

## Sample Line, 4000

If you have not read the General Plumbing Instructions for replacing plumbing parts on the KinExA® Instrument please do so now before continuing.

The following Parts and/or Tools are required to complete this installation:

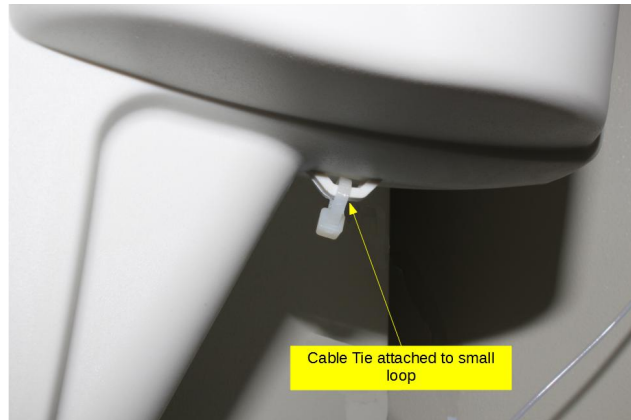
[1] *Sample Line, 4000* (344480)

[1] *15 in-oz Torque Wrench* (024140)

[1] *1/4" Deep Socket* (015902)

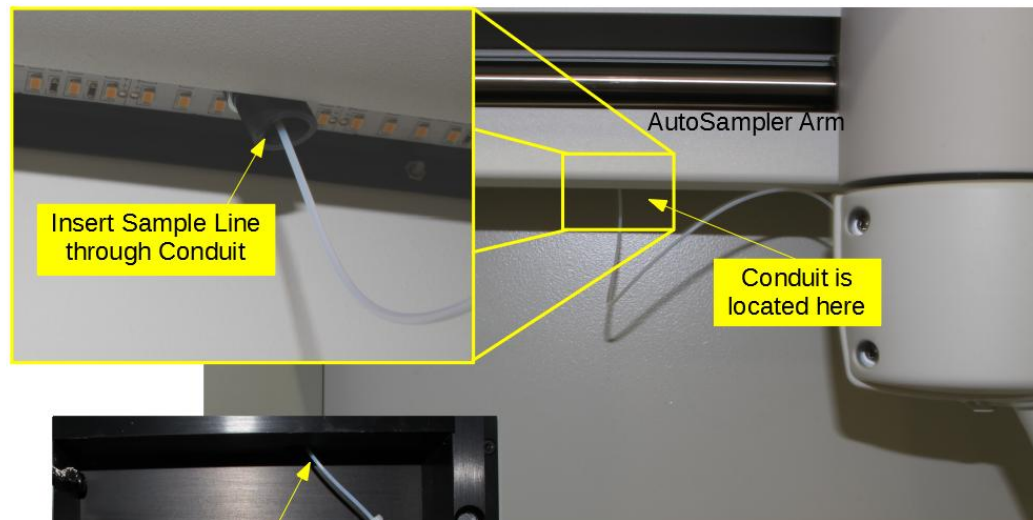
[1] *4 in Cable Tie* (619104)

- Use a 4 in Cable Tie (619104) to make a small loop as shown in **Figure 1**.

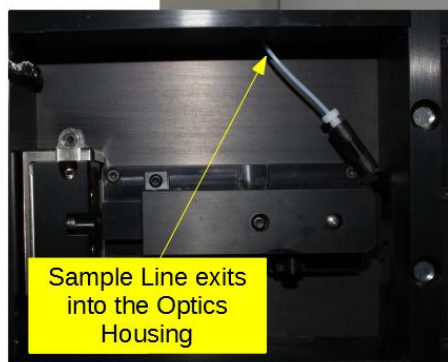


**Figure 1:** Orientation of *Cable Tie* through the loop.

- Starting from inside the Instrument, feed the *Sample Line* (344480) through the conduit until it protrudes into the *Optics Housing* as shown in **Figures 2 & 3**.



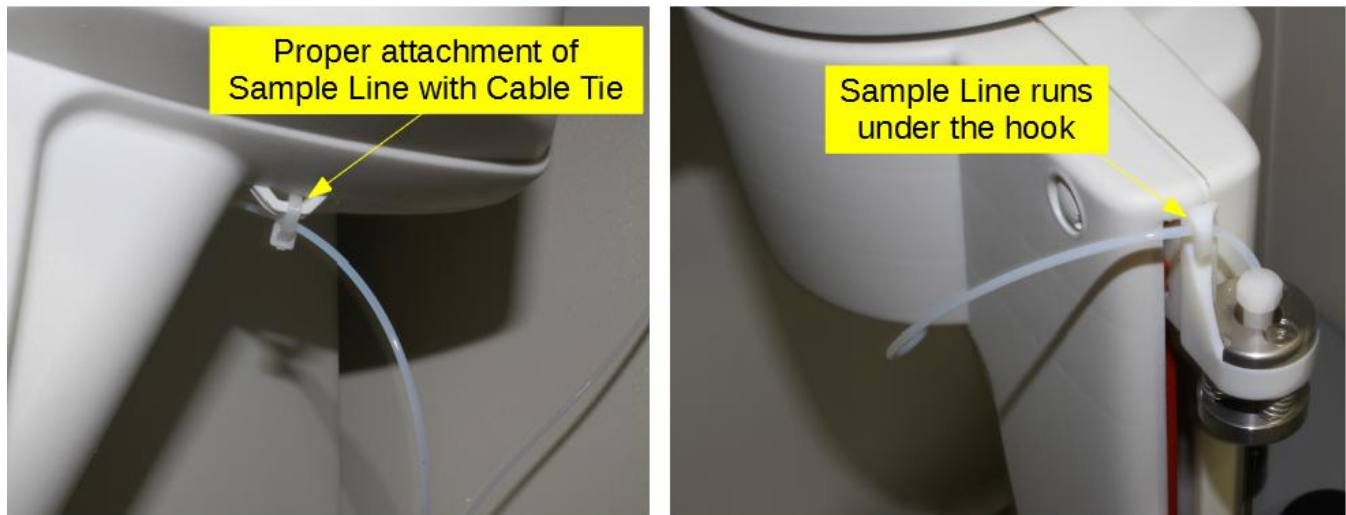
**Figure 2:** Location of *Conduit* for *Sample Line*.



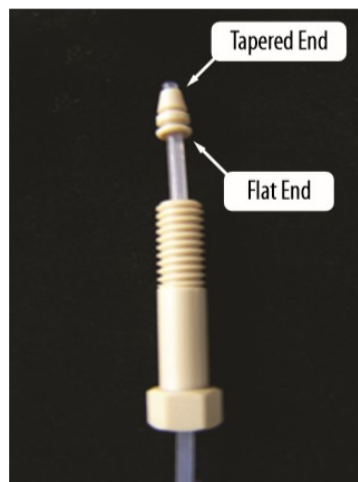
**Figure 3:** Proper exit of the *Sample Line* into the *Optics Housing*.

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- **Note: For guidance on the orientation of Ferrules, see Figure 5.**
- Attach the *Sample Line* to one side of the *Union* using the *Extra Short Nut* and the *1/16" Tan Ferrule* (included with the *Sample Line*). Torque the *Extra Short Nut* to **15 in-oz** using the *1/4" Deep socket (Q15902)* and the *15 in-oz Torque Wrench (Q24140)*.
- With the remaining length of *Sample Line*, route the *Sample Line* through the previously attached *4 in Cable Tie* on the underside of the *Sample Arm* and up to the *Sipper Tube*. Make sure the *Sample Line* is positioned under the tubing hook just above the *Sipper Tube* as seen in **Figure 4**. Attach the *Sample Line* to the top of the *Sipper Tube* using the *Short Nut* and the *1/16" Tan Ferrule* (included with the *Sample Line*) and torque to **15 in-oz**.



**Figure 4:** *Sample Line* correctly routed through the *Cable Tie* and under the tubing hook.



**Figure 5:** *Tan Ferrule* with tapered end away from *Nut*.