

# Windshield Glass

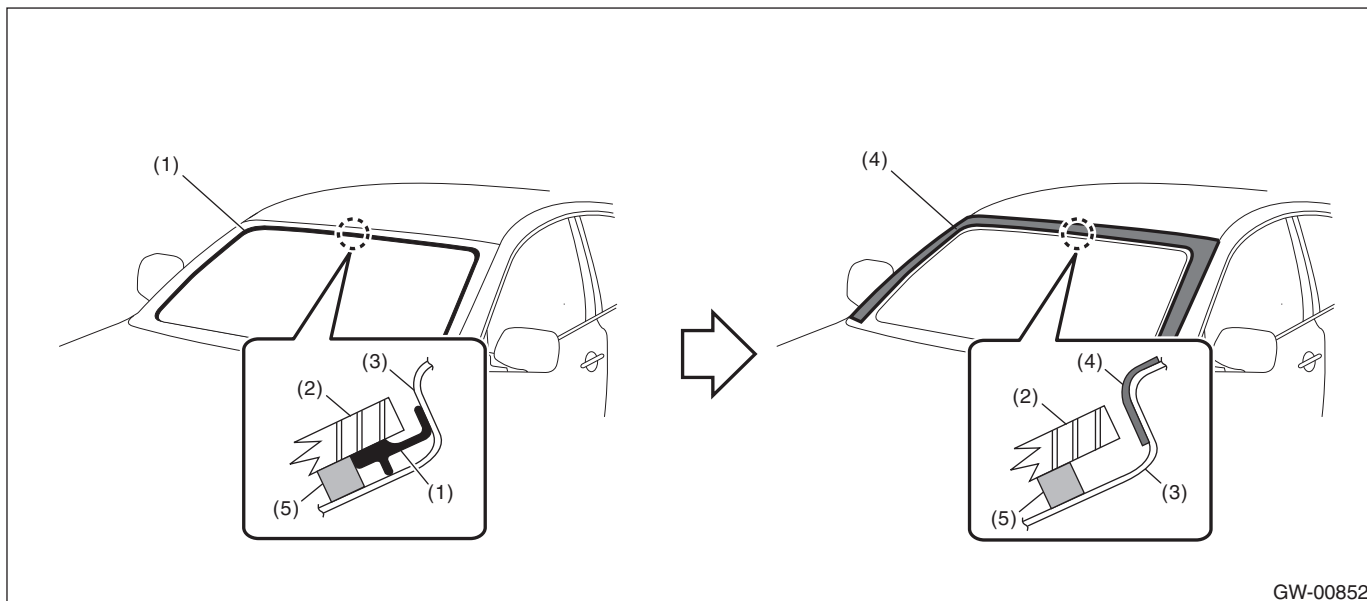
GLASS/WINDOWS/MIRRORS

## 14. Windshield Glass

### A: REMOVAL

#### 1. USING WINDSHIELD GLASS KNIFE

- 1) Disconnect the ground cable from battery. (Models with wiper deicer)
- 2) Remove the front pillar trim. <Ref. to EI-101, REMOVAL, Upper Inner Trim.>
- 3) Disconnect the wiper deicer connector. (Models with wiper deicer)
- 4) Remove the cowl panel. <Ref. to EI-32, REMOVAL, Cowl Panel.>
- 5) Remove the molding from the glass and tape the body side of the circumference of windshield glass for protection.



(1) Molding

(2) Windshield glass

(3) Body panel

(4) Protective tape

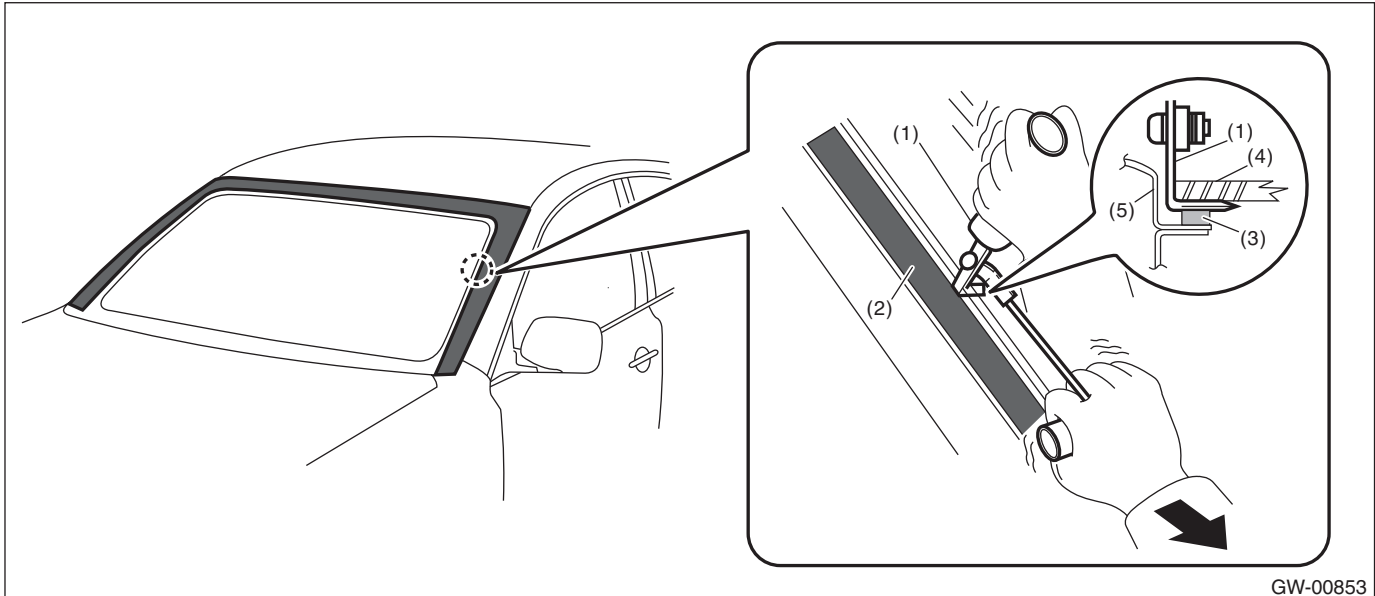
(5) Adhesive

6) Remove the windshield glass.

- (1) Apply sufficient amount of soapy water to the adhesive part and insert the windshield glass knife.
- (2) 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.

**CAUTION:**

- Cutting of adhesive part should be started with wider gap between windshield glass and body.
- Never twist the windshield glass knife.



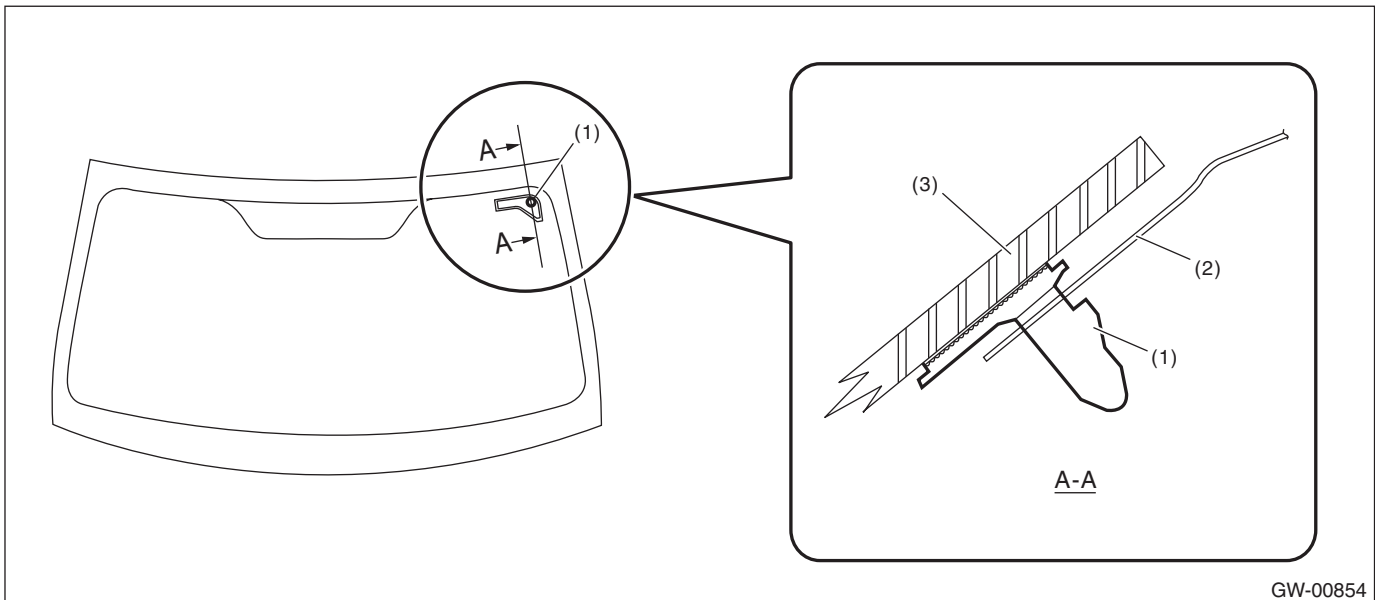
GW-00853

- |                            |                      |                |
|----------------------------|----------------------|----------------|
| (1) Windshield glass knife | (3) Adhesive         | (5) Body panel |
| (2) Protective tape        | (4) Windshield glass |                |

(3) Disconnect the locating pin and remove the windshield glass.

**NOTE:**

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



GW-00854

- |                  |                |                      |
|------------------|----------------|----------------------|
| (1) Locating pin | (2) Body panel | (3) Windshield glass |
|------------------|----------------|----------------------|

# Windshield Glass

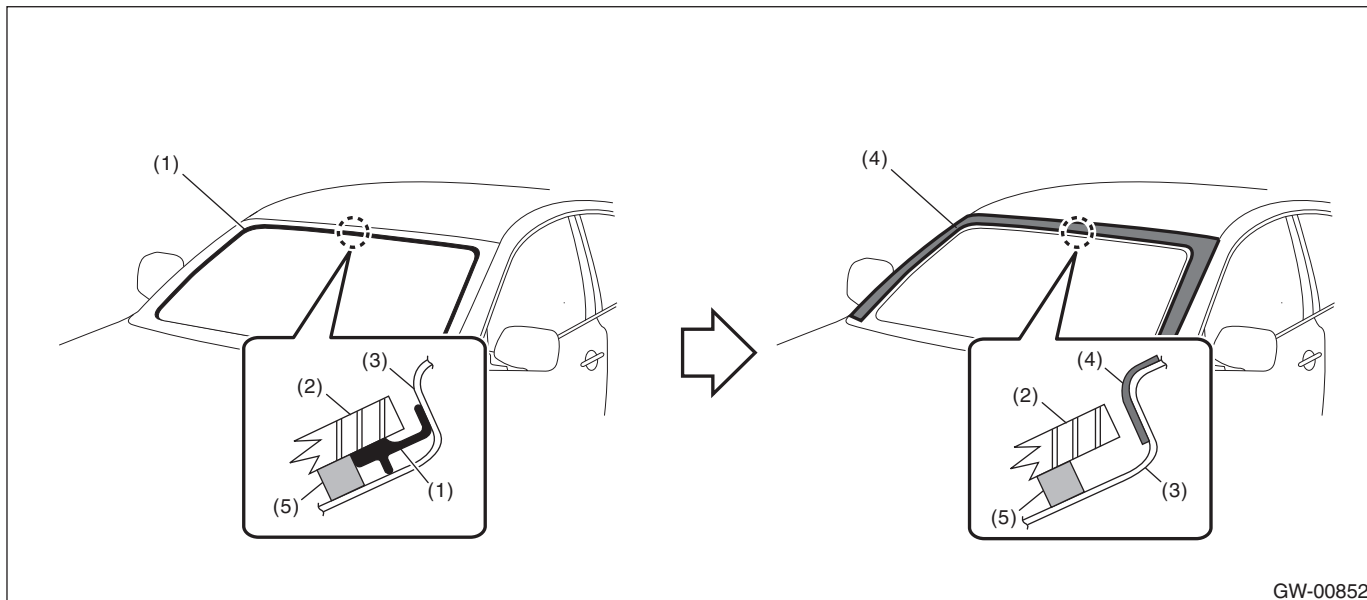
## GLASS/WINDOWS/MIRRORS

### 2. USING PIANO WIRE

#### CAUTION:

- Do not tightly pull the piano wire against the windshield glass edge.
- Apply protective tape, etc., and be careful not to damage interior and exterior parts.
- Do not cross piano wires. Otherwise they may be cut.

- 1) Disconnect the ground cable from battery. (Models with wiper deicer)
- 2) Remove the front pillar trim. <Ref. to EI-101, REMOVAL, Upper Inner Trim.>
- 3) Disconnect the wiper deicer connector. (Models with wiper deicer)
- 4) Remove the cowl panel. <Ref. to EI-32, REMOVAL, Cowl Panel.>
- 5) Remove the molding from the glass and tape the body side of the circumference of windshield glass for protection.



GW-00852

- (1) Molding  
(2) Windshield glass

- (3) Body panel  
(4) Protective tape

- (5) Adhesive

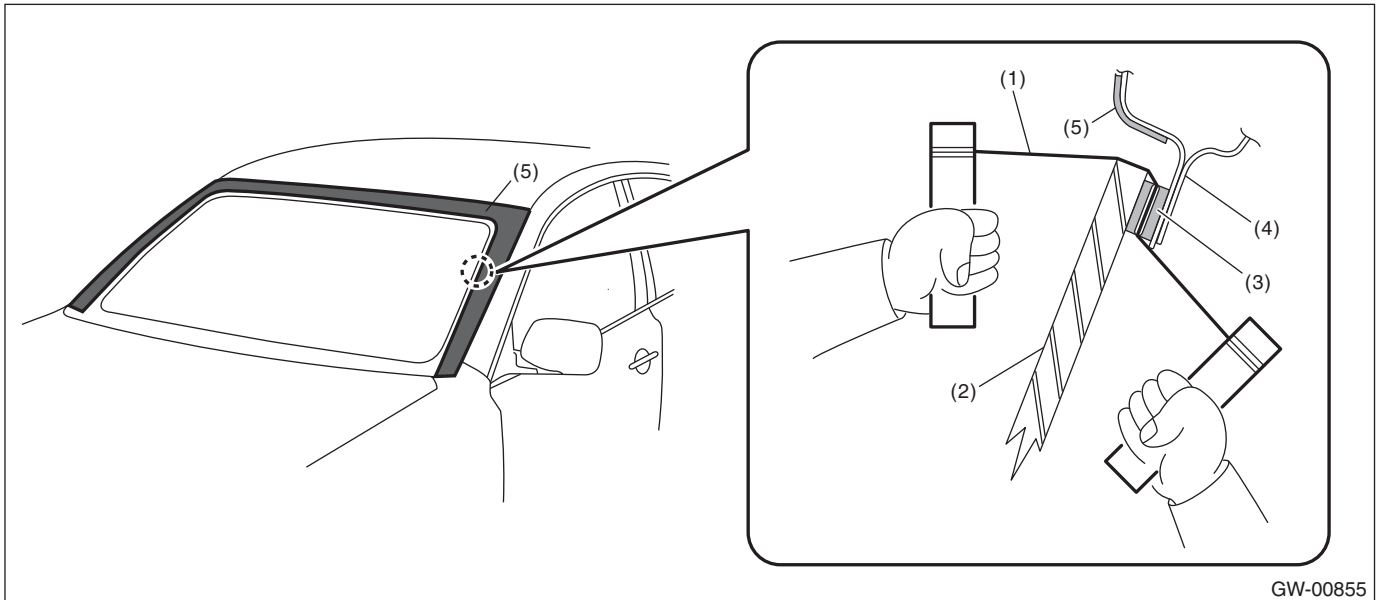
6) Remove the windshield glass.

(1) Using a drill, make a hole in the adhesive part.

(2) Pass the piano wire through the hole, and pull the wire ends alternately to cut off the adhesive part and locating pin.

**CAUTION:**

**Attach a piece of wood to both piano wire ends.**



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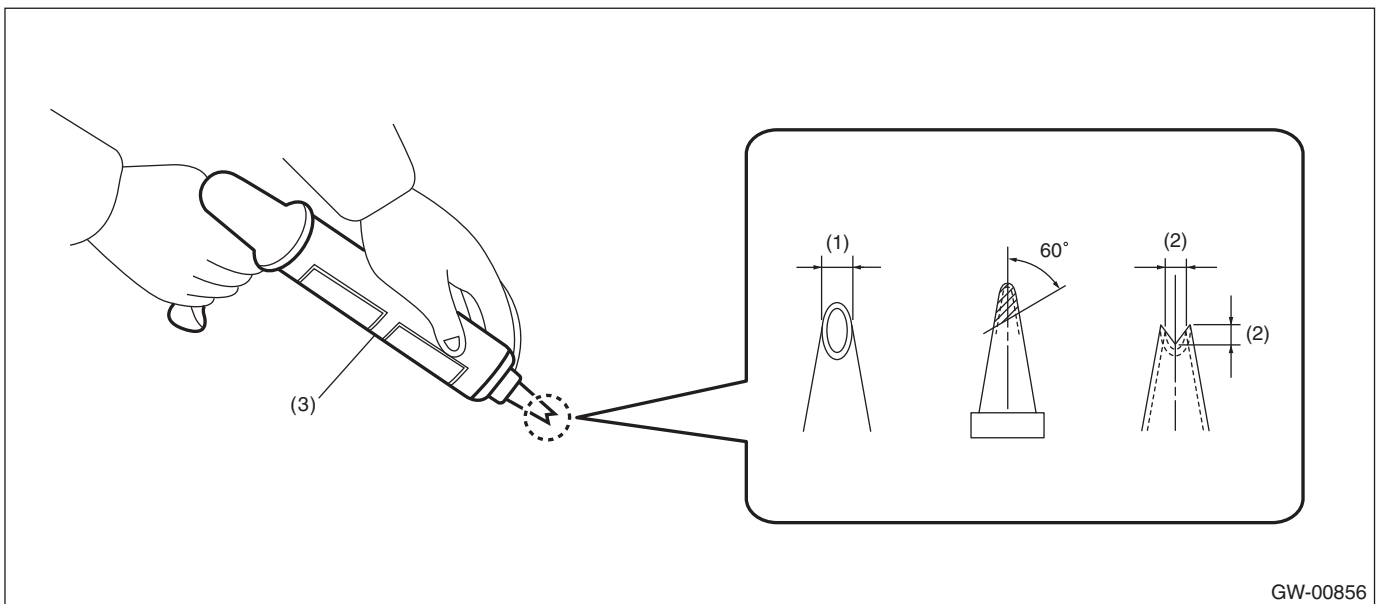
- (1) Piano wire
- (2) Windshield glass

- (3) Adhesive
- (4) Body panel

- (5) Protective tape

**B: INSTALLATION**

1) Cut the cartridge nozzle tip as shown in the figure, and set the adhesive in the sealant gun.



GW-00856

- (1) 10 mm (0.39 in)

- (2) 8 mm (0.31 in)

- (3) Sealant gun

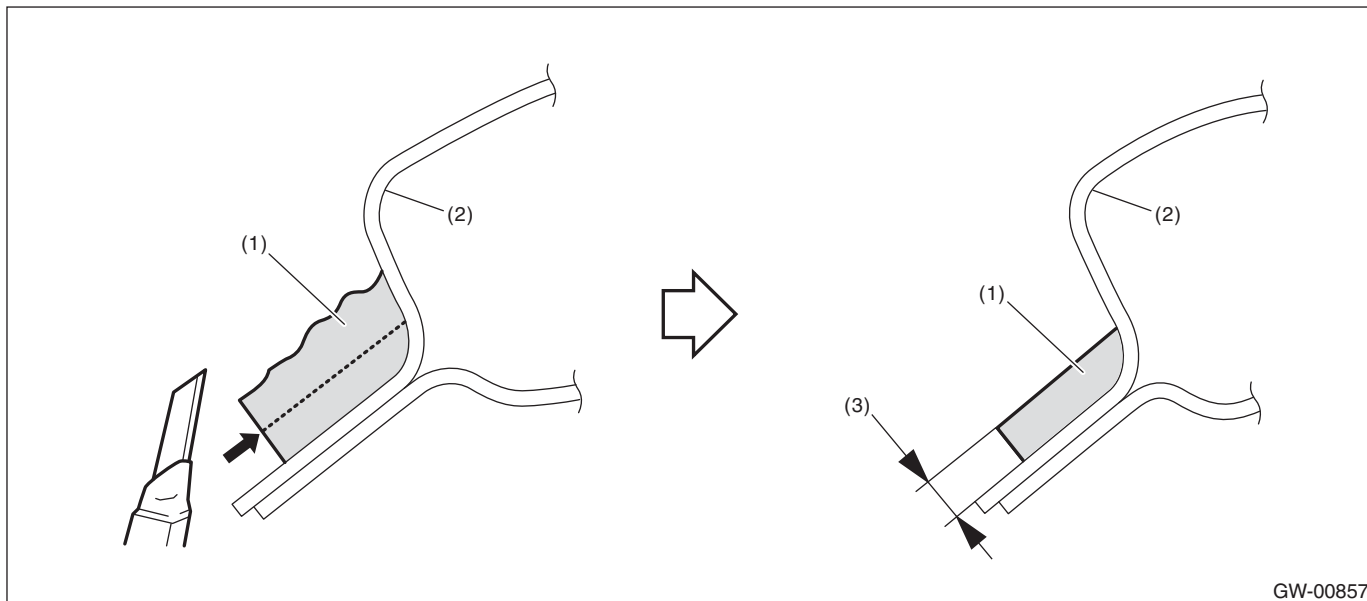
# Windshield Glass

## GLASS/WINDOWS/MIRRORS

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.
- Be sure to keep some of old adhesive.



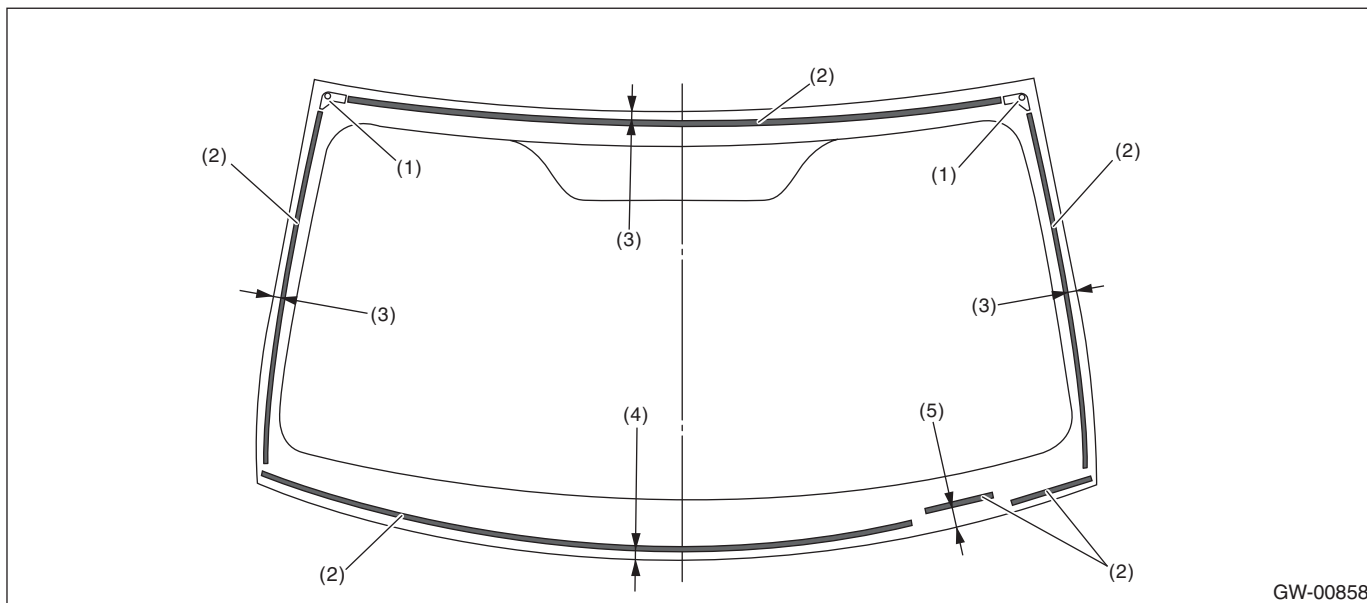
(1) Adhesive

(2) Body panel

(3) 2 mm (0.08 in)

3) Clean the glass and body with alcohol or white gasoline to eliminate cutting powder, dust and dirt completely.

4) Attach the dam rubber to the glass.



(1) Locating pin

(3) 15 mm (0.59 in)

(5) 23.5 mm (0.92 in)

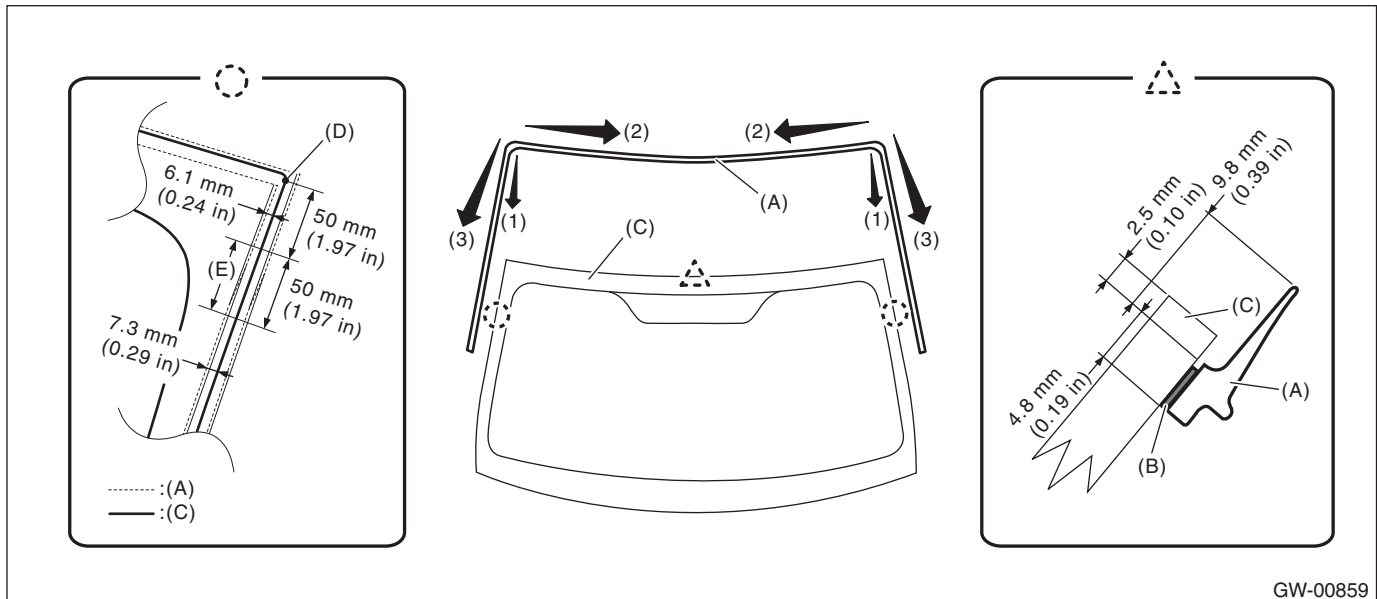
(2) Dam rubber

(4) 13.5 mm (0.53 in)

5) Attach the molding to the glass.

**CAUTION:**

**Be careful to attach the molding so that the molding has no loose or undulating part.**



GW-00859

- (1) Align the molding (A) to the upper ends of the windshield glass (C).
- (2) Attach the molding from the upper corners towards the center.
- (3) Attach the molding from the upper corners downward.

**NOTE:**

Change the molding installation width within the gradual change range (E) based on the curve end point on the upper end of side area (D).

- (4) Firmly apply the double sided tape (B) of the molding evenly to the glass surface.

6) Install the windshield glass.

- (1) Using a sponge, apply primer to the glass side and body side adhesive surfaces.

**Glass primer:**

**Dow Automotive's  
ESSEX U-401, U-402 or equivalent**

**Painted surface primer:**

**Dow Automotive's  
ESSEX U-413 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.

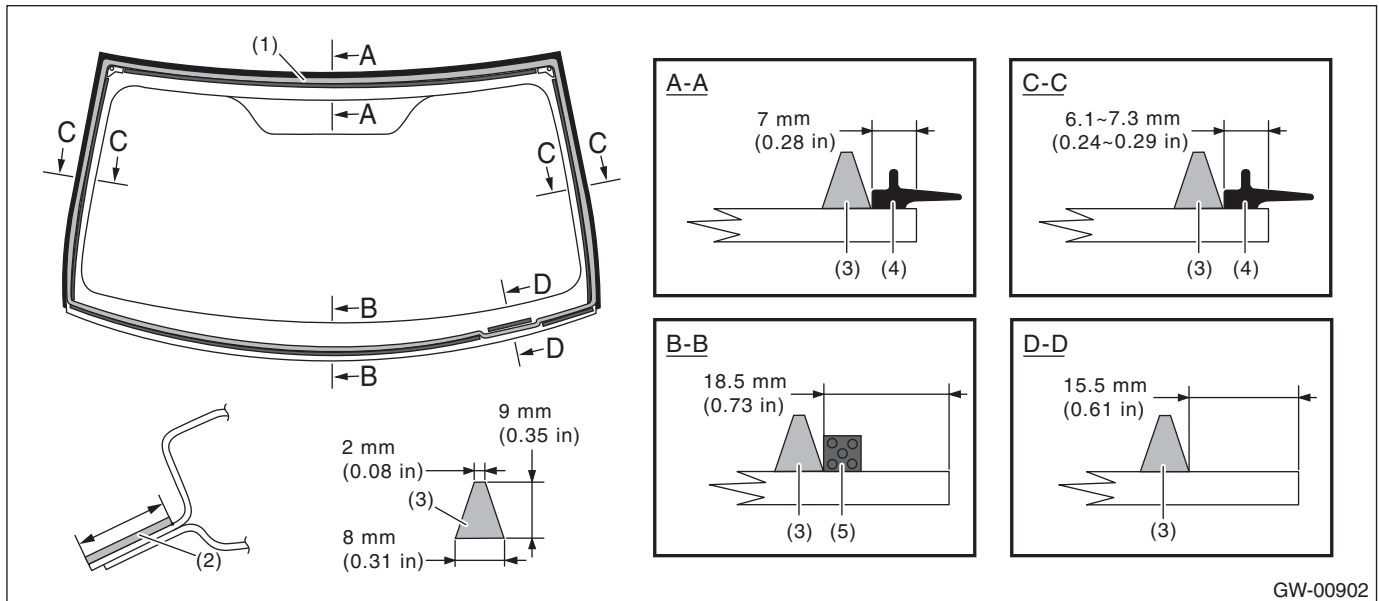
# Windshield Glass

## GLASS/WINDOWS/MIRRORS

(2) Apply adhesive to the glass end back surface.

### Adhesive:

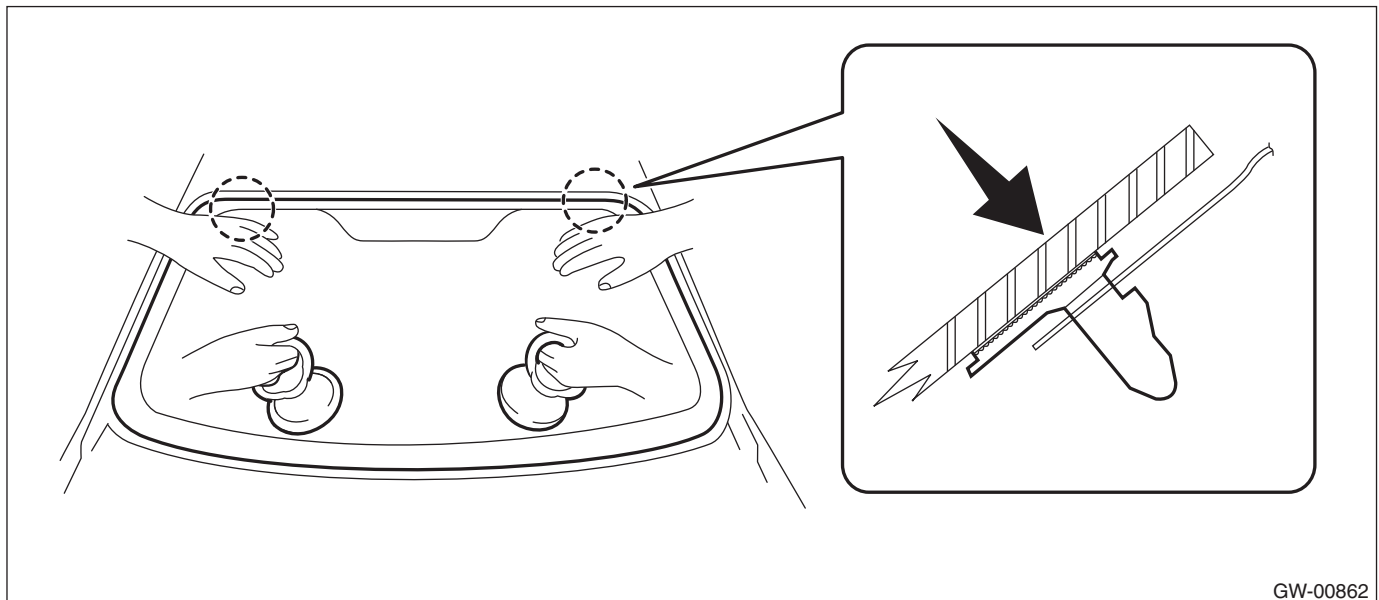
**Dow Automotive's  
ESSEX U-400HV or equivalent**



GW-00902

- (1) Application of primer (glass side)      (3) Adhesive      (5) Dam rubber  
 (2) Application of primer (body side)      (4) Molding

(3) Using suction rubber cups, fit the locator pins into the body side, and attach the windshield glass.



GW-00862

(4) Lightly press the entire perimeter of windshield glass for tight fit.

(5) Make flush the adhesive surface juttred out using spatula.

7) 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.

8) 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.

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

10) Connect the wiper deicer connector. (Models with wiper deicer)

11) Install the front pillar trim. <Ref. to EI-106, INSTALLATION, Upper Inner Trim.>