



Tenon Cutter

OWNER'S MANUAL



WARNING:

Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

04022019

MODEL#
TMC-01TCFB
TMC-15TCFB
TMC-02TCFB
TMC-1152TCFB

Thank you very much for choosing a Timber Tuff product. For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty, and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This product is designed for certain applications only. The manufacturer and/or distributor cannot be responsible for issues arising from modification. We strongly recommend that this product not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the product until you have first contacted the distributor to determine if it can, or should, be performed on the product.

For technical questions, please call **218-943-6290**.

TECHNICAL SPECIFICATIONS

| | |
|--------------|---|
| For Use With | Attaches to a 1/2in. or larger drill |
| Construction | Solid aluminum construction with a durable powder-coat finish to resist corrosion |
| Includes: | Forstner bit |

GENERAL SAFETY RULES

Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury. Do not allow persons to operate or assemble this tenon cutter until they have read this manual and have developed a thorough understanding of how the tenon cutter works.



WARNING:

- A single-speed, gear-driven drill with RPMS of 500 or less is recommended. Exceeding these RPMS may result in damaged parts.
- Please wear safety glasses, dust mask, heavy-duty work gloves, and other personal protection items you require when you are using the tenon cutter and drill.
- Do not use this tenon cutter while you are tired or under the influence of drugs, alcohol, or medication.
- Before installing/removing the tool, the drill should come to a complete stop.
- When cutting tough dry logs, side loading the tool could cause the shank to fail or may result in blade damage.
- The log must be fixed on a log vise or clamp when starting your drill, failure to do may result in bodily harm.

- Handle the blades as you would any sharp object or you will injure yourself or others.
- Re-sharpen or replace the blades as needed.
- Tenon cutter must be maintained by keeping the blades sharp and clear of debris.

BLADE SETTING:

1. Use a hex key (5/32") to tighten the cap screws.



2. If you feel the distance is not suitable, you can slide the blade in or out. This will change the diameter by moving the blade. However, if you slide the blade more than 1/4" from the face of the cutout, the blade will be exposed and will not cut the tenon.
3. Make sure the blade gap setting is the same distance apart for both blades (about 1/8" ~ 1/4"), please note the scale on the unit, this can help to determine the distance set for both blades, see below image:



4. If your blade feels like it is cutting too fast or stops, then, simply take one blade out and use the cutter with just a single blade. Make sure to tighten the cap screw with your hex wrench. If possible, also check the tightness of the screw before starting again and after using for a short period of time.

LOG SETTING:

Ensure the log is fixed in a vise, clamp, or fixture with a V-shaped notch. Timber Tuff's TMW-77 Log Vise is the perfect tool for this.



CAUTION:

If the log becomes loose and is not fixed when cutting the tenon, DO NOT drop the drill or try to catch or grab the log. Stop the drill and remove it from the end of the log. Assemble the log again to ensure its stabilization.

Obtain the log you want to tenon. Cut it to length and make sure the ends are flat. If the ends are not flat, the tenon will be crooked.



If the log diameter is larger than the tool can handle, taper the end with a draw shave. See above.

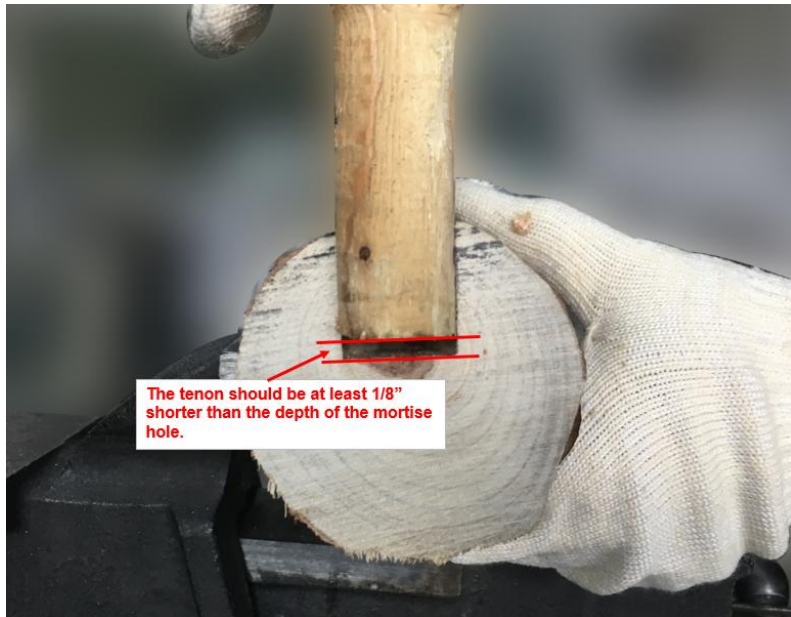
CUTTING TENONS:



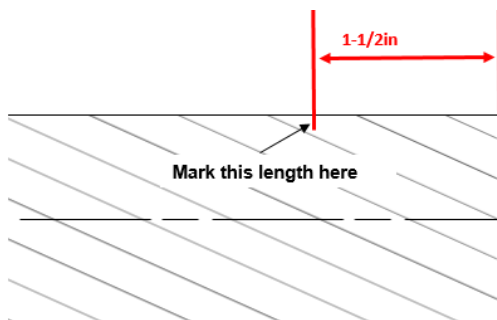
Reminder: Before you begin cutting, you should find out what your tenon length should be. See the below for our recommended method of judging that length.

The most important thing is that your tenon should not be touching the bottom of the hole. Instead, it should be hovering just above the bottom.

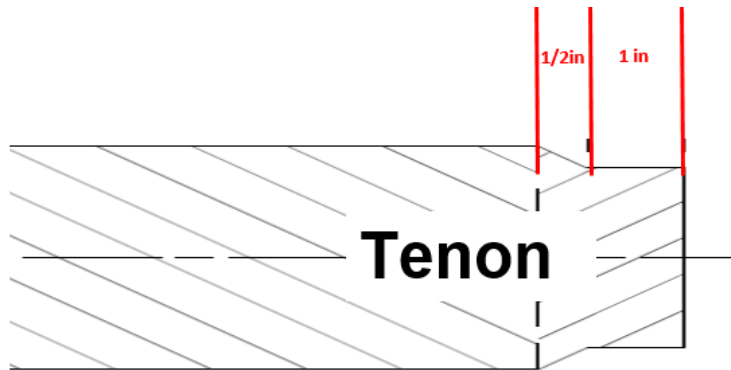
- 1) The tenon should be at least 1/8" shorter than the depth of the mortise hole. See the below diagram:



- 2) Below image shows a cut mark at 1-1/2", it will make a 1" tenon with a 1/2" shoulder joint. 1/2" shoulder + 1" straight tenon = 1-1/2" total cut length:



3) For most projects tenon length will fall between 1" to 2"



CAUTION:

1. When you adjust the blades, the drill power must always be cut off.
2. Please install the tenon cutter into an unplugged 1/2" drill carefully and tighten it firmly. Use the T-Handle to secure the chuck.
3. Square up to the log so that the cutter is flush against the flat face of the log.
4. When drilling the hole or tenon, you could apply your body weight or lean into the drill
5. Pull the trigger to cut the tenon
6. Please wait the drill comes to a stop completely before removing from the log.
7. Make sure that the tool is squared up, this point is very important. If held at an angle the tenon will be cut angled.

DRILLING HOLES FOR TENONS



1. Before your beginning, you must ensure that your logs have been cut to proper lengths. You have to cut tenons on the ends of the specified logs. After cut the holes then you may begin assembly of your piece.

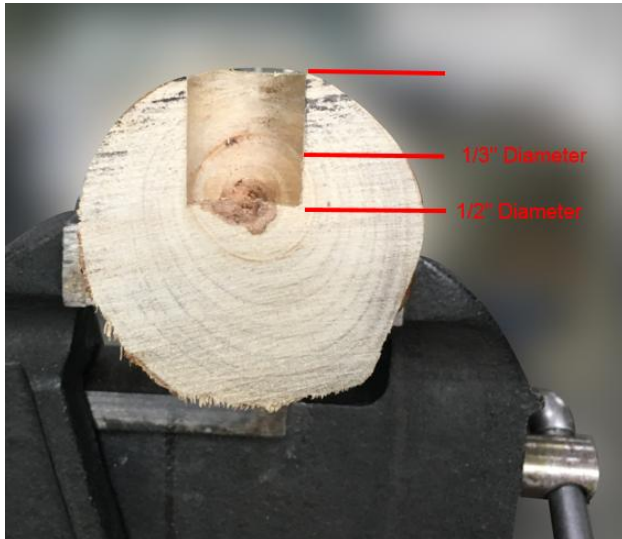
2. Always measure out and mark where the holes will be drilled before beginning.
3. Hold the drill perpendicular and straight to the log.



4. Drill holes in components using a forstner bit at dimensioned locations.

Remark:

The depth of your drilled hole is recommended to be between $\frac{1}{3}$ and $\frac{1}{2}$ of the diameter of the log that you're working with. You should never drill deeper than $\frac{1}{2}$ of the log diameter. See the example shown below:



MAINTENANCE:

Please keep the tenon cutter body clean of sap and build-up. Before cleaning, remove the blades from the tool first. Carefully clean the tool with the solvent or cleaner of your choice. Dry the tool when you are finished.

The blades are made from high-speed steel, and may form oxidation, kindly note that this is natural occurrence and it will vary depending on your geographic location, climate and shop environment. You should periodically clean the blades and apply a thin film of oil. When you re-sharpen the blades, it is recommended to apply a thin film of oil.

WARRANTY

One-year limited parts warranty



BAC Industries
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Miltona, MN 56354

Made in CHINA