FLEX

Service Procedure 028

Revised: 10/11/2023

The FLEX32 Vent Valve Assembly contains seals that should be replaced if leakage occurs. Vent Valve Assemblies marked "Rev A"," utilize two types of seals, O-Ring part # 9147 and a dual seal O-Ring part # 9148.

O-Ring (part# 9147)



No Rev: Qty 8 Rev A: Qty 0

Dual Seal-Slide Bar

(part# 9148)



No Rev: Qty 0 Rev A: Qty 4 A kit is supplied with the instrument which contains the required tools.



1. From the Command Center screen on the HMI, open the "Vent Valve" toggle.



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

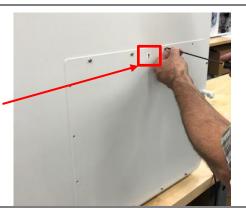


FLEX

Service Procedure **028**Revised: 10/11/2023

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 orientation when the panel is reinstalled. The arrow on the panel indicates which edge is the 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.





FLEX

Service Procedure **028**Revised: 10/11/2023

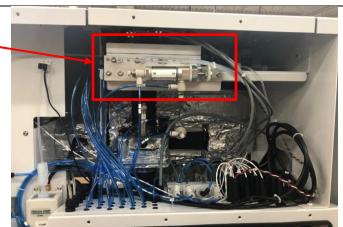
6. Slide the nitrogen fitting out of the slot in the Rear Panel and remove the panel from the Instrument.



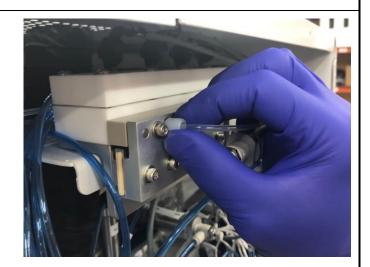
7. Locate the vent valve near the top of the instrument.







8. While wearing gloves, unscrew the four tube fittings from the back of the valve.





FLEX

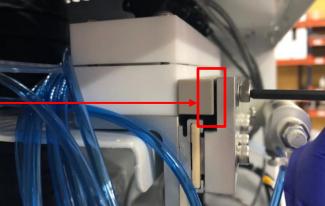
Service Procedure **028**

Revised: 10/11/2023

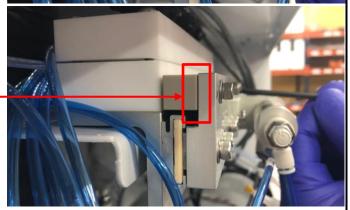
9. Using a 9/64" Hex Wrench, tighten the four screws on the connector plate until the gap between the plate and the slide bar is closed.



Before screws are tightened



After screws are tightened





FLEX

Service Procedure $\mathbf{028}$

Revised: 10/11/2023

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

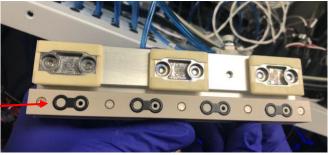


11. Slide the connector plate to the left to remove it from the Instrument.



12. 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.

Rev A vent valve pictured



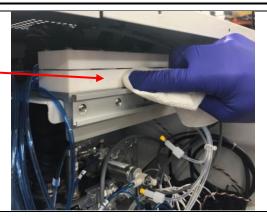




FLEX

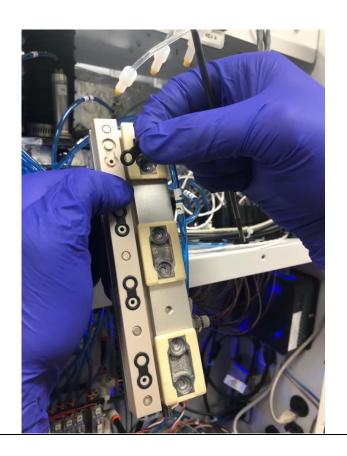
Service Procedure **028**Revised: 10/11/2023

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



14. Locate the small entry hole on the o-ring groove. Place the 90 Degree Angled Pick at the edge of the hole and gently push the point into the rubber o-ring and lift it from the groove. Avoid damaging the groove with the pick. Remove all four of the o-rings.



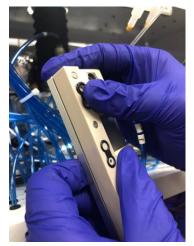




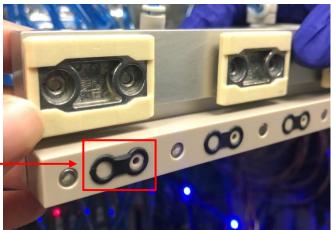
FLEX

Service Procedure **028**Revised: 10/11/2023

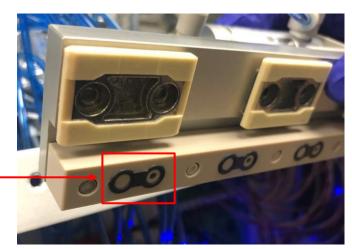
15. Install new o-rings. Ensure that they are pushed all the way into the grooves.



This is an example of an incorrect seal. It is not pushed all the way into the groove.



This is an example of a correct seal. It is pushed all the way into the groove.





FLEX

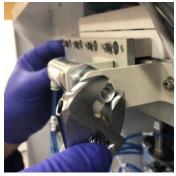
Service Procedure **028**Revised: 10/11/2023

16. Slide the connector back into the carriage rail. Move it to the right to insert the air cylinder rod back into the bracket. Reinstall and tighten the nut on the end of the air cylinder.











FLEX

Service Procedure 028

Revised: 10/11/2023

17. Verify that the end of the slide bar is even with the edge of the white manifold. If it is not, readjust the two nuts on the end of the air cylinder to align the slide bar.

Adjustment Required











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





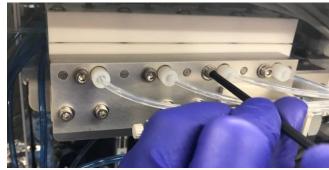
FLEX

Service Procedure **028**Revised: 10/11/2023

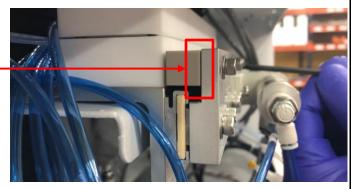
19. Reinstall the four tube fittings into the back of the valve.



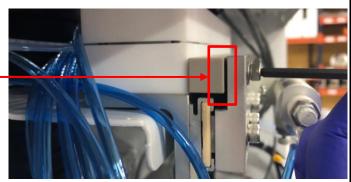
20. Loosen the four screws on the connector plate until the gap reappears between the plate and the slide bar. The washer on the screw should be able to move freely once loosened.



Before screws are loosened



After screws are loosened



21. Run a pressure check to confirm that the vessels are holding pressure when the vent valve is closed. Refer to service procedure "FLSO20 Manual Pressure Check" for further instructions.



Service Procedure **028**

FLEX Revised: 10/11/2023 22. Reinstall and tighten the nitrogen fitting to the rear panel. 23. Reinstall the rear panel and screws. 24. Reinstall the electrical panel and screws.