

#### WHAT'S INCLUDED:



1. Venturi Air Intake Silencer
2. Venturi Air Line
3. Collection Cup Lid
4. Collection Cup
5. Hang-on Mounting Bracket
6. Pre-filter Sponge
7. Submersible Pump
8. Air Intake Adaptor
9. Waste Drain Valve

#### AQUATOP 1 YEAR LIMITED WARRANTY

Products are guaranteed by AQUATOP® Aquatic Supplies to the original purchaser against defective material and workmanship under normal use for a period of 1 year from the date of the original purchase through an Authorized Aquatop Reseller.

Products have no warranty if:

- 1.) The product has been serviced, modified or tampered with by anyone other than AQUATOP Aquatic Supplies,
- 2.) The product has been abused or damaged (including broken or cracked bulbs), and/or
- 3.) The product has been transported without proper packaging,
- 4.) The product was purchased from an Unauthorized Reseller.

**Note:** All sales from Amazon and Ebay (regardless of seller) do not qualify for any warranty coverage. Please see [www.aquatop.com](http://www.aquatop.com) for more information.

#### AQUATOP EXCLUSIVE 1 + 1 EXTENDED BRICK & MORTAR STORE WARRANTY

The additional 1 Year Extended Warranty applies when you REGISTER online with Aquatop. Register your Extended Warranty at [www.aquatop.com](http://www.aquatop.com)

**Note:** Extended warranty is available for qualifying products. See [www.aquatop.com](http://www.aquatop.com) for a list of qualifying products.

- 1.0. Terms and Conditions of Guarantee.
- 1.1. Aquatop warrants to the purchaser, for 1 Year from date of original purchase through an Authorized Aquatop Reseller, to repair or replace goods where fault is found due to defective materials or faulty workmanship and where goods do not operate in accordance with the instructions.
- 1.2. All claims for repair or replacement must be made at place of purchase.
- 1.3. The original and dated Proof of Purchase (receipt) must be supplied with all goods claims. Please also provide this Guarantee where possible.
- 1.4. The Guarantee covers the Aquarium against gluing breakdown resulting in leakage.
- 1.5. All goods subject to claim under Guarantee should be prepared for transportation in the original packaging or other comparable packaging which offers the same degree of protection.
- 1.6. Where goods are repaired or replaced under Guarantee, these goods are Guaranteed for the remainder of either the original Guarantee or Extended Guarantee period.
- 1.7. Where claims on inspection reveal goods are in normal working order, Aquatop will request reimbursement of all reasonable costs incurred.

#### WARRANTY LIABILITY DISCLAIMER

In no event will Aquatop® be liable for any consequential or incidental damages, including but not limited to, lost sea life, personal injury, property damage, equipment damage, lost profits, lost wages, lost savings, lost income, etc., arising out of the use of any Aquatop products.

For more information on tank health and maintenance as well as other products carried by Aquatop, visit our website: [www.aquatop.com](http://www.aquatop.com)

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# AQUATOP® Xyclone® MINI PROTEIN SKIMMER



## OWNER'S MANUAL



## INTRODUCTION

Thank you for purchasing AQUATOP's PS-170 Xyclone Mini Protein Skimmer. Please read this instruction manual carefully before use and save it in case it is needed for future reference.

The AQUATOP Xyclone Mini Protein Skimmer is capable of filtering 174 Gallons per hour, making it suitable for Saltwater Aquariums up to 55 Gallons. This powerful Protein Skimmer will help clean your aquarium water by performing foam fractionation, a process that removes dissolved organic waste from your aquarium water before the waste can enter the nitrogen cycle. The flexible design allows for a Hang-on Tank application or In-sump installation, and includes a needle-wheel impeller, removable collection cup and a submersible pump.

## CAUTION/SAFETY INFORMATION

It is your sole responsibility to verify that the plug And the receptacle are clean and free of moisture And salt build up at all times. The receptacle must be Free of water, salt, calcium, magnesium and dust. Failure to do so can cause fire, damage to property, And permanent damage to the product and personal Injury not limited to loss of life.

1. Read and follow all instructions.
2. A drip loop must be used with all Electrical aquarium devices.  
A drip loop is a self-made part of the cord hanging below the receptacle. (See Fig.1)
3. A GFCI (ground fault circuit interrupter) should be used In the branch circuit supplying all power to water pumps And electrical aquarium equipment. If you do not have a GFCI, we strongly recommend having a qualified Electrician install one prior to operating any aquarium Component.
4. Do not plug into extension cord/power strip.
5. Use this product for its intended use only.
6. Never yank or pull the cord from the electrical outlet.
7. Do not operate if the plug or wire is damaged.
8. Verify that hands are dry prior to disconnecting the Power.
9. To reduce the risks of electrocution, keep all Connections dry.
10. For indoor use only.
11. If any of the electrical components get wet, unplug Immediately.
12. Do not use soaps or detergents when cleaning this device. Thoroughly clean and rinse with warm water and make sure the device is completely dry before connecting.
13. Keep this product away from children.

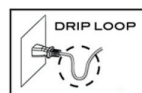


Fig.1

## ASSEMBLY & SET-UP:

- 1) Connect submersible pump to the protein skimmer chamber by inserting the pump outlet extension into the bottom of the Skimmer Stand.
- 2) Connect the Venturi air intake adapter to the submersible pump by inserting the adapter to the threaded inlet on the pump.
- 3) Install the Venturi air line hose onto the air intake adapter nozzle and then install the air intake filter on the other end of the air line hose.
- 4) For hang-on applications, remove the collection cup by gently pulling upwards while holding the base of the cup. Slide the hang-on mounting bracket onto the outer chamber body and tighten the fastening screw at the desired position.
- 5) Hang the protein skimmer on the aquarium glass or acrylic frame using the included fastening bolt.
- 6) Attached the Venturi air line hose to the clip on the hang-on mounting bracket. The venturi air line should not have any bends, kinks or loops. Also, the air intake filter should be placed above the water line, and in the open position to allow air to enter the system.
- 7) Adjust the water level on the inside of the protein skimmer chamber by adjusting the height of the collection cup (NOTE: If the water level in the chamber is too high, it can cause the protein skimmer to overflow)
- 8) Make sure that the submersible pump is completely submerged underwater during operation.
- 9) Plug in the PS-170 into an electrical outlet (GFCI recommended). Make sure to create a drip loop.
- 10) Empty the collection cup once a week or as needed.

**NOTE:** DO NOT operate with newly mixed or un-cycled saltwater as it can cause the skimmer to overflow.

**NOTE:** The submersible pump must be fully submersed in water while in use or else permanent damage to the pump can occur and will void any warranties.

## CLEANING/REMOVING THE SUBMERSIBLE PUMP

- 1) Unplug the submersible pump from the electrical outlet before performing any maintenance.
- 2) Remove Skimmer from designated location and drain any excess liquid.
- 3) Gently remove the submersible pump from the bottom of the protein skimmer body.
- 4) Rinse pump with clean, warm water.
- 5) Re-install pump by performing the above steps in reverse.

## CLEANING/REMOVING THE IMPELLER

- 1) Turn the impeller cover slightly counterclockwise to remove.
- 2) Gently remove the impeller from the pump motor.
- 3) Clean impeller with clean, warm water.
- 4) Re-install impeller by performing the above steps in reverse.

## TROUBLESHOOTING:

If not functioning properly, please check the following items:

1. Check that the unit is plugged in securely.
2. Inspect the venture airline and the air intake silencer to make sure they are not clogged.
3. Adjust the height of the protein skimmer chamber.
4. Inspect the submersible pump and impeller.
5. Contact the place of original purchase or the manufacturer for additional information.

## TROUBLESHOOTING GUIDE:

Only water is collecting in the protein collection cup	<ul style="list-style-type: none"><li>• The Specific Gravity is too high. Adjust to 1.018-1.025.</li><li>• The use of additives such as water conditioners, medications, and algaeicides are causing the bubbles to bond longer forcing more water than skimmate into the collection cup.</li><li>• Replace cotton/carbon filter pad, talk to local fish store to find water conditioners and additives that will not affect the performance of your skimmer.</li><li>• Decrease the water flow with the outlet adjustment valves.</li><li>• Aquarium was just cleaned (water change); dump collection cup when full, repeat until skimmer functions properly.</li><li>• Decrease water level inside the PS-170 by adjusting the height of the protein skimmer chamber.</li></ul>
Small air bubbles are discharging back to the aquarium	<ul style="list-style-type: none"><li>• The Specific Gravity is too high. Adjust to 1.018-1.025.</li><li>• Excess gas and nutrients may be overloading the PS-170. New tanks with the addition of uncured live rock cause poor water quality, 20% water changes done daily will help lower excessive nutrients and gas.</li><li>• Once your skimmer is operating properly, you may choose to fine-tune the skimmer to the driest foam.</li></ul>
Nothing will collect in the Protein Collection cup	<ul style="list-style-type: none"><li>• There is no Biological load in the aquarium.</li><li>• Verify the Specific Gravity is 1.018-1.025, if not adjust the Specific Gravity.</li><li>• Adjust the height of the protein skimmer chamber.</li><li>• The Venturi air-line needs to be cleaned or replaced.</li><li>• All skimmers have a break-in period of 1 to 2 weeks. Set up and wait without making any adjustments.</li></ul>

**NOTE:** We recommend emptying the collection cup once a week depending on the amount of organic waste being collected.

**NOTE:** Clean the submersible pump and the air intake filter every 3 to 4 months.

**NOTE:** All protein skimmers generally require a 1 to 2 week "Break-in Period." During this period, the protein skimmer may discharge micro-bubbles into the aquarium (for Hang-on back applications), which is normal. These micro-bubbles will subside after the "Break-in Period" under normal operation. For additional information, please refer to the troubleshooting guide.

## SPECIFICATIONS

Model	Max Flow	Voltage/Freq	Power	Dimensions
PS-170	174 GPH	110V /60Hz	10W	4.13"x3.54"x13.38"