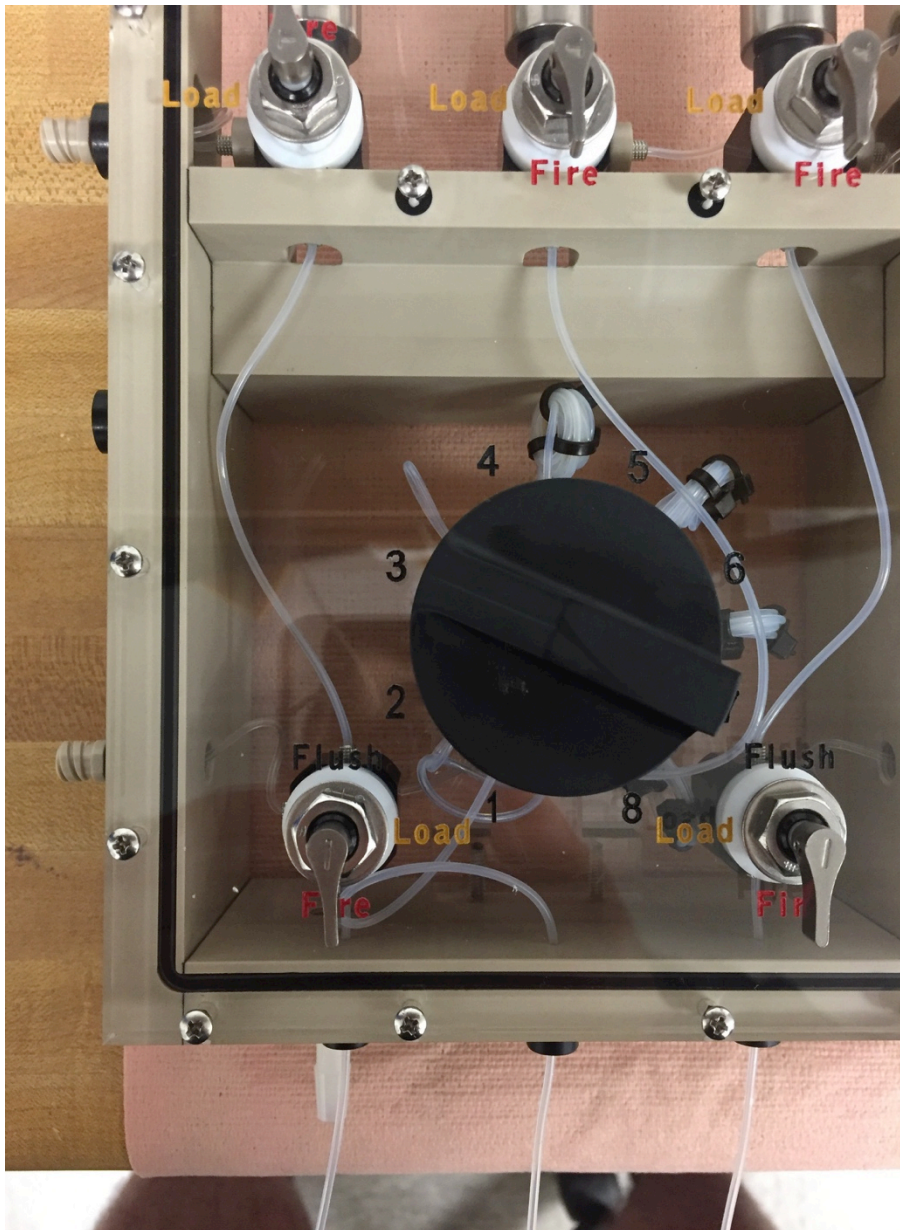
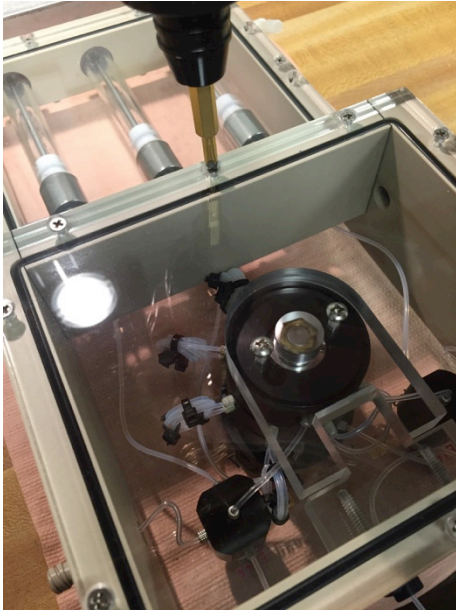


RQF Valve Replacement

1. Remove syringe box from drive stand by removing the four larger Philips head screws.
2. Place the 8-Way valve into either the #3 or #7 position so that the reaction loops are clear from the valve to be replaced.



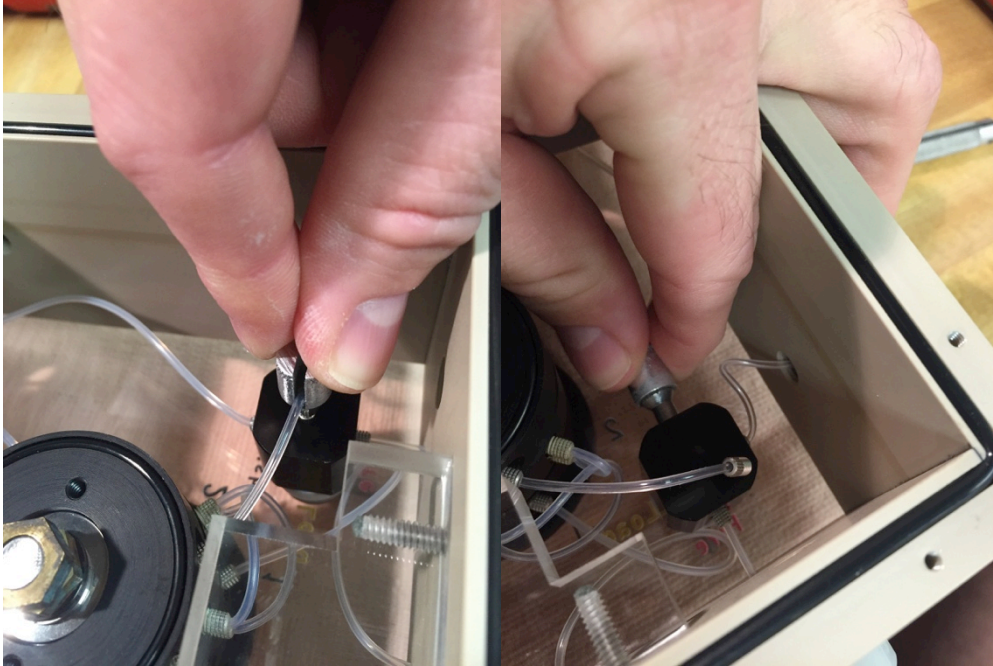
3. Flip syringe box onto its face and remove the acrylic plates by removing the screws around the edges. Note: you should never need to remove the front acrylic panel from the syringe box to service the RQF.



4. Remove the acrylic “Tombstone” from the back of the 8-way valve to give additional work space.



5. Use microtubing connector wrench to remove the Sample load loop form the back of the lower valve and the valve to valve buffer line from the top of the valve.



The flush line should remain in the valve.

6. Loosen the compression fitting, for the appropriate tubing, on the bottom of the syringe box.



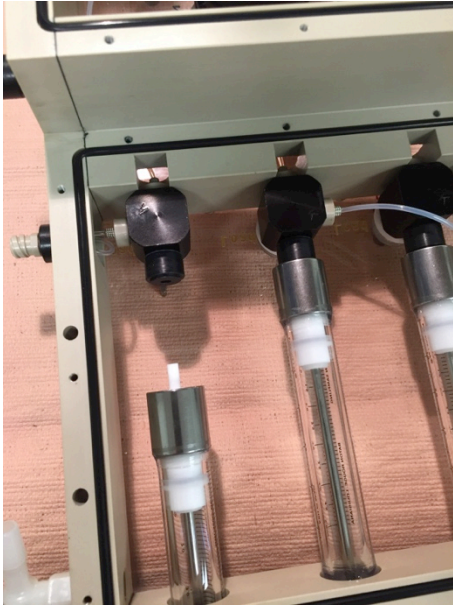
- 7. Flip the syringe box over and first remove the valve handle using the supplied 0.050" allen key. Then remove the nut that secures the valve with a 1/2" wrench.**



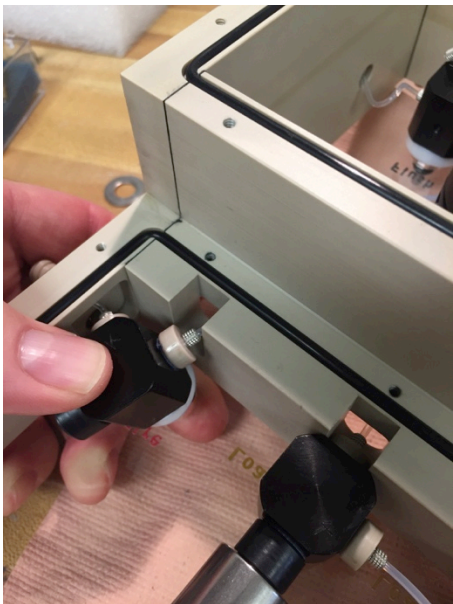
If removing the lower valve it is now free and can be removed from the syringe box. Carefully feed the flush line out of the bottom of the box. Flush line will be reused in new valve as will the white Teflon spacer on the stem of the valve.

- 8. For upper valve replacement you must also remove the upper acrylic panel from the back of the syringe box and remove the valve handle and securing nut in the same manner as the lower valve.**

- 9. Remove the syringe from the upper valve. The syringe is a press fit into the adapter on top of the valve. Carefully twist and pull the back of the syringe while also applying pressure at the tip of the syringe.**



- 10. With the nut on the valve removed you can now remove the upper valve. Note that the valve-to-valve buffer line should still be attached as well as the load loop to the side of the box.**



- 11. Use microtubing wrench to remove load loop from the minstac valve adapter.**



- 12. Upper valve removed from the syringe box. Note that all fittings are in place as is the valve-to-valve buffer line. The plastic fittings (2x minstac adapters, syringe adapter and Teflon spacer) will all be reused on the replacement valve.**



13. Reinstallation is reverse of removal. Thread sealant or Teflon tape may be used on the plastic fittings to ensure a leak free seal but nothing should be used on the minstac fittings. Do not over tighten and of the fittings into the valves as this can lead to premature valve failure. Once you feel the fitting bottom out in the bore turn an additional $\frac{1}{4}$ turn to ensure a good seal.