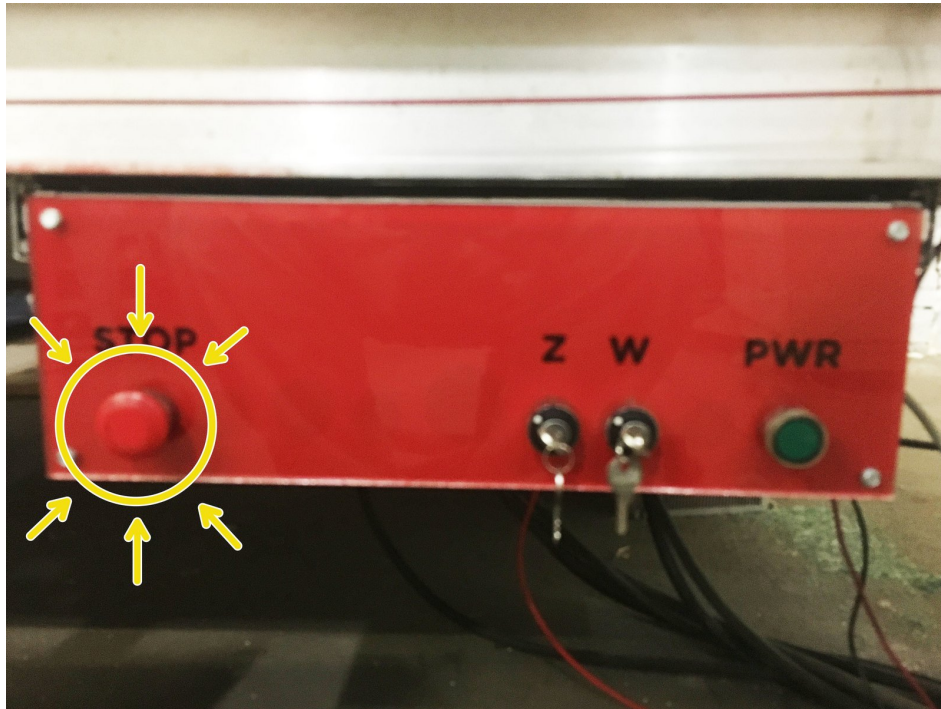


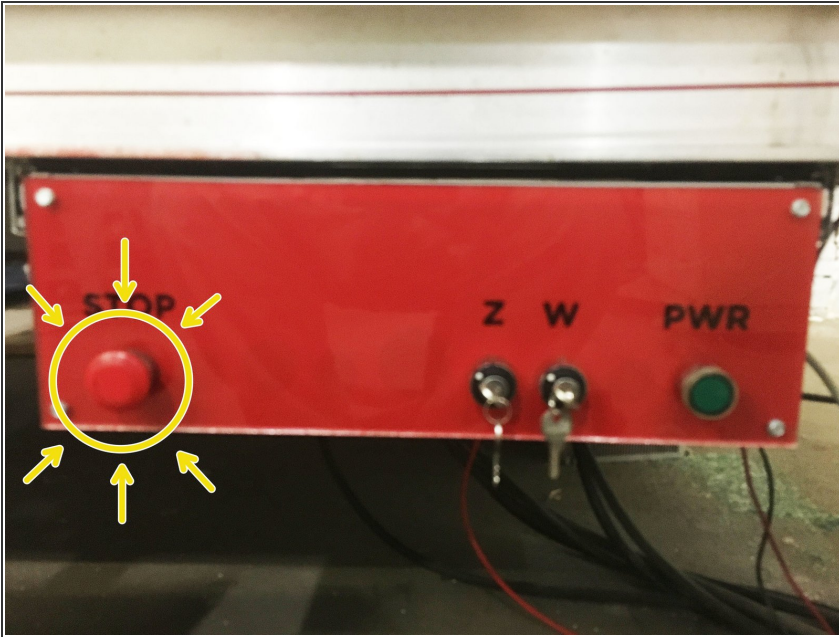
01 - Start-Up



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



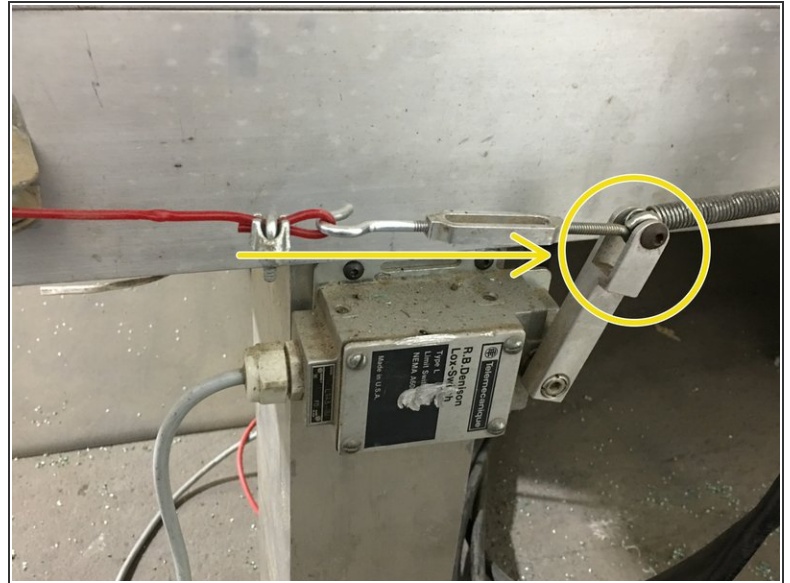
- Double click on the "Router" icon on the desktop to start Mach3

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.

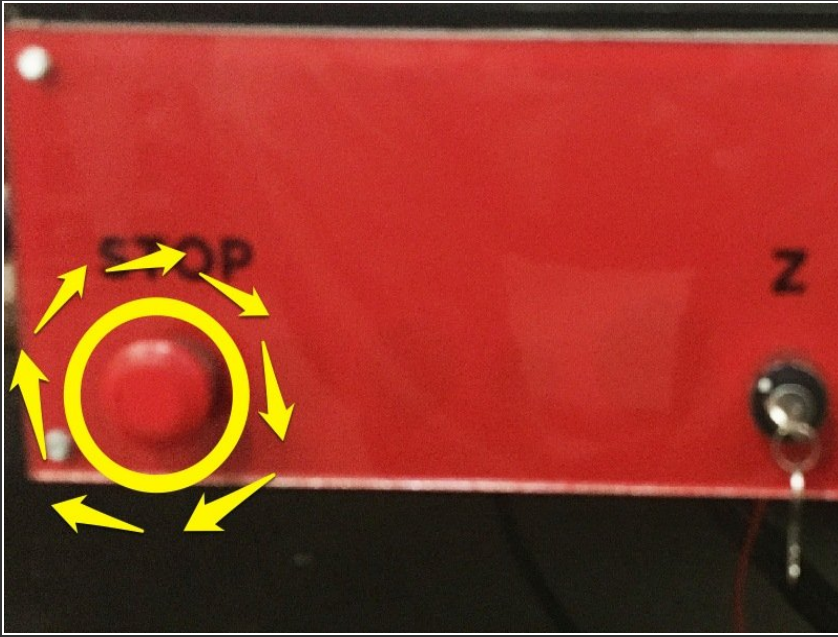


It is a good practice to remove the key from the lock at the point.



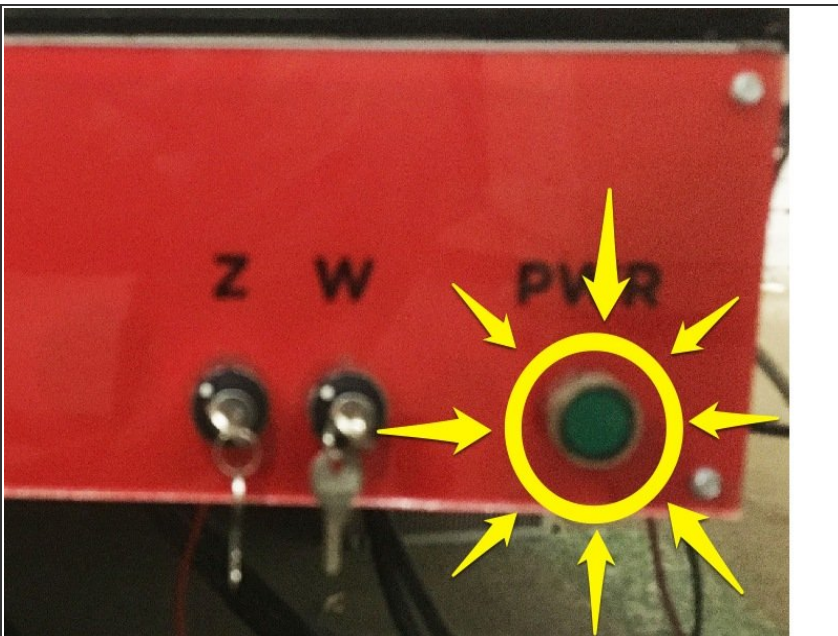
The power is removed from the spindle controller when the key is removed from the spindle lockout switch, ensuring the spindle cannot be turned on by the controller.

Step 7 — Disengage Stop Switch



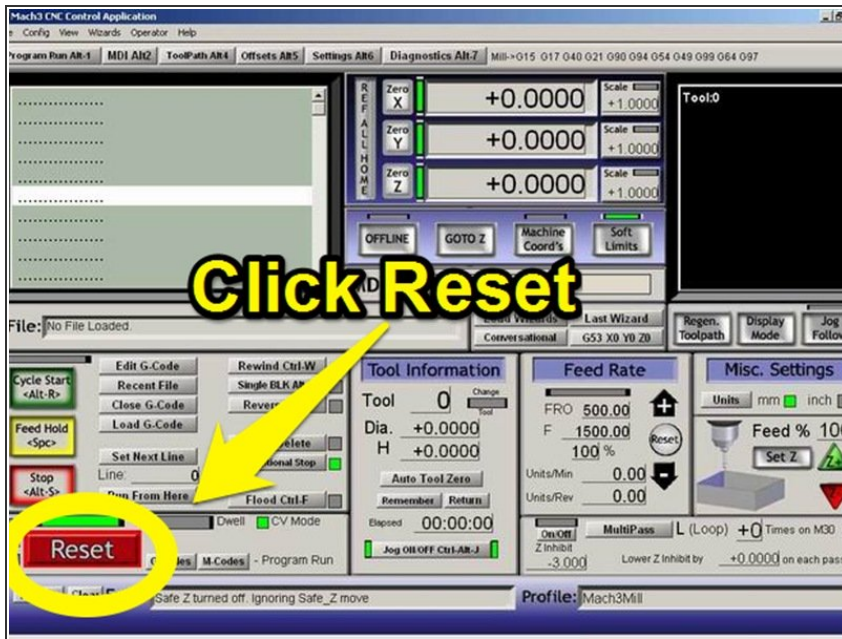
- Rotate the STOP switch 1/4 turn clockwise.
- The switch will pop out slightly when it has been disengaged.
- ⓘ Be careful to not over-rotate the switch.

Step 8 — Turn On Control System



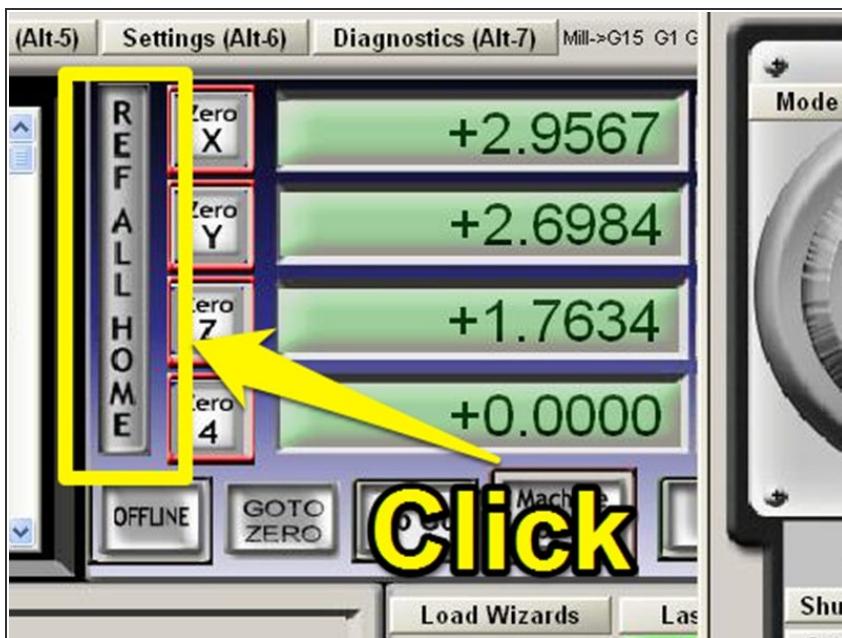
- Press the green "PWR" button on the control panel.
 - The light should come on and remain lit.
 - ⓘ If the green light does not remain lit, the most likely cause is that an EStop remains tripped. (Check STOP switch and EStop cord.)
- ⚠ You should hear and audible click as the motors engage.

Step 9 — Reset Mach3



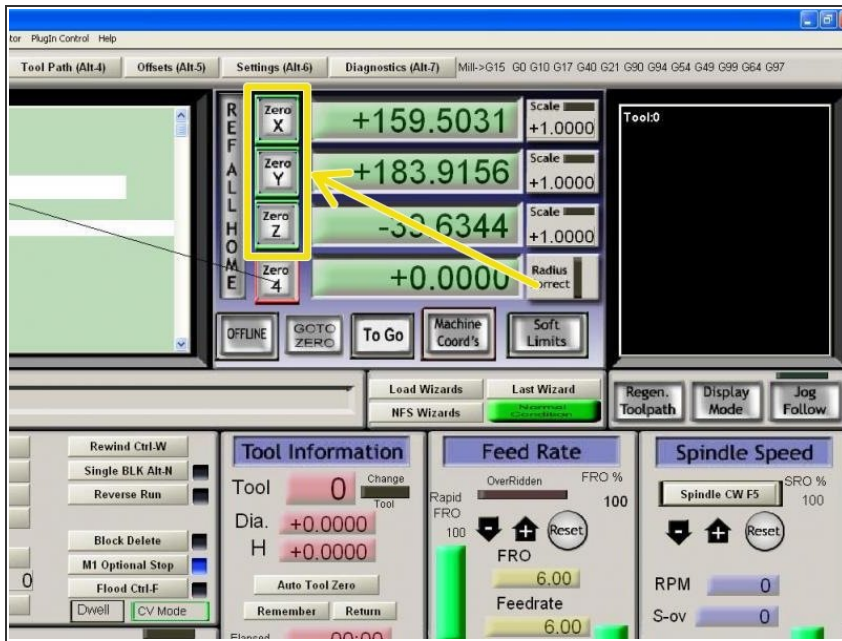
- Click the "Reset" button on the Mach3 screen.

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.