

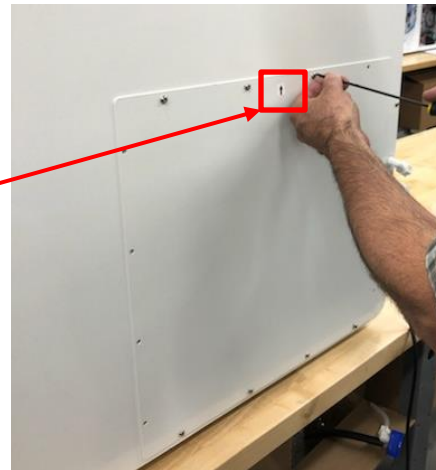
1. From the HMI Command Center, make sure the Vent Valve is in the Open position.



2. Turn off the instrument and unplug. Leave the nitrogen on and connected.

3. 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.



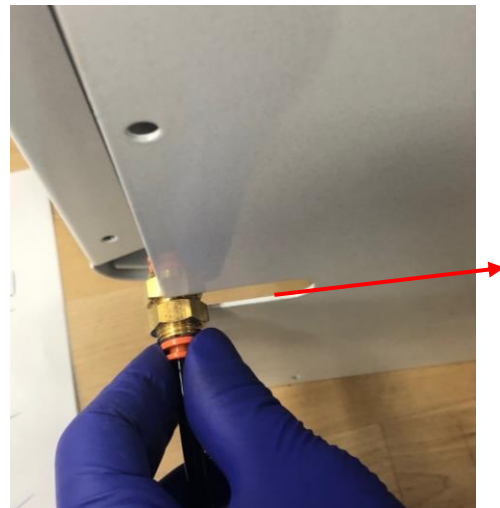
4. Use an adjustable wrench to slightly loosen the hex nut on the rear panel nitrogen fitting while keeping the nitrogen connected.



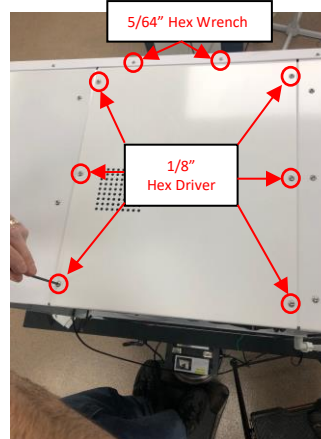
5. Using the same 1/8" Hex Driver, remove the (20) Rear Panel screws from the back of the instrument.



6. Slide the Nitrogen fitting out of the slot in the Rear Panel and remove the panel from the Instrument.

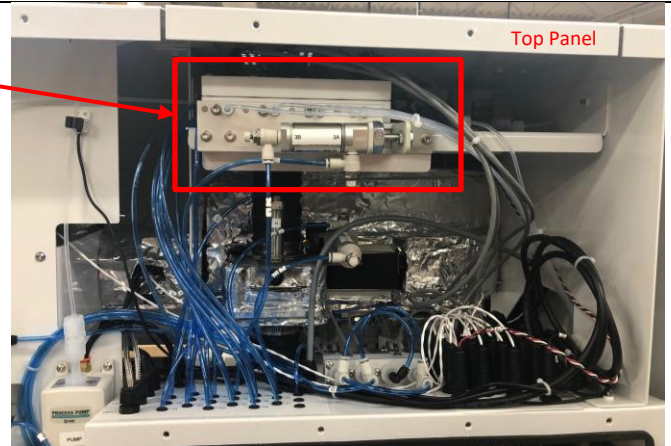


7. Use the 5/64" Hex Wrench to remove (2) screws and the 1/8" Hex Driver to remove the (6) screws from the top panel of the instrument. Slide the panel to the back of the instrument to remove it.

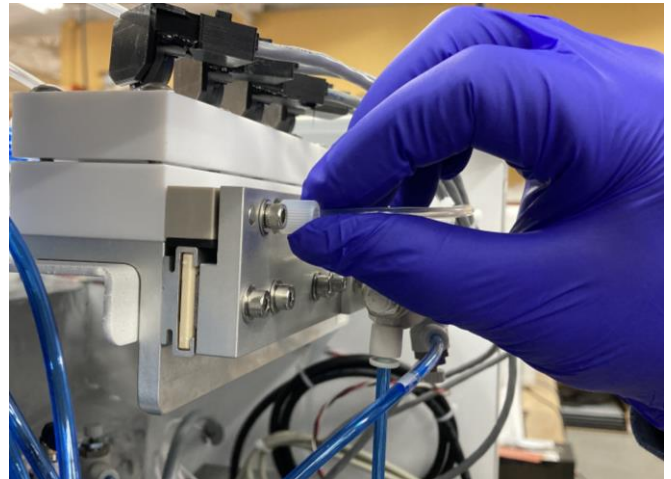


8. Locate the Vent Valve near the top of the instrument.

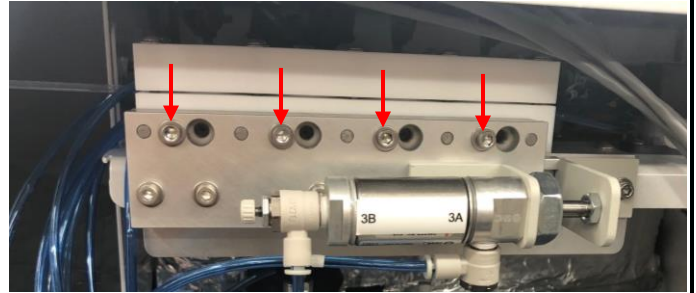
(The top panel will not be in place like the picture shows when performing this procedure since it was previously removed)



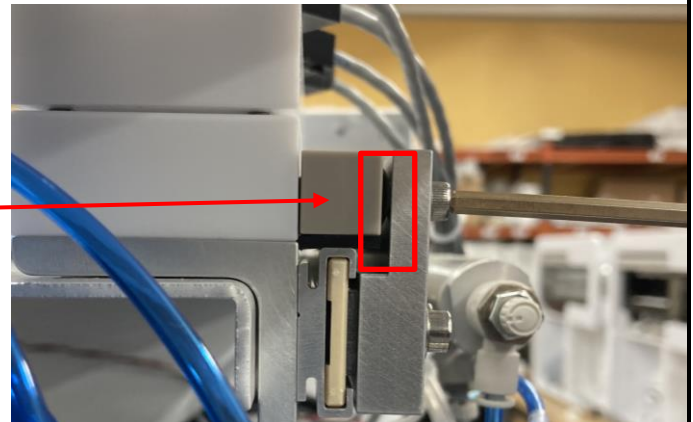
9. While wearing gloves, unscrew the four tube fittings from the back of the Valve.



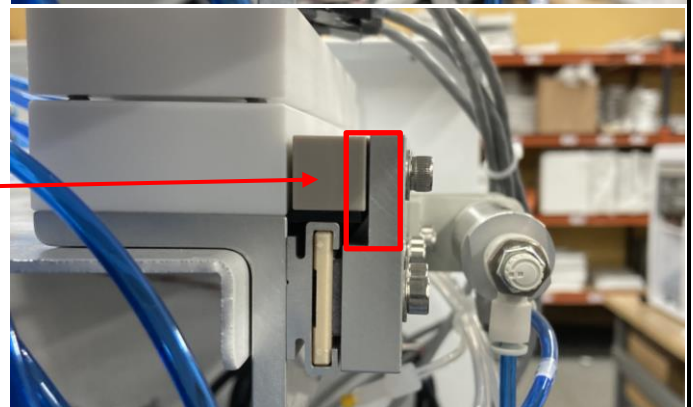
10. Using a 9/64" Hex Wrench, tighten the four screws on the Connector plate until the gap between the plate and the Slide Bar is closed.



Before screws are tightened



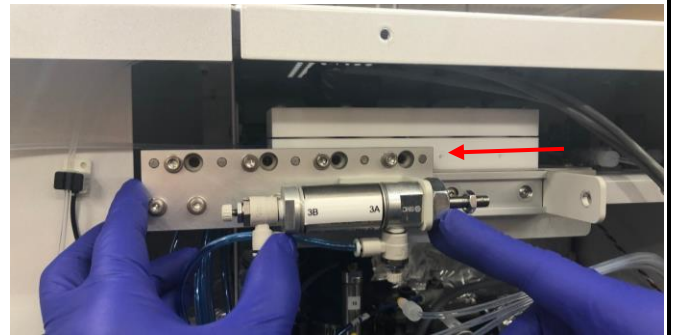
After screws are tightened



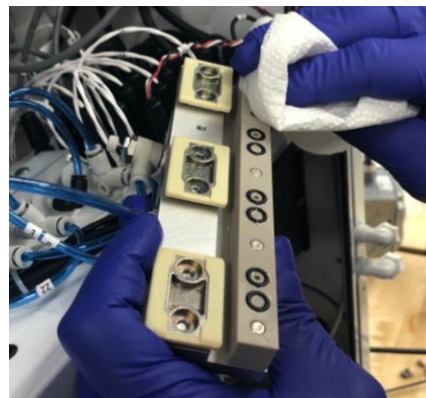
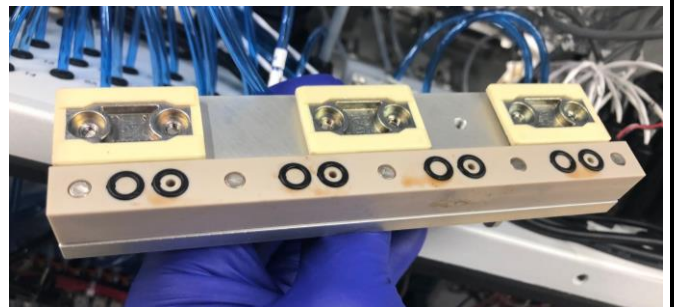
11. Use an adjustable wrench to remove the hex nut on the end of the air cylinder.



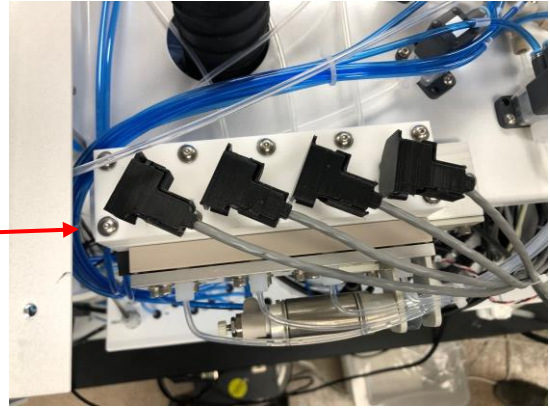
12. Slide the Connector plate to the left to remove it from the instrument.



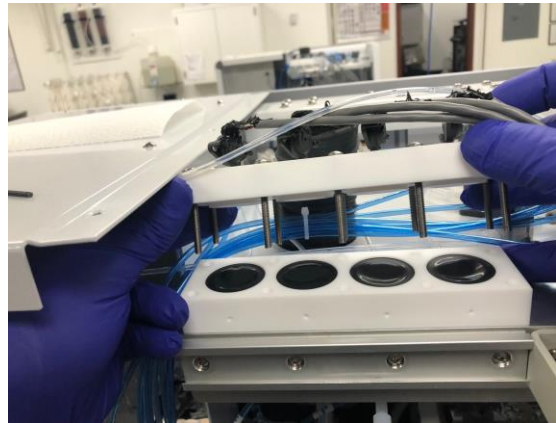
13. Inspect the Slide Bar for residue. If residue is present, clean the bar using a paper towel dampened with distilled water. Wipe until clean. Do not use any sharp objects which may damage the seals.



14. Use the 3/32" Hex Driver to fully unthread the (10) screws on the Top Manifold, the screws can remain in the manifold.

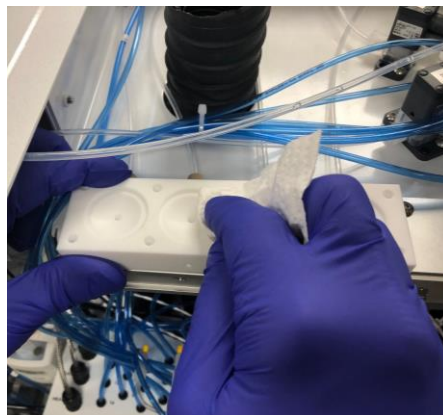
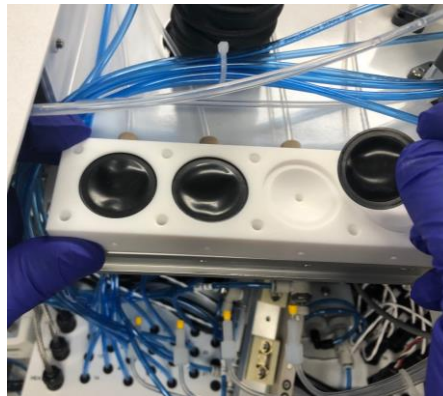


Lift the Top Manifold up and place it to the side.

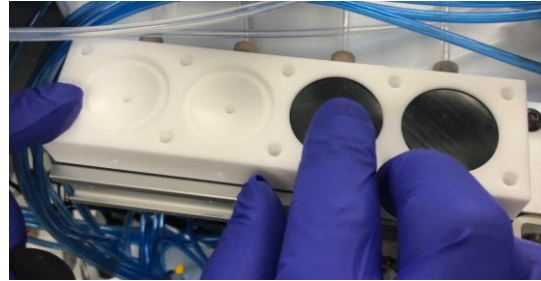


Remove the (4) diaphragms and dry any residual liquid.

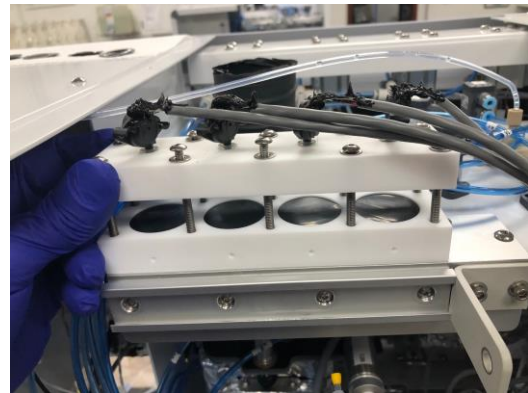
Note that the Lower Manifold will be detached from the mounting bracket.



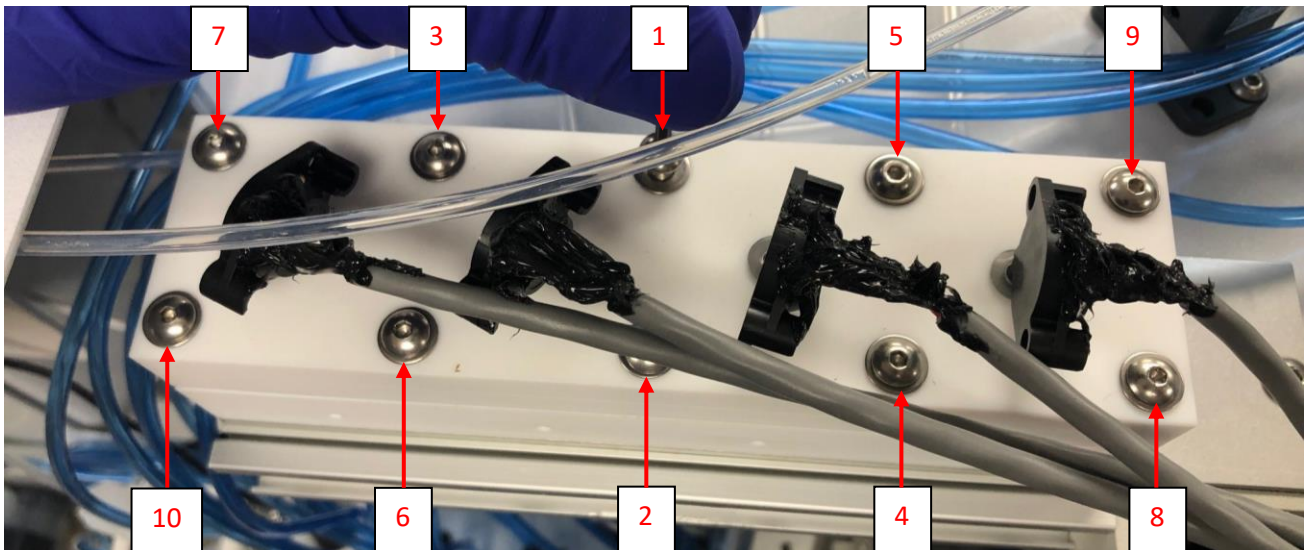
15. Clean the Lower Manifold with distilled water and place the new diaphragms in the cavities.



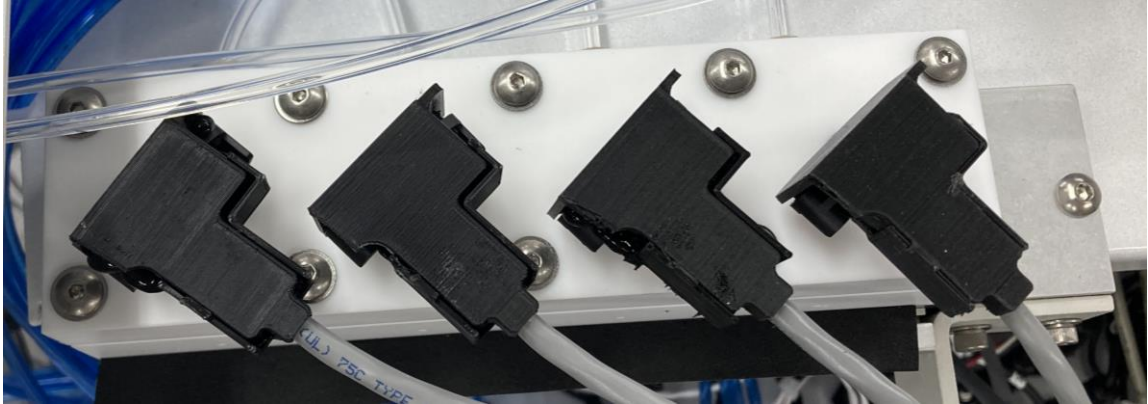
16. Reinstall the Top Manifold and screws. Make sure the manifolds are properly aligned to each other and the screw holes in the mounting bracket.



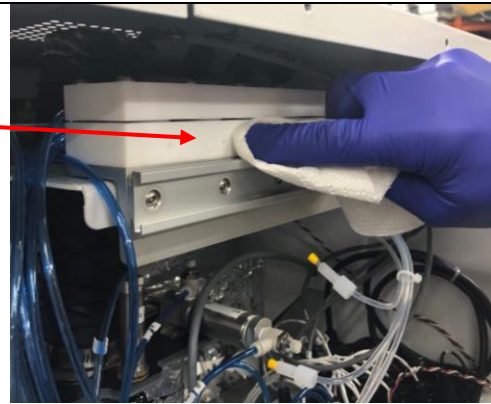
17. Tighten the screws in the following numbered pattern until they just contact the manifold (finger tight). Repeat the pattern (2) more times turning the screws 1/8 turn each time.



Note: In some models, Vessel Low Pressure Sensor Assemblies 1,2,3, and 4 (#FLEX19) will resemble the image below.

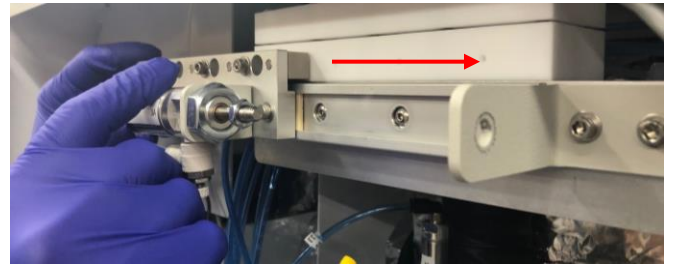


18. With a paper towel dampened with distilled water, wipe the face of the white manifold. Ensure that the four holes are not blocked.



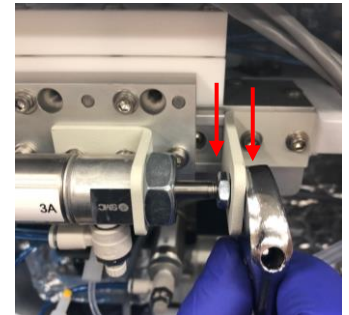


19. Slide the Connector back into the carriage rail. Move it to the right to engage the air cylinder rod back into the bracket. Reinstall and tighten the nut on the end of the air cylinder.

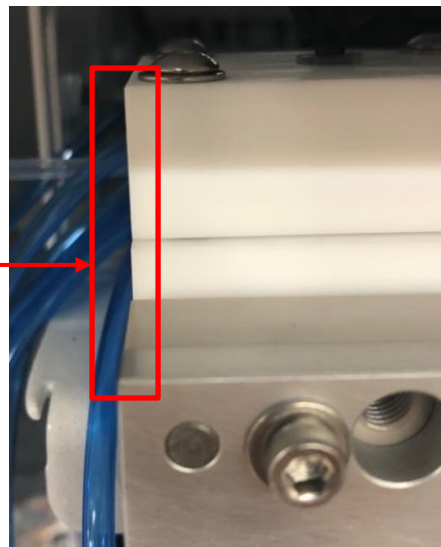


20. Verify that the end of the Slide Bar is even with the edge of the white manifold. If it is not, the two nuts on the end of the air cylinder must be adjusted to align the Slide Bar.

Adjustment Required



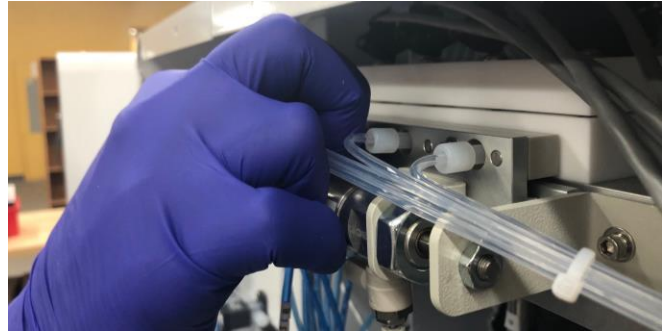
Properly Aligned



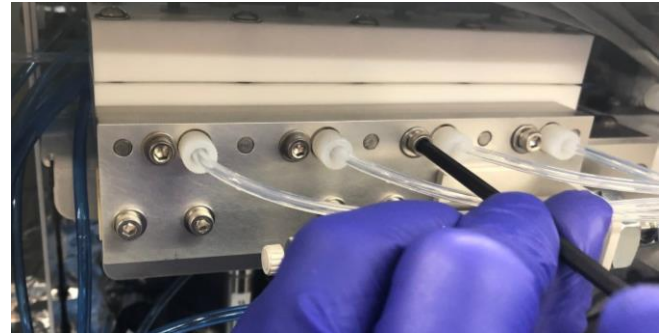
21. Verify that the two nuts on the air cylinder are both tight against the bracket.



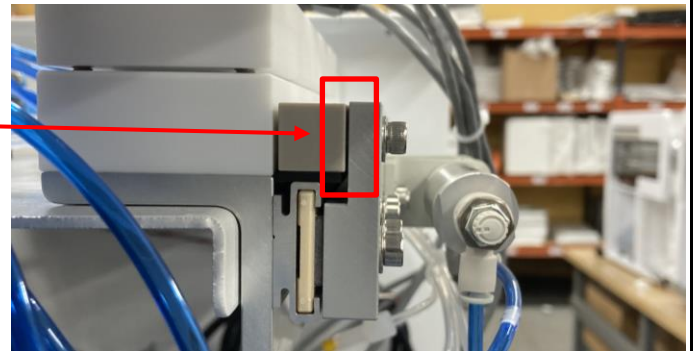
22. Reinstall the four tube fittings into the back of the Valve.



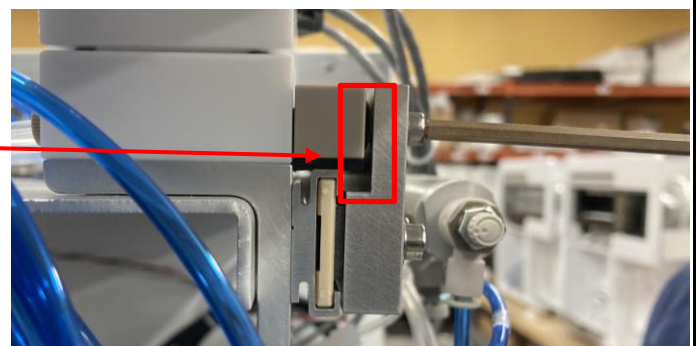
23. Loosen the four screws on the Connector plate until the gap reappears between the plate and the Slide Bar. The washer on the screw should be able to move freely once loosened.



Before screws are loosened



After screws are loosened



24. Run a pressure check to confirm that the vessels are holding pressure when the Vent Valve is closed. Refer to service procedure “FLS020- Manual Pressure Check” for further instructions.

25. Reinstall the top panel.

26. Reinstall and tighten the nitrogen fitting to the rear panel.

27. Reinstall the rear panel and screws.

28. Reinstall the electrical panel and screws.