



## Coil Descaling



Lime and scale build-up in a pressure washer coil is caused by hard water leaving silicates, sulfates, and similar materials that will interfere with proper coil operation. This buildup of debris will result in corrosion, reduced water pressure and less water volume. Preventing scale from building up or "descaling" will increase equipment efficiency, prolong the life of the coil and ultimately save money.

How often to descaling is dependent on three factors: how hard the water is, the water temperature and the frequency of use.

### **Water Hardness**

Hard water is water that has a high mineral content, usually calcium and magnesium sulphates and/or chlorides. Hard water forms off-white solid deposits called "scale" which restrict the flow of water, resulting in clogged pipes and plumbing.

### **Water Temperature**

As water temperature increases, the volume of mineral scale that the water is able to hold drops. This results in the release of scale molecules into the water. These scale molecules attach to other crystals and the scale buildup has begun. A basic rule of thumb is the hotter the water (especially steam) the more frequent descaling is required.

### **Usage**

The more hard water pumping through a coil, the quicker the scale buildup.

### **Preventative Measures**

The cheapest, most effective way to prevent scaling is to incorporate a water softener. Not only will a water softener reduce scaling, but it will also lower your consumption of soap. Call your local Hotsy dealer for more information on water softeners.

Cooling down the coil after each use will also help to reduce scaling. After each use, turn the burner off and run cold water through the system. This will flush any loose debris out.

## **How to Descale**

It is recommended that an auxiliary pump be used to descale and clean the heating coil. Use a small diaphragm pump, and install it into the cleaner system as follows:

Connect about six feet of hose to suction side of auxiliary pump. Connect a discharge hose between the auxiliary pump output port and the drain tee at the bottom of the coil. Secure a five-gallon container. Mix two gallons of water with one gallon container of Coil Cleaner Acid.

Operate pump and circulate the acid mixture through the coil system for 30 minutes or until discharge solution stops foaming. When coil is clean, foaming will stop. After cleaning, remove auxiliary pump assembly and reconnect plumbing. Operate machine and pump clear water through unit for five minutes. Thus, you have neutralized any remaining acid while flushing out all line and sludge deposits. Replace gun nozzle.

*NOTE: Flush pail, diaphragm pump, and hose's with clear water for 5 to 10 minutes before storing away for next use.*