



## Piston Pumps Do's and Don'ts

### Pump Series: PW

#### DO:

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1. Consult the engine & pump manufacturer's instructions before starting the unit
2. Follow all safety, health & environmental rules and procedures.
3. Make sure all guards and shields are in place and secured before starting engine.
4. Ensure that the pump is level, stable and secure before starting.
5. Keep suction lift to a minimum and support all hoses & piping as needed.
6. Avoid air traps in the suction & discharge lines and make sure that suction line is designed with a slight slope to the pump.
7. Check fuel supply – verify adequate fuel level & check for contamination.
8. Set-up the unit as close as possible to the underdrain and near the center of the header line when used on wellpoint systems.
9. Fill pump & tanks with water before starting or connecting unit.
10. Tighten all suction connections properly - use pipe compound, Teflon tape, or wellpoint clay as required.
11. Use only good hose gaskets and good quality, reinforced suction hose.
12. Only pump water from a good filter system, i.e. wellpoints, vacuum wells, sock, or underdrain.
13. Keep wellpoint system or sock tuned for proper & efficient operation.
14. Ensure that pump produces a continuous flow within approx. 10 minutes. If no flow is produced recheck all suction connections and re-prime pump (fill with water).
15. Follow the maintenance schedule as specified in the manual.
16. Drain the pump, tanks, and all hoses & piping during extended periods of non-usage or during freezing weather. Rotate pump end while draining to remove maximum amount of water.
17. Allow the pump to cool prior to disconnecting any hoses or draining the pump.

#### DON'T:

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1. Allow inexperienced personnel to operate equipment unless they are supervised.
2. Forget safety, health & environmental precautions.
3. Lift the pump with suction or discharge hoses attached.
4. Attempt suction lifts over twenty-five feet.
5. Allow pump to run dry.
6. Sump with a piston pump.
7. Pump solids i.e. wood chips, rocks, excessive sediment...; Also avoid caustic chemicals.
8. Operate the pump at an excessive angle of inclination.
9. Run the engine faster or slower than the recommended operating speed range.
10. Adjust the vacuum relief valve prior to tuning your wellpoint system.
11. Block off vacuum relief valve to increase vacuum.
12. Operate pump with excess of 20" Hg of vacuum on sock system as it may collapse the sock.
13. Operate the pump with discharge size smaller than the suction port