

# Portable Pressure Pump Model BY-8110-300

## **Technical Manual**

### PORTABLE PRESSURE PUMP - BY-8110-300

#### INSTRUCTIONS

The BY-8110-300 pump is a scissors bandle high pressure pump that will generate 300 psi for calibration or testing. It is all metal construction built for continuous service with minimal maintenance. It is a pump with small displacement so it is recommended that the volume to be pressurized is minimized. Install a shut-off valve close to the instrument and make your test connection between the valve and the instrument.

#### OPERATION

Connect the hose to the pump and the instrument. The O'ring in the pump fitting enables you to make a finger tight connection which is pressure tight. A wide range of adaptors are available for the other end of the hose (see yellow sheet). Shut the bleed-off valve and squeeze handles with a rapid motion. Generate a pressure close to the desired pressure, fine tune the pressure with the vernier (black knob) on top of the pump. Bleed off pressure when finished.

#### TROUBLESHOOTING

1. If the pump will not pump up the inlet check valve (rubber washer) on top of the piston is not closing. Remove brass cylinder, remove screw on top of the piston and carefully clean under the rubber washer. Lighly oil the top of the piston and replace rubber washer, stainless washer, spring, small washer and screw.

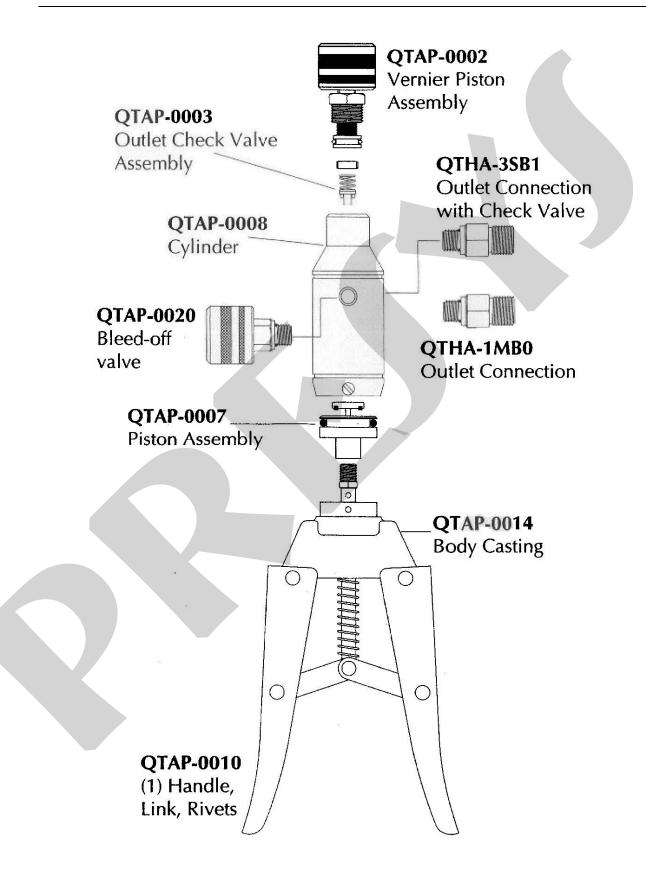
2. If the pump will not hold pressure cover the end of the hose with your finger, pump up the pump and slowly immerse the pump assembly in water.

If it leaks around the swivel gauge fitting, clean and oil fitting, inspect O'ring for cuts. If it leaks around the piston rod at the bottom of the pump the autlet check valve is leaking. Remove the vernier piston and and hex nut inside vernier piston chamber. Clean, reoil and replace check valve.

HAS NOT BEEN USED FOR AWHILE THE OUTLET CHECK REQUIRE EXTRA PRESSURE TO OPEN. WHEN THE HANDLES ARE SQUEEZED THE FIRST TIME THE CHECK VALVE MAY STICK OPEN. IF THIS VE SMALL PLUG IN SIDE OF CYLINDER HEAD AND RESEAT SMALL SCREWDRIVER.

#### MAINTENANCE

Pumps can become inoperable if they become filled with water, dirt or other chemicals from your system. If this happens they can be made operable if cleaned with the proper solvent and reoiled. The piston O'(QUAD)ring and rubber piston washer should be replaced periodically. Lubricate with O'ring grease or graphite paste and oil. Vernier O'ring should be lubricated also.



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