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The care, use and tuning of your new plow plane:

Your Old Street Tool plow plane comes with 8 irons ranging in width from 1/8" to 5/8". They are stamped with numbers which correspond to the width of the iron in sixteenths of an inch. Also, they are supplied in a canvas tool roll which protects them from incidental damage as well as from becoming orphaned from one another.

Sharpening

The irons supplied with your plow plane are sharp and ready for use. We suggest that you accustom yourself to the plane and irons through use before altering or re-sharpening them. In time they may need trued to be square to the plane as you re-sharpen, depending on how they register on the bed and in the wedge mortise.

If you inspect the irons as supplied, you will note that they have been hollow-ground to form a primary bevel of about 25° with a honing, or secondary, bevel of about 30°. This honing bevel is created simply by registering the iron on the primary bevel, then raising the iron a few degrees to hone by hand. The advantage of this approach is that it is very quick and effective, which encourages sharpening in a timely fashion.

The other half of the honing equation has to do with the face (some people call it the back) of the irons. In addition to the advantage of working with a shaper plane, timely sharpening also minimizes the difficulty of dealing with the "wear bevel" on the face of the iron. In fact, most of the time it can be readily eliminated by a few passes on your finest stone. And, in the event you need to use a slightly coarser stone to eliminate this wear bevel, there will be no difficulty moving from one stone to the next if you habitually keep your stones flat.

Finally, as you hone either the bevel or the face, you can tell when you've removed enough steel by feeling for a very slight "wire edge" created by the honing. If you "raise" this wire edge at each step of the honing, you know you've attained your goal. Stropping may be a useful final step, but exercise some care not to dub, or round, the face especially. Timely effective sharpening should only take a minute or two, constituting little more than a pleasant break while keeping your plow plane functioning up to its potential.

Setting

When it comes to plow planes, setting is a term which can be applied to setting the iron for rankness of cut, the depth stop based on the depth of the groove desired, as well as the fence to determine the lateral location of the groove. So let's take them in that order.

One strategy for setting the iron is to install it shy of the desired cutting position, set the wedge with a sharp rap with a mallet, then advance the iron with a small (6 to 8 oz.) brass hammer or plastic mallet. Then reset the wedge to make sure it and the iron are secure. In installing the iron, note that it has a V-groove in its back which locks onto a corresponding V-shape on the leading edge of the rear skate.

If you discover the iron is set ranker than desired, it is theoretically possible to back it out a little with a sharp rap, using a mallet, on the heel or top of the toe of the plane. But, in the case of the plow plane this can be awkward and/or may loosen the wedges of the fence arms which you may already have set. So, we suggest that you drive the iron slightly deeper, but not too far because of the length of the V-groove. This will release the wedge because of the taper of the iron, and you can simply re-position the iron and reset the wedge as already described.

Once you have the iron set, you can then turn your attention to the depth stop. Before attempting to move it up or down, make sure the arm wedges are released. Especially the front one, because when it is set, it presses the arm against the depth stop to help keep it in position during use. Depending on its fit and the climactic conditions, you may be able to adjust the depth stop by hand, or you may need to use light taps with a mallet. Once you have it set, you can then turn your attention to setting the fence.

Setting the fence can sometimes test one's patience, and you will likely develop your own strategy. But, for starters we suggest that you attempt to keep the fence relatively parallel to the body of the plane as you check the location of the iron to a measurement or gaged lines. Once the iron is in the desired location you can measure between the fence and the skate just ahead of the iron, then adjust the fence at both ends of the skate to that dimension. If the arms fit into their mortises fairly tightly one can usually secure them in place with firm finger pressure to set the wedges. Sometimes a light tap on the wedge with a small mallet can be useful. **Note: If after the fence is set you decide the depth stop needs adjusting, remember to release the wedge of the front arm before doing so.**

Use

The function of the plow plane is to create grooves of the width of the selected iron in the longitudinal orientation of your material. For example, grooves in the edges of rails and stiles to take the edges of panels in frame and panel assemblies. Or, it can be used to create grooves as part of the process of sticking mouldings with hollows and rounds, usually in conjunction with rabbet and snipe's bill planes. Additionally, it can be used to isolate the shoulder of wide rabbets in preparation for removing the rest of the waste with firmer chisels and/or rabbet planes.

Usually, when using a plow plane the goal is to set the iron to take as thick a shaving as can be taken in a controlled and sustainable manner. Needless to say, this varies according to the width of the iron/groove, the density of the material, the strength and stamina of the woodworker, &c. In addition, for purposes of establishing control, it is often suggested that one start the first cut near the far end and work back to the close end as the groove deepens with successive cuts. This can be particularly useful if one is following the traditional trade practice, when making cabinet doors and other frame-and-panel assemblies, of executing mortises before creating the grooves. A practice which we recommend as it aids in accuracy of the mortise and tenon joinery as well as avoids the “butchering” of mortise chisels or plow plane irons to unnecessarily match each other exactly.

One problem people often have with plow planes is that of maintaining a stable orientation of the plane throughout each stroke. Success with this largely comes through familiarity with the plane and its use, but we think a little strategy can help. We suggest that you try to think about your two hands undertaking somewhat separate functions in the use of the plow plane. Specifically, concentrate on your left hand keeping the fence against the surface of the material being worked as well as maintaining a consistent orientation, while using your right hand primarily to move the plane forward. We also feel this is aided by keeping the plow plane compact in keeping with 18th century examples.

Maintenance

The finish on your plane is Min-wax “Antique Oil” finish, which doesn't expand as it dries. It should be compatible with other high quality finishing oils you might use to maintain the finish in worn or damaged spots. After applying finish we suggest buffing with fine steel wool and waxing with a high quality wax such as Tre-Wax.

Storage

We suggest removing the iron and replacing in the canvas tool roll for long term storage. We also suggest relieving pressure on the wedge if the plane isn't going to be used for a day or two.