Routing Stopped Flutes

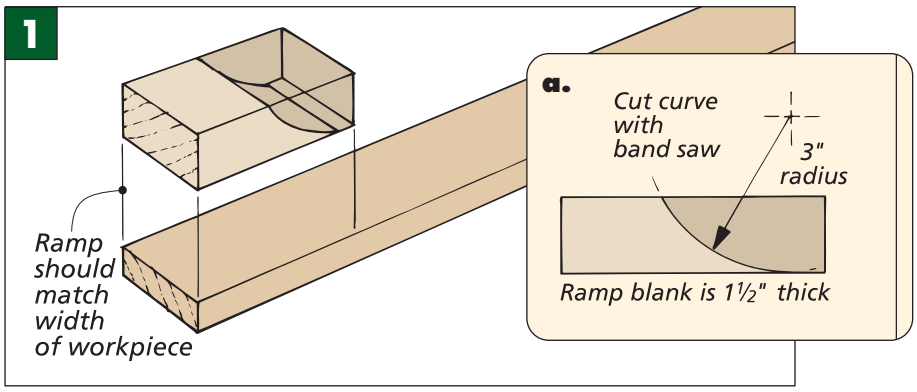
Recently I was making a bookcase with stopped flutes on the side. I was disappointed when I noticed my router bit left some pretty bad burn marks at the end of each flute, see photos at right. To overcome this problem, I made a simple ramp device that keeps my router from burning the edges. This method works so well that now I use it just about anytime I'm building a project that calls for routed flutes.

▲ *Routing a stopped flute usually results in burn marks at the ends.*

▲ *The ramps lift the bit out of the flute, leaving a clean, tapered end.*

My device looks like a miniature skateboard ramp, see photo below. When I slide the router up the ramp, the bit is lifted smoothly out of the flute. Not only do you eliminate the burning, but you also get a nice, tapered end.

The ramps are nothing more than scraps of "2x4" stock with arcs cut in them, see Fig. 1. The blanks for the ramps should be the same width as the stock that you are routing the flutes in. For the flutes in the bookcase, I found that a 3"-radius arc was just about right. After laying out the arcs, I cut them on a band saw and sanded them smooth on a drum sander. To see how I use the ramps, go to page two of this tip.



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Routing Stopped Flutes (continued)

To use the ramps, simply clamp them to the ends of the workpiece, making sure that the end of each ramp is square to the edge of the workpiece, see Fig. 2. (You could also tape the ramps down with double-sided carpet tape.) With a jig or edge guide attached to your router, the ramps will help lower and raise the router into the cut, see Figs. 3 and 3a.

There's one thing to be aware of. I found that the sharp edge of my router base had a tendency to "catch" on the edge of the ramp at the end of the flute. To avoid this, I simply filed a slight chamfer on the edge of my router base plate.