Sawing Small Parts Safely, Version 1.0

By R. G. Sparber

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What if I needed to saw out and file this odd piece of plastic? My primary goal *should* be to not cut my fingers. Secondarily, I want the part.

The technique I use is to keep the part attached to a "handle" for as long as possible.



I started by drawing the outline of the part on my stock. In this case, it is a section of scrap PVC pipe from my junk drawer.



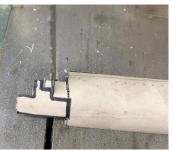
Holding the stock far from my bandsaw blade, I start removing bits.



Notice that I cut away a rectangle that only had one side common with the part.



This "L" shaped cut gives me partial access to the stairstep side.

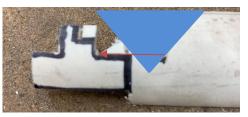


Next, I sawed into the stairsteps.

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Here is where I went freeform. Ultimately, I wanted to be able to cut the top horizontal lines but the saw blade needed some room. By going in at an angle, I can clear out material.



In hindsight, I should have cut more of the plastic to the right as shown by the blue area. Then it would have been a straight in cut.



But I wasn't that smart so I made a few wasted cuts before I could get the blade in the right orientation. Note that my "handle" is now behind the blade. A bit awkward to hold but far safer than trying to grasp the part from the front.



The stock was then clamped in my vise with the attached part sticking out. I used a file to bring the part to final size.



Trying to do this filing on just the part would have been a real pain and probably would have damaged the surface.



When I was done with all exposed edges and surface, I sawed the part free from the stock.



A few passes with the file on the last saw cut and I'm done.

I welcome your comments and questions.

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