

Making a Better Dremel Polishing Mandrel

by Desiree McCrorey



This page describes how I made a customized polishing Dremel mandrel to hold more than one polishing cloth wheel.

While my main polishing tool is a Foredom bench model, I find I favor my variable speed Dremel for its convenience, extreme portability and increased suitability for doing small items like beads.



The key drawback (IMHO) with the Dremel, however, is it's tiny cloth polishing wheel, a thin little disc that's about 3/8th inch thick and 1 inch in diameter (A). The area that actually touches the item to be polished ends up being very small -- too small for my needs.

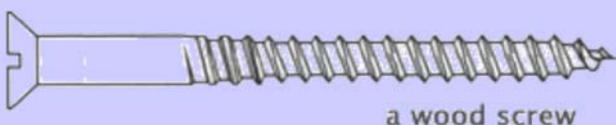
I've always wanted to add a second disk to double the polishing area, but the mandrel (B), the accessory that fits into the Dremel to hold the cloth wheel, has room for only one. So I decided to see what I could do to change that

limitation.

Success! I figured out a solution that looks like it would accommodate at least one to two more wheels (F).

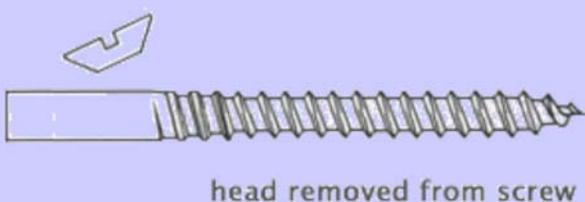
Here's what you'll need if you want to do the same:

- two nice new cloth polishing wheels (A)
- variable speed Dremel rotary tool (C)
- metal cutting emery wheel {Dremel #409} and its mandrel {Dremel #402} (D)
- zinc wood screw, 5 X 1-1/2" (E)
- safety goggles
- metal file
- pliers



Step One:

Put on your safety goggles. Take one wood screw. Hold the threaded end with some pliers because it will get too hot to hold when you perform the next step.



Step Two:

Cut off the head of the 5 X 1-1/2" screw using your Dremel and the metal cutting emery wheel attachment. Make **absolutely sure** to wear safety goggles when doing this because tiny bits of metal could wind up in

your eyes.

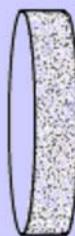
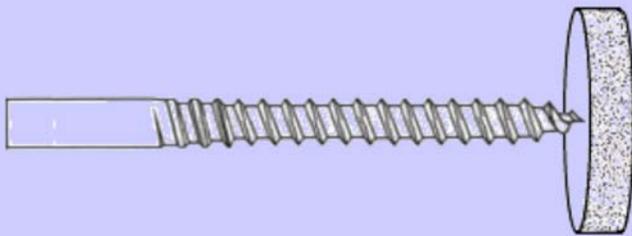
Sparks will likely fly but that's okay.



new 'mandrel'; formerly wood screw

Step Three:

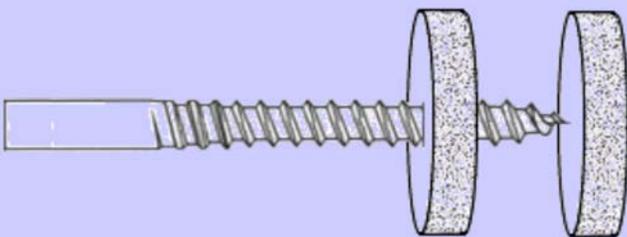
File any rough cut edges using a metal file disk or a metal file. With the screw head removed, you've got yourself a polishing wheel "mandrel". The end of the screw that you've just filed is the end that goes into the Dremel.



preparing to twist 'mandrel' into first polishing wheel

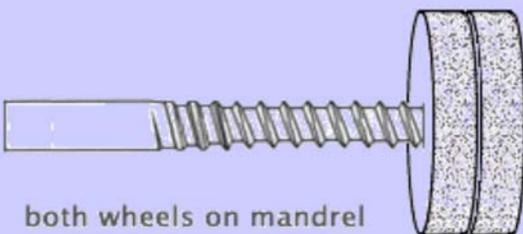
Step Four:

Twist the first cloth polishing wheel onto the pointy, threaded end of your new mandrel until about 3/8ths inch of the screw's end shows.



First wheel on mandrel, preparing to twist on 2nd wheel

Twist on the second cloth wheel until it is right up against the first wheel and just the tip of the screw shows.



both wheels on mandrel

Step Five:

Mount the screw and wheel accessory into the Dremel and spin for a few minutes against some kind of hard edge, like a counter top or table edge, to remove the first few loose cloth threads.

Congrats. You've just doubled your Dremel polishing capacity! *tee hee*.

Next month, I'll show you how to make your own polishing wheel, which is optimal for polymer clay.

