



## Thank you very much for purchasing the E-Z Tenon Cutter

The **E-Z Tenon Cutter** can be adjusted to cut 1" to 2.5" diameter tenons and will accept logs up to about 4.5" in diameter.

### What's Included:

- E-Z Tenon Cutter
- Two Cutting Blades; one mounted and ready to cut, and one spare blade stored on arm.
- One 3/8" drill bit for drilling pilot holes
- One 3/32" hex key to adjust tenon size
- One 3/16" hex key to install or replace cutting blades.
- Easy-To-Build Ratchet Strap Clamp Plans

To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely and store it in a safe location. Unauthorized copying or transferal, in whole or in part, of this manual is prohibited. The contents of this operation manual and the specifications of this product are subject to change without notice.

Rustic Woodworking assumes no responsibility for any direct or indirect loss or damage which may occur through use of this product, regardless of any failure to perform on the part of this product.

## Getting Started:

We suggest that you practice using your new **E-Z Tenon Cutter** on scrap wood, as it may take a few tries to adjust the tenon width to achieve a tight fit into the mortise.

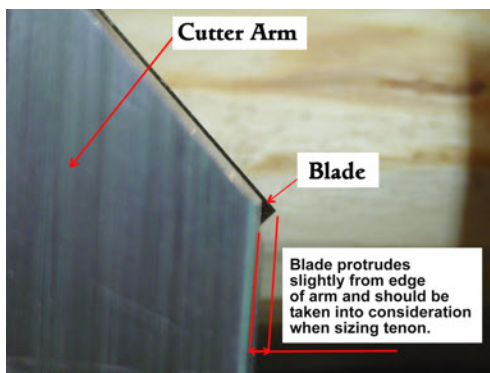
Drill a mortise hole into another scrap log or branch using either a forstner bit or flat bit so that you are ready to test the tenon after you cut it.



## Adjusting Tenon Size:

A simple way to set the tenon size is to place your forstner or flat bit in the center of the two cutter arms. Slide the cutter arms inward so that they touch the bit. Tighten the arms using the hex key.

You will notice that the cutting blade extrudes slightly from the arm. Take this into consideration when adjusting the cutter, as you may have to move that arm out slightly to compensate for the blade.



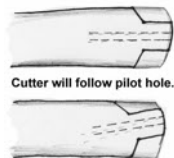
## Cutting Tenons:

For best results you will need a higher amp drill, especially if you are working with larger logs, or cutting many tenons. A support handle on your drill will help hold it steady when cutting tenons and drilling mortises. If your logs are larger than 4.5" in diameter, use a draw knife or saw to taper the ends to accept the cutter. It is best to work with seasoned and dry wood. Green wood may shrink or crack over time which will result in loose tenons.

Mark the center of the end of the log. Insert the 3/8" drill bit into your drill. Clamp your log down securely so that it won't wobble, rotate, or move. Use a bench clamp or use the plans included to build your own strap clamp.


Angle your drill so that the pilot hole doesn't go off center while drilling. The E-Z Tenon cutter will follow the pilot hole.

If the pilot hole is drilled at an angle, that's how your tenon will be cut, and the shoulders will be angled as well, and may look off centered. It is helpful to have a level on your drill. You can then level your log before clamping and align your drill to the center of the log.



Put the E-Z Tenon cutter into your drill, and insert the guide bar into the pilot hole. You may want to start slowly until the edges of the log are cut, and gradually add more pressure to finish the cut. The guide bar helps to cut a straight tenon that will provide full contact in the mortise.

Place the tenon into the mortise to check the fit. Adjust again if necessary.

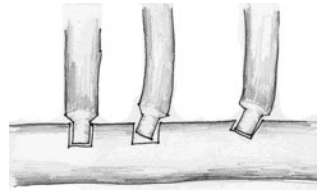
 **HINT:** For a super strong tenon, glue a piece of 3/8" wooden dowel into the pilot hole. This will make the tenon stronger than even a solid tenon.

## Cutting Mortises:

It is important that the tenon fits tightly into the mortise, especially if it will be glued. The more contact, the better.

If your logs *are* straight, use a drill press to drill the mortises if possible.

Since most logs and branches are not perfectly straight, some mortises might have to be cut at an angle to properly accept the tenon. The wood will not bend to fit the mortise. Some artists purposely use curved and odd shaped branches to make interesting and unique works of art.



To make an angled mortise, start by drilling straight into the log. Gradually pivot your drill to the proper angle, cutting slowly. When you are at the correct angle, then apply pressure to drill the mortise. Try to keep your drill as steady as possible. Wobbling may enlarge the mortise and cause a loose fit.

The best way to be sure that all the parts fit together correctly is to first cut your tenons, and then lay your entire project out on the ground.

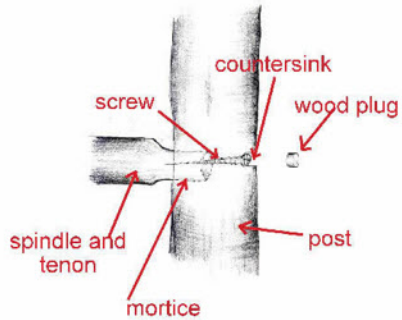
Number your tenons so that when you assemble the project they are in the same order as when cut. For example, for a railing project, number the rails from left to right, and mark the top and bottom tenons.

Put one mark on the log where the mortise is to be drilled, and another mark for the angle of the mortise if necessary. Try keeping your eye on the mark while you're drilling.



*Working with logs and branches is a challenge, but very rewarding. Your ability to master the “eye-ball” method of measuring, drilling, and cutting tenons in logs and branches on the fly will determine your success!*

**HINT:** If your tenons come out loose and you simply must make them work, drill a hole through the log and tenon, countersink the hole, screw a screw through the tenon, and then glue in a wood plug.



## About The Blade:

The cutting blades are made from hardened steel and cannot be sharpened. They are double-sided, and will last a very long time. Two blades are included with your order. One is mounted and ready to cut. One is stored on the arm of the cutter. If you need replacement blades simply send an email to [sandy@rusticwoodworking.com](mailto:sandy@rusticwoodworking.com).

If you have any questions at all about the E-Z Tenon Cutter, please send an email to [sandy@rusticwoodworking.com](mailto:sandy@rusticwoodworking.com), or call me at 218-384-9425

Thank you for your order.

*Sandy*