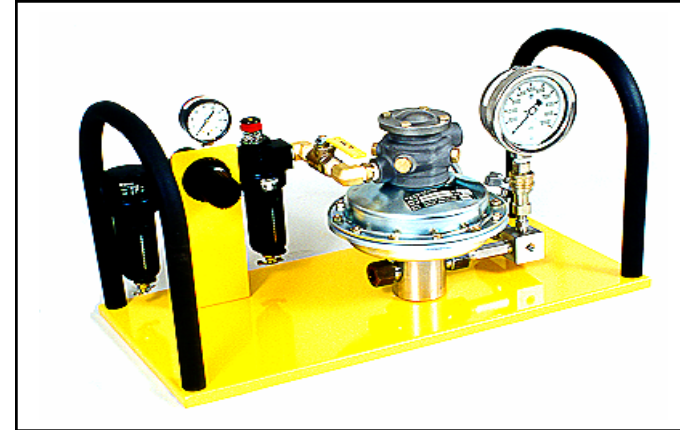


# TROUBLE SHOOTING GUIDE

| PROBLEM  | CAUSE  | REMEDY  |
|--|--|---|
| <b>1. PUMP CYCLES BUT DOES NOT BUILD PRESSURE.</b>       | <ul style="list-style-type: none"> <li>a. Water Supply Valve closed.</li> <li>b. Drain Valve open</li> <li>c. Foreign matter inside check valve.</li> </ul>  | <ul style="list-style-type: none"> <li>a. Turn On (open) water supply valve to pump.</li> <li>b. Close drain valve tightly.</li> <li>c. Remove pump check valves and clean out seals, replace o-rings.</li> </ul> |
| <b>2. PUMP CONTINUES TO CYCLE UNDER PRESSURE.</b>        | <ul style="list-style-type: none"> <li>a. Possible leak from component being tested.</li> <li>b. Possible leak in portable pump piping.</li> <li>c. Possible faulty pump check valve seals.</li> </ul> | <ul style="list-style-type: none"> <li>a. Check component for leaks.</li> <li>b. Check hydro pump fittings and tubing for leaks.</li> <li>c. Remove pump check valves, clean and replace o-ring seals.</li> </ul> |
| <b>3. EXCESSIVE WATER COMING OUT FROM PUMP MUFFLER.</b>  | <ul style="list-style-type: none"> <li>a. Excessive water in the air line.</li> <li>b. Pump seals damaged.</li> </ul>  | <ul style="list-style-type: none"> <li>a. Drain water from the air lines, use air dryer.</li> <li>b. Replace pump seals, use the recommended seal kit.</li> </ul>   |
| <b>4. PUMP CANNOT REACH MAXIMUM RATED TEST PRESSURE.</b> | <ul style="list-style-type: none"> <li>a. insufficient shop air pressure.</li> <li>b. possible damaged pressure gauge</li> </ul>   | <ul style="list-style-type: none"> <li>a. Check shop air, minimum 100 PSI required.</li> <li>b. Check Pressure gauge for proper functioning.</li> </ul>   |

# OPERATOR'S MANUAL



## Portable Hydrostatic Test Pump P-100-SM Series

BARBEE ENGINEERED TESTING SYSTEMS TEL. 619-585-8484  
 FAX. 619-585-9996 E MAIL: barbee@connectnet.com  
 WEBSITE: www.barbee.thomasregister.com

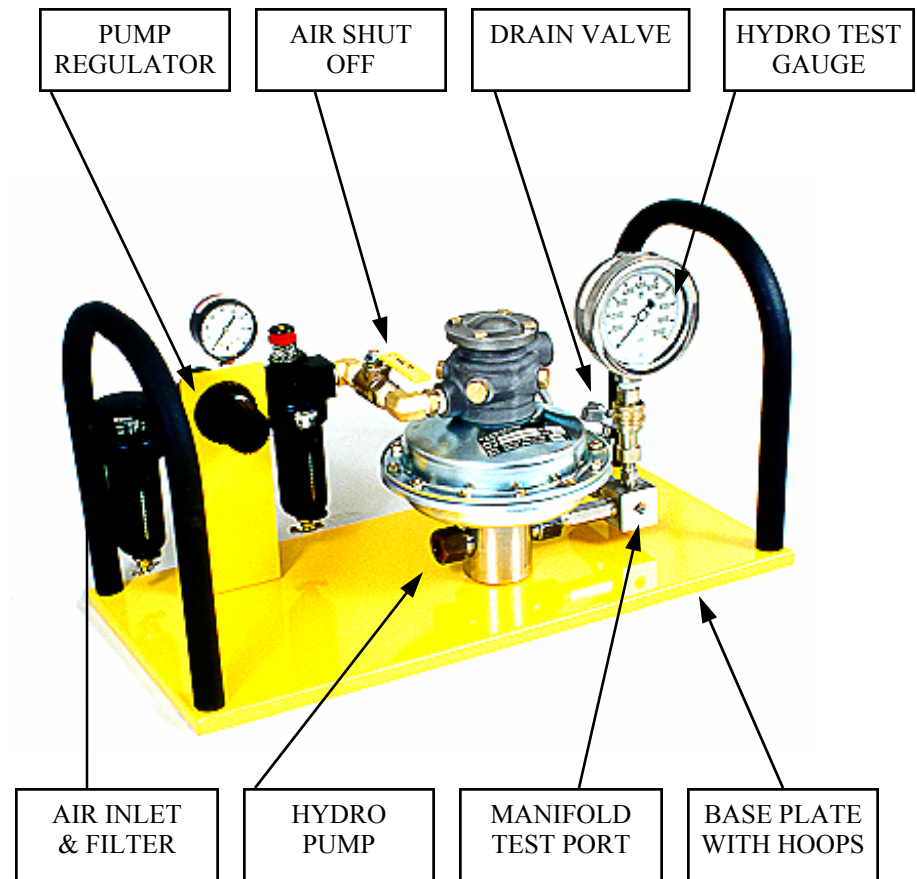
**BARBEE ENGINEERED TESTING SYSTEMS**  
**San Diego, California**

## OPERATING INSTRUCTIONS:

1. Connect air, water and hydro test hose to the portable tester. Ensure hoses used are rated for the maximum operating pressures.
2. Turn ON Water Supply to the hydro pump. Water can flow through the pump even if it is not running. Vent all the air from the component being tested.
3. Crack open drain valve from the manifold block to ensure all the air is vented from the pump.
4. Ensure pump regulator adjusting knob is turned to the full counter-clockwise position before turning ON the air supply valve to the pump.
5. Turn ON air supply valve to the tester and rotate pump regulator clockwise until desired test pressure is obtained.
6. Observe component being tested for leaks. Observe hydro test gauges. Turn OFF air supply to the pump and check for pressure loss from the test gauges. If component being tested requires visible external leakage to be detected, air to the hydro pump may be left in the open position to maintain test pressures.
7. When hydrostatic testing is completed, turn OFF water and air to the hydro pump and open drain valve to release the test pressure. Ensure all pressure is vented before component is removed from the test hose.

**WARNING! OBSERVE ALL SAFETY PRECAUTIONS WHEN PERFORMING HYDROSTATIC TESTING.**

## PORTABLE HYDRO TESTER P-100-SM



**NOTE: Adjustable relief valves can be purchased optional with test pumps. Rotate adjusting knob clockwise to increase, and counter-clockwise to decrease set pressure.**