

Operating Procedures for Shop Sabre CNC Router

Power On Sequence

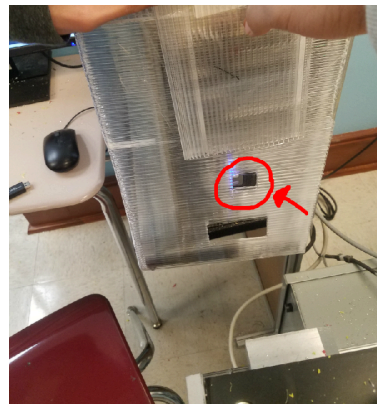
Step 1: Turn on breaker
(Located to the left of the router)



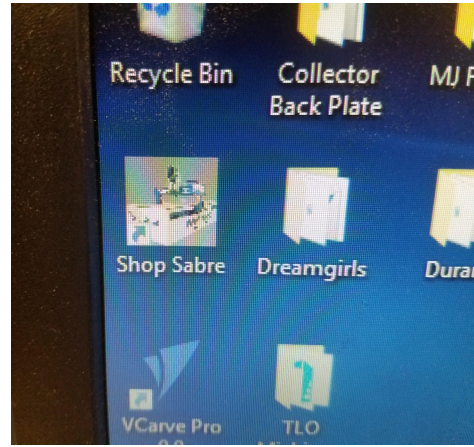
Step 2: Ensure the numbers on the LCD lights up



Step 3: Turn on the computer's power (found to the right of the computer monitor)



Step 4: Wait for the computer to turn on, then open the program:
Shop Sabre



Step 5: Turn on the Router
(located to the front left when facing the Router from the front)

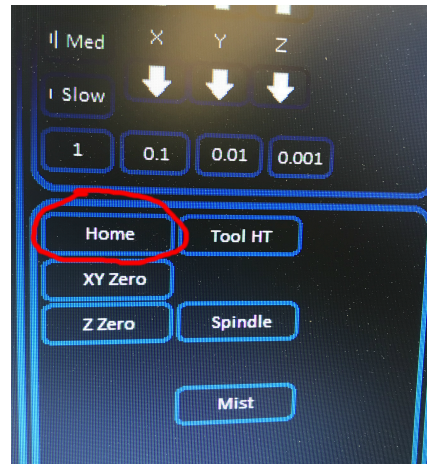


Step 6: First disable the E-stop.

How to use E-Stop: Turn off the E-stop by twisting the button ClockWise. Push to turn on Estop

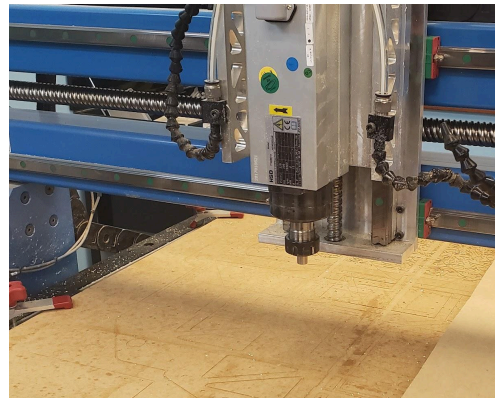


Step 7: In ShopSabre, click the “Home” icon to home the ShopSabre.



Changing Tools on the ShopSabre

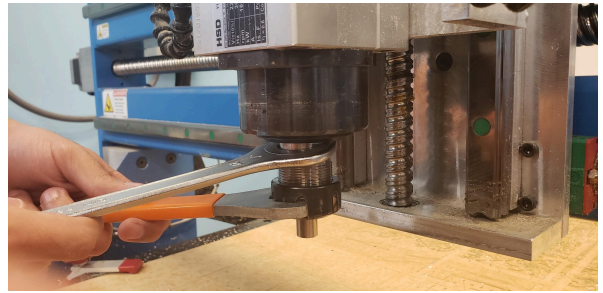
Step 1: Using the ShopSabre program, bring in the ShopSabre to you. Once it's close, press the page-down button on the keyboard to bring down the machine so if the bit falls, it won't break.



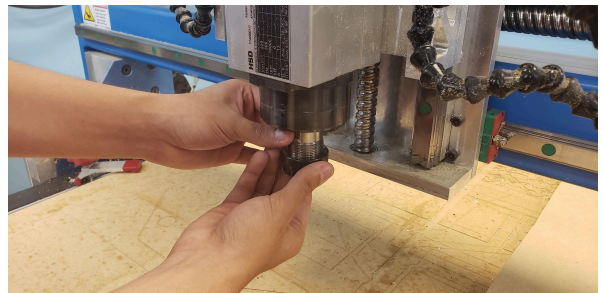
Step 2: Once the ShopSabre is set up, enable the E-stop.



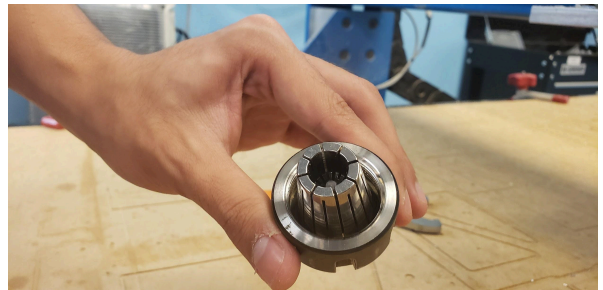
Step 3: Use the orange gripped to grip on to the holder of the bit. Then use a normal wrench to grip on to the top metal part of the machine.



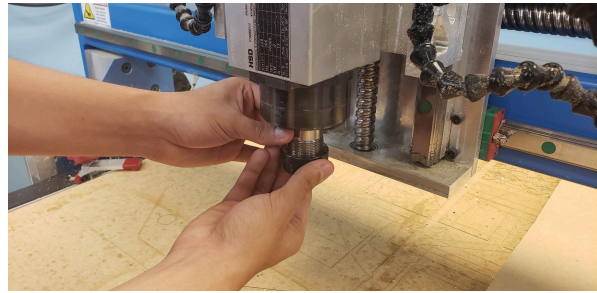
Step 4: To ensure the bit won't fall and break, untighten the bit with your hands.



Step 5: Once the tool is removed from the machine, place your desired router bit inside the collet.



Step 6: First, install the bit with your hand



Step 7: Next, tighten the bit with the wrenches. Now the tool height must be measured by the machine and the origin of the part must be set up. This is found in the section below.



XZY Part Origin & Tool Height

Step 1: Follow all the steps for the Power On routine of the machine.

POWER ON

Step 1: Turn on breaker
(Located to the left of the router)



Step 2: Ensure the numbers on the LCD lights up



Step 3: Turn on the computer's power (found next to the monitor)

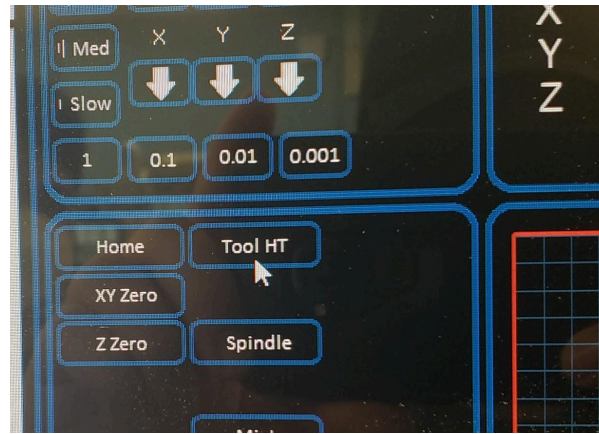


Step 2: In ShopSabre, click the “Tool HT” (tool height) icon to set the tool height for the spindle. Make sure the tool presses the white button on the left side of the router.

NOTE:

This process must be done every time a tool is changed.

In some cases the Tool HT button does not initiate the M-Code when first hit. Click the button a second time and the process will begin.

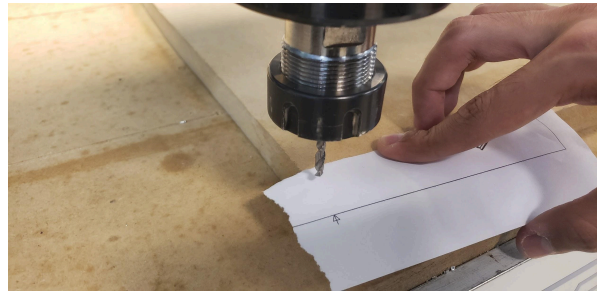


Step 3: Roughly align the tool with the lower left corner of your part that you will be routing.

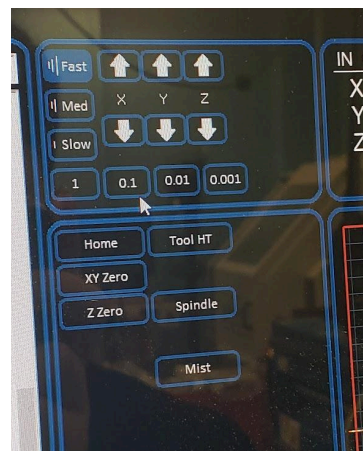
NOTE: This procedure is used when the part that you are cutting is smaller than the part you are cutting and it does not need precise alignment.



Step 4: Place a piece of paper below the tool in the spindle. Adjust the XY height of the Spindle in ShopSabre until the paper is barely able to move. The paper should not move easily, however it shouldn't be unable to move completely. You can adjust the step of the tool in ShopSabre for more precise zeroing.



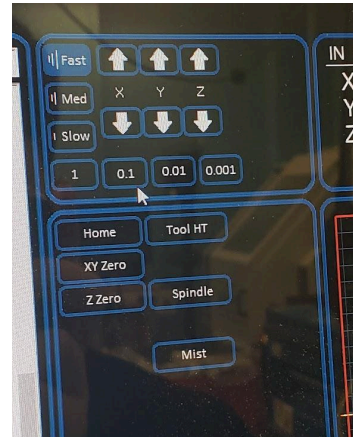
Step 5: In ShopSabre, click the “XY Zero” icon to set the xy zero of your part.



Step 6: Adjust the Z height of the Spindle in ShopSabre until the paper is barely able to move. The paper should not move easily, however it shouldn't be unable to move completely. You can adjust the step of the tool in ShopSabre for more precise zeroing.



Step 7: Click the “Z Zero” icon in ShopSabre to zero the z height of your part.



Power Off

Step 1: Turn the E-stop on by pushing it in



Step 2: Turn off the router (located to the front left when facing the Router from the front)



Step 3: Close ShopSabre program
and shut down computer

Step 4: Turn off the breaker



Step 5: Ensure the numbers on the
LCD are off

