



Setup and Operation Manual



KEBBY INDUSTRIES INC.

TABLE OF CONTENTS

INTRODUCTION	1
SAFETY PRECAUTIONS	2
BenchMark FEATURES	3
INITIAL SETUP INSTRUCTIONS	4-16
QUICK SETUP INSTRUCTIONS (AFTER INITIAL SETUP)	17-25
OPERATING INSTRUCTIONS	26
APPENDIX - BenchMark SETTINGS LOG	27

INTRODUCTION AND SAFETY

INTRODUCTION

The BenchMark is a bench top vial seal crimping device that is designed to provide precise and highly repeatable quality crimps. The crimp pressure and head height can be easily adjusted to accommodate a variety of vial sizes and seal types. Recordable coarse and fine setting adjustments allow the BenchMark to be quickly set up for subsequent runs. Unlike most bench top crimpers currently on the market, the BenchMark is designed to also apply down pressure on the vial during the crimp cycle. The down pressure ensures that the seal is completely in contact with the lip of the vial, and maximizes the proper wrap of the seal.

The BenchMark is constructed with corrosion resistant, machined steel and aluminum parts that will provide reliable and accurate operation for many years. The fine quality that Kebby Industries is known for is evident in the smooth, easy operation of the BenchMark.

*** Manufactured in the U.S.A. ***

INTRODUCTION AND SAFETY, continued

SAFETY PRECAUTIONS

1. Do not set up or operate the BenchMark until you have read and understand this manual and/or have been properly trained on its use.

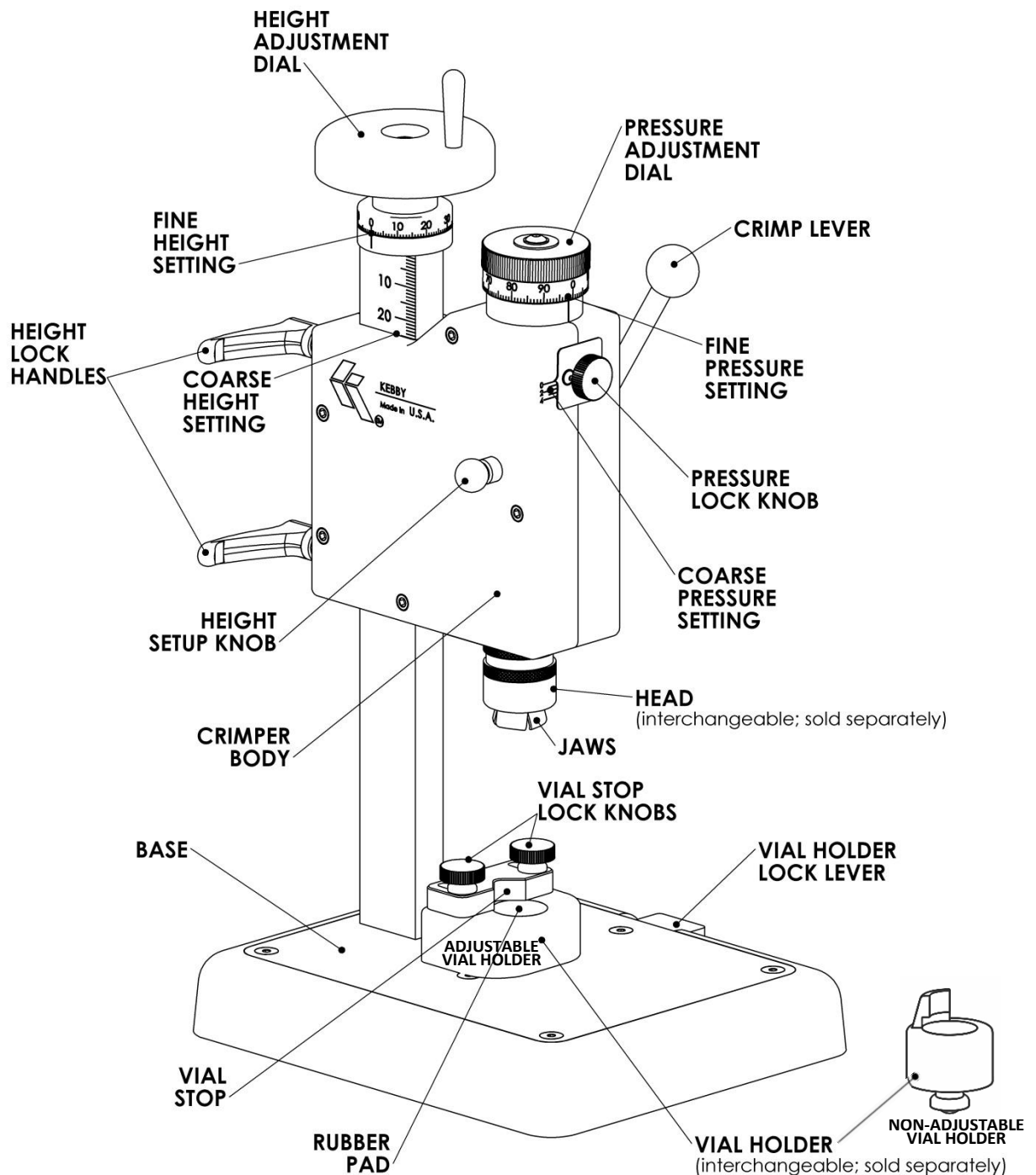
Improper setup or misuse of the BenchMark may cause damage to the vial being crimped, including breakage of glass that may cause injury.

2. Review and follow all warning labels on the BenchMark to avoid injury and damage to the device.
3. Always wear impact resistant safety glasses and protective gloves while setting up or operating the BenchMark, due to the possibility of glass breakage.
4. Do not set any objects on the BenchMark, other than the appropriate accessories installed according to this manual. Any other objects set on the crimper base may interfere with the crimp cycle and cause damage.
5. Keep hands and fingers clear of the head jaws when the crimp lever is pulled forward to avoid being pinched.
6. When returning to the BenchMark after an absence, always recheck the setup. The device may have been used and not reset correctly, knocked out of adjustment, or tampered with.
7. Do not attempt to set up or operate the BenchMark if you suspect the device is damaged or defective.
8. Contact Customer Service if you have any questions or concerns regarding the safe and proper setup or operation of the BenchMark.

Kebby Industries, Inc.
Customer Service
(815) 963-1466

PRODUCT OVERVIEW

BenchMark FEATURES



INITIAL SETUP INSTRUCTIONS

IMPORTANT – Read before beginning Initial Setup.

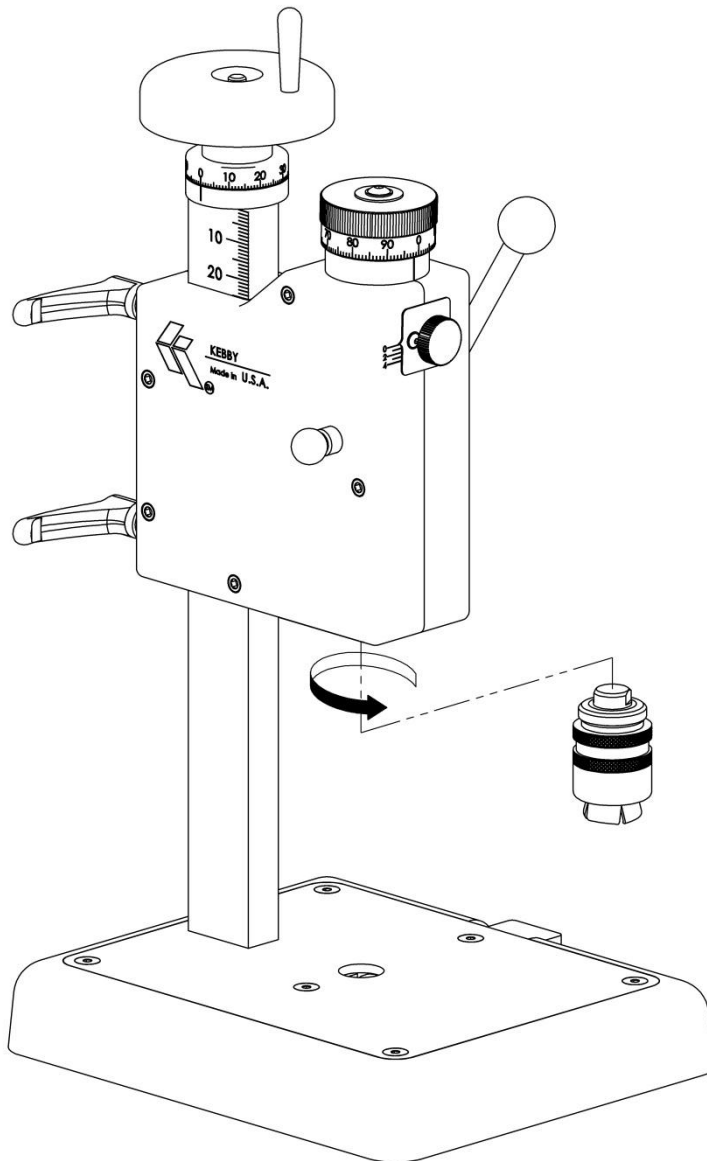
WARNINGS:

- If the BenchMark is not set up properly for the vial size and seal type that is to be crimped, there is a chance of vial breakage during the crimp cycle.
 - Wear impact resistant safety glasses and protective gloves while setting up the BenchMark.
-
- The Initial Setup Instructions must be followed for each unique combination of vial size and seal type to be crimped.
 - Have empty vials and unused seals on hand for the setup process.

INITIAL SETUP INSTRUCTIONS, continued

STEP 1 – Assemble Head to BenchMark.

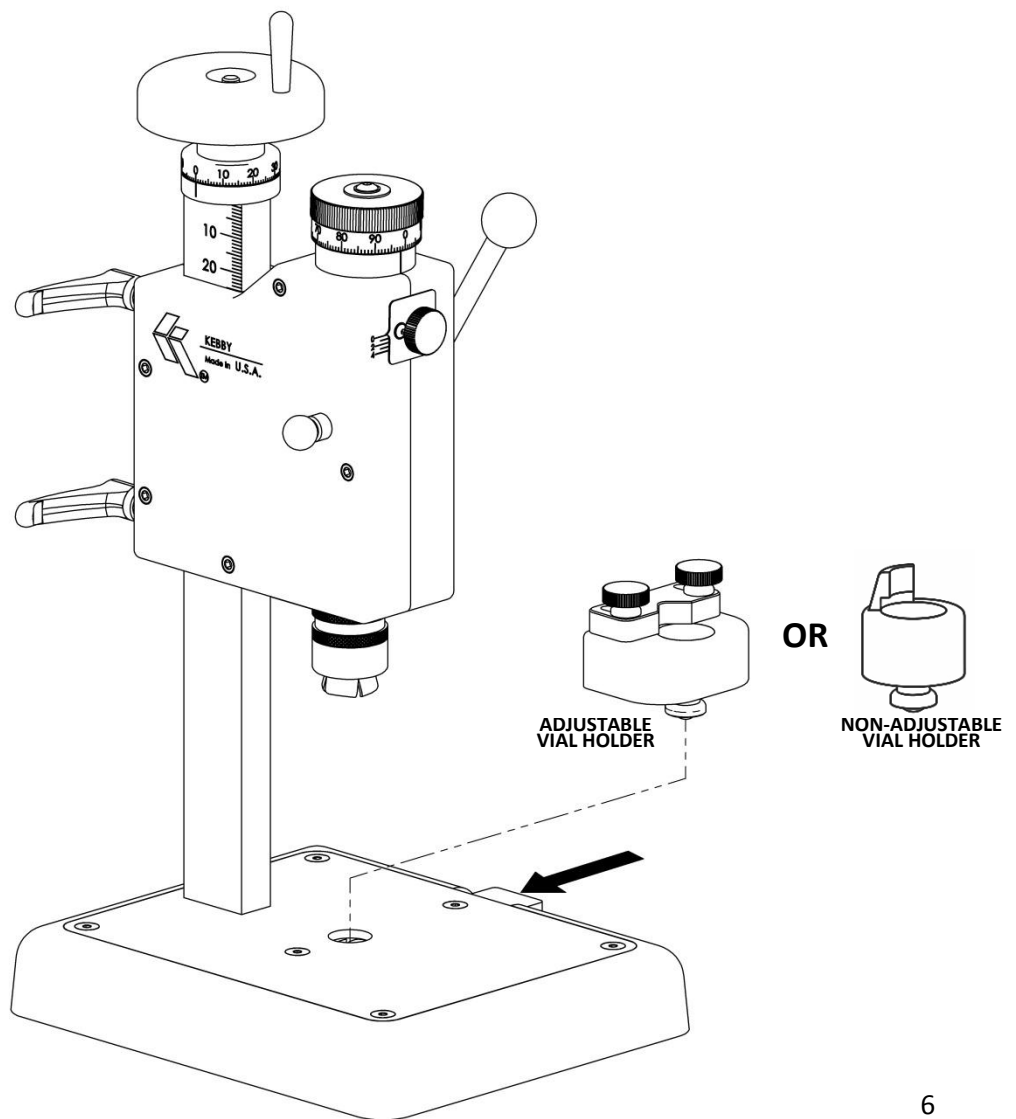
- A. Select the correct size and type of Head for the seals to be crimped.
- B. Screw the Head into the bottom of the Crimper Body counterclockwise by hand just until snug. DO NOT OVERTIGHTEN.



INITIAL SETUP INSTRUCTIONS, continued

STEP 2 – Assemble Vial Holder to BenchMark.

- A. Select the correct size of Vial Holder for the vials to be crimped, based on the outside diameter of the vial. Vial Holders are available as adjustable and non-adjustable styles, and are labeled with the applicable vial diameters.
- B. Push the Vial Holder Lock Lever inward and hold. Place the Vial Holder into the center hole of the Base, so that it is sitting flat against the Base. Gently release the Vial Holder Lock Lever.

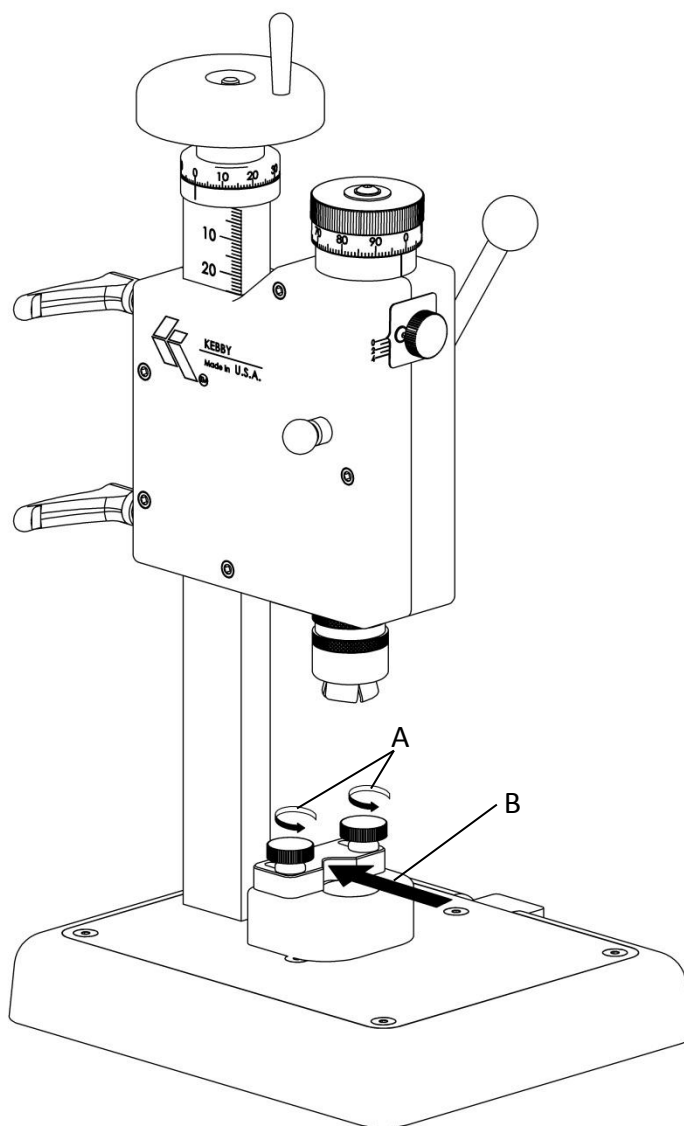


INITIAL SETUP INSTRUCTIONS, continued

STEP 3 – Slide Vial Stop back.

NOTE: If using a Non-Adjustable Vial Holder, Step 3 does not apply.

- A. Loosen both Vial Stop Lock Knobs (A).
- B. Slide the Vial Stop (B) back as far as it will go.
- C. Leave the Vial Stop Lock Knobs (A) loose. They will be tightened later.



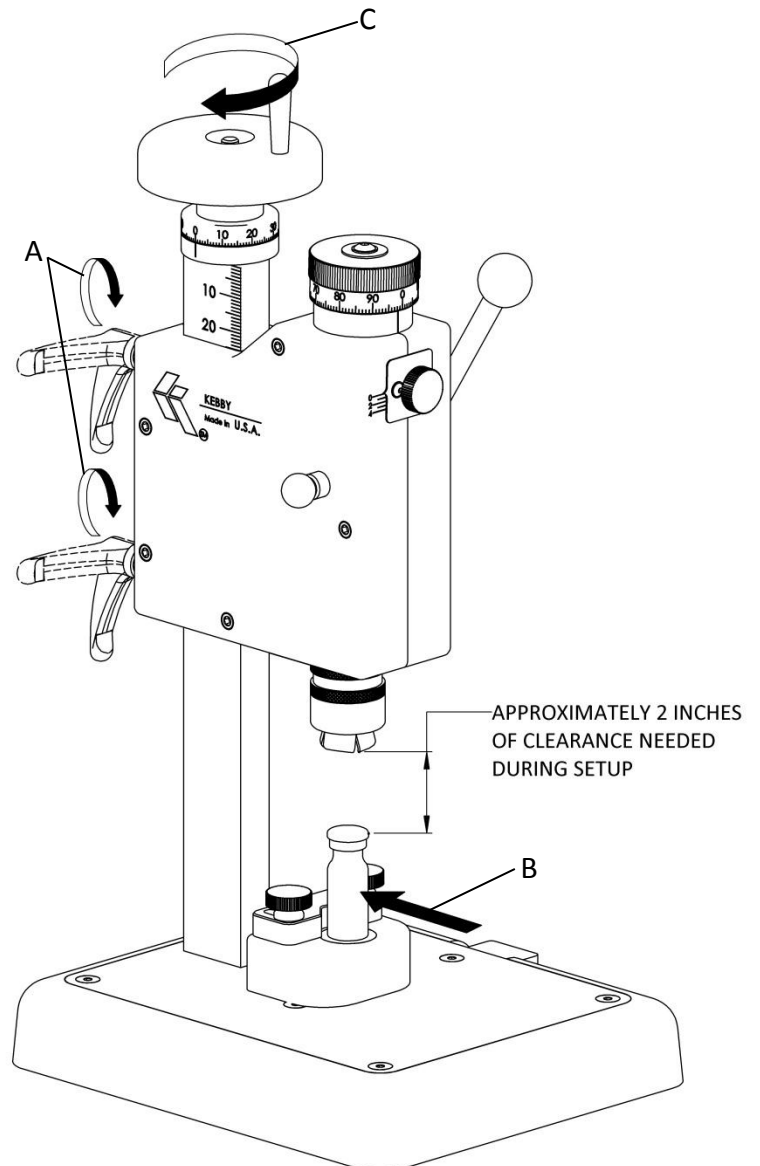
INITIAL SETUP INSTRUCTIONS, continued

STEP 4 – Raise the Crimper Body for setup clearance.

WARNING:

There is risk of pinching hands or fingers during the setup process if there is not enough clearance between the Head and Vial Holder.

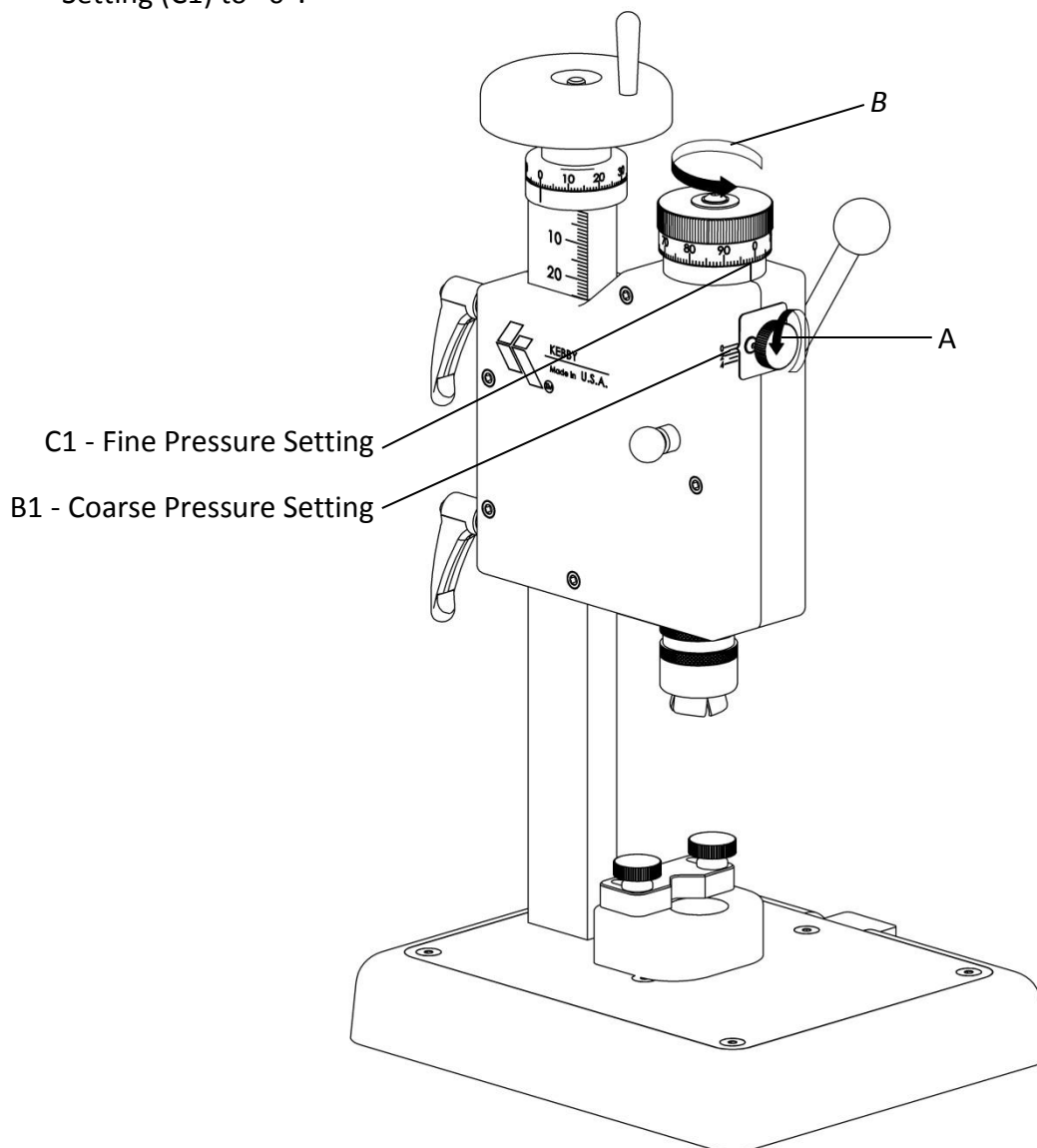
- A. Loosen both Height Lock Handles (A) by less than 1 turn.
- B. Place an empty vial on the Rubber Pad of the Vial Holder (B).
- C. Turn the Height Adjustment Dial (C) clockwise to raise the Crimper Body until there is approximately 2 inches of clearance between the bottom of the Head and the top of the vial.



INITIAL SETUP INSTRUCTIONS, continued

STEP 5 – Set preliminary Pressure Settings.

- A. Loosen the Pressure Lock Knob (A) by less than 1 turn.
- B. Turn the Pressure Adjustment Dial (B) to set the Coarse Pressure Setting (B1) to “1”.
- C. Turn the Pressure Adjustment Dial (B) in the nearest direction to set the Fine Pressure Setting (C1) to “0”.



INITIAL SETUP INSTRUCTIONS, continued

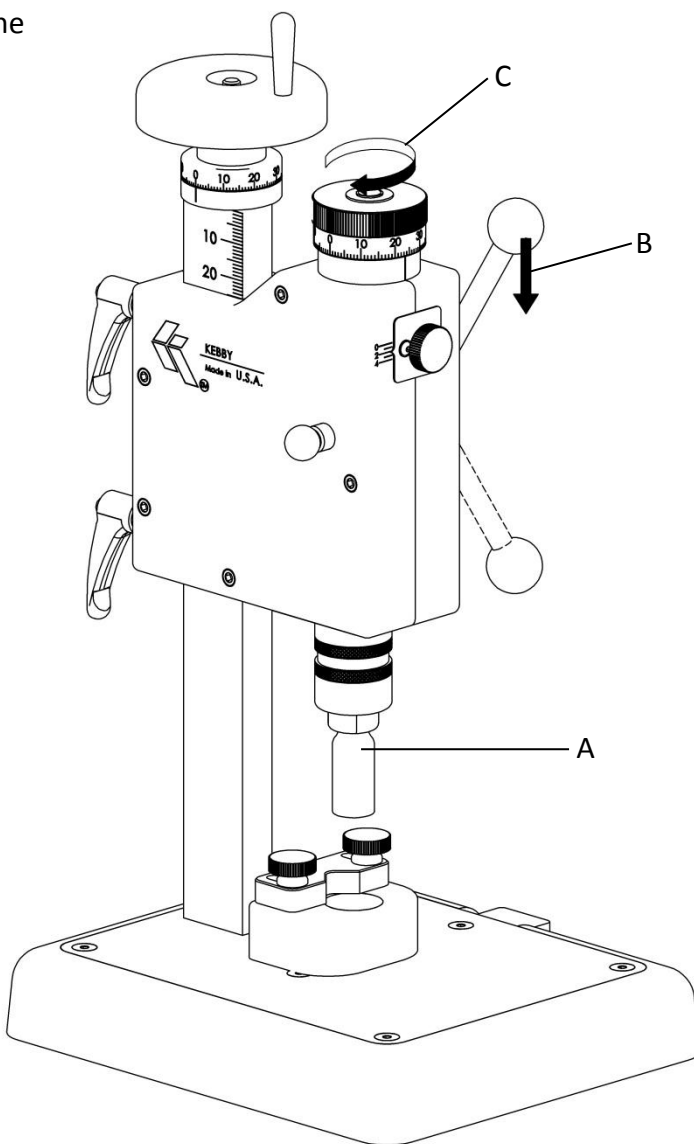
STEP 6 – Adjust Pressure.

- A. Place a seal on an empty vial, and hold the vial up into the Head as far as it will go.
- B. While holding the vial in place (A), pull the Crimp Lever (B) forward until it stops. Gently release the Crimp Lever and remove the vial from the Head.

NOTE:

The Crimp Lever is adjustable, so it may be moved to a position most comfortable for the operator. See label near Crimp Lever for adjustment instructions.

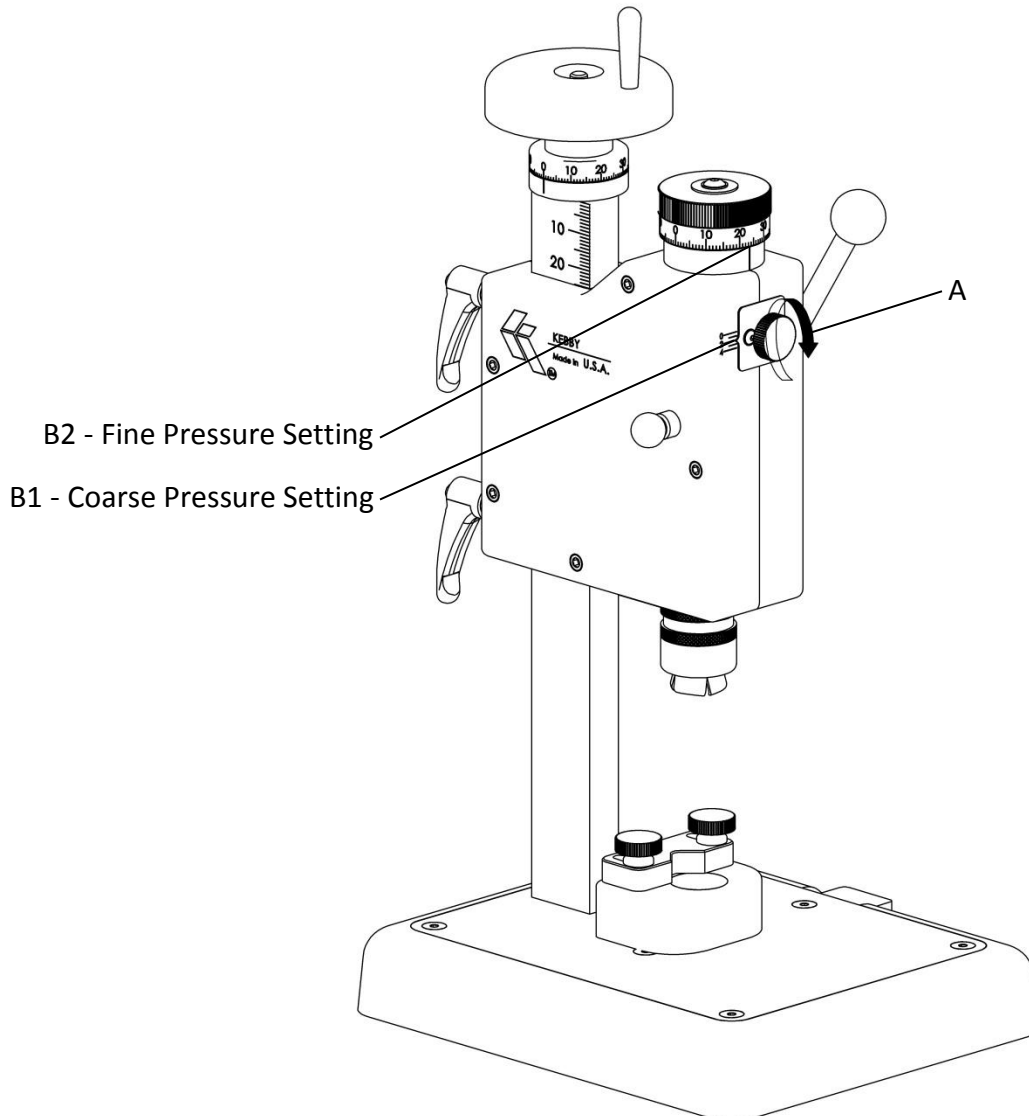
- C. Inspect the seal on the vial.
 - If there is little to no crimp, increase the pressure by turning the Pressure Adjustment Dial (C) clockwise by no more than 50 fine increments (half of a turn of the dial).
 - If there is enough crimp to prevent the seal from freely moving, increase the pressure by turning the Pressure Adjustment Dial (C) clockwise by no more than 10 fine increments.
 - If the seal is overcrimped, then decrease the pressure by turning the Pressure Adjustment Dial (C) counterclockwise, and make smaller incremental adjustments than previously used.
- D. Repeat steps 6.B. and 6.C. until a satisfactory crimp is achieved. Unless the seal is overcrimped, the same vial and seal may be used for each pressure adjustment.



INITIAL SETUP INSTRUCTIONS, continued

STEP 7 – Lock and record Pressure Settings.

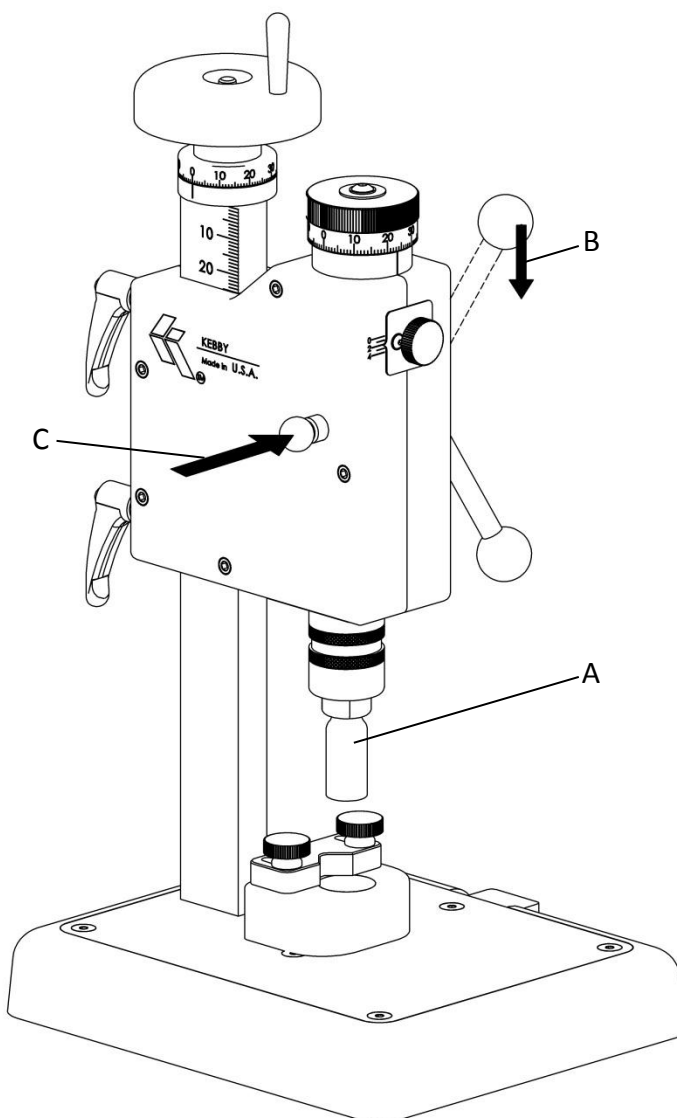
- A. Tighten the Pressure Lock Knob (A) just until snug. DO NOT OVERTIGHTEN.
- B. In order to be able to easily set up and reproduce the desired crimp in the future, record the Coarse Pressure Setting (B1) and Fine Pressure Setting (B2). See Appendix for a BenchMark Settings Log that may be used to record the settings.



INITIAL SETUP INSTRUCTIONS, continued

STEP 8 – Secure vial into Head using Height Setup Knob.

- A. With your left hand, hold an empty vial with a crimped seal back up into the Head.
- B. With your right hand, pull the Crimp Lever (B) forward until it stops and hold it there. Let go of the vial so that it is held only by the Head.
- C. Still holding the Crimp Lever (B) forward, use your left hand to push and hold the Height Setup Knob (C) inward.
- D. Gently let go of the Crimp Lever (B) (which should now stay in the forward position), then let go of the Height Setup Knob (C). The Height Setup Knob should stay pushed inward, and the vial will remain in the Head for the next step.



INITIAL SETUP INSTRUCTIONS, continued

STEP 9 – Adjust Height and secure Vial Stop.

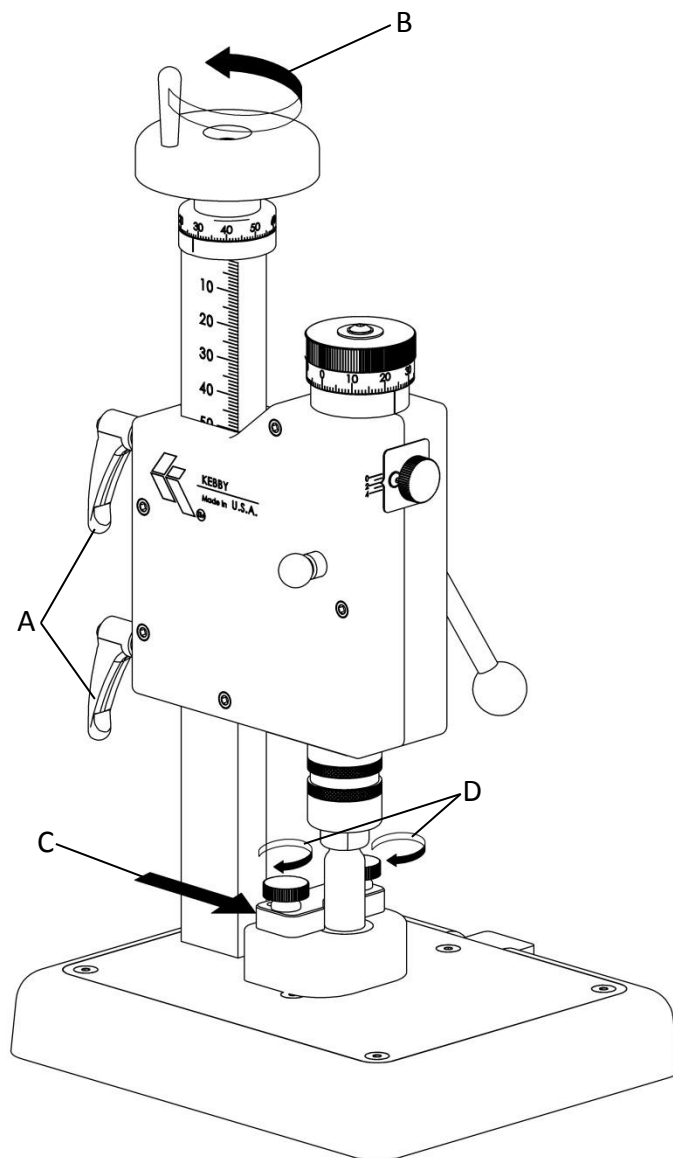
NOTE: If using a Non-Adjustable Vial Holder, Steps 9C and 9D do not apply.

- A. Confirm that both Height Lock Handles (A) are loosened (by less than 1 turn).
- B. Turn the Height Adjustment Dial (B) counterclockwise to lower the Crimper Body down until slight resistance is felt when the vial meets the Rubber Pad on the Vial Holder.
- C. Gently slide the Vial Stop (C) up against the vial and visually check that the vial appears centered with the Head and Rubber Pad.

NOTE:

The entire Vial Holder may be rotated by hand to a comfortable position for the operator.

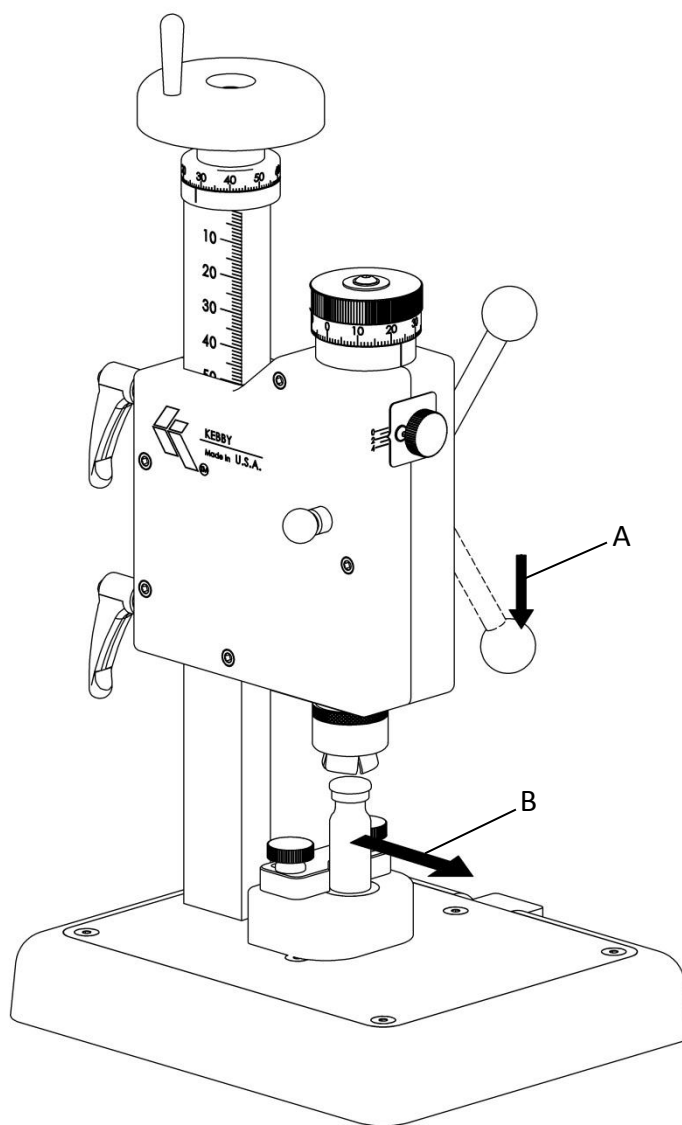
- D. Tighten the Vial Stop Lock Knobs (D) just until snug. DO NOT OVERTIGHTEN.



INITIAL SETUP INSTRUCTIONS, continued

STEP 10 – Release Height Setup Knob and remove Vial.

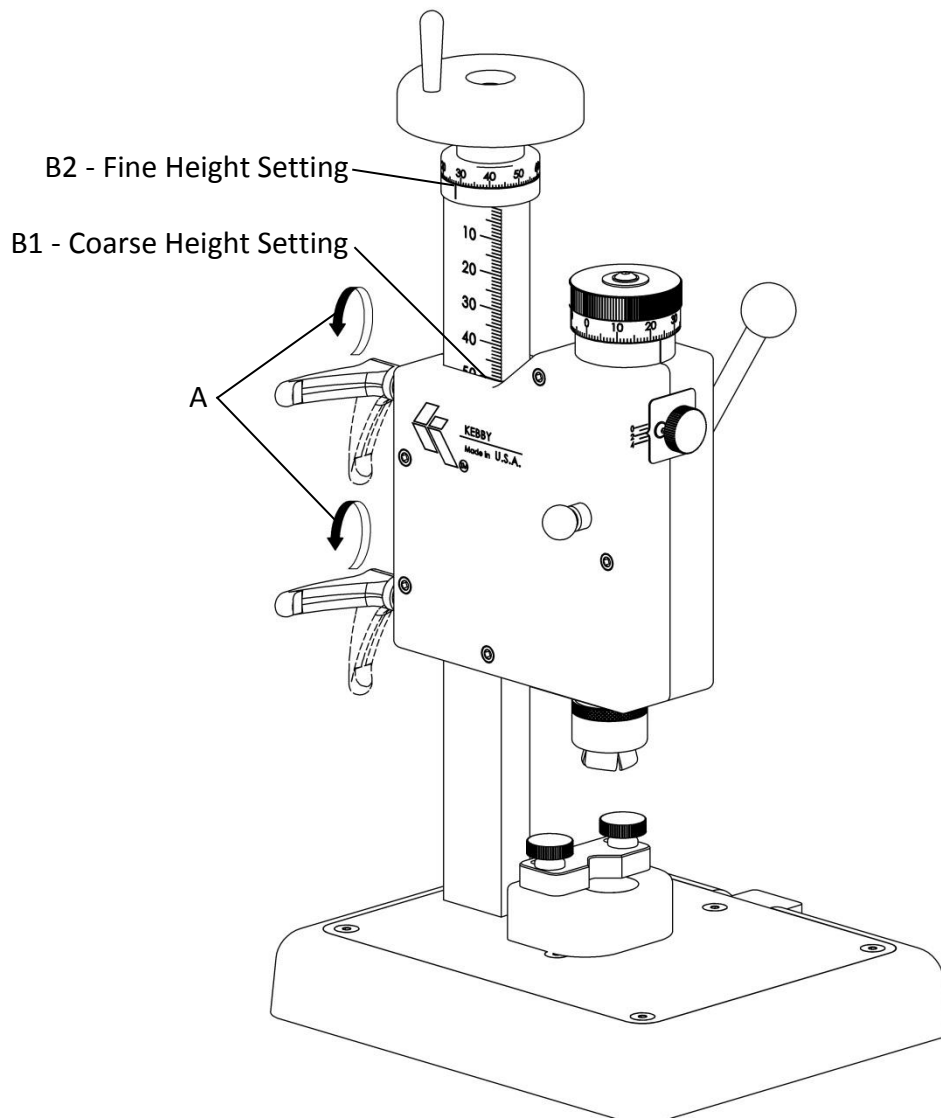
- A. Push downward on the Crimp Lever (A) to release the Height Setup Knob, and gently allow the Crimp Lever to return to its original position.
- B. Remove the vial from the Vial Holder (B).



INITIAL SETUP INSTRUCTIONS, continued

STEP 11 – Lock and record Height Settings.

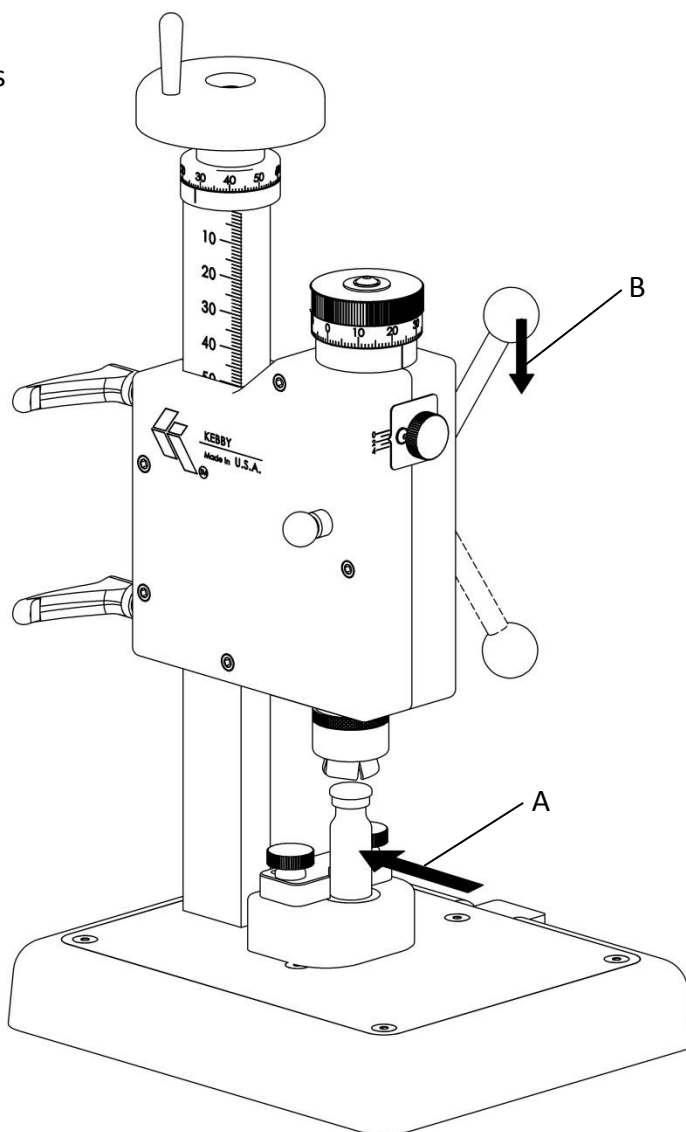
- A. Tighten both Height Lock Handles (A) just until snug. DO NOT OVERTIGHTEN.
- B. In order to be able to easily set up and reproduce the desired crimp in the future, record the Coarse Height Setting (B1) and Fine Height Setting (B2). See Appendix for a BenchMark Settings Log that may be used to record the settings.



INITIAL SETUP INSTRUCTIONS, continued

STEP 12 – Test the setup.

- A. Place a new seal on an empty vial and set the vial on the Vial Holder so that it is up against the Vial Stop (A).
- B. Pull the Crimp Lever (B) forward as far as it will go, then gently allow the Crimp Lever to return to its original position.
- C. Remove the vial from the Vial Holder and inspect the seal.
 - If the crimp is not acceptable, then both the Pressure and Height Settings must be adjusted by repeating the Initial Setup Instructions beginning with Step 4.
 - If the crimp is acceptable but slightly more down pressure is desired, then loosen both Height Lock Handles, turn the Height Adjustment Dial counterclockwise by no more than 5 fine increments, retighten both Height Lock Handles, and repeat Steps 12A through 12C.



WARNING:

- If there is too much down pressure, there is a chance of vial breakage during the crimp cycle. Wear impact resistant safety glasses and protective gloves.

- If the crimp is acceptable, the BenchMark is now ready for operation. Follow the Operating Instructions in this manual.

QUICK SETUP INSTRUCTIONS

IMPORTANT – Read before beginning Quick Setup.

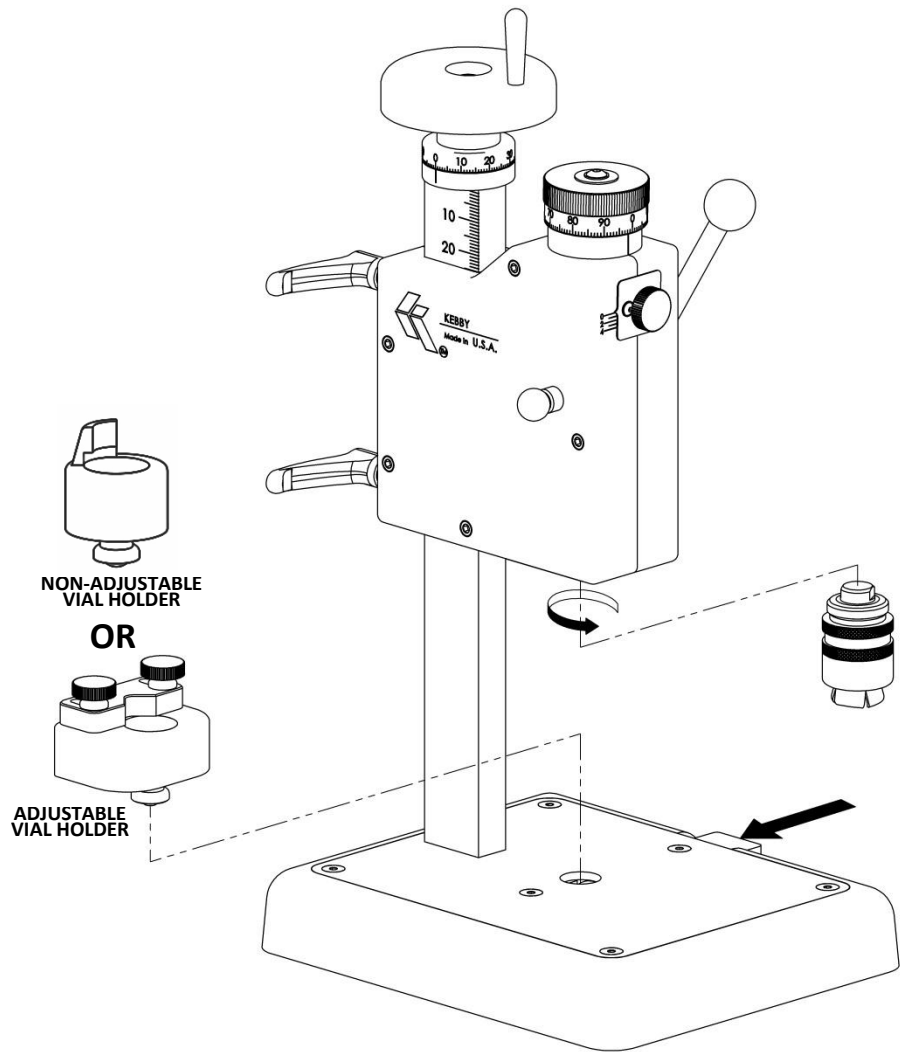
WARNINGS:

- **Use Quick Setup Instructions only if Initial Setup Instructions have been already performed for the particular vial size and seal type to be crimped.**
- **If the BenchMark is not set up properly for the vial size and seal type that is to be crimped, there is a chance of vial breakage during the crimp cycle.**
- **Wear impact resistant safety glasses and protective gloves while setting up the BenchMark.**

QUICK SETUP INSTRUCTIONS, continued

STEP 1 – Assemble correct Head and Vial Holder to BenchMark.

- A. If applicable, remove incorrect Head from Crimper Body by unscrewing the Head from the Crimper Body clockwise by hand.
- B. If applicable, remove incorrect sized Vial Holder from Base by pushing and holding the Vial Holder Lock Lever inward, then lifting the Vial Holder up and out of the Base.
- C. Assemble the correct Head and Vial Holder to the BenchMark following the INITIAL SETUP INSTRUCTIONS Steps 1 and 2.

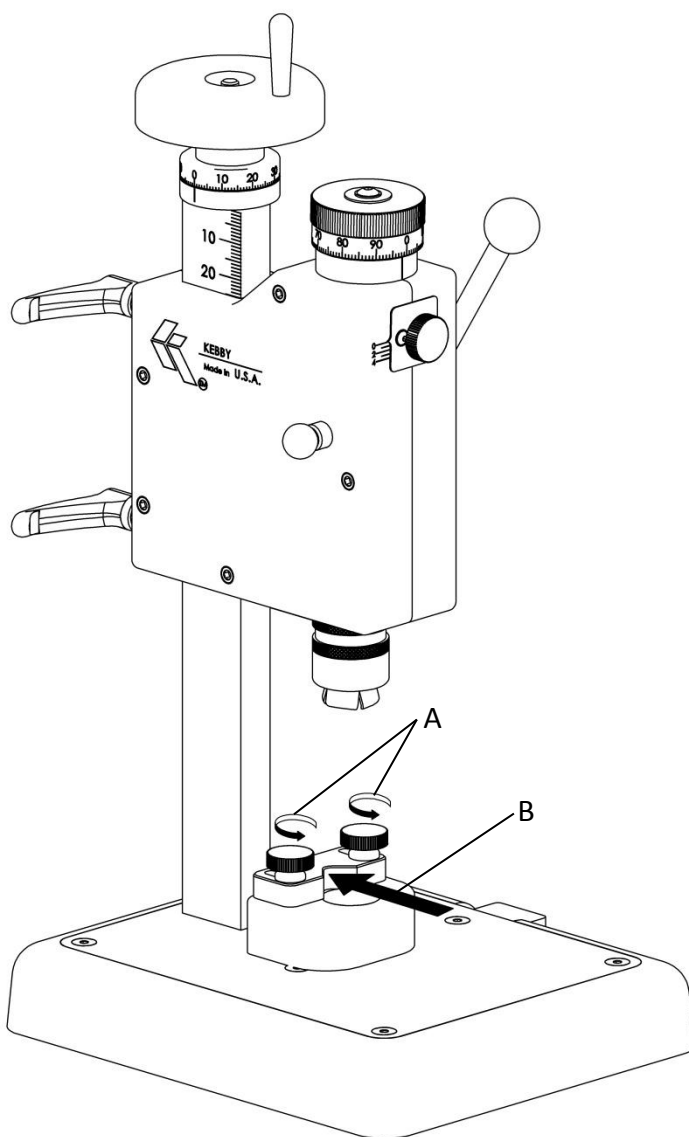


QUICK SETUP INSTRUCTIONS, continued

STEP 2 – Slide Vial Stop back.

NOTE: If using a Non-Adjustable Vial Holder, Step 2 does not apply.

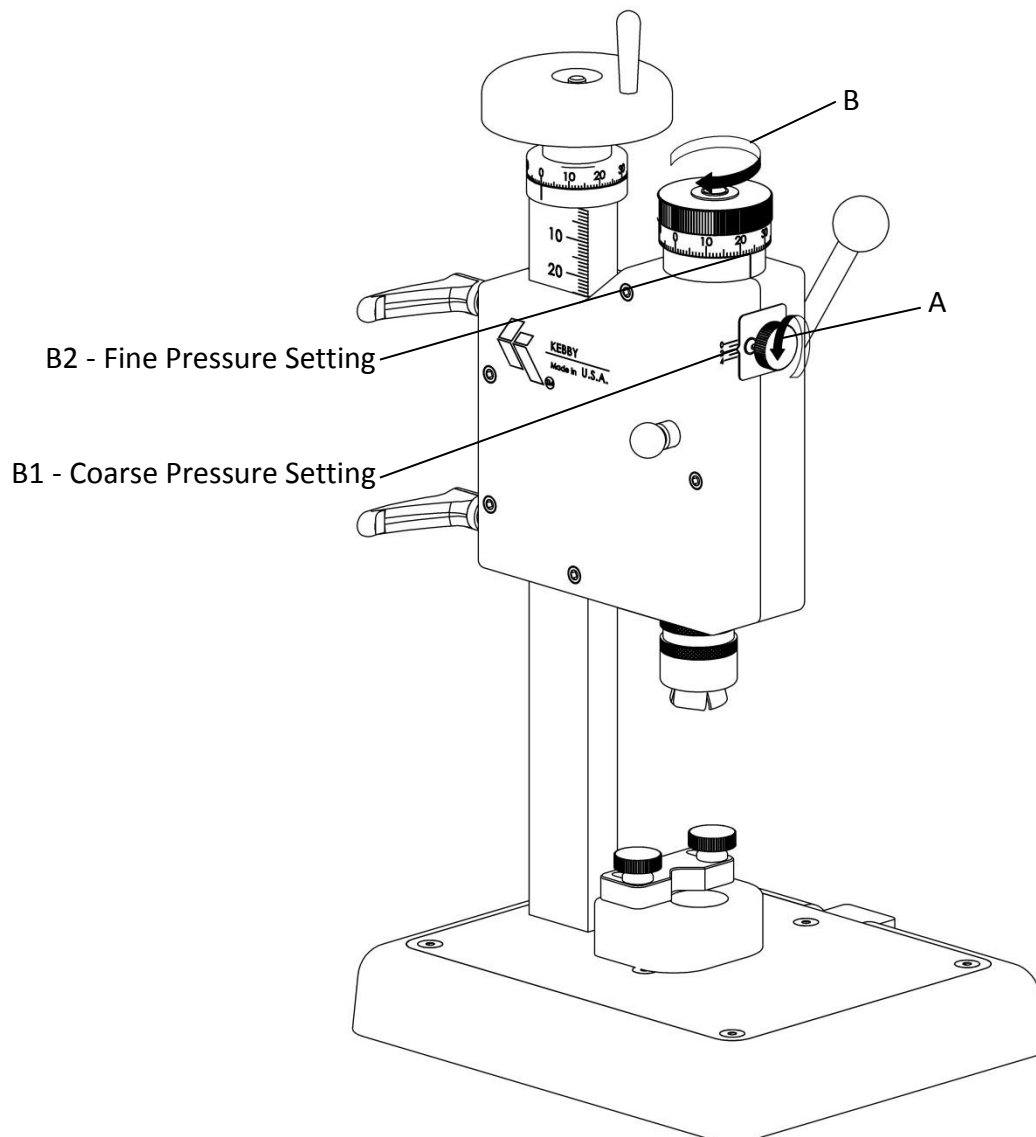
- A. Loosen both Vial Stop Lock Knobs (A).
- B. Slide the Vial Stop (B) back as far as it will go.
- C. Leave the Vial Stop Lock Knobs (A) loose. They will be tightened later.



QUICK SETUP INSTRUCTIONS, continued

STEP 3 – Set Coarse and Fine Pressure Settings.

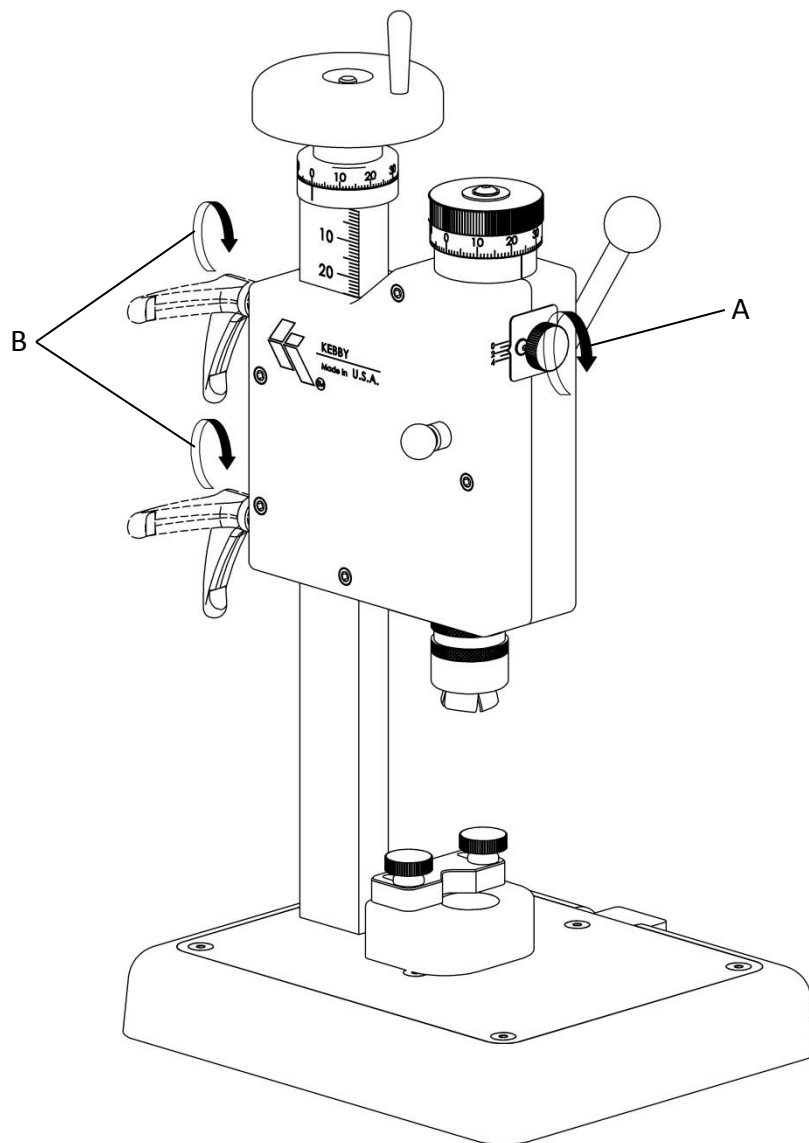
- A. Loosen the Pressure Lock Knob (A) by less than 1 turn.
- B. Turn the Pressure Adjustment Dial to first set the Coarse Pressure Setting (B1) and then the Fine Pressure Setting (B2) to the settings previously recorded for the particular vial size and seal type to be crimped.



QUICK SETUP INSTRUCTIONS, continued

STEP 4 – Lock Pressure Settings and loosen Height Lock Handles.

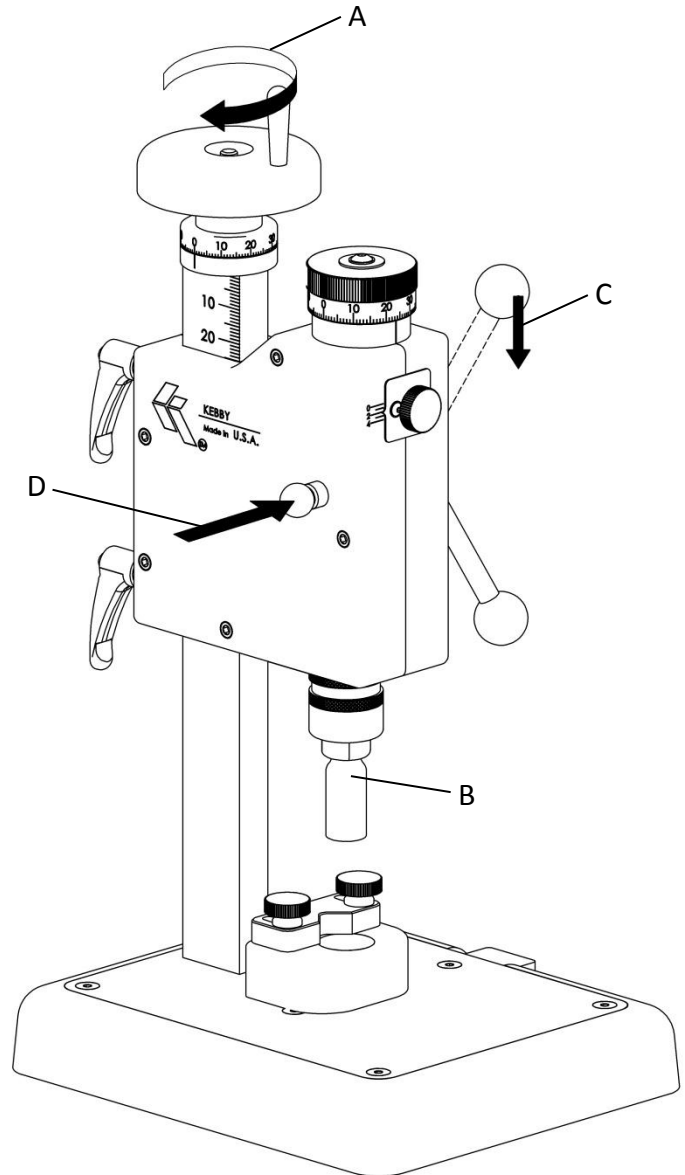
- A. Tighten the Pressure Lock Knob (A) just until snug. DO NOT OVERTIGHTEN.
- B. Loosen both Height Lock Handles (B) by less than 1 turn.



QUICK SETUP INSTRUCTIONS, continued

STEP 5 – Raise Crimper Body, then secure vial into Head using Height Setup Knob.

- A. Set an empty vial on the Rubber Pad of the Vial Holder, then turn the Height Adjustment Dial (A) clockwise to raise the Crimper Body until there are approximately 2 inches of clearance between the bottom of the Head and the top of the vial (refer to diagram on page 8).
- B. Place a seal on the vial, and hold the vial up into the Head (B) as far as it will go with your left hand.
- C. With your right hand, pull the Crimp Lever (C) forward until it stops and hold it there. Let go of the vial so that it is held only by the Head.
- D. Still holding the Crimp Lever (C) forward, use your left hand to push and hold the Height Setup Knob (D) inward.
- E. Gently let go of the Crimp Lever (C) (which should now stay in the forward position), then let go of the Height Setup Knob (D). The Height Setup Knob should stay pushed inward, and the vial will remain in the Head for the next step.

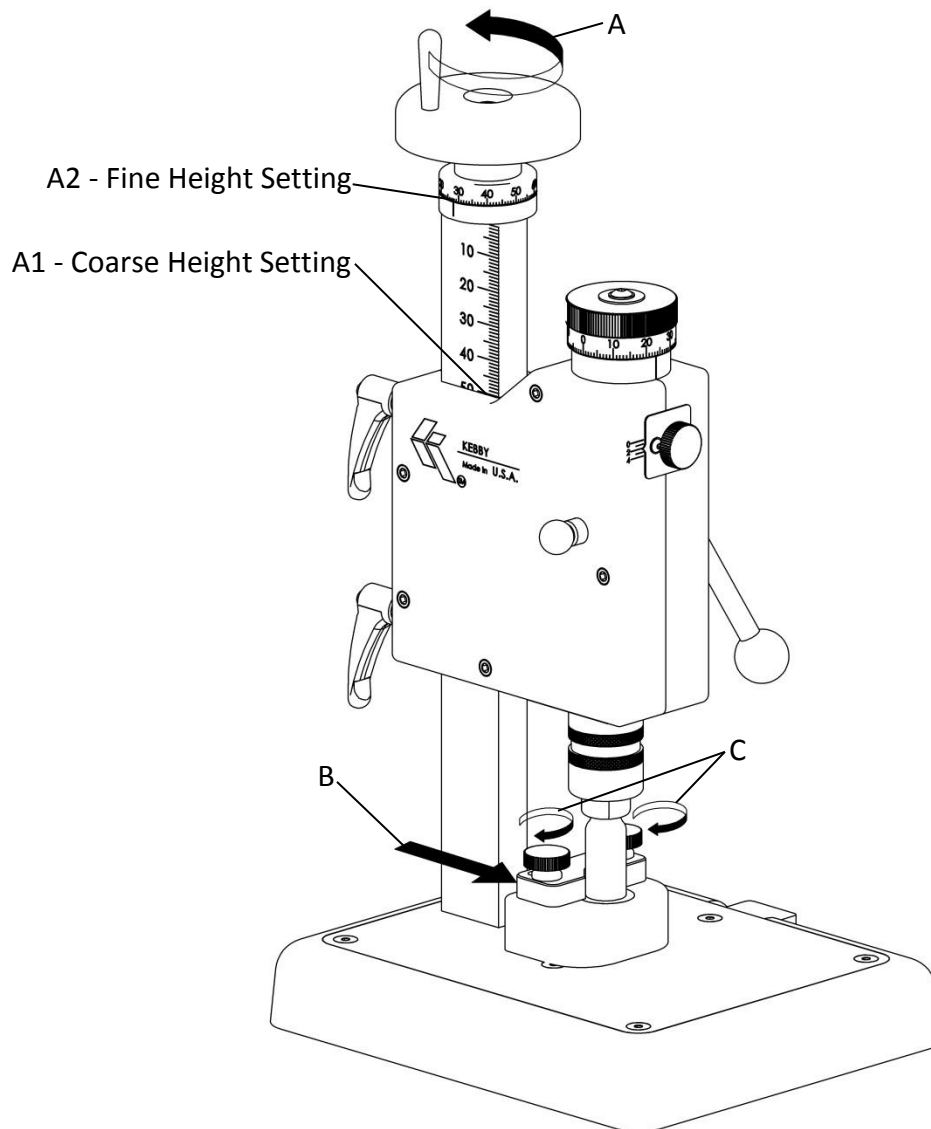


QUICK SETUP INSTRUCTIONS, continued

STEP 6 – Set Coarse and Fine Height Settings, then secure Vial Stop.

NOTE: If using a Non-Adjustable Vial Holder, Steps 6B and 6C do not apply.

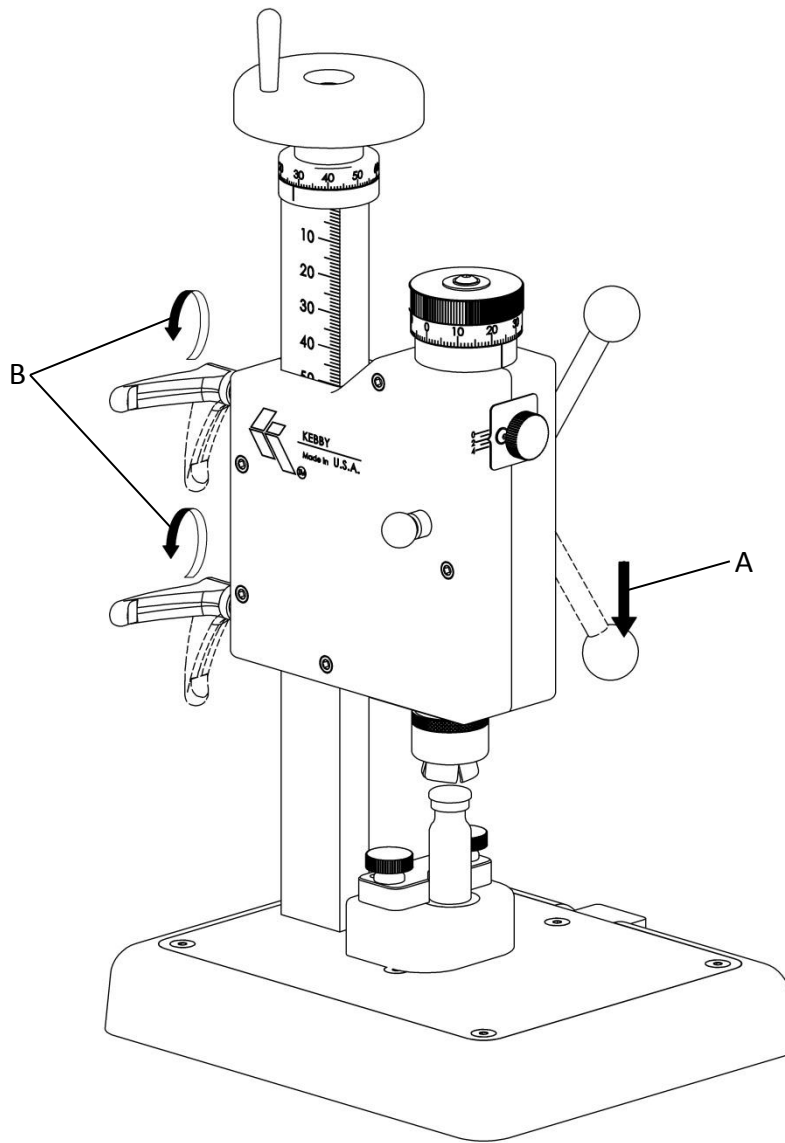
- A. Turn the Height Adjustment Dial (A) to first set the Coarse Height Setting (A1) and then the Fine Height Setting (A2) to the settings previously recorded for the particular vial size and seal type to be crimped.
- B. Gently slide the Vial Stop (B) up against the vial.
- C. Tighten the Vial Stop Lock Knobs (C) just until snug. DO NOT OVERTIGHTEN.



QUICK SETUP INSTRUCTIONS, continued

STEP 7 – Release Height Setup Knob, then lock Height Settings.

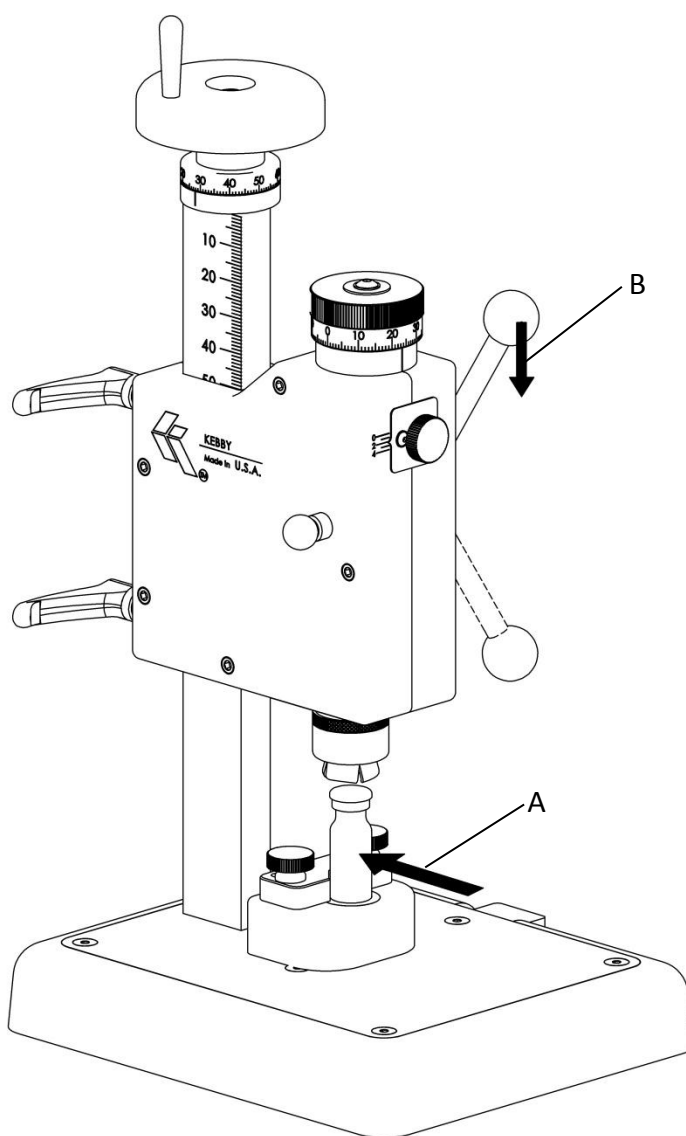
- A. Push downward on the Crimp Lever (A) to release the Height Setup Knob, and gently allow the Crimp Lever to return to its original position.
- B. Tighten both Height Lock Handles (B) just until snug. DO NOT OVERTIGHTEN.



QUICK SETUP INSTRUCTIONS, continued

STEP 8 – Test the setup.

- A. Place a new seal on an empty vial and set the vial on the Vial Holder so that it is up against the Vial Stop (A).
- B. Pull the Crimp Lever (B) forward as far as it will go, then gently allow the Crimp Lever to return to its original position.
- C. Remove the vial from the Vial Holder and inspect the seal.
 - If the crimp is acceptable, the BenchMark is now ready for operation. Follow the Operating Instructions in this manual.
 - In the unlikely event that the crimp is not acceptable, repeat the Initial Setup Instructions to again determine the proper settings for that particular vial size and seal type.



OPERATING INSTRUCTIONS

WARNINGS:

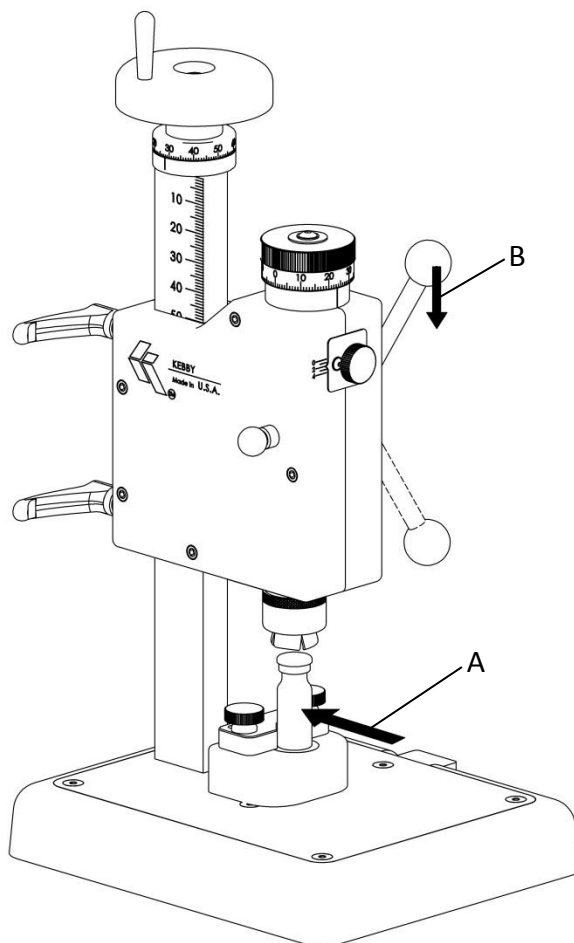
If the BenchMark is not set up properly for the vial size and seal type that is to be crimped, there is a chance of vial breakage during the crimp cycle. As a precaution, the following checks should be made prior to operating the BenchMark:

- Make sure the correct Vial Holder and Head are assembled to the BenchMark.
- Make sure all four settings are correct for the vial size and seal type to be crimped (refer to settings recorded during the initial setup).

Wear impact resistant safety glasses and protective gloves while operating the BenchMark.

CRIMPING OPERATION INSTRUCTIONS

- Place a seal on a filled vial and set the vial on the Vial Holder so that it is up against the Vial Stop (A).
- Pull the Crimp Lever (B) forward as far as it will go, then gently allow the Crimp Lever to return to its original position.
- Remove the sealed vial from the Vial Holder.
- Repeat steps A through C until all vials have been sealed.



APPENDIX

**BenchMark Settings Log
is on the next page.**

BenchMark Settings Log

[illegible]