
X-Leadscrew and Guide Shaft Replacement

NOTE:

MAKE SURE THE UNIT IS UNPLUGGED AND IN THE "OFF" POSITION BEFORE BEGINNING THIS PROCEDURE.

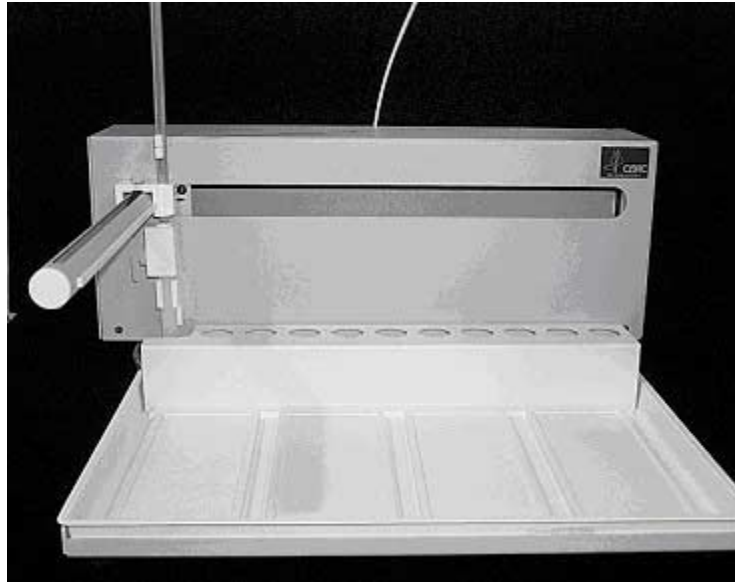


Figure 1-1. Front view of ASX-510.

1. First, remove the two Kynar thumbscrews from the Y-axis home block. See Figure 1-2.

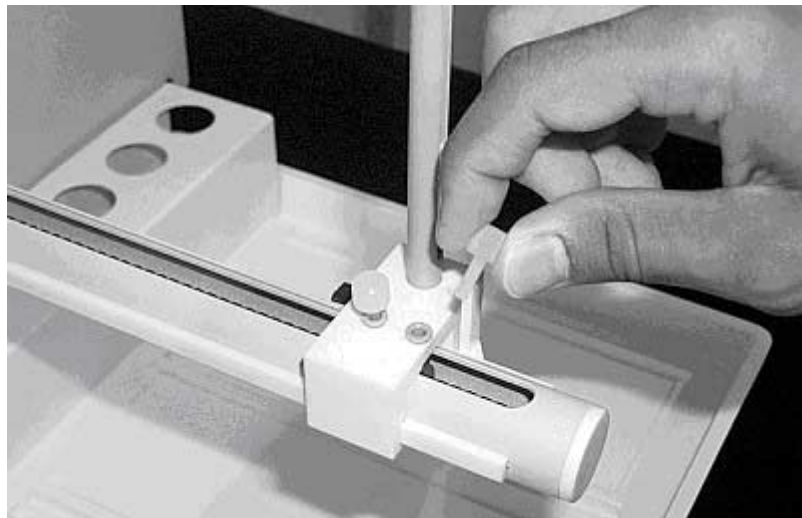


Figure 1-2. View of Y- axis home block with Kynar thumbscrews.

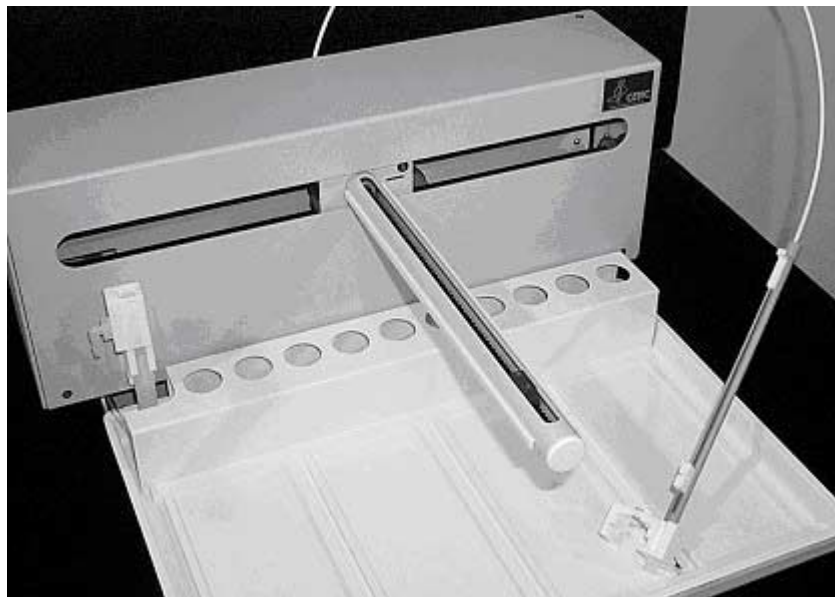


Figure 1-3. Z-drive removed from arm assembly.

2. Next, remove the whole Z-drive assembly from the arm by pulling the whole Z-drive assembly forward and off the Auto Sampler arm. See Figure 1-3.
3. After the Z-drive assembly is removed, then remove the rinse station. See Figure 1-4. Turn the rinse station $\frac{1}{4}$ turn counter-clockwise while pulling up. Also, the tubing located at the bottom of rinse station will have to be removed or moved aside. See Figure 1-5.

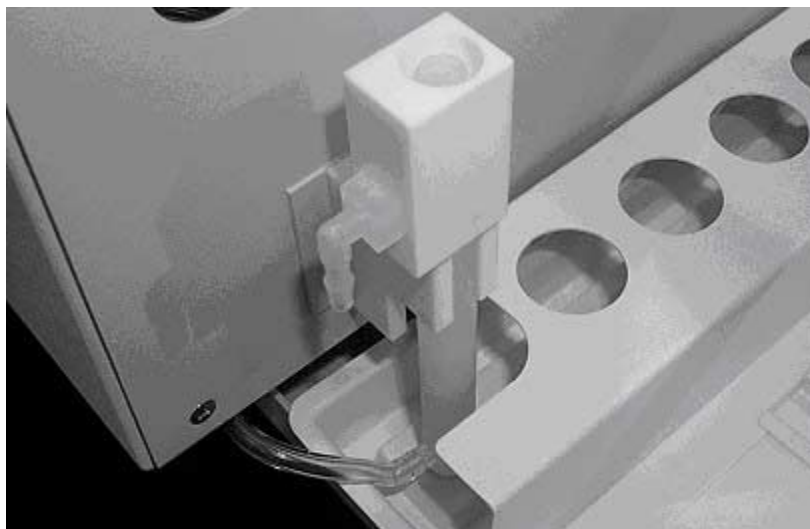


Figure 1-4. View of rinse station.

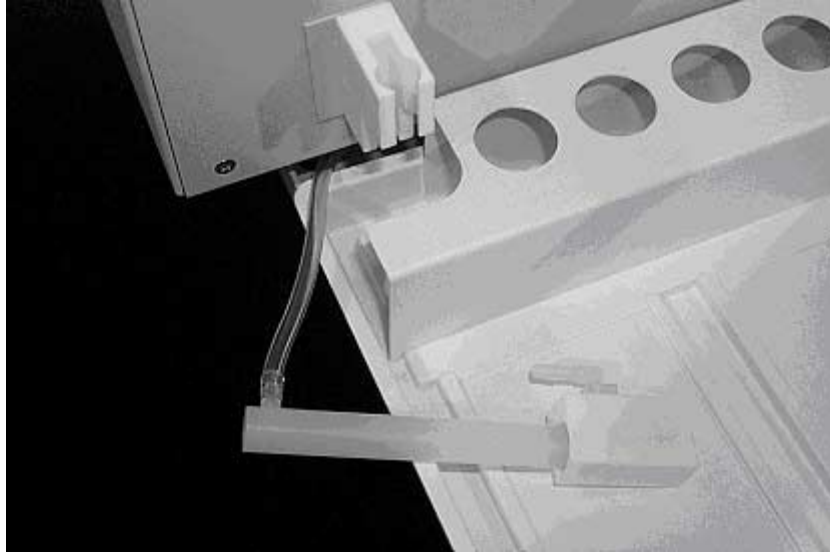


Figure 1-5. View of rinse station removed from the front cover.

4. The Auto Sampler tray is next to be removed. Lift up the tray and pull forward. See Figure 1-6.

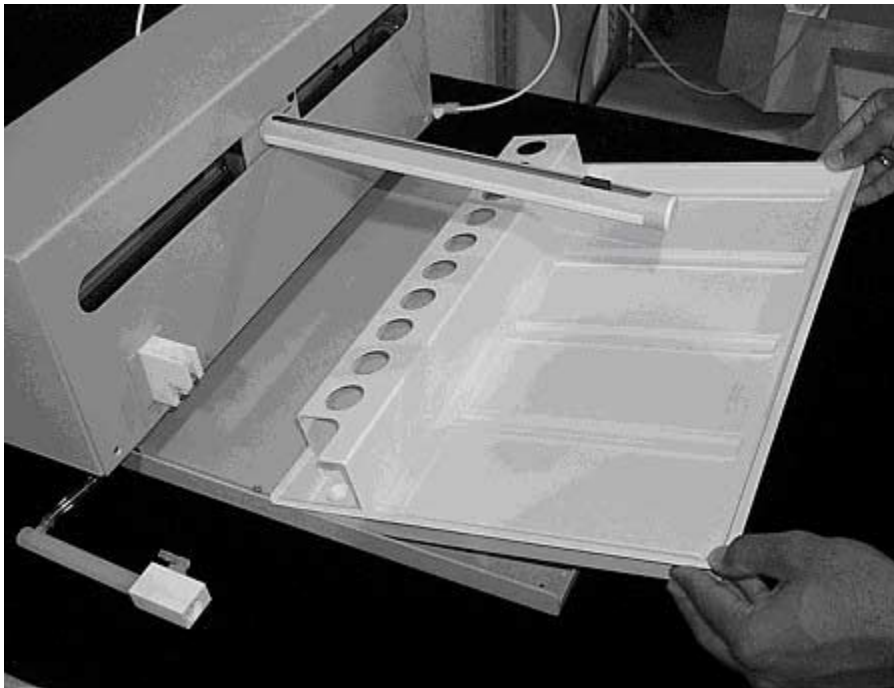


Figure 1-6. Removing the tray.



Figure 1-7. Front view of ASX-510 Auto Sampler showing front cover screws.

5. Next, the front cover needs to be removed. Remove the four corner screws shown in Figure 1-7.
6. The front cover can be removed by lifting it slightly and pulling forward. See Figure 1-8.

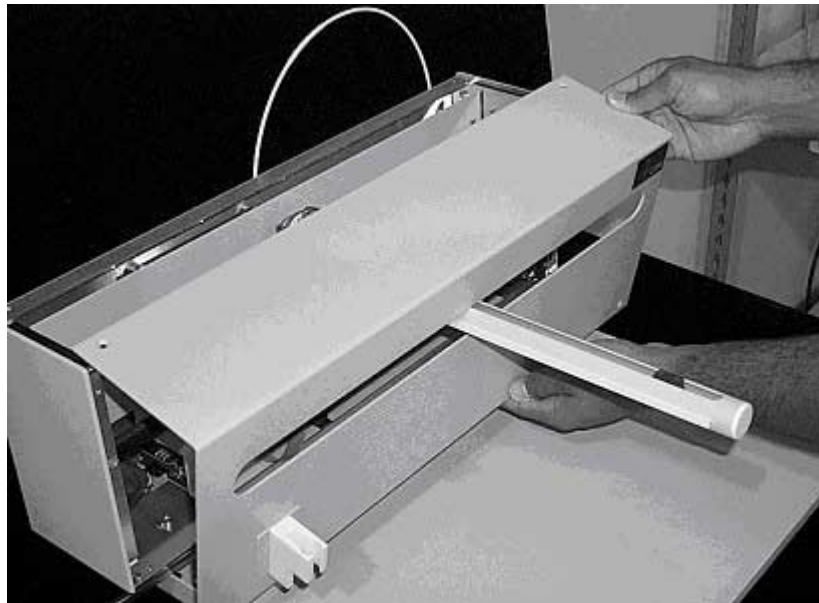


Figure 1-8. View of ASX-510 Auto Sampler with the front cover being removed.

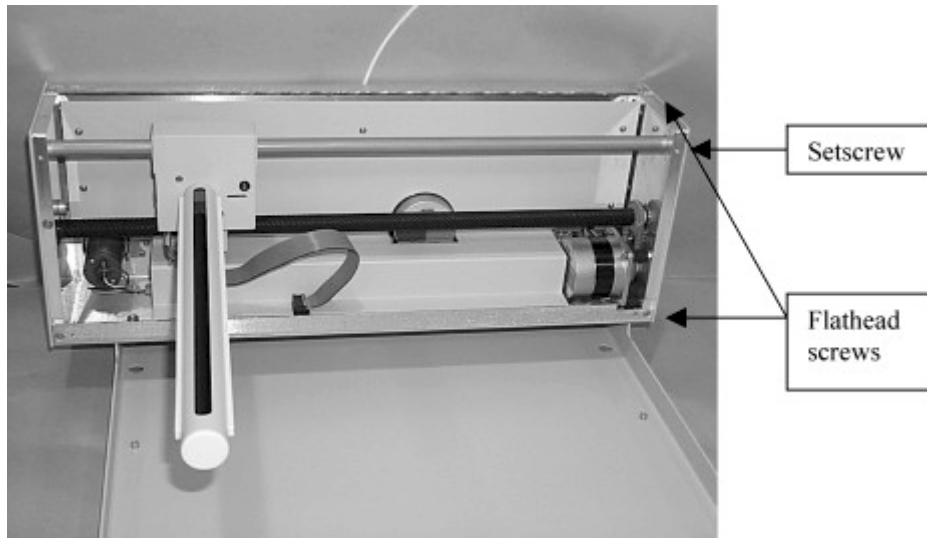


Figure 1-9. View of ASX-510 with front cover removed.

7. Remove the right side panel by removing 2 flat head screws located as shown in picture, and also a pan head screw located in the rear of the unit. Then loosen setscrew indicated in figure 1-9.
8. To remove the side plate you will need a rubber mallet. Tap on side panel to remove (Figure 1-10).

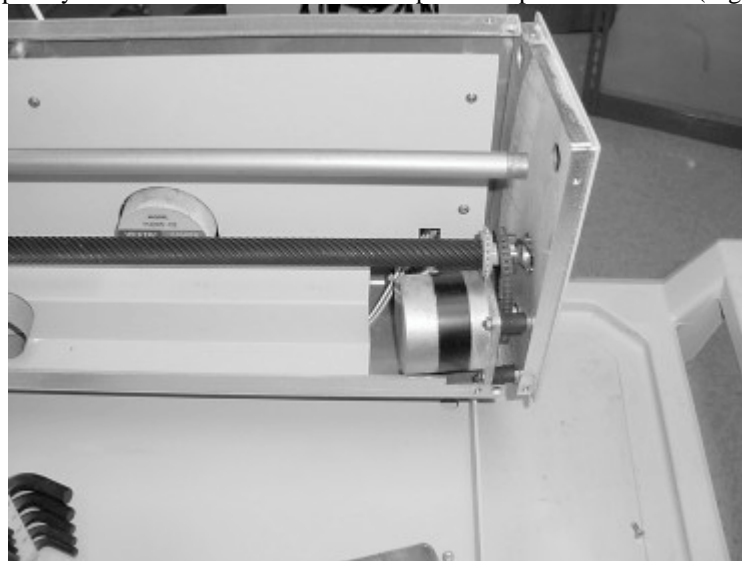


Figure 1-10.

9. Remove panel completely. Now remove ribbon cable from main board (Figure 1-11).

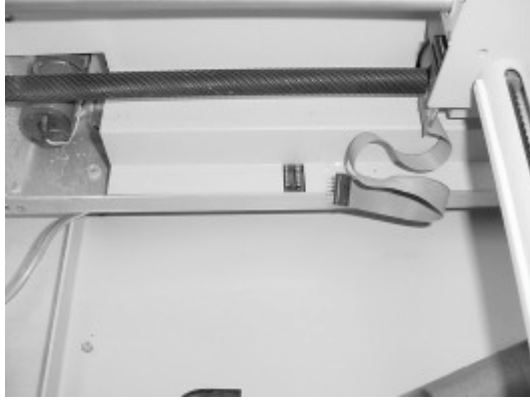


Figure 1-11.

10. Now loosen Setscrew on left panel, so you can remove the guide shaft (Figure 1-12).

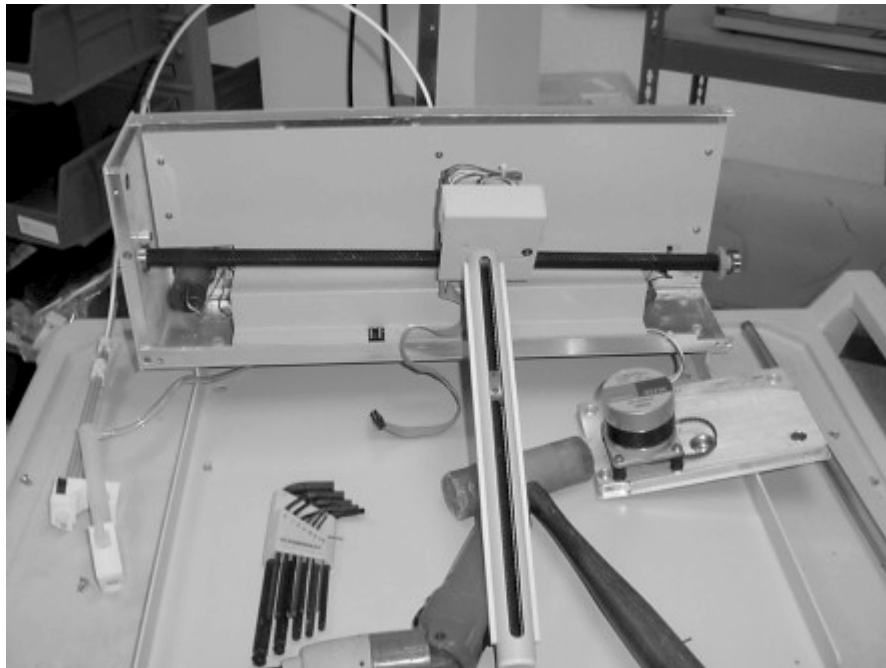


Figure 1-12.

11. Now grasp Lead screw and wiggle while pulling away from left panel to release lead screw and bearing from left panel. If the bearing doesn't come out just reinsert lead screw into bearing and once again wiggle and pull, this may take a couple tries. With the lead screw and bearing out grasp the lead screw and the carriage, then wiggle to free the resilient mount and nut from the carriage assembly (Figure 1-13).



Figure 1-13.

12. Remove the lead screw with the resilient mount and nut from the carriage.
13. To remove the bearings remove 4 flat screws from the carriage (Figure 1-14). After removing on side push the bearings thru. There will be a spacer between them, make sure to replace the spacer with the new bearings, then replace the bearing caps.



Figure 1-14.

14. To insert new nut on the lead screw in to the carriage use rubbing alcohol to get the resilient mount slippery, and insert in carriage and wiggle and push till the nut is flush on both sides.

15. Place end bearings in each side plate and push in there may be a wave washer that goes between the bearing and the end plate.
16. Insert new guide shaft and tighten setscrew on left side plate.
17. Insert lead screw into bearing on left plate, then align guide shaft and lead screw on right side plate, with the rubber mallet pound side panel until you are able to replace screws. Tighten Setscrew on right side panel, and replace screws to secure right side panel.
18. Reinsert ribbon cable.
19. Replace front cover, Z-drive, and rinse station.
20. If you have any questions feel free to contact CETAC Customer Service at (402) 733-2829 or 1-800-369-2822.