

## Replacement of Z-Axis drive tubing in Cetac ASX-110/112FR Autosamplers

1. Unplug power and communication cables as well as any sample and rinse lines from the auto sampler.
2. Remove the top clear cover and set aside.
3. Find four white plastic locating pins about 1cm wide and 2.5 cm tall at the four corners of the sampler.
4. On the bottom of the sampler, opposite the four pins, are 4 Phillips head screws. Remove these screws.
5. Slide the top assembly up, out of the chassis base and set next to the base.
6. Remove two plastic standard screws on the z-axis slider assembly where the swinging arm attaches to the slider. (Figure 1)

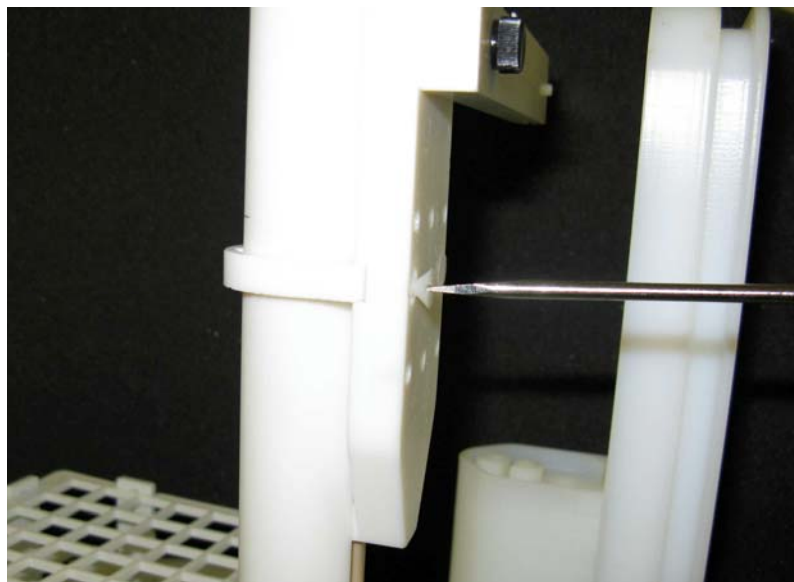


Figure 1.

7. You can remove the positioning clamp that goes around the z-axis arm and set it aside.
8. Remove the peek tubing by cutting out the clamped portion in the gap at the attachment point on the back of the slider. Alternatively, you can squeeze the tubing with needle nose pliers to “un-flatten” it and pull it out of the bottom of the slider. (Figure 2)

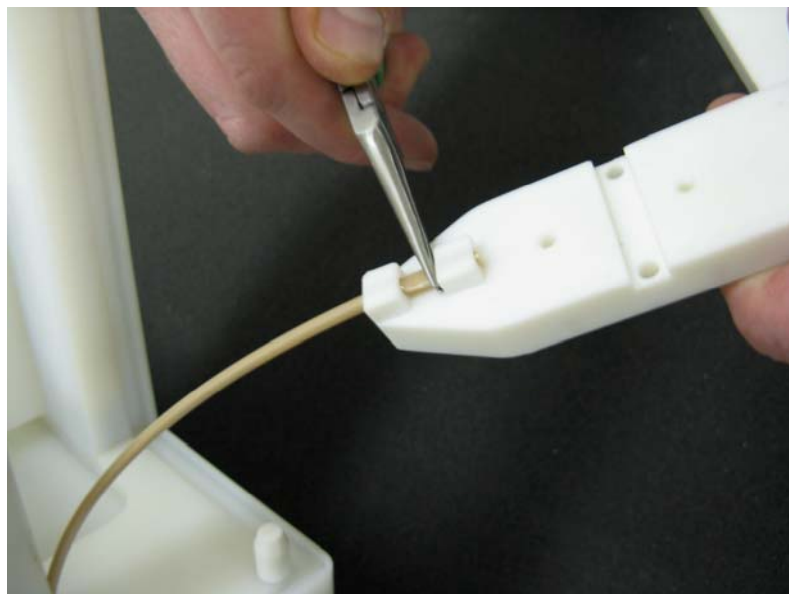


Figure 2.

9. Remove the clamp on the z-axis rotor (Figure 3) and pull the old z-drive tubing out of the top of the z-drive arm and discard.

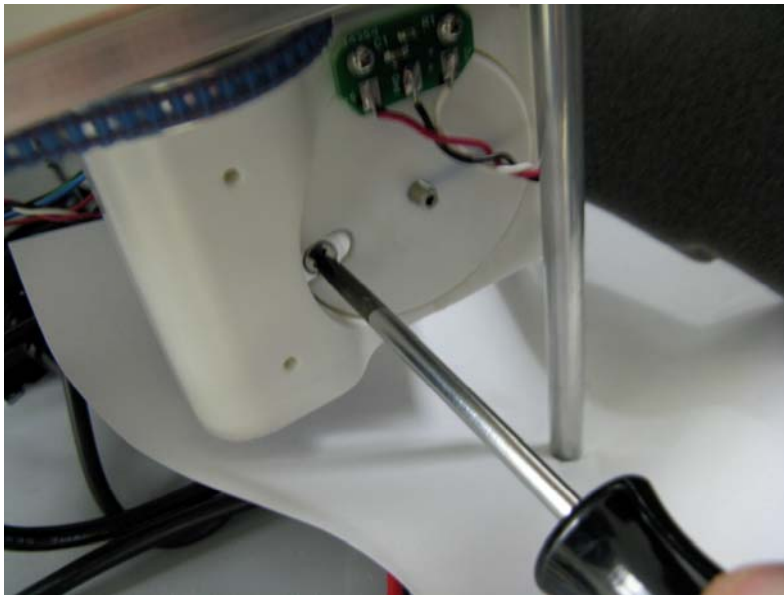


Figure 3.

10. Remove any broken pieces of the tubing from the inner portion of the rotor at the clamp.
11. Insert a new z-drive piece into the rotor from the z-drive arm. Take note that one end does not have an insert. This end should not be inserted into the rotor.
12. Adjust the peek tubing so that it goes past the clamp about 1mm but no more. Set the clamp back in the rotor and tighten securely. (Figure 3)
13. Slide the top of the peek tubing into the slider assembly back until the top of the tubing is even with the top of the second (top) hole in the slider.
14. Using your pliers, crimp the peek tubing in the gap in the back of the slider. (Figure 2) Squeeze the tubing well enough to flatten it at the top and bottom of the gap and check for play by moving the slider up and down. Crimp as necessary to minimize play in the slider.
15. Secure the slider to the z-arm with the two plastic screws and the positioning clamp removed in step 7.
16. Re-attach all power and communication cables and check for functionality.