



Plastic Extrusion Tooling Specialists

ph: 800.272.8878

Adjustable Center Crossheads Operations Manual

BH25, BH30, BH75, BH225, BH250 & BH750



B&H TOOL COMPANY

**FIRST IN
EXTRUSION
TOOLING**

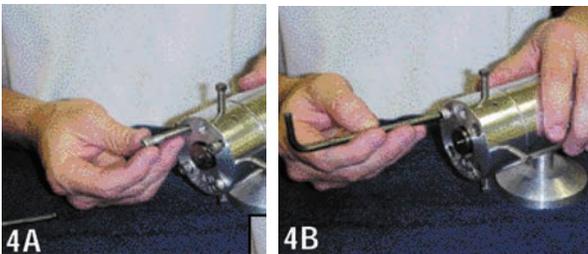
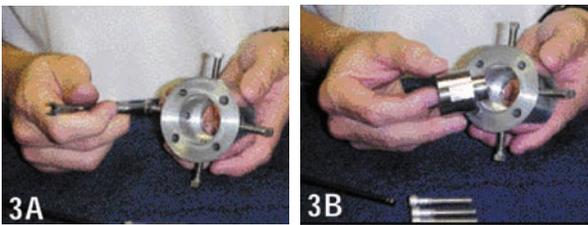


Dear Customer,

Thank you for purchasing a B&H Tool Company product. Founded in 1967, B&H Tool Company was the first company to specialize in the manufacture of crossheads. B&H Tool Company has been providing reliable service and producing quality products for several years. We are sure that you will agree with our other customers that this equipment is reliable and easy to use. The following is an explanation of the operation of our crossheads to help you with set-up and cleaning. If you have any questions do not hesitate to call us at 800-272-8878. We would be glad to assist you.

Sincerely,
Peter Neville,
President

SET-UP: Assembly



Reference Crosshead Drawings Provided

- 1.** Remove the four (4) die holder cap screws and die holder

You can perform your set-up with the crosshead on your extruder, or at a set-up area. If you are assembling hot parts, be sure to use gloves to protect your hands.

- 2.** Screw the tip into the core tube. Some tips have flats on OD and some tips have a hex in the end. Tighten tip with a crescent or hex wrench gently. Do not over tighten the tip.

NOTE: If changing out a tip extend core tube as far as possible by turning adjusting nut counter-clockwise. Remove tip and clean exposed surface of core tube. Install new tip.

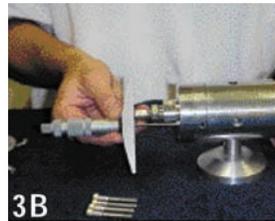
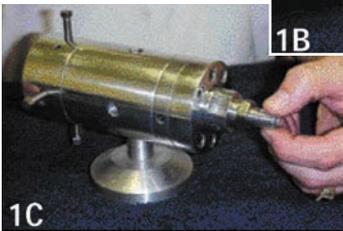
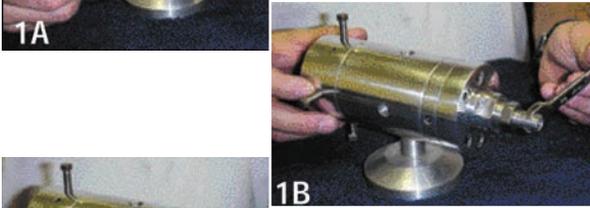
- 3 A & B.** Loosen the four (4) die adjusting set screws and slide die into die holder

3 C. *Note: Some crossheads have a die cup/die assembly. In this case, put die into die cup and slide die cup into die holder.*

- 4.** Assemble Die Holder by installing the four (4) Die holder caps screws. Tighten cap screws so that they are snug. It is not necessary to over-tighten the screws in order to seal the crosshead. The wedge ring prevents the crosshead from leaking by sealing against the die.

- 5.** Tighten the four (4) die adjusting set screws, centering die by appearance.

OPERATIONS: Tip & Die Adjustment



Pressure Tooling

1 A, B & C. Once the pressure tip and die are assembled in the crosshead, you can rotate the tip, making a parallel construction wire by loosening the jam nut and rotating the core tube at the back of the crosshead. There are flats machined into the core tube, so you can hold onto the core tube with a wrench while loosening or tightening the jam nut. Once the tip is in the correct rotational position, tighten the jam nut.

Note: This step is not necessary for simple construction, round products.

2. Adjust the axial position of the tip by loosening or tightening the adjusting nut at the back of the crosshead. Rotating the adjusting nut clockwise moves the tip back in the crosshead. If you have pressure tooling manufactured by B&H Tool Company, the face of the tip should be one product diameter back from the land of the die, as an initial starting position. If necessary, the axial position of the tip may be adjusted by turning the adjusting nut while you are extruding product.

3 A & B. To establish the position of the tip relative to the die, remove the die from the die holder and place it against the wedge ring. Extend the tip forward by rotating the adjusting nut until the tip contacts the inside of the die. Use a depth gauge and measure the distance from the back end of the core tube to the crosshead. Back off the core tube, measuring the distance from the end of the core tube to the crosshead, to establish the desired gap between your tip and die.

4. The die or product center can be fine-tuned by tightening and/or loosening the four (4) die adjusting set screws while extruding product. Tighten and loosen opposite screws by equal amounts.

Sleeving or Tubing Tooling

1. The adjustment of sleeving or tubing tooling is the same as pressure tooling except that for B&H tooling the end of the tip land should line up flush with the face of the die as an initial starting position.

CLEANING: Breakdown

Reference Crosshead Drawings Provided



Die Holder, Die and Tip

1. Loosen the four (4) die adjusting set screws

Crosshead should be cleaned immediately after purging all compound from extruder. We recommend that the crosshead be disassembled while still hot. Use gloves to protect hands.

2. Remove the four (4) die holder cap screws and die holder. You may need to use a wooden dowel or brass bar to pry die holder from barrel body.

3. Press out die from die holder or die cup. Clean die holder or die cup with copper mesh.

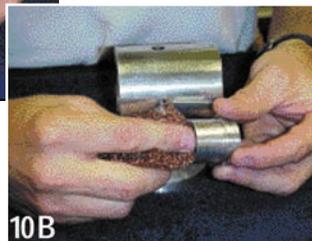
4. Extend core tube as far as possible by turning the adjusting nut counterclockwise.

5. Core tube can be completely removed by detaching jam nut and pushing core tube forward through crosshead. Do not pull the core tube assembly out the back end of the crosshead or material will collect on the inside of the deflector.

6. Remove tip and clean with copper mesh



CLEANING: Breakdown



8 A. Remove all six (6) cap screws from rear of crosshead

8 B & C. Remove the adjusting nut holder, adjusting nut and adjusting tube. Set these aside for cleaning.

9 A & B. Remove deflector. If deflector is difficult to remove, replace two (2) short cap screws with two (2) long cap screws and tighten in order to jack deflector out of barrel body. Tighten two cap screws equally so that deflector comes out straight. Clean the deflector while it is still hot using copper or brass brush and copper mesh.

10. Use B&H wedge ring removal tool or wooden dowel to tap out wedge ring from barrel body. Clean wedge ring while still hot using copper or brass brush copper mesh.

11. After completely cleaning the crosshead, coat the crosshead parts and all threads prior to assembling with Teflon lube provided by B&H Tool Company, or another mold release. Anti-seize containing copper or aluminum should be avoided.