WELL WATER VALVE OPERATION AND SERVICE TIPS

All well water Hydro-Temp systems are equipped with a set of pressure regulated water valves. These valves regulate the amount of water that will go through the system, and stop the water flow when the system is off. With the pressure regulated water valves more water is used when the system is under load and less water if the system is running under normal conditions. The Hydro-Temp system is very conservative on water consumption.

There will always be two valves, one for heating (V46N** Thin spring on top) and one for cooling (V46A** Thick spring on top).

The heating water valve will start opening when the pressure on the sensing element drops to approximately 65 psi. It will be wide open if the pressure drops below 50 psi. This is of course depending on the pressure exerted by the spring on top of the valve. To adjust the heating water valve look at chart below. (Fig. 1)

The cooling water valve will start opening when the pressure exceeds approximately 200 psi. It will be wide open if the pressure exceeds 275 psi. This like the other valve depends on the pressure exerted by the spring. To adjust the cooling water valve look at the chart below. (Fig. 2)

The sensing elements are connected to the freon line just before entering the water coil. This line will be a high pressure line in cooling and a low pressure line in heating.

The water valve will consist of a spring, valve body, valve seats, and the sensing element.

If water starts running while the unit is off, you should check for two things. First check the freon pressure. If it is below 65 psi you are low on freon. Or check the valve seats in the water valve for something that could stop the valve from completely seating off. If sand or any other objects are a problem you should install a filter strainer.

Fig. 1

HEATING WATER VALVE
V46N**
Thin spring
Opens on freon pressure decrease
Turn spring adjustment screw counterclockwise to increase water flow (compress spring)
Adjusting the heating water valve would directly effect the suction of the compressor.

Normal pressures in heating would be 60/275.

Fig. 2

COOLING WATER VALVE
V46A**
Thick spring
Opens on freon pressure increase
Turn spring adjustment screw clockwise to increase water flow (release spring)

Adjusting the cooling water valve would directly effect the high side of the compressor.

Normal pressures in cooling would be 60/225.

** Note: The last few numbers on the water valve will vary depending on water valve size.