Procedure Title: Replacing the X-beam belt

Machine Type: Helix

Tools Needed: Philips head screw driver
Needle nose pliers

Intro:
This procedure details steps to replacing the I-beam belt on the Helix. The X-beam belt controls the side movement of the laser head.

Procedure:

1. Unplug the power cord from the machine.
2. Remove both side panels.

3. Pull X-beam to the center of the machine.
4. With a Philips head screwdriver, remove the X-beam cover. The X-beam cover contains two screws in the front and five screws on the back, loosen these screws, however, it is not necessary to remove them.

5. Slacken the belt.
   a. On the left side of the X-beam there is a pulley system. Loosen the two screws on the pulley tensioning system.
   b. Press the black pulley into the machine (to the right).
   c. Still pressing on the black pulley, tighten the two screws on the pulley tensioning system.

6. Locate the lens assembly. Remove the four screws and remove the plates to detach the ends of the belt.
7. Slowly pull one end of the belt out of the lens assembly.

Re-Installing the Belt

8. Replacing the belt on the Helix is tricky. On the right side of the X-beam, the belt must go around two pulleys.
   a. Connect the left end of the belt, with the grooves toward the inside of the machine to the right side of the lens assembly. Screw in the plate.

b. Pull the belt to the right side of the X-beam.

c. Unscrew the three captive screws around the motor.

d. Lift the motor out of the bracket
e. Loop the belt around the black pulley inside the motor bracket.
f. With your index finger, slide the belt around the silver spindle connected to the motor.

g. Replace the motor. Screw in the three captive screws.

h. Pull the belt end close to the X-beam. Pull the belt behind the X-beam but in front of the white ribbon cable.
i. Loop the belt end around the black pulley on the left side of the machine.

j. Place the belt end onto the left side of the lens assembly. Tighten the screws on the plate.

9. Loosen the two pulley screws on the left side of the X-beam. The pulley will snap into place and will tighten the belt.

10. Gently pull the pulley assembly to the left while tightening the two screws.

11. Replace the X-beam cover. Tighten the two screws in the front of the X-Axis Assembly and the five screws in the back.

12. Replace side panels.

If you have any questions, please contact Epilog’s Technical Support
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