13mm Crimper

(cat.# 21739)

Parts List (with replacement part numbers)**:**

1. 13mm crimper (cat.# 21739)
2. 1/8-inch allen wrench

Required items (not included)**:**

WISP™ 48 Style 13mm Crimp-Top Vial (15 x 45mm Snap Seal)

Description	100-pk.	1000-pk.
4.0mL Clear Vial	24658	24659

13mm Silver Aluminum Seals w/Septa, Assembled

Description	100-pk.	1000-pk.
PTFE/Natural Rubber	21753	21754

Tool List

Needed: 11/32-inch open-end wrench or adjustable wrench.
Recommended: 13mm Decapper (cat. # 21740)**.** Used to remove the aluminum seal and septa. Helpful when the sample needs to be transferred or emptied. Also useful when a pierced septa needs to be replaced with a new septa for sample storage.

Overview

This item is used to crimp seals onto 13mm vials. When using vials, septa or seals from different manufacturers, you may need to adjust the crimper to obtain an optimum seal. For chromatographers who need to save, transfer or dispose of their samples, we sell a decapper (cat. #21740) that removes a crimp-top cap safely and easily.

Instructions

1. Test the crimper first with your empty vials, septa, and seals.

   A properly crimped seal should look like the one in Figure 1. The seal should not be overly deformed, yet the crimp should be tight enough that the seal cannot be rotated by hand.

   A seal that is not crimped tightly enough (under-crimped) will look like the one in Figure 2. Note that the seal may look properly crimped, but still can be rotated by hand around the vial.

   An over-crimped seal will look like the one in Figure 3. Note how the seal is deformed around the sides and at the top. While a seal is obtained with this crimp, the deformed sides and top may interfere with the autosampler, headspace unit, syringe, or other system parts. Poor system reliability may result from using over-crimped vials.

   If a satisfactory crimp cannot be obtained, follow the adjustment procedures listed.

Figure 1—Good Crimp. Note that the crimped seal cannot be rotated around the vial.

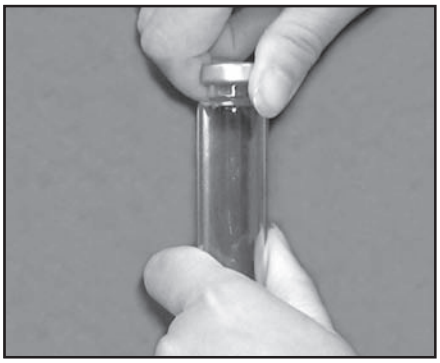

Figure 2—Under-crimped seal. Note that the seal may look properly crimped, but still can be rotated by hand around the vial.

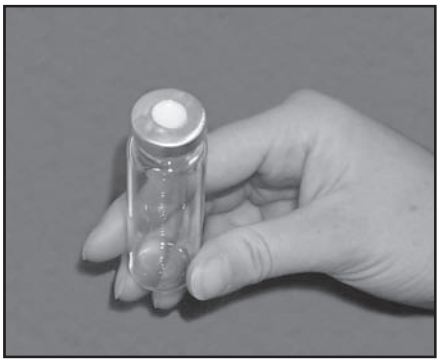

Figure 3—Over-crimped seal. Note how the seal is deformed around the sides and at the top. While a seal is obtained with this crimp, the deformed sides and top may interfere with the autosampler, headspace unit, or syringe. Poor system reliability may result from using over-crinped vials.

Fine Adjustment:

If the crimp is only slightly over or under optimum, try adjusting the crimper with the fine adjustment first. The fine adjustment is located between the handles as shown in Figure 4. Loosen the lock nut with an $^{11}/_{32}$-inch open-end wrench.

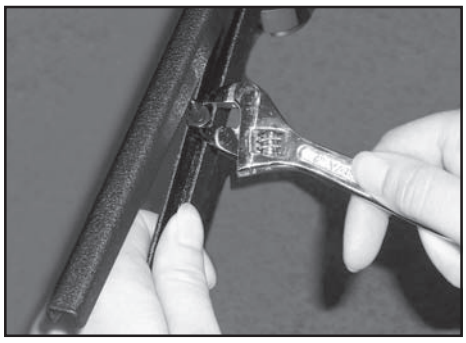

Figure 4—Fine adjustment. Note locking nut and adjustable height stop. Clockwise lowers height stop, increases crimp. Counterclockwise raises height stop, loosens crimp.

To correct under-crimped seals:

Rotate the height stop clockwise to lower the height stop—try a ½-turn at a time. When a satisfactory crimp is obtained, tighten the lock nut to a ¼-turn past finger-tight. If the height stop is lowered to the point where the top handle touches the lock nut and the crimp is still too loose, you will need to use the coarse adjustment procedure described below.

To correct over-crimped seals:

Rotate the height stop counter-clockwise to raise the height stop. Try ½-turn at a time. When a satisfactory crimp is obtained, tighten the lock nut to a ¼-turn past finger-tight. If the height stop is raised too high (about 1 inch above the handle or less than five turns into the handle) and the crimp is still too tight, you will need to use the coarse adjustment procedure described below.

Note:

If a satisfactory crimp could not be obtained through the fine adjustment procedure described above, use the coarse adjustment procedure below.

Before proceding to course adjustment, loosen the fine adjustment lock nut and fully lower the fine adjustment height stop by turning it counter clockwise until the top handle almost touches the lock nut (Figure 4).

Coarse adjustment:

To correct under-crimped seals:

Use the $^{1}/_{8}$-inch Allen wrench to rotate the coarse adjustment counter-clockwise (Figure 5). Try a ¼-turn at a time. When a satisfactory crimp is obtained, you are done. If the coarse adjustment is set for slight over-crimping, it can be loosened with the fine adjustment procedure described above.

To correct over crimped seals:

Use the $^{1}/_{8}$-inch Allen wrench to rotate the coarse adjustment clockwise (Figure 5). Try a ¼-turn at a time. When a satisfactory crimp is obtained, you are done. If the coarse adjustment is set for slight over-crimping, it can be loosened with the fine adjustment procedure described above.

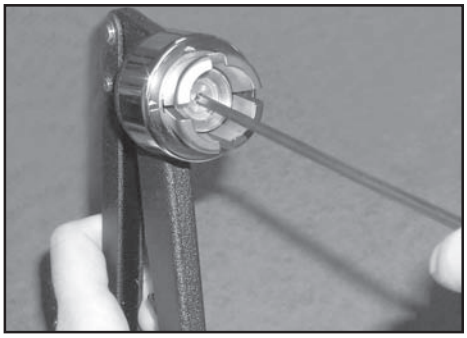

Figure 5—Coarse adjustment. Note allen wrench and coarse adjustment. Counterclockwise increases crimp. Clockwise loosens crimp.

Troubleshooting

If you cannot obtain a good seal by following the adjustment procedures listed above, please call Restek's technical support at 800-356-1688, ext. 4 or e-mail support@restekcorp.com.

Call Technical Service at 800-356-1688 or 814-353-1300, ext. 4 (or your local Restek representative) if you have any questions about this product or any other Restek product.

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