

Flow Cell, Siliconized, 4000, with Exit and Entry Lines

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

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

[1] Flow Cell, Siliconized, 4000, with Exit and Entry Lines (392170)

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

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

[1] Dielectric Grease (231362)

- Replace the Flow Cell by opening the Reflector Mount and removing the old Flow Cell from the Retaining Clip. Once the Flow Cell is free, the Clear Entry Line can be gently pulled down out of the conduit (in the top of the Optics Housing Frame) to reveal the Union. Remove the Clear Entry Line from the Union and discard the Ferrule but keep the Extra Short Nut, which will be reused.
- Open the Plumbing Panel and remove the Black Exit Line from the Pressure Transducer. Discard the Ferrule but keep the Black Nut to be reused. The old Flow Cell should now be completely unattached and can be removed from the Instrument.
- Thoroughly clean the Grooved Lens, the new Flow Cell, and the Reflector Mount with Denatured Alcohol and Kimwipes.

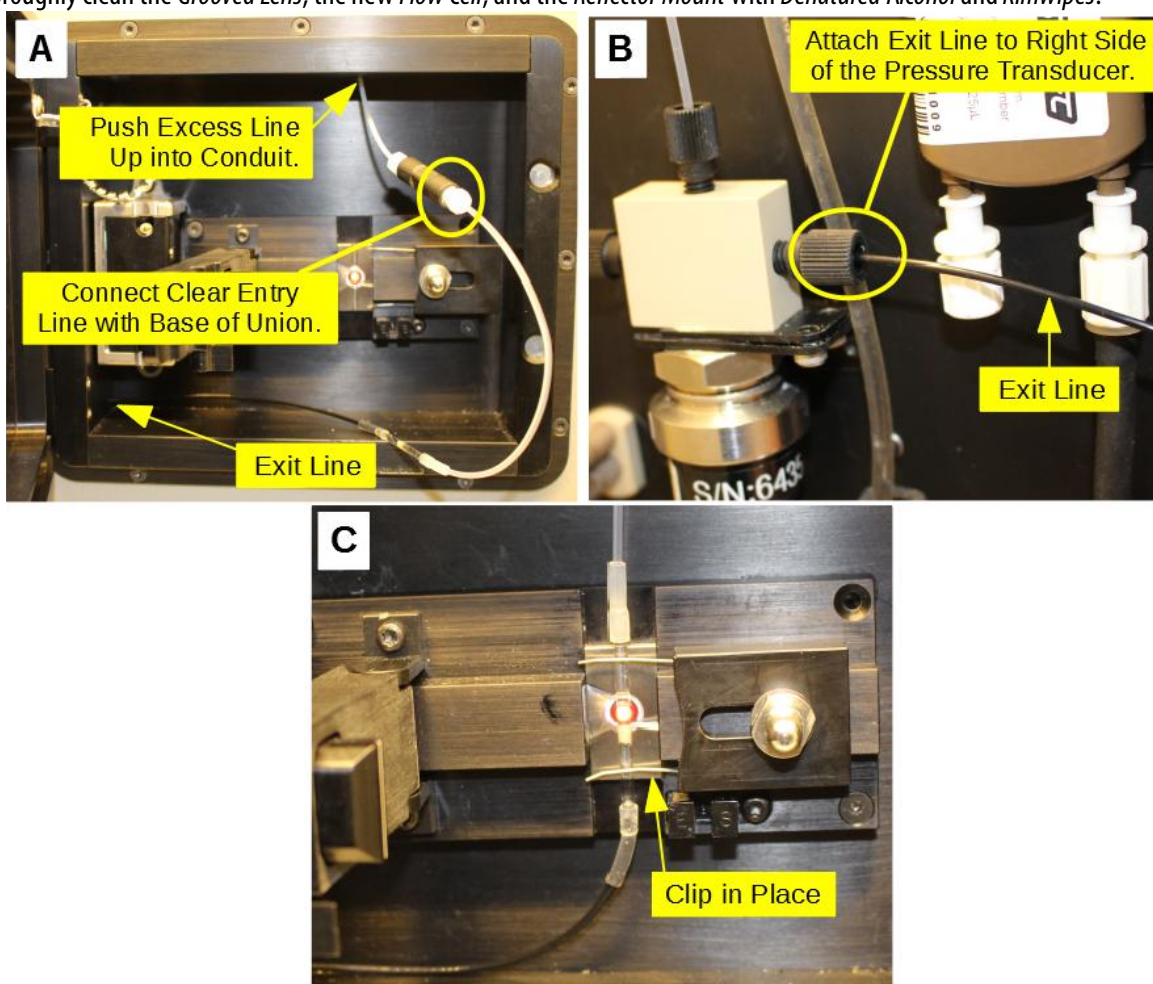


Figure 1: Routing diagram for the Flow Cell.

Note: For guidance on the orientation of the Ferrules, see Figures 2 & 3 below.

- Attach the Clear Entry Line to the Base of the Union using the Extra Short Nut and the 1/16" Tan Ferrule (included with the new Flow Cell).

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Torque the *Extra Short Nut* to 15 in-oz using the *1/4" Deep Socket (015902)* and the *15 in-oz Torque Wrench (024140)*. Route the *Clear Entry Line* upwards through the hole (located on the top of the *Optics Housing Frame*), making sure the *Union* is hidden from view. (Figure 1, A)

- Slide the *Black Exit Line* through the *O-Ring* (located on the lower left side of the *Optics Housing Frame*) and connect it into the right side of the *Pressure Transducer* using a *1/16" White Ferrule* (included with the new Flow Cell) with the saved *Black Nut*. (Figure 1, B)
- Apply a thin film of *Dielectric Grease (231362)* onto the *Flow Cell* before securing it with the *Retainer Clip* and attaching the *Reflector Mount*. (Figure 1, C)
- Align the top of the filter, represented in green below, with the notch in the *Optics Housing* as shown in Figure 4.
- Look at the camera image and fine tune the alignment so that the top of the filter is in line with the corner of the KinExA Technology logo. (Figure 5)

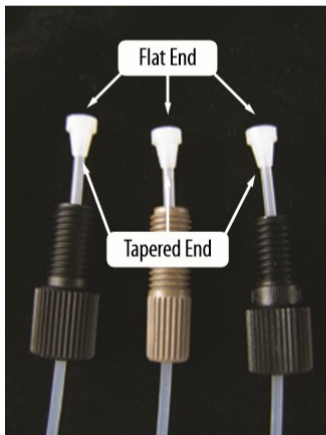


Figure 2: White Ferrule with tapered end facing the Nut.

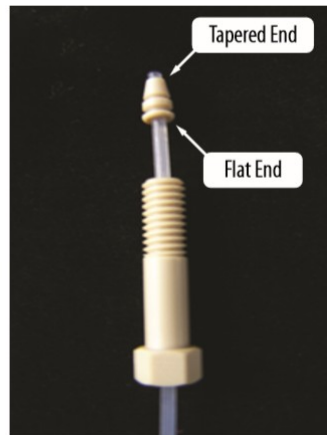


Figure 3: Tan Ferrule with tapered end away from Nut.

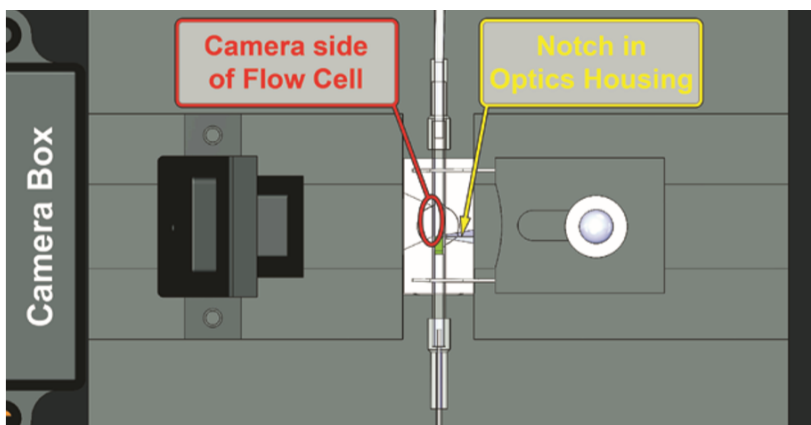


Figure 4: Proper alignment of the filter with the notch in the Optics Housing. Grease left on the camera side of the flow cell (red circle) can cause image to be blurry or cloudy. (Note: The filter is not green, the color helps to see the alignment in the illustration.)

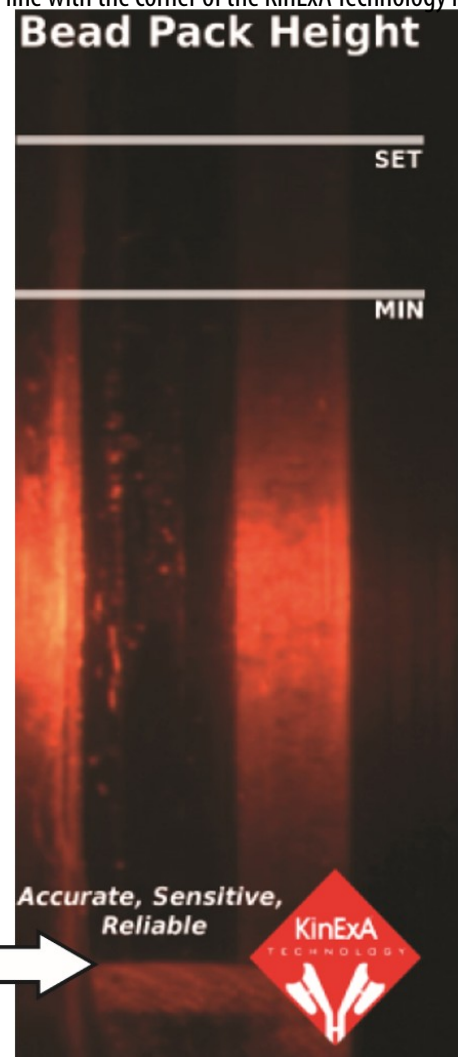


Figure 5: Camera image of a properly aligned Flow Cell.