

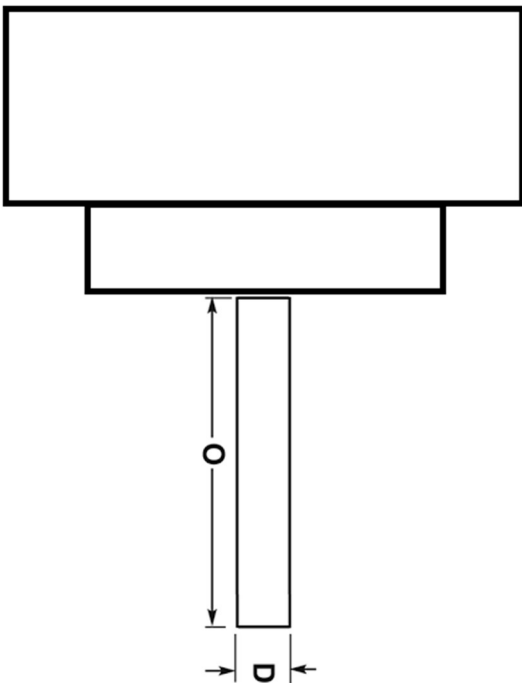


SMC4-4-16A16B

Four-Axis Motion Controller

Origin Guide

Origin: Starting point of work, Finding the origin on your work piece is one of the most important steps to milling a part. In this guide, we will be showing you how to pick up your origin with an edge finder or a pin.

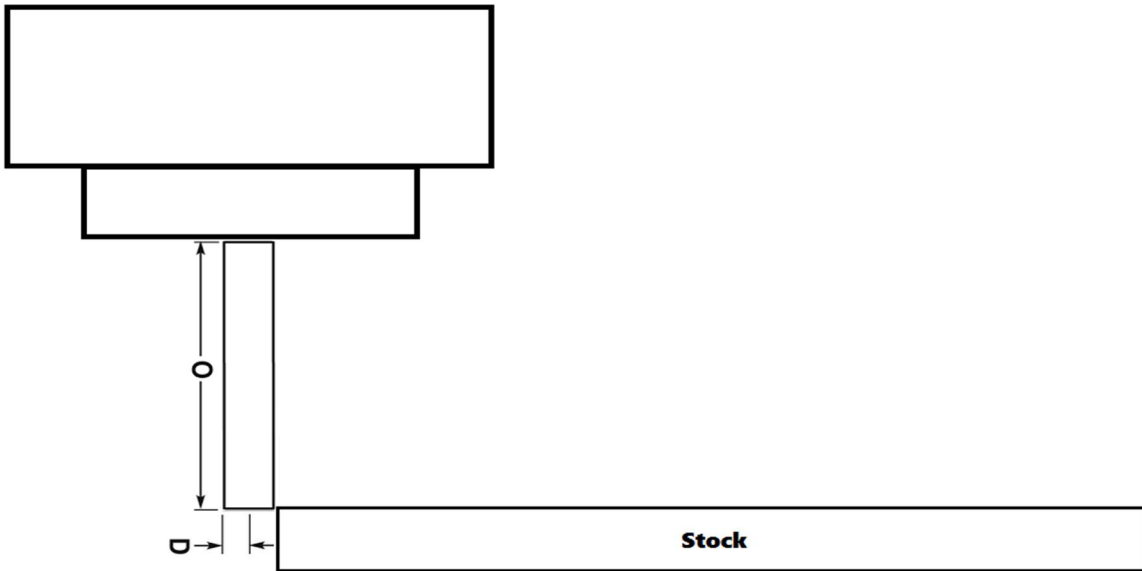


O: overall length

D: Diameter

Step 1: place pin or edge finder in spindle.

Note: if using edge finder be mindful of spindle RPM, keep RPM under 1000



Step 2: Jog pin/finder to touch X and Y axis off part. Use the directional buttons on the controller and once you get close to the stock you will select the:

- Origin (Return to Zero or Workshift Zero)
- Coordinates (Set zero)
- Manual jog (set increment of movement)

Manual Jog Manual (no specific value)

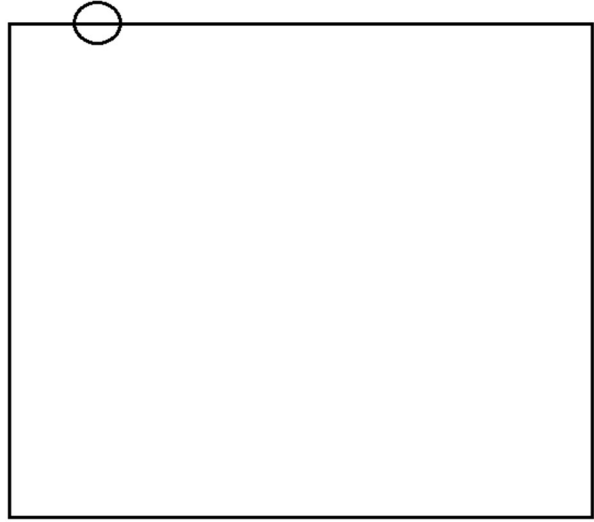
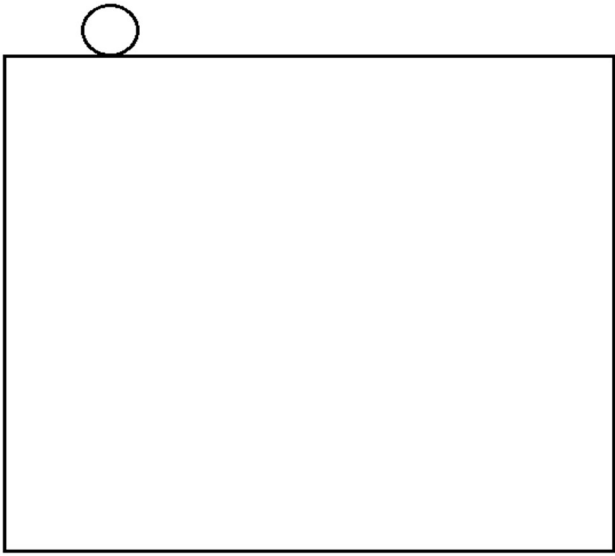
1mm (move 1 inch per button press, ignore MM in controller)

.1mm (move .1 inch per button press, ignore MM in controller)

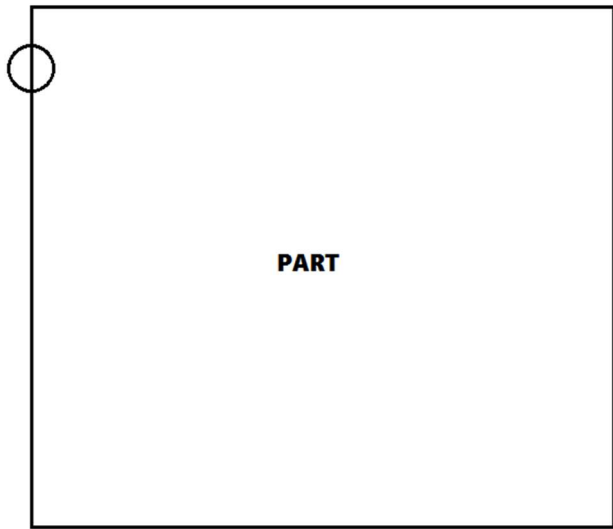
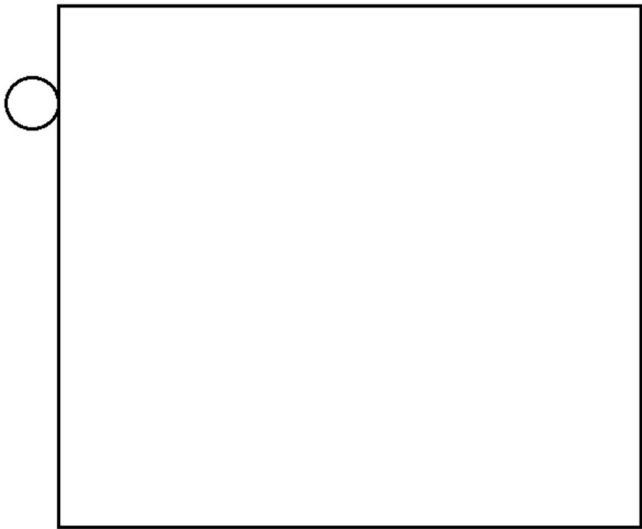
.01mm (move .01 inch per button press, ignore MM in controller)

Blank input box (move custom amount to put in custom amount click with the jog button and then hit ok the box should turn yellow, then place in your custom value and hit ok and then each axis button press will move the inputted value.)

After selecting the manual jog button, we recommend putting in a custom value of .001 once your pin/finder touches the stock you will move positive in Z until you clear the stock and move over half the diameter of the pin/finder

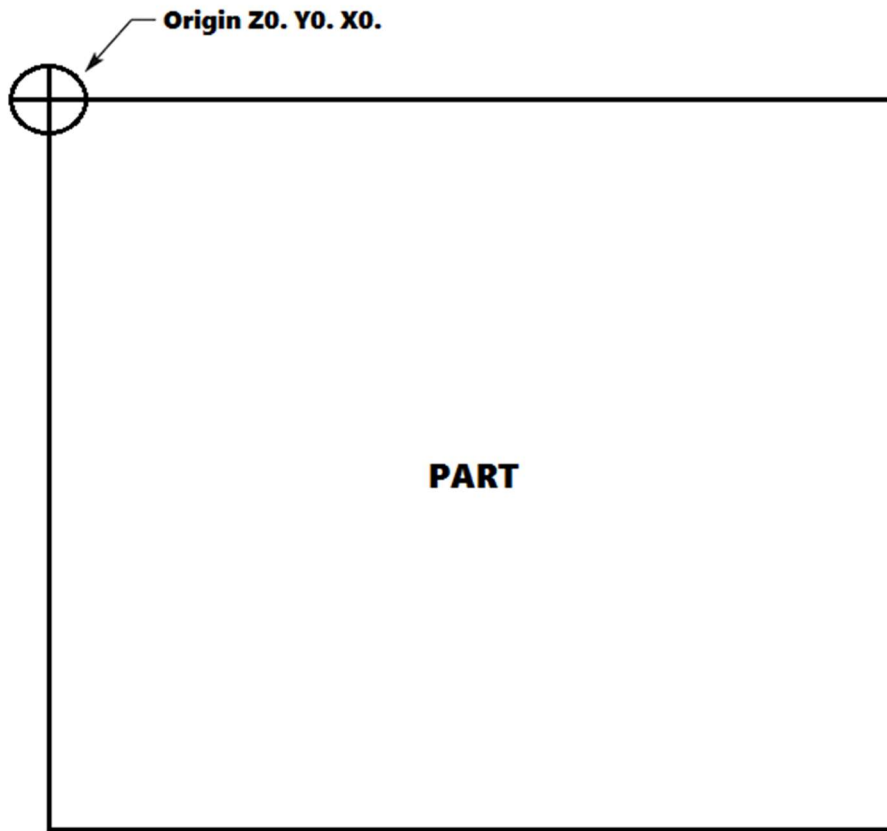


Select the coordinates feature and reset the Y axis (based on image), next repeat this step in X axis.



Select the coordinates feature and reset the x axis (based on image)

Once your X and Y axis are zero then your home position should look like this:



Next place your tool (endmill ect.) in collet and touch off in the Z axis and zero Z axis with the same features.

Now you are ready to run your program (if you used the origin above when designing and coming)