

Y-Axis Belt Replacement:

1. Shut off the cutter and remove the power and computer data cables.
2. Remove the right (3 screws) and Left (2 screws) end covers. See *Removing the End Covers*.
3. Loosen the allen screw on the belt tensioner until the screw is not exposed. Do not remove the screw.
4. Grasp one of the metal “T”-connectors on the end of the Y-Axis belt and pull it out and toward the center of the carriage until it pops free. Make sure that the tensioner assembly is not tangled in the belt. Remove the other end of the belt from the carriage.
5. Pull the Y Axis belt through the holes in the left end plate. The belt will have to be threaded through the tensioner assembly. Once the belt is removed the tensioner assembly will have to be set aside because it is not attached to the end plate.
6. Pull the Y Axis belt through the holes in the right end plate. The belt may have to be threaded through the pulleys in the Y Axis transmission.
7. Thread the new Y Axis belt through the access slots in the right end plate and around the empty pulley in the transmission. It is very important to make sure that there are no twists in the belt and that the belt teeth properly engage the pulley. Continue to thread the belt through the holes in the left end plate and through the belt tensioner. Make sure that the belt teeth face the pulley wheel and that there are still no twists.
8. Insert one of the metal “T”-connectors into the grooves on the back of the carriage body.
9. Align the tensioner assembly with the indentations on the end plate and apply light tension to the belt by tightening the allen screw.
10. Move the carriage to the right side of the machine (Closest to the keypad).
11. To make sure the belt has the proper tension, use a fish scale that measures in Grams. place the hook (on the fish scale) around the belt. See *fig 5-9*.
12. Place a ruler on the bottom of the traverse extrusion, See *fig 5-9*.
13. Pull the fish scale to the 1” (One inch) mark on the ruler. The reading on the fish scale should read from 300 to 360 Grams. See *fig 5-10*.
14. Adjust the belt tensioner until the belt tension is correct.
15. If you can’t find a fish scale, the belt can be adjusted by hand. Tighten the tensioner until you feel there is enough tension on the belt.
16. Slide the carriage back and forth by hand. If you feel slipping the belt is too loose. If you hear “Clicking”, the belt is too tight.

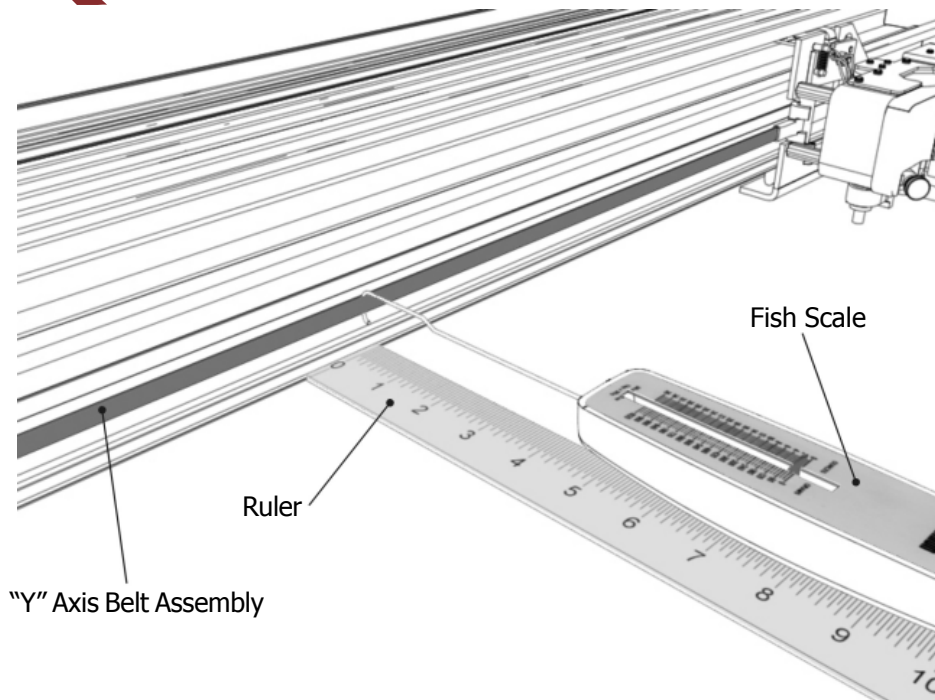


Fig. 5-9 Tensioning the "Y" axis belt assembly

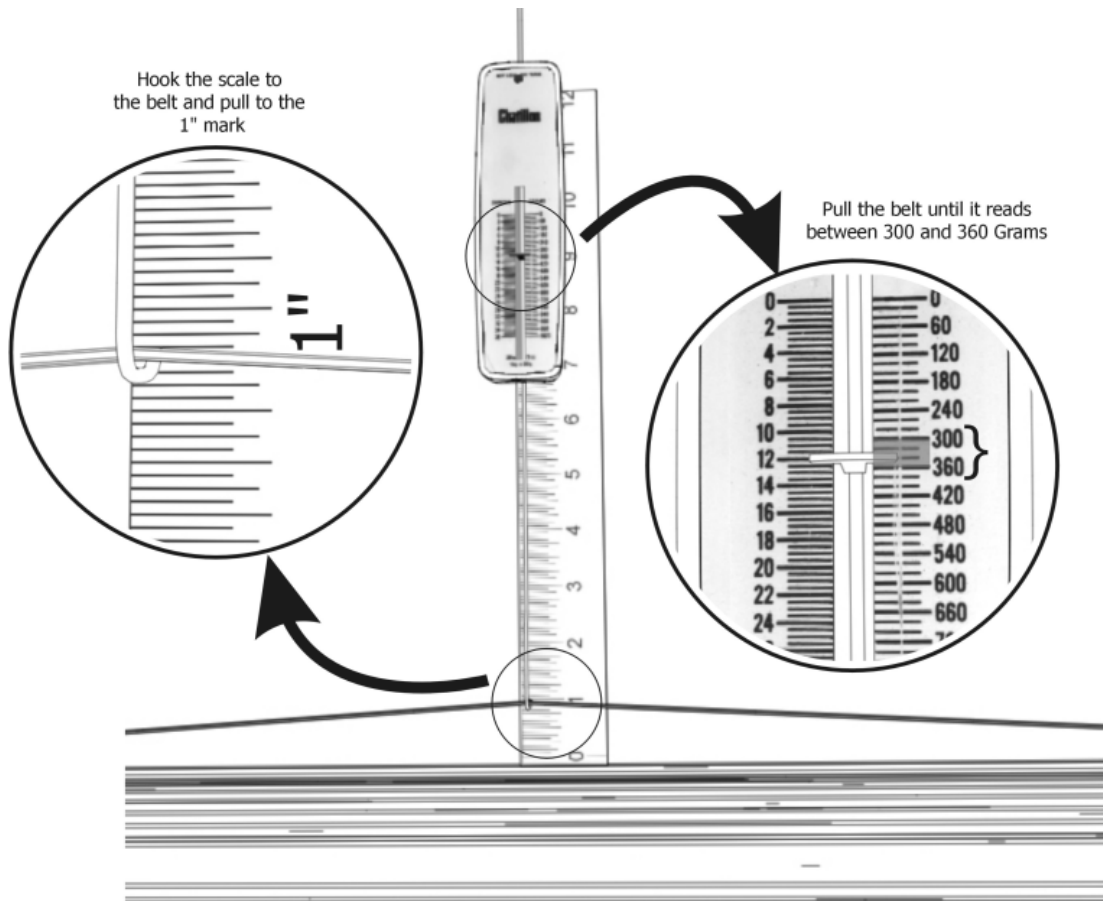


Fig. 5-10 Pulling the belt to 1", and measuring 300 to 360 Grams