

Introduction

The LAW Bench vice has been constructed with a no-compromise philosophy. All materials have been carefully selected as the best and most suitable for their purpose. The design is simple and elegantly functional, and has been accomplished without cosmetic or economical shortcuts. The vice and its components have been made with the highest precision. If by chance you are not satisfied with the function or finish of the product, please don't hesitate to contact me, Lawrence A. Waldron, with your comments.



The LAW vice is a full 360° horizontally rotating vice. The jaws will securely hold any hook from 7/0 down to 28 and smaller, with one adjustment only. The vice is provided with a pedestal base or a C-clamp, and comes with an articulated bobbin holder. Several optional accessories are available. These are listed in the Options section of this guide.

Assembly

The vice will come in two parts: pedestal base or C-clamp, and the main stem/and jaws assembly. They are easily assembled by inserting the stem into the base or C-clamp and tightening the knob. The height and angle can be adjusted to fit the tier's taste and circumstances.

- Base:** Aluminum. Weight 2.6 kilograms. Surface has been treated with white powder enamel that withstands varnish and thinner. It will take any industry standard 3/8" vice stem.
- Stem:** Stainless steel. Industry standard 3/8" diameter. Fits all standard pedestal bases and C-clamps. Extending piece included.
- Joint:** Stem part is brass and jaw part is white delrin.
- Bearing:** Stainless steel directly in delrin. Self lubricating.
- Jaws:** Hand filed tool steel with two hook pockets to accommodate large hooks
- Knobs:** Brass, except for hook tightening knob which is an aluminum bronze alloy.
- Options:** Material clip
Backplate, with integrated mirror
Gallows tool
Third hand, with integrated hackle gauge



1. Adjustment

The jaw assembly will usually be horizontal when tying, but you can tilt it at a variety of angles. Adjust the jaw assembly angle screw with a hexagonal key to your preferred friction setting ("set it and forget it".) Simply fold the jaws assembly downwards to collapse parallel to the main stem for convenient and compact transportation.

2. Rotation friction

You can adjust the rotating capability of the vice with the brass knob located next to the rotation lever. Loosen this screw enough to let the jaw assembly rotate freely, and tighten it in small steps until the jaws rotate smoothly but with enough friction to hold in position while tying.

You can tighten the screw completely if you wish to lock the jaws, and keep them from rotating.

The lever can be set at any of four 90 degree angles by unscrewing the knob completely, taking off the lever and turning it independently from the jaw assembly to the desired position. Then reassemble the lever and screw, and adjust the rotation friction as described above.

When the angle and rotating friction are set, you are ready to put a hook in the jaws.

3. Inserting and securing the hook

The jaws have only one adjustment screw, the Star Wheel, to secure the hook. Open the jaws by rotating the Star Wheel. The jaws are spring loaded and will open to accommodate the hook. Insert the hook in the jaws as shown on the illustration, and ensure that the shank is horizontal and as close to the centerline of the bearing as possible. Large hooks (#10 and larger) should always be set into one of the two hook pockets located in the jaw segment closest to the tier. The hook pockets allow for a secure hold, with only minimal pressure applied to the hook wire and are positioned to automatically keep the shank close to the centerline of rotation.



Rotate the Star Wheel to fasten the hook. While the design is based on intuitive thumb-only operation, some tiers prefer to operate the Star Wheel with thumb and fingers. Try the various methods and select the one which works best for you.

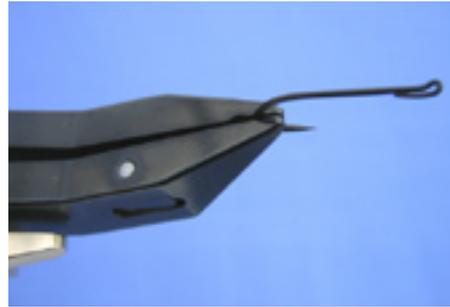
Try pressing the hook shank slightly to test the hold. It is not necessary to use force in the tightening. Too much force will just mark the hook. The chance of inflicting structural damage to the jaws is minimal.



The variety of hooks available on the market today may not always allow exact centering of the hook shank in the axis of rotation.

4. Releasing the hook

To remove the hook you just loosen the Star Wheel. If it is too tight, you might want to rotate the jaws to a horizontal position for a better grip on the wheel.



5. Disassembly

The vice is constructed in two basic parts: base or C-clamp, and the stem/jaws assembly. If you want to transport the vice in a more compact manner, you can tip the jaws parallel to the shank.



6. Maintenance

There is little maintenance required with the LAW Bench vice. Simply clean after each use - remove bits of material, thread, varnish etc. with a soft cloth.

7. Lubrication

The threads can be lubricated with an acid free synthetic oil once in a while. It is rarely necessary to do this more than once or twice a year.

Apply very little oil and wipe with a soft cloth. Too much oil on the threads will just attract dirt and grit.

The rotating bearing can be taken off and wiped with a soft cloth. It will keep itself lubricated, but you might want to add a bit of oil to the O-rings for a smooth operation. Put a bit of oil on your index finger and run it lightly over the rings before reassembling the bearing.

8. The jaws

The jaws are made from tool steel and sport a protective finish. Depending on the climate of your region, (specifically the humidity level), and the acidity on your fingers, over time traces of rust may show up.

To avoid or remove rust, you can occasionally coat the surface of the jaws with a little oil. A drop on a finger tip is sufficient. Spread it lightly on the jaws and wipe over with a soft cloth. You can use a narrow strip of cloth to wipe clean - and maybe oil - the slot between the two halves of the jaws.

The LAW Bench Vice



Lawrence A. Waldron
3 Crockington Close
Seisdon
Staffordshire
WV5 7EL
England
Phone/Fax: (+44) 0902 896315