

## 13. Windshield Glass

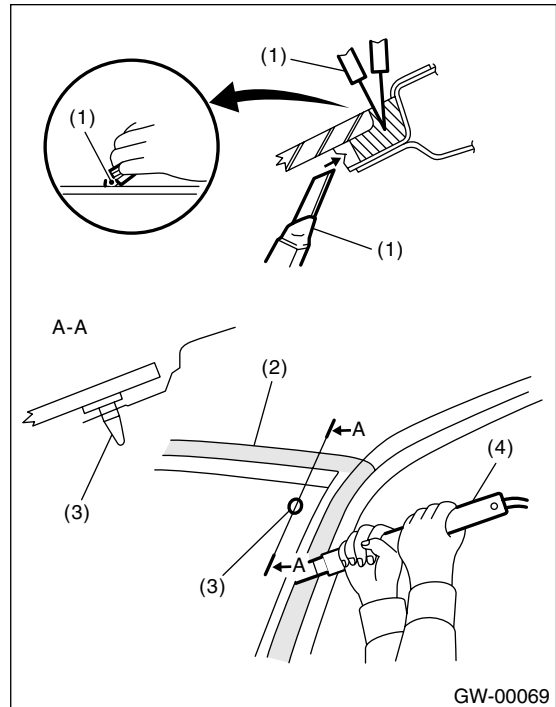
### A: REMOVAL

#### 1. USING WINDSHIELD KNIFE

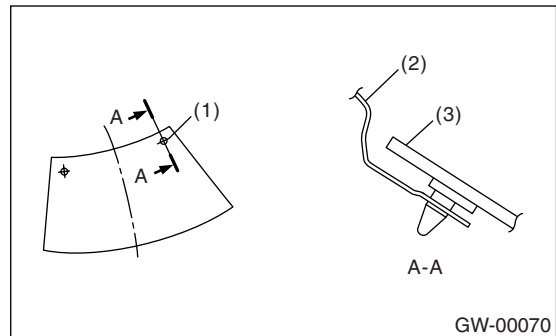
- 1) Remove the cowl panel. <Ref. to EI-29, REMOVAL, Cowl Panel.>
- 2) Remove the glass molding.
- 3) Tape the body side of the circumference of windshield glass for protection.
- 4) Apply sufficient amount of soapy water to the adhesive layer.
- 5) Insert the windshield knife into the adhesive layer.
- 6) While holding the knife edge and windshield glass edge at a right angle, move the windshield knife in parallel to the windshield glass edge along face and edge of windshield glass to cut the adhesive layer.

**NOTE:**

- Do not twist the windshield knife.
- Cutting of adhesive layer shall be started with wider gap between windshield glass and body.
- Because the matching pins are bonded to corners of glass, use piano wire to cut the pin.



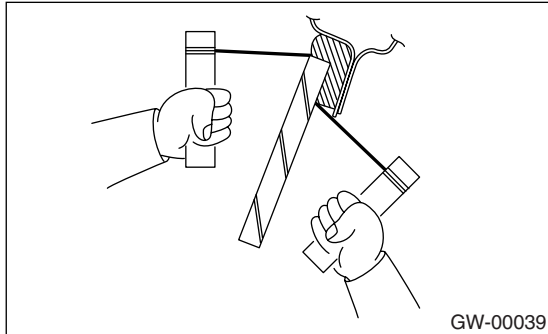
- (1) Putty knife
- (2) Protective tape
- (3) Matching pin
- (4) Windshield glass knife



- (1) Matching pin
- (2) Body panel
- (3) Glass

## 2. USING PIANO WIRE

- 1) Remove the cowl panel. <Ref. to EI-29, REMOVAL, Cowl Panel.>
- 2) Remove the roof molding and upper front molding.
- 3) Tape the body side of the circumference of windshield glass for protection.
- 4) Make a hole in the adhesive layer using a drill or knife.
- 5) Pass the piano wire through the hole, and attach securely both the wire ends to pieces of wood.



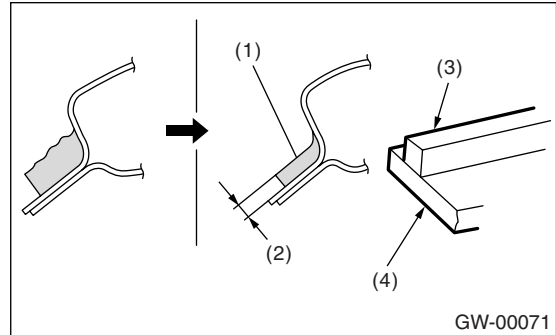
- 6) Pull the wire ends alternately to cut off the adhesive layer.

### CAUTION:

- Do not tightly pull the piano wire against the windshield glass edge.
- Be careful not to damage the 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.

## B: INSTALLATION

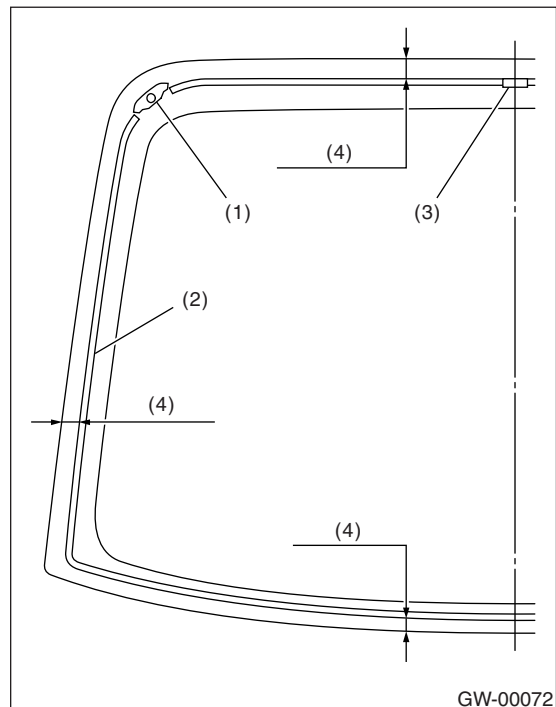
- 1) Clean the external circumference of windshield glass with alcohol or white gasoline.
- 2) Remove the adhesive layer on the body using cutter knife to obtain smooth face 2 mm (0.08 in) thick.



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

- 3) Clean the body with alcohol or white gasoline to remove thoroughly chips, dusts, and dirt from body face.

- 4) Apply the dam rubber to back of glass.

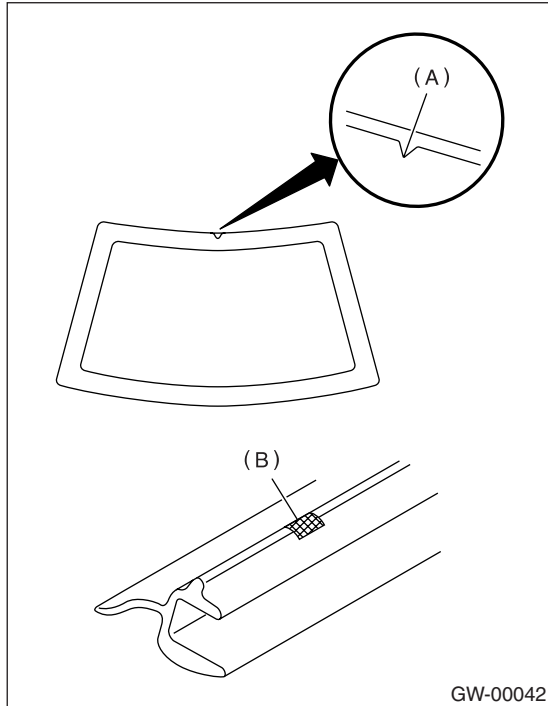


- (1) Matching pin
- (2) Dam rubber
- (3) Fastener
- (4) 13 mm (0.512 in)

# WINDSHIELD GLASS

## GLASS/WINDOWS/MIRRORS

5) Remove the backing of double-faced adhesive tape, and then align the molding mark (B) to notch (A). Attach the molding around the edge of glass, and then press it evenly to fit.



6) Apply primer to the adhesive layer of glass using sponge.

### **Glass primer:**

**Dow Automotive  
U-401 or U-402**

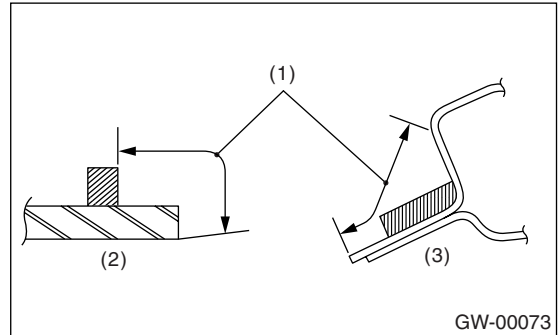
7) Apply primer to the adhesive layer of body.

### **Painted surface primer:**

**Dow Automotive  
U-413**

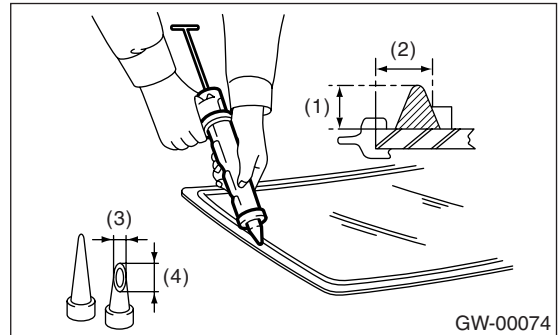
### NOTE:

- Primer once attached to the painted surface of the body and internal trim is hard to wipe off. Mask the circumference of such areas.
- Let the 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 and set it in sealant gun as shown.



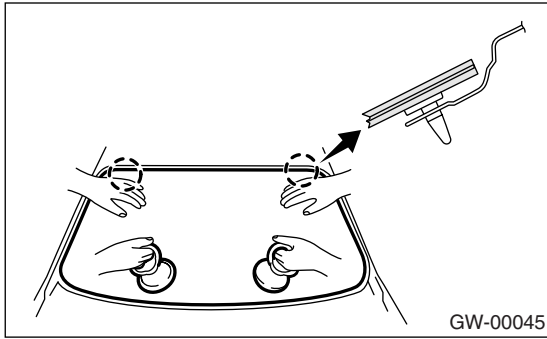
- (1) 10 — 13 mm (0.39 — 0.51 in)
- (2) 13 mm (0.51 in)
- (3) 10 mm (0.39 in)
- (4) 15 mm (0.59 in)

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

### **Adhesive:**

**Dow Automotive  
ESSEX U-400 HV**

10) Fit the matching pins 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 the door is opened/closed after glass is bonded, always lower the door glass and then open/close it carefully.
- Move the vehicle slowly.
- For minimum drying time and time the vehicle must be left standing before driving after bonding, follow instructions or instruction manual from the adhesive manufacturer.

14) After curing of adhesive, pour 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. <Ref. to EI-29, INSTALLATION, Cowl Panel.>