

X Axis Motor Field Replacement - 536

Tools Needed:

Phillips screwdriver, 1/16" Allen wrench, 7/64" Allen wrench

Note: Before beginning the disassembly procedure, look closely at the routing of the belt as it comes off the right side of the large black pulley. The belt will loop **under** the idler pulleys before looping around the motor. Also, make note of how much gap there is where the belt passes under the idler pulley, and passes over the lower span of the belt, as it returns the underside of the large pulley. It is not important that the **same** gap be maintained on reassembly, but **some** gap has to be maintained in order to keep the belt from rubbing against itself while running.

Remove the two Phillips screws that hold the motor bracket to the side plate, cut the two tie wraps holding the wiring, and unplug the two connectors going to the motor. **Do not** pull on the wires, pull only the two halves of the white connectors. (Fig. 1, below)

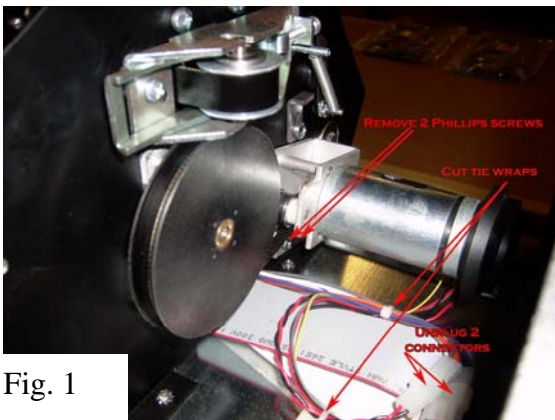


Fig. 1

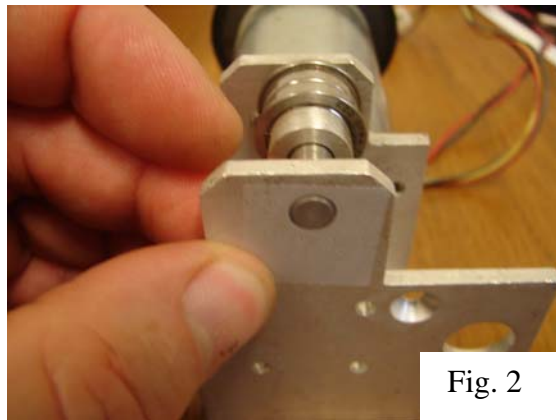


Fig. 2

Once the motor bracket is removed from the machine, place a piece of tape over the idler shaft, on the machine side of the motor bracket. This will prevent the shaft from moving during the assembly process, and can stay in place permanently. (Fig 2, above)

Before removing the motor from the bracket, make note of which way the wiring at the bottom of the motor faces, relative to the bracket. Put the new motor in the same rotation.

Holes are provided in the X motor bracket to allow insertion of a 7/64" Allen wrench for removal of the motor from the bracket.

Remove the 4 screws holding the motor to the bracket and remove the motor from the bracket (Fig 3, below).

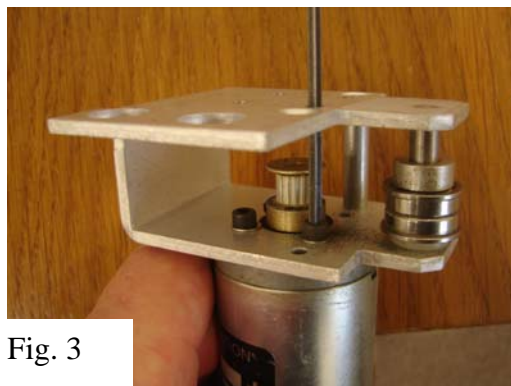
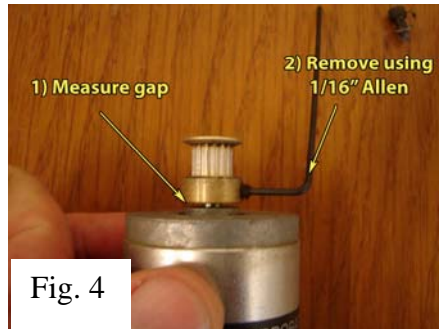


Fig. 3

X Axis Motor Field Replacement - 536

NOTE: Before the next step, make note of the location of the pulley on the motor shaft, (Fig. 4, below) . If there is 1/16" inch gap under the pulley to the motor bracket, install the new motor to that location to ensure the belt rides straight when in operation.



Loosen the gold pulley on the motor, using the 1/16" Allen. Once loose, pull the pulley off the motor shaft. If needed, you can pry the pulley up GENTLY from the motor using a flat screwdriver.

Install the motor pulley to the new motor, setting the height before tightening the set screw.

Install the new motor to the bracket, making note of the orientation of the wiring direction, then secure with 4 Allen cap screws and 7/64" Allen wrench..

Install motor bracket to side plate of machine, leaving the two Phillips screws loose. Once all screws are in place, install the belt to the motor pulley first, then roll the belt back on to the large, black grit wheel pulley.

Tension the belt by applying hand pressure only to the motor. Push the motor straight back, and make sure that you maintain the gap originally seen in the first step of this document. When properly tightened, the belt should have less than 1/8" of free play when checked along the longest span of the belt, between the bottom of the large pulley and the bottom of the motor pulley. Once this is achieved, then tighten the two phillips screws and connect the wiring to the motor.



X Axis Motor Field Replacement - 536