

1 SUNFREE SOLAR POOL HOT TUB HEATER

I've had this system in use by people all over the Pacific Northwest for the past 25 years and it works very well in our semi-sunny climate.

First I will share with you how to make use of plain black plastic and a trickle garden hose to pre-heat the water going into your swimming pool or hot tub. It's the initial heating that takes all the energy. Once you have a warm water temperature the rest is easy. On the South side of your house, or the side that gets the most sunlight, spread as much black plastic, (one piece) from the top of the roof to the bottom to your gutter. Be able to collect the water coming through the gutter close to the pool or hot tub. I cut the bottom out of a Clorox jug, attach a hose piece at the small opening and let the water drain from the gutter into the large cut out end and then run the warm water into the pool. You will need to plug one end of the gutter and make sure that at least the one strip of gutter you are using is clean. Secure the plastic with tacks or bricks or something to hold it in place while you set a trickle water hose at the top, so when you turn the water on low pressure it will trickle down over the black plastic getting very warm and collecting in the gutter. And now draining into your empty pool and filling with warm free heated water. It would take about \$250.00 worth of gas to heat a 30,000 gallon pool from 55 degrees to 78 degrees at today's prices. And that is just to get started.

You can make a passive solar heater out of your pool or hot tub if it sits in the sunlight for any time. 1:00 pm is what we call solar noon in the summer. Any equal time before or after solar noon is good for heating. 11:00 am to 4:00 pm is great!.. With your tub or pool in the sun it is best to have a dark bottom to start with. I used to take black plastic and weigh it down with clean smooth rocks to stay on the bottom. Not an easy task I might add, but well worth the trouble. With dark on the bottom, and water in the pool, place a clear, not black, but clear plastic sheet over the pool or hot tub. Secure it so it stays on. With the clear plastic the sun's rays will penetrate going for the dark at the bottom and will heat the water 4 or 4 degrees each day the sun is out. Keep the plastic on to prevent evaporation and warm air leaking out. I know black plastic seems hot on top of water, but only for a inch or less. Would you rather have a black umbrella over you at noon on a 100 degree day, or clear plastic? You see, the clear plastic allows the heat to enter while the black prevents going past it.

These suggestions will get you started and well on your way to free hot water.

THE SUNFREE SOLAR POOL HOT TUB HEATER

This design won a National Energy Contest for it's simplicity and usefulness

We will be building a control valve and laying poly-pipe and that's it.

Depending on the size of your pool. In ground 40,000 gallons, 2" pipe at the filter, or 2,000 gallon above ground pool with 3/4 inch fittings,

will depend of the amount of poly-pipe and size of your control valve.

Purchase a double ended water turn off spigot and match up with PVC fittings. (See Page 3)

*This shows
A 2 stage
On each side
Of Valve.
You will be
Building a
Three stage*

