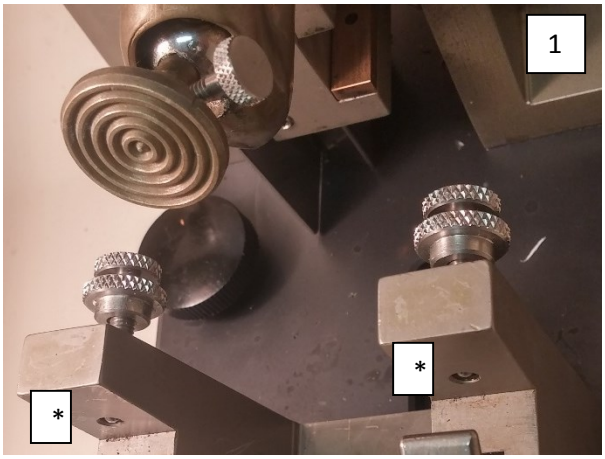
Protocol for using the IEC Minotome Cryostat

It is easy to cut yourself on this machine—PAY ATTENTION

A. Zero blade holder and specimen holder angles



The following steps are necessary only when: 1- the machine is used at different angles, 2- the machine has been sitting fallow, 3-the specimen holder angle has been changed—by loosening the socket screw.

Retract the blade holder set screws (fig 1) until flush (*)

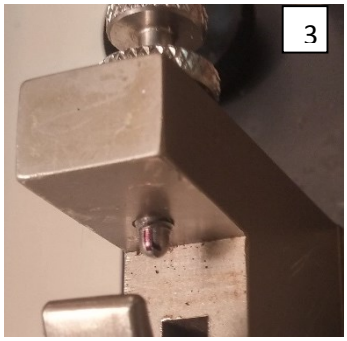
Loosen specimen holder socket screw (black knob fig 2; keeps the specimen chuck 'ball' from moving)

Insert and affix blade holder by tightening the blade holder clamps.

Zero the angle between the specimen holder and the blade holder by pressing specimen holder into the back of the blade holder (fig 2).

Tighten specimen holder socket screw.

DO NOT ADJUST the SOCKET SCREW AGAIN!



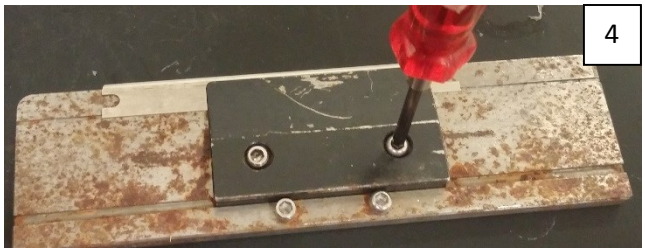
B. Adjust blade holder angle

Remove blade holder and turn the blade holder set screws. Black mark facing up and two threads showing (fig 3).

C. Insert blade into blade holder

Be careful! (fig 4)

Tighten blade into blade holder with hex wrench. Alternate sides for even pressure.

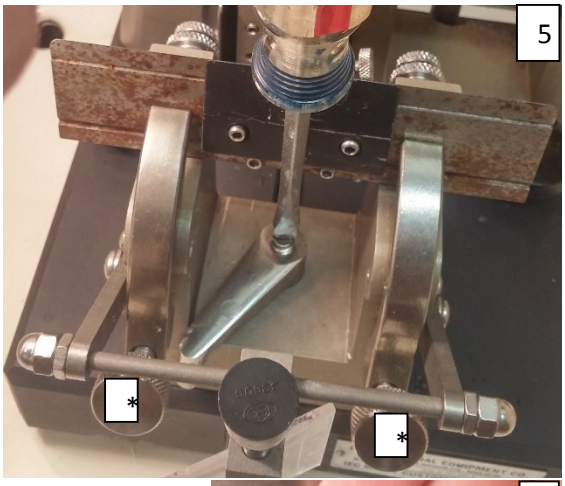


D. Insert and affix blade holder into minotome

Tighten blade holder clamp screws (fig 5 *). Make sure that the blade holder is flush against both set screws and the minotome.

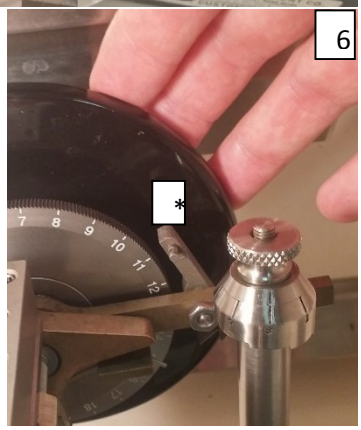
Choose the final position for the blade holder 'sled' in the mintome. It should be *just* far enough away from the specimen.

Tighten the blade holder 'sled' in place with the screw driver (fig 5). Note this is a left handed screw.



E. Adjust the specimen arm

Open the rachet (fig 6 *) and spin wheel clockwise to advance the specimen and counterclockwise retract the specimen (fig 6)



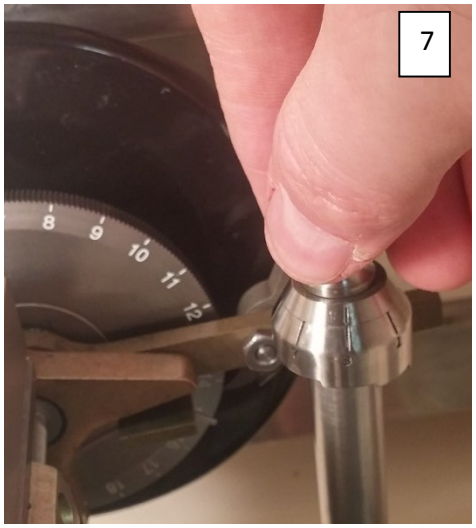
F. Adjust cutting thickness

Close the ratchet

Loosen the screw on the thickness adjustment knob

Align number on knob with line below (fig 7). Number is half as thick as eventual sections (i.e #3 = 6 microns)

Tighten screw above adjustment knob



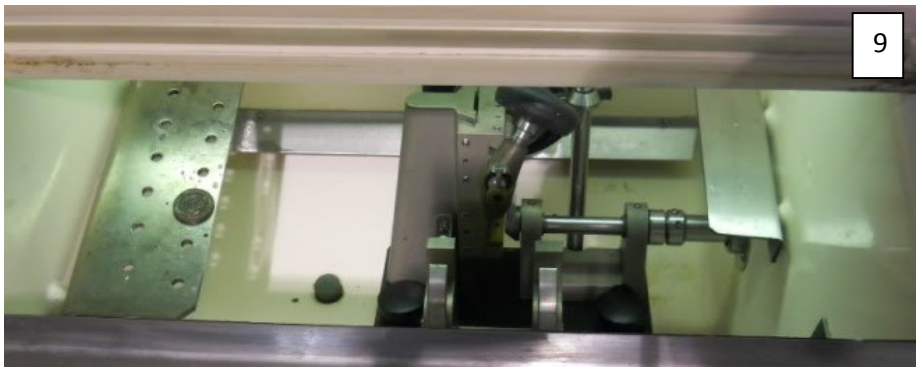
G. Cutting tissue

Plug machine in

Set temp: press the temp button (fig 8, thermometer icon) and adjust value with arrow buttons (brains ~ -17C)

8

Activate freezing plate by pressing snowflake (fig 8). Freeze sample on freezing plate (fig 9)


9

Secure specimen chuck in specimen holder (fig 1).

Rotate crank and collect sections.