

Humidity Generation and Calibration Equipment

THUNDER SCIENTIFIC
CORPORATION THE HUMIDITY SOURCE

Model 2500

Regulator Replacement Procedure



Tech Support Document TSD-0214
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623 WYOMING BLVD. SE



ALBUQUERQUE, NM 87123-3198
WWW.THUNDERSCIENTIFIC.COM



TEL: 505.265.8701
FAX: 505.266.6203

2500 Regulator Replacement Procedure

1. Turn the power off to the 2500 generator.



2. Turn off the air supply.



3. Remove the air supply line from the back of the system using a 9/16" wrench.



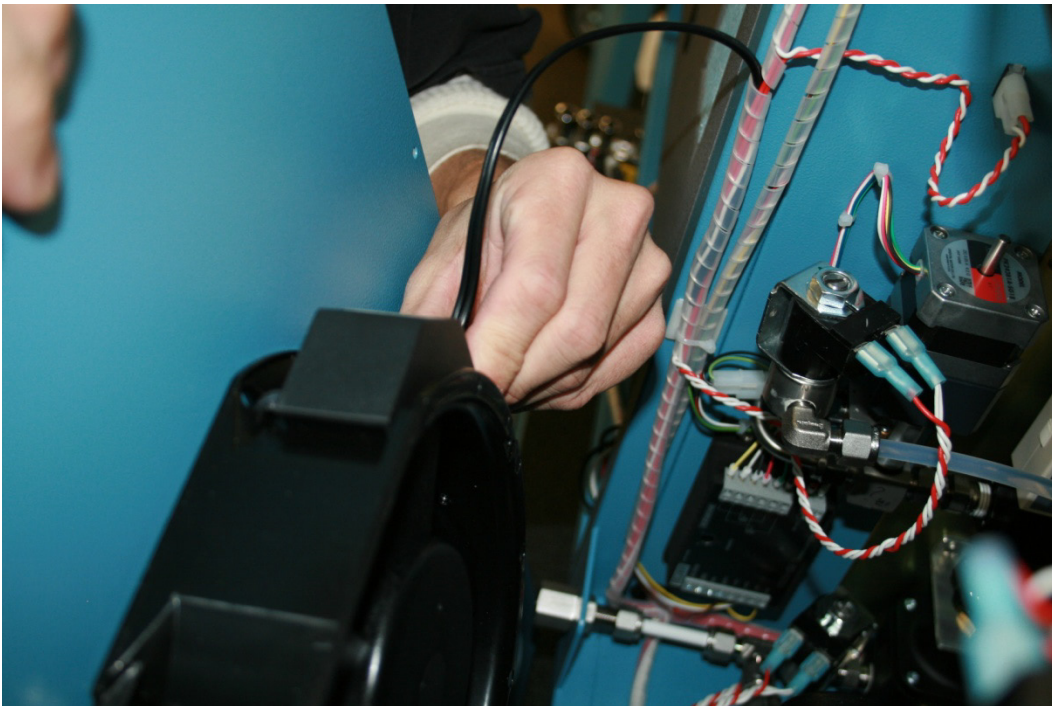
4. Remove the power plug from the rear of the system.



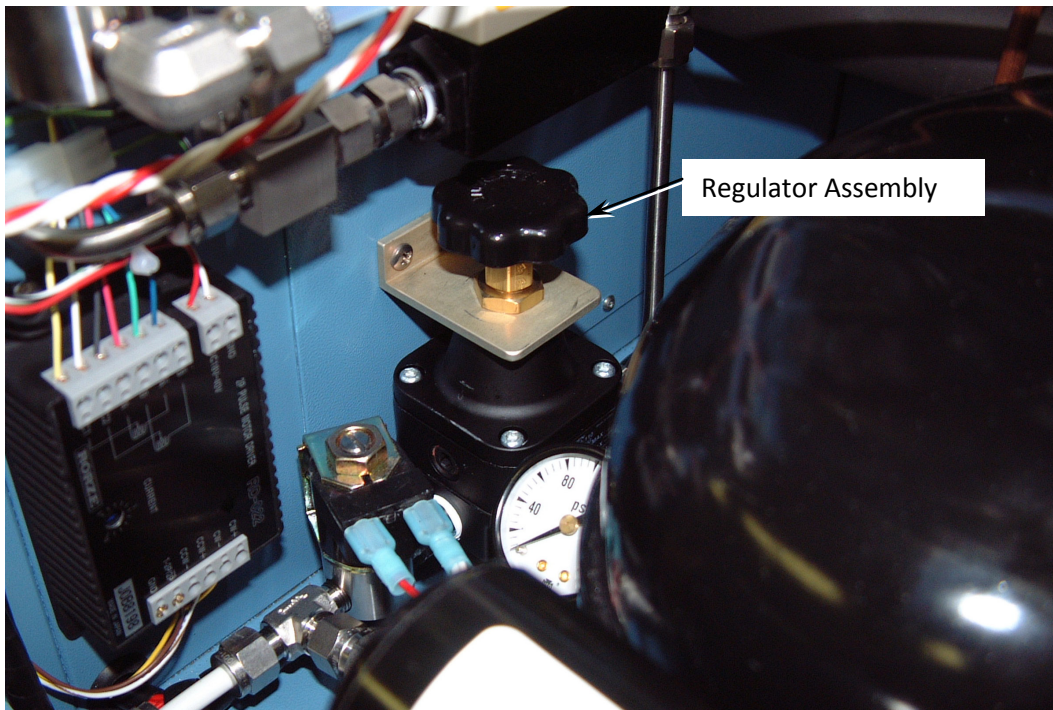
5. Remove the rear right hand panel screws and panel. Using the Torx screw driver provided.
Note: hold the panel while removing the screws.



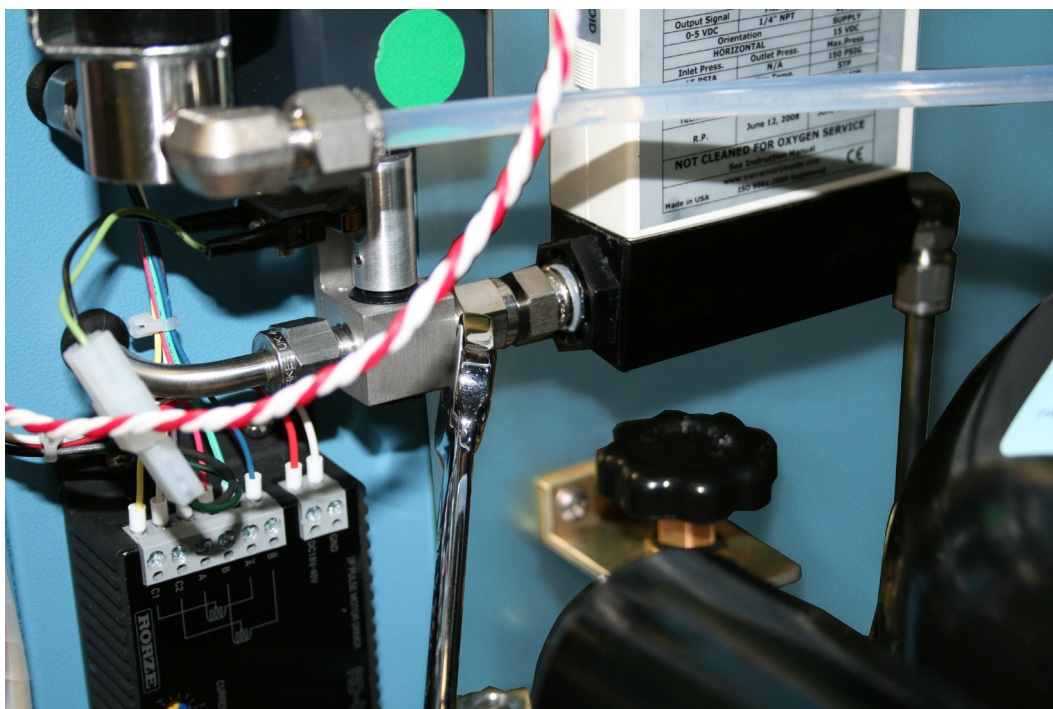
6. Remove the fans power cord connector.



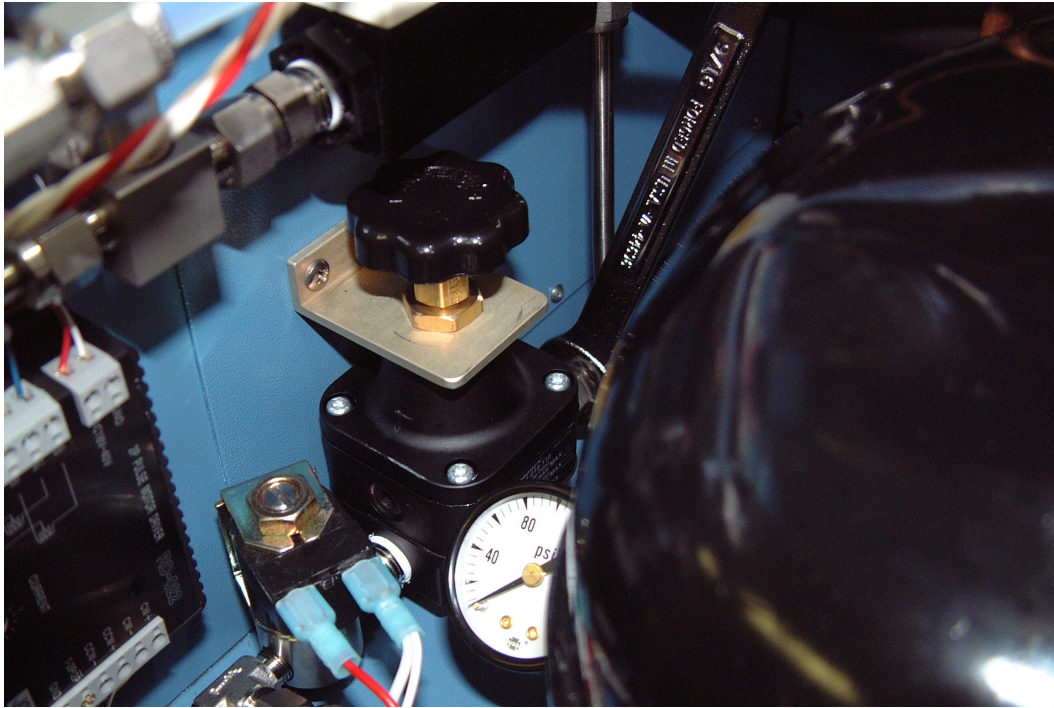
7. Locate the regulator mounted on the center panel.



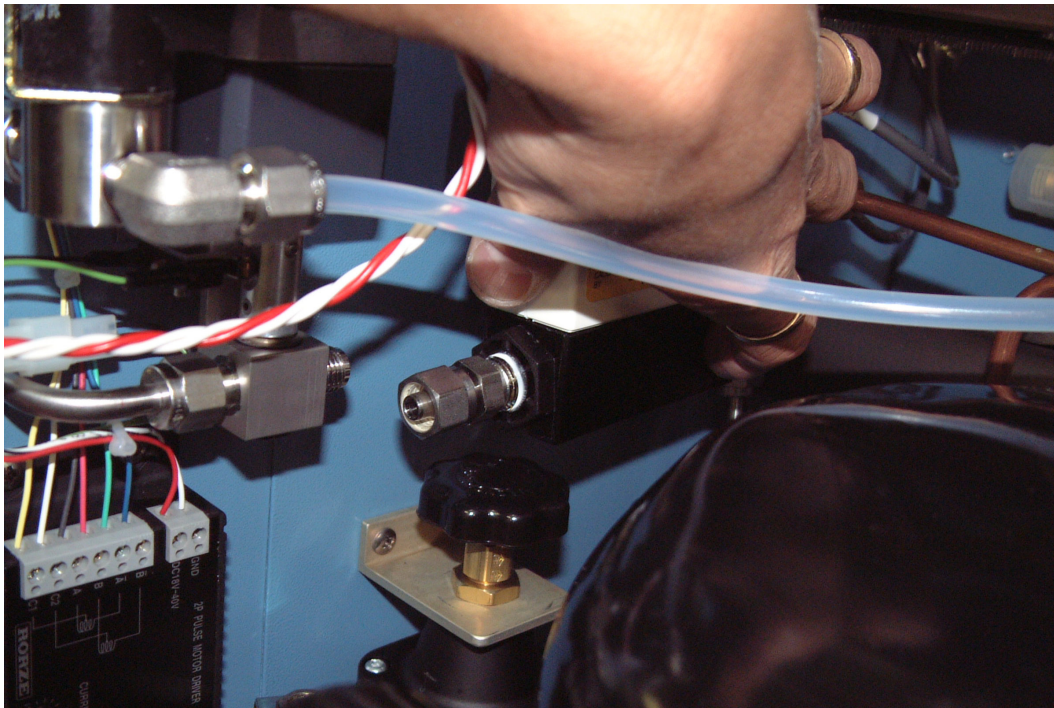
8. Remove the flow meter located just above the regulator using a 9/16" wrench removing the left swage nut first.



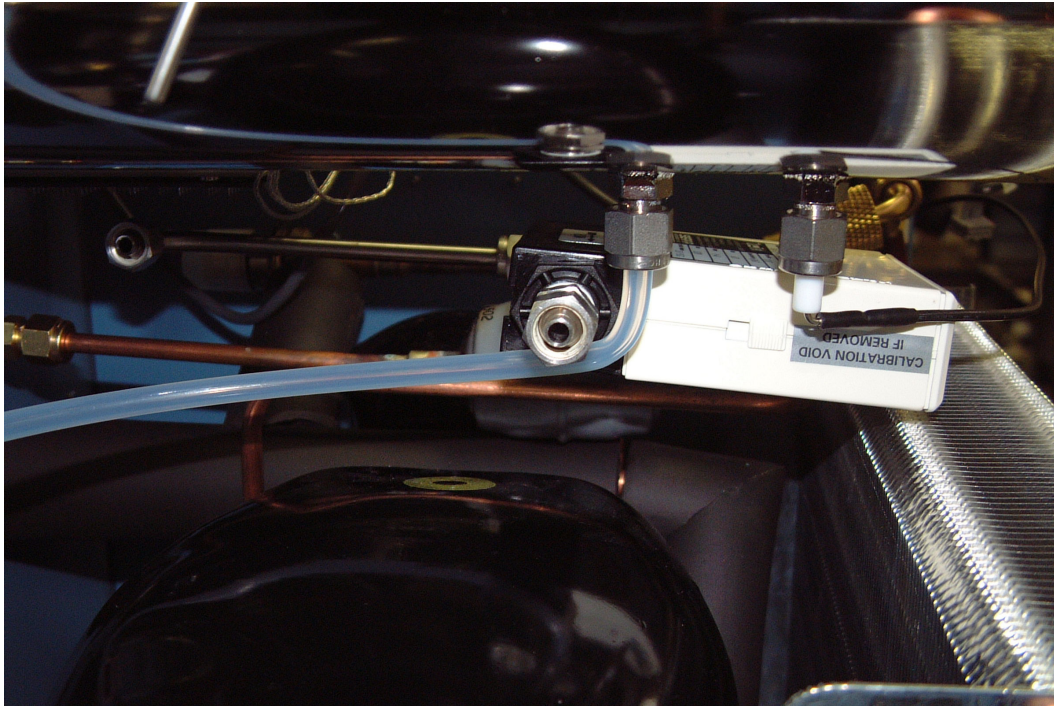
9. Remove the lower swage nut located on the right side of the regulator.



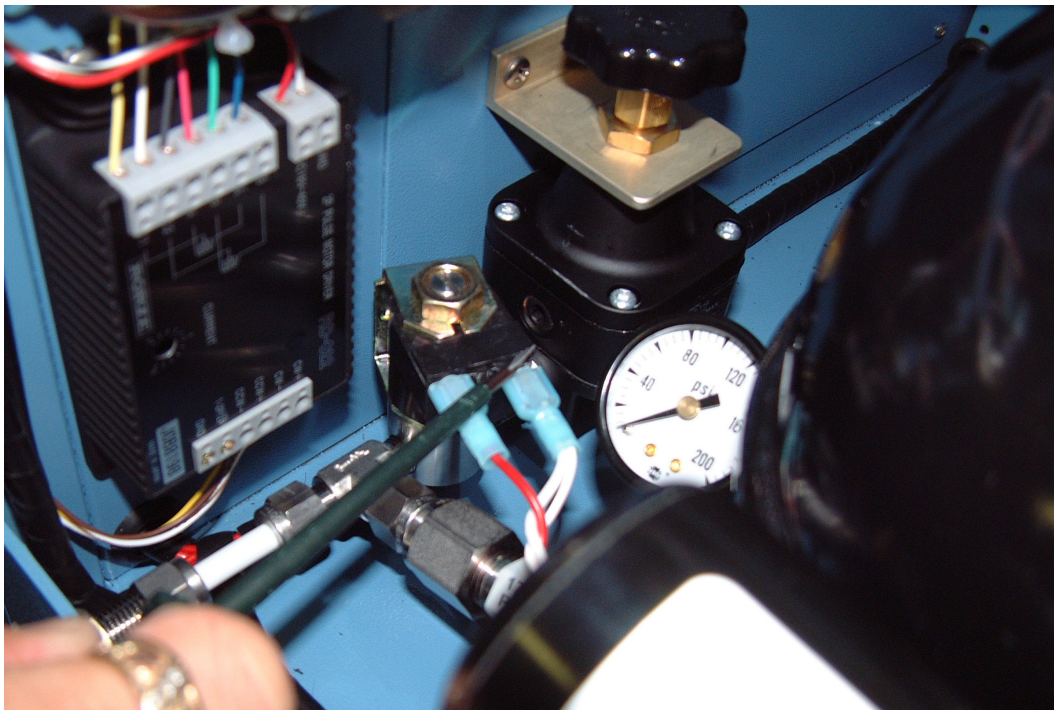
10. Lift up the flow meter and rotate it clockwise so that it lays horizontal over the compressor assembly.



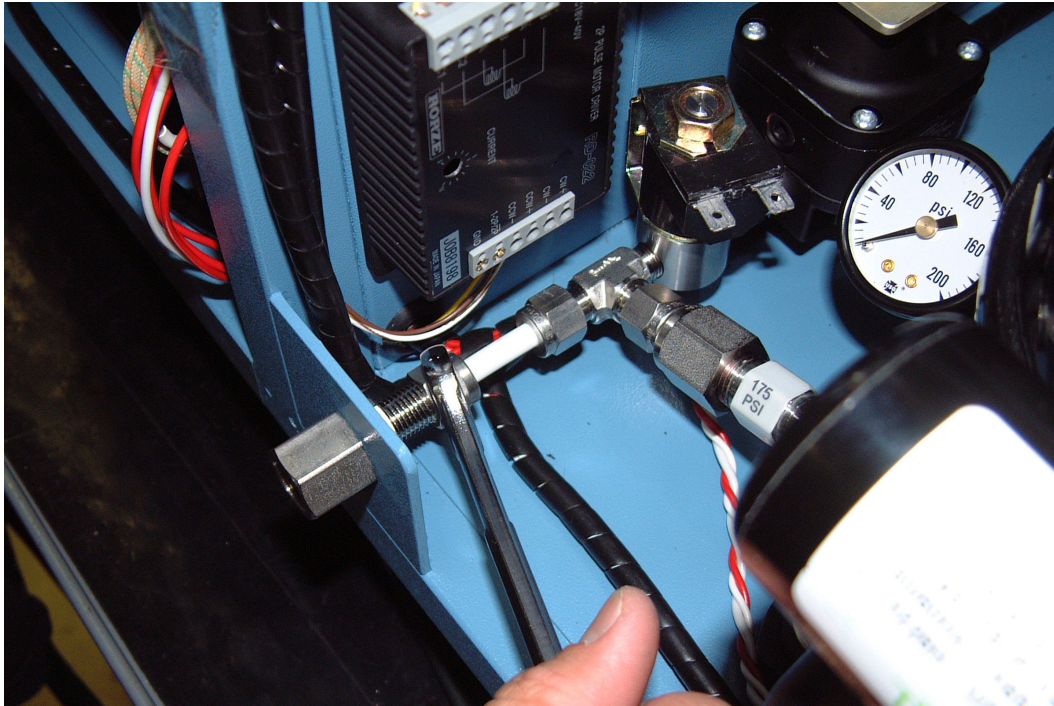
11. Be careful when rotating the flow meter not to disconnect the flow meter wiring.



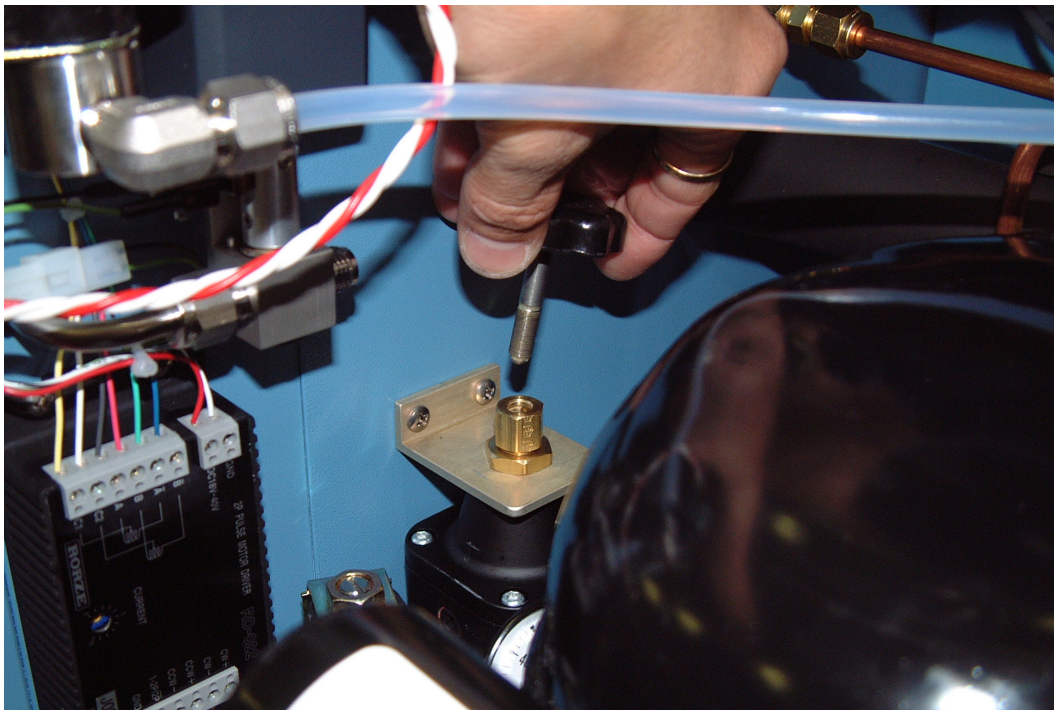
12. Using a flat head screwdriver, pry the wire leads off of the solenoid valve.



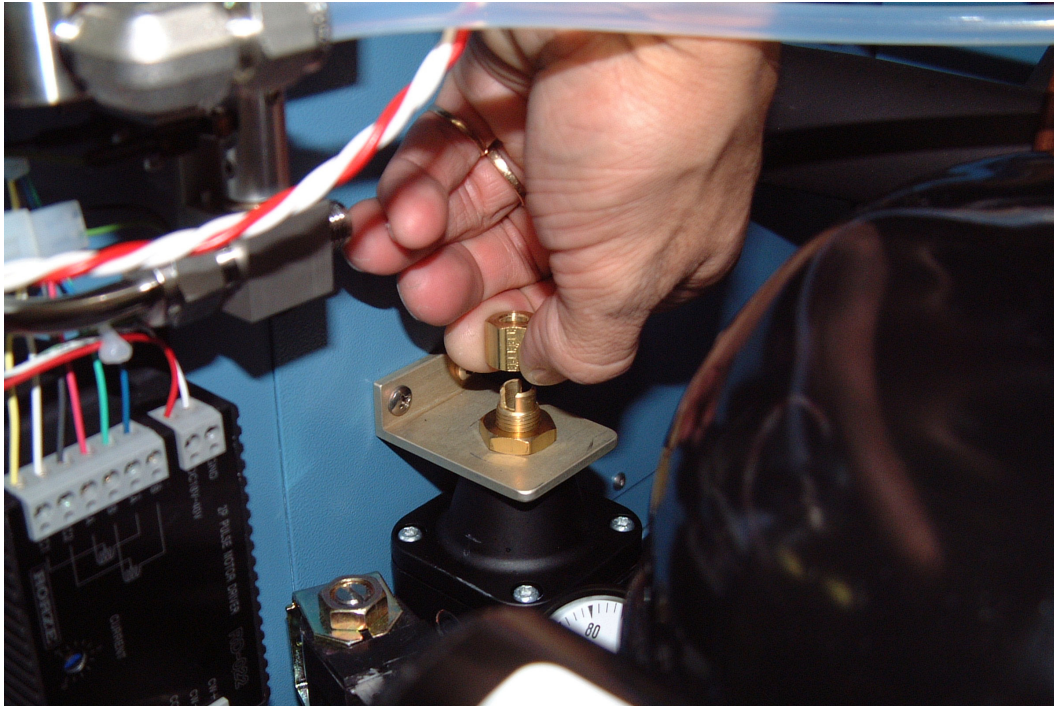
13. Remove the swage nut located on the rear bulkhead fitting using a 9/16" wrench.



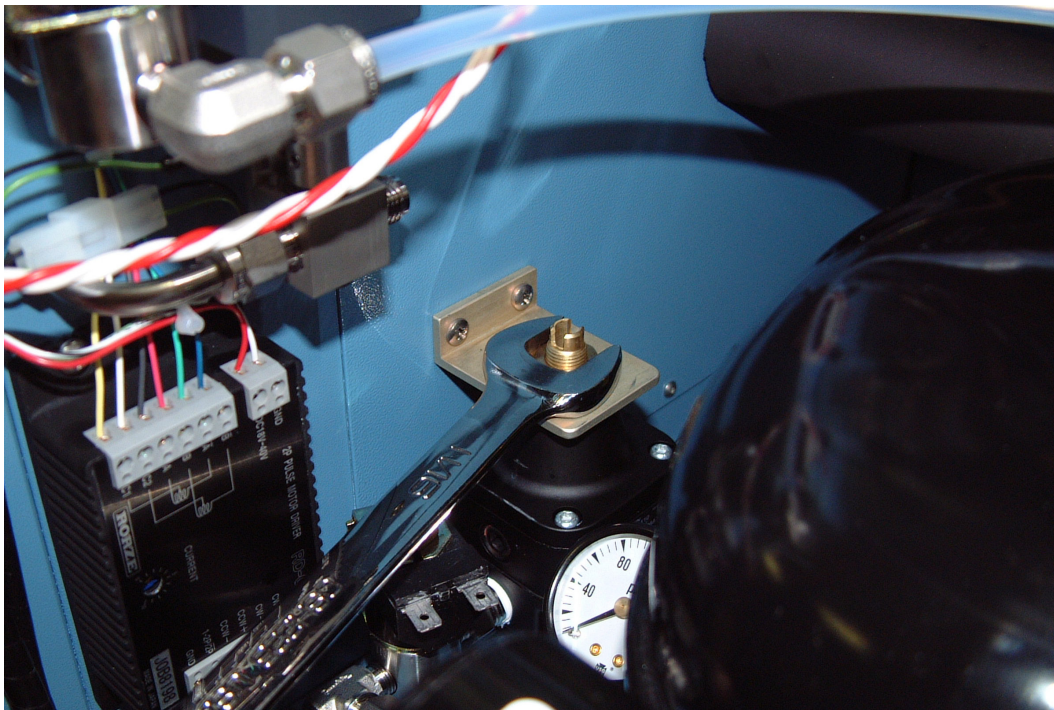
14. Remove the regulator knob unscrewing counterclockwise and lift it out.



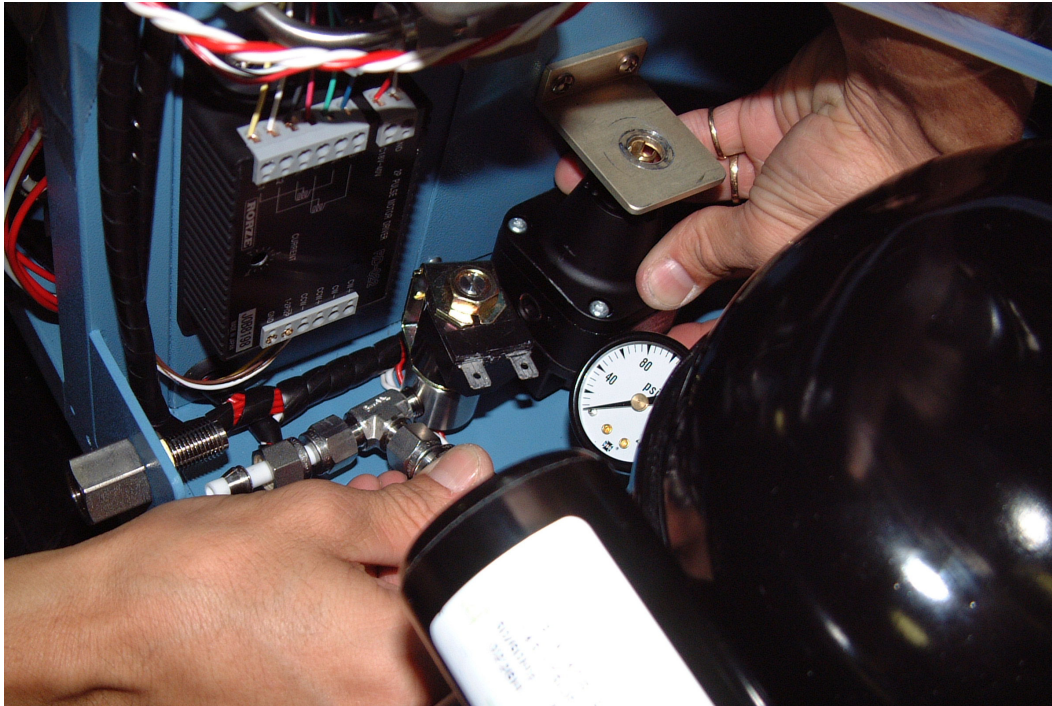
15. Remove the brass knob guide nut using a 9/16" wrench.



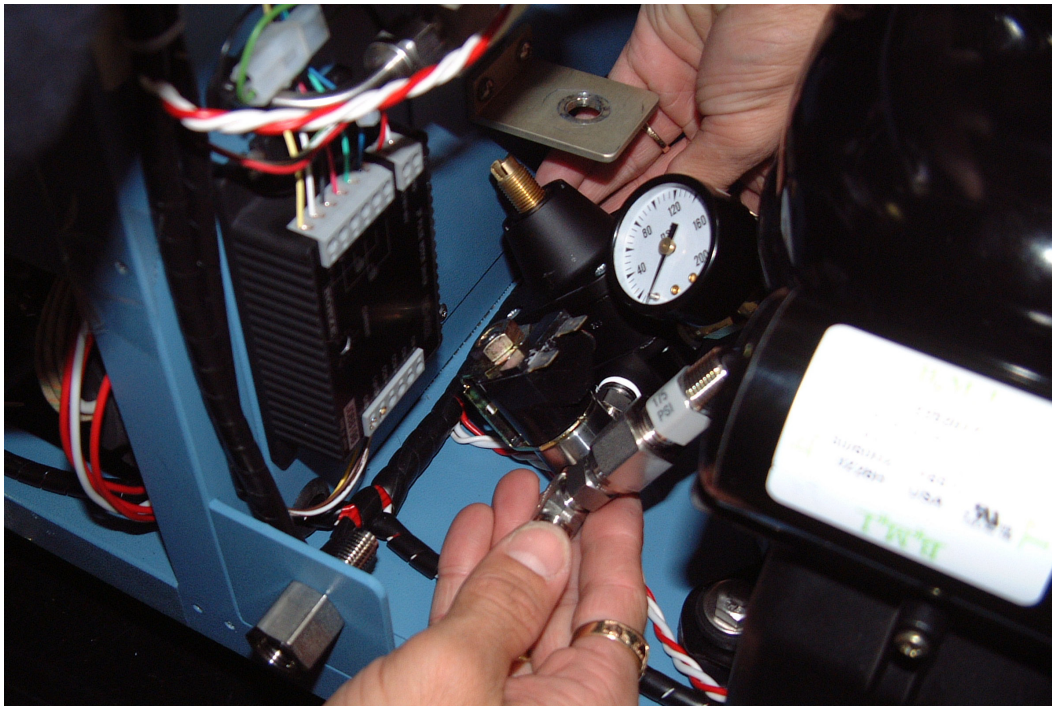
16. Remove the regulator hold-down nut using an 11/16" wrench.



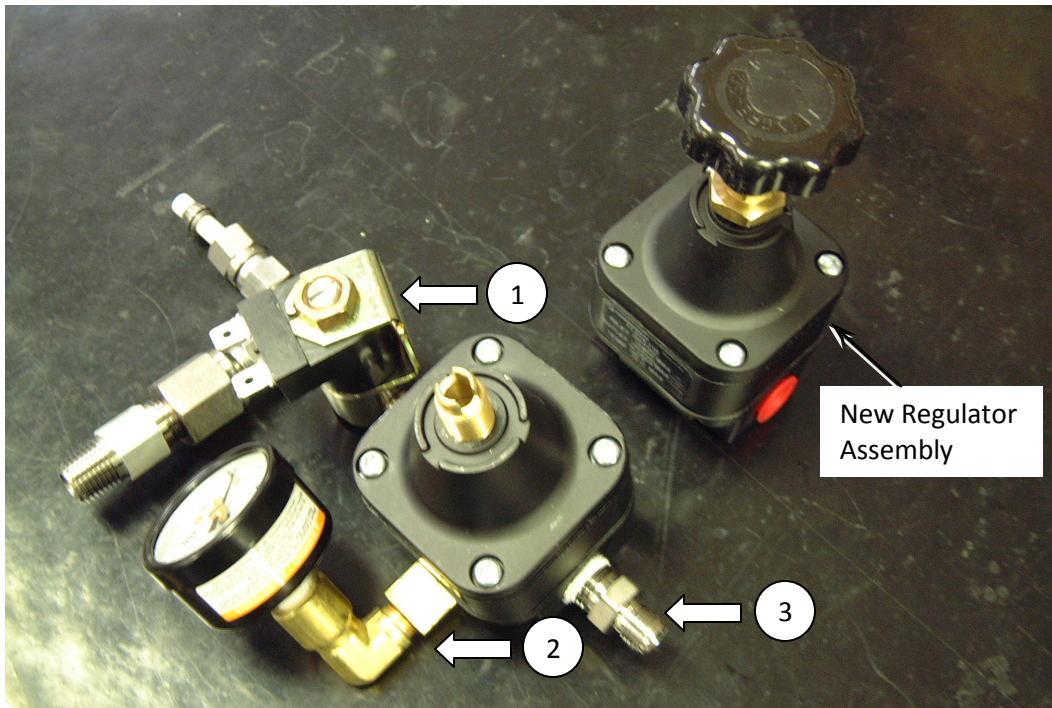
17. Rotate the regulator line assembly down and out of the regulator bracket and move it towards the front of the system.



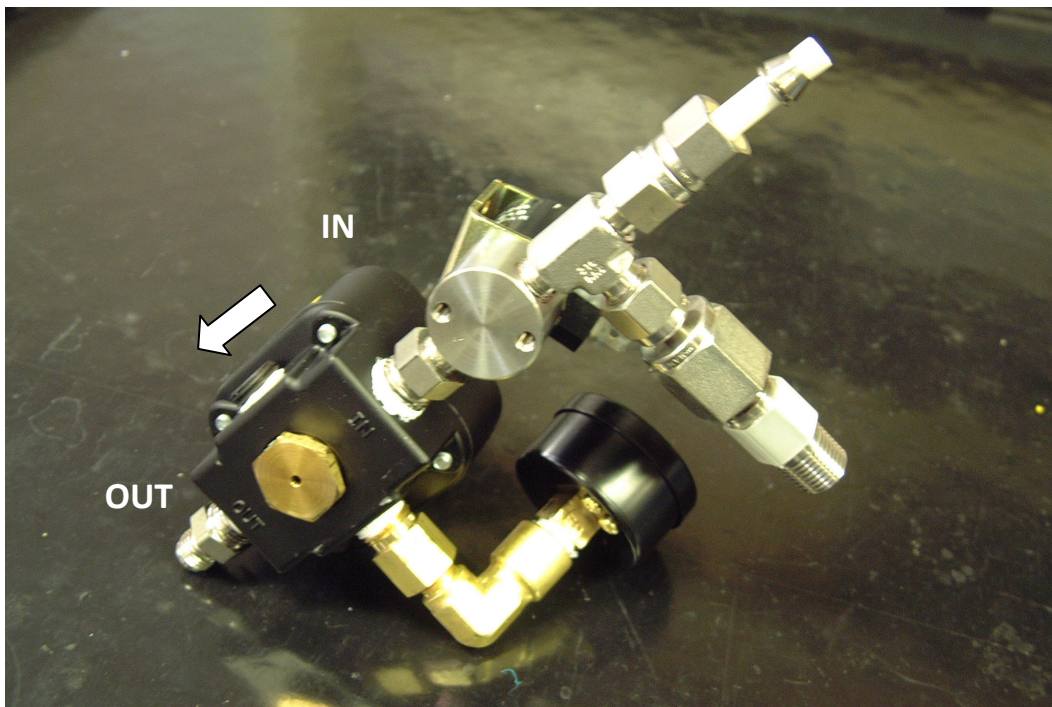
18. Rotate the regulator line assembly 45° counterclockwise and lift out carefully.



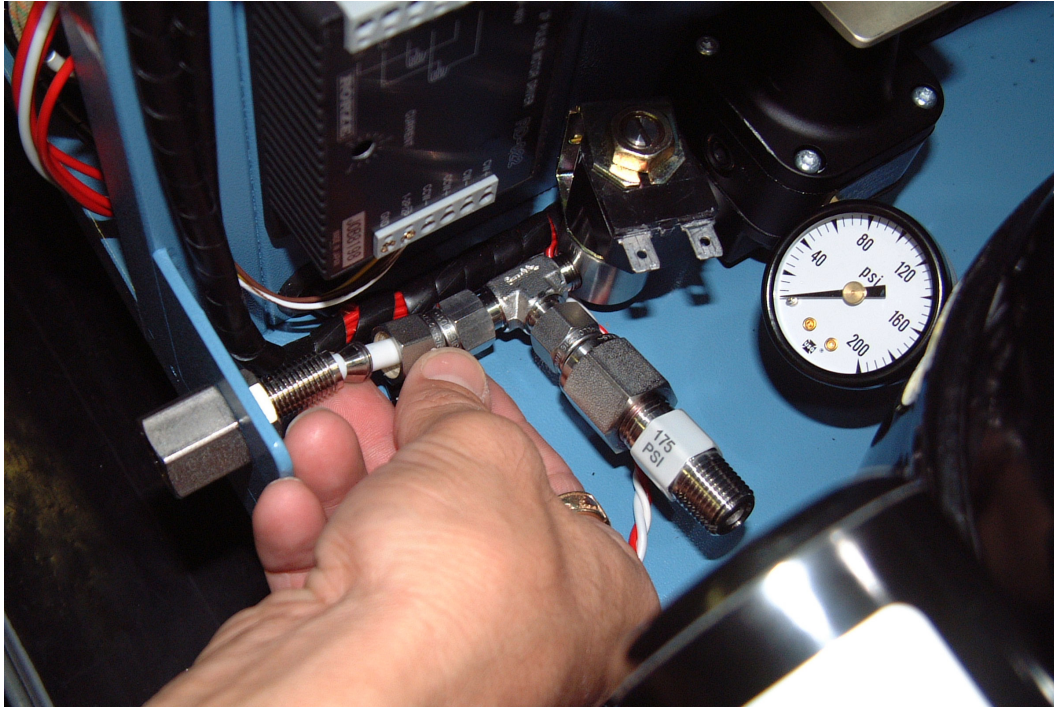
19. Remove the three components going into the regulator assembly. On the new regulator assembly remove the knob, guide nut, hold-down nut and plugs.



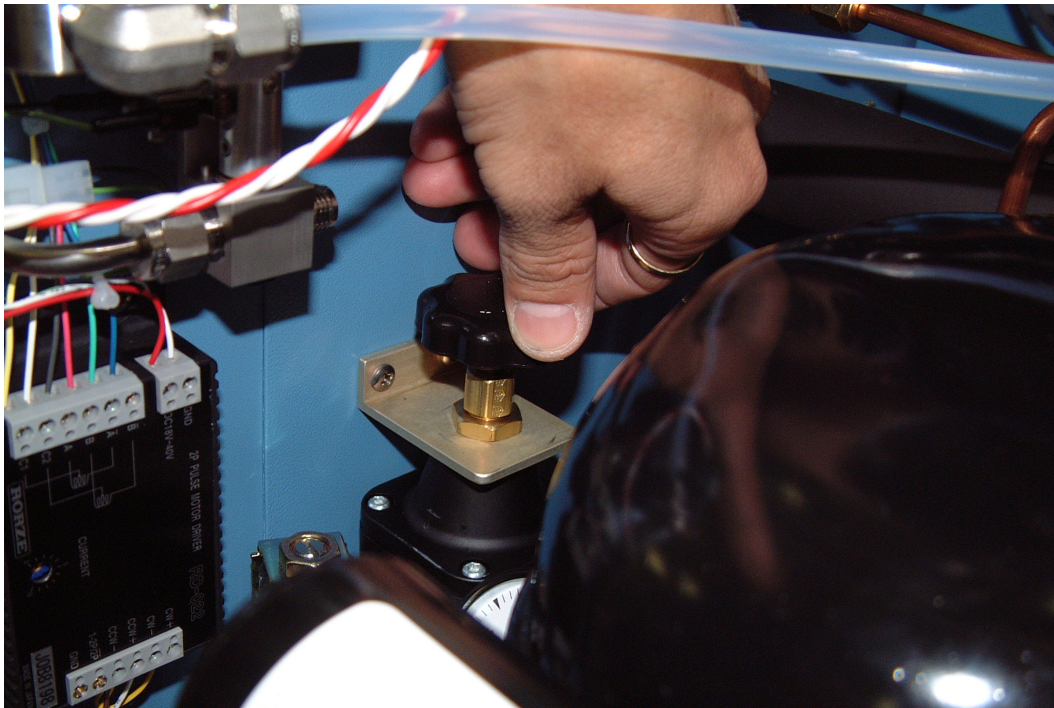
20. Reinstall the same three components in the new regulator assembly using Teflon tape. Tighten each item to a 1-1/4 turn after finger tight. Note the direction of flow on the bottom of the regulator assembly.



21. Using steps 8-18 in reverse order, reinstall the regulator line assembly taking care when inserting the Teflon tube in the rear bulkhead fitting.



22. Reset the regulator pressure back to 150 psiG while the 2500 system is in the operating mode.



Please Call 1-800-872-7728, Fax 1-505-266-6203, or E-mail support@thunderscientific.com should you have any questions.