

REMCO SUPPORT DOCUMENT

Title: Testing and Identifying Valve Function

Date: 10/14/2020 Rev: 1

PURPOSE: To describe the procedure for testing the functionality of Remco pump valves. Along with identifying the issue and knowing whether replacement or cleaning is needed.

TOOLS:

- Water bottle or Air Gun
- Rag/Towel (Used in combination with Air Gun)
- Additional Tools if valves are discovered to be not functioning
 - Drill or Screwdriver with t20 torques bit
 - Bucket of clean soapy water

PROCEDURE:

1. Rinse pump with clean water to remove any chemical, this is best done while pump is still hooked up to power source.
2. Locate the outlet port of the pump indicated by the flow arrows on pump ports. The outlet is the port which fluid flows out of when the pump is operating, commonly referred to as discharge or pressure port.
3. Using the Water bottle
 - a. Pour water into the outlet port until port fills completely
 - b. Wait 30-60 seconds if water does not flow through and come out the inlet port then the valves are intact and functioning properly
 - c. If water does leak out the inlet port this is a valve issue. See disassembly instructions below procedure #5
4. Using Air Gun and Towel
 - a. Slowly blow air into the outlet port. Use the rag/towel to seal around the air gun and outlet port so air is forced through the pump
 - b. If air does not come through the pump and out the inlet port valves are intact and functioning properly
 - c. If air does leak out the inlet port, there is a valve issue. See disassembly instructions below in procedure #5
5. Disassembly and inspection of valves
 - a. If you have not already done so remove pump from equipment and power source
 - b. Using the drill or screwdriver and t20 torques bit remove all pump head screws
 - i. 3300 Series has 7 screws total 3 longer for holding the pump head to the electric motor, and 4 shorter screws for holding the pump head together. Note their orientation during removal
 - ii. 3200 Series has 7 screws total 3 longer for holding the pump head to the electric motor, and 4 shorter screws for holding the pump head together. Note their orientation during removal
 - iii. 5500 and Fatboy Series have 10 screws total 5 longer for holding the pump head to the electric motor, and 5 shorter screws for holding the pump head together. Note their orientation during removal. (pattern is every other hole long-short-long-short)
 - c. Once all screws are removed pull up on the housing removing the ports and pressure control
 - d. Locate the valve housing and remove it from the diaphragm or upper housing. DO NOT REMOVE LOWER HOUSING/DIAPHRAGM FROM MOTOR
 - i. **Note:** exhaust valves are not pressed in place and can be loose inside the pump head during removal. The molded numbers on these valves have no bearing on their orientation they are all the same.
 - e. Inspected the valves for cracks, deformities or debris
 - i. If there is noticeable debris use the bucket of soapy water, towel, and air gun to clean and remove debris. See reassembly instructions below in Procedure # 6



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- ii. If any of the valves are cracked or deformed the entire valve housing should be replaced. Contact Remco with your pumps model number for replacement valve housing part number. 763-253-4740 or sales@remcoindustries.com
6. Reassembly of pump
 - a. Make certain that all valves are in place on the valve housing
 - b. Place the valve housing onto the diaphragm noting orientation
 - c. Place the upper housing over the valve housing
 - d. Insert the pump head screws back into their proper holes noted from disassembly
 - e. Tighten screws using a star pattern so the upper housing is tightened evenly (Torque Spec 37-40 in/lbs)

IF YOU HAVE QUESTIONS REGARDING THIS SUPPORT DOCUMENT PLEASE CONTACT REMCO 763-253-4740 OR
SALES@REMCOINDUSTRIES.COM

Photos Needed

- All Tools needed
- Pump Head flow arrows
- Water bottle pouring water into port
- Towel over pump port with air gun
- Removing pump from power source
- Screws for all pump series
- Valve housing on diaphragm
- Exhaust valves stuck to UHA Posts
- Valve cracks and debris
- Placing UHA on to Vha
- Pump head screws orientation for all series
- Torque wrench on screws with star pattern