# **OPERATING INSTRUCTIONS FOR P-SERIES HYDROSTATIC TEST PUMP**

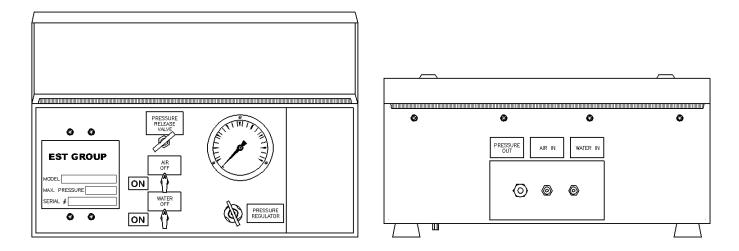
#### INTRODUCTION

The P-Series Hydrostatic Test Pump is designed to supply high pressure water for hydrostatic testing utilizing 25 - 125 psi compressed air to drive the pump. The pump is supplied with a quick connect terminating with male 1/4 NPT for connecting to the compressed air supply, a valve assembly terminating with a female 1/4 NPT for connecting with the unit under test.

#### HYDRO PUMP SET UP

NOTE: To avoid contamination of internal pump components, a water strainer and air filter should be installed in-line with the water and air supply hoses.

- 1. Ensure both the air and water valves are in the off position on the pump.
- 2. Connect the water supply to the WATER IN connection on the back of the pump.
- 3. Connect the air supply to the AIR IN connection on the back of the pump.
- 4. Connect the unit to be pressure tested to the high pressure hose assembly using the male 1/4 NPT fitting. Make sure all connections are rated for the pressure being applied.
- 5. Connect the high pressure hose assembly to the PRESSURE OUT connection on the back of the pump.
- 6. Ensure the regulator is set at zero psi/bar by turning counter-clockwise.



## PUMP OPERATING INSTRUCTIONS

- 1. Close the PRESSURE RELEASE VALVE by turning clockwise until closed tight.
- 2. Verify that the connections for water supply, air supply and unit to be tested are completed as described in Hydro Pump Set Up.



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- 3. Open the Water Valve introducing water to the system by turning to the ON position.
- 4. Bleed/vent all air and/or gases from the system by opening fittings located at the highest points in the test set-up where air can become trapped. Allow water to continue to flow from these fittings until it is free from air, re-tighten all fittings.

## WARNING! COMPRESSED AIR IS VERY DANGEROUS UNDER HIGH PRESSURE. TAKE ALL PRECAUTIONS TO THOROUGHLY BLEED ALL THE AIR FROM THE SYSTEM BEFORE PRESSURE IS INTRODUCED.

5. Turn the Air Valve to the ON position and slowly adjust the regulator clockwise until the desired test pressure is reached on the pressure gauge.

## WARNING! STAND AT SAFE DISTANCE FROM ANY VESSEL BEING TESTED.

- 6. Turn Air Valve to the AIR OFF position when the desired test pressure has been reached. Observe the pressure gauge for a drop in pressure, which would indicate a leak.
- 7. After testing is complete, turn the Water Valve to the closed position, WATER OFF, and bleed all system pressure by turning the PRESSURE RELEASE VALVE counter-clockwise. Water will drain from the bottom of the pump.
- 8. Turn regulator counterclockwise to adjust pressure setting of pump to zero.
- 9. Disconnect the unit and connect the next unit to be tested to the high pressure hose.
- 10. Repeat steps 1 through 9 until all assemblies have been tested.

**NOTE:** For rapid testing using the same test pressure on each part, leave the regulator adjusted to the desired test pressure. When the Air Valve is then turned to the "ON" position, the pump will then pressure the system to the last setting.

## **Questions?**

Contact EST Group Customer Service at any of the following locations with questions.

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