
OPERATING INSTRUCTIONS

ALL MODELS



**ROTARY VANE POSITIVE DISPLACEMENT
DRY-AIR PUMPS
VAPOR-OIL PUMPS**

MADE IN AMERICA SINCE 1939

CONGRATULATIONS!

You have purchased one of the most dependable and thoroughly proven Rotary Positive Displacement Pumps available for vacuum or low pressure applications. When installed properly and used within stated and reasonable limits of load, it should provide years of satisfactory performance.

Please read and follow the suggestions for installation and maintenance given in this manual to obtain maximum performance and trouble free service. If you have any questions at any time, please feel free to contact our factory representative for helpful advice.

Westmoor, Ltd.

YOUR CONDE' PUMP

MODEL # _____

SERIAL # _____

DATE PURCHASED _____

PURCHASED FROM _____

PLEASE DIRECT ANY QUESTIONS
OR COMMENTS TO:

WESTMOOR LTD.

Conde Pump Division
West Hamilton Avenue
Sherrill, New York 13461
315-363-1500 or 800-367-0972

IMPORTANT

READ BEFORE INSTALLATION OF THIS UNIT

WIRING

All wiring for the installation of this unit should be done by a licensed electrician according to National and Local Electrical Regulations.

SINGLE PHASE MOTOR UNITS

All single phase motors are wired for proper direction of rotation. Unless otherwise requested motors are wired for low voltage service.

3-PHASE MOTOR UNITS

The belts have been removed from the unit to avoid running the air pump backwards in case of improper wiring. Wire the 3-Phase motor to rotate in the same direction as the arrow on the Air Pump. **RUNNING THE AIR PUMP BACKWARDS MAY CAUSE VANE BREAKAGE.**

VAPOR OIL PUMPS

Use a High Detergent 10W-40 Oil for all Conde Vapor Oil Pumps. When starting new Vapor Oil Pumps fill oil reservoir above the fittings in which the wicks are inserted. This will give the Pump extra oil for the first two hours of operation.

When refilling fill to just below oil wicks.

Capacities:

Model 2 1 quart

Model 3 1 quart

Model 6 2 quarts

Model 12 4 quarts

INSTALLATION INSTRUCTIONS CONTINUED

CHECK VALVE

A Horizontal check valve has been installed on all Dri-Air Pump Units to keep the pump from running backwards and to prevent siphoning liquid into the pump from wet applications.

VACUUM RELIEF VALVE

The adjustable Vacuum Relief Valve is preset at 15in/hg unless otherwise requested.

PRESSURE RELIEF VALVE

The adjustable Pressure Relief Valve is preset at 5psi unless otherwise requested.

OPERATIONAL LIMITS

Max Vacuum (Continuous) 15IN/Hg

Max Vacuum (Intermittent) 25IN/Hg

Max Pressure (Continuous) 10PSI

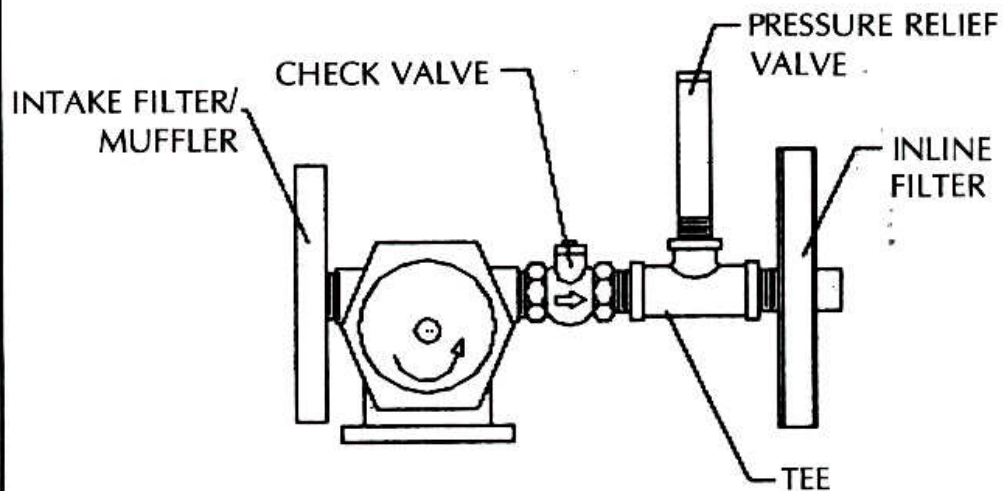
Max Pressure (Intermittent) 15PSI

AIR PUMP UNIT

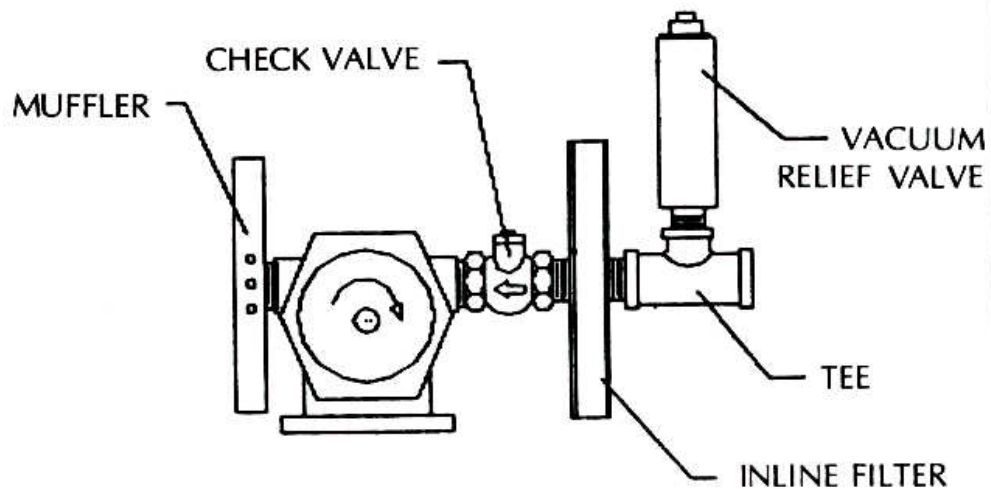
ASSEMBLY INSTRUCTIONS

All pipe thread fittings should be coated with a commercial pipe joint compound before assembly.

PRESSURE APPLICATION



VACUUM APPLICATION



GENERAL MAINTENANCE

1. Clean filter media every 1000 hours of operation under clean operating conditions. For more severe conditions clean or replace more frequently.
2. Adjust belt to 1/2 inch of free play at the center of the pulleys. Make the first adjustment after the first 24 hours of operation. Make any additional adjustments when necessary.
3. Lubricate motor or engine according to manufacturers recommendations that were supplied with the unit.
4. Fill oil reservoir in Vapor Oil Pumps to just below oil jet hole. **NEVER OIL DRI-AIR PUMPS.**

STORAGE for CONDE DRI-AIR PUMPS

1. Disconnect air lines and pump fittings from the intake and exhaust ports of the air pump.
2. Plug the pump ports with commercial pipe plugs or the plastic plugs that were supplied with the unit.
3. Coat the pump shaft with a small amount of grease or oil to prevent rust buildup during storage.
4. Store the air pump in a cool dry place.

IMPORTANT RE-STARTING

When re-starting the air pump turn the pump over by hand to be sure the shaft and rotor assembly spins freely within the pump housing. If any binding or restriction is felt the pump must be taken apart and cleaned.

FLUSHING INSTRUCTIONS for CONDE VAPOR OIL PUMPS

It may be necessary to flush your Conde Vapor Oil Pump to remove any gum or varnish buildup inside the pump that cause the vanes to stick in their slots. this is a simple maintenance operation and should be the first step when troubleshooting a loss of vacuum in a system.

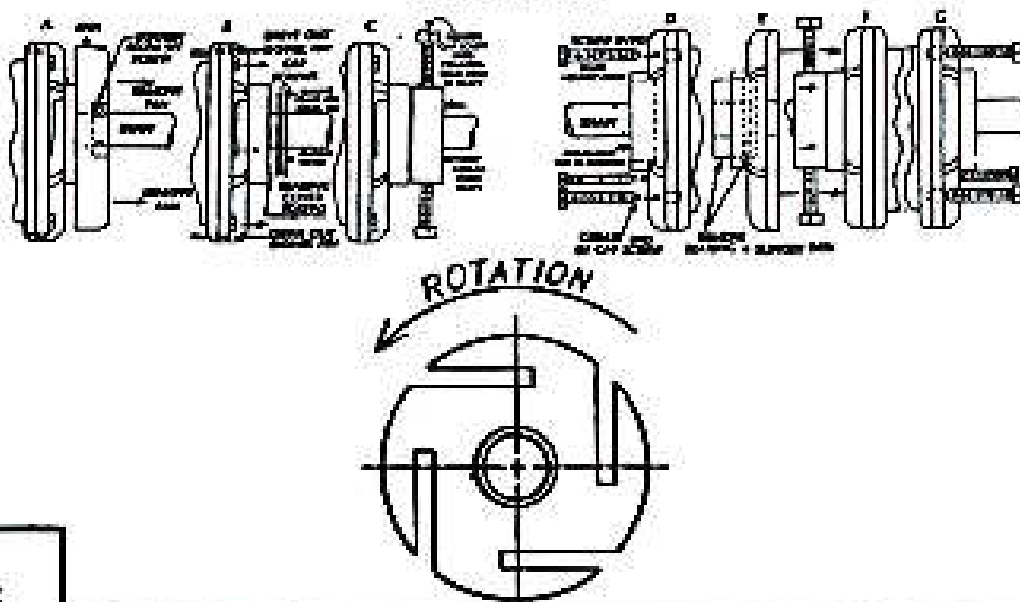
1. Remove the oil tube at the oil reservoir.
2. Be sure the exhaust is directed away from the motor or engine.
3. Use kerosene or dry cleaning fluid for flushing process. While the pump is running under vacuum, simply insert the tube into the cleaning fluid and allow the pump to draw the fluid in. Alternately let air into the tube with the cleaning fluid. It can take up to a gallon of cleaning fluid to clean the pump.
4. In the same maner draw in about 5 ounces of oil to complete the flushing process.

INSTRUCTIONS FOR DISASSEMBLY & ASSEMBLY

Disassembly:

- Fig. A - Remove cooling fans.
- Fig. B - Remove dowel pins, cap screws, bearing cover & shims.
- Fig. C - Slide collar over shaft and tighten screws securely.
- Fig. D - Screw the bolts into the 3 threaded holes in the opposite side of the pump that the collar is on. Turn the bolts alternating (no more than 1 turn at a time) until endplate slides off the pump shaft.
- Fig. E - Remove the bearing from the endplate. (This can be done easily since the bearing is a slip fit in the endplate)
- Fig. F - Put the plate just removed back in place without the bearing then slide the collar over the shaft and tighten.
- Fig. G - Remove the opposite endplate using the 3 bolts as previously done.

DRAWING



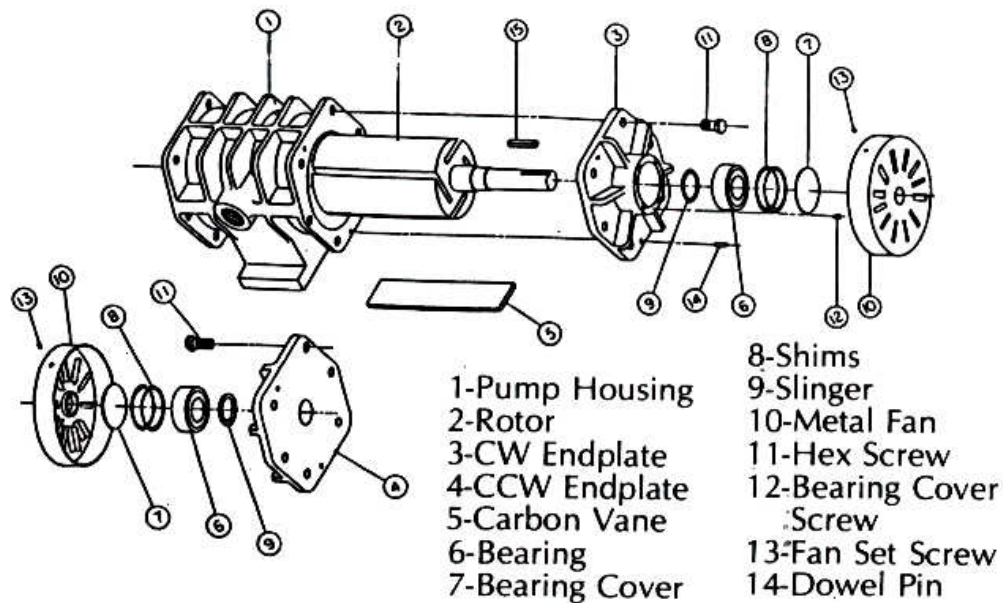
ASSEMBLY

1. Before assembly deburr all parts with a fine file. Determine correct rotor rotation (see drawing). Check the vane slots for free movement of vanes.
2. On model 2 Pumps start assembly with side of housing that has the dowel pin holes on the left side of the housing. On model 3, 6 & 12 start on side with dowel pin holes on the right. Note: dowel pin holes are always on the exhaust side of the pump.
On oil lubricated pumps press the shaft seal in place and place the paper gasket in position on the housing. Install the endplate with the six hex screws and finger tighten. Drive the 2 dowel pins in place then tighten hex screws securely.
3. Insert rotor into housing according to rotor rotation and rotation arrows on the pump. (The pump must be assembled in the same position it was disassembled. The rotation cannot be changed.) Assemble the air pump in a vertical position. This will align the rotor with the endplates and housing.
4. Install the slinger over shaft. (green disk)
5. Press bearing on the shaft using a bearing installation tool or arbor press. **IMPORTANT** -press on the inner race of bearing only. Pressing on the plastic seal may cause damage to roller bearings.
6. Invert pump assembly and install the vanes into the slots.
7. Install 2nd endplate as previously done but do not tighten screws and leave dowel pins out. Install bearing and slinger.
8. Apply downward pressure to rotor shaft so that the rotor bottoms out on the 1st endplate, while pressure is applied tighten hex screws evenly. Drive in dowel pins.
9. Shim the pump and install new bearing covers.

IMPORTANT — The pump should spin freely by hand when completed, if any binding is noticed repeat step 9.

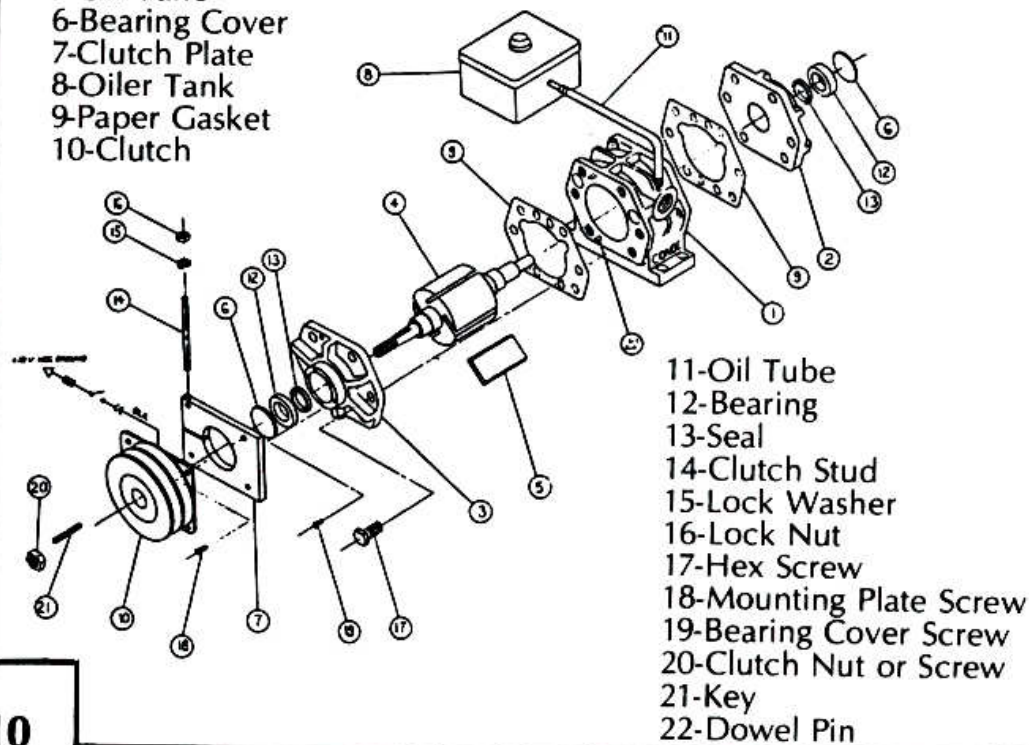
10. Install cooling fans.

DRI-AIR PUMP PARTS



VAPOR OIL PUMP PARTS

- 1-Pump Housing
2-CCW Endplate
3-CW Endplate
4-Rotor
5-Oil Vane
6-Bearing Cover
7-Clutch Plate
8-Oiler Tank
9-Paper Gasket
10-Clutch





LIMITED AMBIENT AIR ONLY WARRANTY STANDARD DRY AIR OR VAPOR-OIL AIR PUMPS

Westmoor Ltd. warrants for a period of one (1) year from date of manufacture against defects in workmanship and material. During the period, Westmoor, Ltd. will repair or replace any defective part free of charge, providing the product is returned, shipping prepaid, to our factory. Due to the extreme diversity of uses of the air pump, Westmoor, Ltd. reserves the right to refuse warranty claims if, in the opinion of Westmoor, Ltd., the installation or use of the pump exceeded the design capabilities. The pump is designed for ambient air intake only. Westmoor Ltd. does not warrant against minor leaks not affecting performance.

Owners responsibility include providing normal maintenance as required by Westmoor Ltd. This warranty does not apply (1) if the pump has been damaged due to improper use, neglect, accident, misuse, exposure to extremities of dryness or humidity (2) if the pump has been serviced or modified by other than Westmoor, Ltd. authorized personnel.

No other warranty, expressed or implied, is given. The repair or replacement of the pump is your exclusive remedy. Any implied warranty of merchantability or fitness is limited to the duration of this written warranty. In no event shall Westmoor, Ltd. be liable for consequential or incidental damages. Some states do not allow the exclusion or limitations of this warranty so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.