CONTINENTAL NH3 PRODUCTS INSTALLATION, OPERATION, REPAIR AND MANTINANCE INSTRUCTIONS

PRODUCT SERIES: A-QOVM-125FF

ATTENTION: Please follow all of the instruction in this manual carefully and read the entire manual completely, failure to do so may cause the product to function improperly or fail causing serious injury or death.

DANGER



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ANHYDROUS AMMONIA IS AN INHALATION HAZARD AND WILL CAUSE SERIOUS INJURY OR DEATH. PLEASE USE EXTREME CAUTION WHEN HANDLING IT OR PERFORMING ANY MAINTENANCE ON EQUIPMENT USED FOR ANHYDROUS AMMONIA.

ATTENTION: Before performing any installation, repair or maintenance please follow the instructions below.

- 1. You must be certified to work with anhydrous ammonia. If you are not please seek out the appropriate agricultural department to attend a class to obtain the proper certification.
- 2. Wear appropriate safety goggles, gloves and breathing apparatuses.
- 3. Drain all tanks, hoses and piping of anhydrous ammonia COMPLETELY before removing, installing, performing maintenance or repairing any equipment.
- 4. Always remove device from service before performing any maintenance or repair
- 5. have sufficient water near by
- 6. Obey all local, state and federal laws regarding the handling of anhydrous ammonia

INSTALLATION & OPERATION

- 1. PLEASE NOTE THIS IS A MINIMUM BLEED QUICK OPENING LEVER VALVE. The seat is located near the end of the acme coupling. This eliminates the need for a bleeder valve when installed on the end of the filler or vapor return hose at the riser filling station. ONLY USE THE VALVE AT THE END OF THE HOSE AT THE RISER FILLING STATION. THIS VALVE IS NOT TO BE INSTALLED IN ANY OTHER APPLICATION.
- 2. Make sure the valve is turned off before installation.
- 3. Apply pipe thread sealant to the male thread end of the hose at the riser station and tighten firmly.
- 4. Before operating valve make sure valve is attached to appropriate piping, hose or fitting.
- 5. Thread acme coupling on to the nurse tank filler and or vapor return valve and hand tighten. Never open valve with out appropriate hoses and valve down stream of the valve, doing so will release anhydrous ammonia into the air that could cause serious injury.
- 6. Open nurse tank valve slowly to make sure there isn't any leak and open the nurse tank valve all the way open.
- 7. When you are ready to fill open the valve by pressing down on the hand lever latch and lifting the lever up until it stops. THIS WILL ALLOW AMMONIA TO FLOW OUT OF THE VALVE INTO THE NURSE TANK. MAKE SURE THE ACME COUPLIG IS FIRMLY ATTACHED TO THE NURSE TANK VALVE.
- 8. To close valve lower the lever down until is stops and verify the lever latch is locked into place. DO NOT SLAP THE LEVER HANDLE TO CLOSE THE VALVE. THIS WILL CAUSE PREMATURE WEAR TO THE SEAT.
- 9. Close the nurse tank valves and tighten firmly
- 10. Loosen the acme coupling slightly to allow the ammonia to bleed down and when finished unthread the acme coupling.

MAINTENANCE

- 1. Check valve regularly for leaks and wear.
- 2. If any threads on the valve are getting warned down replace the valve immediately
- 3. If valve leaks from pipe thread connection try to tighten the valve to stop the leak. If it continues to leak replace the valve.
- 4. If valve leaks from the stem, seat or bonnet purchase repair kit A-QOVM-RK and follow repair instructions. This will give you all the seal to repair the valve however you need a special acme coupling removal tool A-QOVM-RT.

REPAIR

- 1. Remove valve from service by following the above ATTENTIONS AND CAUTIONS.
- 2. Remove hand lever QOVM-04 by driving out the lower hinge pin QOVM-4-162. Lever the handle clip installed.
- 3. Remove bonnet QOVM-10 from valve body. There is lock tight on the threads so it might be difficult to remove.
- 4. Remove stem assembly and closing spring from the bonnet and remove and replace bonnet o-ring QOVM-221
- 5. From inside the bottom of the bonnet remove and replace the bonnet packing QOVM-31N, QOVM-52N and cap seals QOVM-Q5112. Grease the cap seals and install them back into the bonnet in this order. 1 = QOVM-52N nylon spacer then 1 = QOVM-Q5112 then 1 = QOVM-52N then 1= QOVM-O5112 then the QOVM-31N packing load bushing.
- 6. From the top of the bonnet remove and replace the QOVM-25H-8112 O-ring and QOVM-500 nylon wear pad.
- 7. Replace seat seal QOVM-60FF by removing the seat retainer screw and washer and re-installing.
- 8. Replace internal shut off spring QOVM-900, grease upper stem and carefully re-install the stem assembly and replace stem hinge pin handle and tap hinge pin in with hammer.
- 9. To replace the Acme nozzle o-ring remove the acme coupling set screw QOVM-1024 from the side of the valve body.
- 10. put the valve body into a vice and slide the hex tool guide bushing to the bonnet opening the valve body and insert the hex bar tool into the middle of the guide bushing until it seats into the hex recess in the acme stem. Use a wrench to remove the acme coupling. There is lock tight on the threads so it might be difficult to remove.
- 11. Replace acme outlet nozzle o-ring QOVM-128 and re-install the acme coupling and tighten firmly with the hex bar tool
- 12. Re-install the set screw back into the valve body and tighten firmly.

Flow increase are dependent on your current plumbing. Please keep this in mind before installing. There are many factors that can affect your fill times and the impact the A-QOVM-125FF will have on your fill times. Below are a few

- 1. Bypass adjustment adjust by-pass to allow more flow to the valve
- 2. Nurse tank fill valve. Closed yoke nurse tank valves can restrict flow. Open yoke is preferable. B-1201 recommended
- 3. Riser breakaway devices. If they are small this can restrict flow. A-98-RSS recommended
- 4. Riser valves. The larger the better, 1-1/2" x 1-1/4" preferable, 95 GPM or higher, A-1508-FR recommended.
- 5. Riser hose size. 1-1/4" recommended
- 6. Front filling through the withdrawal valves. The weight of the ammonia when the tank gets 40 percent full will start to affect the fill time. Top fill is recommended.

If you are using a non-minimum bleed valve there will not be any improvement in fill times however, you will have the convenience of using a lever valve that opens faster and is easier on your wrist than a hand wheel and you will vent less ammonia.

QUESTIONS CALL 800-537-5642