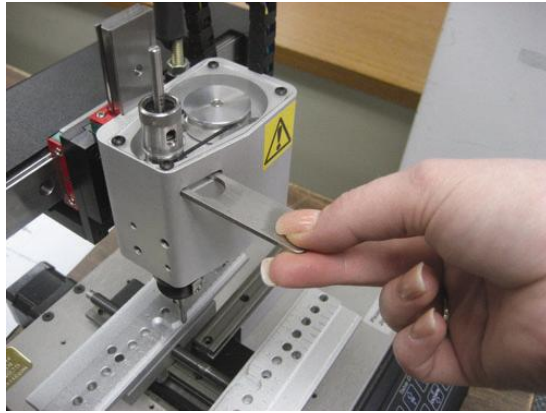


How to Change Your Diamond Drag Gravers and Cutters

In order to change the Diamond Drag Graver and your Cutter Knob you must insert your tightening tool into the slot on the front plate of the “Z” Axis Housing Unit.



“Tightening Tool”



“Housing Unit”



After inserting the ‘tool’ you must then turn the

‘Light Touch knob’ or



the

‘Brass Cutter knob’ clockwise until you are able to unscrew it.



After you have taken the entire piece out you can then easily use your Alan wrench (2.0mm Metric) and loosen the screw inside the cutter knob and remove the diamond drag graver or the cutter from the knob.



You may then place the new diamond drag graver or cutter into the knob making sure to tighten the screw. Then put the needle back into the machine making sure to screw your Cutter Knob back into the housing unit using your tightening tool.

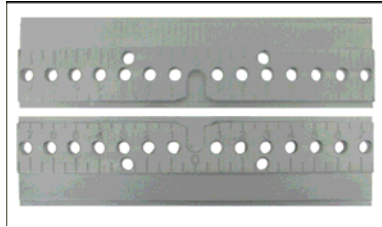
If you would just like to change the diamond drag or cutter without changing the cutter knob you may do so without taking the knob out. By inserting your Alan wrench into the small screw holding the diamond drag graver or cutter and loosening the screw you may loosen it until the diamond drag or cutter is able to be removed.



When placing the new diamond drag or cutter in the cutter knob make sure to carefully tighten the screw to hold the diamond drag or cutter in place.

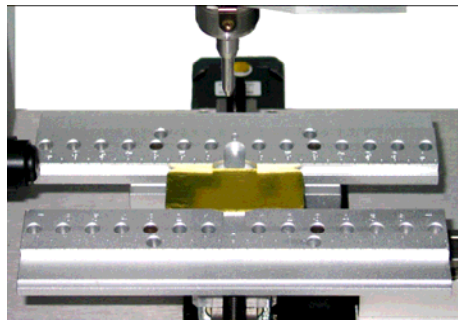
Proper Use For All Your Work Holders (Jigs) And How To Hold Your Items

Your standard aluminum jigs are going to attach directly onto your center vice.



Standard Jigs

Line up the holes in your jigs and the pegs on the center vice making sure that your two jigs are evenly centered.

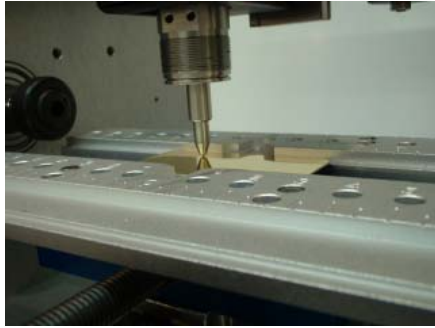


This is important because the engraver is designed to self-center. By placing your plate directly in the middle of these jigs you will ensure that your engraving will come out exactly in the middle. Engraving different sized plates is not going to be tricky but you do need to have an understanding of the proper way to hold these different shapes and sizes.

First of all, when looking at your jigs you want to ensure that you are holding the plate in the most secure position possible. You want your edges to be firmly in place and your space underneath the middle of the plate between the jigs to be as small as possible. If you do *not* do this then when engraving, the plate may bend or come loose ruining your item.

A Great Tester For This: Do a tap dance on top of your plate with your finger to make sure that it is stable!

For example: When holding a long skinny plate you want to use the side of the jigs that have with the shorter indented ledge.



This will maximize the strength of the hold but it will also insure that the plate will not bend in the middle while engraving. When holding a plate that is wider rather than longer you want to use the opposite side of your jigs.



This will ensure the strength of the hold by giving you more support in the middle of the plate as opposed to using the other side that will cause the plate to bend in the middle if it were to be engraved. When engraving oddly shaped plates you want to keep the same rules of thumb in mind:



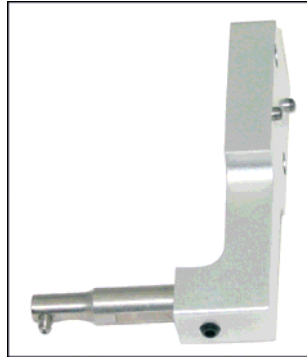
Make sure you have as much support as possible when holding the plate and when in doubt do a tap dance on top of the plate to ensure the stability of the hold.

Work Holder Options:

Ring Attachment:



Ring holder



Engraving needle



How the ring attachment should look after everything is attached!

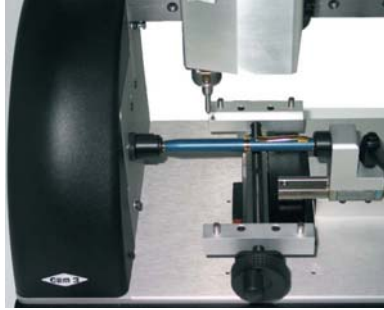
Pen Attachment:



Front Pen Attachment



Pen Vice

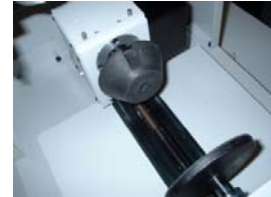


This is how all of your pen attachments should look when engraving a pen using the cylindrical. The left side is your pen support brush and the right is your pen drive brush.

Another method for engraving a pen without using the cylindrical option is by use of a pen jig (SST 581). Below will show you how to correctly hold the pen in order to engrave on a smooth surface.



Your cylinder attachments (for use on the GEM VX & The UNIVERSAL-300):



This is how it should look when you are done putting all your cylinder attachments in!

Make sure to NEVER get your Center Vice wet, it could result in rusting

Always ensure that your center vice is clean before moving your jaws. This could damage your center vice thread