ultimate washer

MANUFACTURER'S OPERATING INSTRUCTIONS
TEST PUMP MODEL DP-Series (3/4/6/8/56-250)

CONNECTING THE PUMP:

1. Check pump oil thru reservoir sight glass, half-way to the top is full. Use 30w non-detergent oil.
2. Check oil level in engine crankcase, use (10W30) as needed.
3. Check oil level in the gear reduction, use (90W) as needed. Oil should be level with side plugs.
4. On units 4/6/8 accumulator head is equipped with a valve stem to adjust air pressure of the accumulator diaphragm, set between 90 to 120 psi.
5. Connect inlet hose assembly provided. The pump MUST be either suction fed (Such as out of a barrel), or gravity fed (from a water truck). A RESSURIZED LINE CANNOT BE USED TO SUPPLY WATER TO THE PUMP. Never connect this unit to a water source such as a standpipe, hose bib, tap water faucet, etc… *unless a PRESSURED Tank accessory is added.* The source of the water should be within 8-10 ft. maximum.
6. Connect the supplied high-pressure outlet hose.

OPERATING THE PUMP:

1. Turn the outlet ball valve to the open position, and start the engine. The engine RPM is preset at the factory, **DO NOT ADJUST.**
2. The pressure regulator has been preset at the factory. *To change this setting you must make this adjustment while the water is flowing freely, under no pressure.* To adjust pressure, first loosen the locknut. Turn the T-handle/Knob clockwise to increase and counterclockwise to decrease the pressure. Place a ball valve or similar open and close valve at the end of outlet hose, open and close this valve to check pressure setting and re-adjust as necessary. It is also recommended that you open and close the hose bib located under the gauge to bleed excess air from piping and ensure accurate pressure gauge readings. Upon reaching desired pressure setting, tighten locknut and prepare to begin test.
3. With the ball valve open begin building pressure in test environment. Bleeding air from hose bib under gauge at least once during this process. Once test pressure has been reached, *close the ball valve and shut off the engine.* An inline check valve prevents water pressure from bleeding back into the pump.
4. Once the outlet ball valve is closed and your test begins, you have now isolated the test pump from your test environment; any loss of pressure is due to leaks or trapped air in the lines.

REMEMBER THESE CAUTIONS:

1. Check all fluid levels prior to operating pump.
2. Use inlet hose supplied, or a suction hose the same size as inlet piping.
3. NEVER connect the inlet of the pump directly to a pressurized source.
4. Protect the pump from freezing, FLUSH with anti-freeze.

RECOMMENDED PERIODIC MAINTENANCE PROCEDURE

1. Change engine oil after the first 80 hours of operation thereafter every 250 hours of use or every season.
2. Change the oil in the pump body after the first 50 hours of operation thereafter every 250 hours.

TROUBLE SHOOTING
FOR DP-SERIES HYDROSTATIC TEST PUMP

IF PUMP FAILS TO BUILD PRESSURE:

1. Look for leaks in water supply hose and connections.
2. Supply hose is too small. Filter may be clogged.
3. Supply hose may be kinked or collapsed; Maximum 9 feet.
4. Pump may be sucking air. Small holes in supply hose are hard to find because air is drawn inward. Replace supply hose. Loose piping or connections.
5. T-Handle/knob on pressure regulator may be set incorrectly.
6. Faulty pressure gauge, replace.
7. Pump is running too slow. Advance throttle on engine to between 3400-3600 RPM, NO higher.
8. Pipeline being tested may have leaks, or open valve. Isolate pump and self-test, by placing a ballvalve on the end of the outlet hose.
9. Foreign material may be lodged in a valve, preventing valve from seating properly. Remove cylinder head. Remove valve assemblies, clean and replace.
10. Airlock. With pump running, open and close bleed valves several times to remove air trapped in piping.
11. Diaphragms may be ruptured; oil in crankcase will be milky white. Drain oil from pump and install new diaphragms.
12. No air in accumulator head on models 4/6/8, reset between 90-120 psi.