Standard Taper Reamers

05J62.01
05J62.05

These one-piece high-carbon steel reamers can be used for a wide variety of woodworking tasks, including deburring and tapering leg sockets. The included angle of 12.8° on both reamer bodies matches the tenons made with the Veritas® Tapered Tenon Cutters. The small reamer can taper a pilot hole with a minor diameter greater than 11/64″ and a major diameter less than 3/4″. The large reamer can taper a pilot hole with a minor diameter greater than 11/64″ and a major diameter less than 17/32″. Designed for use in an electric drill, these reamers have a 5/16″ hex shank and may also be used in a traditional hand brace with a tapered square-shank brace adapter.

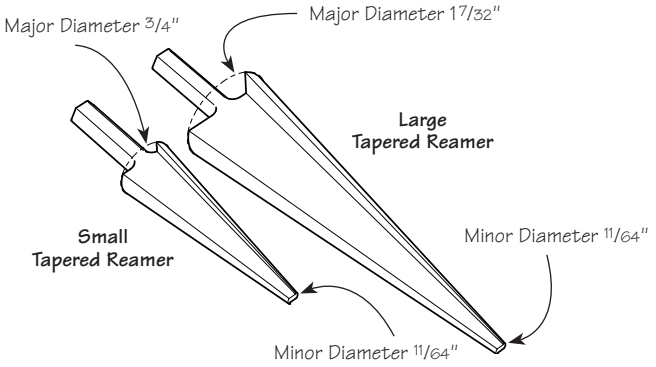

Figure 1: One-piece reamers.

Use

Caution: *Be sure to follow the safety instructions that came with your electric drill. Make sure the workpiece is free from nails or other foreign objects, and always maintain proper footing and balance. As with any power tool accessory,* ***always*** *wear eye protection when using this product.*

The reamers are for use in a pilot hole that is slightly smaller than the diameter required for a particular application. (They cannot be used to bore a hole directly.) To start, firmly tighten the reamer in the chuck of an electric drill. A minimum 3/8″ chuck is required, and a high-torque, low-speed (~500rpm) drill is recommended. The cutting action of these reamers can be quite fast, particularly in softwoods, so it is important to proceed slowly. Overloading the reamer or operating it at high speeds can lead to overheating it, resulting in edge failure and loss of hardness.

With a visual reference device (such as a sliding bevel) placed adjacent to the pilot hole and set to the desired angle, press the reamer into the pilot hole and switch on the drill at low speed, as shown in **Figure 2**. Check the angle often and correct as required. Stop to clear chips as needed and to avoid excessive heat build-up.

Caution: *Do not touch the reamer directly after use; it will be very hot.*

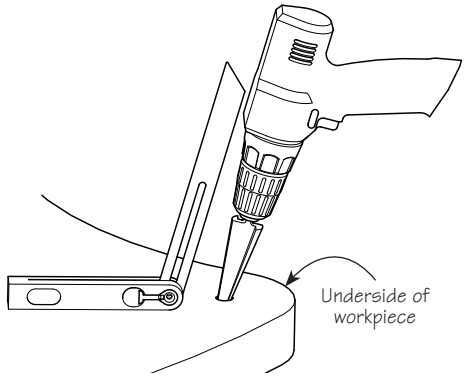

Figure 2: Reaming a leg socket at a desired angle.

Sharpening

The reamer comes sharpened and ready for use; however, it will eventually require resharpening. This can be easily done with a slip stone or diamond hone. Hone only the inner surfaces of the cutting edges; **do not** hone the outer surfaces. The geometry of the reamer is not as simple as it looks. The relief angle is built into the outer surfaces and honing these will damage this geometry.

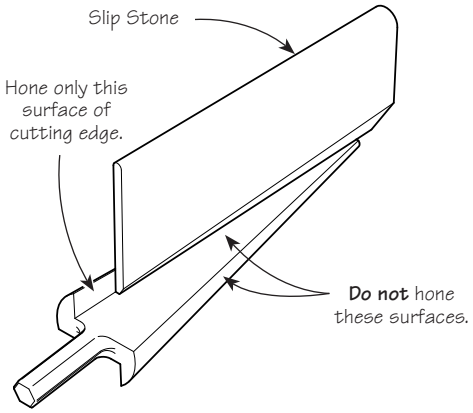

Figure 3: Honing the cutting edges.

Care and Maintenance

- The body of the reamer is made from a steel alloy selected and heat treated for toughness. Although it will usually withstand hard knocks without material failure, avoid dropping the reamer on a hard surface such as a concrete floor.
- Store in a dry place. The reamer can rust if exposed to moisture or humid conditions. As with any iron or steel tool, an occasional application of silicone-free paste wax will prevent rust.
- Resharpen as needed. If water stones are used, be sure to remove all traces of water after sharpening.