

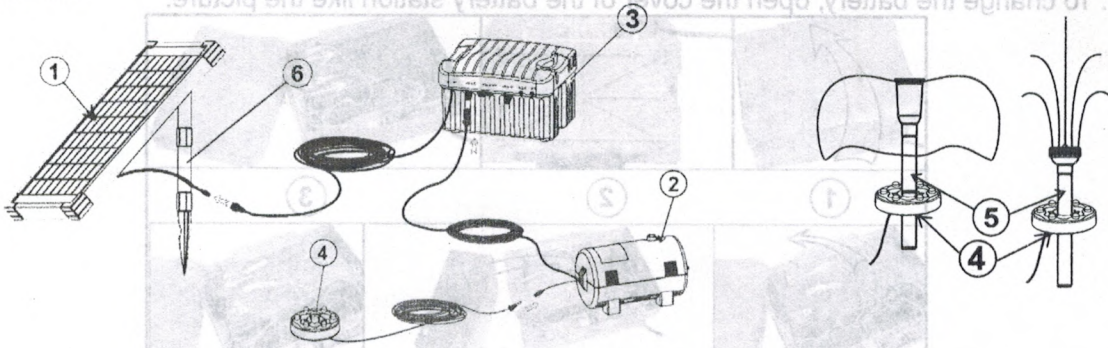
SOLAR PUMP KIT USER'S MANUAL

Design for fountain
Model No. SPBL10-401209A

1. OVERVIEW

- 1) The solar pump is designed for outdoor or indoor fountain use, and is powered by a solar module. In order to make the pump work by solar energy, the solar module needs to be placed in the sunlight facing the sun.
- 2) The pump is supplied by the battery station which is charged by a solar module. It can work for day and night.
- 3) The special LED ring light can lighten the fountain in the night.
- 4) The performance of the pump depends on the sunlight intensity and the orientation of the solar module.

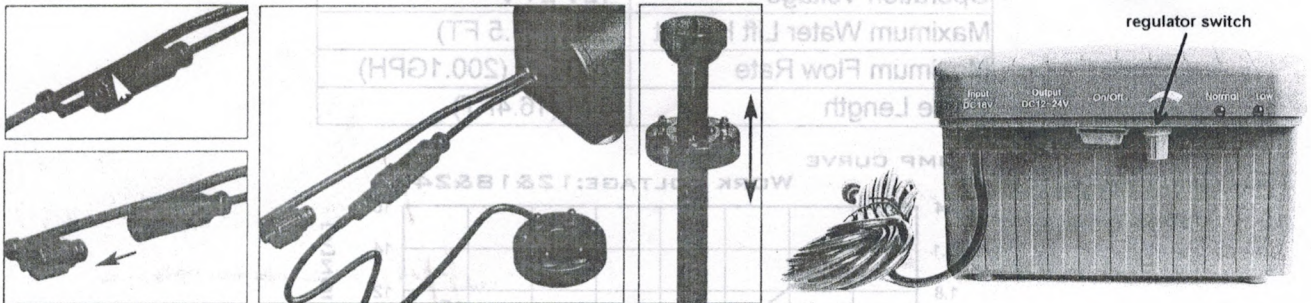
2. COMPONENTS



- 1)solar panel 2)solar pump 3)solar battery backup 4)fountain LED light 5) nozzle accessories 6) spike

3. ASSEMBLING

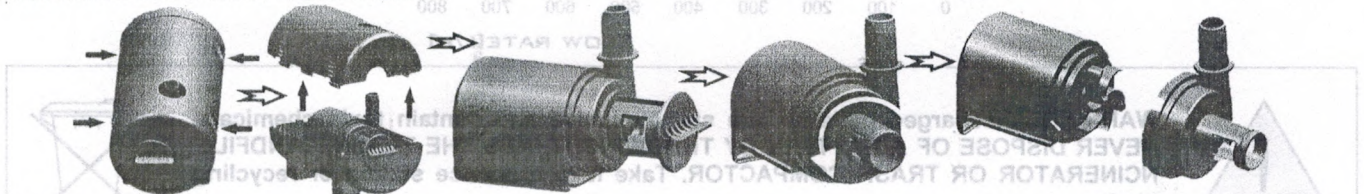
- 1) Unpack all components carefully.
- 2) Connect the pump to the solar battery backup.
- 3) Connect the solar battery station to the solar panel.
- 4) Connect the nozzle with the pump tube, the nozzle can produce 2 different jet shapes like the above picture.
- 5) Connect the LED light to the socket like below photos, it can easily slip onto the nozzle tube or put it on the ground under water only.
- 6) Make sure to place the pump fully underwater when the pump operates.
- 7) To produce the excellent fountain effect, please leave the fountain head above the water surface.
- 8) Put on the ON/OFF switch, the green indicating light "ON" shows the system is in NORMAL condition, the solar pump is now ready to operate.
- 9) Adjust the regulator switch to get different pump performance. The pump can operate at the voltage range of 12V-24V.



4. CAUTIONS

- 1) Do not alter or change the components of the product.
- 2) Do not connect the pump to any AC voltage power directly; it's ONLY for DC Voltage power.
- 3) Operate the pump in freshwater or saltwater only (never above 40°C), especially keep it away from flammable liquids.
- 4) Do not strike the solar panel.
- 5) Do not let the pump run dry.

5. CLEANING AND MAINTENANCE



If after some time the pump starts losing power or stops working, please clean up sediment in the pump shell or filter cribs. Note the pump can be opened by pressing down at the bottom of the filter housing (See the above photo for demonstration).

To clear the impeller, open the pump housing at the front by sliding up the front plastic cover.

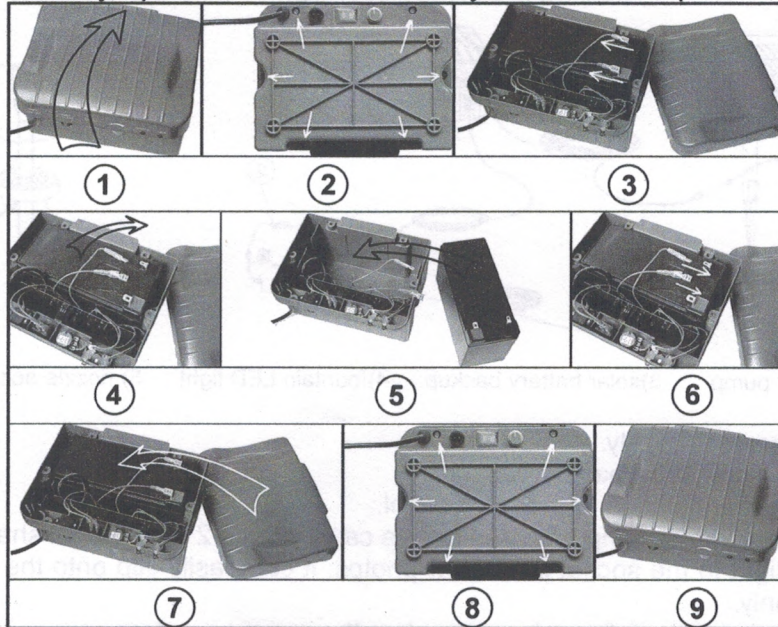
To clean the solar module, wipe off the dust, leaves etc.

Be careful, never drop down the ceramic axis while cleaning the impeller, it breaks easily.

6. FUNCTIONALITY PROBLEMS

***Pump does not operate even though the solar panel is in full sunlight.**

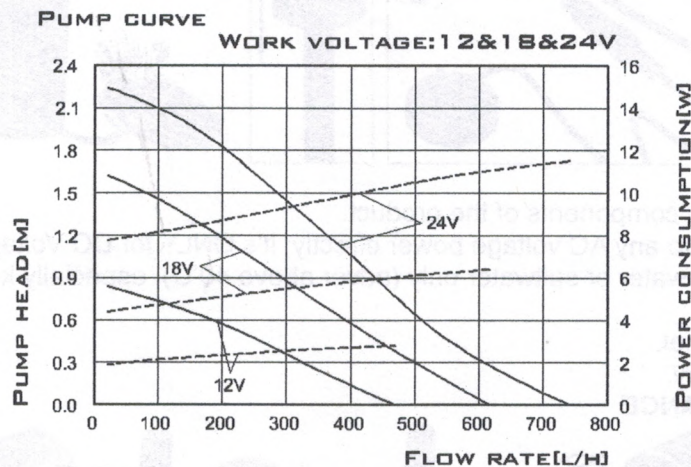
- 1) In cloudy or rainy days, the battery cannot get sufficient power supply during the daytime. The RED indicating light will turn on, showing the battery is in LOW voltage condition. It needs to be charged in a sunny day.
- 2) No connection—check the connections on the solar module and the battery station.
- 3) Impeller is blocked—to clean the pump, remove the front plate and the impeller, and use a brush or water to remove any debris.
- 4) The storage battery inside the box will lose efficiency after a year and a half and therefore need to be changed. To change the battery, open the cover of the battery station like the picture.



***Pump does operate but there is no water running through the tubes: Clear the tube and the filter to make sure the tube is through completely.**

7. TECHNICAL DATA AND PUMP CURVE

Peak Power of Solar Panel	10 W
Operation Voltage	12V-24 V
Maximum Water Lift Height	2.3 M (7.5 FT)
Maximum Flow Rate	760 L/H (200.1GPH)
Cable Length	5 M (16.4FT)



WARNING: Discharged batteries are still explosive and contain toxic chemicals. NEVER DISPOSE OF A BATTERY BY THROWING IT INTO THE TRASH, LANDFILL, INCINERATOR OR TRASH COMPACTOR. Take it to a service station or recycling center.

