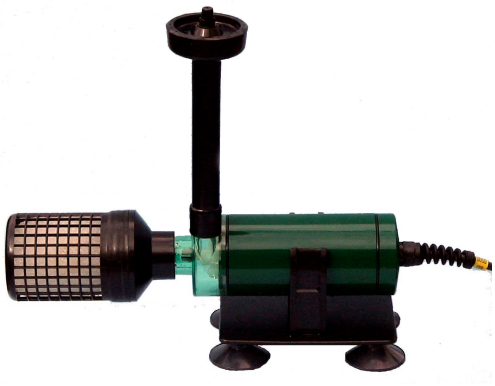
Instructions. Please read

Thank you for purchasing our SXT solar pump. The 12 volt DC electronic pump you have purchased is designed to run continuously and modern technology makes it very reliable. The nominal running voltage is 12 volts DC – this can be supplied by a solar photovoltaic module (solar panel), your car's 12 volt battery, or any other stable 12 volt DC supply. A standard fused plug is supplied with the pump.



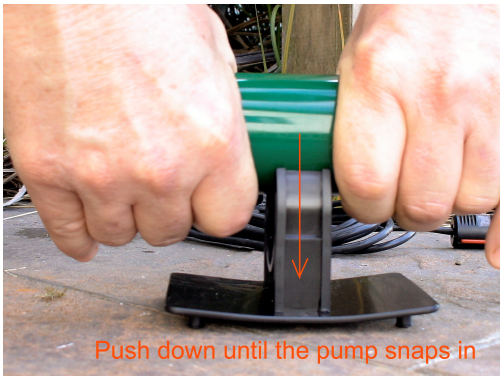
Unlike other DC pumps SXT pumps have been specifically designed to operate from the wide range of voltages that are generated by solar panels. This voltage typically ranges from 2.5 to 17 volts. They are also polarity protected, which means that if you wire them up the wrong way they are not damaged (provided the input voltage is not exceeded).

The kit includes

- 1 pump SXT (your model is listed on yellow band around the cable)
- 1 holder with suction feet
- 4 additional small spacer washers
- 1 red adaptor
- 1 counter pressure disc
- 1 fountain head
- 1 filter

Assembly

Wet the mounting plate as this makes it easier to push the pump in. Place the plate on a firm surface and push the pump body down onto it until it snaps in. Be sure to push on the pump body and not the impeller housing. Once snapped into the mounting plate the pump body can be rotated to direct the outlet ie: vertical, to the side or somewhere in between.



Push the four suction feet onto the underside of the mounting plate.

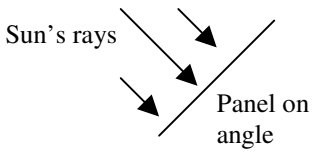
Push the filter onto the suction end of the pump.

Push the fountain head or an outlet hose onto the output of the pump. Support the impeller housing from the underside with your hand so the impeller housing is not put under too much pressure.

A Hansen 20mm fitting (left) is supplied to fit onto the outlet of the SXT2000 so you can fit a 20mm hose to it. We suggest you use 19mm thin-wall tube available from some garden centres and irrigation shops. It is not as stiff as alkathene pipe. The pump must be horizontal in the water, but you can rotate the pump body in its mount so the outlet comes out to the side.

Place the pump in the water. Ideally the pump should be mounted up off the bottom (on a brick for instance) so debris on the bottom of the pond does not get sucked into the pump.

Place the solar panel in **full sun**. Ideally it needs to face true north on about a 35 degree angle, so the sun's rays hit the panel at a right angle.



Connect the pump to the panel. The pump should immediately start pumping.

The connectors are not weatherproof so put them under cover or inside a plastic bag. If they get wet they won't be dangerous, but it will lead to premature corrosion and contact problems in the future.

Important. If using your car's cigarette socket be sure to use the red collar over the pump's plug to avoid a short circuit.

The pump and panel were tested together before they left Hunkin Garden Products, but in the unlikely event the pump does not go you need to check the following.

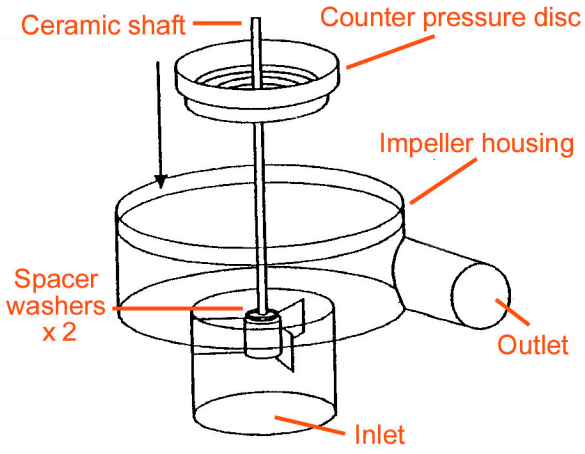
1. Make sure the pump is still submerged.
2. Is the panel in full sun (clear blue sky)?
3. Disconnect and reconnect the plug.
4. Disconnect the panel and pull the pump from the water. Look through the impeller housing and make sure nothing is interfering with the white impeller.
5. Unscrew the pump plug and check the fuse inside.
6. If you still can't get it going please call Hunkin Garden Products on 0800 14 48 65

IMPORTANT

1. The pump has ceramic bearings that will last a very long time due to them being very hard. What will destroy them very quickly is running the pump out of water. The pump will burn up if run in air. The pump must always be in fresh water when the panel is connected. If you need to remove the pump from the water, disconnect the panel first. The original plug supplied with the pump contains a fuse and it must always be used with the pump. If the pump is run out of water or the correct fused plug in not used, the warranty will be void. Always use the filter.
2. If using the fountain head, make sure all the water returns to the pond. In strong winds for instance, water can be blown over the sides of a pond eventually emptying it, causing the pump to run dry.

Counter pressure disc

Inside the small plastic bag that came with the pump you will find a small plastic disc. If you have a high head, such as a 1 metre waterfall, you can increase the pump's pressure by installing this disc into the impeller housing to reduce the clearance around the impeller. The pump's output below 0.8m is reduced when the disc is used, so only use it if a head higher than 0.8m is required. Do not use this disc if you are using a fountain head, and always make sure the filter is attached when using it.



To install the counter pressure disc hold the pump in your left hand and remove the impeller housing by turning it counter clockwise. Be careful not to lose the 2 small plastic spacer washers. Take the counter pressure disc and press it into the impeller housing until it stops. Put the impeller housing back on the main pump body, making sure you put back the 2 spacer washers.

If you want to remove the disc, put a screwdriver into the gaps in the inlet, and tap it out. Do not try to lever it out from the impeller housing side or you will break the housing. Be careful not to lose the two small spacer washers on the shaft.

How to open and clean the pump

(See diagram below)

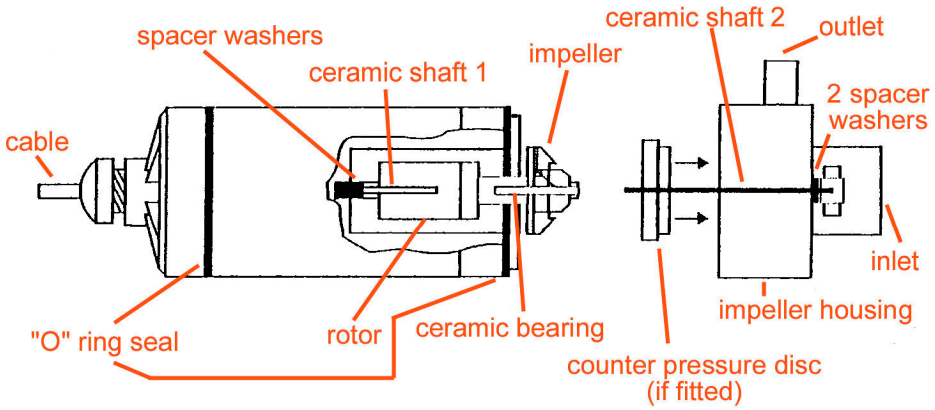
Hold the pump over a clean surface in your left hand and open the impeller housing by twisting it around counter clockwise. Watch for the two small spacers on the end of the impeller, you may lose them if they fall out. There are also spacers on the shaft inside the pump body which may come out with the rotor and they are not that easy to see (that is why we recommend opening the pump over a clean surface). There are four spare spacers supplied with the pump and you can also purchase spares from Hunkin Garden Products if you lose any.

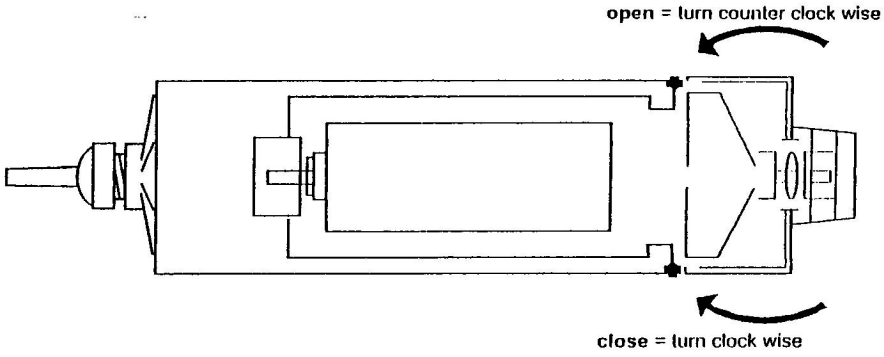
Take out the impeller and rotor. There will be some resistance due to the magnets so you may need a small knife or screwdriver to carefully prize the impeller out just enough so you can pull it out by hand.

The impeller housing, rotor, and the inner parts of the pump are easily cleaned using regular vinegar.

Reassemble in the reverse order, remembering to put in the spacer washers. Before you put on the impeller housing make sure the impeller rotates freely. It should be just clear of the main body so it does not rub on it. If there is no clearance between the impeller and the pump body then pack it out using the spacer washers.

The filter end unscrews and the filter medium can be cleaned under a tap. The fountain head also unscrews from the top and can be cleaned.





If you need any further information, parts or help, please call on 0800 14 48 65