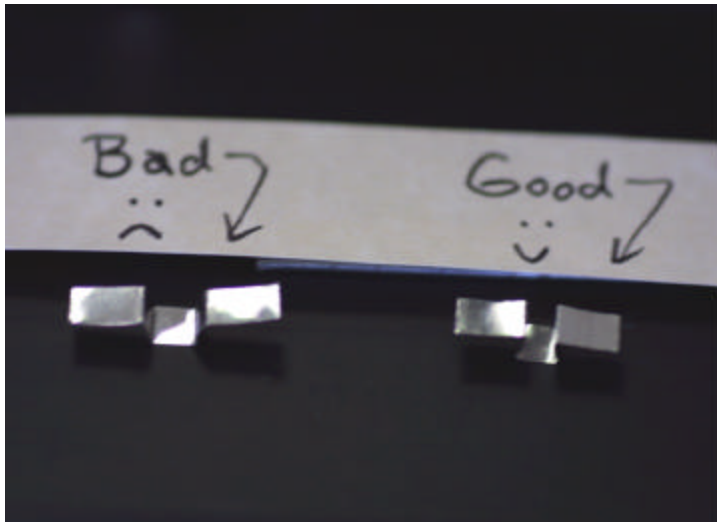


Trough Filament Shape & Alignment

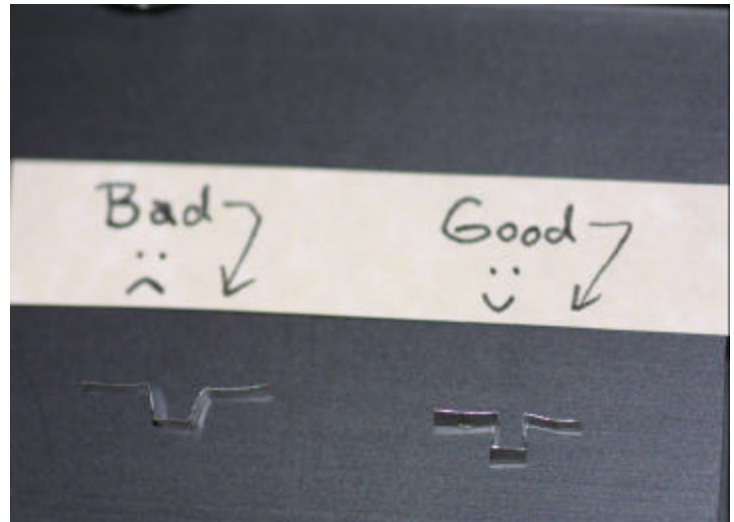
3mm Trough Filament (FT330B)



Top View

BAD shape

GOOD shape



Side View

BAD shape

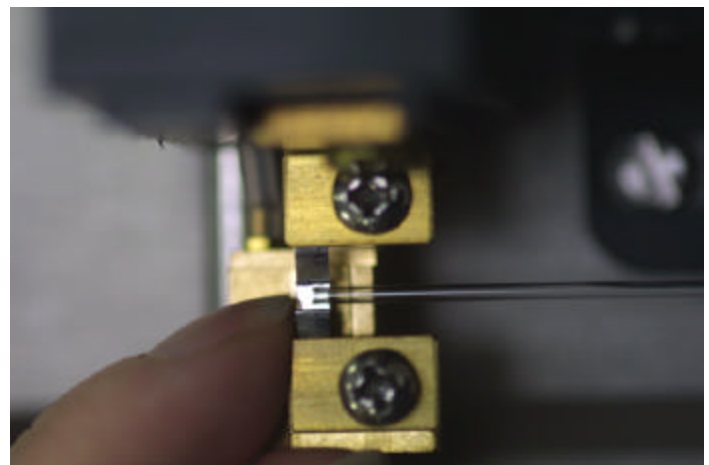
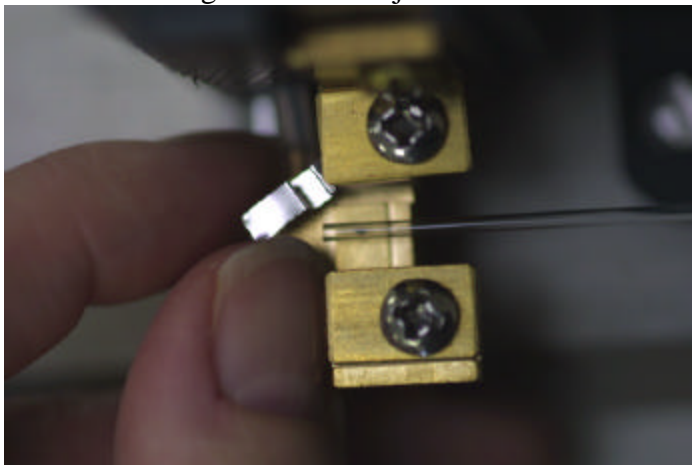
GOOD shape

BAD filament shape: A “Bad” filament shape for the 3mm trough (FT330B) pictured above with the walls angled outward (this is bad!) will provide inefficient heating, ramp values over 300 units, and a greater chance of burning out your filament. If your ramp test values or heat values are above 300 units, it is best to remove the filament and reshape it according to what is shown as a “good shape. After you have reshaped the filament, run a new ramp test and adjust your heat settings to be no greater than 15 units over the ramp test value and stay under 300 units for your heat.

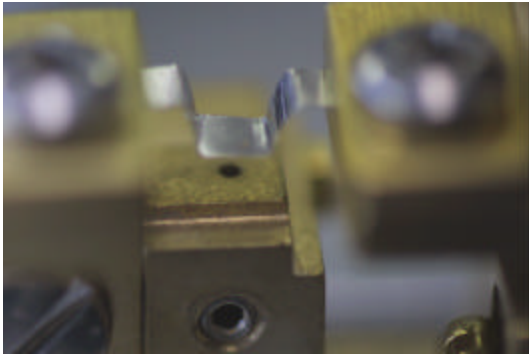
GOOD filament shape: A “Good” filament shape for the 3mm trough (FT330B) pictured above will provide efficient heating of the glass, a ramp value between 240 - 280 units, and a long filament life span of one to two years. The walls should angle inward at 80 degrees and there should be a 2mm opening at the top of the filament.

Installing your filament:

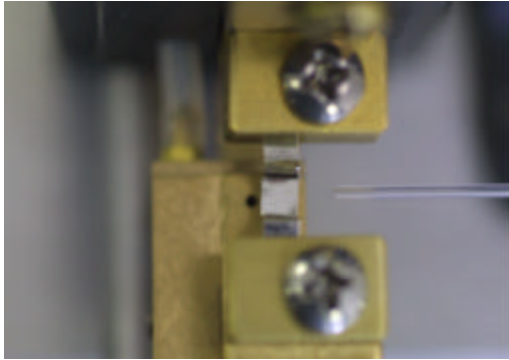
Place a piece of glass in the right puller bar and install the filament around the glass. Filament should be positioned over your air jet. Usually the filament is centered over the air jet when it is sitting 0.5 to 1mm in from the left edge of the brass jaws.



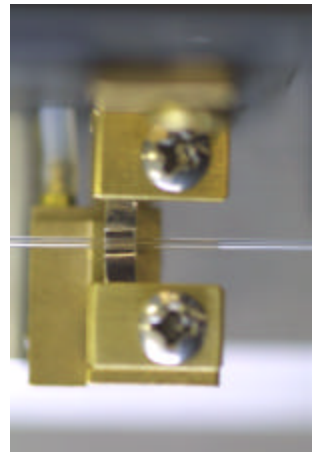
Trough Filament continued....



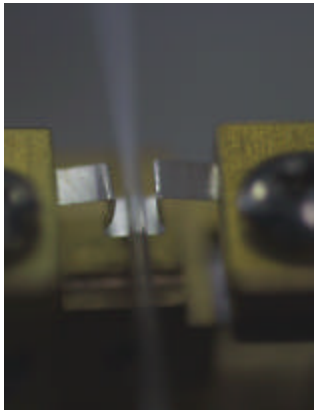
BAD SHAPE



BAD ALIGNMENT



GOOD shape & Alignment



GOOD

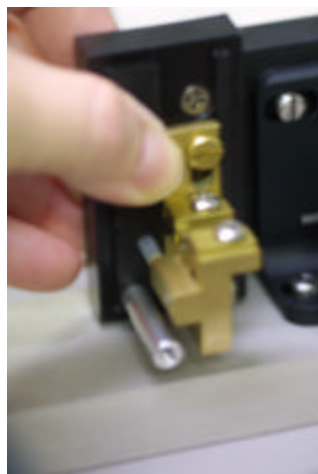


GOOD

Changing from a Trough to a Box Filament: If you are changing from a trough filament to a box filament, you will need to change the position of the brass jaws. The trough sits higher than the box, so you will need to loosen the brass screws (one at a time) and slide each jaw **down** about 3mm.



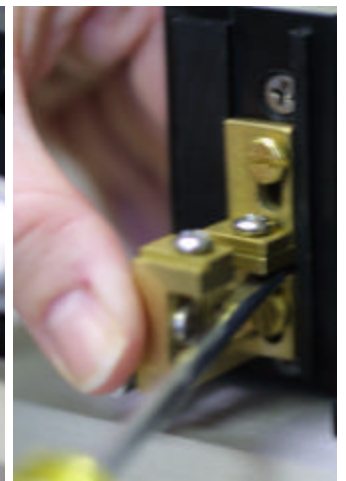
STEP 1.
Loosen top brass screw then...



STEP 2. Slide jaw down 3mm, then tighten the brass screw.



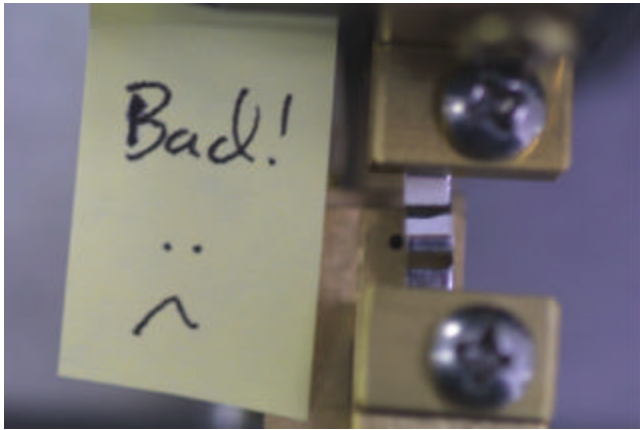
STEP 3. Loosen bottom brass screw and then...



STEP 3. Use the screw driver to pry jaw down 3mm, then tighten the brass screw.

Installing the BOX filament...

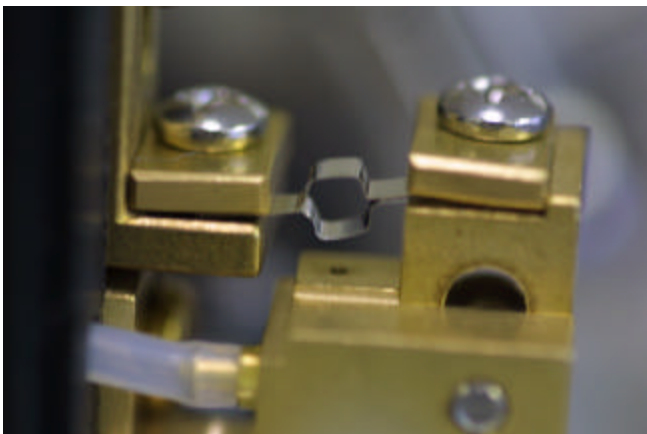
The box filament does not require shaping, but needs to be installed so it is centered right to left over the air jet and also centered around the glass. The glass should run through the middle of the filament.



Box filament not centered over air jet & crooked.
This is BAD!



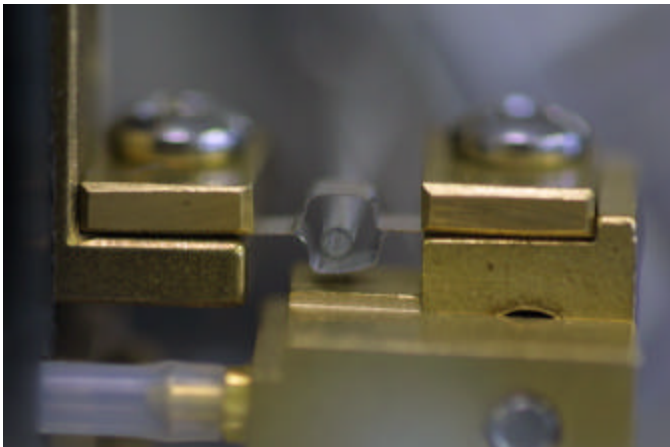
Box filament centered over the air jet and is 1.0mm in from the left edge of the brass jaws. The filament is positioned so the glass runs through the center of the filament.
This is GOOD!



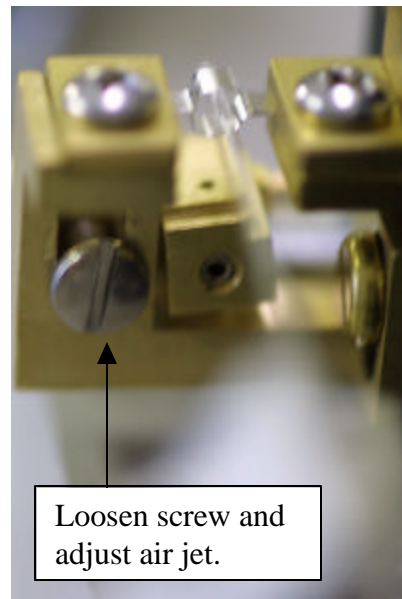
BAD...adjust jaws and make them even (page 11)



GOOD...jaws even, glass centered, air jet 3mm below the filament.



BAD...Air Jet too close



BAD...Air Jet too far and tilted

ECCENTRIC ADJUSTMENTS

Large adjustments to Box or Trough Filament (more than 1-2mm)

If you find that the glass is not centered in the filament from top to bottom, it is best to make large adjustments by adjusting the brass jaws (as seen at the bottom of pg.10). If the filament is not centered in the filament front to back (the glass is sitting closer to the front or back wall of the filament), it is best to loosen the clamp screws and move the filament forward or back.

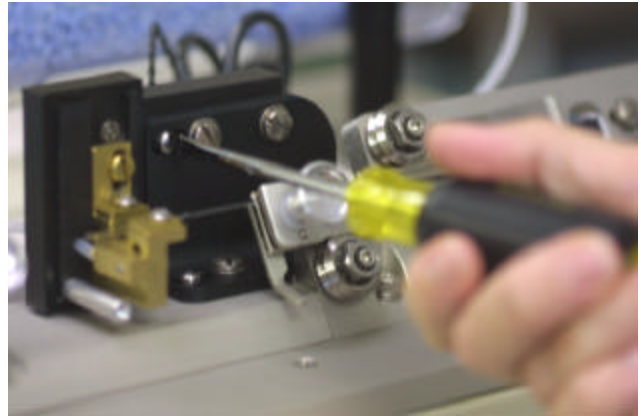
Eccentric Adjustments (less than 1-2mm)

To fine-tune the position of the glass within the filament, you can use the eccentric adjustments to fix the vertical and horizontal alignment. The eccentrics allow you to adjust the filament position in relation to the glass. For a trough filament, the glass should sit centered and low within the filament. For a box filament, the glass should sit centered in both the horizontal and vertical axis.

Vertical Eccentric Adjustment (Moving Filament Up & Down)

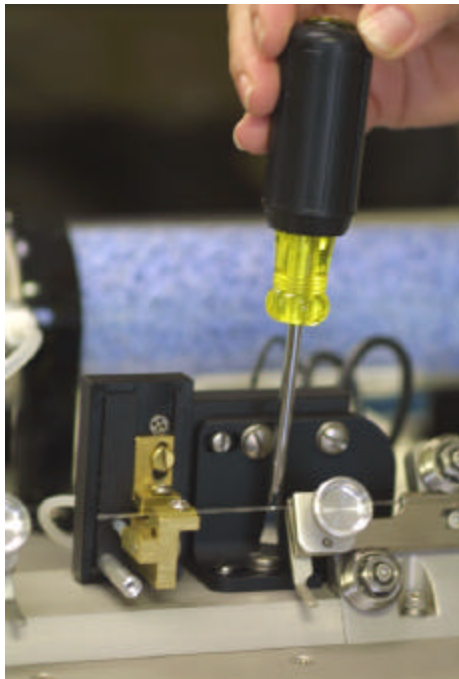


Loosen the locking screw

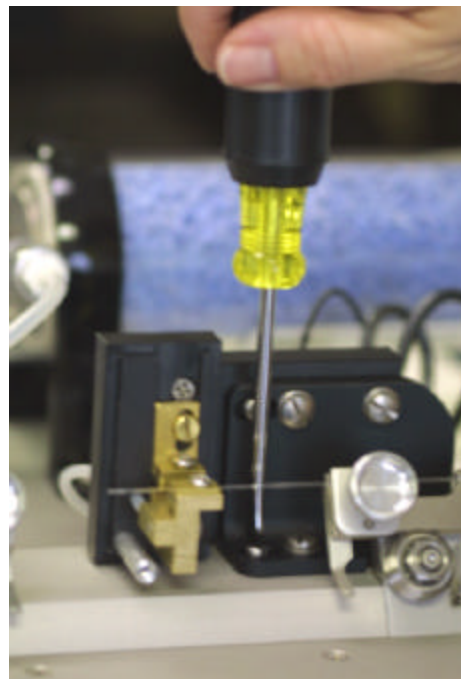


Turn Eccentric Screw

Horizontal Eccentric Adjustment (Moving Filament Forward and Back)



Loosen the locking screw



Turn Eccentric Screw

***Always remember to tighten the locking screw after you adjust the eccentric!!**