

Shop Notes

Small Knobs for Clamps and Hold-Downs

Whenever I find myself making the same part over and over, I start looking around for a way to speed up and simplify the process. This is particulary true for small parts which are difficult and sometimes even dangerous to shape using power tools.

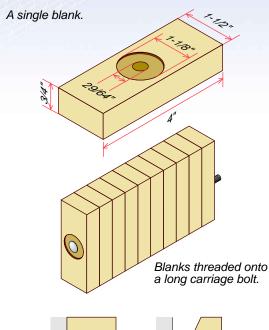
Whenever I find myself making the same part over and over, I start looking around for a way to speed up and simplify the process. This is particulary true for small parts which are difficult and sometimes even dangerous to shape using power tools. I use a lot of small wooden knobs with a t-nut for hold-downs and small clamps. My first attempt at speeding up their manufacture involved a pattern and hold-down mechanism that let me use a router with a flush-routing bit to form the profile. It was faster than marking them out one at a time and cutting them on a bandsaw, but the router tended to chew up the end grain. I've since figured out how to make them eight to ten at a time with a tablesaw and stationary sander.

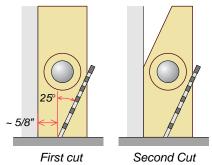
The blanks are 4 inch long sections of hardwood 1X2. Drill through the center of each using a bit appropriate to the t-nut you'll be using. Since I'm using 3/8" bolts and t-nuts, I drilled 29/64. Counter bore with a 1-1/8 forstner bit just deep enough to sink the t-nut flush with the surface of the knob. Do not insert the t-nuts yet.

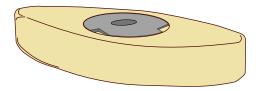
Thread the blanks onto a 3/8" carriage bolt. Square them up against a flat surface and secure with a washer and nut. be sure to make the stack very tight.

For this size knob, I set the tablesaw to 25° and leave 5/8" clearance between the inside edge of the blade and the fence. Check to be certain the blade clears the bolt, nut, and washer before cutting. Two passes through the blade remove opposite corners of the stack. Be careful and feed slowly.

Rough sanding to shape is done with a belt sander or stationary sander while the blanks are still together. Round the ends and sides to eliminate sharp corners. Final sanding and rounding all edges is done after the parts have been separated. Apply a finish if you wish, and insert a t-nut into the recess.







A finished knob. Edges rounded and t-nut in place.