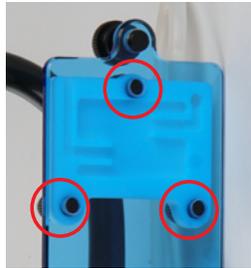




Sponge
Loosen the screw **A** to pick up the sponge of water outlet, make sure to keep it clean.



Air hose
The air hose needs to be clear all the time, check the connected part with the silencer often, once it's clogged, you can clean it right away.

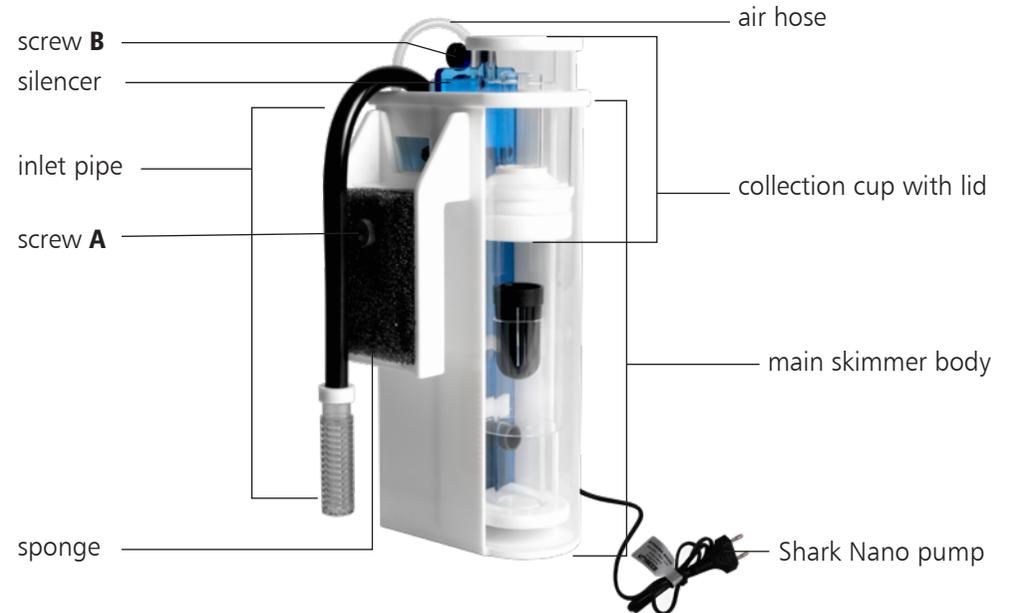


Silencer
Sometimes the silencer got clogged by limescale or unpredictable foreign matters, clean it regularly or anytime it needs. You can pick up the silencer by unscrew the parts that marked on the image.

Bullet-1 Hang-On-Back Protein Skimmer Installation Guide

Before Installation

The Bullet-1 should be well assembled when you get it, so all you need is to check if there's any damaged or lost parts. Then we can start to install your Bullet-1.



Warranty

JNS warrants all JNS products to be free from manufacturing defects for one year from the original purchase date when purchased through an authorized JNS retailer. This warranty does not cover any damages caused by misuse, neglect, alterations or improper handling / transport / maintenance / installation. Physical damages are not covered by warranty. JNS does not cover personal injury, personal loss, or other damages associated with the use of our products. In order to request warranty service, please email us at info@jnsaquaria.com. A purchase receipt is required for any warranty service. Products requiring warranty service must be returned to JNS. You are responsible for the cost of shipping a warranty claim to JNS and any damages that may occur during transit. Once a returned product has been inspected, it will be repaired or exchanged at our discretion and returned to you. International and/or expedited shipping are not covered under your JNS warranty.

Recommendations

1. While we take great care to keep any contaminants away from our products during assembly, please take a moment to clean before attaching them to your tank. Please clean with warm water ONLY. Never clean Acrylic with alcohol-based products. Use caution when handling acrylic scratches easily.
2. It may require 2 – 4 weeks for the skimmer to reach optimal performance due to tiny amounts of oil or remnants left from manufacturing. Skimmer performance may be erratic during this time; be sure to allow ample time for the skimmer to break-in before making adjustments.
3. Regular maintenance of the pump will ensure a long life and maximum performance: recommended every 3 months.
4. For best performance, clean the collection cup frequently with a sponge and warm water.

Select a suitable place to set your protein skimmer

1. The aquarium's water level must not be more than 4" from the aquarium's rim.
2. The water intake of inlet pipe must be completely submerged underwater when in use.
3. Hang the protein skimmer on the aquarium.

Adjust the screw **A**, so the skimmer is parallel to your aquarium.

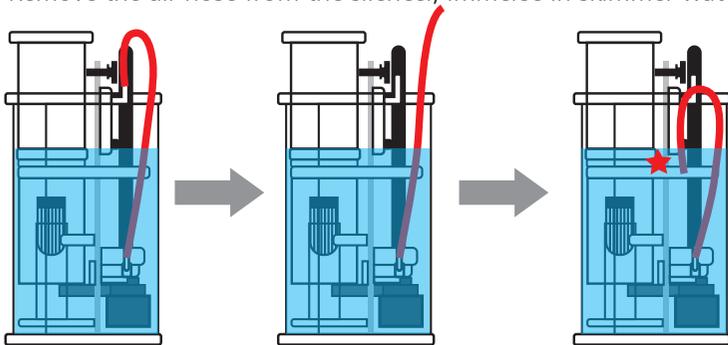
Caution! Over-tightening the screws will damage the skimmer!

To Start

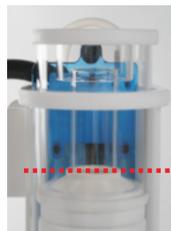
1. Fill skimmer with aquarium water until it flows out of the outlet.



2. Remove the air hose from the silencer, immerse in skimmer water to prime the pump.



3. Plug in the pump, wait until the pump primes. This may take a few minutes. (verify the air hose is immersed in water and the inlet pipe are tightly connected)
4. Once the pump is primed and operating normally (water flushes out from the outlet), re-connect the air hose to the silencer.
5. When the pump operates normally. The main chamber will fill with bubbles. Once the bubbles reached the bottom of the collection cup, you can start to adjust the water level according to your preference. Loosen the screw **B** to adjust the position of the collection cup. If you prefer a wetter skimmate, you need a high water level (lower cup position); by contrast, if you want skimmate to be drier, just let your water level goes down (higher cup position).



..... recommended water level

water level high low
water color

6. The skimmer will take 2-4 weeks to reach optimal operation. During the break-in period, we recommend setting the collection cup in its highest position. Loosen the screw **B** to adjust the position of collection cup, once you finish adjustment tighten the screw **B** to make the collection cup fixed.

Maintenance

Pump

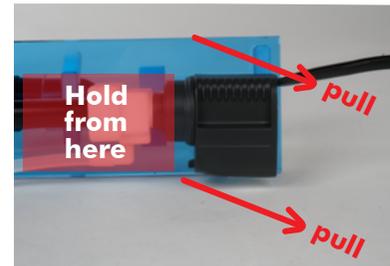
Regular maintenance of the pump will ensure a long life and maximum performance: recommended every 3 months. You can disassemble the pump by following steps:



(1) Pick up the inside plate.



(2) Pick up the collection cup



(3) Separate the pump by pulling it out.

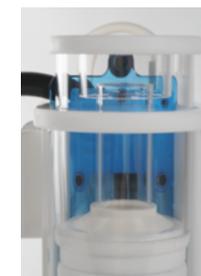


(4) Pull out the rotor



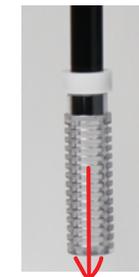
How to remove the limescale?

NO OTHER CHEMICALS, soak in a mixture of 1 part water and 1 part vinegar (citric acid also available) for at least 24 hours. Once you finish, please rinse with warm water.



Collection cup

clean the collection cup frequently with a sponge and warm water.



Water intake

Pull out the water intake to clean, if it needs.