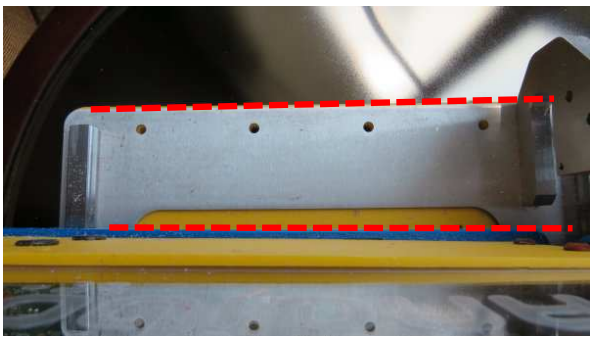
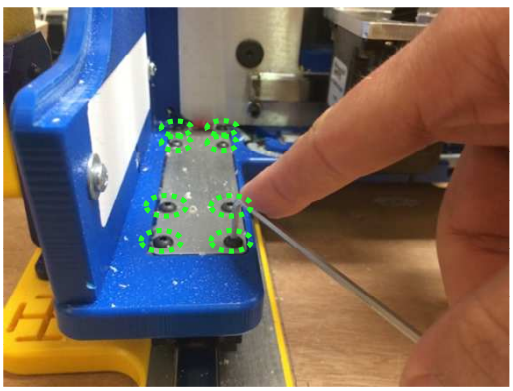
handibot®
smart power tool

Exoframe Alignment

1. If you find that your handibot is not cutting properly, or producing shapes that are out of square; your tool's frame may be out of alignment. Inspect the alignment of the blue exoframe with respect to the yellow base.



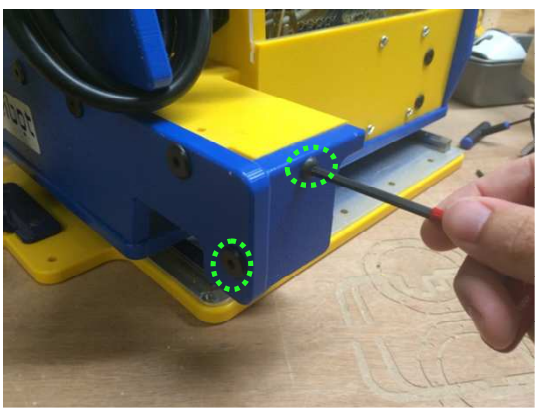
2. To fix alignment of the tool, you'll need to loosen the bolts holding the Y-axis bearing blocks in place. The 8 screws on the left side of the tool are easy to access.



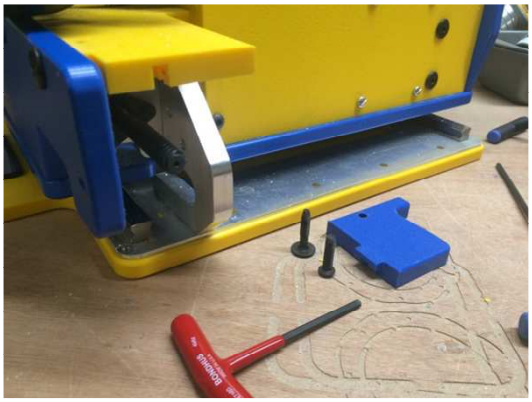
3. With the left side bearings loose, see if you can pull the tool back into square. Use of a straight edge like a small board can help to measure if the exoframe is square to the base.

4. If you're able to pull the tool into square—retighten the 8 bolts and you're all done! If not, continue in this guide to see how to loosen the right side bearings.

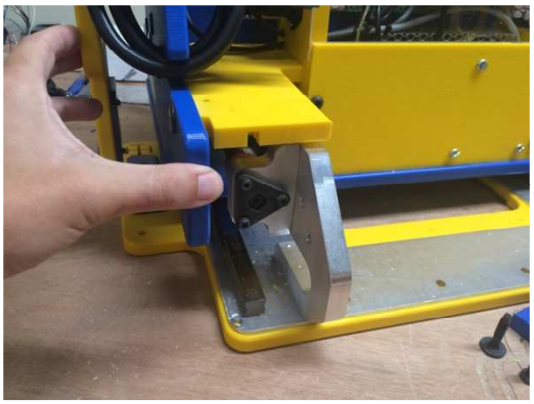
5. First, remove the Y Motor guard using the included 4mm T handle Wrench to remove two screws.



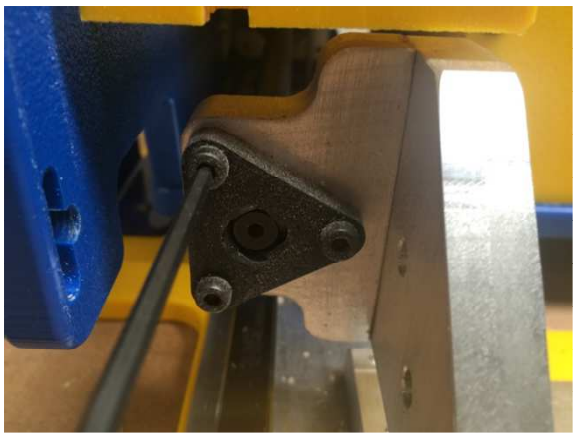
6 Set the motor guard aside. If one of the nuts used in the joinery falls out when the screw is removed, set it aside as well—we'll re-insert it before replacing the motor guard later.



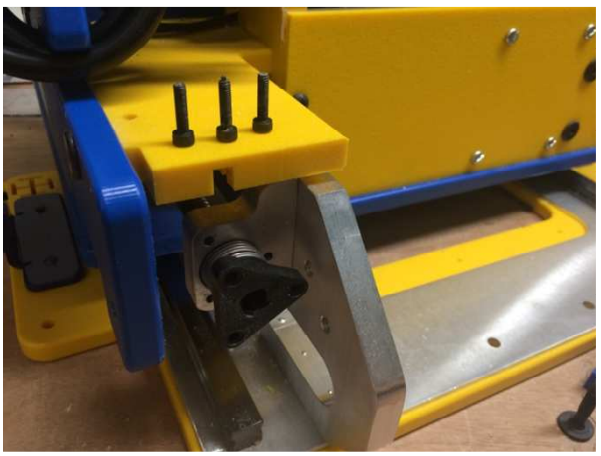
7 Manually push the tool forward until the motor lead screw has pulled into the black, triangular anti-backlash nut.



8 Remove the three screws holding the anti-backlash nut into the bracket.

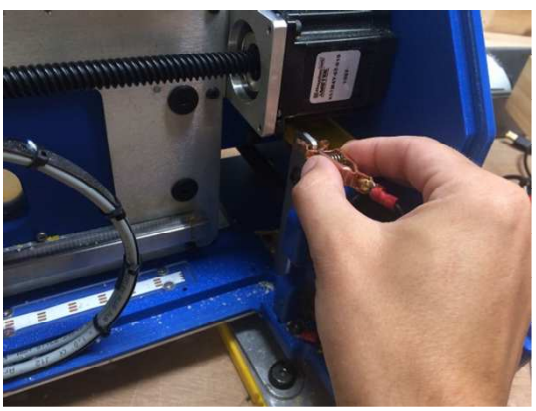


9 Remove the anti-backlash nut by spinning it off of the motor lead screw.



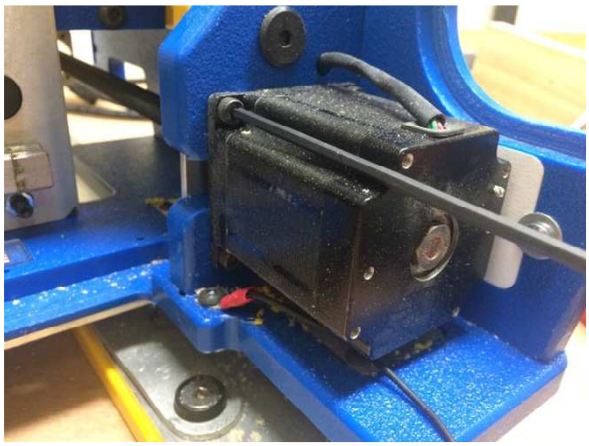
10 Set the nut aside. The tool should now move freely and easily in the Y axis.

11 The screws that hold the right side bearings are under the Y motor; we'll need to remove it to perform the alignment. First, unclip the z zero clip and set it aside.

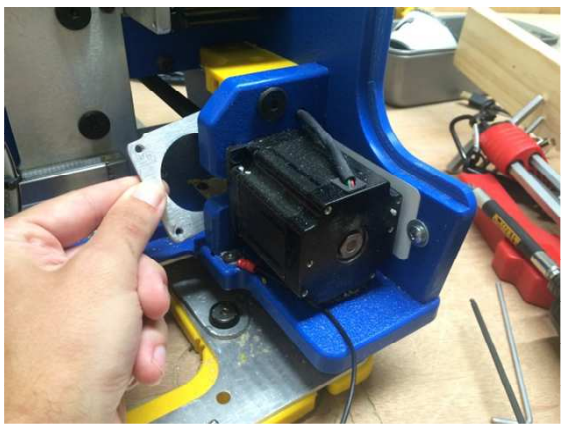


12 Use the 4mm wrench to remove the metal cable guide barrier.

13 Use a 3mm wrench to remove the 4 screws holding the Y motor in place.

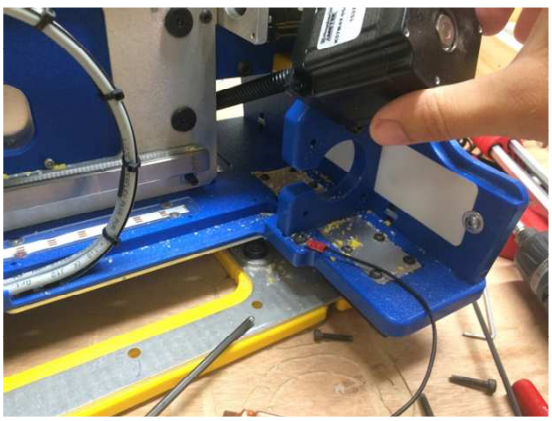


14 The metal Y motor plate will become loose when all screws are removed, take it out and set it aside with the screws.

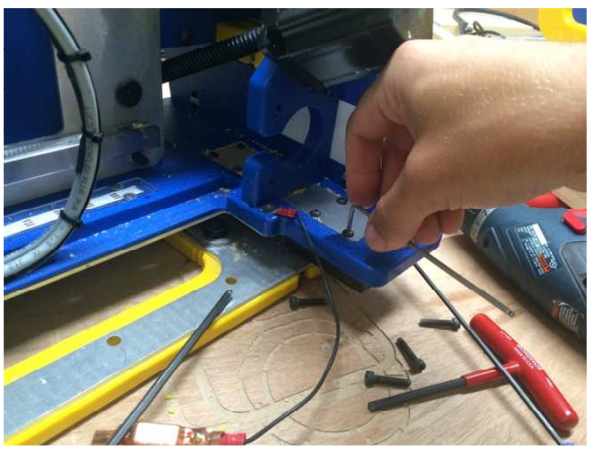


15 The motor should now be loose as well. Move the tool forward if you need to, so that the motor lead screw is free from the bracket on the back of the tool.

16 Flip the Y motor up and out of its holder to get access to the 8 screws holding the right side bearings.

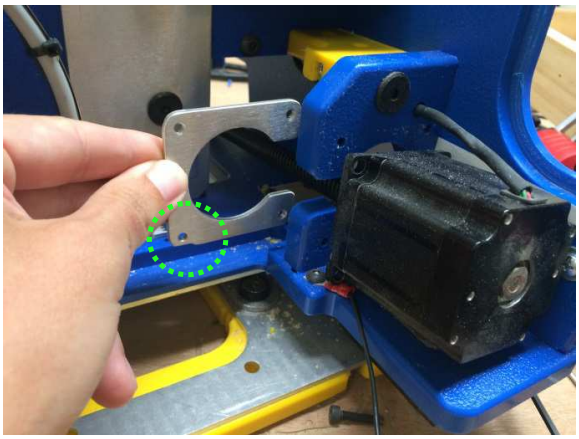


17 Loosen these screws.

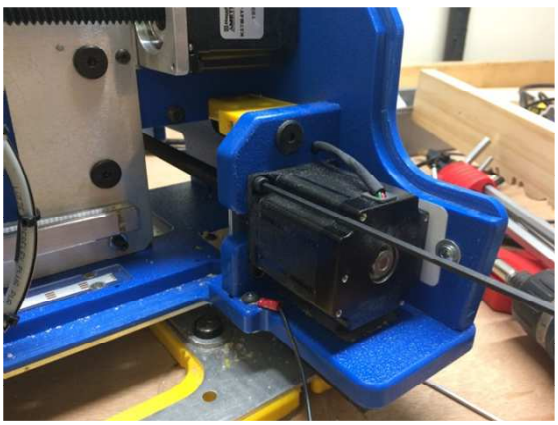


18 Repeat the alignment check and move the tool as need be to achieve proper alignment between the blue exoframe and the yellow base. Retighten the 16 screws for both the right and left side bearings when done.

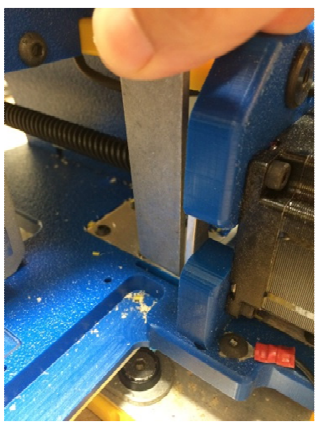
19 Reinsert the Y motor and motor plate—be sure that the notch in the plate is positioned to the bottom left as shown below.



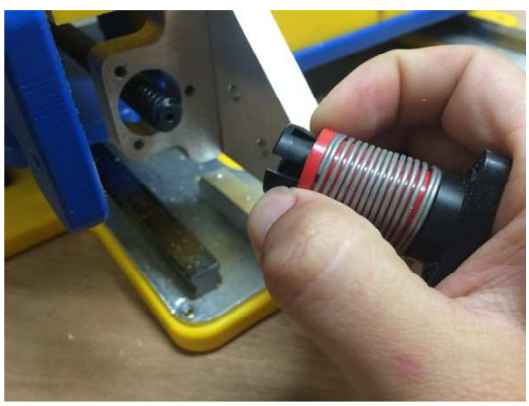
20 Reinsert the 4 screws that hold the Y motor in place.



21 The cable guide barrier is reinserted into the small slot next to the right side bearings and secured back in place using a single ¼-20 x ½" screw.

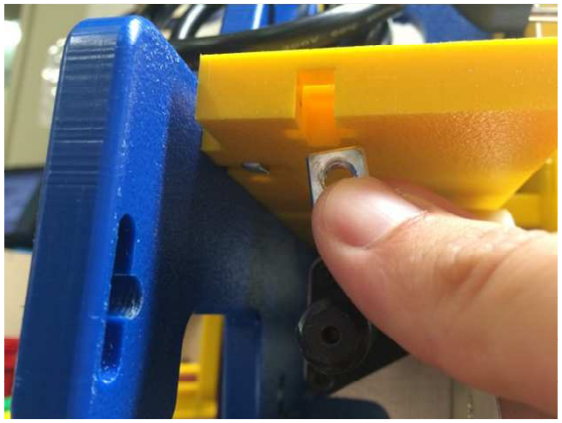


22 To reconnect the anti-backlash nut to the motor lead screw, pull down on the red collar to open the screw and twist it onto the lead screw.

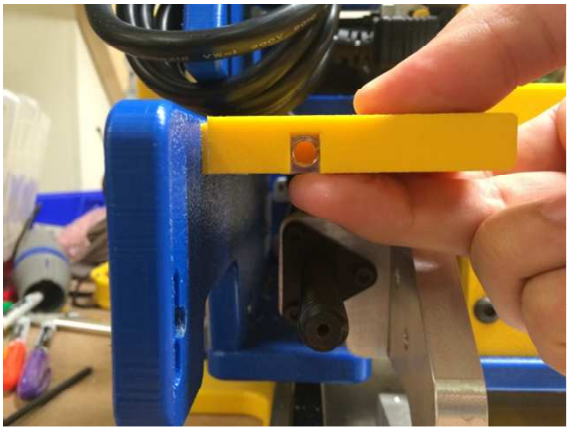


23 Reinsert the 3 screws that hold the nut in place.

24 If need be, reinsert the nut that holds the motor guard in place.



25 Hold it there while you position the guard.



26 Reinsert the two screws holding the motor guard in place.