CREATE A BIT OF BRILLIANCE IN YOUR OWN BACKYARD

AP300SP, AP960SP & AP1360SP SOLAR PANEL & PUMP KIT - INSTRUCTIONS -



MODEL 02AS510 02AS512 02AS514 DATE MAY 2022 v2.0 HOTLINE 1300 278 283 PHONE +61 (8) 6260 1000 EMAIL SALES@AQUAPROONLINE.COM.AU

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CONGRATULATIONS ON YOUR PURCHASE OF THIS PRODUCT BY **AQUAPRO**.

TECHNICAL SPECIFICATIONS

DESCRIPTION	AP300SP	AP960SP	AP1360SP
MAX WATER FLOW IN FULL SUN	310L/H	980L/H	1360L/H
MAX PUMP HEAD IN FULL SUN	0.8M	1.0M	2.1M
MAX PUMP POWER CONSUMPTION	2.5W	4.5W	10.5W
PUMP VOLTAGE RANGE	6-9V	12-24V	12-24V
LOW WATER LEVEL CUT OFF	YES	YES	YES
ELECTRICAL CURRENT TYPE	DC	DC	DC
SOLAR PANEL MAX POWER	3.5W	8W	20W
CABLE LENGTH	5M	5M	5M
BUILT IN FLOW ADJUSTER	YES	YES	YES
OUTLET Ø	10MM	12MM THREAD	12MM THREAD
FOUNTAN KIT INCLUDED	YES	YES	YES
RECOMMENDED TUBING SIZE ID	8MM	12MM	12MM
RECOMMENDED FOR	TABLE-TOP	OUTDOOR	OUTDOOR
PRODUCT ORDER CODE	02AS510	02AS512	02AS514

FEATURES

THE AQUAPRO DC SOLAR PUMPS HAVE BEEN MANUFACTURED WITH ADVANCED TECHNOLOGY TO PROVIDE YOU WITH THE BEST QUALITY SOLAR PUMPS FOR YOUR WATER FEATURE. VISIT OUR WEBSITE TO VIEW OUR RANGE OF OUTDOOR/UNDERWATER LIGHTING AND WATER GARDENING ACCESSORIES.

- Advanced Low voltage pump motor design with DC current, brushless motor.
- The built in Flow adjuster on the front of the pump can alter the water flow rate of the pump.
- Low water level cutout will automatically cut power to the pump on low water level.
- Long life Impellor Design Ceramic shaft is wear resistant and self-lubricated by water.
- Energy Efficient Runs directly off energy from the sun via the solar panel.

- Eco Friendly Exceptional low dB noise rating with low mechanical vibration.
- Tool-less Assembly for Easy maintenance. No special tools required.
- Easy to install due to the Plug and Play plug design and Extra Low Voltage Electrical system.
- Multiple fountain nozzles included for different effects.

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BENEFITS

AQUAPRO DC SOLAR PUMPS ARE SUITABLE FOR USE IN MANY DIFFERENT APPLICATIONS INCLUDING WATER FOUNTAINS, WATER FEATURES AND BIRD BATHS. YOUR PUMP HAS A SINGLE MOVING PART (AN IMPELLER SET) ENABLING EASY CLEANING AND MAINTENANCE.

- The pump has a robust bearing and shaft design so no oil/grease lubrication is required.
- Aquapro DC Solar Pumps are continuous rated therefore are designed not to demand short breaks for cooling purposes.

IMPORTANT SAFEGUARDS



PLEASE READ THESE INSTRUCTIONS AND FAMILIARISE YOURSELF WITH THE EQUIPMENT BEFORE PLACING IT IN SERVICE. CORRECT AND SAFE USE OF THE SYSTEM REQUIRES STRICT COMPLIANCE WITH THE SAFETY INSTRUCTIONS. FOR SAFETY REASONS PERSONS LESS THAN 16 YEARS OF AGE OR PEOPLE THAT ARE NOT FAMILIAR WITH THESE INSTRUCTIONS SHOULD NOT USE THIS EQUIPMENT.

- Any damage to the equipment or unmerited operation will bring dangers to the surrounding precincts. If there is any damage of the equipment, it must not to be used. Check appliance for defects regularly.
- For your own safety, disconnect from the power supply before any maintenance of any equipment is attempted. Always unplug the pump from the Solar Panel when not in use. Never pull the cable to disconnect the plug grasp the plug and pull to disconnect.
- Do not cut the cable as this will result in voiding your warranty.
- Do not install or store the appliance where it will be exposed to extreme hot or cold temperatures. Do not use in water above 35°C.
- Care should be taken to arrange the power cable so that it cannot be accidentally tripped over or pulled.
- Do not attempt to repair the electrical appliance yourself. Return to an authorised service centre or place of purchase if a fault occurs, regular maintenance is not considered repair and is required by user.

PRODUCT SPECIFIC SAFEGUARDS

- Do not operate the pump without water at any time; permanent damage may occur.
- Be sure the equipment is submerged completely in the water. Do not submerge to a depth greater than 2m.
- The pump is designed to be used in a fresh water bird bath or water-feature using clean water only. It is not to be used in any other manner or purpose, or with any chemicals such as a solvent or gasoline.
- Do not connect the pump to any AC voltage power supply. It is only to be supplied with DC power within the voltage range stated in the specification table.
- The solar panel is made with glass components. Do not drop strike, or crush the solar panel. The solar module should only be cleaned with soft tissue or glass cleaning solutions.
- It is recommended that you should not to select a pump that is too small for the job required. If in doubt select a bigger model.

INSTALLATION

- The solar pump is designed for outdoor use, and is powered by a solar panel. In order to make the pump work by solar energy, the solar panel needs to be placed in direct sunlight with its solar cells facing the sun as much as possible. The performance of the pump depends on the sunlight intensity and the incident angle at which sunlight strikes the panel surface.
- The pump has a built-in function of dry-run protection. The dry-run protection function is provided by two sensor points on one side of the pump housing (referring Diagram). The pump works if both of the points are submerged in water. If either or both points emerge out of water, the pump stops working.
- In the centre of the impellor you may notice a small hole opening that protrudes through the ceramic shaft from front to back. It is paramount that this portal is kept unblocked at all times. This is a cooling channel for the motor.
- The pump flow rate can be adjusted by the flow valve on the front of the pump.



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ASSEMBLING THE FOUNTAIN KIT

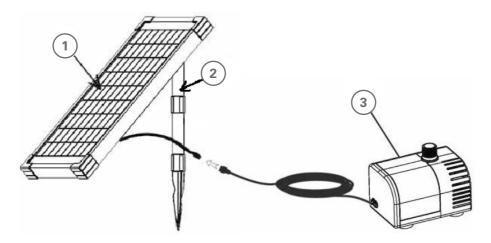
- To create a small fountain, fit your selected nozzle and extension tubes to the top of the pump outlet by pushing or screwing (depending on the model). There are different nozzles for different effects. To produce the effect, it is best practice for the fountain head or nozzle to be positioned 5 - 10cm above the water surface. It is best to keep the pump off the waterfeature base to avoid drawing the waste and debris into the pump, otherwise it may lead to a blockage in the pump. A household brick is sometimes used for this purpose.
- If you choose to connect tubing to the pump instead of the fountain kit, we recommend using one of the riser stems from the fountain kit to push inside 13mm hose. You may need

to utilize hot water to soften the tube and expand the diameter to fit over the riser end. Remember to use Stainless Steel hose clamps to fasten the hose on to the Hosetail. This is to ensure that the pipe does not blow off at a later time or leak at this point in the plumbing system. Direct the hose in your desired direction.

- Place the pump in the desired location. Ensure the pump is on a stable, raised surface free of sludge, sand, and other debris. Do not place the pump directly on the water feature floor or in mud.
- Connect the pump to the solar panel and tighten the protection nut.

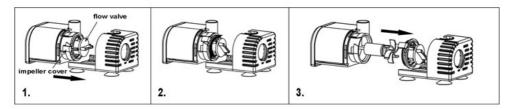
ASSEMBLING THE SOLAR PANEL

- Install the solar panel on the lawn or garden by jabbing the spike (2) into the ground. Adjust the orientation of the panel (1) to face towards the sun and then tighten the screw on the back of the panel to secure.
- Make sure to keep the pump (3) fully submerged in water while the pump is in operation.
- The solar pump should now operate.



CLEANING

- The filter screen will clog up over time. Begin by ensuring that the power supply is disconnected from the solar panel before attempting any maintenance or adjustment of the unit. Remove the unit from the water.
- Please clean regularly (at least once a month) to ensure strong water flow. Failure to maintain the unit will result in a burnt out motor and other damage. All Aquapro DC Solar Pumps are water cooled. If the pump becomes restricted, or blocked, it will overheat and could cause permanent damage. When the flow starts to be reduced check and clean if necessary.
- The motor unit of the pump is encapsulated with epoxy resin and does not need lubrication. Regular inspections, cleaning and maintenance of impellor is necessary to ensure longer life



- Disconnect the tubing/fountain kit from the pump.
- Press on the bottom of the filter housing, and meanwhile move the filter housing away from the pump.
- Turn the impeller cover together with flow valve clockwise to the end and then carefully pull the impeller cover, and flow valve, away from the pump.
- Lift out the impellor assembly. Take care not to break ceramic shaft. Clean the impellor with clean water and a suitable brush, taking note to remove fine sediment on and around the back end of the impellor. Replace the impellor if necessary.
- Clean the housing and pump with a suitable brush, taking care to clean off sludge, algae and debris.
- Reassemble the pump in reverse sequence.
- Reconnect the pump as before.
- *Be careful not to drop the ceramic shaft while cleaning the impeller as it breaks easily.

IMPORTANT NOTES:

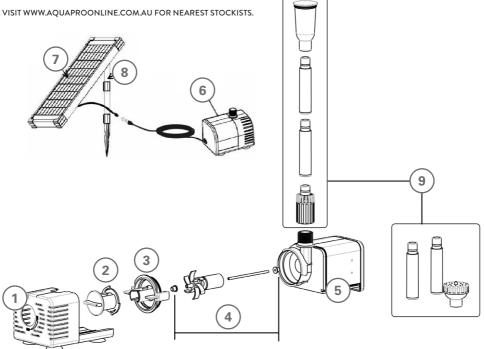
IT IS IMPORTANT TO ENSURE MAINTENANCE IS CARRIED OUT REGULARLY AS THE COOLING PATH INSIDE THE MOTOR CAN BECOME CLOGGED. IF THE IMPELLOR ASSEMBLY BECOMES WORN OR DAMAGED IT SHOULD BE REPLACED (AVAILABLE FROM YOUR DEALER OR SPECIAL ORDERS). FAILURE TO DO SO MAY CAUSE SERIOUS DAMAGE TO PUMP. INSPECT FOR SIGNS OF WEAR AND TEAR.

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PART DESCRIPTION

NOTE:

PLEASE CONSULT YOUR RETAILER FOR QUALITY ORIGINAL AQUAPRO REPLACEMENT PARTS FOR YOUR AQUAPRO PRODUCT.



Part No.	Description	AP300SP	AP960SP	AP1360SP
4	Impellor and Shaft Assembly	12AS064	12AS065	
6	DC Solar Pump Only - not all parts included with this model	12AS073	12AS074	
7	Solar Panel Only	12AS067	12AS068	12AS069
9	Fountain kit - inc. Threaded Adaptor, Riser, & Fountain Nozzles	N/A	12AS	071

TROUBLESHOOTING

PROBLEM	REASON	SOLUTION	
WATER PUMP NOT WORKING	No Power	Check that the plug is connected and turned on	
	Impellor is blocked with sludge or limescale	Clean the Impellor as per the instructions	
	Running without sufficient water	Submerse the equipment underwater then plug in. Refill if necessary.	
	Blocked Impellor chamber or ceramic shaft is broken	Clean the Impellor. Check for wear. Replace if necessary.	
WATER PUMP IS NOISY	Blockage in pump	Clear the blockage	
	Impellor & Shaft worn out	Replace Impellor & Shaft	
	Impellor broken	Replace Impellor	
	Flow adjuster set to minimum	Open the flow adjuster and allow water to flow	
	Unit inlet is blocked or the water pump outlet is blocked	Clear all blockages	
	The height to which you are pumping is too high for the given model of pump.	Select a bigger model of pump	

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SAFEGUARDS & WARRANTY

IMPORTANT: IF USED IN MARINE OR SALTWATER, DUE TO THE HARSH CONDITIONS THE WARRANTY IS VOID.

- This product comes with a warranty against defects and motor failure (Warranty). The benefits provided in this Warranty are in addition to other rights and remedies available to you under the Australia Consumer Law. The Warranty is provided to the original purchaser of the product on the following terms:
- The Warranty is given by Aquatec Equipoment Pty Ltd trading as Aquatec Equipment: 37 Edison Circuit, Forrestdale, WA 6112. Tel 1300 278 283 or email sales@aquatecequipment.com.
- To make a claim under the Warranty you must return the faulty product to the place of purchase with a valid receipt or proof of purchase.
- A Warranty claim must be made within 2 years of the date of purchase.
- If your claim complies with the above terms and the product is not an exhaustible Item and no voiding events have occurred, we will (at our sole discretion):
 - repair the product, if possible; or
 - provide a replacement product; or
 - if a replacement product is not available, provide a refund for the purchase price paid.
- You will bear the cost associated with claiming under the Warranty such as the cost of transportation and delivery of the product to and from the place of purchase.
- The product contains a complete Impellor Set, O Ring & UV Globe. These items are exhaustible (Exhaustible Items) and are not covered under the Warranty.
- The Warranty will be void if any of the following events occur, as determined by us, at our sole discretion (Voiding Events):
 - any tampering/removal of warranty identification labels or electrical components is evident.
 - the defect has arisen due to: an accident, incorrect or inadequate installation, misuse or abuse of the product (including improper maintenance and service), excessive wear and tear, not following manufacturer's guidelines/ instructions, or the product has been used in a manner contrary to the purpose or suitability of the product.

- the product has been modified without our authority.
- the defect is caused by power surges/spikes/ brownouts.
- Loss of livestock, damage to property, or personal injury caused by the improper use or abuse of the product will not be covered and the manufacturer excludes all liability for such events to the extent permitted by law.
- In addition to the Warranty set out above, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

FOR MORE INFORMATION AND THE COMPLETE AQUAPRO RANGE VISIT WWW.AQUAPROONLINE.COM.AU



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