

SPI 25 FAST TRACK KNIFE MAKER



UNPACKING INSTRUCTIONS

Carefully unpack the knife maker on a solid bench.
The knife maker should complete with:-

- 1 Knife maker and instruction book
- 1 Packet of hexagonal keys & screwdriver
- 1 pair of safety glasses
- 1 pack of 406 x 25.4 x 6mm Histology glass
- 1 cleaning brush
- 1 Adjustment screwdriver

The knife maker has been set in the factory and is ready to produce Ralph knives from SPI histology 25.4 x 6mm glass. If

after unpacking any difficulty is found producing good knives it is worth checking that the cutter pressure is still correct and has not been maladjusted during transit. See Knife adjustments.

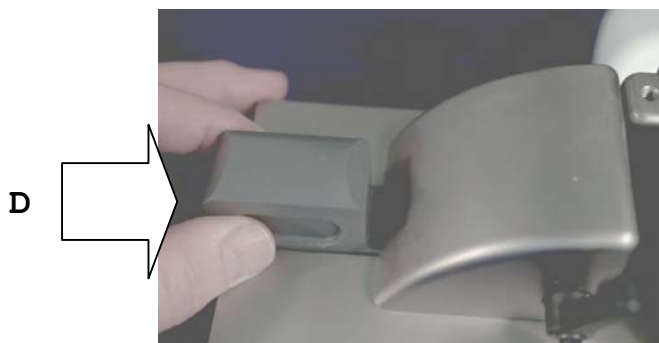
SAFETY INSTRUCTIONS

At all times whilst breaking knives or using glass it is recommended that suitable eye protection is worn.

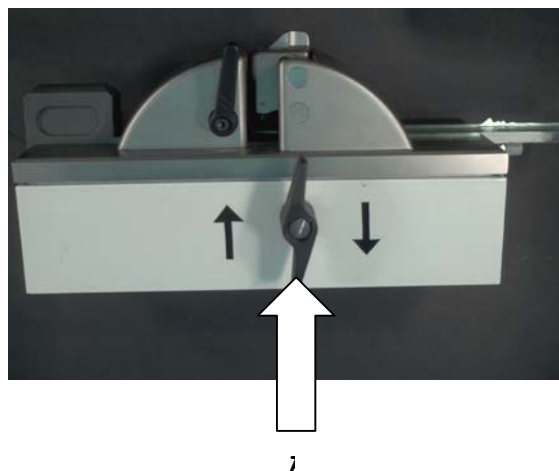
Any glass flakes should be removed from the knife maker before use

INSTRUCTIONS FOR MAKING KNIVES.

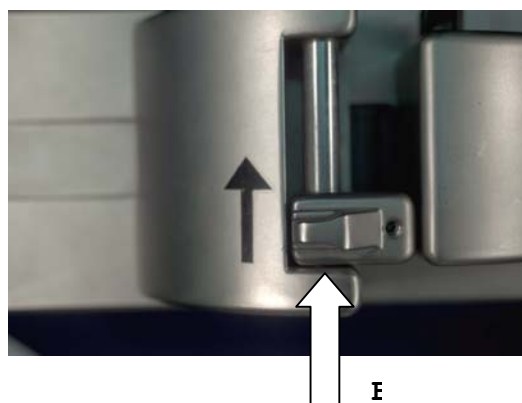
1 Push the black knife tray **D** to its inner most position Place the glass strip into the recess at the rear of the knife maker until it meet's the knife tray. Push the glass inwards until the knife tray has come out of the knife maker approximately 10mm or as required.



2 Clamp the glass with the clamp lever **A** Clockwise.

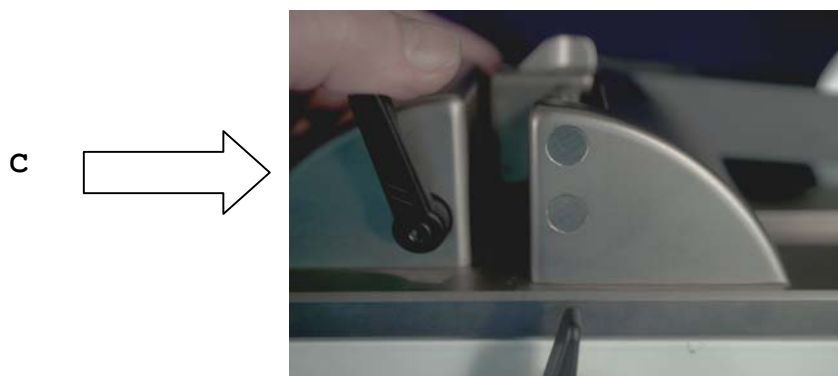


3 Score the glass by pulling or pushing the scoring assembly (**B**) over the glass towards the clamping lever using your index finger or thumb with a consistent speed. Never score the glass in both directions.



4 Break the knife by pushing the breaking lever (**C**) slowly upwards. Remove the knife for examination on the knife tray .

The knife should be straight across and even. If the angle of the knife is too high or too low then the knife rake adjustment or the cutter pressure procedures below should be carried out.



5 Before making more knives all traces of glass flakes and debris should be removed from the knife maker surfaces using the brush.

ADJUSTING THE KNIFE MAKER

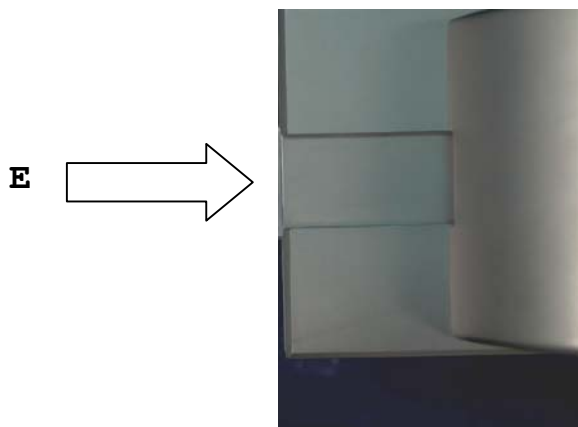
CUTTER PRESSURE

After the cutting wheel has been in use for a considerable time it may become necessary to adjust the scoring pressure on the cutting wheel. This can be done by adjusting hexagonal grub screw directly on top of the cutter mechanism by one quarter turn clockwise using the hexagonal wrench. The correct cutter pressure is when there is a light score on the glass. If the cutter pressure is too high then it will effect the angle of the knife edge. If there is any sign of burst out from the glass surface after scoring then the cutter pressure is much too high. This will produce a poor quality knife that is difficult to break. The cutter pressure along with the rake angle adjustment is responsible for the knife rake angle.

KNIFE RAKE ANGLE ADJUSTMENT

Before adjusting the rake angle adjustment, it should be noted that the cutter wheel pressure will have an effect on the rake angle and it is important that this is set correctly first. It is also important that the glass used in the knife maker is of good quality and of consistent size which will save the need for adjustment.

1 To adjust the rake angle of the knife edge, turn the small screw, **E** on the edge of the knife maker base plate using the Adjustment screwdriver. Clockwise to lower the rake and Anti Clockwise to increase the rake. It is important to know that to high a rake angle will make very sharp knives but the edge will not be so durable.



Cutter Wheel Replacement

Slacken the small socket head grub screw which clamps the twin parallel round bars that hold the cutter mechanism. Push the bars out of their supports to allow the cutter assembly to slide off the bars.

Using a pin punch push out the axel holding the cutter wheel in place pull the worn wheel from its housing. Push the new wheel assembly into place until it fits completely into the housing and press in a new axel. Replace the cutter assembly on the bars and slide the bars into the sockets. Re tighten the socket grub screws.

The new cutter should be much sharper than the worn cutter so it is worth slackening off the adjustment socket grub screw so that the glass is not scored to heavily.

A new cutter would be expected to last for more than one year's heavy use of the knife

Parts List

Item	Description	Catalogue No
1	Cutter Wheels	049\1
2	Breaking pad	049\2
3	Knife collection tray (D)	049\3
4	Bush bearings	049\4
5	25.4 x 6mm Histology glass	Box of 20 pieces

Photographs of the knife maker may vary slightly due to development changes

during manufacture.