Fence Alignment Tool for a 4x6 Horizontal/Vertical Bandsaw in the Vertical Position, Version 1.0

By R. G. Sparber

What happens if the flank of the blade is not parallel to the fence? The material being cut may be pushed into the fence and bind up or pull away from the fence. Either way, the result will be a cut that curves away from the intended path.

It is pleasing to my eye to see my fence parallel to the side of my bandsaw table. But as I got into the task of twisting the blade an additional 4°, I quickly realized it was not worth the trouble.

What I needed was to be able to set my fence parallel to the side of the blade. This is not easy for me to do by eye.

I came up with a complex set of tools that let me see the flank of the blade and us it to set the fence. Only when I was done did I realize how unnecessary this was. Toss it back into my scrap drawer.

This is a piece of sheet metal that has a ¼-inch bend along one side to make it easier to handle.

I made a cut with my saw the full depth of the blade about 3/8-inch from the edge. After deburring, I aligned a ¼-inch wide parallel on the cut. Then I scribed a line with a knife for the full length of the metal. The distance from cut to edge is not critical, but being parallel is essential. As carefully as possible, I used tin snips to cut along that line. Deburr. OK, the tool is nothing to get excited about.

The value of this tool becomes evident when I align the fence. It is easier to see the edge of the tool than to sight the flank of the blade. I can hold down the tool, drop in a spacer, and then slide the fence in snug. Clamp the fence in place, remove the bits, and I'm ready to go. *The trick is to not press on the edge of the tool, which can cause the blade to twist or deflect.*

I tested out the alignment of the fence with a strip of sheet metal. One edge was trued up on my belt sander, so it was straight compared to a machinist square. No light came through. After sliding the metal along the fence, I deburred it.

How close to parallel was this cut comparted to my reference edge?

I zeroed my caliper at one end. The strip of metal enabled me to keep the jaws flat.

I am high by 0.001-inches in the middle,

and low by 0.0005-inches near the other end.

This is far from proof but does demonstrate the potential value of aligning the fence this way.

I welcome your comments and questions.

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