



# MODEL 2585K-03

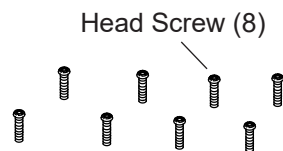
## MAJOR SERVICE KIT

For use on 2585B-01, 2585B-50, 2585B-55, 2585Z-50 Pumps

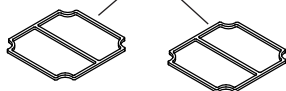
 **WARNING:** Unplug the pump or pump system before beginning disassembly.

 **CAUTION:** Improper assembly or use of damaged parts may lead to premature failure. To avoid frequent repairs follow the recommended assembly procedures.

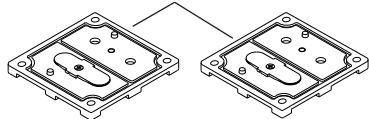
This kit includes the following parts:



623624 Head Gasket (2)

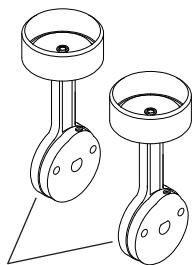


Valve Plate Ass'y (2)



O-Ring (Piston Sleeve) (2)

O-Ring Connector Tube (4)



Connecting Rod Ass'y (2)  
(Marks read "804")

**NOTE:** Before you begin, read these instructions thoroughly and assemble the necessary tools. You will need:

- 1/4" Hex socket attachment for torque wrench
- Torx T-25 attachment for torque wrench (for head screws)
- 5/32" Hex torque wrench for eccentric set screw
- Clean cloths

# DISASSEMBLY

**! WARNING:** Unplug the compressor before beginning disassembly.

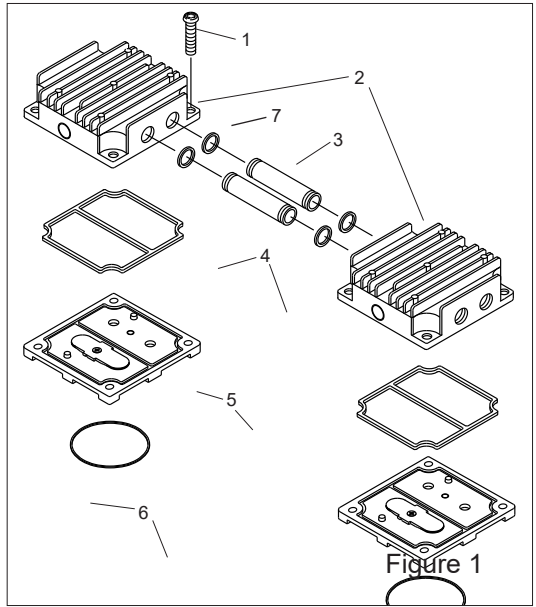
**NOTE:** To avoid confusion, service one side of the pump at a time.

**STEP 1.** Clean loose dirt from the outside of the pump.

**STEP 2.** Loosen the 8 head screws (1) and remove the pump heads (2) and connector tubes as one piece. Pull the 2 heads apart and remove the 2 connector tubes (3). Carefully remove the valve plates (5) from the bottom of the head.

**STEP 3.** Remove the head gasket O-rings (4) and discard them.

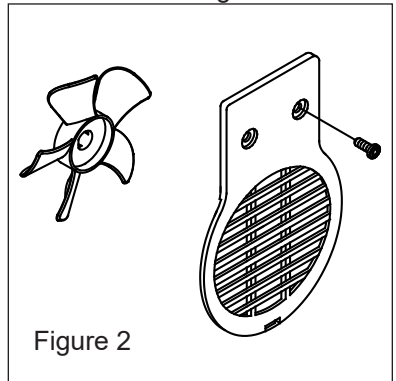
**STEP 4.** Turn the valve plates over. Remove the valve plate O-rings (6) and discard. Remove the 2 O-rings (7) from the end of the connector tube (3) and replace. Use a blunt object to aid this replacement. Any scratch or dent in this area can cause an air leak.



**STEP 5.** Remove the fan guard by unscrewing the 2 screws holding it to the housing. See figure 2.

**STEP 6.** Remove the fan by releasing the pressure from the clip holding it to the shaft. Note position of fan for reassembly. (Fan spring clip facing in or out?)

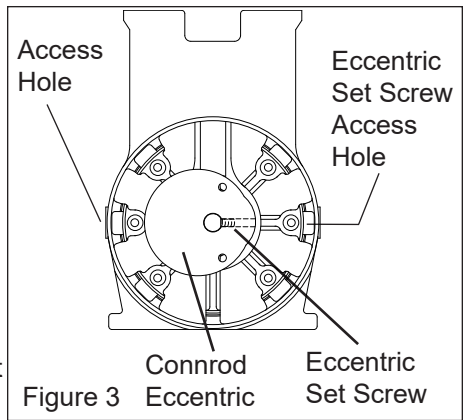
**STEP 7.** Insert the 5/32" Hex wrench into the access hole on the side of the pump housing. Loosen the set screw 1/4 turn. Rotate connecting rod to top dead center (180°) and slide the connecting rod/eccentric assembly off the shaft and through the opening in the housing. See figure 3.



**NOTE:** Read the "X" number stamped on the connecting rod eccentric and match it to the connecting rod assemblies included in this kit. Older assemblies do not have bearing stop on the eccentric.

**STEP 8.** Rotate the rotor shaft so that flat faces up (12:00) Position piston cup at bottom dead center of cylinder sleeve.

**STEP 9.** Slide new connecting rod assembly onto the shaft. If replacing the same rods marked with reading "804" push rod assembly to the bearing stop. If replacing connecting rod marked with "872" with a rod marked "804" center connecting rod manually and visually with respect to the cylinder head. Misalignment will occur if rod assembly is pushed to the bearing stop when replacing "872" with "804". Align the eccentric setscrew with the flat of the shaft. Rotate the eccentric and shaft 90 degrees so the set screw is visible through the access hole in the housing. Seat the Hex wrench into the set screw but **DO NOT TIGHTEN**.



**STEP 10.** Temporarily place the valve plate assembly on the pump housing so the lip of the cylinder sleeve fits into the O-ring on the bottom of the valve plate assembly. Position the valve plate so the mounting holes line up with the threaded holes in the housing. Temporarily insert two head screws into the mounting holes to secure the valve plate assembly.

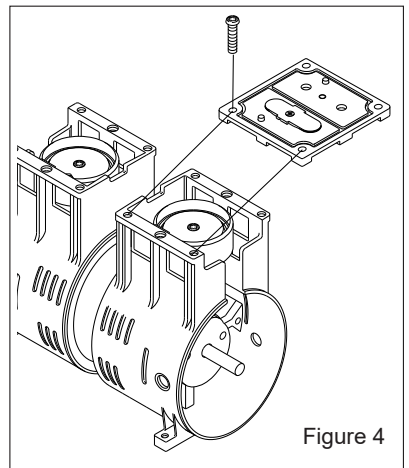
**NOTE:** The purpose of this procedure is to correctly position the connecting rod assembly on the motor shaft before tightening the set screw.

**STEP 11.** Use a torque wrench to tighten the eccentric setscrew to 80 inlbs. Remove the valve assembly and head screws.

**STEP 12.** Align the flat on the fan with the flat on the motor shaft and slide the fan back onto the motor shaft, making sure you position the fan clip in the same orientation as it was before you removed it. Incorrect orientation of the fan will not provide adequate cooling of the pump.

## CHECK OPERATION


Hold the sleeve down against the housing with one hand, and slowly rotate the fan with the other hand to ensure all components are lined up properly. As the piston travels up and down it will also rock from side to side. This is a feature of the WOB-L Piston.



**REPEAT PROCEDURE ON SIDE TWO**

# REASSEMBLY


STEP 1. With the sleeves firmly seated on the housing, replace the valve plates in same manner as they were. See Figure 5. Make sure the top edge of the sleeve locates in the O-ring groove in the bottom of the valve plate.

 **CAUTION:** Make sure gasket is not twisted when seated in groove.

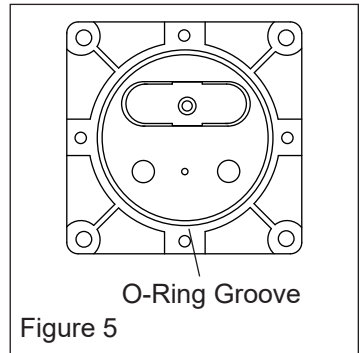
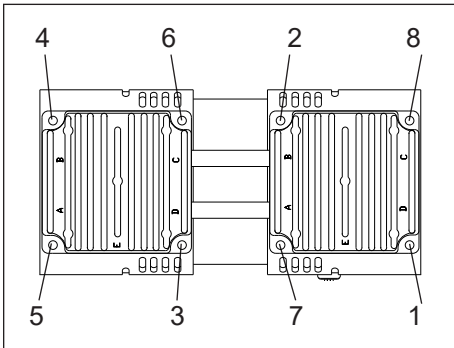
STEP 2. Replace fans, fan guards, and screws. Tighten screws to 10 inlbs.

STEP 3. Assemble connector tubes into both heads as shown in Figure 1.

STEP 4. Place head assembly on the valve plates. Torque the head screws to 40 inlbs. in a criss-cross pattern.

 **Caution:** To avoid property damage or personal injury, always try rotating the fan by **HAND** prior to connecting the unit to the power source. Check for suction at the air inlet port by placing your finger over the port as you turn the fan. You should feel a slight suction with each rotation of the fan. If you don't feel suction, or if you feel or hear a thump as you turn the fan, **DO NOT CONNECT THE UNIT TO A POWER SOURCE**; review the assembly procedure for possible error.

Numbers indicate tightening sequence



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