

Solar Heater

INSTALLATION AND INSTRUCTION MANUAL



Read all instructions **BEFORE** assembling and using it.
RETAIN THIS MANUAL FOR FUTURE USE.

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The solar heater has been engineered and manufactured in our highest standards for dependability, durability, ease of operation and safety. Follow these instructions, and it will heat your pool for many years to come. Thank you for purchasing.

Important Safety Information



WARNING! POSITION THE SOLARARC SO THAT IT DOES NOT PROVIDE ACCESS TO THE POOL FOR CHILDREN.



WARNING! MOUNT ON GROUND. DO NOT MOUNT ON A ROOF OR STANDING STRUCTURE.

Caution:

The solar heater is designed to be installed on the ground next to your pump and filter system. Please ensure that the installation does not provide children access to the pool. The recommended installation is on the ground and not mounted on a roof or standing structure. Doing so could damage the solar heater and the mounting surface and void your warranty.

Important

- Carefully read this manual. Failure to comply with these instructions can cause injury, death, or damage to the unit.
- Do NOT allow children to operate solar heater
- Always turn the filter system off when installing, working on, or servicing the solar heater
- Install solar heater far enough away from the pool to prevent children from using it as a way to access the pool
- When loosening any threaded connections on your filter, pump or pool, be sure that the filter hoses are closed or blocked to prevent water flow
- Please try to keep all the connection hoses straight

NOTE: Be sure to place your solar blanket on at night to help retain the heat generated by the solar heater.

How solar heater works:

Water flows from your pool's filter into the bottom left corner (inlet) of the solar heater. A plug built into the lower header pipe of the solar heater forces the water up through the left half of the unit. When the water reaches the solar heater upper header pipe, it flows to the right and back down through the right half of the solar heater. As the water travels through the solar heater, it is heated by the sun. The heated water then flows out of the bottom right corner (outlet) of the solar heater and back to your pool.



Where should I put the Solar Heater

- Choose a hard, level surface
- The unit(s) should never be placed on a roof, or any structure
- Install solar heater on the ground in a location where it will receive at least 6 hours of direct sunlight a day
- The unit(s) should be angled toward the sun using the legs provided

NOTE: The solar heater is to be installed between the filter and the pool water inlet. Solar heater must be placed after the filter to prevent buildup of dirt/debris in the tubing.

NOTE: If solar heater needs to be further from the filter than the hoses allow, you may need to purchase a longer hose with the 1½" diameter openings, or connect 2 hoses together using a 1½"-1½" coupler (not included). In this case make certain you have two hose dams to secure the hoses to the coupler. If the hoses are too wide to fit the hose connector, put the 1¼"-1½" tube reducer on the hose connector and continue.

CAUTION

Ensure ALL hoses connections are tight and hoses are NOT kinked or bent at severe angles. If the hoses are leaking, check to make sure ALL of the parts that have O-Rings have them attached and are screwed on tightly. DO NOT over tighten hose clamps.

NOTE: The short rubber hose (see parts photo on parts list under letter J) is only used to connect multiple solar heaters together.

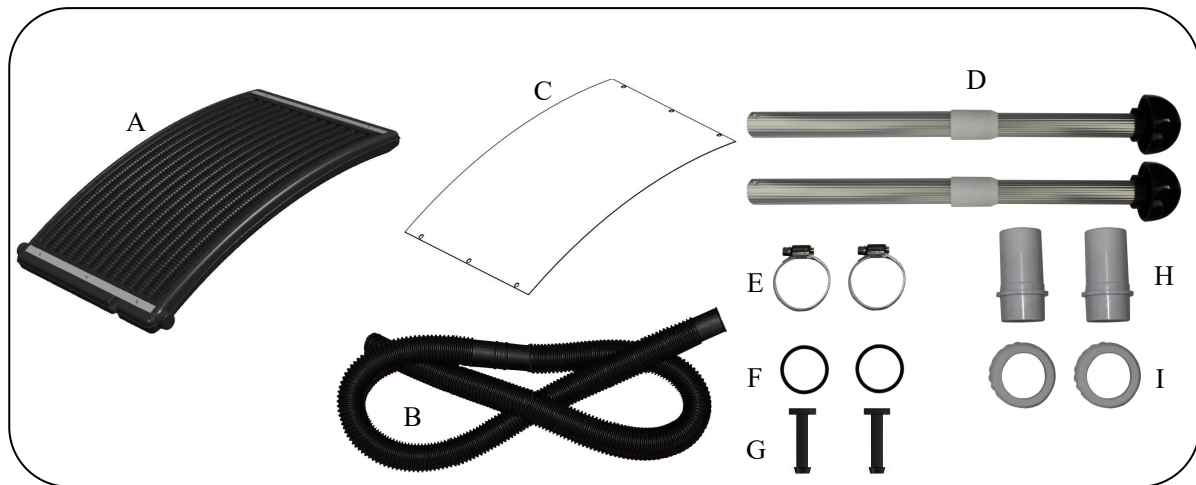
What Tools will I need

- All you need is a flat head screwdriver or 5/16th" nut driver.

When should I run the solar heater

- The solar heater works best when the sun is shining.

Parts lists(Standard package):



Ref. No.	Description	QTY
A	Main body	1
B	1-1/2 Flex hose	1
C	PC Transparent board	1
D	Aluminum legs	2
E	1 1/2" Stainless Steel Clamps	2
F	O-ring	2
G	I-Shaped bolt	2
H	Pipe Adaptors smooth	2
I	1 1/2" PVC Couplings	2

Component parts list:

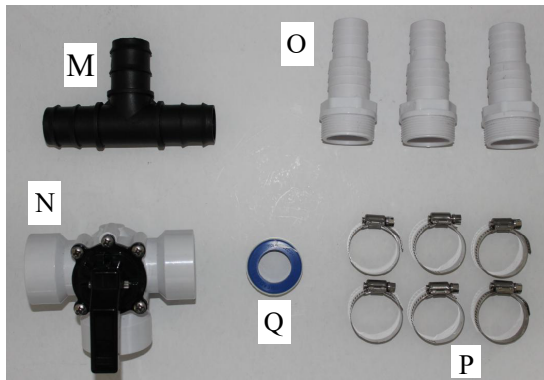
(BUY SEPARATELY, NOT INCLUDED IN STANDARD PACKAGE):



Ref. No.	Description	QTY
J	Pipe Adaptors barbed	2
K	Short rubber hose (for the multiple connection)	1
L	1 1/2" Stainless Steel Clamps	2

Dividing Valve lists

(BUY SEPARATELY, NOT INCLUDED IN STANDARD PACKAGE):



Ref. No.	Description	QTY
M	T-type adaptor	1
N	Three-way valve	1
O	Adaptor 1 1/2" male threaded	2
P	1 1/2" Stainless Steel Clamps	6
Q	Teflon tape	1

Installation

We suggest wrap ample amounts of Teflon tape on the ends of all threaded headers and pipe adaptors.

1. Remove solar heater from box



2. Taking PVC couplings off from inlet and outlet



3. Putting O-ring on the pipe adaptor (smooth). Attach coupling and pipe adaptor to outlet and inlet, tighten it.



4. Plug return fitting in pool to ensure no water loss when disconnecting hose from return.



5. Make sure filter is turned off so no water flows out of the filter when disconnecting return hose from the swimming pool return and connecting to the solar heater.



6. Disconnect flex hose from return fitting.



7. Take the hose end removed from pool return and connect to hose adaptor attached to the header. Tighten hose clamp with screwdriver.



8. Connect provided flex hose to the end labeled “To Pool” and the opposite end to the return fitting. Tighten hose clamp with screwdriver.



9. Put the Aluminum legs on the solar heater and insert I-shape bolt



10. Remove protective film from glazed clear cover.



Multiple solar heater can be installed in series for larger pools and/or for more rapid heating. To connect multiple units together, use the provided rubber hose and hose dams to join the solar heater together at the lower end.

1. Using barbed hose adaptor to instead of smooth hose adaptor for the two connection outlet and inlet.



2. From the first solar heater's output use the rubber hose connector and 2 hose clamps and connect to second solar heater.



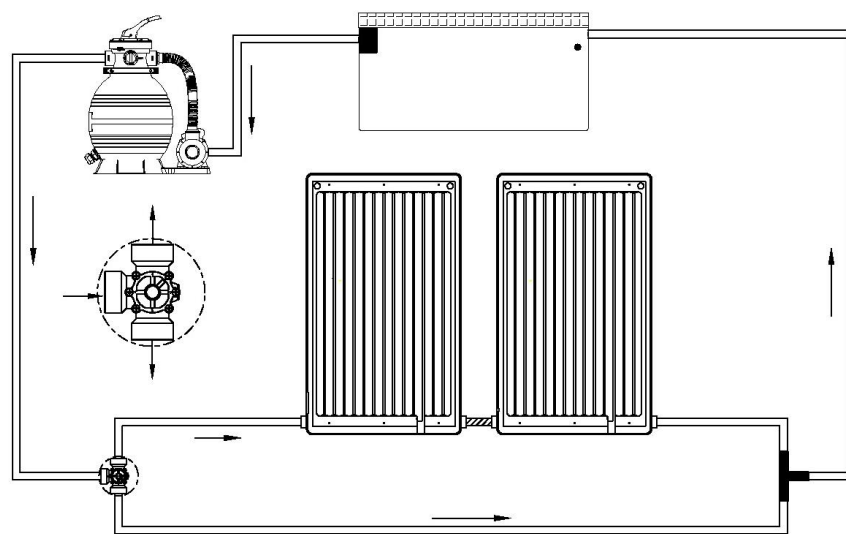
Solar heater should installed with dividing valve

Using dividing valve could lower the heater's pressure that could longer the heater's service life. The dividing valve will not influence the heater's working efficient.

We suggest wrap ample amounts of Teflon tape on the ends of all threaded headers and pipe adapters.

1. Before the installation please make sure filter is turned off so no water flows out of the filter when disconnecting return hose from the swimming pool return and connecting to the solar heater.
2. Three-way valve should install between the solar heater and filter and T-type adaptor should set between the solar heater and pool.

The picture is for your installation reference



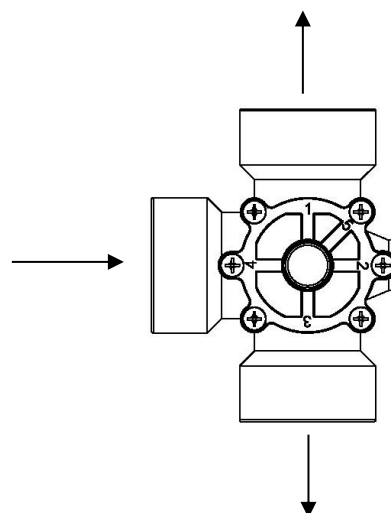
Manual for three-way valve:

The handle on the three-way valve could adjust the water flow, the No.4 is for the water inlet and No.1 is connected with solar heater

If the using 0.25HP to 0.75HP pump, the handle is better sitting on No.2 position

If the using more than 0.75HP pump, the handle is better sitting on No.5 position

If the pump is less than 0.25HP, the handle is better sitting on No.3 position



Winterization:

The solar heater MUST BE DRAINED FOR WINTERIZATION! FREEZE DAMAGE IS NOT COVERED UNDER WARRANTY! YOU MUST DRAIN THE SOLAR HEATER JUST LIKE YOU DRAIN THE REST OF YOUR POOL EQUIPMENT!

It is always best to store your solar heater inside a warm, dry place for winter storage.

Troubleshooting

Problems	Possibilities/Solutions
Solar heater does not appear to be heating the pool	<ul style="list-style-type: none">● Make sure that water is flowing through solar heater by checking the flow at the pool return● Note the weather – has it been cloudy or raining● Use your pool cover at night to reduce heat loss● Refer to our order guide – pool size may require additional solar heater
Bubbles continue to appear from the pool water inlet during operation	<ul style="list-style-type: none">● Check the connections for leaks● Check the flow rate● Check the tubing for leaks or clogging
Solar heater leaks	<ul style="list-style-type: none">● Make sure connectors and hose clamps are tight and not defective