

# **EURO-REEF**

## **AQUARIUM SYSTEMS**

### RS/CS Series Protein Skimmer Owner's Manual

REV 110108

IMPORTANT!!!

# ATTENTION!!

PLEASE READ THIS!!

It is EXTREMELY IMPORTANT that you fill out and return the WARRANTY REGISTRATION document included with this manual. This will ensure that you are able to receive prompt service in the event that you have a warranty issue. Please send it along with a copy of your receipt of purchase to:

Euro-Reef Aquarium Systems  
Warranty Dept  
23400 Peralta Drive Suite A  
Laguna Hills, CA 92653

In addition, take some time to affix the serial number stickers to page #3 of this manual so you will have access to an easy reference to this information. You'll be glad you did!!

# THANK YOU!!

Dear fellow hobbyist,

Thank you for purchasing an RS/CS Series protein skimmer. If this is your first experience with our company's product, **you are in for a treat!!** All of our skimmers are hand crafted using the latest tools and technology. Our primary goal is to provide you with the finest product available today, enhancing the joy of your hobby and insuring the health of your aquatic pets. We are confident that you will never have a better experience with any other product.

Please take a moment to read through this manual thoroughly and affix the serial # stickers to this page. It will be your reference for support should you need it.

Please don't hesitate to call us anytime with questions, we're happy to help!

Sincerely,

The Euro-Reef family

### *Important information:*

My Skimmer Serial#	My Pump #1 Serial#
My Pump #2 Serial#	My Pump #3 Serial#
My Pump #4 Serial#	

# Installation & Setup Instructions

## *Installation & set up instructions for the RS/CS Series Protein Skimmers*

\*\*\*TAKE YOUR TIME AND BE GENTLE WITH THE SKIMMER.\*\*\*

To start, remove the skimmer from the box and unpack skimmer carefully.

***Be sure to recycle foam and cardboard whenever possible.***

After you have unpacked the skimmer and all its parts carefully, begin the installation by making sure you have enough room to easily place the skimmer reaction chamber (body) (see diagram Part #14) into the sump. Set the body into the water while holding it firmly and allow aquarium water to enter in through the pump to body coupling tube (#16). The reason to hold on to it firmly is that it will want to bob up because it is buoyant (will float) until it is partially flooded. Once the body is full enough to sink to the bottom, position it where you want it and attach the riser assembly which includes the tee outlet fitting (#12), the Riser Pipe/ Skimmer Internal Water/ Foam Level Control (#11) (which should be fitted inside the Tee Outlet Fitting #12), and the Vent Cap (#9) (which should be fitted onto the top of the Riser Pipe). Rotating the Riser Pipe will adjust the internal water/ foam level within the skimmer. The ideal water level **in the sump** for optimal skimmer performance is between six and eight inches (6"-8").

**TIP:** *We have found it ideal to use an automatic water top-off system to maintain and ensure optimal skimmer performance. Ask your dealer what brand or system they recommend.*

Now you can attach the pump to the body. Start by carefully placing the silicone air intake tube (#22) over the plastic nipple on the top of the venturi (#21). ***Be gentle!!! Do not press too hard on the plastic nipple as it can break if it is mishandled.*** To further avoid breakage, support the venturi (#20) from below when pressing the tubing over the nipple. Next, thread the tubing through the Silicone airline tube holder (#24) Air Control Valve (ACV)(#23) can be used optionally if you want to manually control the volume of air to the pump. When the ACV is used, a slight reduction in air intake volume and greater turbulence in the reaction chamber will result.

**TIP:** *If you need to, you can dip one end of the silicone tubing in warm water to make it more flexible and to insure a smooth and easy fit onto the plastic nipple.*

Once the air intake tube is installed onto the venturi place the pump etc. into the sump next to the body. Place the pump outlet elbow (#8) onto the pump outlet at the top of the pump. Now locate the pump to body coupling (#9). Lift the pump with the outlet elbow and *gently* slide the outlet elbow(#8) onto the pump-to-body coupling(#9).

# Installation & Setup Instructions

## *Installation & set up instructions (continued)*

Next, insert the air intake tube through the air intake tube holder (#11) on the upper part of the body

You are now ready to power up the skimmer, but before you do, check a few things first:

- Check to be sure the Euro Loc o-ring is lubricated and in place, and the collection cup (#3) are fastened and sealed to the skimmer reaction chamber (#14)
- If you have attached the air intake control valve (#23), check to make sure that it is wide open before you turn the skimmer pump on.
- Be sure to adjust the Riser Pipe Outlet to the "OPEN" position. You can do this by grabbing the Vent Cap/ Skimmer Adjustment Handle and rotating it so that the "OPEN" sticker is facing or parallel the skimmer body.
- Take the pump power cord from the pump (#19) and carefully stretch it out towards the outlet. Be sure to set up a drip loop (a section of power cord that is in the shape of a loop or dip that hangs below and before the wall outlet). This will help prevent electrical shock in the event of water splashing on or near the power outlet or pump power cord. *Where there is water... something's bound to get wet!!!* Double-Triple check that the power source wall outlet is clean, dry and supplying 110v—120v @ 60HZ.

**Well, what are you waiting for??? Plug it in!!**

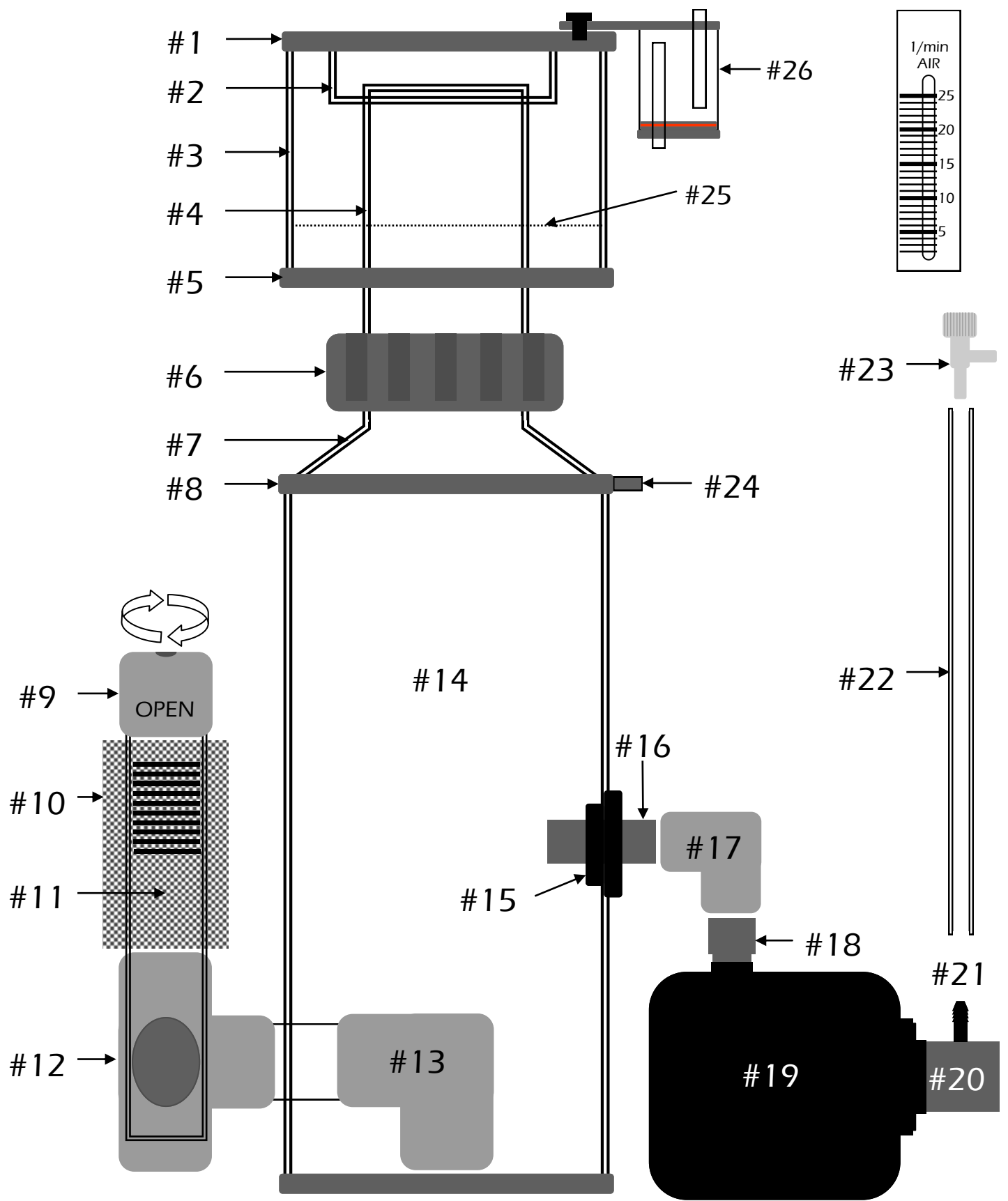
You should allow the skimmer to run for a few hours before you make any adjustments to the Riser Pipe as it may take some time for the skimmer to settle down. Again, You can do this by grabbing the Vent Cap/ Internal Water/ Foam Level Control and rotating it to attain the desired consistency of the foam and effluent. Small adjustments followed by a settling period are necessary to be sure the Control is in the correct position to achieve the desired performance.

**TIP:** *If the foam fills the cup immediately due to the presence of excessive foaming agents (i.e. fish food, water conditioner, pH buffer .etc), slowly close the air valve until the foam level reaches the proper level as indicated in the skimmer diagram. If the proper level still cannot be attained by use of the air valve alone, we recommend that activated carbon in a filter media bag (1/2lb per 50 gallons) be placed in the sump to absorb excess foaming agent. Give the system 24-hours for the excessive foaming agent to be eliminated, then repeat the air valve adjustment step as many times as required until the proper foam level is reached.*

Be sure to monitor the skimmers performance closely for the first week or so as it will be settling in and may need additional adjustment. For now....

**Sit back and enjoy your skimmer!!**

# RS/CS Series Skimmer Parts Diagram



# Parts Diagram List

1. Skimmer Cup Lid
2. Skimmer Lid Foam Guide
3. Skimmer Collection Cup (Body)
4. Skimmer Neck
5. Skimmer Cup Base
6. Euro-Loc Quick Disconnect
7. Transition
8. Ring
9. Vent Cap/ Skimmer Level Adjustment Handle
10. Foam Filter/ Bubble Diffuser
11. Riser Pipe/ Skimmer Internal Water/Foam Level Control
12. Tee Outlet Fitting
13. Internal Outlet Elbow
14. Skimmer Reaction Chamber (Body )
15. Uniseal
16. Skimmer Pump Inlet Pipe
17. Skimmer Pump Outlet Elbow
18. Skimmer Pump Outlet Adapter
19. Skimmer Pump
20. Venturi Apparatus
21. Venturi Air Intake Nipple
22. Silicone Air Intake Tubing
23. Air Intake Control Valve ( Use Optional)
24. Silicone Airline Tubing Holder
25. Starting foam level should be here @ 1-1.5" up into the neck.
26. Air Intake Silencer (Optional Item)
27. Air Intake Flow Meter (Optional Item)

# Notes, Maintenance

**Never** run the pump dry. A pump that is run dry and burns out **WILL NOT BE COVERED BY OUR WARRANTY!!!**

**Never** operate the pump in an area where the intake/suction of the pump will be in close contact with a liquid calcium supplement, Kalkwasser, or any powdered buffer supplements i.e. dKH buffer, pH buffer, Mg (magnesium) buffer. Prolonged or regular exposure to these compounds without the required maintenance\* (see below) will cause the motor to seize and burn out!! If this happens the pump will **NOT BE COVERED BY OUR WARRANTY!!!**

***Skimmer Maintenance:***

**Required Quarterly Pump Service:**

The pump should be cleaned and disassembled for inspection **at least** once every three months. The pump should be **run** in a bath 1-part distilled white vinegar and 2-parts water for 12 hours or overnight if possible. After the bath, remove the pump from the solution and rinse it thoroughly with freshwater and remove all visible debris (try our cleaning brush, Euro-Reef part# 50307). Take the pump apart and inspect all the internal pieces checking them for additional mineral deposits, SPECIFICALLY THE CERAMIC CHAFT AND ROTOR BEARINGS. If you see any residual mineral deposits, soak these parts in a 1:1 Vinegar and Water solution for 6-12 hours. Rinse and re-assemble the pump, fitting it back on to the skimmer in the sump. Restart the skimmer.

It's not a bad idea to perform this service to the whole skimmer once a year.

**\* If you are using any of the supplements noted above you should perform this service every 8-10 weeks to be safe.**

Clean the skimmer cup and neck as often as possible to ensure optimal performance. **Once a week is a minimum!!** Even if the collection cup is not very full, cleaning it will enhance extraction substantially. Dry it thoroughly inside and out before replacing it back on the skimmer.

Once every 1-2 weeks take some time to dip the end of the Silicone Air intake tube into a cup of warm, purified freshwater i.e. Reverse Osmosis. The suction created by the venturi will draw this warm water through the tube rinsing the tube and the Venturi's water air interface point where salt crystals often form restricting the flow of air. This can dramatically effect the skimmer's efficiency (less air, less foam etc...).

**\*\*\*Be sure to keep ALL the o-rings clean and lubricated. This will ensure ease of maintenance, proper sealing, and extend the life of the o-rings. Use Silicone Lubricant Euro-Reef part # 50231 for best results!**

# Warranty

## *Warranty:*

The complete protein skimmer has a 1 year limited warranty\*. If you believe you have a defective part, **DO NOT CONTACT YOUR DEALER!!** Contact our support department (see below) so we can troubleshoot the problem with you. If it is determined that service will be required, we will provide you with an RMA# and instructions for shipping the item.\*\*

Once you mail in your warranty registration, the warranty period begins as of the date of your purchase. If you do not mail in your warranty registration, the warranty period begins date of production plus three (3) months.

Euro-Reef **requires** that you return any parts in question for inspection before a warranty replacement is authorized. You are responsible for return shipping costs. If you believe you have a valid warranty claim within the warranty period, please contact us via phone or e-mail to request an **RMA** (Return Materials Authorization).

Once we have received the part at the factory, as soon as we can **verify** that the part is in fact defective, we will send you a replacement. As always, our goal is to provide a *FAST* turnaround so that you are back in business ASAP. If we determine that the part is not defective but has failed due to **improper use or maintenance (for example: a pump that has seized up with calcium deposits due to improper maintenance)** we will contact you with options for factory service or replacement

*NOTE: Euro-Reef insists on the inspection of all parts returned for warranty replacement before replacement is authorized.*

*Items received without RMA's may be discarded!!*

Euro-Reef parts and accessories are available on our website online store at [www.euro-reef.com](http://www.euro-reef.com). **We suggest that key operational parts such as pumps & impeller assemblies be purchased as backups to avoid filtration downtime during routine maintenance or an unforeseen event.**

"BLEM" protein skimmers have a 90 day limited warranty

**\*\* Contact us:**

Via e-mail: [support@euro-reef.com](mailto:support@euro-reef.com)

Via telephone at: 949-770-9913 ext 17 or at 1-877-HEY EURO (1-877-439-3876)

# Help & Support

If you have questions about our products, we encourage you to contact your local Authorized Euro-Reef Dealer. For technical and warranty support you may contact us via:

**Via e-mail: [support@euro-reef.com](mailto:support@euro-reef.com)**

**Via telephone at: 949-770-9913 ext 17**

**Or toll free at 1-877-HEY EURO (1-877-439-3876)**

## General Contact Information

Website: [www.euro-reef.com](http://www.euro-reef.com)

Snail-mail:

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Laguna Hills, CA 92653

