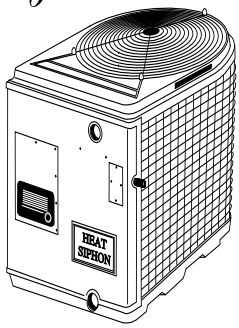
HEAT SIPHON®

Swimming Pool Heat Pumps



Made in Latrobe
Since 1983

Pennsylvania
U.S.A.

"WE PERFORM TO KEEP YOU WARM!!"

Owner / Service Manual

For Heat Siphon® Swimming Pool Heat Pump Models:

Discontinued Models:
(220Volt - 1 Phase - 60 Hz ONLY) - SX3.25HP , SX5HP
(220Volt - 1 Phase - 50/60 Hz) - 2.25HP , 3.25HP , 5.0HP
(220Volt - 1 Phase - 50 Hz ONLY) - SX3.25HP50 , SX5HP50
(220Volt - 3 Phase - 50/60 Hz) - 3.25HP3 , 5HP3 , SX3.25HP3 , SX5HP3
(380/460 Volt - 3 Phase - 50/60 Hz) - 2.25HPX , 3.25HPX , 5HPX , SX3.25HPX , SX5HPX

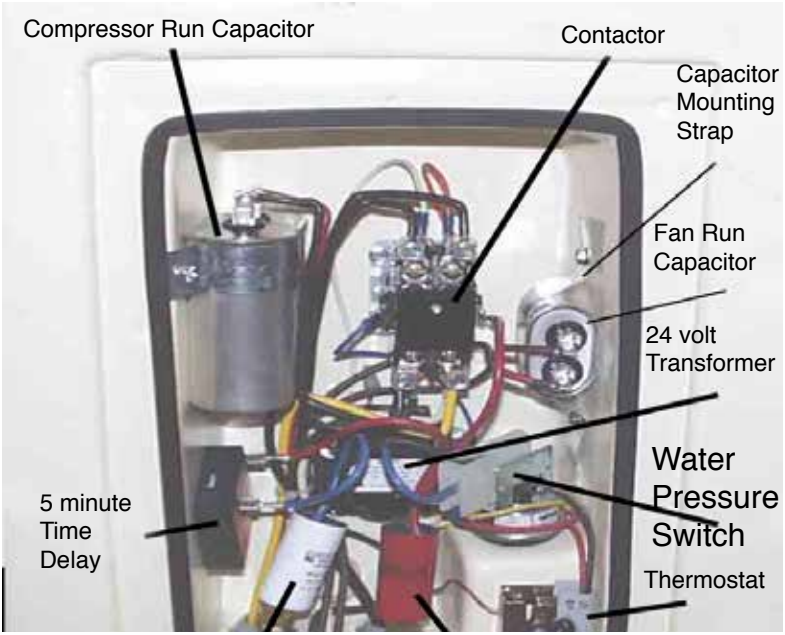
New Models: ALL C Series And Z Series Heat Siphon Models

Publisher: United States ThermoAmp Inc.
1223 Walnut St. , Latrobe, PA. 15650
724-537-3500

Adjustment of the Water Pressure Switch

Below are pictures of the water pressure switch and its location in your Heat Siphon:

Fig 4.2 - Water Pressure Switch Location in Control Box



Heat Siphon's exclusive FULL FLOW Titanium heat exchanger has a minimal pressure drop and requires NO SPECIAL PLUMBING arrangement. It should be considered as just another length of PVC pipe in your pool filtration system.

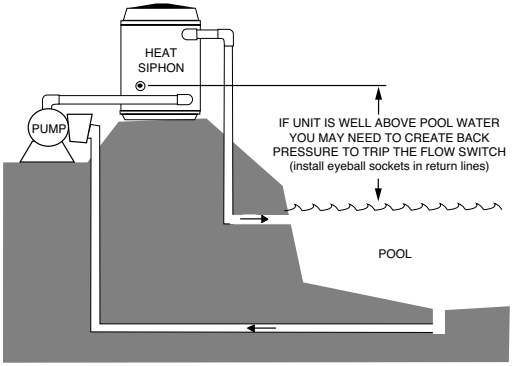
LOCATION: Connect Heat Siphon® in the pool pump discharge (return) line DOWNSTREAM of all filters and pool pumps, and UPSTREAM of any electranator chlorinators or chemical pumps.

SIZE: All Heat Siphon®'s have 1.5 " x 2" fittings for connection to the pool or spa filtration piping which will accept 1.5" schedule 40 PVC pipe directly or 2" SCH 40 PVC pipe with a 2" PVC coupling. The in-line water pressure drop produced by Heat Siphon is less than 1.5 psi at 30 GPM.

Only one Heat Siphon® adjustment may be required at installation. On some models of the Heat Siphon® a gas heater type water pressure sensing switch is used to detect flow rather than direct flow measurement. The switch prevents Heat Siphon® operation with

no water flow. Adjustment is required when the vertical distance from the pool surface to the Heat Siphon® thermostat knob is more than a few feet above or below pool level .

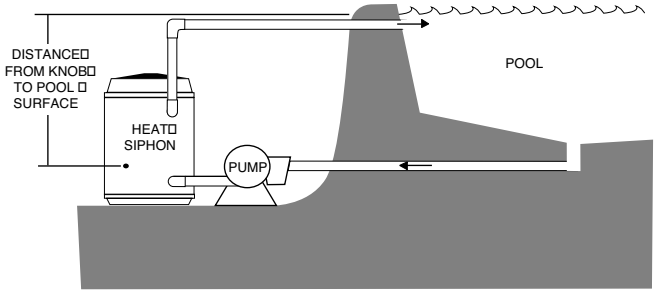
To correct this condition, DISCONNECT ALL ELECTRICAL POWER. Remove the knob and cover to the control box and adjust the switch as follows.



1. If the pool is BELOW the unit and the Heat Siphon® won't turn on with the pool pump, turn the pressure switch adjustment thumb wheel to the right until the top of the switch is at the MINIMUM SETTING (1 psi).

If the unit still doesn't start and it is more than 2 feet BELOW the water surface to the thermostat knob then the height difference may be creating a siphoning effect as the pool water returns to the pool, which in turn lowers the pool return line pressure below the minimum trip pressure of this switch.

In this case you may need to create sufficient back pressure by using eyeball sockets in all the return lines or by restricting the flow with a reducing fitting downstream of the Heat Siphon®



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2. If the pool surface is ABOVE the unit and the Heat Siphon® won't turn off when the pool pump shuts off, then measure the vertical

distance in feet from the Heat Siphon knob and the pool water surface and divide by 2.

This will be the approximate pressure setting required for proper operation. Turn the pressure switch thumb wheel until the top of the wheel lines up with the proper psi lines.

3. Replace cover and repeat the start up/ shut down test above. / shut down test above.

Fig 4-1(a) New Style Water Pressure Switch

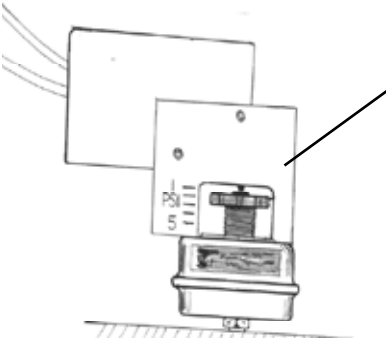

Fig 4-1(b) Old Style Water Pressure Switch