

Desktop Y Axis Motor Replacement



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Notes:

This motor is attached to a motor mounting plate that is also adjustable. If the motor mounts directly to the electronics backing instead of a detachable plate then it is an early version. In this case, disregard these instructions and contact customer support.

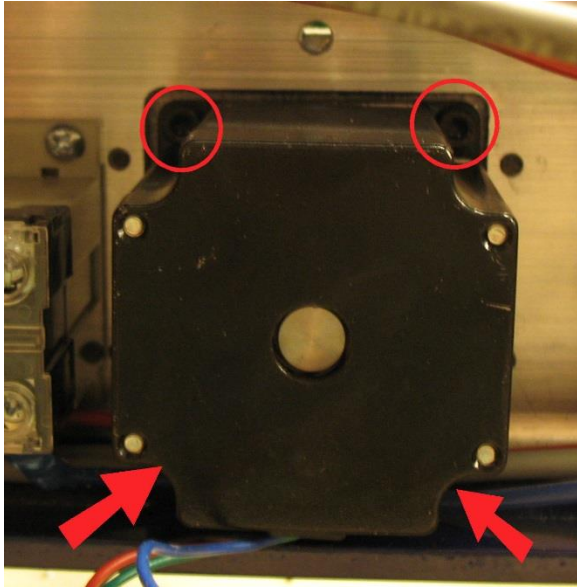
If after installation the motor binds, there may not have been enough adjustability in the bearing block. It will be necessary to loosen four screws holding the motor plate. These are found inside the machine (the area normally covered by the spoiler board), surrounding the motor. Then repeat step 9 to align the motor and tighten these bolts.

**Step 1:**

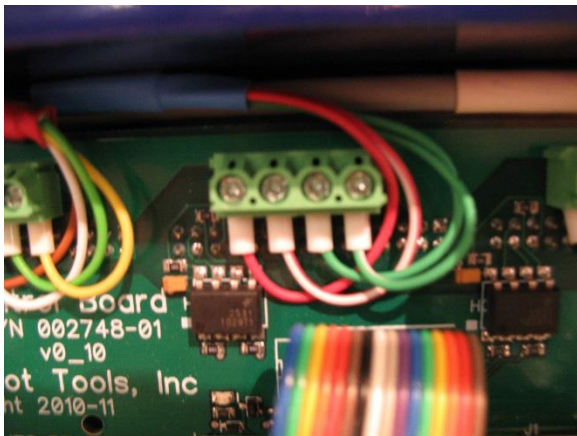
Turn off power and unplug ShopBot.

**Step 2:**

Remove two screws and plastic cover from the rear of the machine. The right side screw is shown in picture to the left.

**Step 3:**

Remove the four screws holding the motor to the frame.

**Step 4:**

Loosen screws and remove the corresponding pins to disconnect the motor wires from the terminal block.

**Step 5:**

Carefully pull the motor straight out from the surface of the machine, unthreading the lead screw from the nut block.

NOTE: The nut block is located under the table surface. The table surface can be removed for easier access.



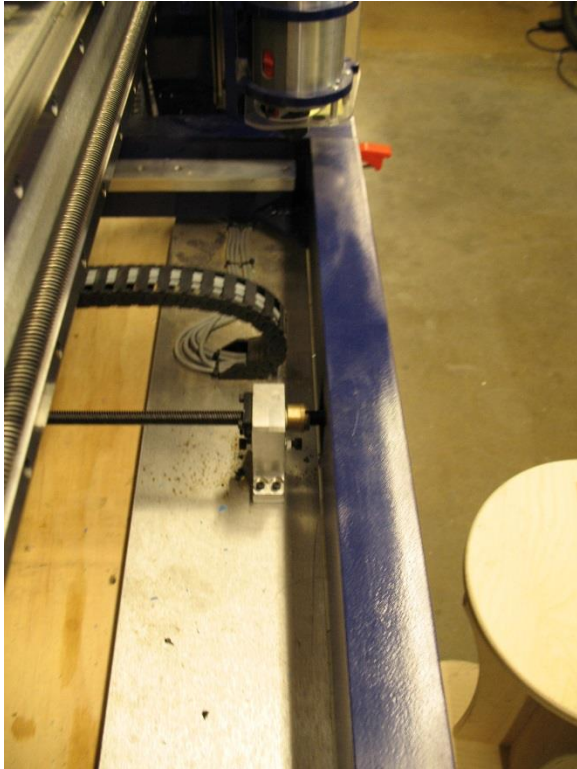
Step 6:

Put the new motor in place, threading the lead screw through the nut block and into the bearing block at the front of the machine. Be careful to ensure spring does not pop off. If it comes off, it will be necessary to reinstall it with the red retainer until it snaps back into place. When properly assembled it will look like the image.



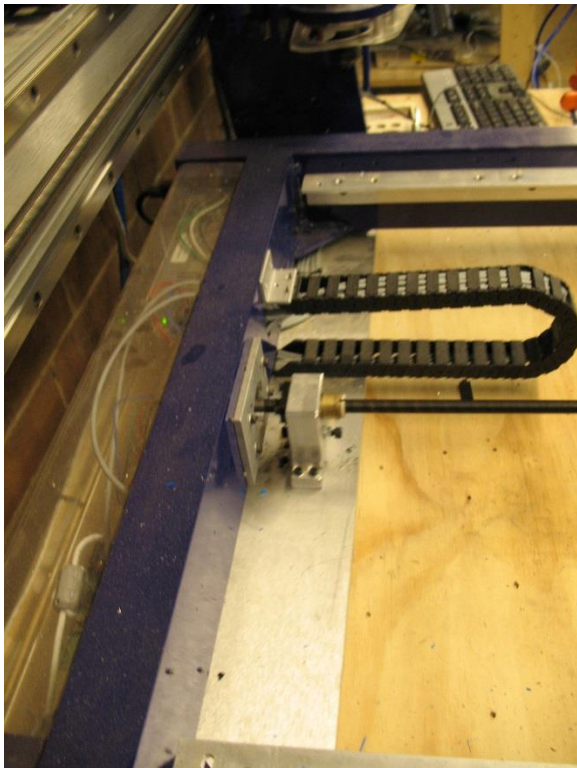
Step 7:

Screw the motor mounting screws in, but do not tighten. Ensure it is seated in the bearing block at front of the machine. Loosen the two small screws of the bearing block opposite the motor on the front of machine. The bearing block screws are located at front of tool as shown.



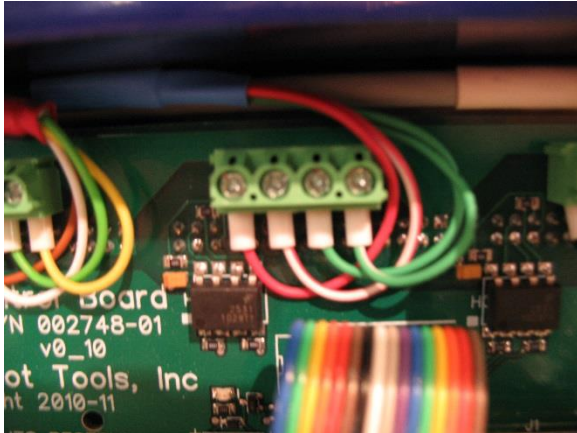
Step 8:

Move the gantry to the front of the machine and tighten the bolts on the bearing block to align the bearing block in line with the nut block.



Step 9:

Move the gantry to the rear of machine and tighten the motor screws. This will align the motor with the nut block and bearing block to prevent binding.



Step 10:

Wire in the new motor on the same terminal block. Ensure wires are connected as follows from the left: red, red/white, green, and green/white.



Step 11:

Reattach the electronic cover with two screws. The Y motor should now be properly installed. Test with some practice cuts to ensure proper wiring and that there is no binding. If there are issues recheck the wiring or see note on first page about binding.

Revision History

Date:	ECO:	Change:	Author:
2015 12 21		Release Update	M. Cummings