



03-023B
2 May, 2007

THOMAS 2668/2688 DUAL HEAD PUMP REBUILD

I. PURPOSE:

To provide instructions on how to rebuild a 2668/2688 Thomas dual head pump.

II. TOOLS:

Torque wrench
½" Hex Socket Attachment – (For flapper valve screws)
Flat blade screwdriver
Torx T-27 attachment – (for retainer screws)
Torx T-25 attachment – (for head screws)

III. PARTS:

KIT000177

IV. PROCEDURE:

1. Loosen the 8 screws and remove the compressor head.
2. Lift off the valve plate. **IMPORTANT:** Note the position of the tabs on the valve plate for reassembly. See FIGURE 1.
3. Remove the sleeve from the connecting rod (discard). Remove the screw from the cup retainer (Keep the cup retainer). Remove the piston cup (discard) and wipe debris from the top of the connecting rod with a clean damp cloth. See FIGURE 2.
4. Remove the O-ring, intake valve flapper and valve keeper from the bottom of the valve plate (discard all). Clean the bottom of the plate with a clean, soft cloth.
5. Remove the O-ring, exhaust valve flapper and valve keeper from the top of the valve plate (discard all)
6. Install the intake (bottom of valve plate) and exhaust (top of valve plate) valve flappers to the valve plate. **NOTE:** The valve keeper should be placed on top of the flapper so that the word "UP" is visible. See FIGURE 3.
7. Install the new O-rings on both the top and bottom of the valve plate, seating it firmly into the grooves with your finger or blunt object.
8. Place cylinder sleeve over rod top with smooth edge facing up. See FIGURE 2.
9. Place new piston cup on rod top making sure it is centered.
10. Place retainer on top of piston cup and seat retainer in rod top pocket, making sure the retainer, cup and the screw holes lines up.
11. Two different size retainer screws are provided in the pump rebuild kit. Use the screw that is similar to the one you have removed in step 3. Insert new screw into retainer and tighten to 65 inch-lbs.
12. Pre-shape the piston cup if necessary by using the cylinder sleeve as a guide.

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13. With the sleeve located and firmly seated on the housing, replace the valve plate in the same manner as it was. See FIGURE 1.
14. Make sure the top edge of the sleeve locates in the O-ring groove in the bottom of the valve plate.
15. Place the head on the top of the valve plates. Tighten the head screws in a criss-cross pattern to 40 inch-lbs.

FIGURE 1

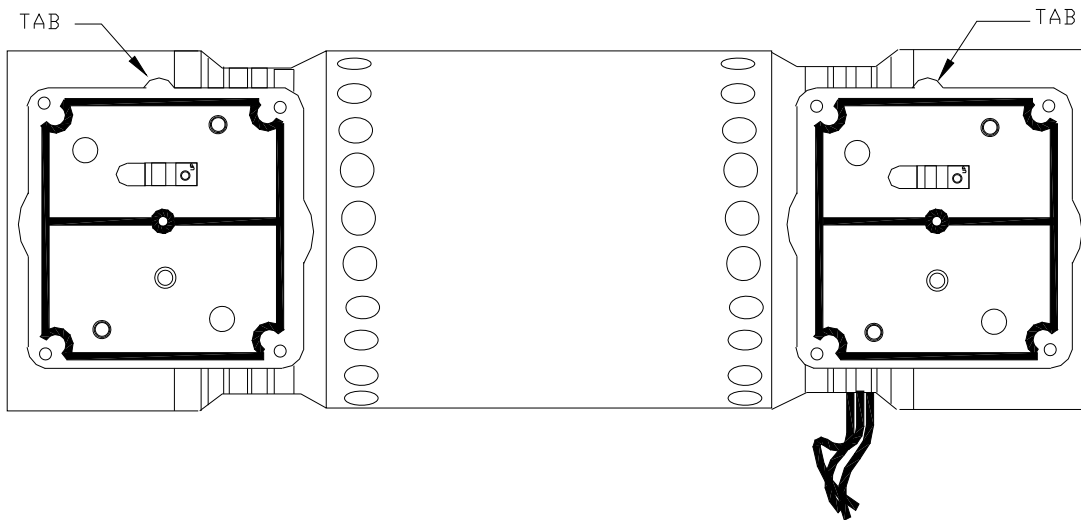
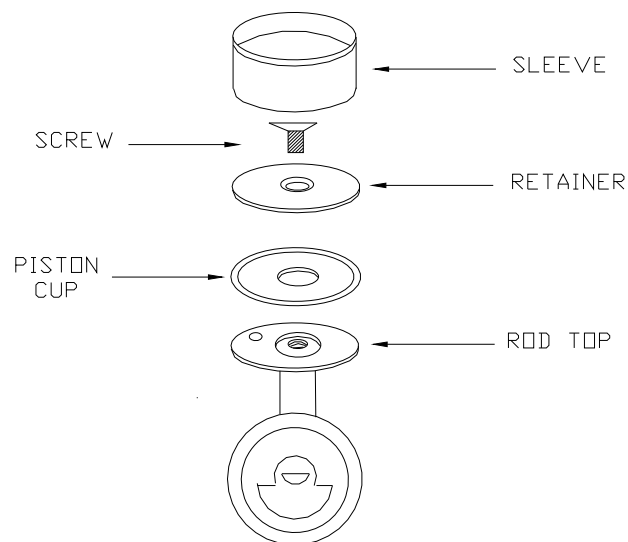


FIGURE 2

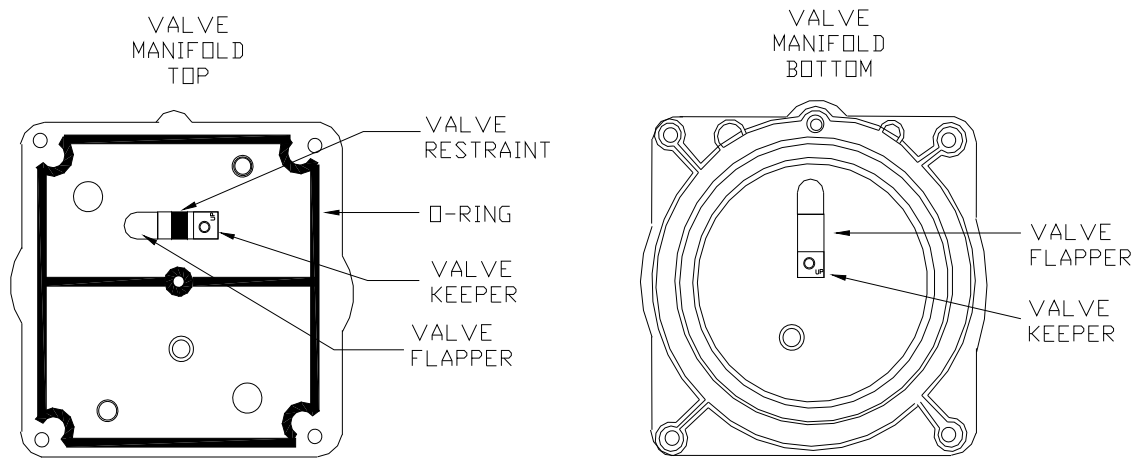


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FIGURE 3



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