

Model 2500

High Air Flow Expansion Valve Plug O-ring Replacement Procedure



Tech Support Document TSD-0231 Revision Date: March 12, 2010

623 WYOMING BLVD. SE



ALBUQUERQUE, NM 87123-3198 WWW.THUNDERSCIENTIFIC.COM

TEL: 505.265.8701 FAX: 505.266.6203

High Air Flow Expansion Valve Plug O-ring Replacement Procedure

1. Disconnect power from the 2500 system.



2. Using the Torx drive provided remove the Torx screws, and the right top panel.



3. Remove the top expansion valve foam insulation.



4. Remove the side expansion valve foam insulation.



5. Using an 11/16" wrench loosen the fittings on both sides of the expansion valve.



6. Remove the two Allen head cap screws that secure motor to the valve bracket.



7. Remove the snap ring at the base of the expansion valve.



8. Rotate the expansion valve body up as shown.



9. Remove only two Phillips screws at opposite sides of each other on the drive motor as seen in photo.



10. Lift the drive motor off of the valve assembly.



11. Be Careful to hold the micro switch roller arm away from the shaft coupling to prevent bending of the switch roller arm. Remove the valve plug from the body housing.



12. Remove the valve plug from the body housing as shown.



13. After removing the valve plug, be sure to clean out the valve body housing using a cotton swab with alcohol to remove any debris. **Note**: the valve body is not removable from the system.



14. Remove the O-rings and clean the valve plug.



15. Replace O-rings with kit number VI-P6T-K2.



16. Re-grease O-rings and valve plug as shown.



17. Use Krytox[®] 240AB Grease part number KRYTOX O-RING LUBRICANT.



18. Replace the valve plug into the valve body and hold the micro switch roller arm away from the shaft coupling.



19. Slide the motor insulation plate between the valve and motor. Insert the Allen head cap screws through the valve mounting bracket, but do not tighten fully yet.



20. Replace the plug retaining ring and finish tightening the Allen head cap screws evenly.



21. Replace the valve motor and insert the two Phillips head screws.



22. Rotate the motor back into position and tighten both nuts.



23. Replace the side foam insulation.



24. Next replace the top insulation foam.

25. Put the top chamber top panel on and replace the Torx head screws.

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