

3781 Flow Control Orifice Cleaning

1. **NOTE: Use necessary ESD protection when handling the 3781 unit, ESD sensitive components inside.**
2. Remove the cover from the WCPC 3781 and locate the tubing and barb shown in Figure #1.

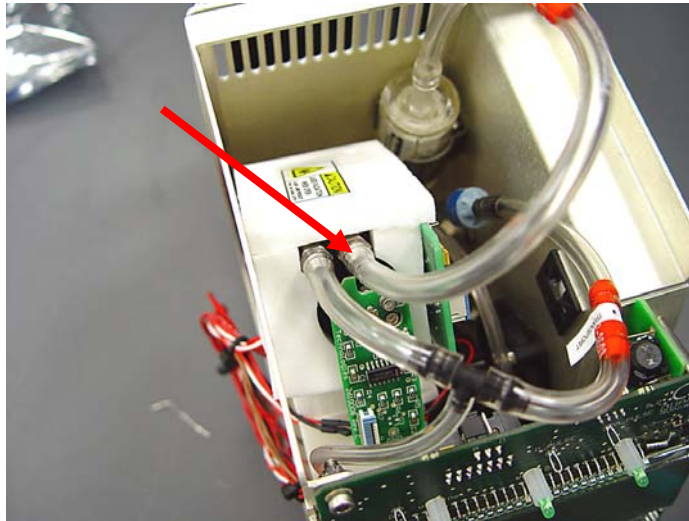


Figure #1

3. Carefully remove the tubing from the 1/8" tubing barb making sure not to collapse or damage the tubing. The use of needle nose pliers may be necessary.



Figure #2

4. Carefully remove the 1/8" barb from the optics head assembly being careful not to cause any damage to any surrounding components, refer to Figure #3.

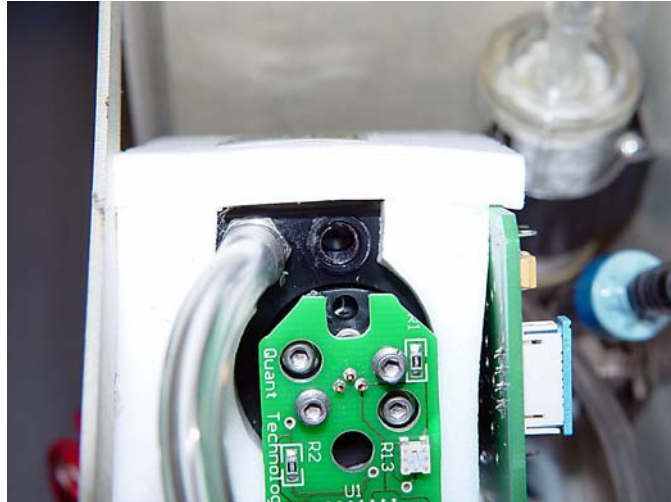


Figure #3

5. Using a flat head screwdriver back out the Flow Control Orifice as shown in Figure #4.

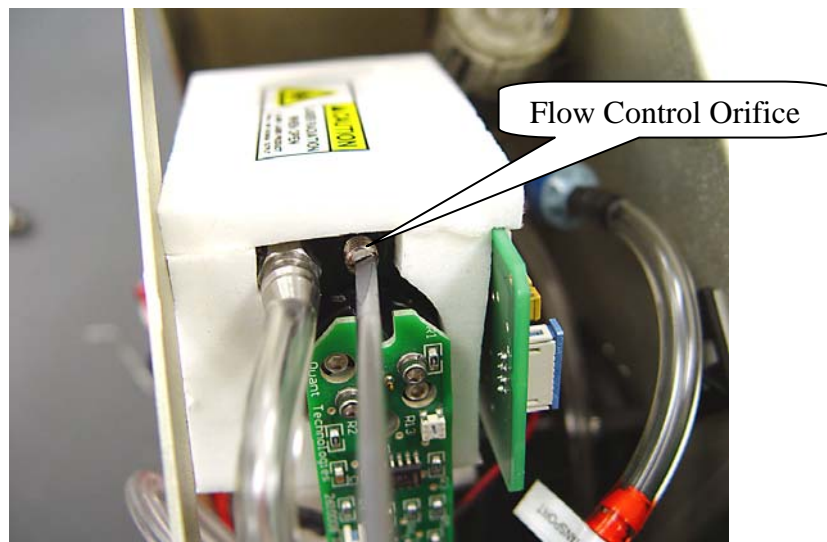


Figure #4

6. Soak the Flow Control Orifice in Isopropyl Alcohol for approximately 3-5 minutes to allow any contaminants that may be clogging the orifice to dissolve, refer to Figure #5.



Figure #5

7. Using a filtered air source blow air through the slotted end to clean out any debris which could be clogging the orifice as shown in Figure #6.



Figure #6

8. Inspect Flow Control Orifice under a microscope to verify there is no debris blocking the orifice.

9. By shining a light from the opposite side of the optics fasten the Flow Control Orifice into the threaded hole until no light can be seen through the Orifice, stop and back it out 1/2 turn. Refer to Figure #7 as an example of how the orifice should look properly installed.



Figure #7

10. Making sure the O-Ring is still on the 1/8" Fitting fasten it back onto the optics head and re-attach the tubing as shown in Figure #8.

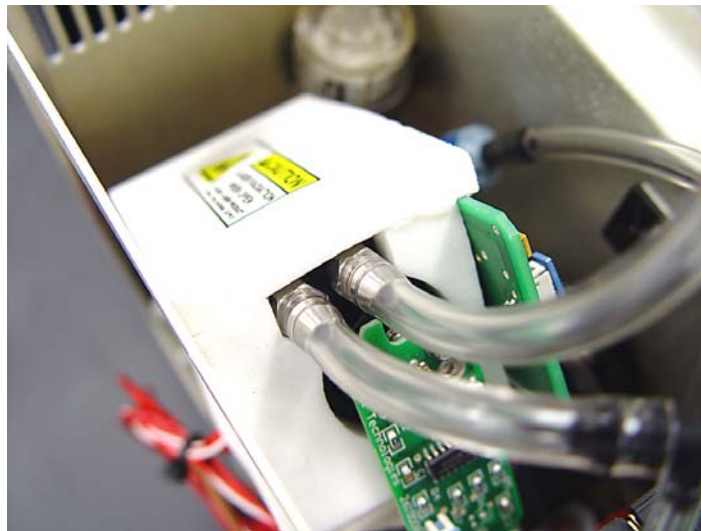


Figure #8