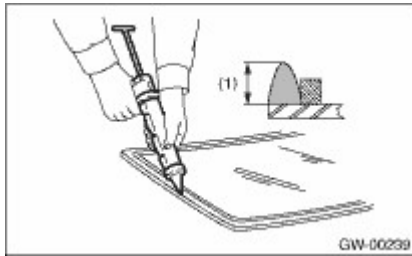
(1) 10 mm (0.39 in)

(2) 15 mm (0.59 in)

**9.** Apply adhesive to the glass end surface as shown.

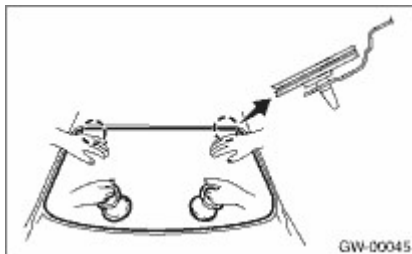
**Adhesive:**

Gurit-ESSEX Betaseal 1502 or equivalent



(1) 12 – 15 mm (0.47 – 0.59 in)

**10.** Fit the locating pins to vehicle body using suction rubber cup to install the windshield glass.



**11.** Lightly press the windshield glass for tight fit.

**12.** Make flush the adhesive surface juttred out using spatula.

**13.** After completion of all work, allow the vehicle to stand for about 24 hours.

**NOTE:**

- **When door is opened/closed after glass is bonded, always lower the door glass first, and then open/close it carefully.**

- **Move the vehicle slowly.**

- **For minimum drying time and vehicle standing time before driving after bonding, follow instructions or instruction manual from the adhesive manufacturer.**

**14.** After curing of adhesive, pour the water on external surface of vehicle to check that there are no water leaks.

**NOTE:**

**When a vehicle is returned to the user, tell him or her that the vehicle should not be subjected to heavy impact for at least three days.**

**15.** Install the cowl panel. 