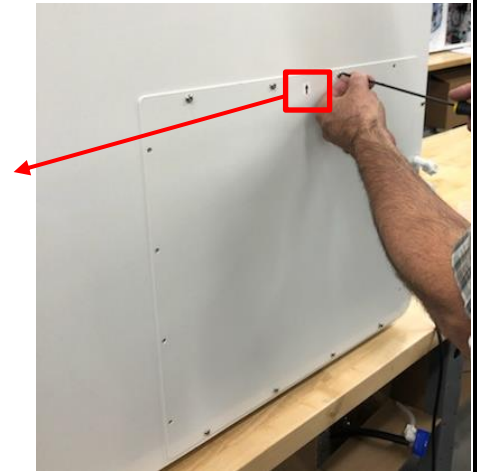


This service procedure details how to replace or upgrade the Check Valve. Please contact ANKOM Technology for further assistance.

1. Turn off and unplug the instrument. The nitrogen can stay connected.

2. Use a 1/8" Hex Driver to remove the (16) Electrical Panel screws from the back of the instrument. Next remove the panel.

**IMPORTANT:** Maintain the same top edge orientation when the panel is reinstalled. The arrow on the panel indicates which edge is on top.



3. Use an adjustable wrench to slightly loosen the hex nut on the rear panel nitrogen fitting while keeping the nitrogen connected.



4. Using the same 1/8" Hex Driver, remove the (20) Rear Panel screws from the back of the instrument.

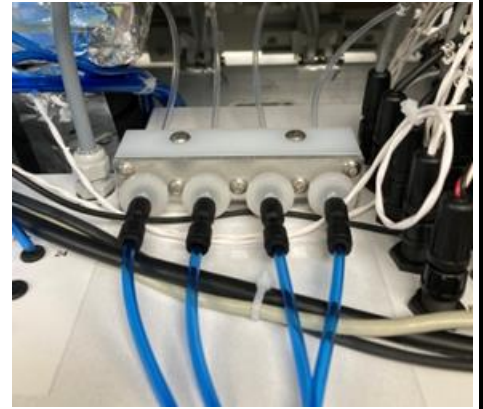


5. Slide the nitrogen fitting out of the slot in the Rear Panel and remove the panel from the instrument.

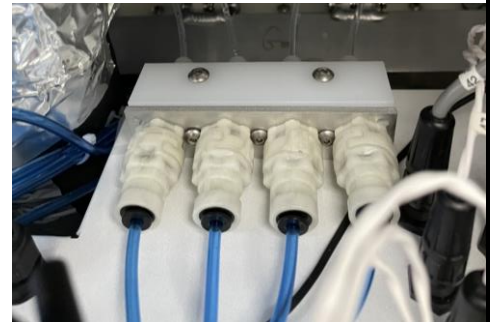


6. Locate the Check Valve Manifold near the center of the instrument.

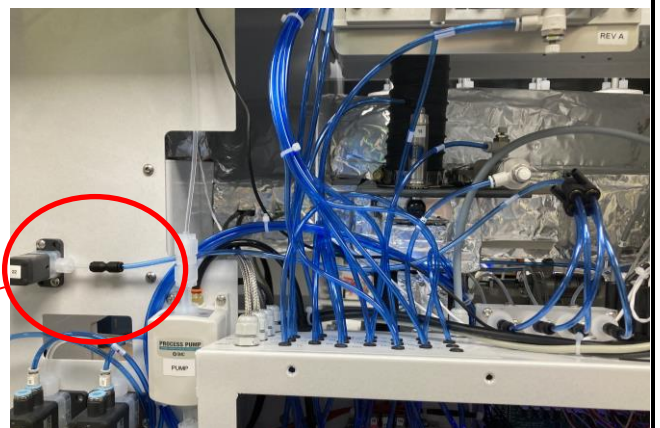
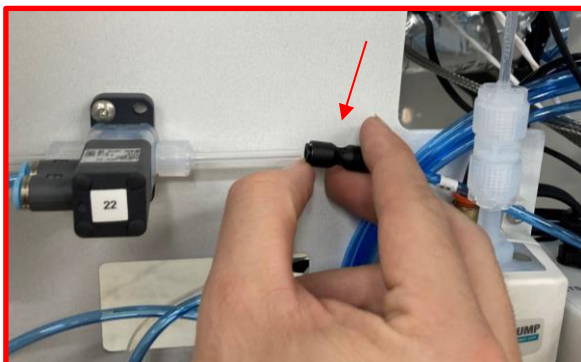
**NOTE:** Check Valve appearance may vary. All Check Valve iterations can be successfully replaced with FLEX71.



Example of a former FLEX71 iteration



7. On the left-hand side of the instrument, remove the black straight connector from the 1/8" clear tubing by squeezing inward on the inner ring at the end of the tube and pulling away.



8. Remove the old assembly.
  - a. To remove the FLEX71 iteration that resembles Figure 1, remove all (7) screws and take off the plate, valves, tubing, and O-Rings. Remove the old assembly.



Figure 1

- b. To remove the FLEX71 iteration that resembles Figure 2, remove the three screws between the check valves with a Hex wrench to separate the plate from the manifold. Remove the old assembly.

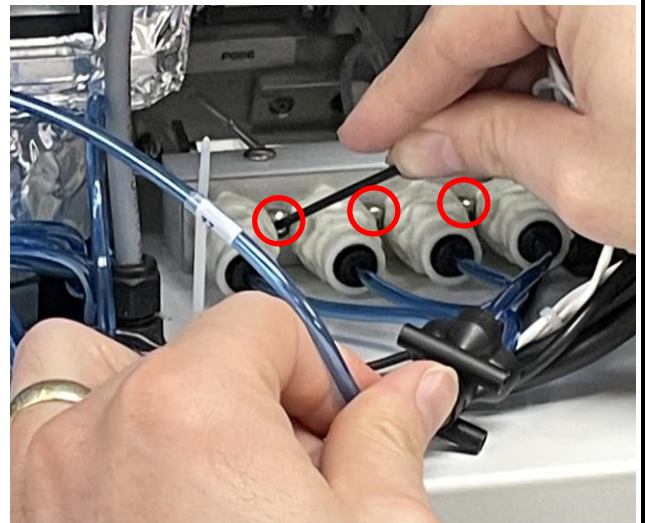
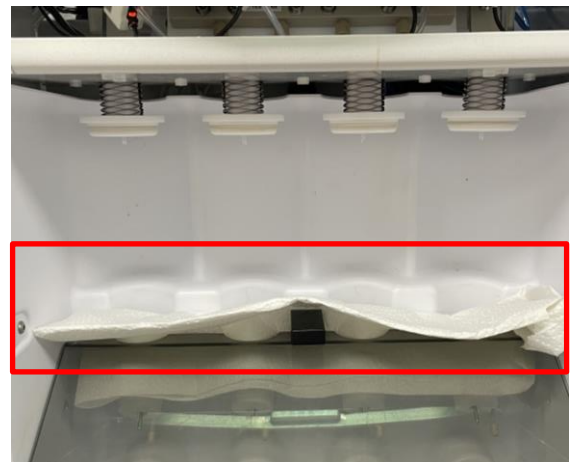
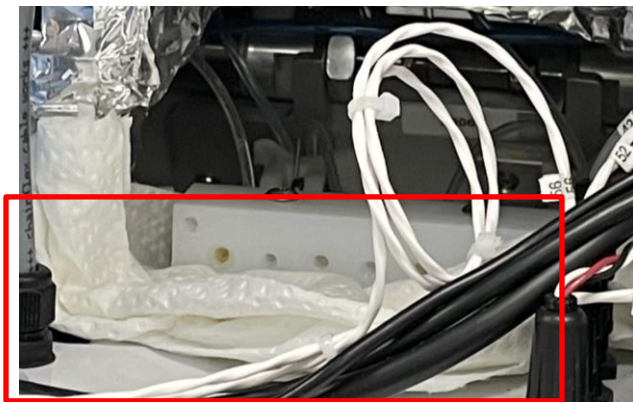


Figure 2

9. Upon removing the old assembly, rinse the lines.
 

To begin, place a piece of paper towel below the manifold and another beneath the column nozzles.

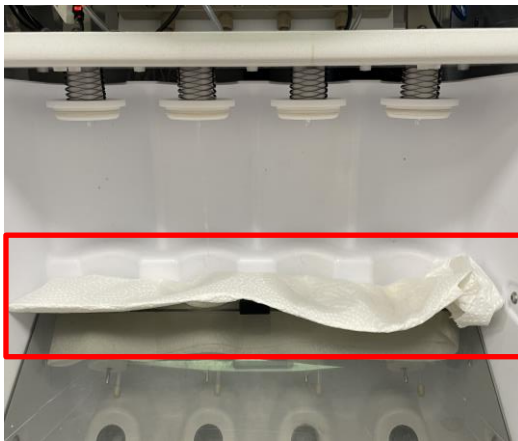


10. Fill a syringe with 5-10ml of water.

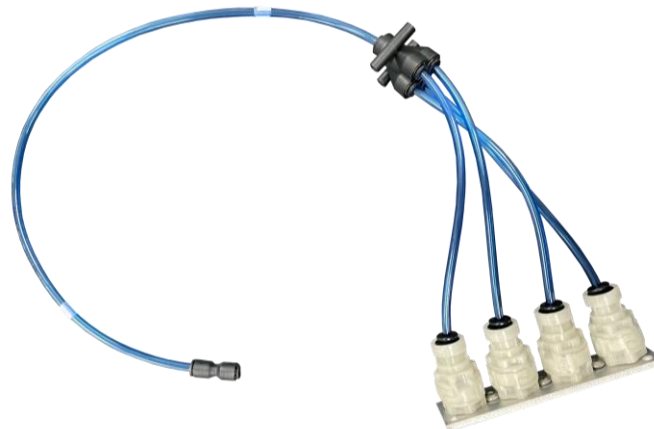


11. Inject the water through each of the lines.

Water will drip from the column nozzles onto the paper towel below. Be careful not to flood the lines too quickly and spill much water on the electrical cabinet.



12. Ensure you have received the FLEX71 Check Valve Assembly.



13. To install the new FLEX71 Check Valve Assembly, reconnect the connectors in opposite procession.

Reconnect the black straight connector first (first image), making sure to run the blue tubing behind the blue tubes in the foreground as shown (second image).

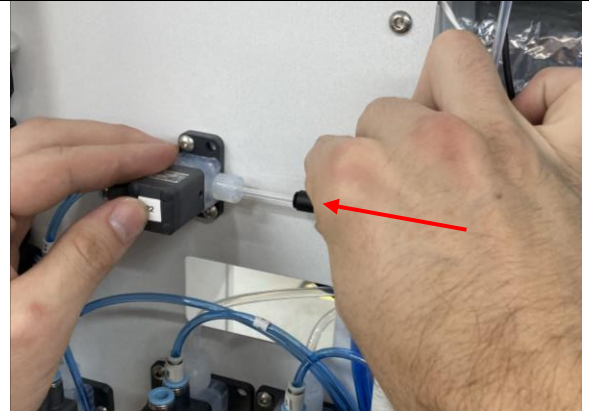


Figure 1

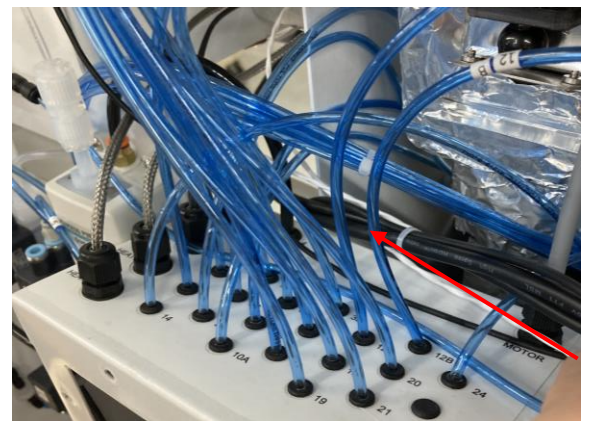
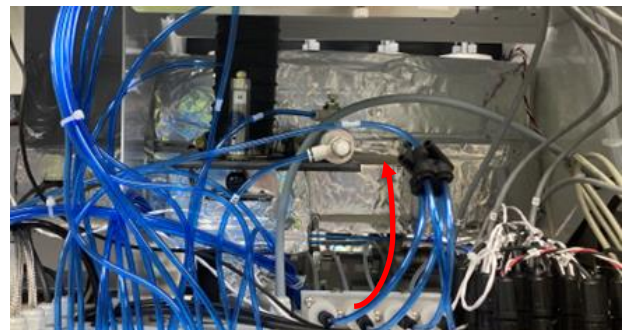
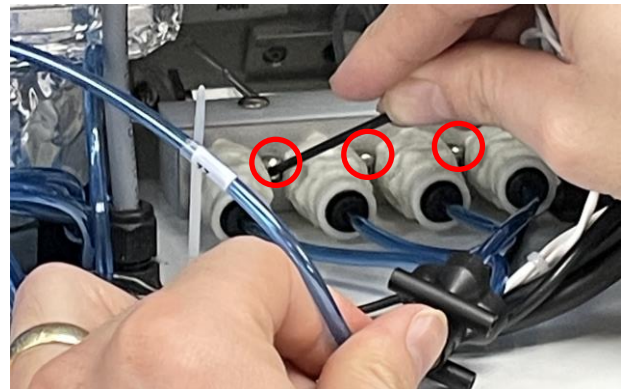


Figure 2

14. Align the plate with the manifold and reposition the three screws between each check valve into their slots between the manifold. Once in place, tighten each screw evenly with the Hex wrench to ensure all are secure with the same tension.

Run the nitrogen lines to sweep upwards so that they do not interfere when reinstalling the back panel.



15. **IMPORTANT:**

Make sure no gap is left between the plate and the manifold.

Figure 1 shows correct placement.

Figure 2 shows the incorrect gap.



Figure 1



Figure 2

16. Reinstall the instrument back and panel onto the instrument.

17. Run a pressure check to confirm that the FLEX71 Check Valve Assembly has been properly installed.

Refer to service procedure “Manual Pressure Check (FL020)” for further instructions.