



# SK2668

## COMPRESSOR SERVICE KIT

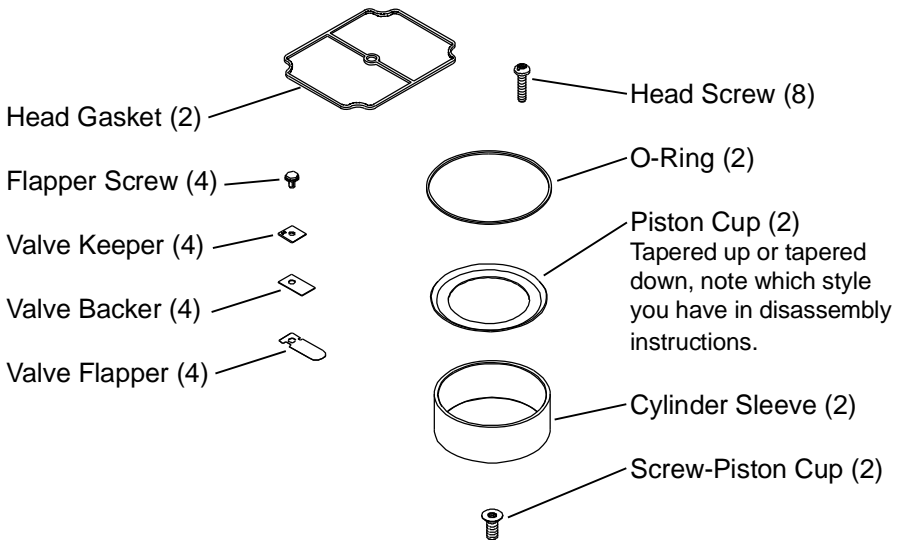
For use on 2668 and 2688 Model Series Compressors

 **WARNING:** Unplug the compressor 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.

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

This kit includes the following parts:




- 1/4" Hex Socket attachment for torque wrench
- Torx T-20 attachment for torque wrench (for retainer screws)
- Torx T-25 attachment for torque wrench (for head screws)
- 5/32" Hex wrench for torque wrench (eccentric screw)
- Flat Screwdriver
- Clean Cloths

NOTE: To avoid confusion, service one end of the compressor at a time.

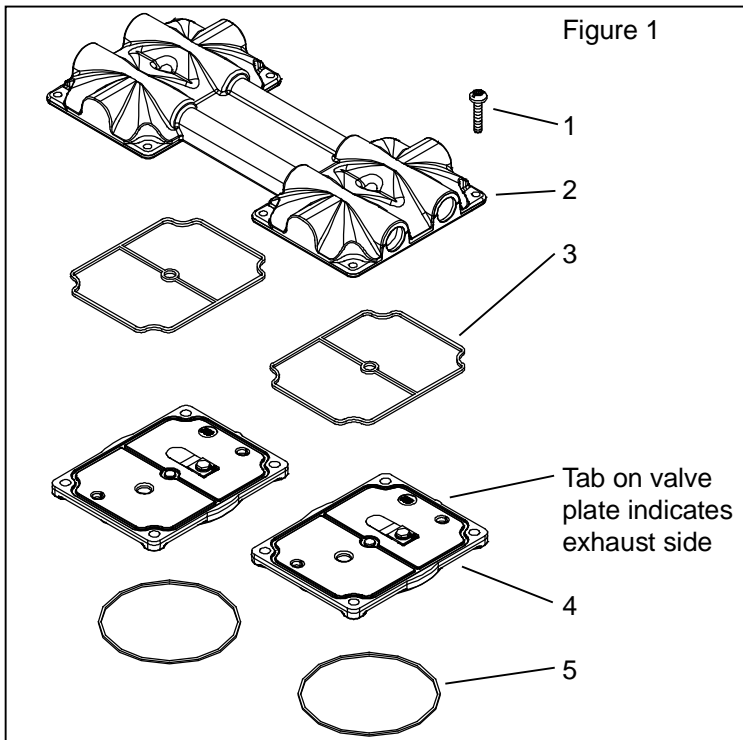
STEP 1. Clean loose dirt from the outside of the compressor.

STEP 2. Loosen the 8 head screws (1) and remove the compressor head (2). Note orientation of head for reassembly (very important). Discard head screws.

 Caution: Place capacitor off to side leaving it connected to lead wires.

STEP 3. Carefully remove the valve plates (4) from the bottom of the head, or cylinder sleeves. Note orientation with respect to the tab on valve plate for reassembly.

STEP 4. Remove the head gasket O-rings (3) and discard them. Turn the valve plates over. Remove the valve plate O-rings (5) and discard them.



Note: Valve plate (4) orientation is a representation, note which Valve Flapper orientation you have.

STEP 5. Remove the intake Valve Flapper (1), Valve Backer (2), Valve Keeper (3) if assembled, and screw from the bottom of the valve plate and discard. Clean the bottom of the plate with a clean, soft cloth. Install the new intake Valve Flapper, and Valve Backer (if one was removed). The Valve Keeper should be placed on top of the Valve Flapper so that the word "UP" is visible See Figure 2.

NOTE: Pay close attention to valve assembly. Some parts in kit may not be for your model.

NOTE: Torque new Valve Flapper Screw to 18 inch-pounds.

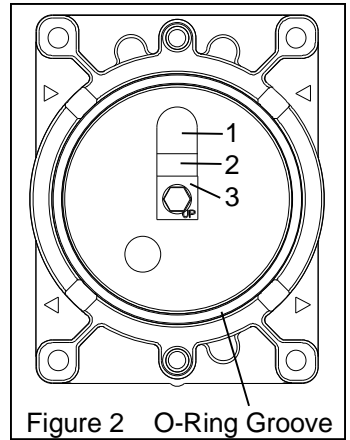


Figure 2 O-Ring Groove

STEP 6. Install the new O-ring, seating it firmly into the groove with your finger or blunt object See Figure 2.

STEP 7. Remove the exhaust Valve Flapper (1), Valve Backer (2) and Valve Keeper (3) from the top of the valve plate and discard them. Clean the top of the valve plate with a clean, soft cloth. Install the new exhaust Valve Flapper, Valve Backer and Valve Keeper. The Valve Keeper should be placed on top of the Valve Flapper so that the word "UP" is visible See Figure 3.

NOTE: Torque Valve Flapper Screw to 18 Inch-pounds.

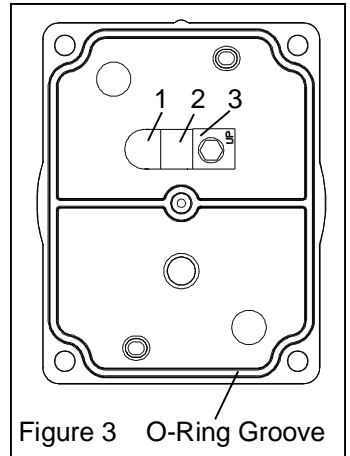


Figure 3 O-Ring Groove

STEP 8. Install the new head gasket, seating it firmly into the groove with your finger or blunt object See Figure 3. Set aside. Repeat steps 5 thru 8 to service other end of compressor

STEP 9. Remove the fan guard by depressing the 4 tabs on the side of the housing.

STEP 10. Remove the fan by using two flat blade screwdrivers to pry off, making sure screwdriver contact is made with hub back, and not the fan blades. Note fan orientation and color for reassembly.

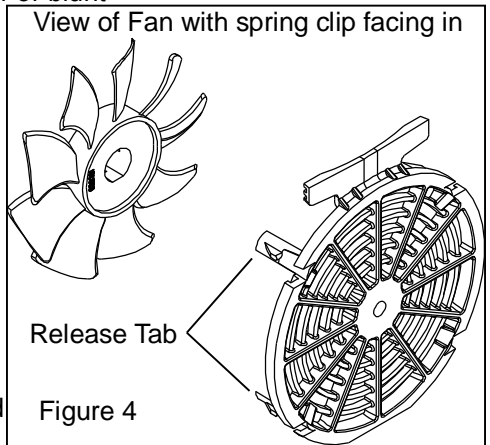
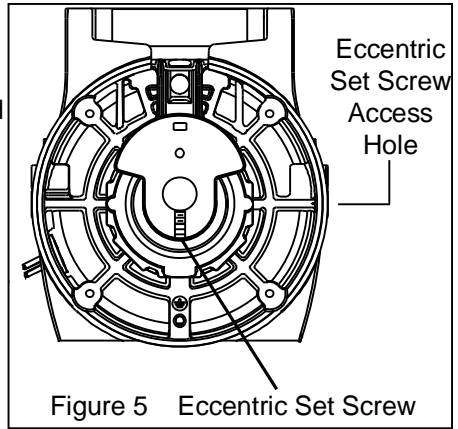


Figure 4

STEP 11. Insert the 5/32" Hex wrench into the access hole in the compressor 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.



STEP 12. Secure the rod assembly in a fixture. Remove the sleeve (1 - Discard) from the connecting rod. Remove the screw (2 - Discard) from the cup retainer (3 - Retain for reassembly).

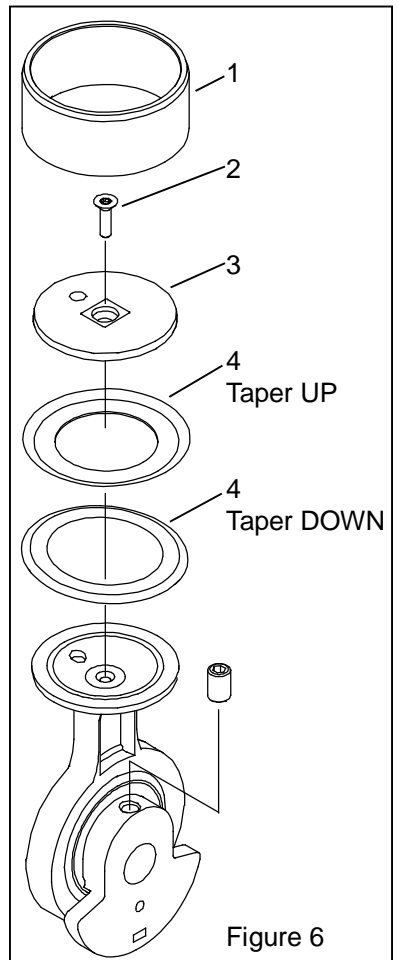
Note: Read before proceeding with the following disassembly instructions: Observe the direction of the piston cup taper (4), Taper UP or Taper DOWN. Remove the piston cup (4 - Discard) and wipe debris from the top of the connecting rod and retainer with a clean damp cloth.

Note: Before beginning determine if your connecting rod had a Taper UP or Taper DOWN piston cup.

STEP 13. For Taper UP piston cup (4). Carefully place new cylinder sleeve (1) over connecting rod top with the machine rabbit up.

STEP 14. For Taper DOWN piston cup

STEP 15. Place new cup (4) in center of connecting rod top. Do not damage the cup. Place retainer (3) on top of cup (counterbore up), making sure that the cup inside diameter is seated properly over retaining boss. Note that the retainer has a locating boss that must insert into rod top pilot. Drive new retainer screw to 55 Inch-pounds. Proceed to step 3 for other rod assembly.



STEP 16. For a Taper UP piston cup (4) carefully pull the cylinder sleeve up forming the cup.

STEP 17. For a Taper down piston cup (4) carefully push down the cylinder sleeve forming the cup. Position the cylinder sleeve so the piston cup is midway inside the sleeve.

STEP 18. Rotate the rotor shaft so that flat faces up (12:00). Position piston cup at bottom dead center of cylinder sleeve.

STEP 19. Slide the connecting rod assembly onto the shaft until the eccentric face positively stops against the bearing. 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, and tighten set screw to 125 Inch-pounds.

STEP 20. 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 compressor.

## 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 steps on the other side of compressor.

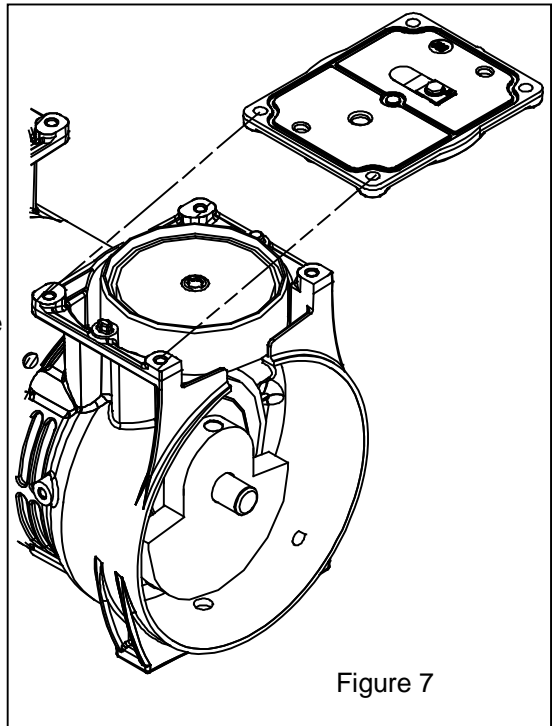

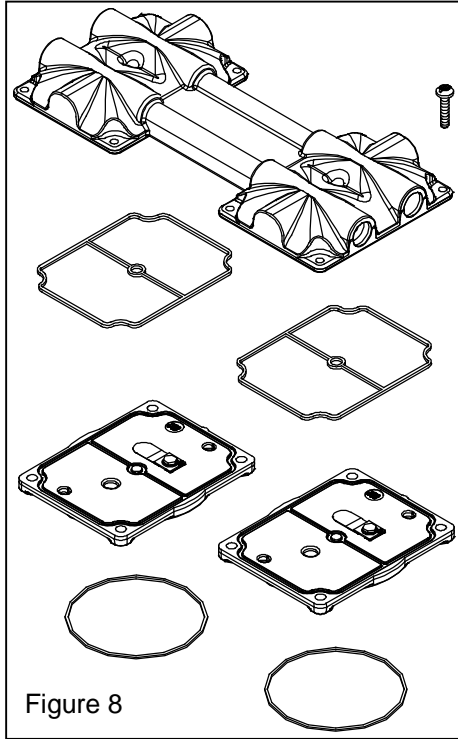


Figure 7

STEP 21. With the sleeves firmly seated on the housing, replace the valve plates in same manner as they were See Figure 8. Make sure the top edge of the sleeve locates in the O-ring groove in the bottom of the valve plate.

 CAUTION: Make sure Head Gasket is not twisted when seated in groove. Figure 8



STEP 22. Place head on the valve plates, making sure that the same letter orientation is as was before disassembly. Torque the head screws to 55 Inch-pounds in a crisscross pattern.

STEP 23. Push the fan guards into the housing until the release tabs “pop” into the mounting holes in the compressor housing. 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 for Head Assembly

