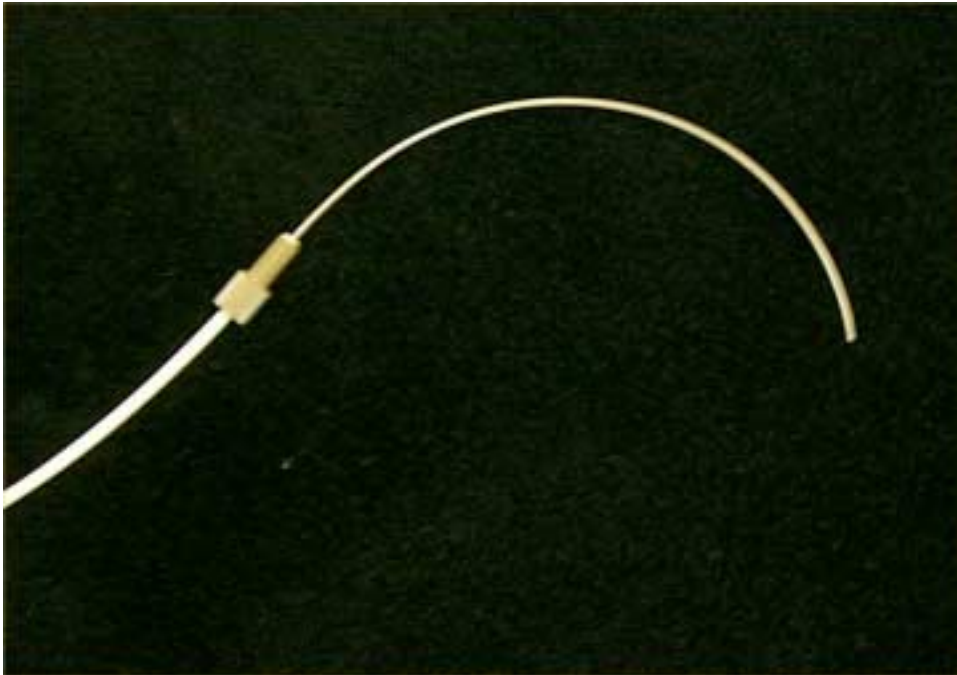

**Alignment of Z-drive for
ADX-500 and ASX-510**

1. If you have an old z-drive on the unit remove it off both the ADX and ASX-510.
2. Remove the new Z-drive from the package and locate the end with the peek tubing coming out that has no mounting block attached to it as shown in the picture below.



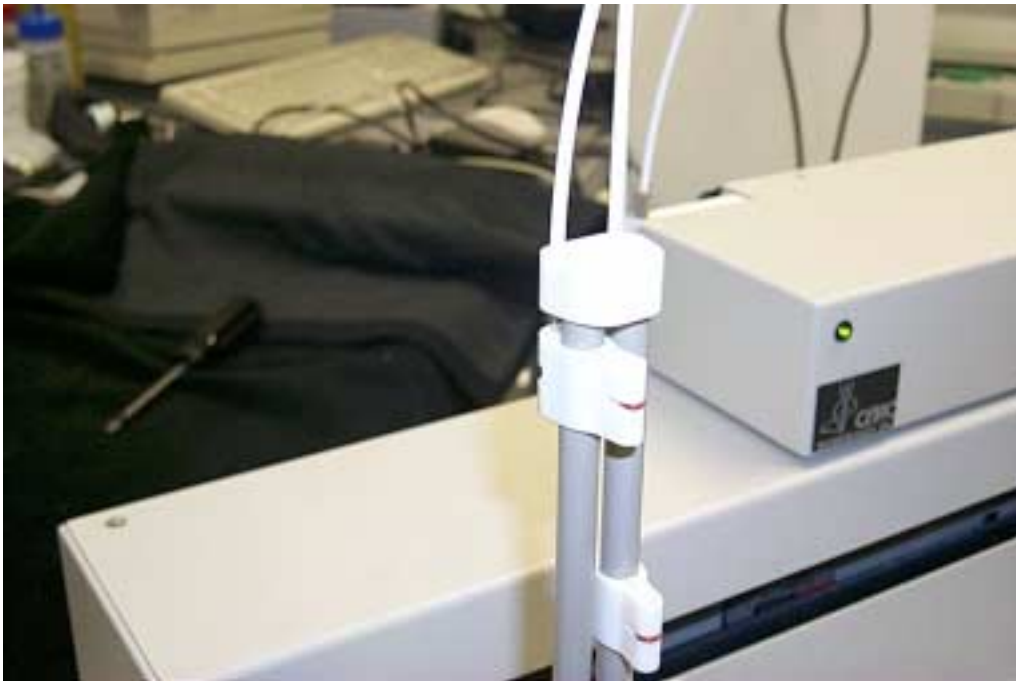
3. Pull the peek tubing until fully extended and cut to a 7" length, and curl with a pen as shown above.
4. Insert the peek tubing into the ADX Z-drive rotor, align rotor so that the clamp is at the 3 o'clock position as shown below. When peek hits the stop on the rotor hold it tight to the stop and tighten clamp by tightening the Philips head screw.



5. Turn the rotor manually clockwise until the fitting is ready to be screwed in to the ADX. Screw the fitting into the ADX until tight. Also at this time attach the Z-drive to the asx-510 on the arm tube and also to the back by putting the peak through the slot around the rotor on the asx-510, you may have to loosen the clamp to get the peek tubing past it. Once the peak tubing is past the clamp, attach the mounting block to the back of the asx-510 with 2 thumbscrews, then turn the rotor manually clockwise till the stop pin hits the stop. Now pull the peek till the slider on the z-drive (the slider on the right side) almost hits the top. Tighten the thumbscrew. The z-drives should be attached as shown below.



6. With the Z-drives attached turn the rotor on the ADX counter-clockwise to lower the slider on the Z-drive. Plug in the power supply to the ADX and cycle the power so that the ADX moves the slider to the top of the Z-drive as shown in picture below.



7. If the slider doesn't make it to the top or try's to go to far then you will have to adjust the sensor. You will want the z-drive to go to top with @ 1/8" space between the top and the slider. To adjust the sensor turn the rotor as shown below and insert allen wrench (3/32) in hole in the top-center. Loosen set screw inside and turn knob clockwise if the slider is going to far and counter-clockwise if the slider is not going far enough. Then tighten the set screw and remove wrench and cycle power, and repaet procedure until the Z-drive rises to desired height.



8. To align the Asx-510 follow the instructions below.

9. Ensure power to instrument is off. Make sure that you have a sample probe in the Z-drive, and racks on the right and left of the tray. As shown in figure 1-1. There is no need for racks in the 2 middle sections of the tray.

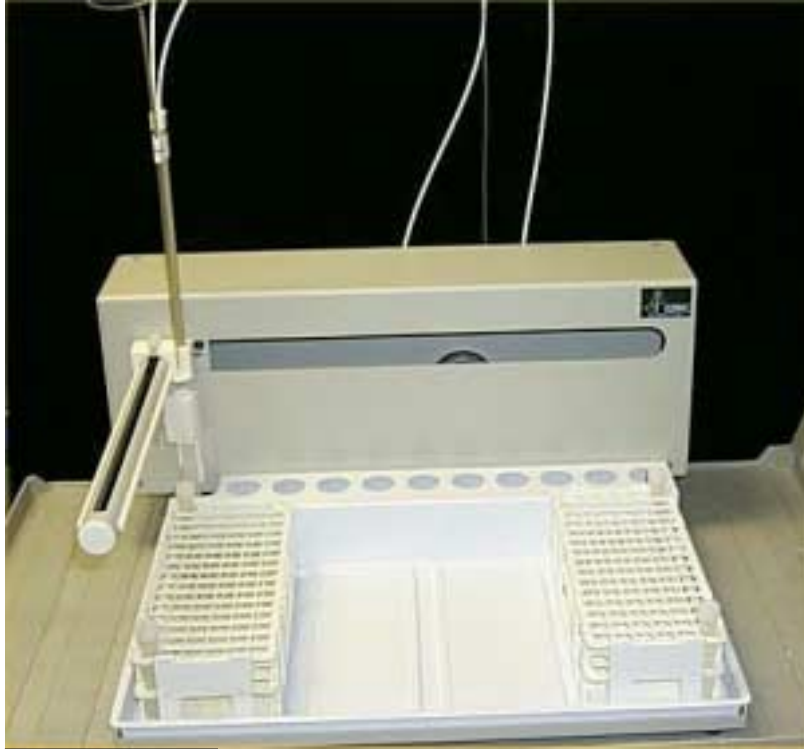


Figure 1-1

10. Move the back of the unit to the edge of the table or cart (**make sure that you have someone hold the tray section (as shown in figure 1-2) so that the autosampler will not fall**) because the back that is hanging of the edge of the table or cart is heavy. Or you may move it to the corner it will balance on the corner on the cart but beware the unit could fall if bumped.

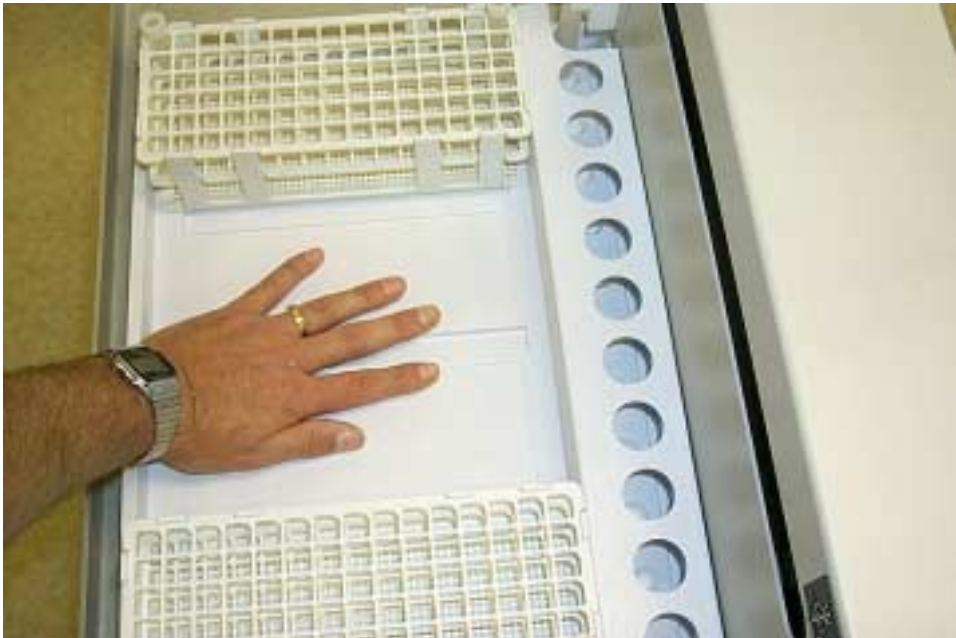


Figure 1-2

11. With the back of the autosampler off the edge of the table or cart. Locate the 4 cap screws located under the bottom of the autosampler. As shown in figure 1-3.(only one side is shown in picture)

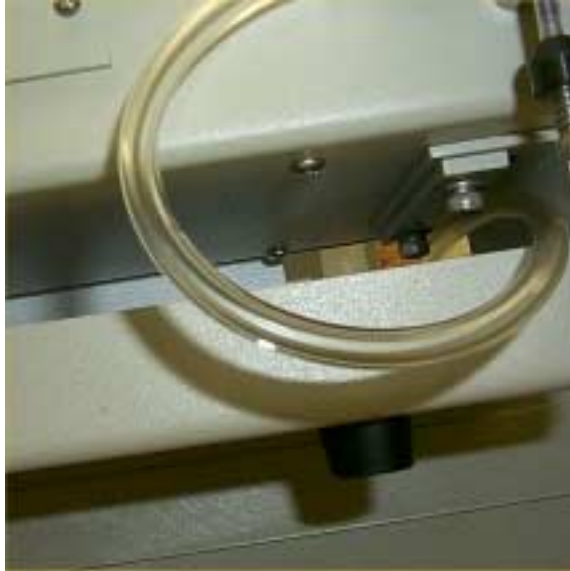


Figure 1-3

12. Notice the holes in the bottom of the tray, these are for access to the 4 cap screws. Using a long 5/32 allen wrench, loosen the 4 screws slightly so that you can move the body of the auto sampler left, right, front, and back. As shown in figure 1-4.



Figure 1-4

13. Connect communication cable from the computer to **COM 1** on the back of the autosampler.

14. Turn on the autosampler. It should home x, y, and z-axis.
15. Now open the program that you downloaded off the website. It will open a **tcomm debug** window, then soon after will open the main window as shown in figure 1-5.

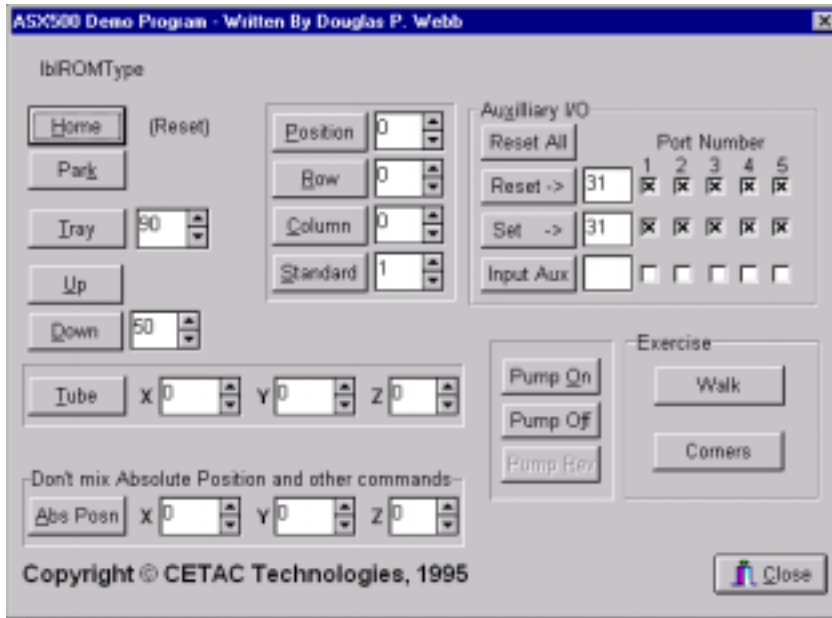


Figure 1-5

16. In the top left hand corner of the main window it should tell you what version of e-prom is in your autosampler.
17. Click the **Home** button and unit should act just as it did when you turned it on.
18. The # next to **Tray** is the # of tubes in a rack, please enter that # now.
19. The number next to **Down** is the depth that the Z-drive travels. Click the arrow till the number reads 150 for a normal z-drive and 100 for a nicolet z-drive.
20. Now under the **Exercise** window click **Corners**.
21. When the autosampler gets to the first tube and z-drive is down turn autosampler off. Align the sample probe (the one on the right side) so it is in the middle of the test tube.as shown in figure 1-6. Tighten the cap screws slightly on that side.



Figure 1-6

22. Turn autosampler back on and when the sample probe gets to the next tube, do the same as you did on the first tube. Turn unit off align and tighten screw. As shown in figure 1-7.



Figure 1-7

23. Turn unit back on and let unit run through all the 4 corners.
24. If the alignment is off slightly when it hits the 2 tubes in the front of the tray, then split the difference between the back tubes and the front tubes.
25. If satisfied with the alignment, then tighten all 4 cap screws as tight as possible. The alignment may move when tightening the screws so check before closing software.
26. Click the close button on the software before turning off the autosampler for the final time, or you may get an error message.
27. At this time the autosampler should be aligned and ready for your application.