A Home Made Dremel® Drillpress, version 1.1 or "Feeding the Disease"

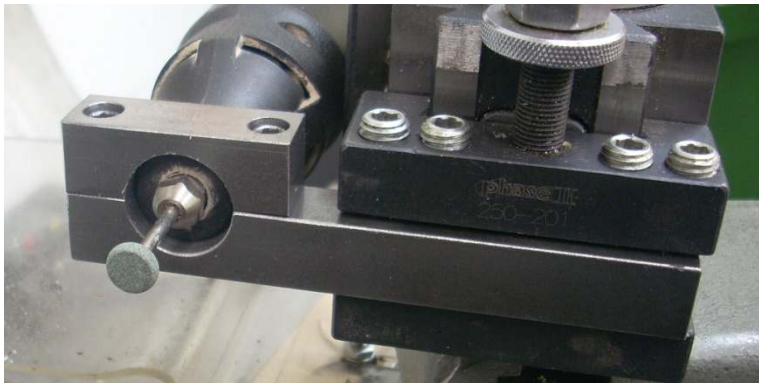
By R. G. Sparber

You know the feeling. You look at something that has been kicking around your shop for many years. It is ***really*** nice, but what do you do with it? Such was my burden since my very generous friend, Tom Davis, blessed me with this machine. Well, it turned out that Tom got it from Tim Coppage who had prized it for several years but didn't know what to do with it either.

I have no idea what it was originally for but it sure had a nice action. Pull on the lever and a rod feeds out the bottom of the orange block. The rod does not turn.

[1] You are free to copy and distribute this document but not change it.

Well, today I decided I wanted to make a drillpress that would hold my Dremel and I suddenly realized that this odd but really nice machine was perfect for the job.



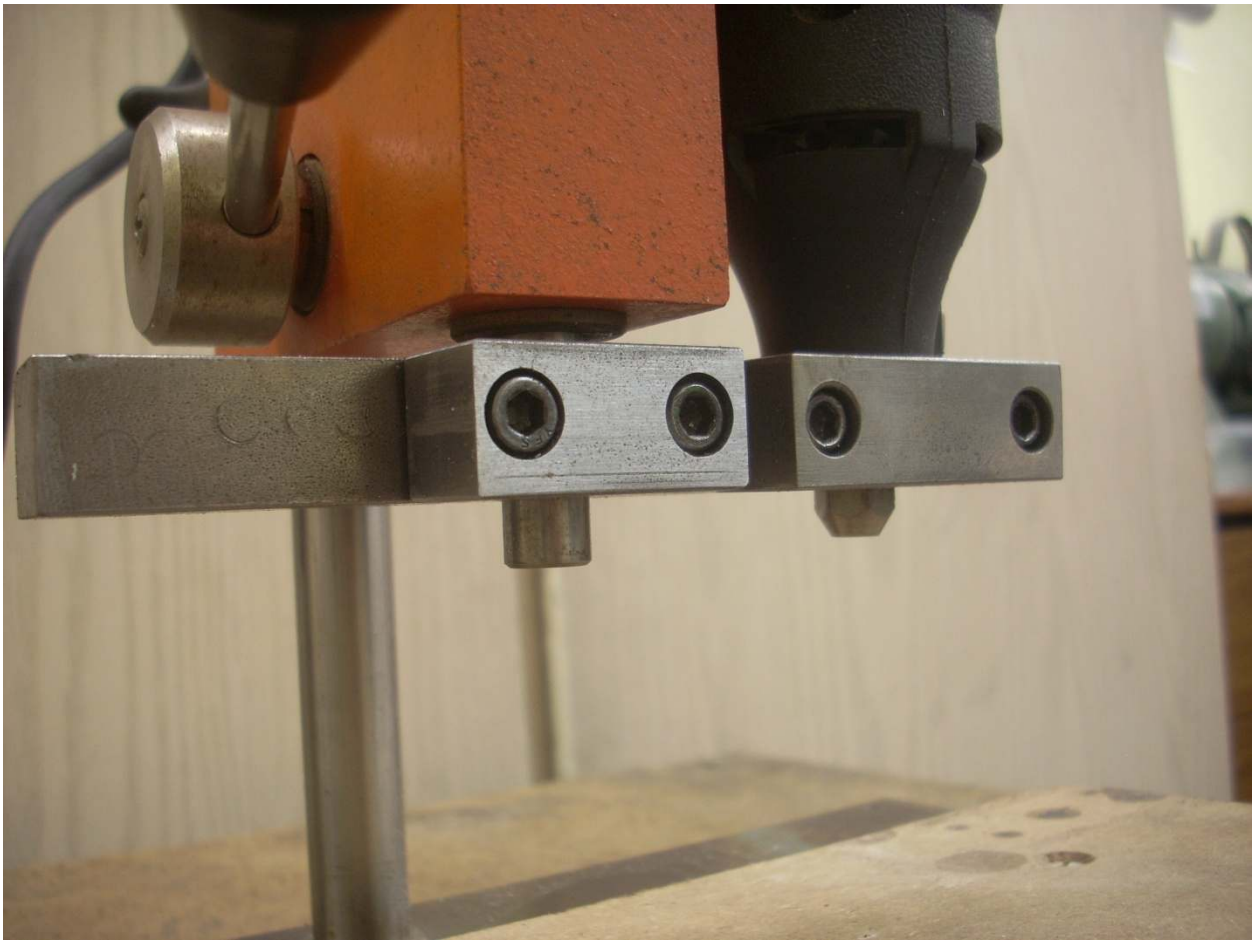
In fact, the project got a bit sweeter when I realized that much of the adapter had already been made. Back in January of 2011 I built a fixture that would let me mount my Dremel in my lathe's toolpost:

http://rick.sparber.org/tad.pdf.

All I needed to do was add a second clamping block and I would be done.

I replaced that broken top with a piece of aluminum. The holes were match drilled through the black rectangle below it so no measurements were needed. I discovered that the hole in the center of this top had a brass threaded insert so I drilled and tapped a similar hole in my new top. I discovered that by adding a screw I was able to adjust the spring tension.

My brand new Dremel drillpress cost me a few hours of enjoyable shop time. I then used it to drill about 100 holes as I learned how to best use it.



Here is a close up of the two clamping blocks. On the right is my Dremel firmly clamped in place and ready to receive a circuit board type drill. On the left is the rod that moves up and down under the control of the lever. I slide the clamp up the rod to set the maximum height of the drill.

The minimum height is set by lowering the lever all the way down as shown on page 3.

Then, with the Dremel running, I ***carefully*** lower the head down until it just kisses the MDF. The knob on the back of the unit sets a clamp that locks the head to the column.

In this way I can raise the tiny drill safely but barely above the circuit board to position the drill with minimum parallax. Then when I lower the lever, I always go all the way through the board but not too deep into the MDF.

Of course nothing goes perfectly. I was given two of these fancy drills by "Beevo" and had a great time drilling an entire 2" x 2" board before I tried to fine tune the position of the head without the Dremel running. Yup, snapped that tiny drill right off. Sometime next week I should be receiving a shipment of 40 drills of different sizes. Then I'll be ready to go. I just need the artwork so I can etch the next board.

Acknowledgements

Thanks to Tom Davis for giving me this very nice but unknown machine so many years ago. Thanks to "Beevo" for giving me two drills. Sorry I snapped one so quickly… Thanks to Tim Coppage for adding to the history.

I welcome your comments and questions.

Rick Sparber
Rgsparber@aol.com
Rick.Sparber.org