

### SECTION D – USING THE CF30 FOR DESCALING

#### DESCALING PROCEDURE

##### Safety Precautions

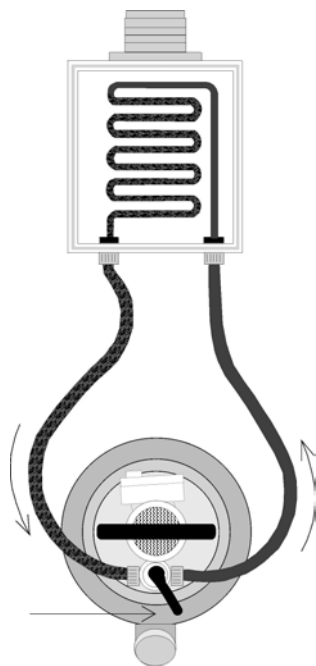
**When working with acidic descaling chemicals always wear suitable protective clothing and goggles, and check and observe instructions supplied with descaling chemicals.**

PLEASE FOLLOW THESE INSTRUCTIONS TO AVOID OPERATING OR SERVICING PROBLEMS.

Fill the tank with sufficient descaling solution to ensure that the pump rotor housing is submerged during use. The minimum liquid level is shown on the "CAUTION" label on the tank.

Screw the outer ends of the flow and return hoses securely to the plant or equipment to be descaled, using BSP threaded adaptors & PTFE tape if necessary. Connect the power cable to a suitable earthed power supply (220 or 110 volt [50 hz], according to model). As the pump will be used in a damp location, we recommend that a residual current circuit breaker plug top be used.

Switch on the pump, and check to ensure that the liquid level does not fall below the level of the rotor housing (see above), as some of the contents of the tank enter the equipment being descaled, particularly when the overall capacity of the system being descaled is greater than the tank capacity of the pump. If necessary, add more descaling solution, or water. Check all connections for leaks.



During use, the tank cap should rest on top of the screwed stem, but should **not be screwed on by more than a quarter turn**, to allow for the passage and elimination of the gas evolved during descaling. Check that the foam level does not exceed the maximum filling level. If necessary, carefully add FOAMBREAKER to the solution.

The built-in flow reverser makes it possible to attack scale from both directions. During descaling periodically move the flow reverser handle from one stop to the other. This reduces descaling time considerably, and is more effective in flushing out any solid matter, which will accumulate on the circumference of the base of the tank. By attacking scale from both sides it is possible to clean piping which is almost totally obstructed.

Scale removal can be considered complete when bubbles no longer form in the return pipe, and the solution is still acidic.

SCALEBREAKER descaling chemicals, with a built-in colour change to allow acid strength to be monitored visually, are available from KAMCO.

Caps should be kept securely on all chemical containers whilst not in use. As a matter of prudence, and to avoid splashes, operators should avoid standing directly over the open neck of either chemical containers or the filling neck of the descaling pump whilst pouring or adding chemicals.

If the pump is not to be used for a period of time, wash out the pump after use by circulating clean water through it, to prevent any residues of descaling process from drying and "gumming up" the rotor.

#### Please observe these precautions:

1. Temperature of the descaling / flushing solution must not exceed 70°C.  
Monitor temperature closely when descaling plant / equipment which may already have a high temperature, such as the domestic water coil in storage water heaters, or large plastic injection moulding tools.
2. Do not dissolve solid or crystalline descaling chemicals directly in tank, as this may choke the pump inlet and cause abrasion damage. Dissolve such chemicals in a bucket first.
3. Always keep pump upright, particularly in transit, to avoid any liquid penetrating lower electric motor bearing, or lower electric motor bearing may wear prematurely.