



Genesis Packaging Technologies

**FW-A WESTCAPPER®  
Operation and Maintenance  
D-24808**



GMP Machinery Products is proud to carry on the quality and tradition of the **WESTCAPPER®**. GMP provides three different sealing mechanisms to meet all production and lab or pilot speed and quality requirements.

In addition, the GMP Phase-Shift™ Vial Washer and Laminar Flow Sterilization Tunnel work in concert to clean, depyrogenate, and sterilize vials in a variety of sizes with few change parts.

GMP Machinery — the foremost provider of packaging process management and machinery to the liquid pharmaceutical industry.

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## CHANGE HISTORY

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## FUNCTIONAL OVERVIEW

The FW-A WESTCAPPER® is a hand operated capper that applies serum caps to bottles with a G.C.M.I. 2710 finish. The sealing head is interchangeable for different size caps and several, similar type seals.

The operator places a bottle on a rubber pad located on the cast aluminum base. An adjustable V-guide centers the bottle under the sealing head. The operator then pulls the sealing head handle, and sealing takes place in the following sequence:

- The sealing head lowers until the pressure block seats on top of the seal.
- The sealing jaws close around the skirt of the cap.
- Top pressure is applied on the cap.
- The sealing jaws close and move upward to crimp the seal.

## TECHNICAL DATA

Aluminum Seals      11 to 43 mm

### Bottle Limits:

Finish	G.C.M.I. No. 2710 serum finish
Height	Accommodates bottles up to 203.2 mm (8") in height
Diameter	Accommodates bottles up to 107.95 mm (4.25")

Weight                      18 pounds (8.2 kg)

Dimensions                24" (61 cm) high X 8" (20.3 cm) wide X 11.5" (29.2 cm) deep

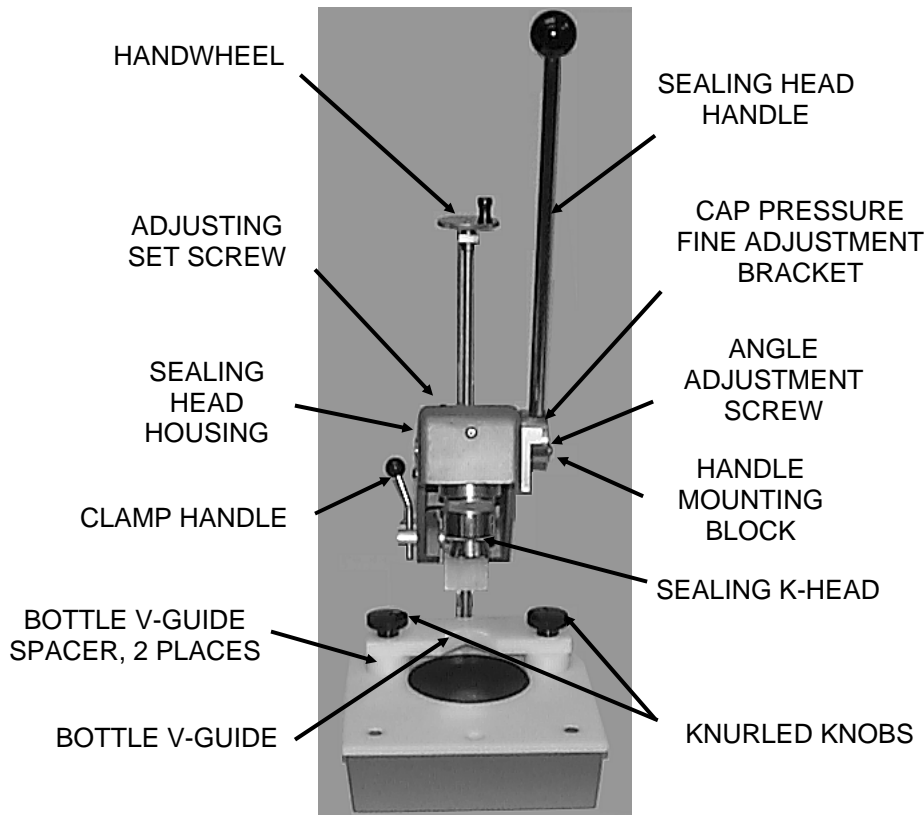
## INSTALLATION, UNPACKING, AND ASSEMBLY

When you receive the capper, check it to determine if it has been damaged in shipment. In case of damage, inform the shipping agent and The Genesis Machinery Products. If the capper is received undamaged, follow the instructions in this section to unpack and assemble it.

1. Locate the screws on the top and one side of the plywood crate. Remove these screws, and take off the top and side panel.
2. The capper will be securely held by a shelf attached to the sides of the box by screws. Remove these screws to free the shelf.
3. Remove the capper.
4. If present, remove plastic covering or packaging material. Dust off the capper to remove any small particles of packaging.
5. Place the capper on a stable work surface.

## PRE-OPERATIONAL SETUP

This section includes the procedures necessary for setup and adjustment to prepare for the capping operation. Refer to Figure 1 for parts locations.



**Figure 1. FW-A WESTCAPPER**

### Mounting the Sealing K-Head

Refer to Table 1 and choose the SEALING K-HEAD required for the bottle used in the current capping operation. The sealing head for this capper is type K. The type K sealing head is operated through a plunger equipped with a 36 mm thread for mounting. The K-head mounted in the threaded ring can swivel around two screws and is stabilized by a spring.



The mounting procedure is as follows:

1. Turn the threaded end of the SEALING K-HEAD into the threads of the SEALING HEAD HOUSING.

### **⚠ NOTICE**

**Ensure that the jaws in the sealing head do not start to close when the K-head is mounted and tightened against the ring.**

2. If the jaws in the sealing head start to close as the K-head is mounted, turn the ADJUSTING SET SCREW counterclockwise until the sealing head reaches maximum opening. Do not turn the screw past this point.

## **Adjustment for the Bottle Height and Bottle Diameter**

Adjust for the bottle height and bottle diameter as follows:

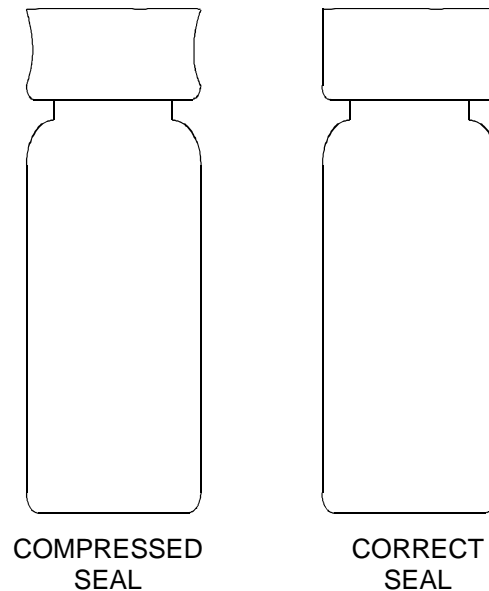
1. For very small bottles, remove the two BOTTLE V-GUIDE spacers.
2. Loosen the BOTTLE V-GUIDE using the two knurled plastic knobs.
3. Turn the CLAMP HANDLE counterclockwise (full vertical position).
4. Pull the SEALING HEAD HANDLE forward until it comes to a stop before the sealing jaws start to close. This movement will position the SEALING HEAD HOUSING from a slanted position to a vertical position.
5. Put a bottle with cap under the SEALING K-HEAD, and lower the head by turning the HANDWHEEL counterclockwise until the sealing jaws, by further movement of the SEALING HEAD HANDLE, will close, just clearing the lower edge of the cap.
6. Move the BOTTLE V-GUIDE into place against the bottle, and tighten the two knurled plastic knobs.
7. Tighten the CLAMP HANDLE by turning the handle clockwise.
8. Check for the proper bottle height adjustment as follows:
  - a. Complete the sealing of the cap by pulling the SEALING HEAD HANDLE as far forward as it will go.
  - b. The sealing head is set to the correct height if the SEALING HEAD HOUSING moves upward during the last movement of the handle. If the SEALING HEAD HOUSING does not move upward, lower the sealing head by turning the HANDWHEEL counterclockwise about one-half turn at a time.

### **⚠ NOTICE**

**The height adjustment setting is most critical for bottles with a short neck, since there is very little room for the sealing jaws between the cap skirt and the bottle shoulder. Setting the sealing head too low will result in damage to the sealing jaws or broken glass. Setting the sealing head too high will decrease or completely eliminate top pressure.**

## Cap Pressure Fine Adjustment

1. Refer to Figure 1. Put a bottle with a cap on the capper.
2. Loosen the two screws that hold the CAP PRESSURE FINE ADJUSTMENT BRACKET in place, and lower the bracket.
3. Pull the SEALING HEAD HANDLE down through its full travel. As shown in the left side of Figure 2, the seal should distort inward (concave).



**Figure 2. Fine Seal Pressure Adjustment**

4. After you achieve the COMPRESSED SEAL shown in the left of Figure 2, raise the CAP PRESSURE ADJUSTMENT BRACKET up slightly, and tighten it in place.
5. Put a bottle with a seal on the capper.
6. Pull the SEALING HEAD HANDLE through its full travel, and return it to the rest position. This time, the bottle should seal properly (CORRECT SEAL in Figure 2) without any concave indent.
7. Repeat the procedure as necessary to achieve a CORRECT SEAL condition.

## Adjustment of the Operating Handle Angle

The following adjustment is done according to the operator's preference:

1. Pull the SEALING HEAD HANDLE toward the front of the capper from the mounting block until you hear and feel a click. The handle is now at the proper operating length.
2. Remove the ANGLE ADJUSTMENT SCREW.
3. Pull the handle mounting block off of the splined shaft, and relocate it as desired.
4. Replace the washer and ANGLE ADJUSTMENT SCREW.

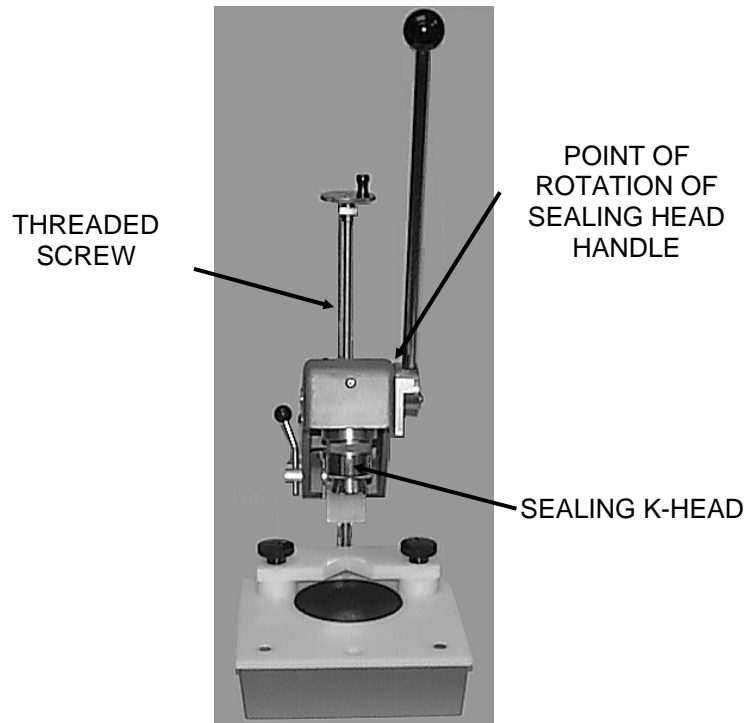
## OPERATION

1. Complete the "Pre-Operational Setup" procedures necessary for the bottle, cap size, and type for the present run; then return to step 2 of this procedure.
2. Place a cap and seal against the BOTTLE V-GUIDE.
3. Pull the SEALING HEAD HANDLE fully forward until it stops to complete the sealing operation.
4. Repeat steps 1 through 3 for each bottle to be capped.

**Table 1. Type K Sealing Heads**

<b>TYPE K HEAD</b>	<b>DESCRIPTION</b>	<b>SEAL</b>
K-83	8 mm Dental Cartridge Seal	8-1
K-83F	8 mm Flip-Off Dental Cartridge Seal	8-F
K-114	11 mm Single Seal	11-I, 11-10, 11-10 Lined
K-137	13 mm Single Seal	13-I, 13-10, 13-I Lined, 13-10 Lined
K137T	13-10T 13 mm Sing Tearoff Seal	13-10T, 13-22, 13-23, 13-22 Lined
K137/50-165F	13 mm Flip Tearoff	13 FTO
K-138F	13 mm Flip-Off Seal	13-F
K-142	13-31 13 mm Triple Two-Piece Tearoff and Disc Seal	13-31
K-146	13-30 13 mm Triple Seal	13-30
K-14/79	13 mm Tip-Off	13 Tip Off
K-171F	16 1/2 mm Flip-Off Non Scuff Liner	16 1/2 FO
K-180/150N	17 1/2 mm Overseal Seal	17.5T
K-190/45S-130/100N	18 1/2 mm Univial	
K-205F	20 mm Flip-Off and Flip Off-Tear Off	20-F
K-205/70-250F	20 mm Flip-Tearoff	20 FTO
K-207	20 mm Single Seal	20-I, 20-I-11, 20-10, 20-11, 20-10T, 20-10T-NN, 20-10T-N, 20-14, 20-22, 20-23, 20-22 Lined, 20-23 Lined, 20-25A, 20-27, 20-27N
K-216	20-30 20 mm Triple Seal	20-30, 20-32, 20-20
K-282/120-310F	28 mm Flip-Off Seal	28-F
K-286T	28-31 28 mm IV Solution Seal	28-31
K-293T	20-10T 28 mm Unit Dose Seal (Short Skirt)	28-20
K-301	30-10 30 mm Single Seal	30-27, 30-I, 30-10T, 30-14
K-304T	30-13 30 mm Snap Cap Seal	30-13
K-310/120	Alcoa 28 mm 3 Piece Long Skirt (Travenol)	
K-320	32 mm Pull Ring Long European Seal	
K-332F	32 mm Flip-Off	
K-450	43-10 Breakaway Tab	
K-454	43-31 43 mm IV	43-31

## LUBRICATION INSTRUCTIONS



**Figure 3. FW-A WESTCAPPER**

Refer to Figures 3 and 4, and lubricate the following annually or as necessary:

1. Place a drop of Nevastane 32 AW FDA approved oil, or equivalent to the Threaded Screw attached to the handwheel that raises and lowers the sealing head.
2. Apply a drop of Nevastane 32 AW FDA approved oil, or equivalent to the point of rotation of the Sealing Head Handle.
3. Apply a thin film of Super FML #2 Lubriplate grease (or equivalent) to the K-Head on the jaw actuator stem shown in Figure 4.



**Figure 4. FW-A WESTCAPPER**

