

Resetting your Pressure Relief Valve



The Pressure Relief Valve is a safety release which protects your system from an overpressure event. While the nominal operating pressure is 800psi, the high pressure pump is capable of building to pressure to more than twice that. To protect the other system components, the pressure relief valve will open to dump the pressure, when it climbs above the safety threshold of 1050psi. Each pressure relief valve is tested and set in our factory, prior to being fit to the high pressure pump.

The pressure relief value is regulated by a stainless steel spring. Stainless springs do not have the 'memory' that a normal high carbon steel spring has. As such, the pressure relief value may need to be reset once or twice during the life of your watermaker.

You can tell that you pressure relief valve needs to be reset when the system suddenly drops in pressure to something around 200psi. This usually happens when you are dialling in pressure, on the way to 800psi.

To reset the valve, follow these steps.

1. Remove the hose from the pressure relief valve (on the high pressure pump) and plug the end. This hose is T'd into the discharge circuit, so plugging it will be required to prevent discharge water from spilling out.

2. Run a temporary $\frac{1}{2}$ " hose from the hose-tail on the pressure relief value to a bucket. Do not fit a hose clamp.

3. Loosen the locking nut on the pressure relief valve, and wind the cap-nut (with the hose-tail attached) all the way in, until it bottoms out.

4. Run up the system, following the procedure in the quick start guide. It is best to have two people for this, one to adjust the pressure relief valve, and one to operate the control panel. Bring the pressure up to 1050psi, being careful not to allow it to go any higher.

5. Unwind the cap-nut on the pressure relief valve. Keep unwinding until the pressure relief valve opens. This will likely happen suddenly. Quickly unwind the pressure on the pressure control valve. When the pressure drops to around 200psi, the poppet in the pressure relief valve will re-seat. Continue unwinding the pressure control valve until there is zero pressure. Shut off the high pressure pump.

6. Tighten the lock-nut on the pressure control valve and re-connect the original hose.

7. Test run the system to confirm there is normal functionality.

