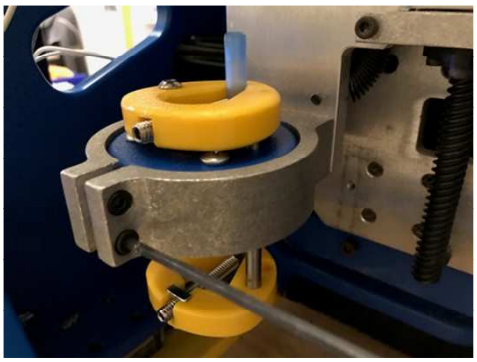
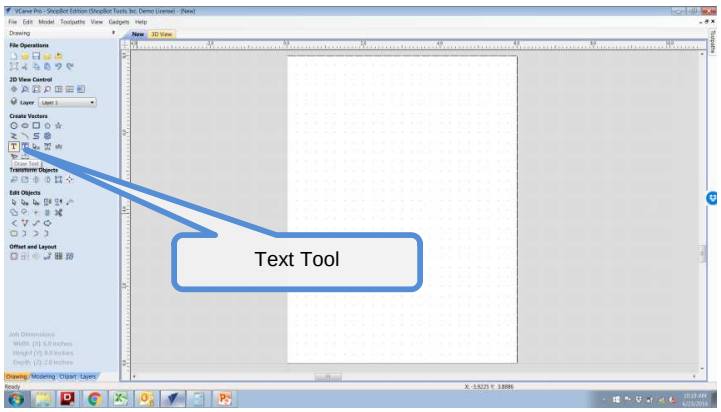
handibot®
smart power tool

Handibot Plotter Pen User Manual

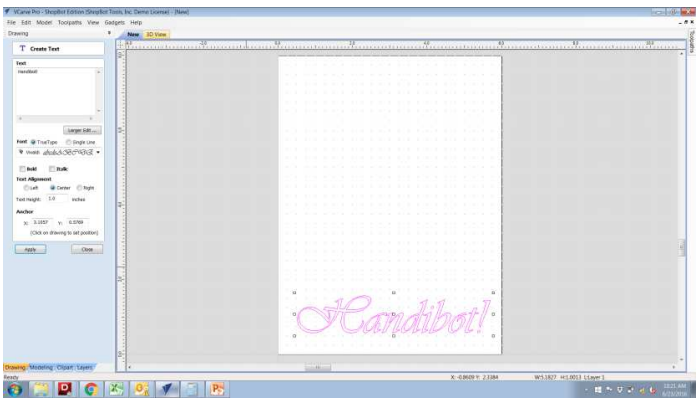
1 The handibot plotter pen holder is a versatile accessory that can be used to hold markers, fabric pens and even paint brushes. You can use it to create art, draw on t-shirts, or make colorful signs on any surface.



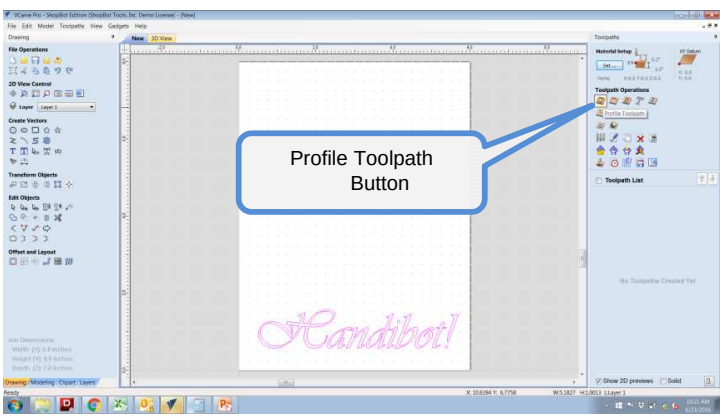
2 Creating toolpaths for the pen is easy. To draw text, simply use the text tool in vCarve



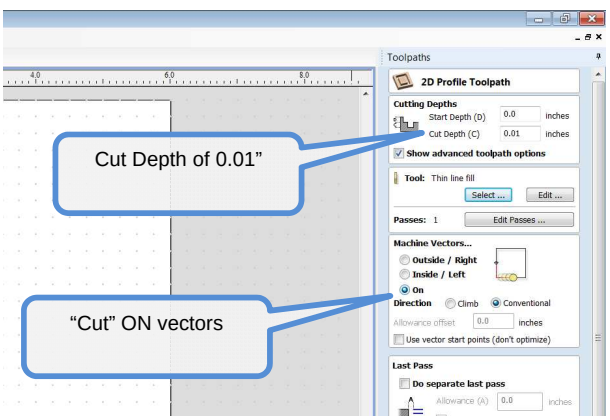
3 Choose your font and text size, then click to place the text in your work area



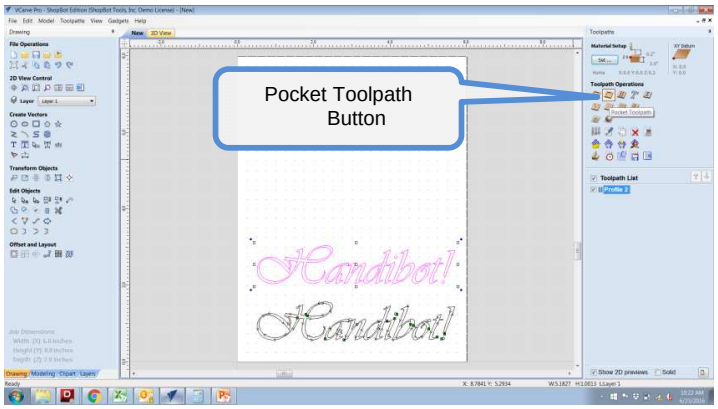
4 To trace the outline of your text, create a profile toolpath



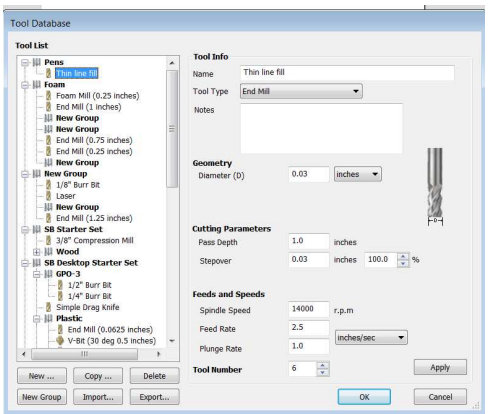
5 The pen barely needs to touch the surface, so choose a shallow “cut” depth and instruct the tool to cut ON the vector lines



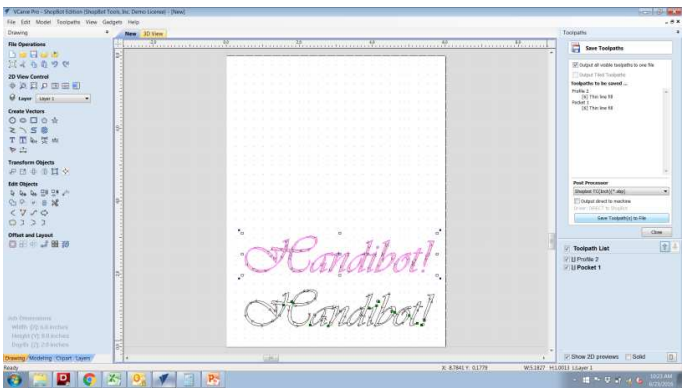
6 We'll make a second copy of the text and tell the tool to fill in the letters this time using a Pocket Toolpath



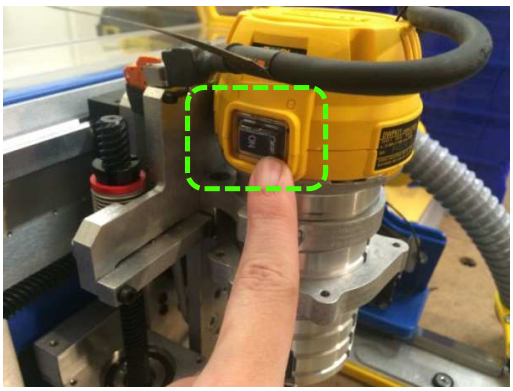
7 I created a custom tool in my library for drawing. Most important is the tool diameter and stepover values. This will control how well the color fills in your drawings



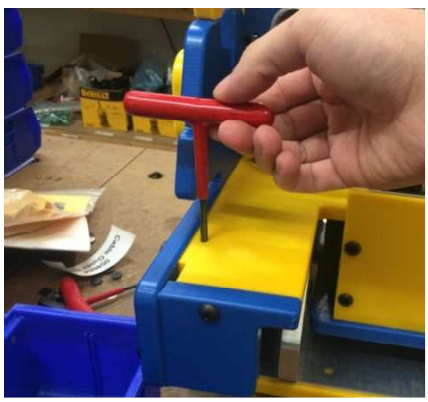
8 I'll save both toolpaths into one cut file.



9 You'll need to remove the router to install the plotter pen. For safety, turn router power switch to "OFF"



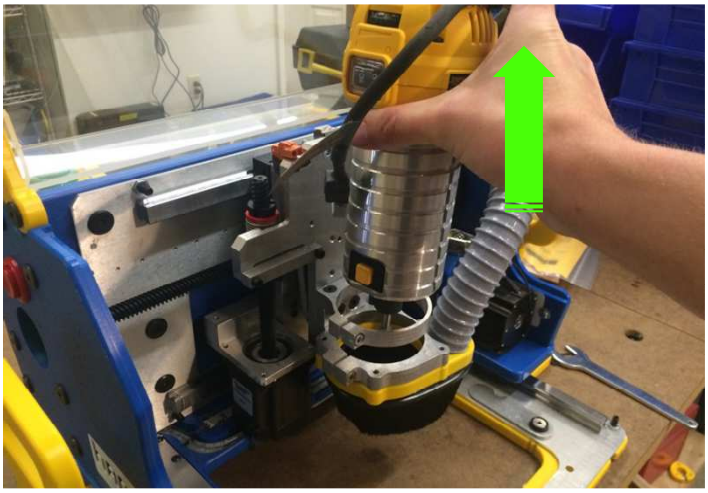
10 Grab the 4mm wrench from its holder on the back of your handibot. (Handibot 1.1 and earlier will find a 3mm wrench in the toolkit included with the handibot).



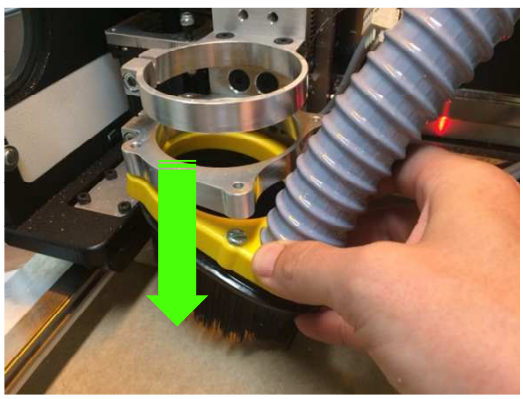
11 Loosen the two bracket bolts on the front of your handibot. Be sure to hold onto the router; it may drop as the brackets are loosened!

12 Unplug the grey router power connector from the orange receptacle on the Z axis. (Handibot 1.1 and earlier will not find plug on router and will need to carefully set the router aside).

13 Lift the router straight up out of the router bracket and set it aside.



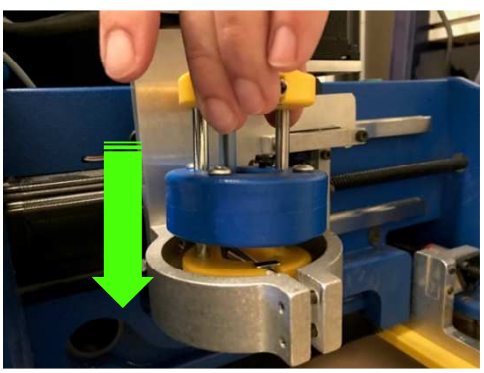
14 Pull the vacuum foot out of its magnetic holder by tugging down on it firmly.



15 To remove the vacuum foot entirely, unscrew the hose from the handibot by twisting it clockwise.

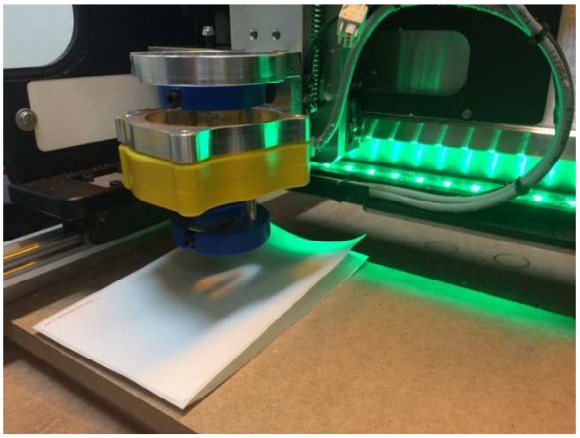
16 Once the vacuum foot is released, set it somewhere out of the way so that the tool doesn't roll over it during cutting.

17 Slide the pen holder into the router bracket and tighten bracket screws to secure in place.

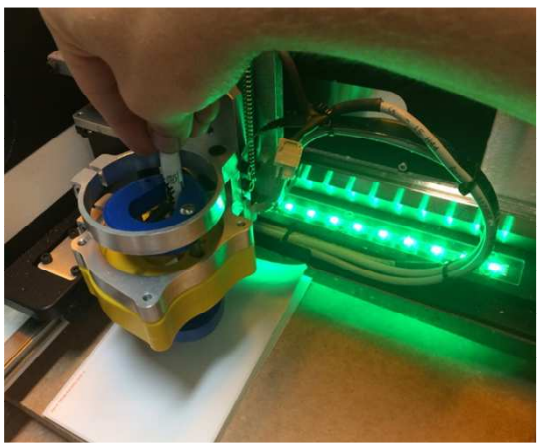


18 From the FabMo dashboard, send all axes to zero.

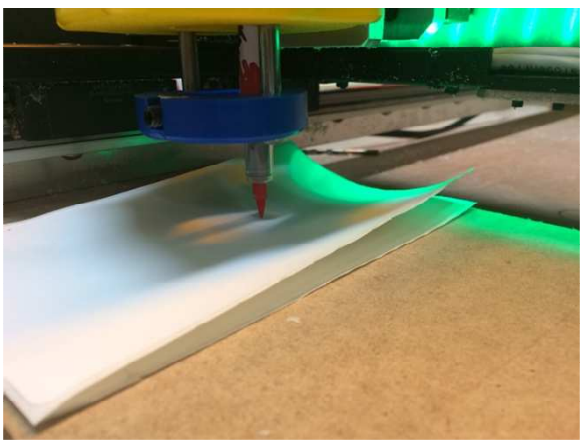
19 You may want to place a piece of scrap paper under the pen for zeroing



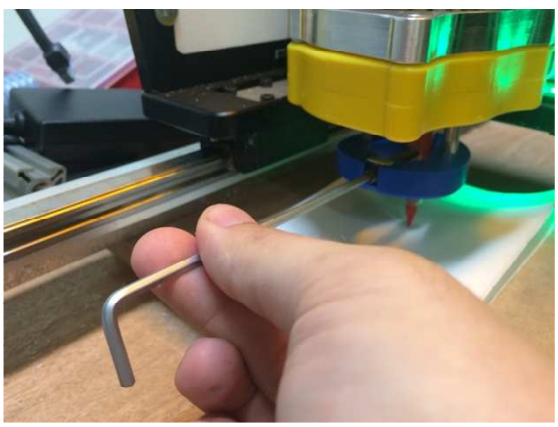
20 With the z axis set to zero, insert the pen that you would like to use.



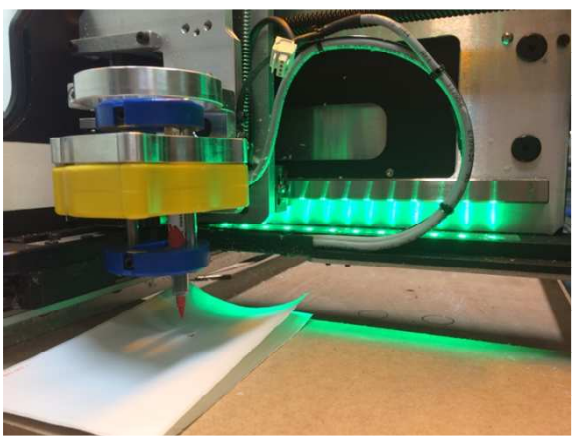
21 Allow the tip of the pen to rest gently on the drawing surface.



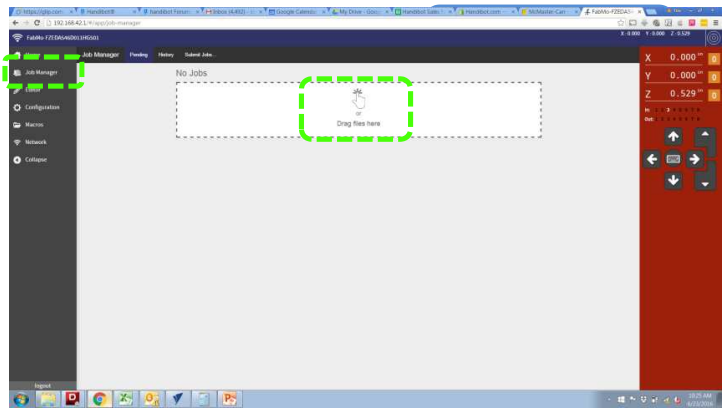
22 Using the included 3mm allen wrench, tighten the two set screws to clamp the pen in place.



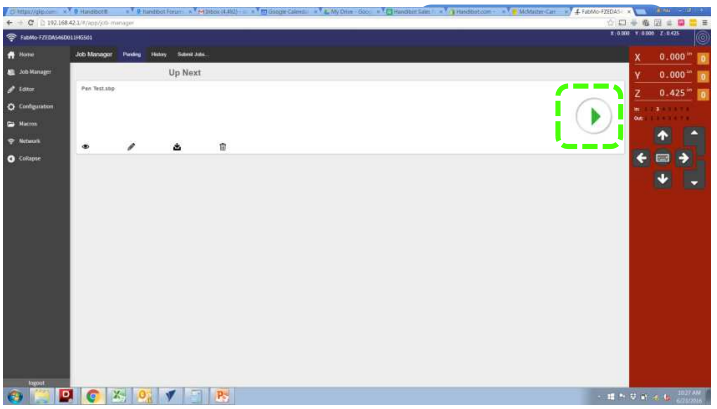
23 With the pen held tightly, move the Z axis up a bit so that you can get your paper out of the way.



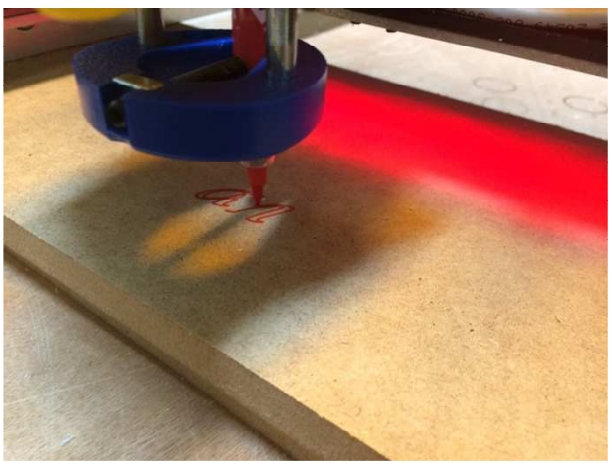
24 Open the job manager to load your toolpath.



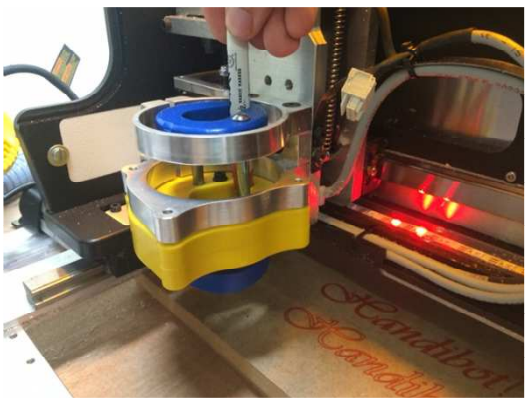
25 Press the green “play” button to start your handibot.



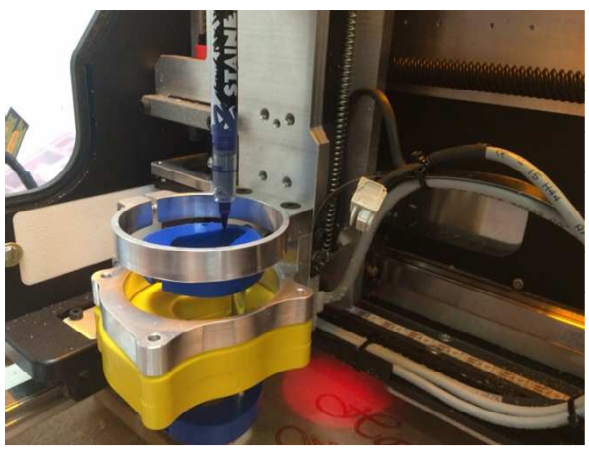
26 Off we go!



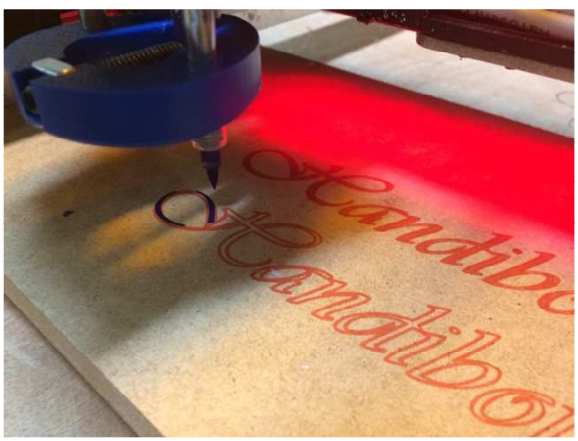
27 I decide that I’d like to change the color of the pen for the outline of the text…with the tool moved back to home and the Z axis at zero, loosen the set screws and remove the pen



28 Insert the new pen and allow it to drop until it is in contact with the drawing surface. Tighten the screws and raise the Z axis.



29 Start your next toolpath…



30 Not sure about the color combination…but looks great!