



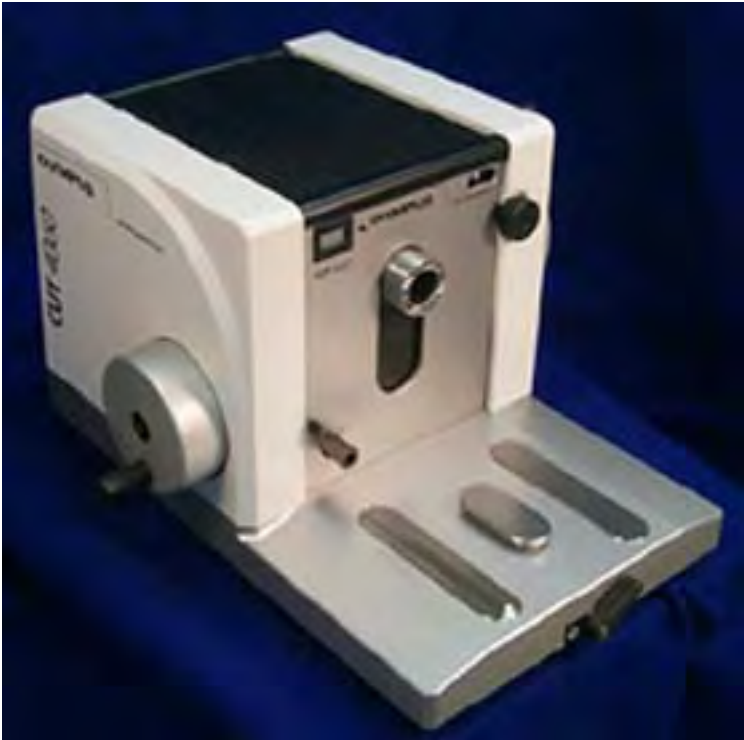
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Preventive Maintenance And Lubrication Guidelines Manual

For **CUT™** Microtomes

Version 1.0, April 2000



Microtome

Place Microtome on solid work surface.

Lock the Fine Advance handwheel.

Remove Knife Holder Assembly.

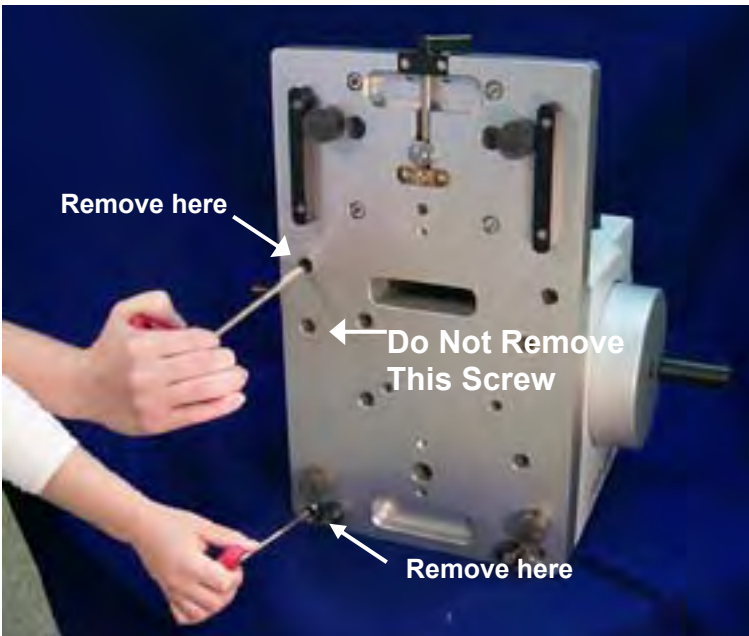


Figure 1

Remove the black rubber mat from the top of the microtome.

For electronic models:
Be sure to remove all electrical connections.

Turn microtome upright on its back. Attempt to minimize the amount of pressure on the side panels.

Remove the screws at the front and back of the left side panel (Coarse Advance side). **See Figure 1.**

The right side panel (Fine Advance side) can be removed but it is not necessary.

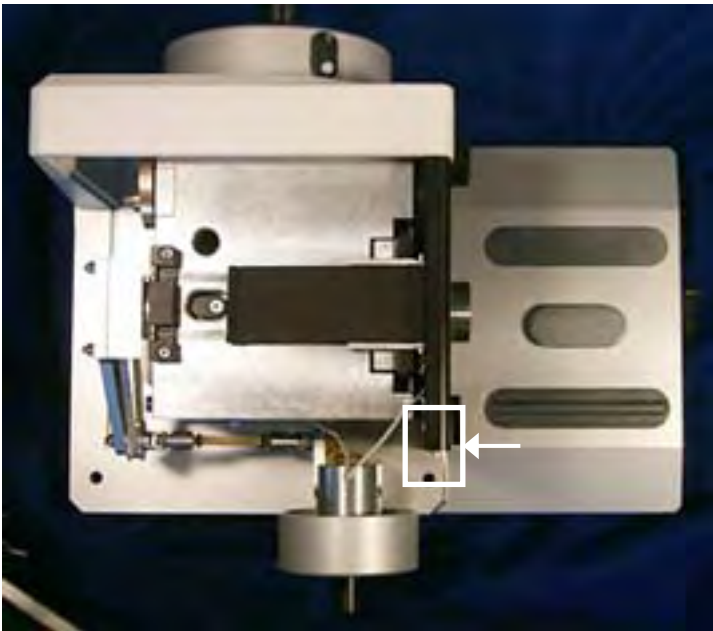


Figure 2



One of four
Positioning Posts

Figure 2A

Remove the top metal cover by sliding toward the left side (Coarse Advance side).

For manual models:

Remove the back metal plate by lifting up. It may be necessary to remove the black support piece before lifting.

For electronic models:

The back plate must remain in place.

Be careful to retain the positioning posts.

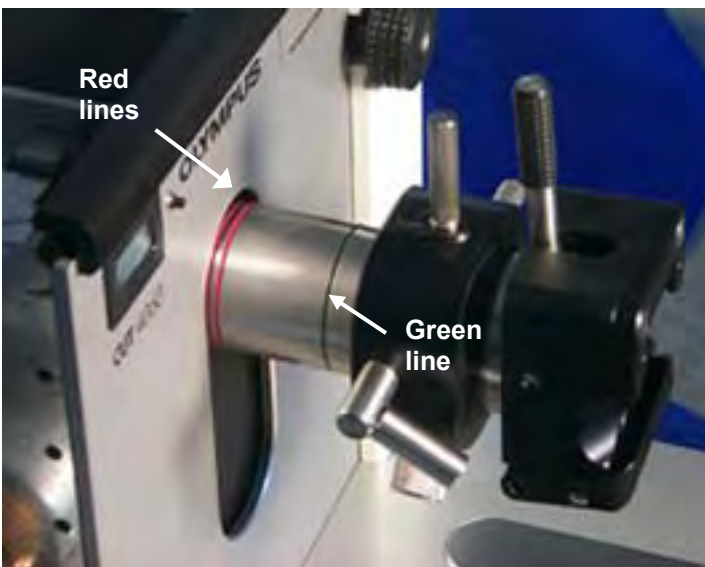


Figure 3

Using the Coarse Advance Handwheel, extend the specimen arm to its most forward position. The red lines should be visible

Every Six Months

Place three or four drops of Isoflex PDP 38 on the specimen arm and rub to coat all the way around. **See Figure 3.**

Using the Coarse Advance Handwheel, move the specimen arm back and forth. Return the arm to the start position with the green line visible.

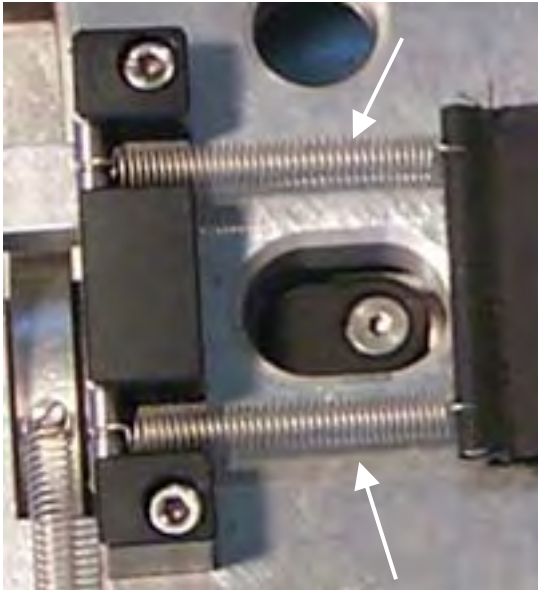


Figure 4A

Check the integrity of the two springs on the Debris Protection Curtain. **See Figure 4A.**

Order and install replacement springs if necessary.

Every Six Months

Place three or four drops of Isoflex PDP 38 on the roller bearing slideways (roller guides). **See Figure 4B.**

Turn the fine advance handwheel to move the specimen arm up and down several times.



Figure 4B

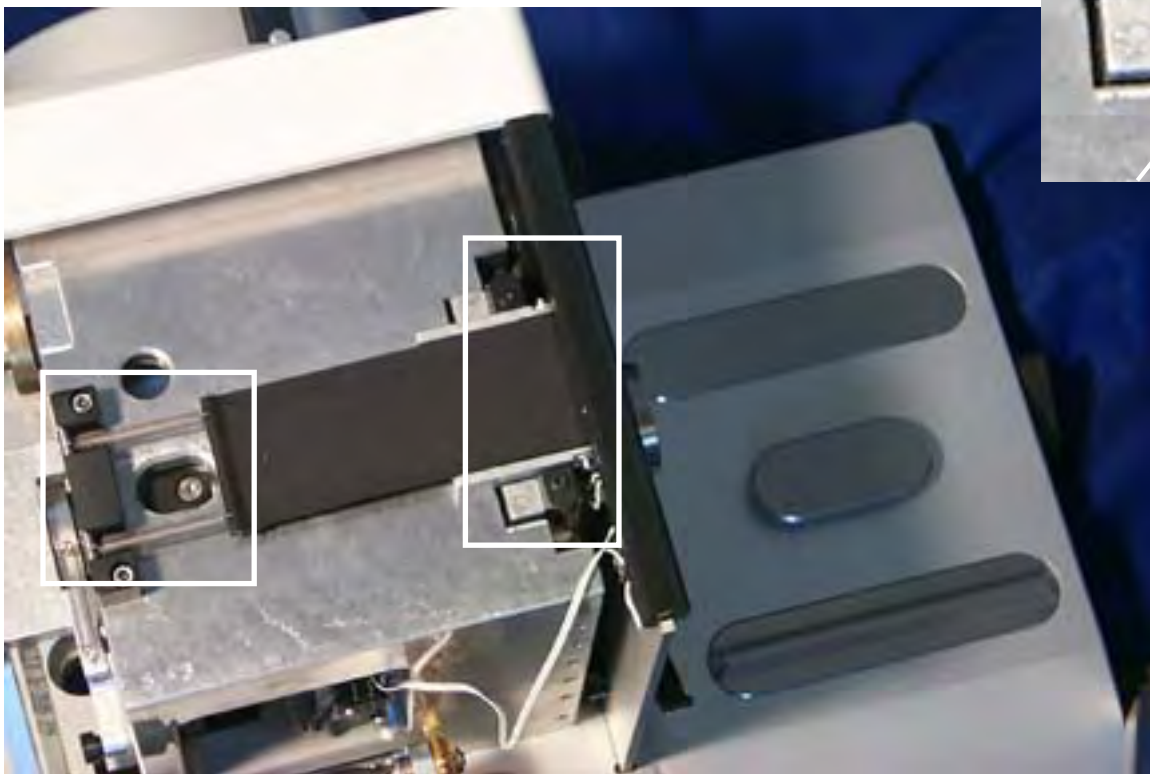


Figure 4

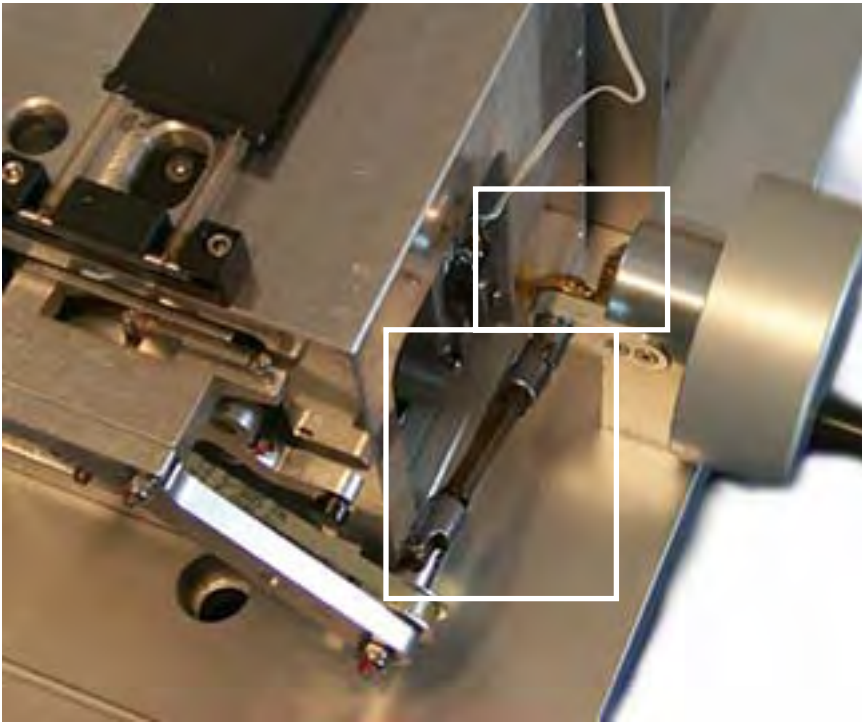


Figure 5

Once a year, remove and reapply Isoflex LDS 18 Special A to the two brass gears on the Coarse Advance mechanism. **See Figure 5A.**

Once a year, remove and reapply Non-Trop Grease to the brass bar on the Coarse Advance mechanism. **See Figure 5B.**

Brass Bar

Brass Gears



Figure 5A

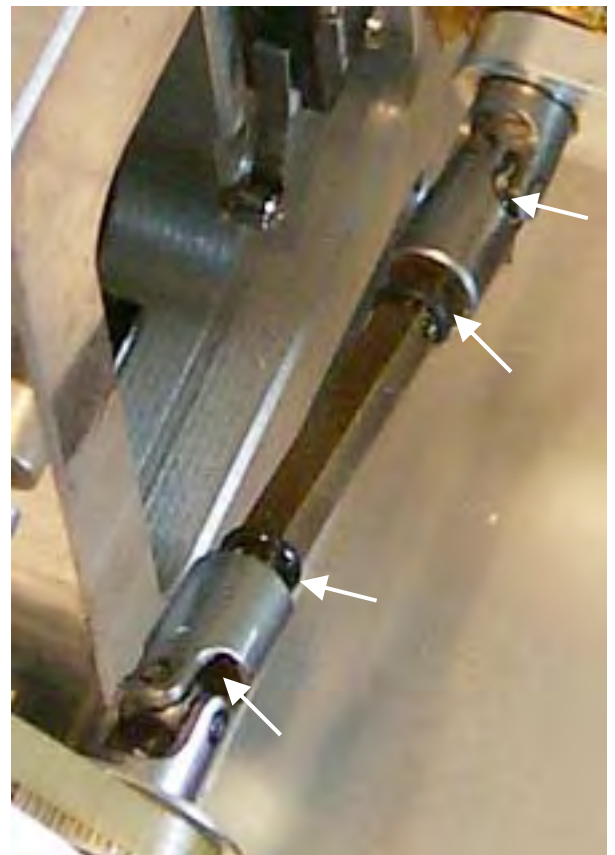


Figure 5B



Figure 6A

For the CUT4060 and CUT4060E retracting microtomes only:

Once a year, remove and reapply the Isoflex CX1000 to the brass bracket and the black hook for retraction.

See Figure 6A.



Figure 6

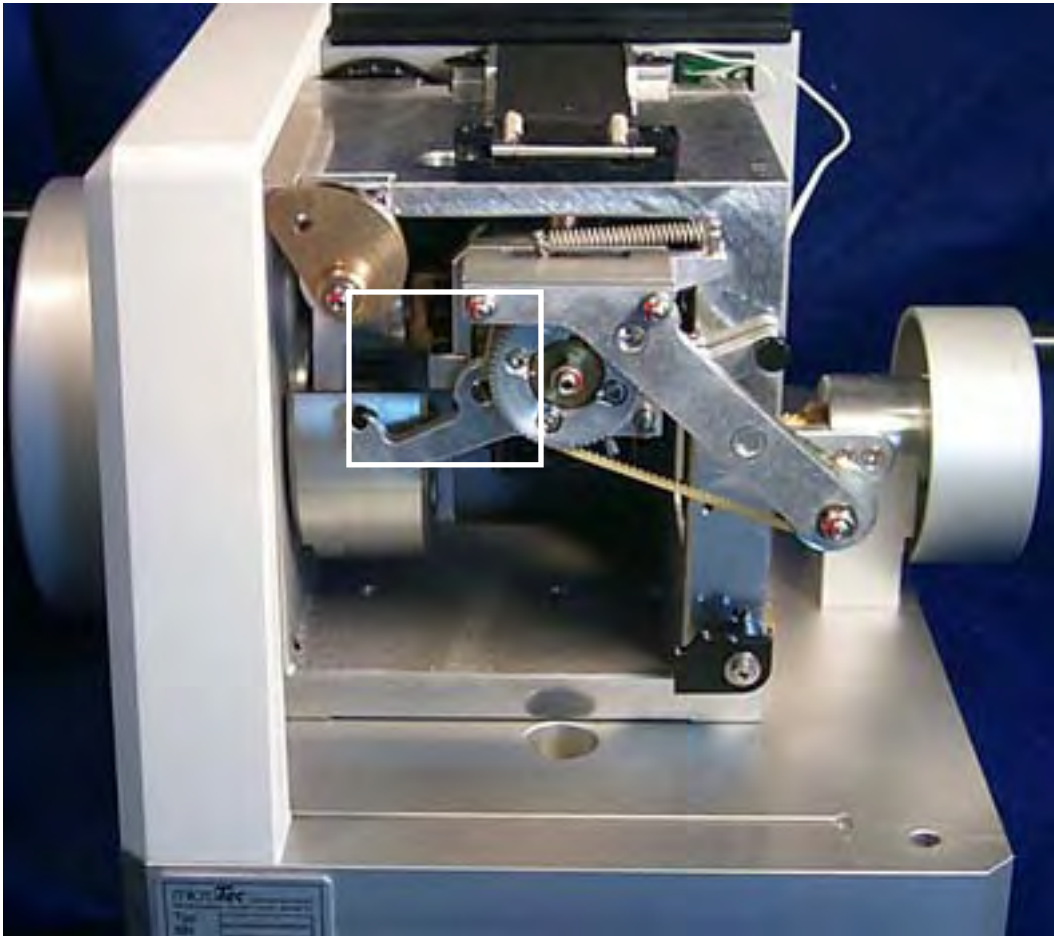


Figure 7

Once a year, remove and reapply the Isoflex CX1000 to the entire length of the horizontal slideway (Guide Bead).

See Figure 7A.

For Electronic Microtomes:
It will be necessary to apply the grease with a syringe.

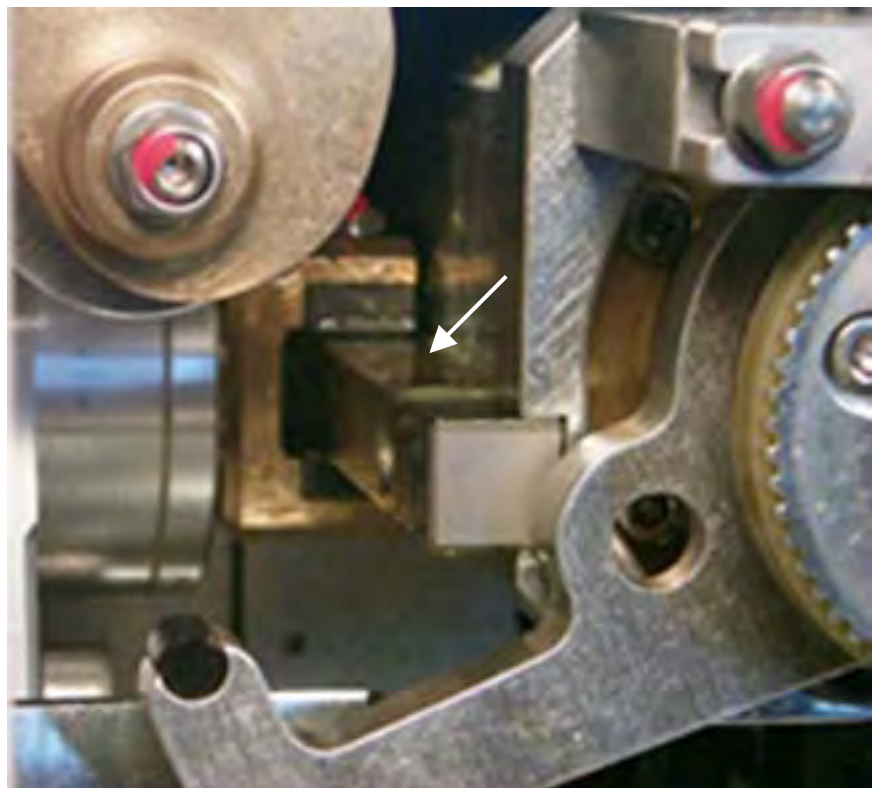


Figure 7A

Once a year, use an applicator stick to apply Isoflex LDS 18 Special A to the brass gear for the Fine Advance mechanism that is located behind the Section Thickness Selector. **See Figure 8A.**

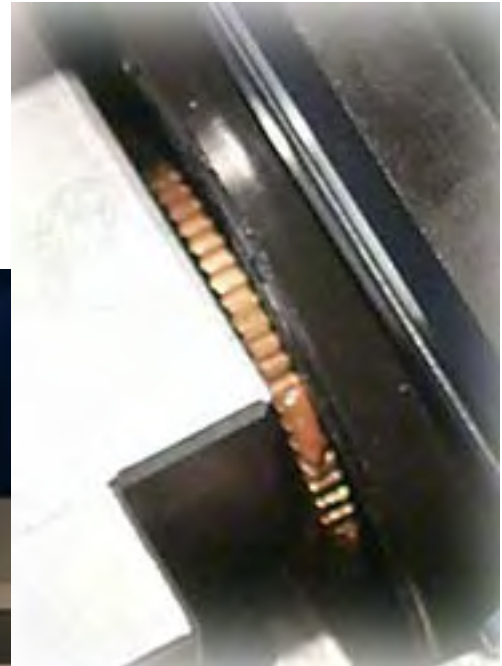


Figure 8A

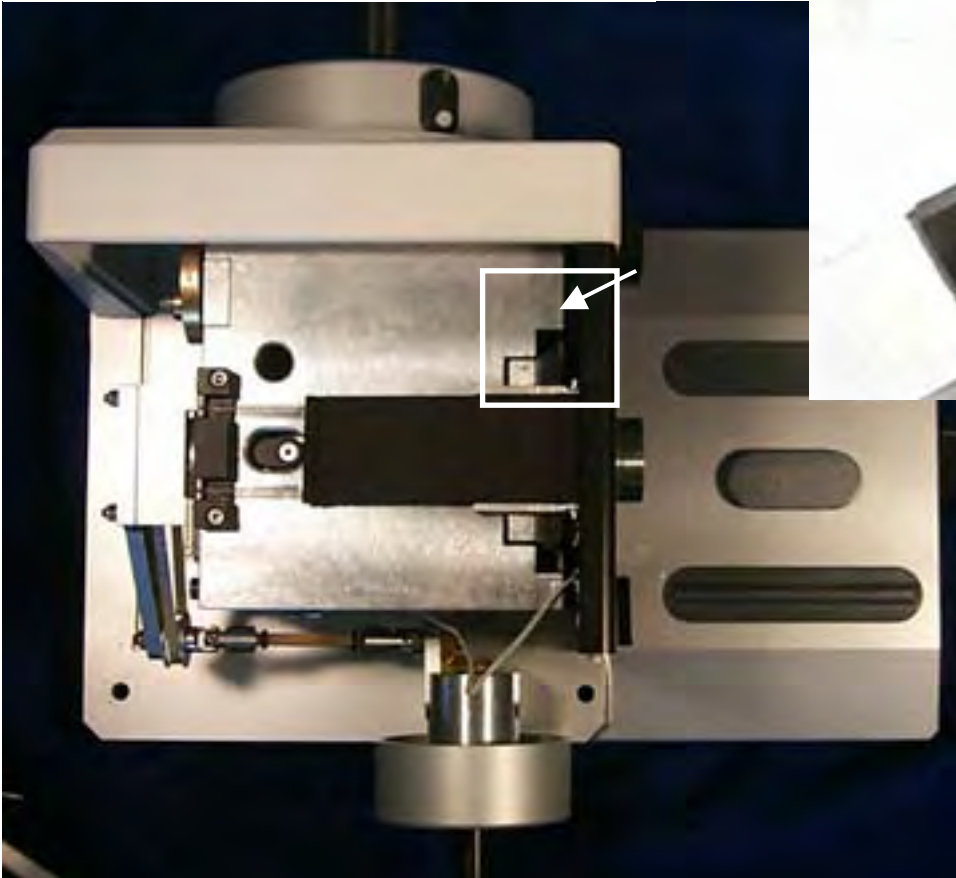


Figure 8

- Reassemble the microtome by replacing the back plate and the black support piece. Be sure the four positioning posts are in place.
- Slide the top metal cover into the black support pieces.
- Replace the left side panel.
- Turn the microtome upright on its back being careful to minimize the amount of pressure exerted on the side panels.
- Replace the screws at the front and back of the side panel. **DO NOT OVERTIGHTEN!** Overtightening can put pressure on the Coarse Advance handwheel and crack the side panels.
- Gently lower the microtome to its normal position. Replace the black rubber mat.