



# WYCO Pump Repair & Sales

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## Technical Guide



# Kimray Pump Troubleshooting

If a glycol pump has been operating in a clean system, it is very likely that no major service will be required for several years. Only a yearly replacement of packing will be required. Normally the pump will not stop pumping unless some internal part has been bent, worn, or broken, or some foreign object has fouled the pump, or the system has lost its glycol.

A pump which has been running without glycol for some time should be checked before returning to normal service. Probably the pump will need at least new “O” Rings. The cylinders and piston rods may also have been scored from the “dry run”.

Following are some typical symptoms and causes:

### SYMPTOMS

1. The pump will not operate
2. The pump will start and run until the glycol returns from the absorber. The pump then stops or slows appreciably and will not run at its rated speed.
3. The pump operates until the system temperature is normal then the pump speeds up and cavitates.
4. The pump lopes or pumps on one side only.
5. Pump stops and leaks excessive gas from wet glycol discharge.
6. Erratic pump speed. Pump changes speed every few minutes.
7. Broken Pilot Piston

### CAUSES

1. One or more of the flow lines to the pump are completely blocked or the system pressure is too low for standard pumps (below 300 psi). Use “SC” pumps below 300 psi.
2. The wet glycol discharge line to the reboiler is restricted. A pressure gauge installed on the line will show the restriction immediately.
3. The suction line is too small and increase in temperature and pumping rate cavitates the pump.
4. A leaky check valve, a foreign object lodged under a check valve or a leaky piston seal.
5. Look for metal chips or shavings under the pump D-slides
6. Traps in the wet glycol power piping sends alternate slugs of glycol and gas to the pump
7. Insufficient glycol to the Main Piston D-slide ports. Elevate the control valve end of the pump to correct