



Tenon Saws

U.S. Pat. No. D645,330

The Veritas® tenon saws combine the best characteristics of the classic fine joinery saw with those of state-of-the-art materials and construction methods. The tooth pattern on the thin high-carbon steel blade provides a good balance between cutting action and surface finish. The design of the wooden handle has been developed to give good power transfer while still allowing a three- or four-finger grip for precise control.

Tenon saws are ideal for medium to large general-utility sawing on larger projects. The crosscut saw is good for trimming parts to length, particularly in combination with a miter box. The rip saw is optimized for cutting the cheeks of medium to large tenons. Both saws have 16" long blades with an effective cutting depth of 4".

Sawtooth Geometry

The crosscut saw has 12 tpi, filed with a 15° rake and a 60° included angle. Set is 0.003" per side. The teeth are filed at an alternating 75° angle to the blade, which creates a 15° bevel on each tooth. The crosscut tooth pattern acts like a series of little knives that sever the wood fibers.

The rip saw has 9 tpi, with a 14° rake using the typical 60° included angle. Set is 0.003" on each side.

As supplied, these saws will have residual sharpening burrs on the teeth. These will disappear as the saw is "broken in".

Since the blade is high-carbon steel, the teeth can be resharpened when necessary. Please refer to references, such as *The Complete Guide to Sharpening* by Leonard Lee (The Taunton Press, Inc.), for detailed directions for sharpening a saw blade.

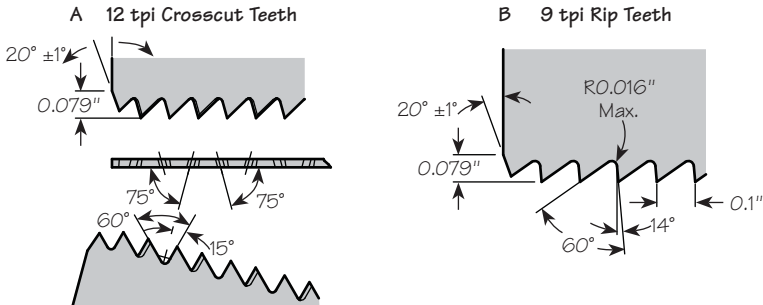


Figure 1: Sawtooth geometry for crosscut (A) and rip (B) tenon saws.

Replacing the Handle

The joint between handle and spine is such that sawing loads are not transferred through saw bolts. Since it is attached to the spine using a single threaded stud, the handle can be quickly replaced if necessary.

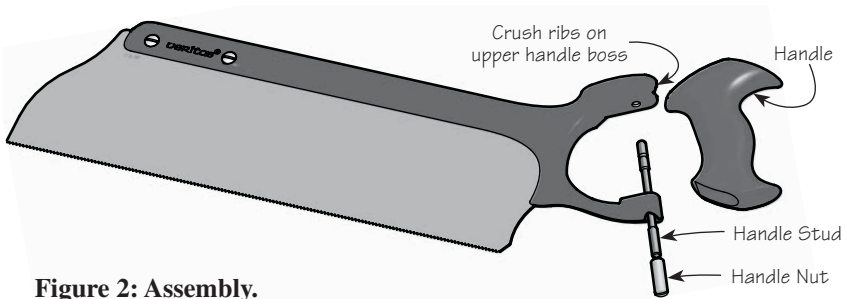


Figure 2: Assembly.

While the handle shape has been carefully developed to offer the best comfort level, we recognize that every woodworker has a preferred handle type. You may want to modify the existing handle, or make your own from scratch. The critical dimensions for the handle are shown in **Figure 3**. Make your handle such that the large boss on the spine bottoms out in the cavity in the top of the handle. The only critical curve is the one that surrounds the top and bottom cavities, as this must match the mating curve on the spine; otherwise, any shape that fits your hand comfortably will do.

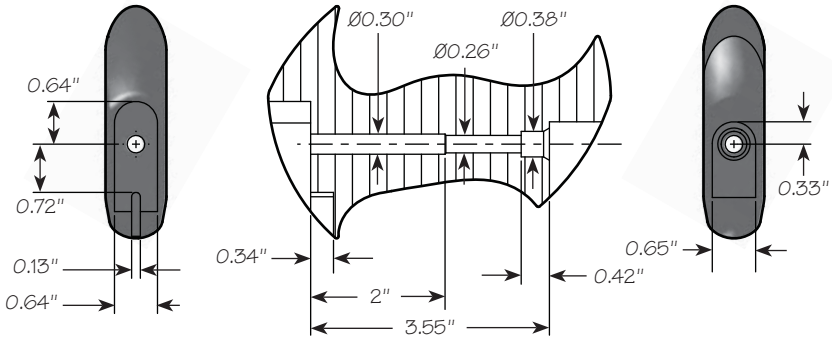


Figure 3: Handle template.

Care and Maintenance

- To ensure many years of service and to prevent damaging the fine teeth, always store the saw with the blade protector in place.
- A light coating of silicone-free wax will prevent the blade from rusting.
- Rubbing paraffin wax on the side of the blade just before use will also allow the saw to run more smoothly through the cut.
- **Do not** use beeswax candles; beeswax will gum everything up.

Accessories

- 05T05.01** Dovetail Saw, 14 tpi
- 05T05.05** Fine-Tooth Dovetail Saw, 20 tpi
- 05T06.01** Small Crosscut Saw, 16 tpi
- 05T07.01** Crosscut Carcass Saw, 14 tpi
- 05T07.05** Rip Carcass Saw, 12 tpi
- 05T10.01** Rip Gent's Saw, 20 tpi
- 05T10.05** Crosscut Gent's Saw, 22 tpi
- 05T14.01** Rip Tenon Saw, 9 tpi
- 05T14.05** Crosscut Tenon Saw, 12 tpi