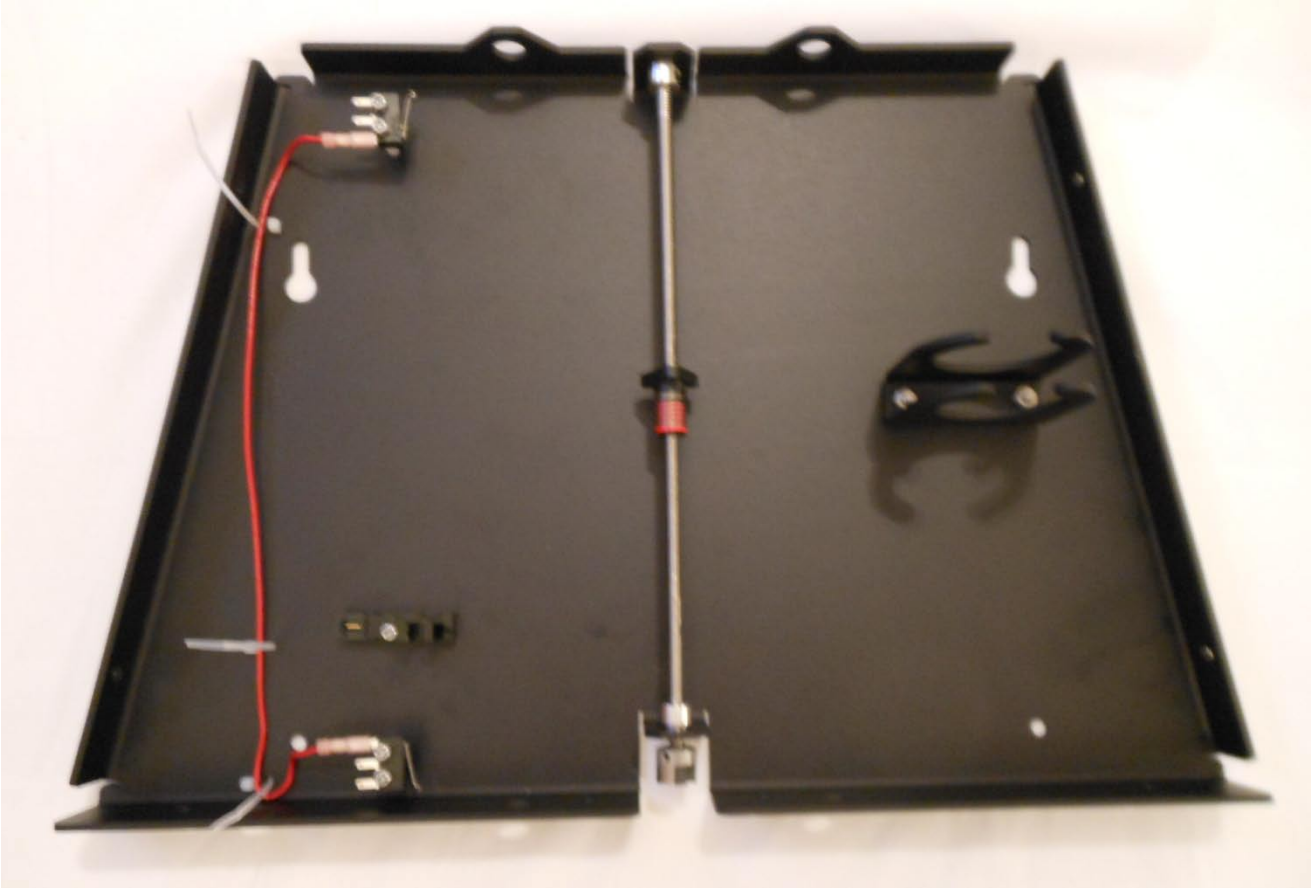
The B9Creator™

Visual Assembly Guide

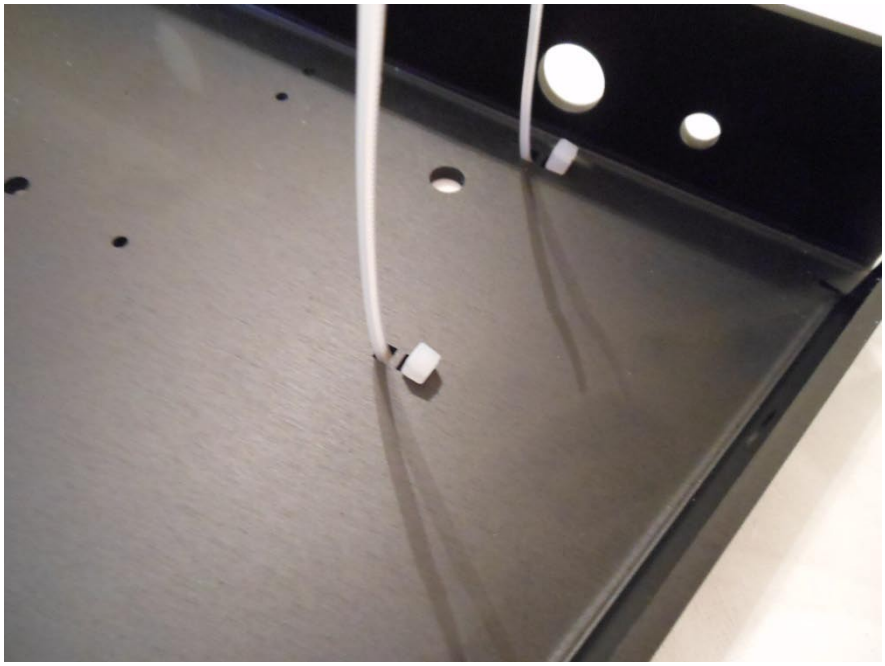
Step 3 - Z Axis (ZA-A) Assembly

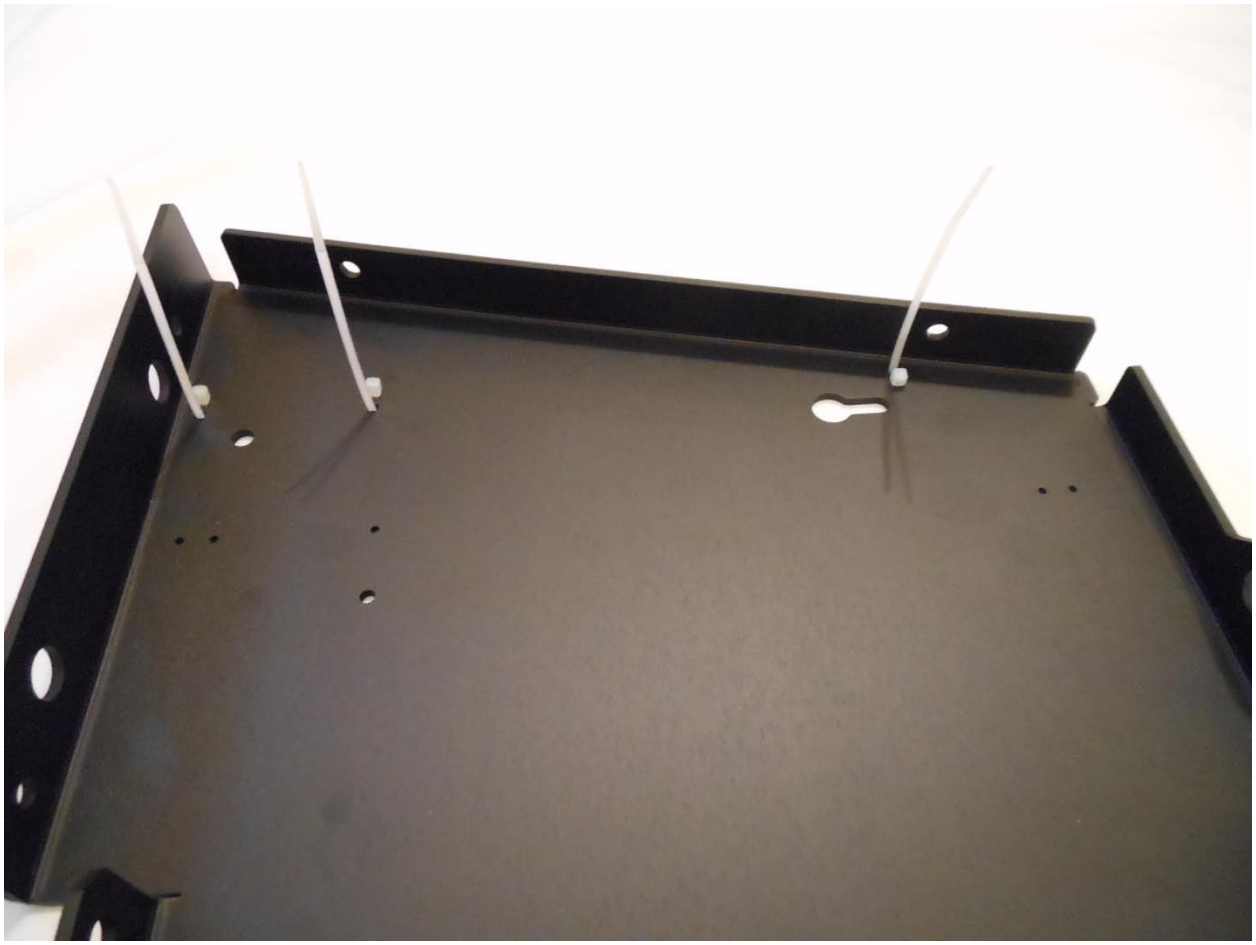


Completed ZA-A (Vertical Slide Support) Assembly

View an online video of Step 3 - Z Axis Assembly

Wire Harness Restraint Placement



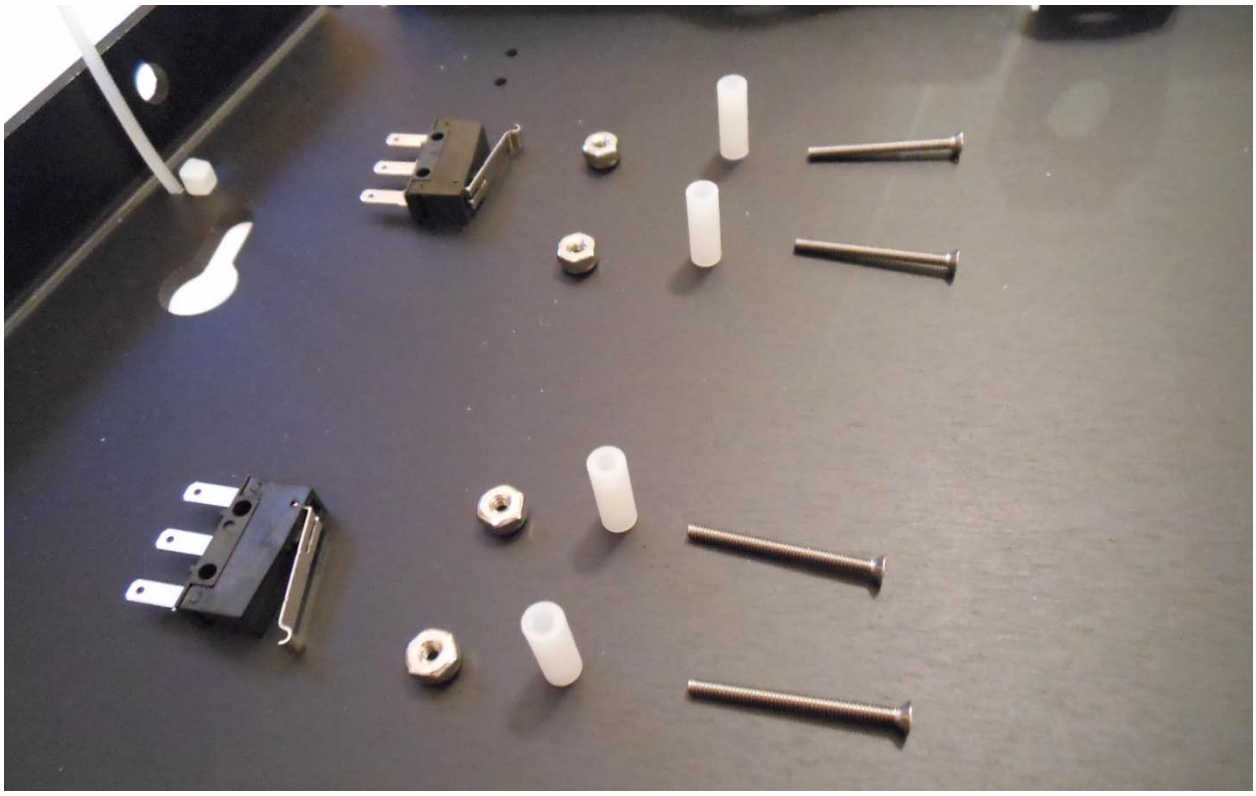


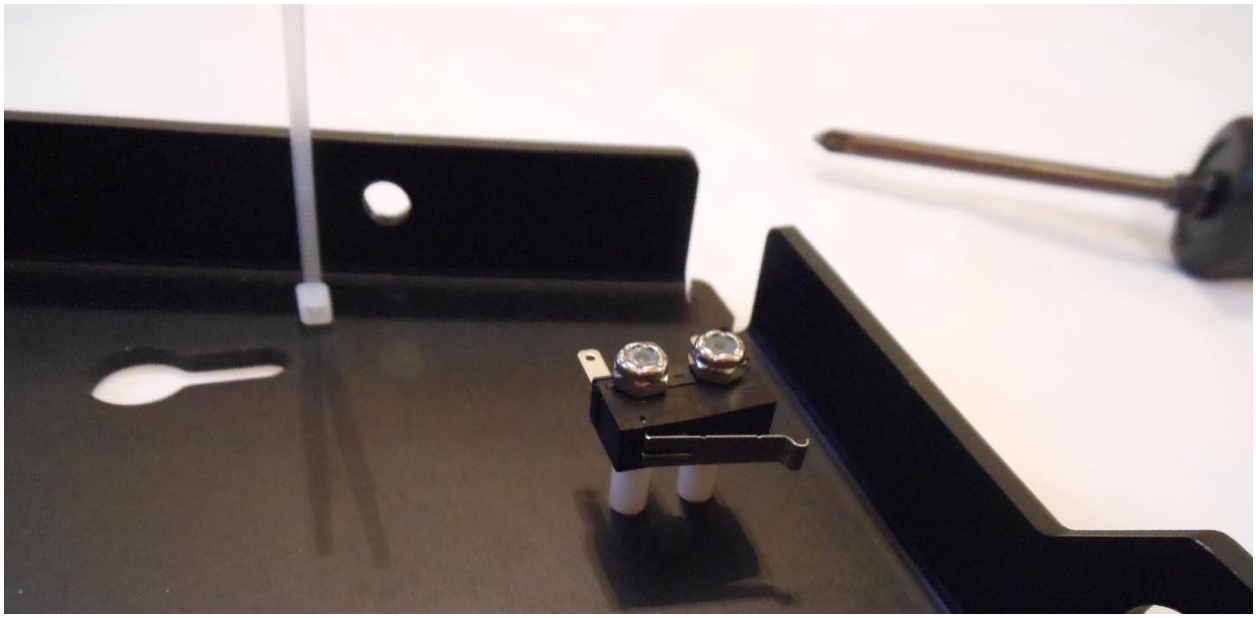
These three zip ties will be used to secure the wiring during final assembly.

Limit Switches

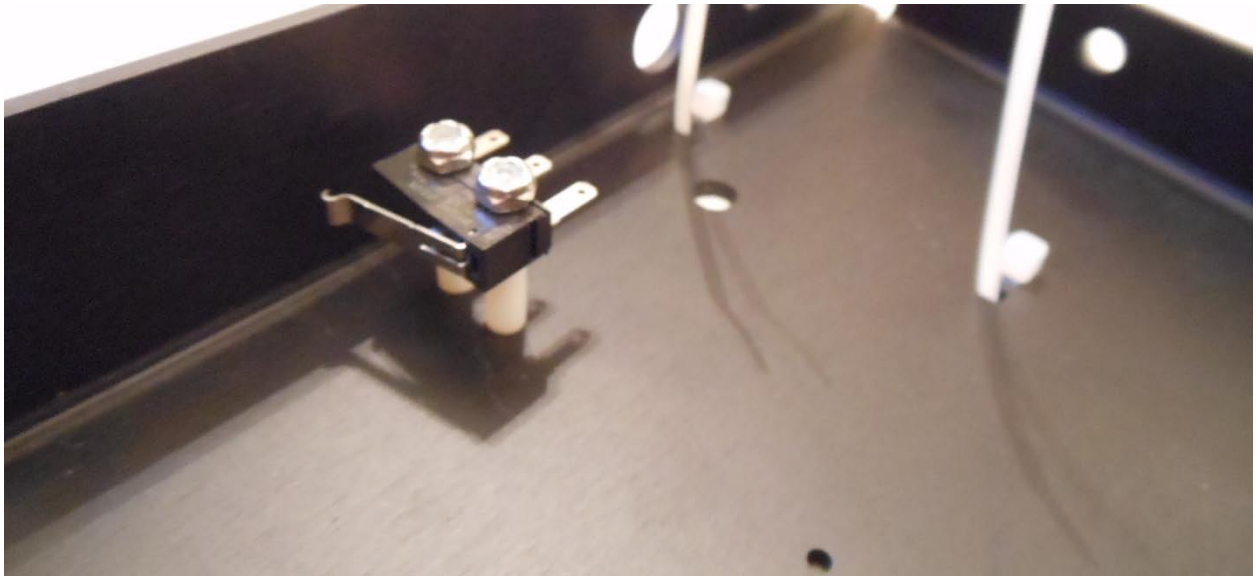
SA-08 and switches.

These switches cut power should the build table attempt to exceed proper limits.

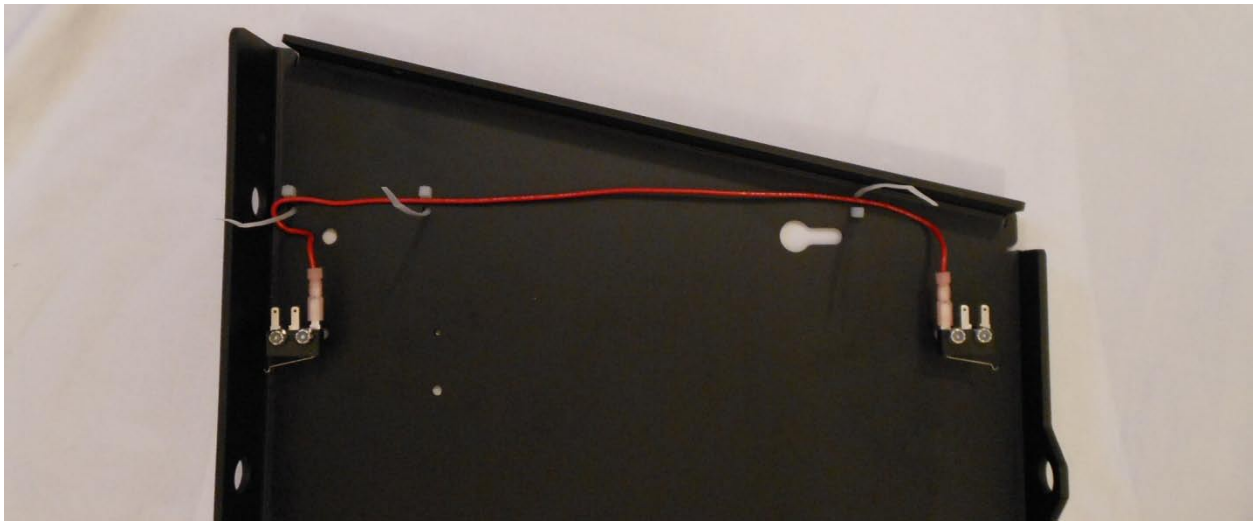




Upper limit switch in place, note nylon standoff placement and orientation of switch lever.



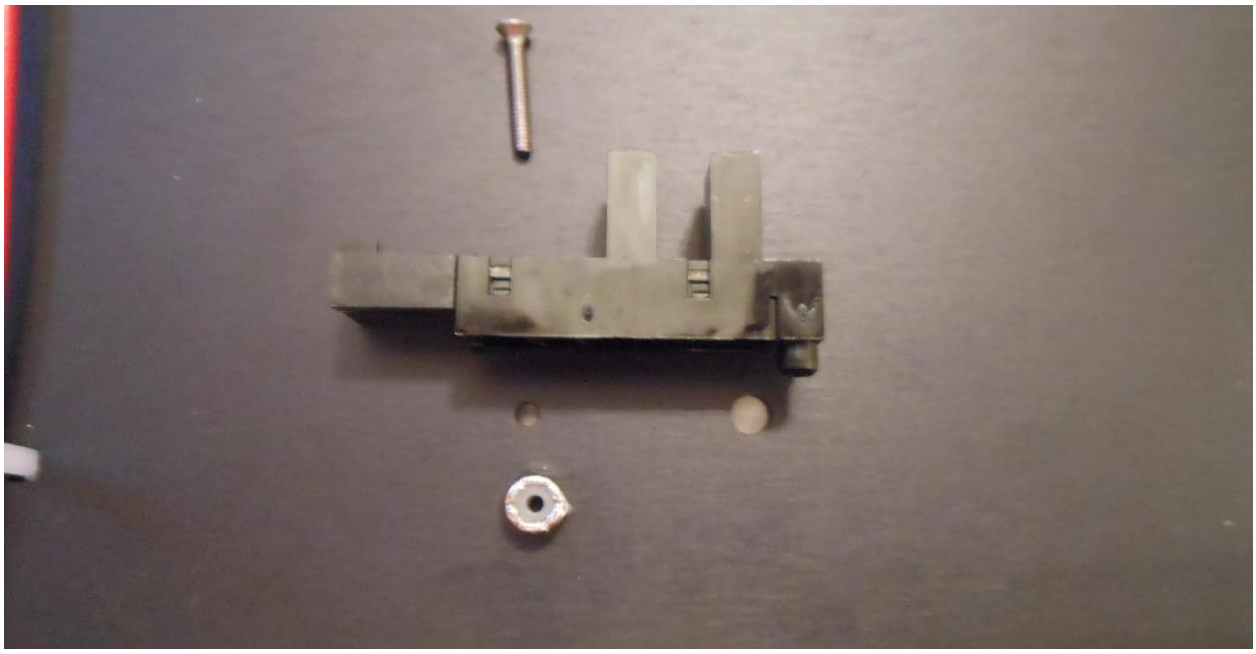
Lower limit switch in place.

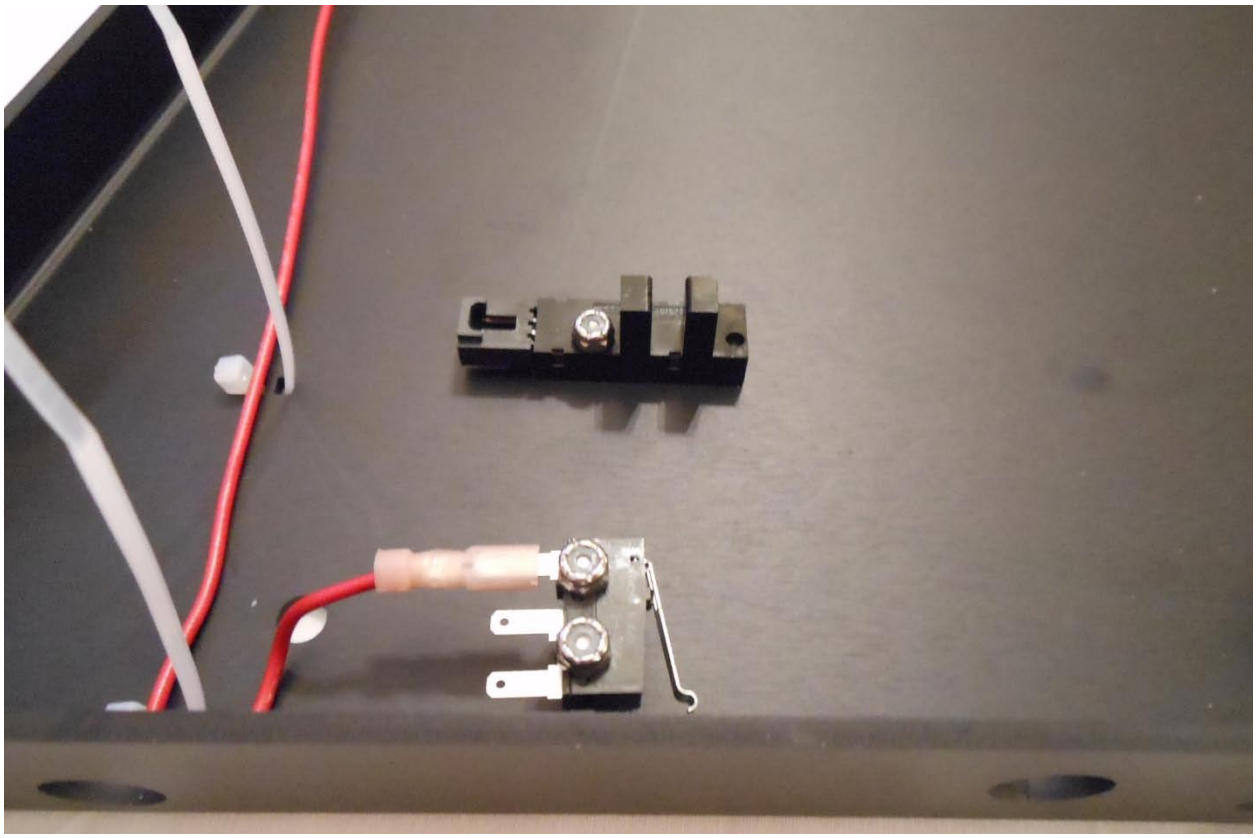


Limit switches with Power Cable 3 routed and connected.

Home Sensor

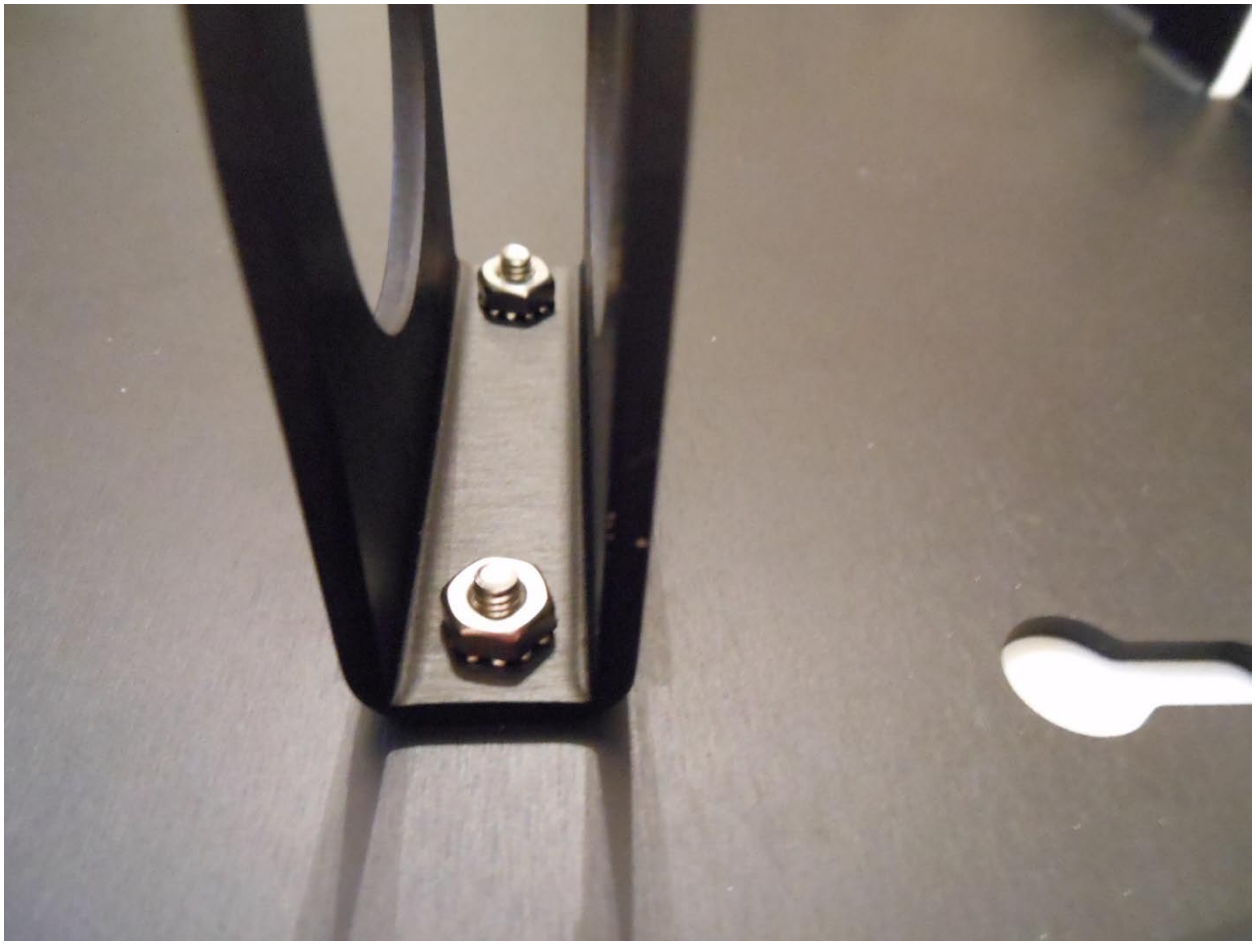
Z Axis (Build Table) Home switch and screw assembly.



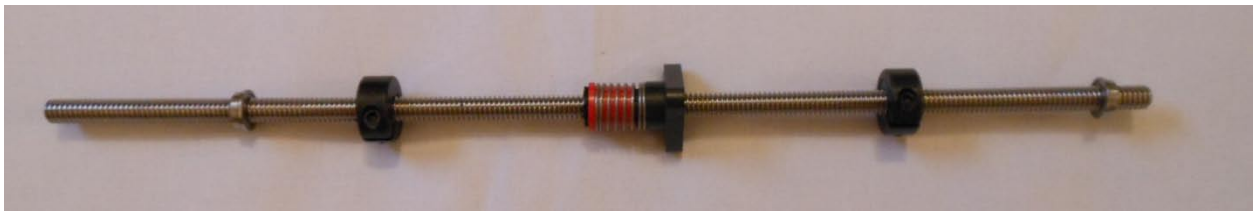


Home switch mounted.

Reserve Resin Bottle Holder



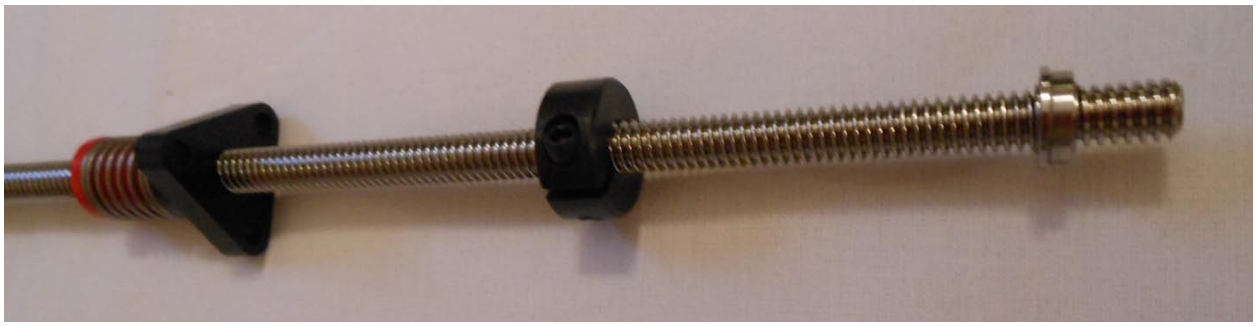
Z Axis Lead Screw Assembly



Lead screw with Anti-wear nut, two shaft collar clamps and two miniature ball bearings.

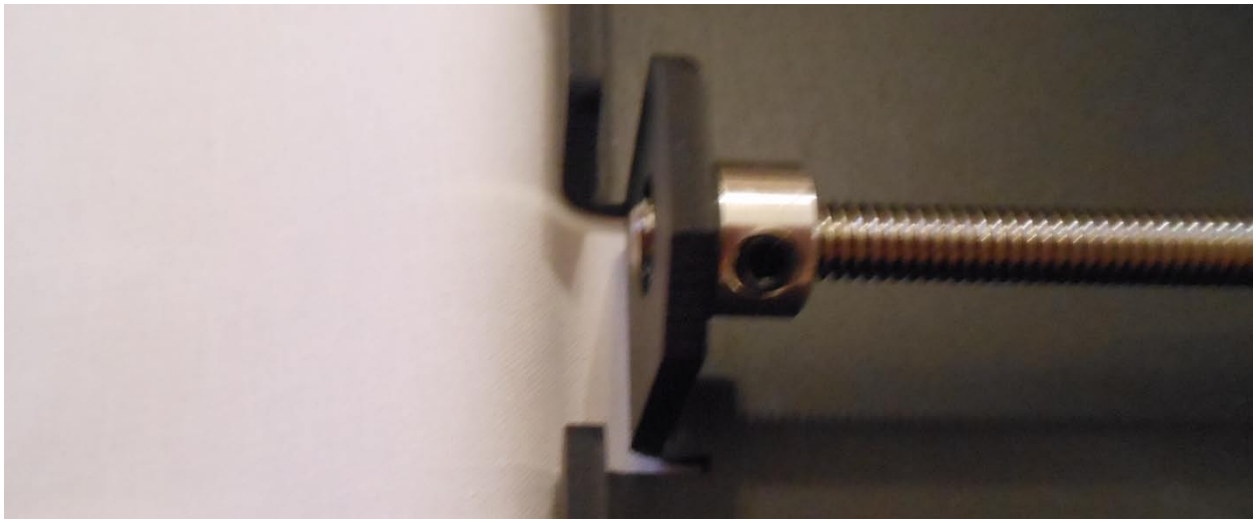
NOTE: The lead screw diameter has been adjusted smaller on each end to allow the ball bearings to slide on. The adjustment on one end goes further up the screw than the other end. The long end goes "down" (left side in this photo). **Be sure the orientation of all parts match the above image.** Note that we now supply alternate aluminum collar clamps which may be substituted for the black oxide steel clamps shown in some of these images.

"down" end, note bearing orientation and how far the bearing will slide up the screw.

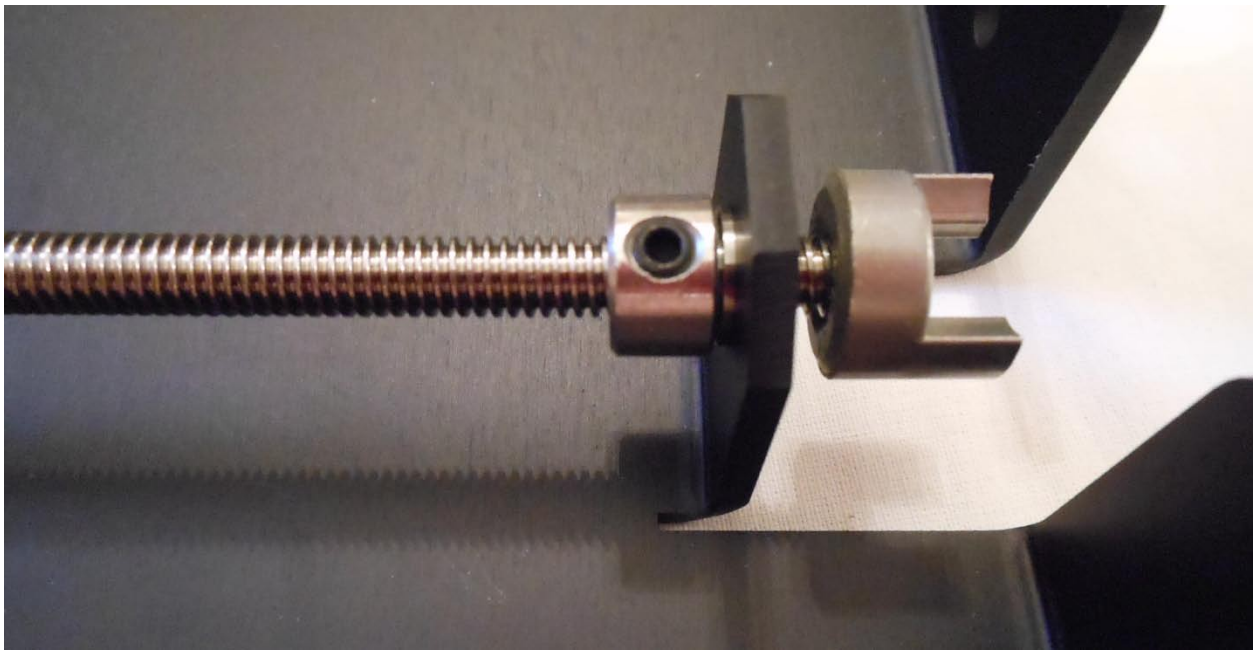


"up" end, note bearing orientation and how it is limited on how far down it can slide.

Also note the orientation of the anti-wear nut.

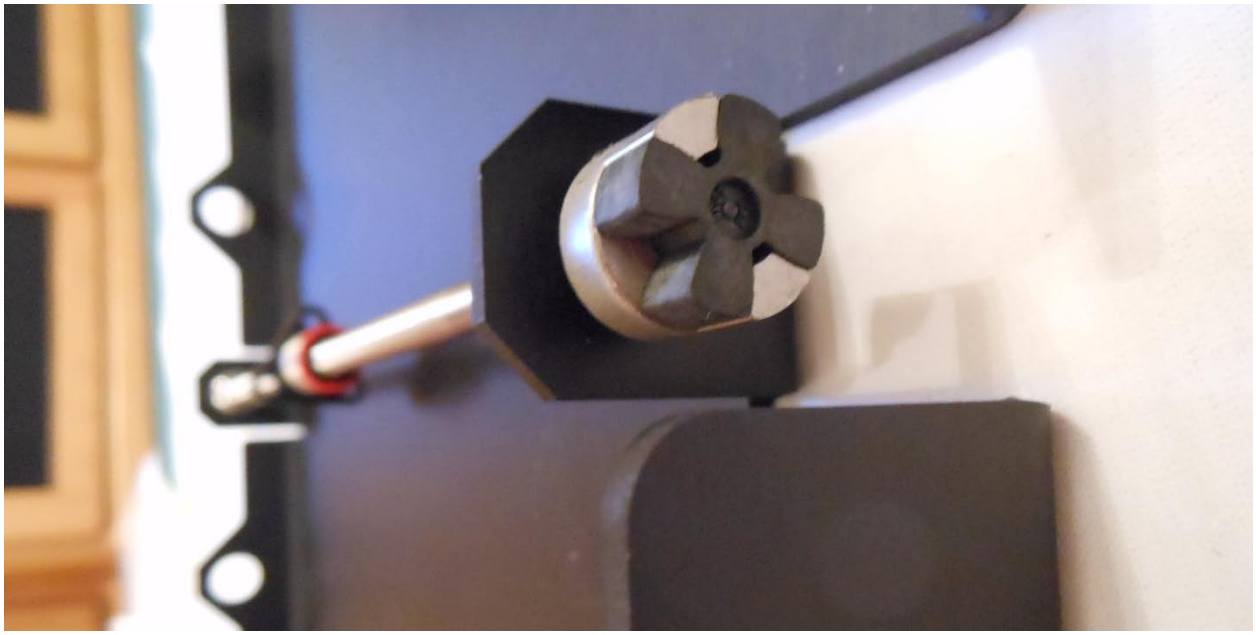


"up" end - Note that the bearing is hidden by the bracket. Adjust the collar (alternative aluminum collar shown here) such that the top end of the lead screw extends ~2mm beyond the bracket and tighten it down securely on the lead screw

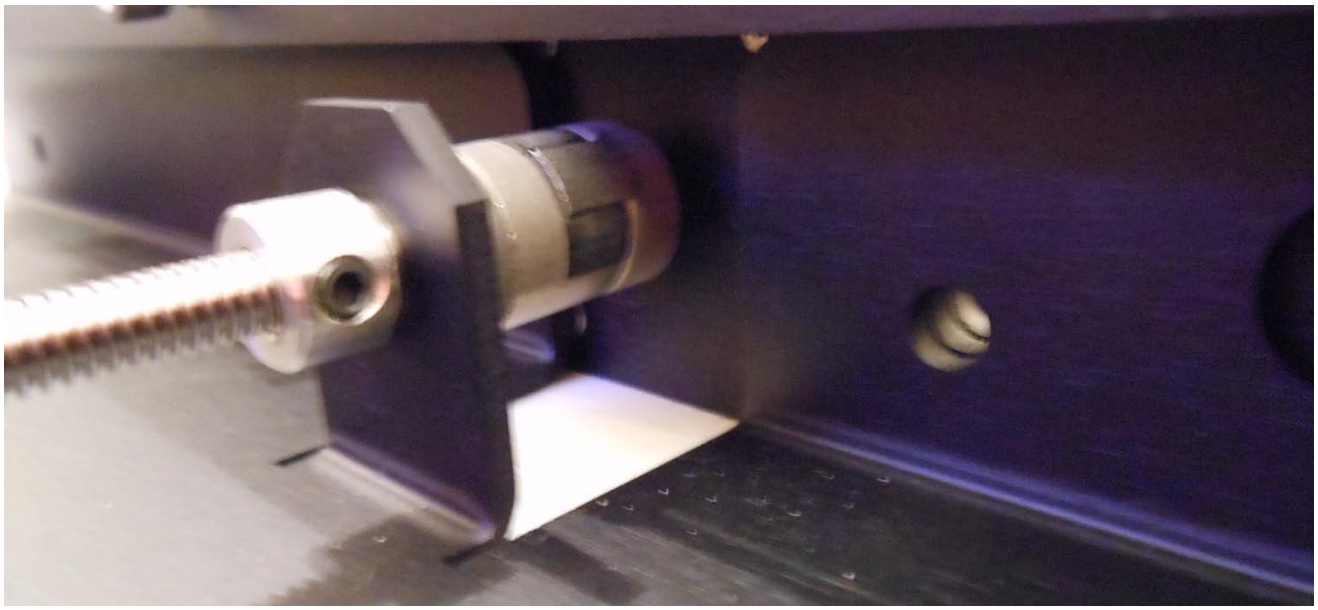


"down" end - Note the bearing can be seen here seated in the lower bracket. Adjust the collar so that it is applying a small amount of pressure against the bearing/bracket and tighten securely.

There should be no "play" vertically once both collars are secure. It is fine if the bearing has a bit of "slop" in the horizontal plane of the bracket. Finally, attach the motor coupler to the lower end of the lead screw using the provided hex wrench. The entire lead screw should spin freely.

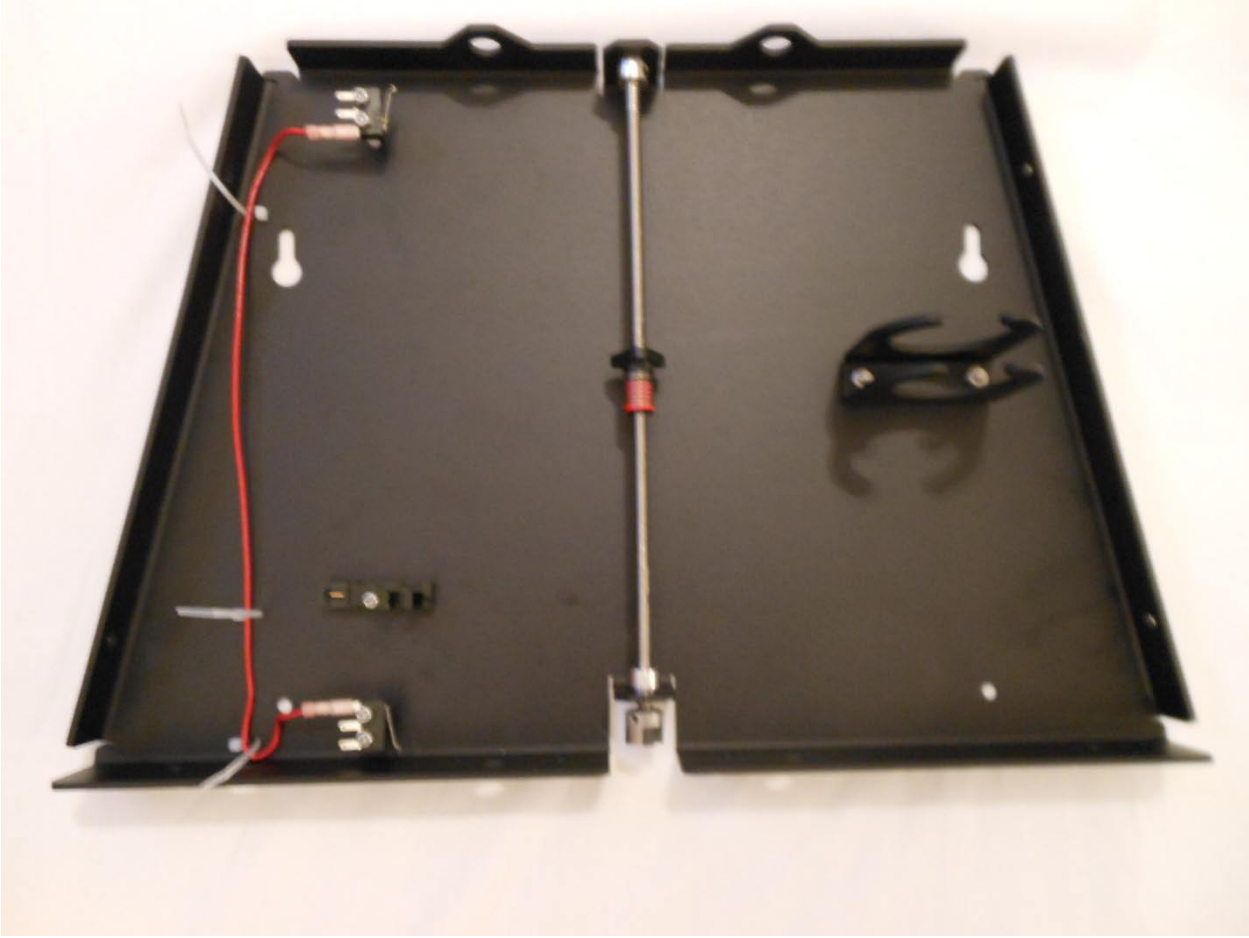


Insert the rubber motor coupler "spider" into the coupler as shown.



This will eventually be mated with the Z-Axis motor which was mounted to the XA assembly.

(Shown here for reference only.)



Finished! (That was easy!)

Set this aside for use in the final assembly.