



**Swimming Pool Solar Heating  
Owner's Manual**

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## System Operation

### Automatic

Operation of your FAFCO Solar Heater is simple. Once your solar heater is started for the season, it operates automatically in conjunction with your pool filtration system. Here is how to start your FAFCO Solar Heater:

- 1 Make sure any caps or drains opened in the fall have been replaced or closed. Open any isolation valves (these may be present in older systems) located on the pipes that go to and from the solar panels
- 2 Set your solar control to "Auto" and set the temperature to your desired temperature.
- 3 Make sure your filter pump is set to operate for optimum solar hours.

### Manual

For systems not equipped with an Automatic control, follow the directions above and at step 2 manually close the \*solar valve.

*\*Note: 1. Ball Valves are open when the handles are parallel with the valve body. Full Port Valves are open when the handles are at a 90 degree angle to the valve body.*

## System Maintenance

### Winterization

It is very important for your solar panels to be properly winterized. Solar panels can be subject to freeze damage if not drained and isolated.

- 1 Turn the solar control to "Off". Close any isolation valves (these may be present in older systems) located on the pipes that go to and from the solar panels. If you have a manual control, open the solar valve.)
- 2 Turn off the filter and pool sweep pumps, and open all drain bibs in the solar loop.
- 3 Remove the end cap located at the lowest point of the solar panels. *Be sure to check the cap for debris. If debris is present, call POCO immediately. Debris in the end cap may indicate a serious filter malfunction.*
- 4 We recommend that you leave the cap out and the drain bibs open until you start the system up in the spring. Leaving the cap out and the drain bibs open will insure that no water gets into the solar panels even if the solar control or valves are inadvertently opened or malfunction.
- 5 Also change your filtration hours to save some energy, you can take it down to 4hrs a day and choose the time of day you'd like to have it running.

### Pool Maintenance

Special care should be taken to insure the solar control is turned "Off" whenever pool maintenance is performed. This is especially important during backwashing, filter cleaning, or vacuuming.

- 1 Turn the solar control to "Off".
- 2 Proceed with pool maintenance. After pool maintenance is complete, run the pool filter for 10 minutes to clear the lines of any debris.
- 3 Turn the solar control to "Auto".

### Helpful Hints

- 1 The best hours to operate your solar heater are 10:00a.m. to 6:00p.m. Experimenting with different time settings will help you find the most efficient hours of operation for your particular situation and location.

2 Using a pool cover in the spring and fall will keep night time heat loss to a minimum and maximize your solar heater's potential.

3 How well your solar heater performs is greatly dependent on the circulation provided by your pump and filter. When flow is restricted through the filtering system, the first place it is usually noticed is in reduced heat from the solar. Keeping your filter and leaf traps clean will maximize the performance of your solar heater and insure that your pool is clean, warm and enjoyable.

POCO Solar Energy is a full service company, offering the following to our valued customers:

- Winter/Spring Maintenance Contracts
- Energy Efficient Pumps & Filters
- Automated Pool Equipment
- General Repairs
- Expert Troubleshooting

## FREQUENTLY ASKED QUESTIONS

### ***HOW LONG WILL IT TAKE FOR MY POOL TO HEAT UP?***

Start your solar system on or about April 1. It will take about two weeks of continuous good weather for your pool to reach 80. It is advisable to use a pool blanket in the early spring and fall to retain heat overnight.

### ***WHY ARE THERE AIR BUBBLES WHEN MY SOLAR IS OPERATING?***

If air bubbles appear only when the system first activates, and then clear up, don't worry, that's normal. If air is present always, you probably need to clean your filter. A dirty filter restricts flow and allows the vacuum breaker at the top of the solar panels to remain open, letting air in. If the problem persists after cleaning the filter, you may need to replace your filter elements or have your pump serviced. If air is present in the returns to your pool with or without the solar on, you have a suction side leak in your pool filtration system that requires service.

### ***WHY DOES MY POOL SWEEP STOP WHEN THE SOLAR COMES ON?***

If you have an automatic control, your control unit is equipped with a pool sweep interrupt. When the solar system is activated, power to the pool sweep motor is interrupted for about ten minutes. This allows the air from the solar panels to clear through the return lines to your pool without doing damage to the pool sweep motor. If it is a cloudy or marginal day, and the solar control is cycling on and off, the sweep motor will cycle on and off as well.

### ***Why do my panels leak in the morning and not in the afternoon?***

Condensation will collect on the surface of your solar panels overnight, roll down and cause your panels to appear to be leaking at the panel couplings. If this appears in the morning and then is dry by the afternoon, your panels are not leaking. It's condensation and it's a normal occurrence like water on the hood or windshield of your car in the morning.

### ***Is it normal for my filter pressure to go up when I turn the solar on?***

It is normal for the pressure to rise slightly 2-10 lbs. when the solar is on.

## **Services Available**

### **Winterization/Spring Start Up**

**Give us a call in fall to schedule one of our experienced technicians to properly shut down your system for the winter and in spring get your system going and ready for the summer.**

### **Removal/Reinstall**

**If you are having any work done to your home in which your panels are a hindrance, we offer a service to properly remove your panels and re-install them when you are ready.**

### **Service Calls**

**If you are having trouble with your system and you have already conferred with the troubleshooting section of the owner's manual, contact us to send out a technician.**

### **Photovoltaic**

**Did you know that Poco Solar Energy also has a division to provide Solar Electric for residential and commercial application?**

**Allow us to inform you on how you can turn your meter back, take control of your electric bills, increase your energy independence, and add value to your home.**

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