Macro Aqua DC Cone Skimmers Models: 510715, 510716, 510717

Installation, Operation & Maintenance Guide



OVERVIEW

Protein skimmers create thousands of tiny bubbles to efficiently remove organic waste materials from the saltwater aquarium water. The air bubbles attract and condense these organics into foam and lift it to the collection cup for convenient removal.

These DC powered skimmers have adjustable motor speeds to help regulate the bubble production and are designed to work with aquariums between 210 gallons and 660 gallons depending on the model.

The DC cone skimmers are designed to sit inside a sump and cannot be placed on a dry surface.



MODELS					
SKU#	Model#	Dimensions	Light Load	Medium Load	Heavy Load
			TANK SIZE		
510715	KP-30	8.00 x 6.75 x 20.5 in.	240 Gallons	180 Gallons	120 Gallons
510716	KP-60	9.25 x 7.75 x 22.75 in.	400 Gallons	240 Gallons	160 Gallons
510717	KP-90	11.25 x 10.00 x 24.75 in.	660 Gallons	405 Gallons	270 Gallons







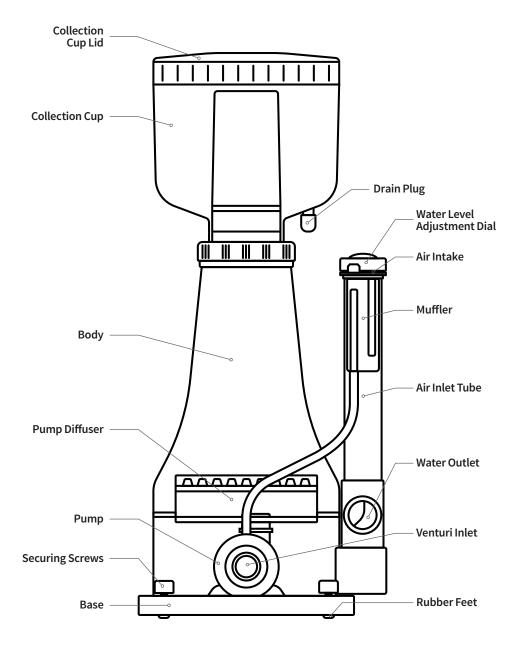
MEDIUM Load



HEAVY Load

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PARTS DIAGRAM



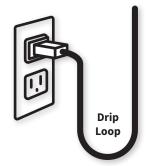




IMPORTANT SAFETY INSTRUCTIONS

To guard against injury, the following basic safety precautions should be observed when operating the unit.

- Never connect the unit to any power source while hands are wet.
- 2. Always unplug the unit from the power source before installing, replacing parts, or doing product maintenance.
- 3. Never allow pump to run dry.
- Always keep the pump submerged during operation.
 Failure to keep the pump submerged while in use may damage the unit and/or cause unit failure.
- 5. Always leave a drip-loop in the power cord to prevent water from running down the length of the cord and reaching the power source.
- For added safety, this device should be plugged into a grounded receptacle controlled by a GFI (Ground Fault Interrupter) circuit breaker.
- 7. Make sure the unit is securely installed before operating.



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IMPORTANT: Skimmer must be placed in a sump for proper operation.





INSTALLATION

STEP 1:

Place the skimmer in the aquarium sump with easy access for maintenance.

Suggested minimum water level is 5 inches and maximum water level is 11.50 inches.

Keeping the water level constant in the sump will maintain a consistent water level in the skimmer. Fluctuating water levels can cause fluctuating bubble height in the collection cup cone.

STEP 2:

Connect the controller to the adapter and then connect the unit to a power source. Install the collection cup.



TIP: When installing the collection cup, press down and twist at the same time to ensure a tight seal with the top O-ring. A little water around the O-ring can help with a tight fit too.

STEP 3:

Rotate the water outlet adjustment dial to the fully open position and press the power switch on the controller. Change the DC pump to run at its highest speed at the beginning. Four blue lights will appear on the controller display. When the bubble column height becomes stable, rotate the water outlet adjustment dial so that the bubble column height is below the collection cup.

STEP 4:

Adjust the bubble column height as needed after the break-in period.

STEP 5:

If bubbles and water are flowing into the collection cup, adjust the bubble height inside main chamber by turning the water outlet adjustment dial. Opening the water flow out of the skimmer.

STEP 6:

If bubbles and water are still flowing into the collection cup, adjust the pump speed to control the amount of water being pulled into the skimmer body.

STEP 7:

The protein skimmer needs to manually adjust in the first few days of operation. Expect micro bubbles to go into aquarium until the break-in period passes (which may last up to 2 weeks). Stop using the protein skimmer when adding chemicals, medication, or rocks into the aquarium, as it will cause the water chemistry to change and overflow in the protein skimmer.

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OPERATION

DRY SKIMMING OPERATION

Adjust the bubble height inside the collection cup to the bottom of the collection cup.



NOTE: Dry skimming will produce a dense foam layer which rises to the top of the cone where it collects until the dry foam overflows into the collection cup.

RESULTS:

- 1. Dry foam (froth)
- 2. Dark, concentrated waste material (less volume)

WET SKIMMING OPERATION

Adjust the bubble height inside the collection cup to the middle of the collection cup.



NOTE: Wet skimming will produce a thin bubble layer which rises to the collection cup lid where it bursts and slides down the collection cup as wet wastewater

RESULTS:

- 1. Wet foam
- 2. Light, diluted waste material (more volume)

MAINTENANCE



WARNING: Always disconnect the unit from the power source before doing any maintenance.

DAILY MAINTENANCE

- 1. Make sure all connections are secure and no leakage is present.
- 2. Observe if the skimmer is functioning properly and producing waste material.



NOTE: The skimmer may need to be adjusted due to variables in water quality and fluctuations.

- Check to see if the collection cup is full and empty the waste material.
 Clean the collection cup where dirt and debris are collected.
- Check air inlet and air intake tube to make sure it is clean and free of dirt and debris

MONTHLY OR AS REQUIRED MAINTENANCE

Clean the skimmer using warm fresh water. Do not use any type of chemical cleaning agent to clean the skimmer such as soap, detergents, alcohol, glass cleaners, polishers, ammonia, etc.

The pump and impeller can be bathed in vinegar if the DC pump has a noticeable decrease in speed.



TROUBLESHOOTING

Variables that affect skimming to produce dry or wet foam:

- a. Adding new fish or invertebrates
- b. Frequent feeding
- c. Change in water chemistry
- d. Adding supplements and medication
- e. Change in the water level in the aquarium sump

No microbubbles produced inside the skimmer.

- a. The air inlet hole or air intake tubing are clogged on the venturi inlet.
- b. Pump is not plugged in or the impeller is stuck.

No foam produced inside collection cup.

- a. Check if the air inlet hole or air intake tubes are clogged. Check venturi inlet.
- b. Adjust the water level inside the skimmer. The water level may be too low.
- c. Water quality is very good, which indicates that there is nothing to skim.

Too many micro bubbles flowing out from the water outlet.

- a. New skimmer may take up to 2 weeks to adjust properly to a new aquarium system.
- b. Reduce the speed of the pump to the lowest setting and increase the height of the bubble column by rotating the adjustment dial to increase the bubble column back to the collection cup. Over time increase the speed of the pump and reduce the bubble column back to your preferred setting.

Skimmer water level fluctuates and water is rapidly overflowing into collection cup.

- a. Reduce the water level in the protein skimmer by adjusting the water level adjustment dial lower and reduce speed of the pump.
- b. Check if the water outlet and air inlet tubes are clogged. Check venturi inlet.
- c. Changes in the water chemistry due to adding chemical or medication recently. Stop using the protein skimmer for few days. DO NOT put the skimmed water from the collection cup back into the tank even if the skimmed water looks clear.

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LIMITED WARRANTY

For SKU's 510715, 510716 and 510717 purchased and used in the United States, Aquatic Life will provide a one-year Limited Warranty.

Aquatic Life warrants that this product shall be free from defective electrical components and leaks or cracks due to defects in materials or workmanship for a period of twelve (12) months from the date of purchase.

If a defect its shown, Aquatic Life will, at Aquatic Life's sole discretion, either repair or replace the product without charge. No cash refunds will be made. This warranty is provided solely to the original consumer purchaser of the product and may not be transferred or assigned.

This warranty does not apply to damage resulting from accident, misuse, abuse, lack of reasonable care, failure to follow safety and installation instructions, use of the product with non-standard electrical service, or any other defect not resulting from defects in the electrical components of the product or defects in materials or workmanship. This warranty will not be effective unless and until the Aquatic Life product is shown to have been used in accordance with the safety and installation instructions accompanying the product.

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Aquatic Life shall not have any obligations under this warranty unless the owner notifies Aquatic Life in writing of any alleged defect(s) within 30 days of discovery of the defect(s). Any notice to Aquatic Life must be delivered by United States or electronic mail to the following address:

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