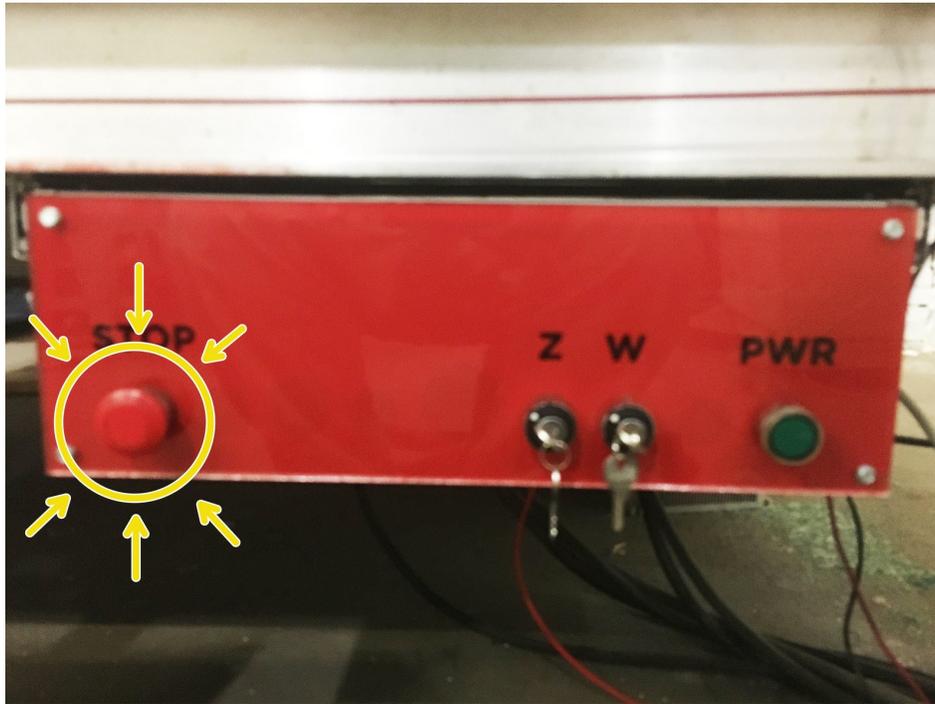


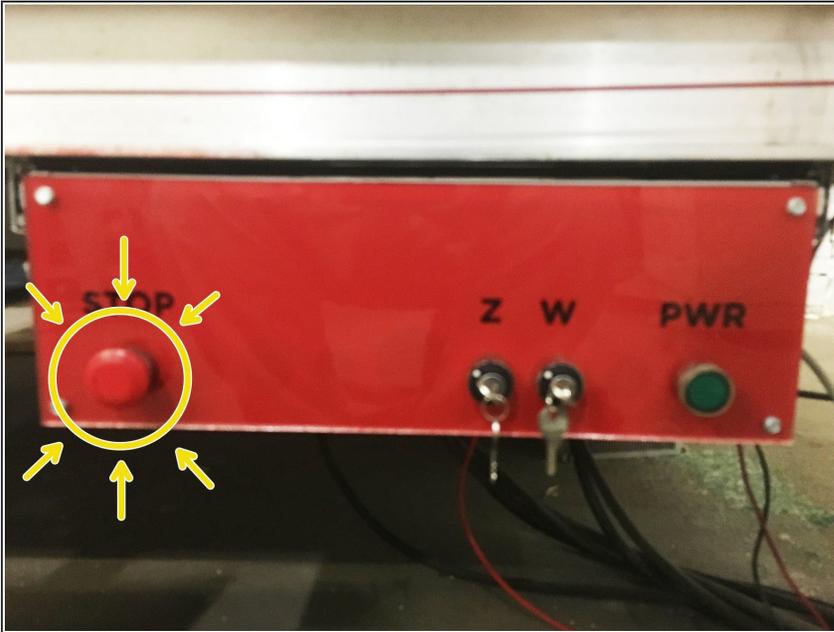
01 - Start-Up



INTRODUCTION

Follow this guide to startup the PA-1000 CNC Machine

Step 1 — Engage the EStop



- Push the "STOP" button on the control panel to engage the EStop
- The button will click in if it has not already been pressed.
- ⓘ If the last user followed the shutdown SOP it should be pressed already.
- ⓘ This steps makes sure we have a control connection to the machine before the motors are engaged.

Step 2 — Turn on control computer



- Turn on the control computer and wait for it to boot.

Step 3 — Start Mach3



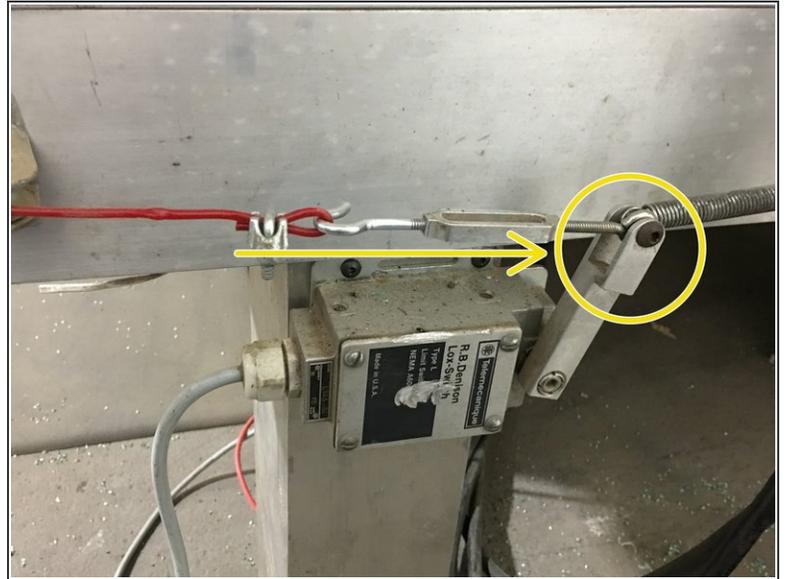
- Double click on the "Router" icon on the desktop to start Mach3

Step 4 — Clear the machine bed



- Ensure that the machine bed is fully clear.
-  The next steps will enable motion of the machine. **Be sure that everyone and everything is clear of the machine before moving on.**

Step 5 — Check EStop Cord



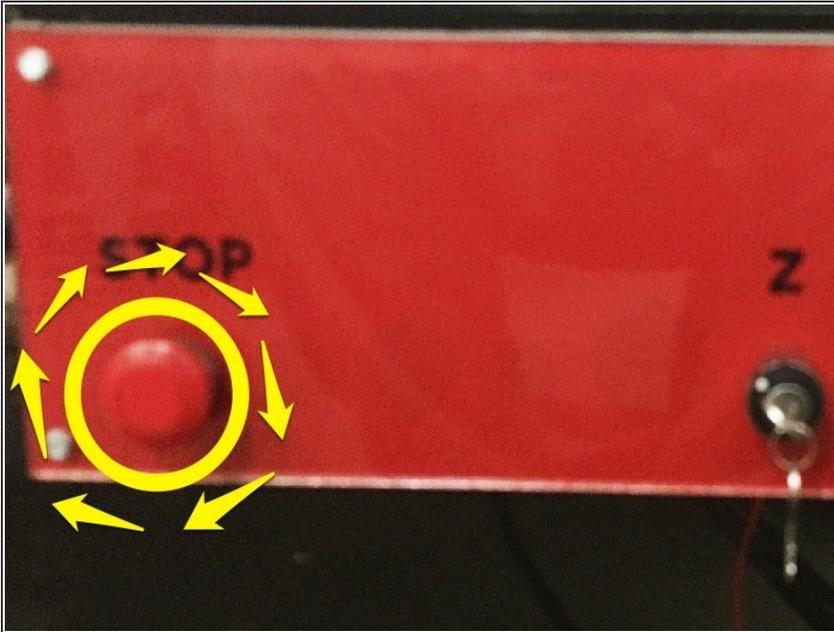
- Check that the EStop cord has not been tripped.
- The lever on the right side of the machine should be pushed toward the back of the machine

Step 6 — Lockout Spindle



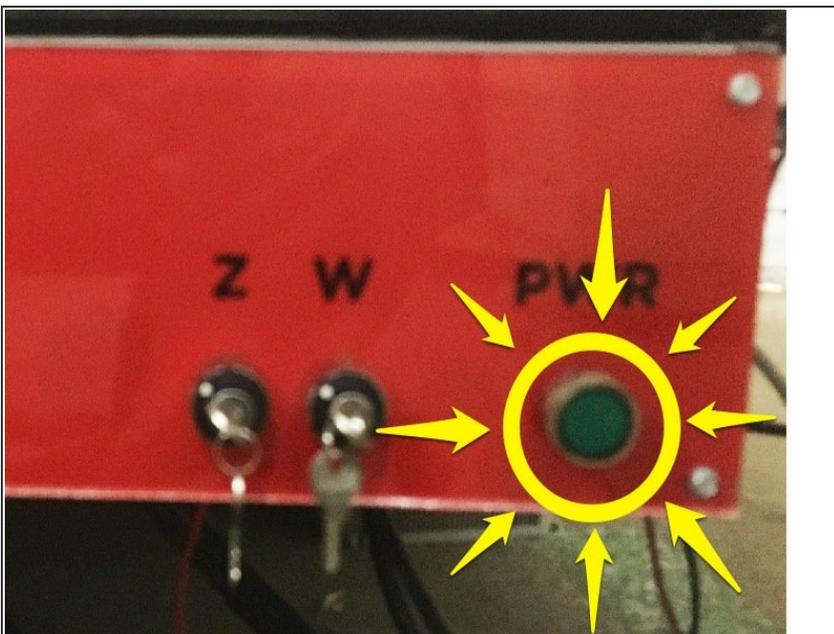
- Turn the keyswitch on the front panel counter-clockwise to engage the spindle lockout.
- ⚠ It is a good practice to remove the key from the lock at the point.
- ☑ The power is removed from the spindle controller when the key is removed from the spindle lockout switch, ensuring the spindle cannot be turned on by the controller.

Step 7 — Disengage Stop Switch



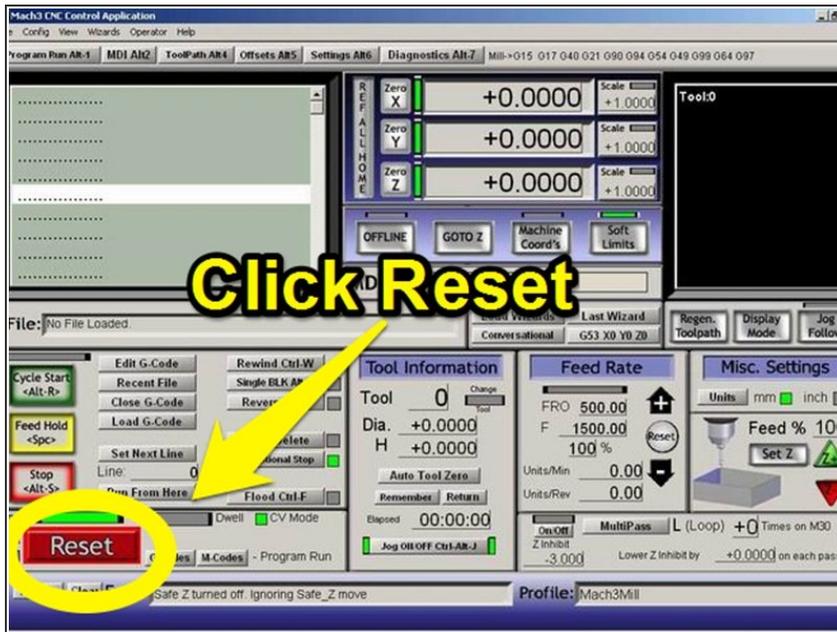
- Rotate the STOP switch 1/4 turn clockwise.
- The switch will pop out slightly when it has been disengaged.
- ⓘ Be careful to not over-rotate the switch.

Step 8 — Turn On Control System



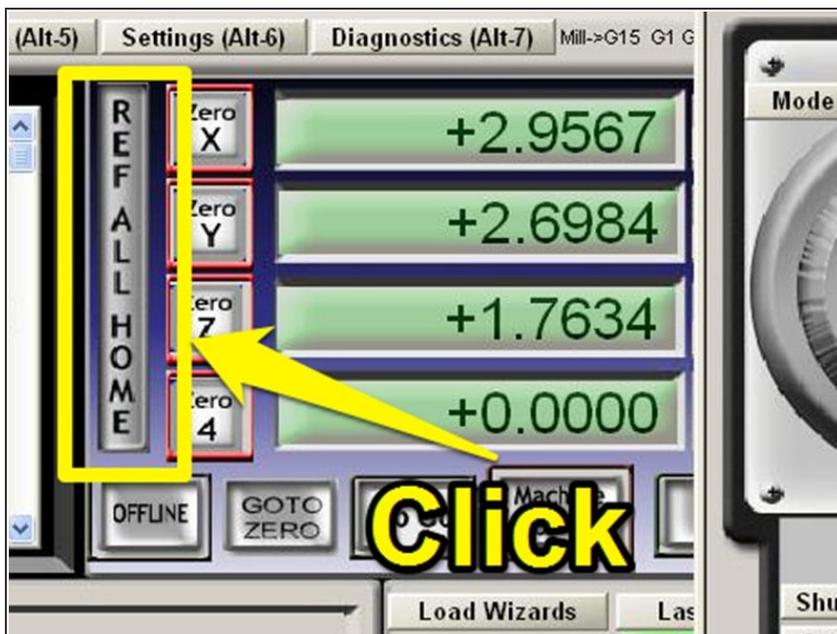
- Press the green "PWR" button on the control panel.
- The light should come on and remain lit.
- ⓘ If the green light does not remain lit, the most likely cause is that an EStop remains tripped. (Check STOP switch and EStop cord.)
- ⚠ You should hear and audible click as the motors engage.

Step 9 — Reset Mach3



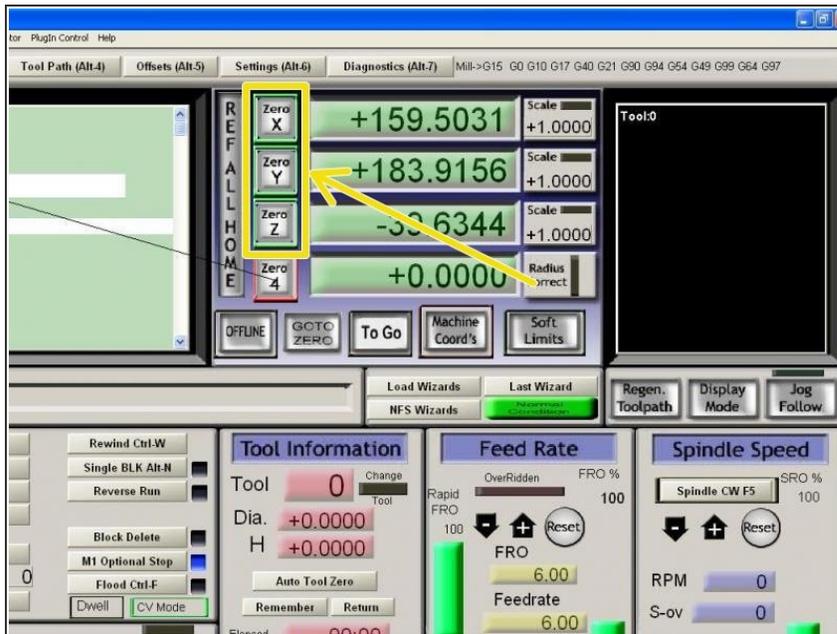
- Click the "Reset" button on the Mach3 screen.

Step 10 — Home the Machine



- ⚠ The following steps will cause the machine to move. Be sure again that the bed is clear and that all users are clear.
- Click the REF ALL HOME button.
- The machine will home itself to the back corner of the machine.

Step 11 — Check Homing Status



- When homing is complete, X Y and Z should be green on the Mach3 DROs.
- ⚠ If any axis is still red, it hasn't homed, and may not be ready for use.
- Ask an area manager for help if reattempting REF ALL HOME isn't successful.