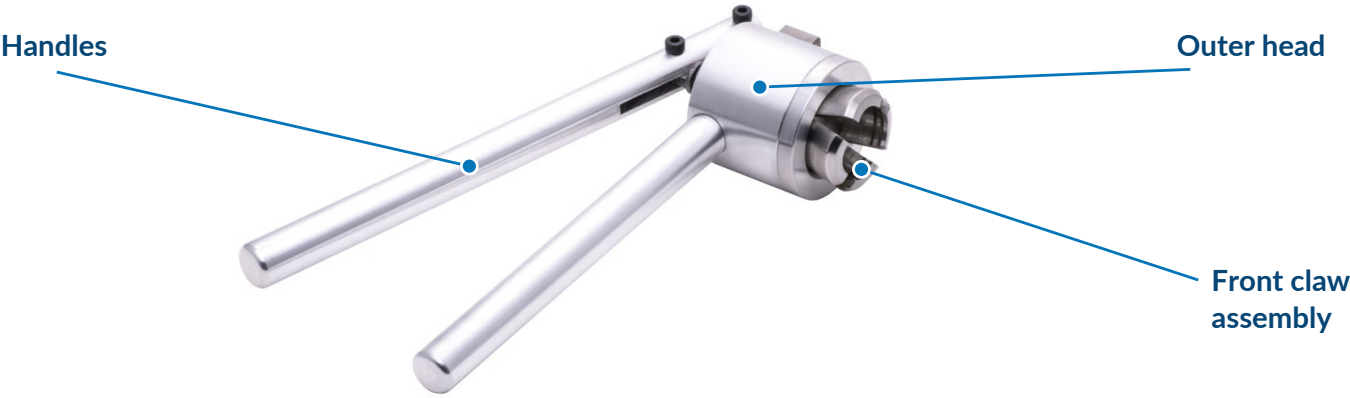


Manual Vial Crimper Guide

How to Crimp, How to Adjust, and Troubleshooting



Rear mechanism



Not the claw-adjustment point.

1 Before You Start

- Match cap size and seal type. [1]
- Aluminium-seal crimper**
For plain aluminium seals with no plastic flip-off button.
- Flip-top crimper**
For flip-off seals with a plastic button over an aluminium skirt.
- Use compatible, undamaged vials, stoppers and seals.
 - Wear eye protection. Keep fingers out of the jaws. [2]

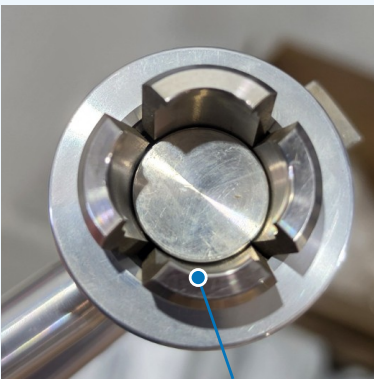
Match both size and seal type. Tightness adjustment does not make different crimpers interchangeable.

2 How to Crimp

- 1 Prepare the vial**
Fully seat the stopper, then place the matching cap squarely over it. Stand the vial upright on a flat, stable surface.
- 2 Seat the crimper**
Open the handles and lower the head straight over the cap. Centre it so the claws surround the skirt evenly; do not start with the head tilted.
- 3 Squeeze with one hand**
Hold both handles in one hand and squeeze smoothly. Use only light downward pressure to keep the head seated; do not force it with your body weight.
- 4 Release and inspect**
Release the handles fully, lift the crimper straight off and inspect the cap all the way around. Trial a fresh assembly after changing the setting. [2]

Keep the head straight. Do not rock, twist or repeatedly pump the handles.

3 How to Adjust the Crimper



Front claw assembly
View into the open jaws.

- 1. Remove the vial.** Slightly squeeze the handles so the claws begin to close.
- 2.** Hold that partial handle position. Rotate **only the front claw assembly** a small amount.
- 3. Clockwise to tighten. Anti-clockwise to loosen.**
- 4.** Release the handles. Test on a fresh vial, stopper and seal. Inspect and adjust again only as needed.

Do not turn or unscrew the outer head, rear block, spring or screws. Never force a stiff adjustment. Keep fingers clear of the closing jaw gaps.

4 Good vs Poor Crimp

Good crimp

- Cap sits level.
- Skirt is turned evenly under the vial lip.
- No tearing or severe crushing.
- Stopper remains seated.

Investigate

- Tilted cap or uneven skirt.
- Torn or crushed aluminium.
- Metal seal lifts or comes off.
- Raised stopper or damaged glass.

Flip-off sample: the plastic button should release while the aluminium stays attached.

Crimp appearance alone does not prove seal integrity or sterility. Use the required tests. [2, 3]

5 Troubleshooting

Issue	Possible cause	What to do
Metal seal feels loose	Insufficient crimp, poor seating or mismatched parts.	Check fit and seating first; then tighten the front claw slightly and test a fresh assembly.
Aluminium comes off with the flip top	Insufficient retention under the vial lip; uneven crimp or component mismatch.	Check crimper type, stopper seating and component fit before increasing the crimp.
Crushed cap / excessive effort	Crimp too tight, cap tilted or wrong seal type.	Do not force. Check alignment and seal type; loosen slightly and test again.
Uneven or inconsistent crimp	Head not square; variable parts; dirty or worn jaws.	Centre the head. Check component consistency and jaw condition. Stop if damage is visible.
Flip-off button is difficult to remove	Wrong crimper type, cap deformation or a closure issue.	Use a flip-top crimper of the correct size. Check for over-crimping and closure compatibility.
Claw assembly will not turn	Handles not partly squeezed, or mechanism binding.	Slightly squeeze the handles and try gently. Do not use pliers, undo the head or force the rear mechanism.

Scope: GVA rotating-claw manual crimpers. Other designs need their model instructions. Test after component or setting changes.
References: [1] GVA crimper types; [2] Thermo Scientific: general safety / inspection (not claw adjustment); [3] West: closure integrity.