## Included in the kit:

4 x Legs – To lift the engraver

4 x Leg Brackets – to clamp the engraver to a board or bench (not pictured)

1 x Axle – for mounting your work

1 x 40mm x M6 bolt – to mount those quick light jobs

1 x Jig Body with adjustable bearing arms – Attaches your work to the engraver.



- 9 x Pulleys 10, 12, 14, 16, 18, 20, 22, 24 and 26mm
- 2 x Pen bushings for mounting pen and other open ended items. 1 standard and 1 quick release.
- 1 x Drive band
- 2 x Band Holders and 2 wedges to hold the band in place
- 4 x self adhesive rubber feet attach if you wish

Assorted nuts and bolts - enough to keep you covered

## Attaching the Legs

Remove the small rubber feet off the engraver.

Stick one of the supplied feet to the underside of each leg if required.

Using one of the supplied bolts attach a foot to each corner of the engraver – don't fully tighten them yet.





Once you have all four feet attached, place the engraver on a flat level surface and fully tighten the bolts. You may need an allen key to do this. Not silly tight, just enough to hold the foot securely to the engraver.

I recommend fixing the laser to a board or workbench using the supplied brackets.

## Attaching the Belt Holders

Attach the band holder to the free hole on the leg and tighten the bolt.



Due to how close the laser carriage is to the frame in the home position I suggest mounting the belt holders on the motor side – not the laser side.



## Attaching the jig body to the engraver

The jig body clips onto the lower plate of the engraver laser carriage. This will necessarily be a tight fit. Ensure the laser side of the jig body is flush with the side of the lower plate as in the picture below.





# Axle Alignment (if necessary)

The jig includes adjustable bearing arms.

If the laser isn't aligned with the centre top of the axle simply loosen the four bolts holding the bearing arms to the jig body and adjust as necessary. (2 at the front, 2 at the back)



Check the jig body is mounted correctly first!

I found this easier with something mounted.

Stainless steel threaded rod scatters the beam ©

### Mounting your work

### Pen / Open Ended Work

Using the 330mm axle assemble your work piece as shown using the two bushings and a nut. Use the quick release bushing on the outside of your work so it's quicker to remove.



You can secure the workpiece with a quick twist of the inner nut. Add a further nut to secure the axle to the jig body.



Insert the axle through the jig body as shown.





Add a further nut to secure the axle to the bearings. This doesn't need to be too tight.



Finally add a couple more nuts and the pulley that is closest to the diameter of your workpiece. Tighten these two nuts up to clamp the pulley to the axle



## Fitting the drive band

Finally thread the band through your slot of choice on the band holder and wedge in place with one of the band wedges or any other implement you choose. Pull the other end tight(ish) over the top of the axle and wedge in place on the other side. I find it easier to grip the band and the wedge between forefinger and thumb and then place in the slot.







Move the engraver by hand into the home position to ensure no parts are fouling the frame before powering the laser up.

You're all set – get lasering 🙂

#### **Quick Mount**

Finally the short 40mm bolt can be used mount those quick and light jobs (This is the Neje jig – forgot to take pictures of this attached to the Ortur!)



### And finally...

I sincerely hope you have as much fun using this jig as I've had designing and making it.

Any issues, suggestions or problems please do get in touch: <u>james@jafweb.co.uk</u> or take a look at the facebook group. <u>https://www.facebook.com/groups/2150167618622948/</u>

Available here: <a href="https://www.jafweb.co.uk/index.php/product/ortur-master-pen-rotary-jig/">https://www.jafweb.co.uk/index.php/product/ortur-master-pen-rotary-jig/</a>

Ortur Master Jig Pack List				
Qty	Item	Print	Prep	Pack
4	Ortur Feet			
4	Foot brackets			
1	330mm Axle			
1	40mm x M6 Bolt			
1	Jig Body			
2	Bearing Carriers			
7	Pulleys			
1	Pen Bushing			
1	QR Pen Bushing			
1	Drive Band			
2	Band Holders			
2	Band Wedges			
4	Rubber Feet			
8	M6 Nuts			
6	M5 Bolts			