

SYSTEM SERVICE AND MAINTENANCE

We recommend that you perform the following procedures. Doing so will ensure you of many years of trouble-free service.

Checking for Proper Operation

Each time the solar system cycles on, there are two things to watch for :

- 1) Air will initially be purged into the pool. This may last up to five minutes.
- 2) The filter pressure will increase slightly and remain elevated as long as pool water is flowing through the solar collector.

If there are no initial bubbles

Manual System - the control valve or valves have not been correctly turned to divert the flow of water through the solar system.

Automatic System - Though you should refer to the manual for the automatic control system you have for a more detailed explanation, here are some general points that can be checked.

- 1) Is there power to the control - usually there is an indicator or "power on" light.
- 2) The auto control may not be functioning properly - check by over-riding the "auto" mode and place the selector switch into the "on" or "solar" position.
- 3) It is possible that the system is not supposed to be working - either the pool is at your desired comfort level or there is not enough usable solar energy available at the moment.

The system does not appear to be heating the pool

- 1) Is the strainer basket before the pump clean and has the filter been backwashed lately? Dirt and debris in the filtration system can slow the flow of water through the collectors and reduce system performance.
- 2) Is the filtration pump being operated at least 8-10 hours per day during normal daylight hours?
- 3) Have you been adding a lot of cold water to the pool lately?
- 4) Has the weather been worse than usual?
- 5) If nighttime temperatures are very cool, are you using a pool blanket to help retain heat that has been collected during the day?

Pool Service and Maintenance

It is advisable to bypass the solar collectors when either backwashing your filter or adding Diatomaceous Earth (DE). This prevents the possibility of any DE or other debris from passing through the solar system as well as any other pool equipment downstream of the filter. When the backwashing cycle and/or the adding of DE is complete, run the filtration system for 10-15 minutes before returning your solar heating system to operation.

If you have an automatic pool cleaning system with its **own pump**, there may be several precautions that you need to take depending on what type of control system you have. These precautions prevent the air that is initially purged from the solar system from possibly damaging pool cleaning equipment during the turning on cycle of your solar system.

Manual Control - do not start the flow of water through the solar collectors while the pool cleaning pump is running. Allow the air to be purged from the system and activate your pool cleaning system.

Automatic Systems - if your automatic control system is **not** equipped with a timed pool cleaner delay cycle, it will be necessary to run your pool cleaner in the early morning and turn it off before your solar system comes on or turn it on in the late morning, well after your solar system normally cycles on. If you manually vacuum your pool, bypassing the solar collectors at this time will provide you with full power for better vacuuming performance.

COLLECTOR REPAIR

This method allows for an easy and permanent on site repair of a collector by isolating the leaking riser tube. Referring to the figure below, locate the tube to be isolated. (End tube has been shown for clarity.) Using a sharp utility knife, very carefully cut away approximately 1" of the tube at both headers. Drive a #10 - #12 sheet metal screw, preferably stainless, into the hole in the header. The screw must be between 1/2" and 3/4" long. **DO NOT OVERTIGHTEN!** If the screw strips out, or if the repair leaks, use a larger screw. This repair method will not void the collector warranty.

