



Bak-Pak™ 2R+

WITH ACCELA PUMP

As many hobbyists venture into the world of reef keeping, a common goal among most is to keep the filtration system as simple as possible. With biological media being replaced by live rock and sand, the only critical need is for the removal of compounds which could eventually break down into ammonia and nitrite. The Bak-Pak™ 2R+ is designed to provide a simple yet highly efficient protein skimmer for a reef system. The Bak-Pak™ 2R+ employs a new bubble reducing chamber. Requiring no supplemental plumbing, it hangs on the back of the tank.

To place your Bak-Pak™ 2R+ into operation:

1) Carefully remove all packaging and inspect the unit for damaged or missing parts. You should have:

- (1) Protein skimmer body
- (1) Accela pump with air nipple mod
- (1) Collection cup assembly with "O" ring and lid
- (1) Outlet assembly
- (1) Inlet assembly

If any items are damaged or missing, please contact your dealer immediately.

2) Rinse inside of the Bak-Pak™ 2R+ with warm water. (optional)

3) Attach the powerhead to the inlet assembly as shown (Diagram A) and hang the Bak-Pak™ 2R+ on your tank**. Use the adjustment screws to position the Bak-Pak™ 2R+ so that it is parallel to the back of the tank.

***If the powerhead does not fit through the opening of the aquarium, place the Bak-Pak™ 2R+ on the tank and insert the powerhead into the inlet from inside the aquarium. Make sure that the muffler on the end of the long airline is outside of the water at all times. A black clip is provided at the top of the unit to hold the airline.*

4) Clean the collection cup including the throat of the funnel in hot water. This will cause the skimmer to begin collecting waste faster. Do not use any detergents on the collection cup. Insert cup inside protein skimmer section with O-ring placed around the outside.

5) Plug in the powerhead. Your Bak-Pak™ 2R+ is now operational.

6) Place the collection cup in the skimmer column of the unit. The base of the collection funnel should be 1/8" below the water surface for optimal performance. Slide the O-ring up or down until the desired skimmate wetness is achieved.

7) The air valve on the airline will allow you to control the amount of air being drawn into the powerhead. We recommend initially opening the valve completely for maximum airflow into the skimmer. If it does not appear that the skimmer column is filled with bubbles, slowly close the valve until the column is full.

It is common that some of the micro-bubble escape to the tank for the first 48 hours. It will stop after the break-in period

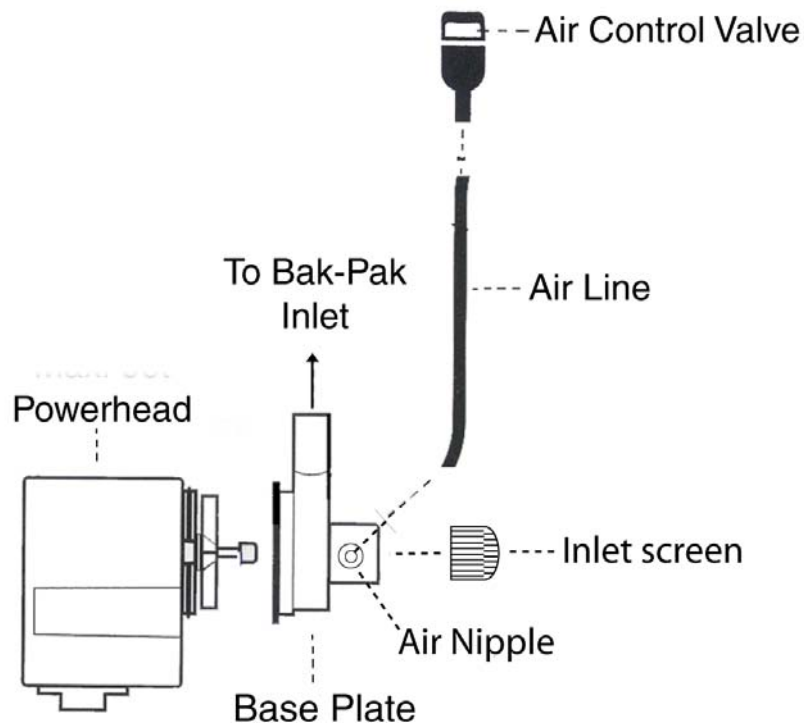
- 8) If turbulence bubbles are coming out of the outlet pipe, adjust the endcap on the pipe so that half the outlet is exposed and out of the water. The outlet can be made shorter or lower by adjusting (up or down) or by reversing the endcap (notice one side is shorter). (See Diagram B) This will allow the bubbles to vent out of the opening without being pushed into the aquarium.

MAINTENANCE

- 1) The collection cup should be emptied regularly. Every time you empty the cup, clean the base of the funnel and the inside of the throat for better collection.
- 2) The Bak-Pak™ 2R+ should be cleaned every three months, or as needed.
- 3) Clean the powerhead at least once a month. Replace the powerhead every twelve to eighteen months to ensure optimal performance
- 4) The inlet and outlet may be removed and cleaned as needed. Be sure to replace the washers on each assembly when reassembling your Bak-Pak™ 2R+. Do not over tighten the inlet assembly.

REMOVAL AND CLEANING OF YOUR POWERHEAD

- 1) Slide the powerhead out of the inlet of the Bak-Pak™ 2R+.
- 2) Remove the airline by pulling away from the powerhead.
- 3) Remove the base plate by lining up the flat portion to the locking guide. Pull the base plate straight away from the powerhead as the impeller may be attached to it.
- 4) Wash all parts under warm tap water. Do not use any detergents. Make sure that the air line is clear of any foreign matter, calcium buildup or salt creep before reassembling.
- 5) Reassemble the powerhead and place it back on your Bak-Pak™ 2R+.

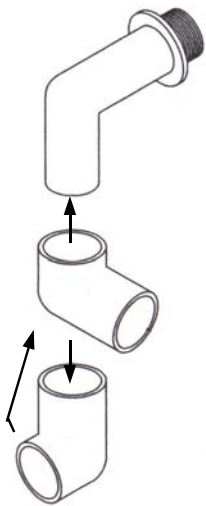


TROUBLE SHOOTING

Problem:	Cause and Solution:
Small air bubbles returning to the tank	The surface tension of the water has been increased by added supplements, medications, or conditioners. Disable the protein skimmer by submerging the airline into the water (remove muffler first) or shutting off the air valve for 24 hours. Many products contain chemicals which will still be present in the aquarium after 24 hours. Run the protein skimmer as normal to remove compounds which may be affecting surface tension.
	The salinity is too high. Lower the salinity to 1.023.
	The aquarium has just been cleaned or water has been changed. Synthetic salt mixes often contain conditioners which increase the surface tension of the water. Bubbles should disappear within 24 hours.
	The air line is clogged with detritus or salt creep. This will increase the water flow rate and possibly sweep the bubbles from the skimmer chamber back into the tank before they can dissipate. The airline should be cleaned every two weeks.
	The outlet can be made shorter or lower by adjusting (up or down) or by reversing the endcap (notice one side is shorter). (See Diagram B) This will allow the bubbles to vent out of the opening without being pushed into the aquarium.
Bubbles escaping from the powerhead into the tank.	The base plate or venturi adapter is not properly sealed. Remove the plate and make sure no detritus or calcium buildup is preventing the plate from sealing properly. Be sure not to break or bend the two clips which hold the plate in place.
No waste collecting in collection cup.	The powerhead and its air line may be dirty. Clean the whole unit every two weeks for optimal performance.
	The collection cup is not low enough. See instructions for the correct height of the collection cup.
	The biological load may not be sufficient to generate waste. On a new tank or a tank with supplemental filtration it may take over a week to generate waste foam.
	Skimmer chamber is not filled with micro bubbles. Slowly close the air line valve until the chamber is filled with bubbles.
The Accela is producing little or no bubbles.	The airline or the air control valve may be blocked. Detritus, calcium and salt will build up in these parts over time. Clean these parts every two to three weeks with warm tap water.
	The powerhead may need to be cleaned. If the powerhead becomes clogged with organic material the flow rate and the air intake rates will reduce. Follow the instructions included with your Bak-Pak 2R+ to clean your powerhead.

Before calling CPR's Technical Support, please take some time to look over this trouble shooting guide. Most of the problems associated with the performance of the Bak-Pak™ 2R+ are due to improper maintenance of the Accela powerhead. Cleaning the powerhead at least once a month will ensure optimal performance of the Bak-Pak™ 2R+.

Diagram B



To minimize turbulence bubbles returning to the tank, adjust the outlet so that it is placed relative to the water level as shown.

The outlet elbow can be flipped around and adjusted up and down the primary outlet piece to achieve the desired height. For users with high tank water levels, the outlet can be further adjusted by loosening the bulk-head fitting on the outlet and rotating the entire outlet to achieve the desired height. It is also acceptable for the water to exit the elbow in a slightly upward manner.

Diagram A

