



Brush guard removed for illustration purposes.

Grinder-Mounted CLEANING BRUSH

Carl Ford

When turning green wood, the shavings and dust can get clogged up in a bowl gouge's flute. Before sharpening the gouge, I like to clean out the flute with a 3" (8cm) nylon wheel brush attached to the side of my grinder. Sometimes you can clean the shavings out with just your finger, but other times there is gunk built up in there that just won't come out. A quick touch of the gouge's flute on the underside of the wheel brush readies the gouge for the grinding wheel.

Attaching the nylon wheel brush to my grinder was a good time saver. I used to walk over to my drill press, mount the nylon wheel in the drill press, clean the gouge flute, and then walk back to the grinder to sharpen the tool. Very inefficient. Here is how I added the wheel brush directly on my grinder.

Mount the wheel brush

I purchased my nylon wheel brush from my local hardware store. I have found that nylon works better than a wire wheel, and it lasts longer.

Attaching the nylon wheel to the end of my grinder required a bit of ingenuity. Most grinders have a $\frac{5}{8}$ " (16mm) threaded shaft on the right side. It is a standard $\frac{5}{8}$ " SAE right-hand thread. I purchased a $\frac{5}{8}$ " coupling nut and a short $\frac{5}{8}$ " bolt. I drilled a $\frac{1}{4}$ "- (6mm-) diameter hole in the end of the bolt head. This allowed me to insert the shaft of the nylon wheel into the top of the bolt. I also drilled and tapped a hole for a $\frac{1}{4}$ " set screw. The set screw holds the nylon brush wheel in place (Photo 1).

Then I was able to screw the coupling nut onto the grinder's shaft (Photo 2).

Note: The thread on most grinders is left-handed on the left side and

right-handed on the right side. This configuration naturally tightens the nuts when the wheels spin, which lessens the chance of them unthreading during use. Left-hand coupling nuts are hard to find and/or more expensive. So I recommend going with a cheap right-hand coupling nut on the right side of your grinder.

I drilled a hole in the grinding wheel cover with a hole saw. This allowed me to install the cover with the adapter installed (Photo 3).

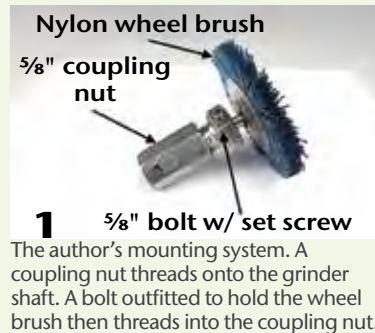
For added safety, I turned a wood cover that goes over the top of the nylon wheel. It is essentially a tall-sided wooden bowl with one-third of it cut off. The rim on the wood cover has a flange that allowed me to attach it to the grinder cover with some sheet metal screws (Photo 4).

In use

Before sharpening, apply the gouge's flute to the *underside* of the spinning wheel brush. Applying it to the top of the wheel could result in the tool catching and being thrown toward you. My added safety cover makes it impossible for me to do that, as the opening is at the bottom of the wheel brush. ■

A member of the Kaatskill Woodturners (New York), Carl Ford is an accomplished woodturner who loves teaching people how to turn. His website is carlford.us.

Brush and mounting components



Nylon wheel brush

$\frac{5}{8}$ " coupling nut

1 $\frac{5}{8}$ " bolt w/ set screw

The author's mounting system. A coupling nut threads onto the grinder shaft. A bolt outfitted to hold the wheel brush then threads into the coupling nut.

At the grinder



2 The wheel brush is threaded onto the grinder's shaft.



3 A hole is drilled in the grinder's guard to accommodate the fixture.

Shopmade safety guard



4 A shopmade guard is simply two-thirds of a tall-sided bowl. A rim flange enables mounting.