



Wood Threading Kit

Product #12T13, 12T14, 12T15, 12T16, 12T17,
12T18, 12T19, 12T25, 12T26, 12T27, 12T28

Sharpening/Cutter Adjustment

The thread box is sharpened and adjusted at the factory and should work well as taken from the box. With use, the cutter will need sharpening, which will require removal and subsequent readjustment. To sharpen the cutter, remove the guide by unscrewing the two brass screws which secure it. Undo the acorn nut and remove the cutter and cutter holder. Sharpen the cutter carefully, holding all the angles and bevels true. Use a fine grade, high quality, oil stone such as hard or black Arkansas. Reinstall the cutter and align the bottom of the "V" of the cutter with the crest of the inside thread. Tighten the acorn nut, replace the guide, and try the box on a dowel which is as true in size as possible. If it binds and breaks the thread as the box is withdrawn, the cutter is out too far and must be moved back. If it cuts thread with a sharp V crest and a shallow, rounded root, the cutter must be moved out. A perfectly formed 60 degree thread with proper root depth and easy withdrawal from the box indicates a properly adjusted cutter.

Threading

When buying a dowel, check it carefully. Commercially available dowels vary greatly in size and are often eggshaped. Straight, round dowels which are true in size are the key to good results. Dowels which are slightly undersized present no problem. Oversized dowels, however, can bind, resulting in excessive tool wear, poor threading, or even a broken cutter. Lightly chamfering the front edge of the dowel will give a slight taper and allow the cutter to start gradually and easily. Applying a light coat of linseed or tung oil to the work greatly aids the cutting. If you are going to apply finish to the part, the oil can be washed off with a little turpentine or mineral spirits after threading. It is suggested that the dowel not be sanded before threading. The wood fibers will inevitably pick up abrasive particles. While this will not ruin the tool, it will cause accelerated wear. Never force the thread box on to a dowel which does not fit easily into the guide. When threading, apply steady, even pressure. Do not force the tool. If the throat becomes clogged with chips, remove them with a sliver of wood. Do not use a metal object for this because it could damage the cutter.

Tapping

Lay out the center of the hole in the desired location and drill with the appropriate drill for the tap being used: $\frac{3}{8}$ " drill for the $\frac{1}{2}$ " tap; $\frac{5}{8}$ " drill for the $\frac{3}{4}$ " tap; $\frac{7}{8}$ " drill for the 1" tap. After drilling, deburr the hole and apply linseed or tung oil. As stated before, if the part is to be finished, the oil can be washed off with turpentine or mineral spirits. Do not sand the hole, because this will accelerate tool wear. The tap can be turned with an open end wrench ($\frac{1}{2}$ ", $\frac{3}{8}$ " and $\frac{3}{4}$ " wrenches for the $\frac{1}{2}$ ", $\frac{3}{4}$ ", and 1" taps, respectively). It is recommended, however, that a large tap holder be used. It is important to insure that the tap starts straight and true. Apply pressure slowly and evenly, backing the tap up slightly every turn or two to break the chip. Insure that the throat does not become clogged with chips. If it does, remove them with a sliver of wood. Use of a metal object for this purpose could damage the cutting edge. If the tap becomes dull, sharpen it with a fine Arkansas slip. The tap should rarely need sharpening.

Bottoming taps are available for cutting threads to the bottom of a blind hole. Use them after you have gone as far as possible with the regular tap.

Maintenance/Throat Opening Adjustment

This thread box, like all wooden bodied tools, may require some initial tuning or maintenance at a later date for proper operation. The hole in the removable wooden bottom is drilled to exact specifications by the factory. Changes in humidity or slightly oversized dowels may require removal of the thread box's wooden bottom so that you may slightly enlarge the opening. We suggest using a medium grit sandpaper, wrapped around a dowel smaller than the thread box opening for this adjustment. Because a reasonably tight dowel fit is necessary for proper thread cutting, go slow and test fit your dowel frequently. The goal is removal of any "fuzz" or build up in the interior of the hole which may hinder dowel insertion. Should you have any further questions concerning this product or this instruction, please call our Technical Service Department, 1-800-535-4486. We hope you are satisfied with this product and we appreciate your continued patronage.