MISC-3 ACCUMULATOR PRESSURE

All Spectra Watermakers except the 700 and 1000 series are supplied with a pressure accumulator tank, p/n PL-ACC-TK, to be installed in the feed water line between the feed pump and the Clark Pump. In addition, some 300 and 400 series will also have an accumulator mounted inside the fresh water flushmodule or the feed pump module. The purpose of the feed line accumulator is to reduce the spikes in the feed pressure caused by the cycling of the Clark pump.

150, 180, 200, and 380 models use Shurflo feed pumps. If the accumulator is not properly charged it can lead to problems with the Shurflo pump pressure cutout switches.

300 and 400 models having magnetically driven vane type feed pumps may experience decoupling of the magnetic drive if the accumulator is not properly charged.

All models will run more smoothly and quietly when the feed water accumulator is properly charged.

The accumulators have an air valve on top similar to those found on car tires. This allows the internal air bladder of the accumulator to be precharged. The accumulator should be pumped up to about 65psi (4.5bar) for best results on most systems. Ventura 150 watermakers will use about 45 to 50 psi. Add air using a tire pump or air compressor while the system is not running. You can experiment with the exact pressure that will give the best pulsation dampening on your installation.

The purpose of the fresh water flush accumulator is to allow a steady flow of 1.5 gallons per minute of flush water through the charcoal filter. Because the feed pumps on the 300 and some 400 hundred series exceed this maximum allowed flow rate, the controller cycles the pump on and off, to reduce the overall flow rate. The accumulator gives the water flowing through the charcoal filter somewhere to go while the feed pump is cycled off. The flush water accumulator should be preloaded to 5 psi (.35bar).

4/26/06