# **Instruction Manual**

## Model 500-801 Air Operated Hydrostatic Proof Test Pump



Designed for performing a proof hydrostatic test on any vessel in a test range of 0-1000 psi

Typically used for retesting fire extinguisher cylinders, small boilers, hoses, etc...

This is a piston driven pneumatic operated pump that uses water as the test fluid

This is a self lubricating pump - no external lubrication or oil is required

#### Set Up

The model 500-801 requires the following utilities to operate:

- 100 psi @ 8CFM of pre-regulated shop air
- Inlet pressurized water supply (garden hose)
- Test adapters for vessell or cylinder being tested
- Mating quick disconnect fittings for end of hose and test adapters

The pump assembly is supplied on a steel base plate that can be either mounted on a wall or a bench

- 1) Connect your inlet air pressure hose to inlet of air regulator mounted on pump
- 2) Connect water supply to garden hose fitting on pump, turn the ball valve at water inlet to the off position.
- 3) Prefill the vessell or cylinder that is to be tested with water
- 4) Attach appropriate test adapter to the vessell or cylinder
- 5) Quick couple the hose to the test adapter

NOTE; the air supply must be PREREGULATED to no more than 150 psi BEFORE it goes into the air regulator. Then you can adjust the black knob on top of air regulator so the regulator gauge reads 100 psi. To adjust the regulator, first pull up on the knob to unlock it, then turn the knob until the gauge reads a maximum of 100 psi. On the right side of the pump is a hose with a tee on the loose end. The tee has two ports, one is a high pressure bleed valve and the other is the connection for the vessel being tested. Now that you have the water and air connected to the pump you are ready to start testing.



### **Hydro-Test Products Inc.**

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#### **Basic Test Operation**

- 1. Open the bleed valve at the tee
- 2. Open the incoming water ball valve on the pump
- 3. When the water starts to come out of the air bleed valve at the tee, close the air bleed valve
- 4. Turn the pump control valve on until you reach the proper test pressure
- 5. Close the water valve on the pump
- 6. Hold pressure for desired time
- 7. Open the bleed valve on the tee to relieve the pressure, observe gauge to be sure 0 pressure is indicated
- 8. Remove the adapter from the vessel

Important Note: ALWAYS HAVE THE VESSEL YOU ARE TESTING INSIDE AN APPROVED SAFETY CAGE OR SHIELD. NEVER EXCEED THE TEST RANGE OF THE PUMP YOU ARE USING . NEVER EXCEED THE RECOMMENDED TEST PRESSURE FOR THE VESSEL YOU ARE TESTING.



#### Parts Breakdown

Key	Part No.	Description
A	160-010	Inlet Air Regulator
В	160-013	Inlet Air Regulator Gauge
C	120-034	Pump Speed Control Valve
D	140-009	Outlet Pressure Gauge (1000psi)
E	120-018	Safety Relief Pressure Valve
F	120-034	Air/ Pressure Bleed Valve
G	120-004	Incoming Water Ball Valve
Н	220-018	Inlet Water Connection (garden hose)
I	200-130	4' Long Outlet Pressure Hose
J	190-030	Replacement Pressure Pump

#### **Trouble Shooting**

Problem	Cause / Solution
	Be sure air supply at regulator is 100 psi
Pump does not build pressure	Check that vessell / cylinder is filled with water
	Check incoming water supply for blockage
Dumm does not hold musesum	Check for physical leaks between pump and vessell / cylinder
Pump does not hold pressure	Outlet check valve on pump is faulty (consult factory)



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