

## **Urban Toolworks Angle Setting Jig Manual**

Thank you for purchasing our Angle Setting Jig. This Manual will guide you through using the Jig to achieve flawless repeatability of honing angles with your common sized straight blades.

The Angle Setting Jig is made of quality materials that will offer many years of corrosion free service. The materials are anodized aluminum, stainless steel, brass and High-Density Polyethylene.

Note your jig is specific to one of three Honing Guides on the market namely.

1. Eclipse style side clamping honing guide.
2. Lie Nielsen Honing Guide
3. Veritas Side Clamping Honing Guide

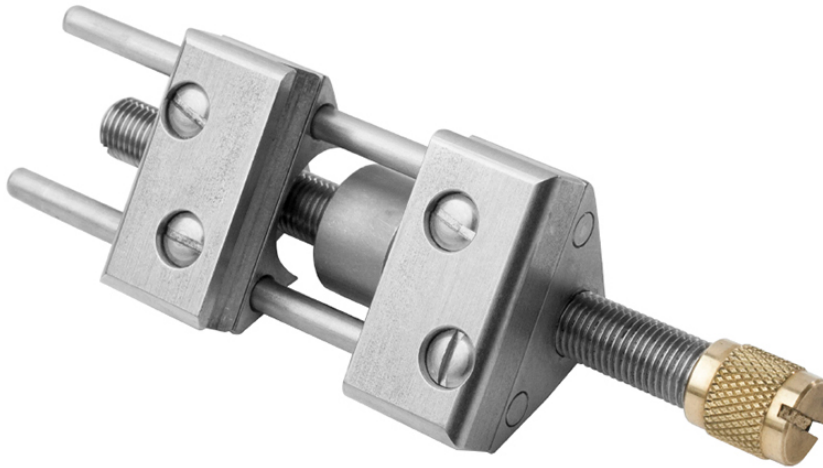
### **Eclipse**

If your honing guide is an Eclipse style guide your angle Setting Jig will be identified by the letter E under the name Urban Toolworks and will have a gold-colored setting block attached to a black base.



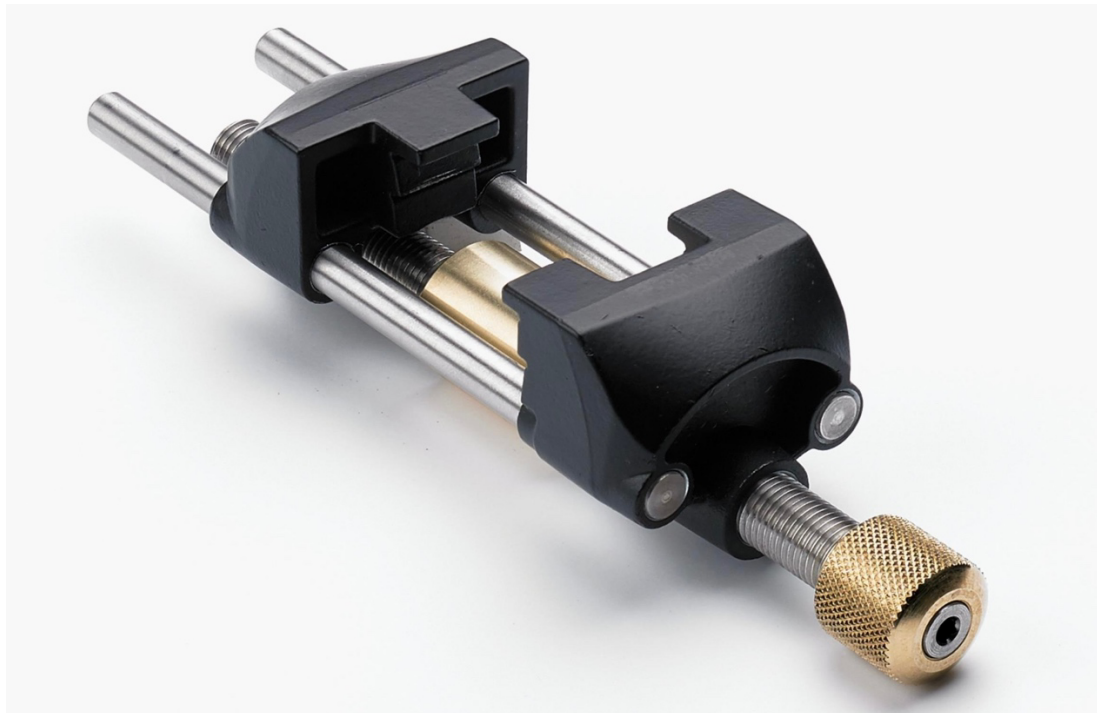
### Lie-Nielsen

If you use the premium quality Lie-Nielsen Honing guide your angle Setting Jig will be identified by the letter LN under the name Urban Toolworks and will have a Silver colored setting block attached to a black base.



### Veritas by Lee Valley

If you use the high-quality Veritas Side Clamping Honing guide your angle Setting Jig will be identified by the letter LV under the name Urban Toolworks and will have a Blue colored setting block attached to a black base.





### Actual Angles vs blade thickness

When designing the angle setting jig for the three honing guides above, we decided to use a single blade with a thickness of 0.125". This is a moderate thickness for modern blades which can be as thick as 0.250" and as thin as 0.080 or even less.

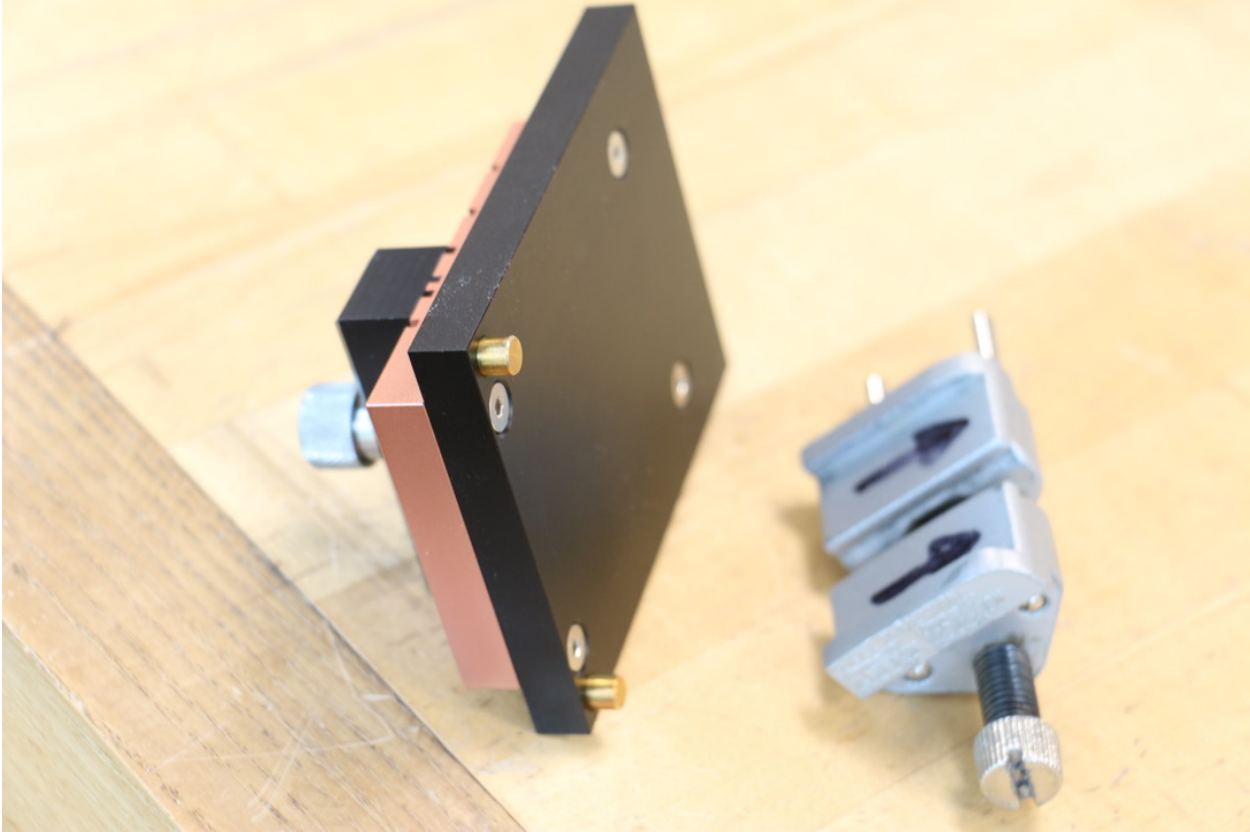
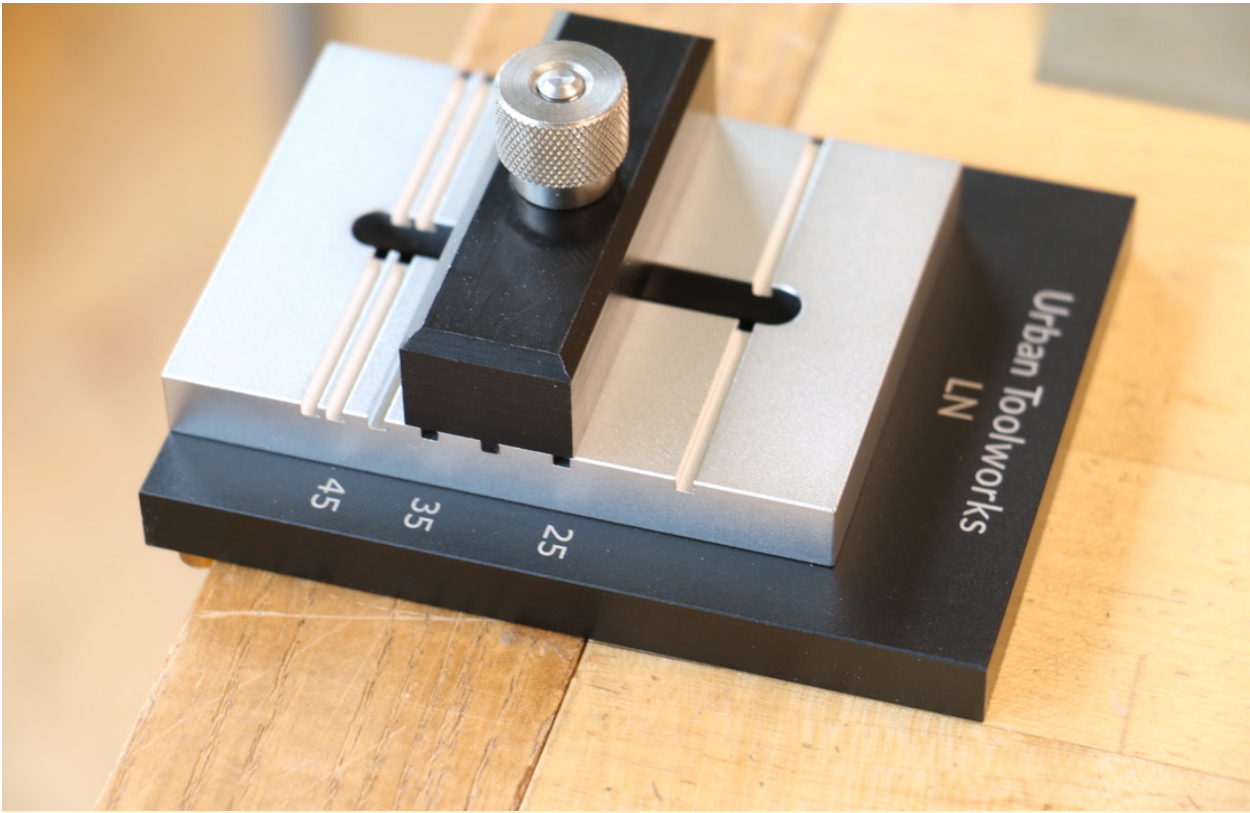
When using the Eclipse style honing guide the projection distance of the blade's edge from the front of the honing guide for a particular angle, changes with blade thickness. It is for this reason we specify our angles based on a 0.125" thick blade.

This variation of angle with varying blade thickness is not an issue with **most** blades when using the Lie-Nielsen or the Veritas Honing guides. (Lie-Nielsen tall jaws may be an exception).

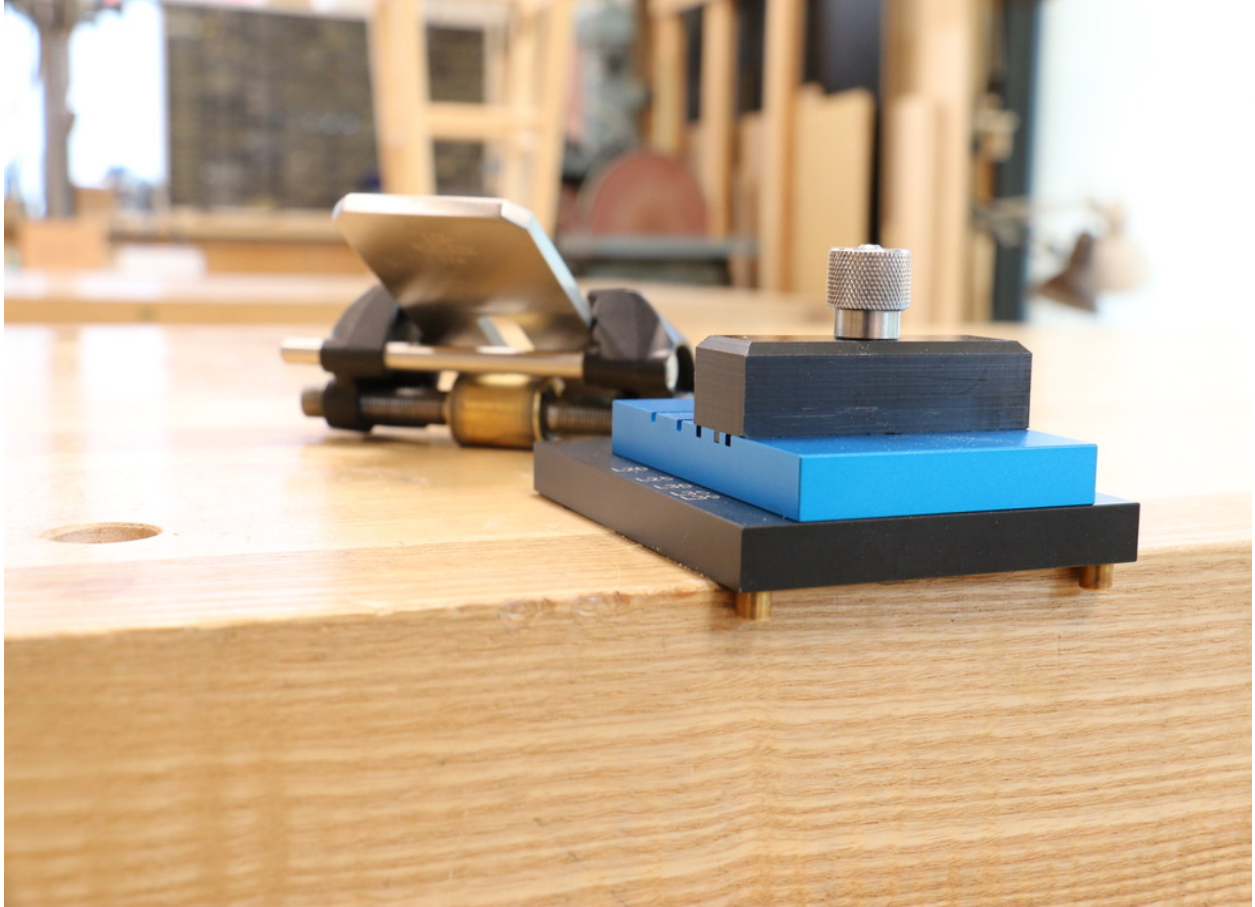
Our angles are true to a tolerance of approximately  $\pm 1^\circ$ .



Let's look at using the Angle Setting jig.



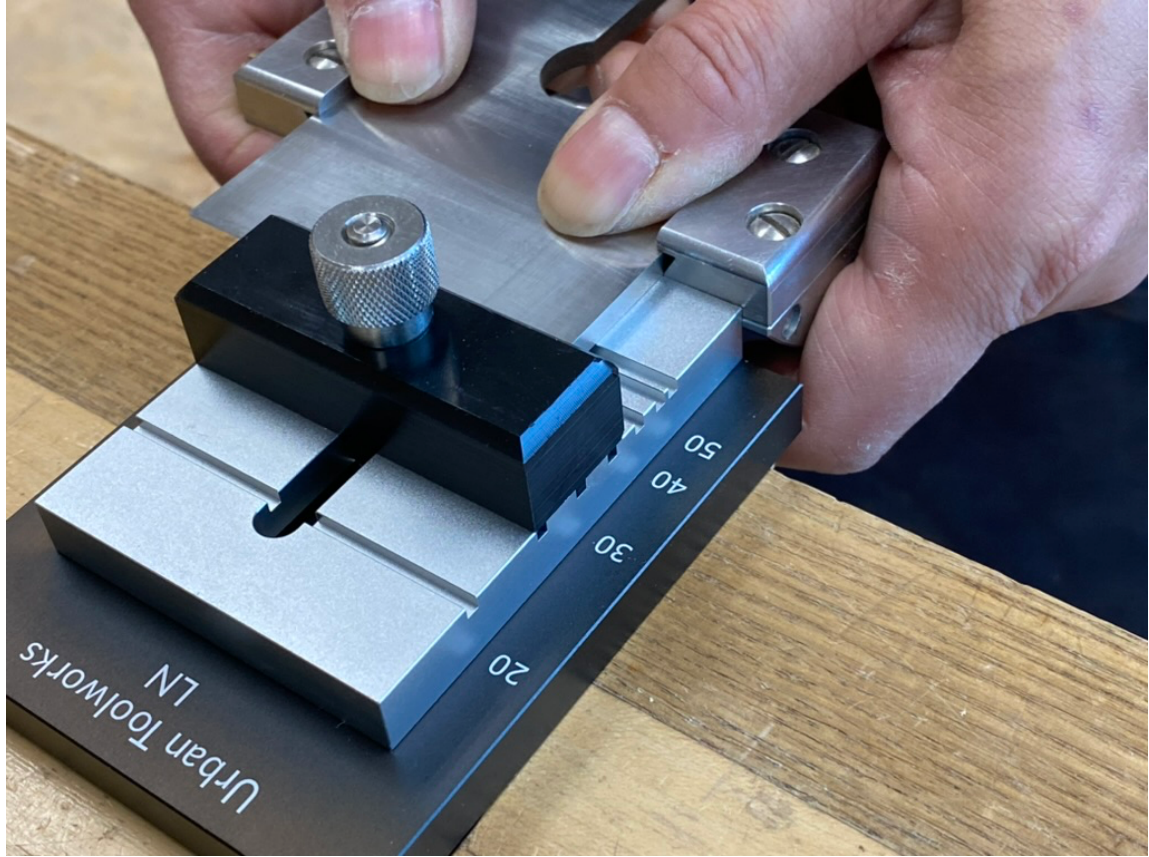
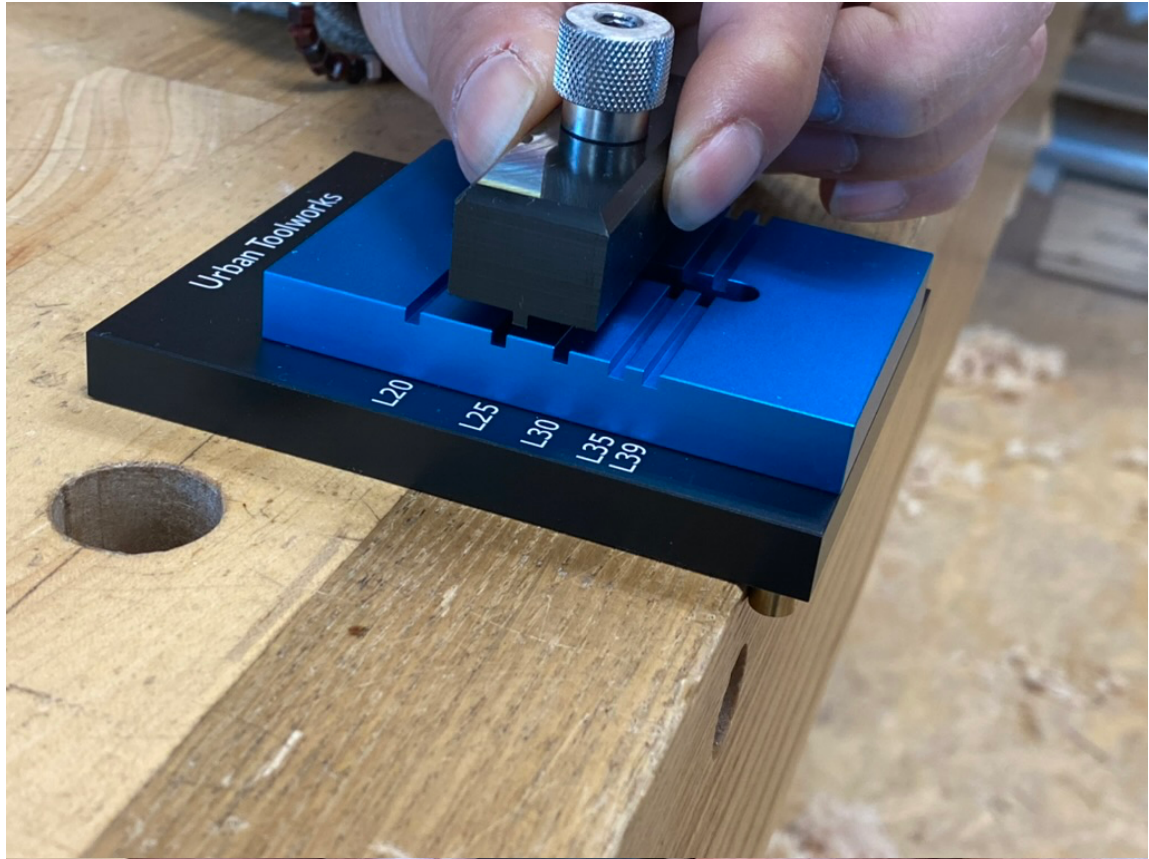




**Setting honing angles.**

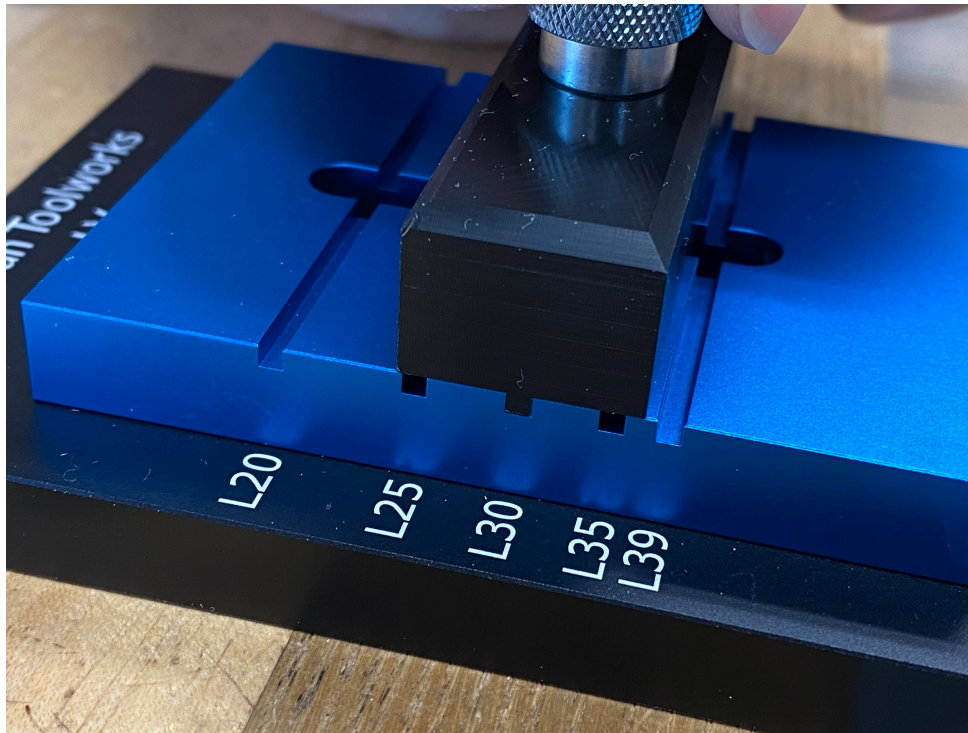
On the topside there is the user settable stop block (black). To set a blade to be honed at a particular angle, loosen the stainless-steel thumb nut enough to move the black stop block to align its centerline to the desired angle on the black base. The distance between the face of the black stop and the edge of the jig represents the projection distance for that angle.

When setting the projection distance be sure to engage the edge of the blade securely against the stop blade and keeping the blade registered flat against the colored setting plate. See pics below.





When using the lower jaws in either a Veritas or Eclipse honing guide, set the stop block to angles denoted with prefix L (for Lower).



### **For users of the Veritas Honing Guide**

When designing the Veritas Angle Setting jig, we found that in the lower jaws the maximum angle was more accurately 39° rather than 40°. At 40° the honing guide jaws would be abraded by the stone.

### **PRO TIP**

When placing the blade in your guide first lightly clamp the blade in place with a projection distance way less than the desired projection distance.

Now place the blade securely on the colored top setting block and with the honing guide securely pressed up against the setting block,

then without loosening the honing guide slide the blade forward to come to rest against the stop block. Now securely tighten the blade in the honing guide.



### A note on securing the blade in your honing guide.

While you should default to the manufacturer's guidelines, we offer our opinion as follows: With the Lie-Nielsen and Veritas please DO NOT use a screwdriver OR WORSE pliers to tighten the blade securely in the honing guide – it is simply not needed.

If your blade is not secure after hand tightening, then your blade is not parallel sided, and this is NOT a fault of the Honing guide but rather of the blade. Grind the blade parallel if feasible or use a layer or two of masking tape to achieve a parallel grip on the blade.

### HOWEVER

If you own an Eclipse style Honing Guide, you may find that tightening the guide with a screwdriver helpful since the honing guide does not clamp smooth sided blades very well.

To avoid stabbing yourself with a slipped screwdriver use and appropriately sized stubby screwdriver or a plane screwdriver like this made by Lee Valley.



### **Honing blades wider than the colored setting block using the Lie-Nielsen honing guide.**

When honing wide blades such as the no. 8 jointer blade or the no. 112 scraper blade, the honing guide is extended to a point where the jaws of the honing guide are further apart than the width of the colored setting block (silver). To set the angle correctly, move the honing guide slightly off center as to engage one side of the honing guide against the colored setting block and most of the blade against the black stop block taking care to keep the edge of the blade against and parallel to the stop block as shown in the pic below.

