

Windshield Glass

GLASS/WINDOWS/MIRRORS

13. Windshield Glass

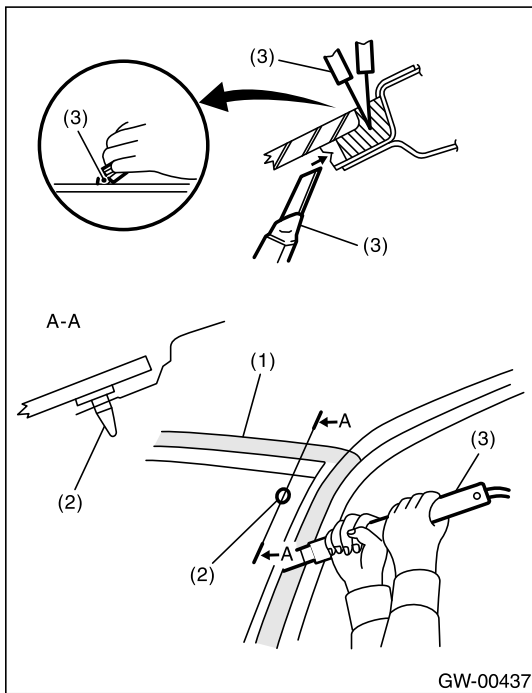
A: REMOVAL

1. USING WINDSHIELD KNIFE

- 1) Remove the cowl panel. <Ref. to EI-34, 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 along face and edge of windshield glass to cut the adhesive layer.

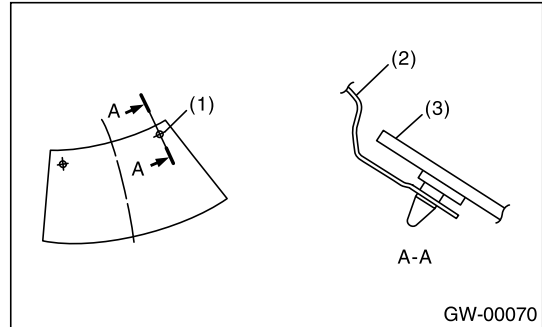
NOTE:

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



- (1) Protective tape
- (2) Locating pin
- (3) Windshield knife

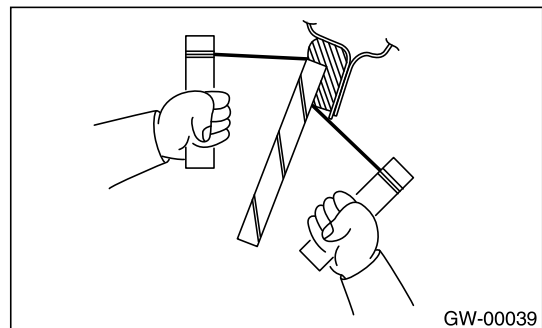
- Because the locating pins are bonded to corners of glass, use piano wire to cut the pin.



- (1) Locating pin
- (2) Body panel
- (3) Front glass

2. USING PIANO WIRE

- 1) Remove the cowl panel. <Ref. to EI-34, REMOVAL, Cowl Panel.>
- 2) Remove the glass molding.
- 3) Tape the body side of circumference of windshield glass for protection.
- 4) Make a hole in adhesive layer using a drill or knife.
- 5) Pass the piano wire through hole, and attach securely both the piano wire ends to pieces of wood.



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

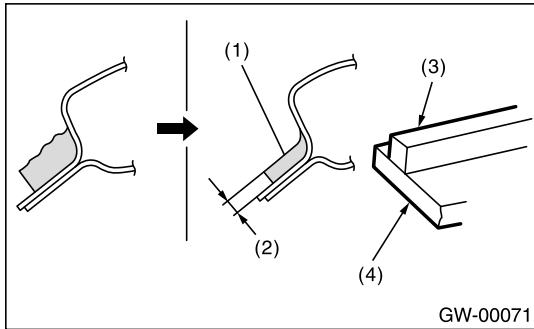
CAUTION:

- 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

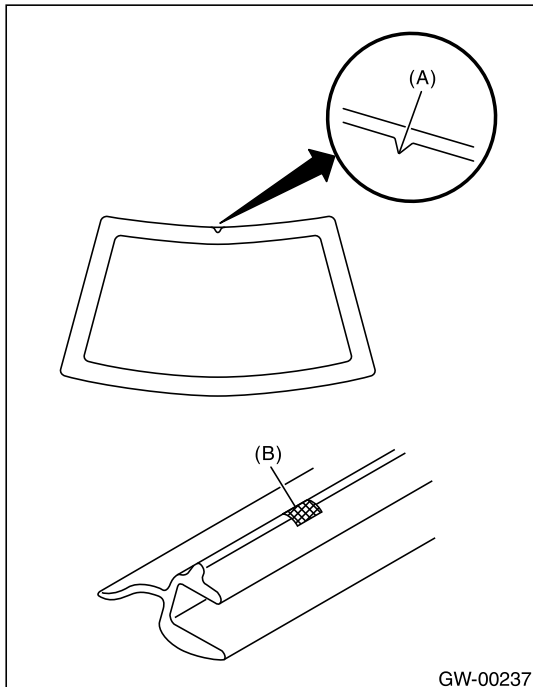
- 1) Clean the external circumference of windshield glass with alcohol or white gasoline.
- 2) Remove the adhesive layer on the body using cutter knife to obtain smooth face 2 mm (0.08 in) thick.

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 remove thoroughly chips, dusts, and dirt from body face.
- 4) Fit the molding mark (B) to notch (A) and install it.



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

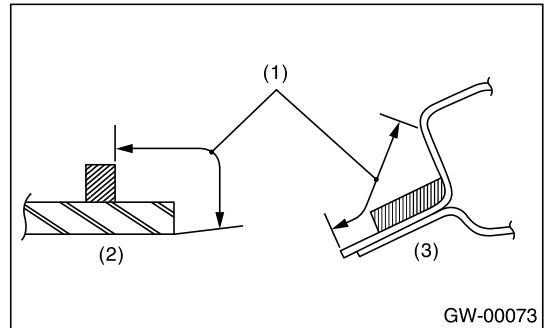
Glass primer:
Betawipe VP 04604 or Betaprime 5001 or equivalent

- 6) Apply primer to adhesive layer of body.

Painted surface primer:
Betaprime 5402 or equivalent

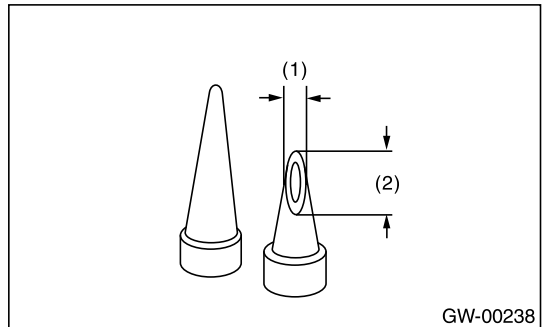
NOTE:

- Primer once attached to 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

- 7) 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)

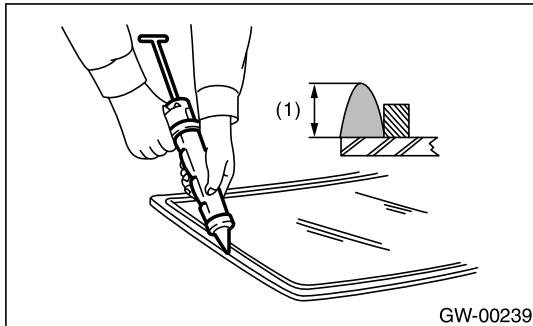
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8) Apply adhesive to the glass end surface as shown.

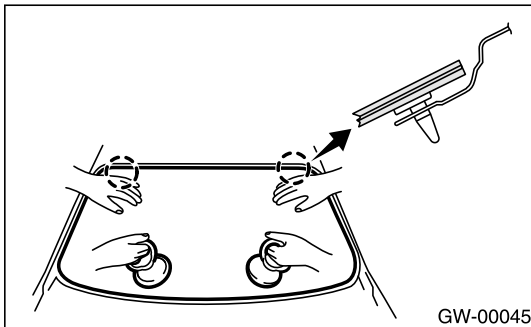
Adhesive:

Gurit-ESSEX Betaseal 1502 or equivalent



(1) 12 — 15 mm (0.47 — 0.59 in)

9) Fit the locating pins to vehicle body using suction rubber cup to install the windshield glass.



10) Lightly press the windshield glass for tight fit.

11) Make flush the adhesive surface juttred out using spatula.

12) 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 the instructions or instruction manual from adhesive manufacturer.

13) 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.

14) Install the cowl panel. <Ref. to EI-34, INSTALLATION, Cowl Panel.>