

## Autosampler Sipper Tube Calibration

The sipper tube on the Autosampler should be perpendicular to the bottom plate. Use the following instructions to verify proper alignment of the sipper tube.

### Materials

- Autosampler Tip Alignment Tool (024125)
- 1.5 mm ball driver or #0 Phillips driver

### Instructions

1. Connect the serial cable from the host plug on the Autosampler to the instrument if not currently connected.

2. Remove all the racks from the Autosampler base plate.
3. Open the KinExA Pro software. Under the **Tools** menu, select **Options**. The prompt box allows the user to select different options. Select **Autosampler Configuration**. Once autosampler configuration is selected, a calibration screen will appear to the right of the options (**Figures 1A & 1B**).
4. Change **Sample Rack 2** (blue arrow) to "**90 samples**" if not already selected.
5. Enter **Rack 2, Position 90** (green arrow) and select **Go**.
6. Set the **Z:** parameter to **150** (red arrow) and select **Go**. This will drive the sipper tube down.

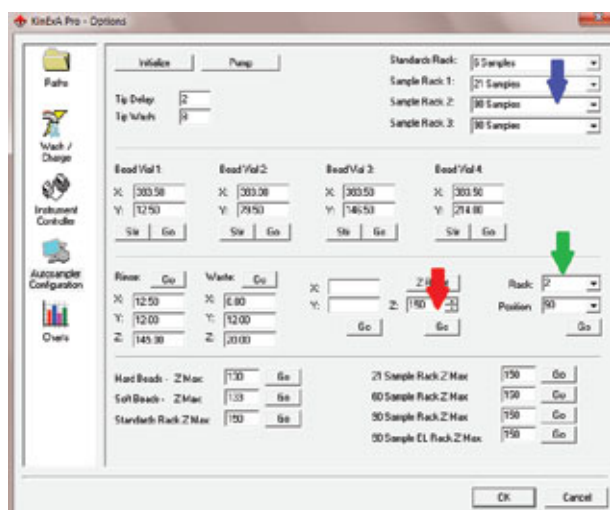


Figure 1A. Software settings for Autosampler Tip Alignment (Old software version)

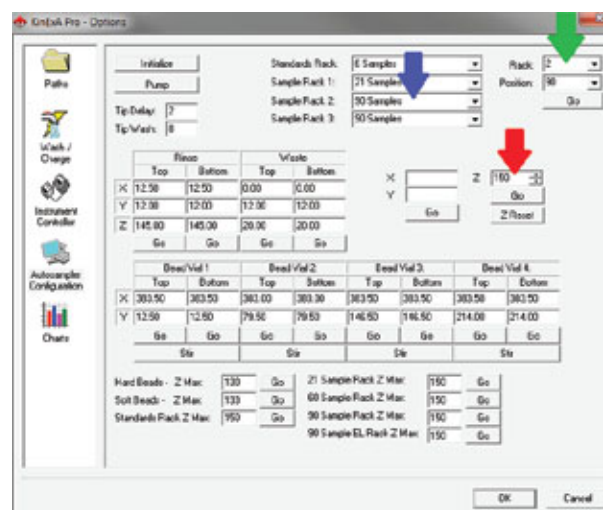


Figure 1B. Software settings for Autosampler Tip Alignment (New software version)

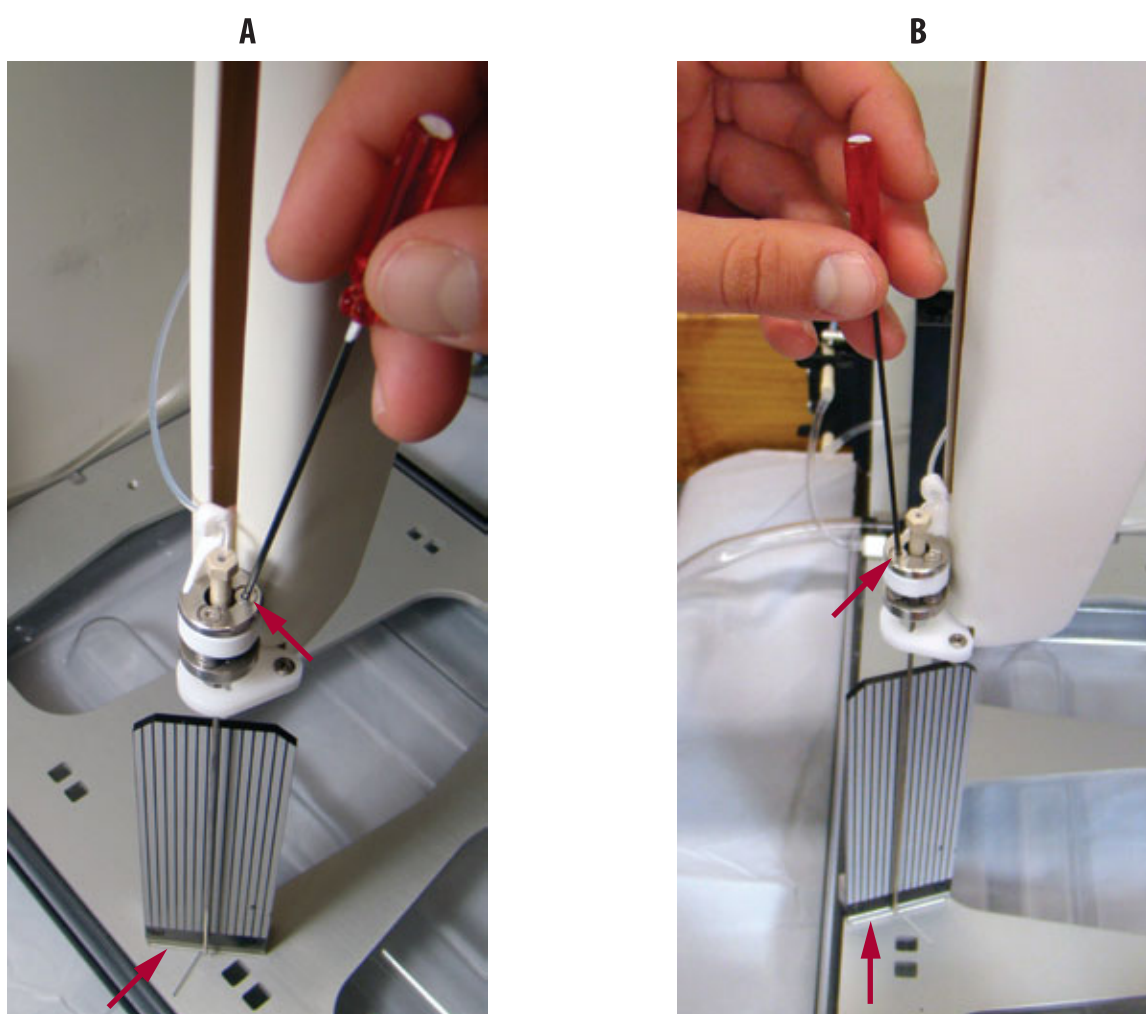
7. Place the alignment tool on the bottom plate near the sipper tube along the drawn lines with the lines on the tool facing away from the Autosampler (**Figure 2A**) or facing the particle reservoirs (**Figure 2B**).

8. **SLIGHTLY** adjust the screws on top of the sipper tube arm until the sipper tube is parallel to the alignment tool. With the tool facing away from the Autosampler, use the right screw (**Figure 2A**). When the tool is facing the particle reservoir, use the left screw (**Figure 2B**). It is important to

note that the adjustment of one screw is not independent of the adjustments of the other screw. This is why only slight adjustments are ideal.

9. Turn the alignment tool between the two positions and continue to adjust the tip until it is parallel in both orientations.

10. Once the sipper tube is aligned, it will stay aligned unless the sipper tube crashes or the tip of the sipper tube is replaced. Select **OK** to close out of the configuration.



**Figure 2.** Place the alignment tool on one of the drawn lines on the Autosampler plate with the position facing away from the Autosampler (**A**) and then position facing the particle reservoirs (**B**).