

Operation manual for the



Turboflotor 750

Inside protein skimmer for aquaria up to 400 l.

With the purchase of this skimmer, you decided to work with a quality instrument. It has been especially developed for aquaristic use and has been tested by professionals. With this unit, if used correctly, you can remove the organic pollutants contained in your sea water aquarium very efficiently.

1. Delivery

The *Turboflotor 750* consists of the following parts:

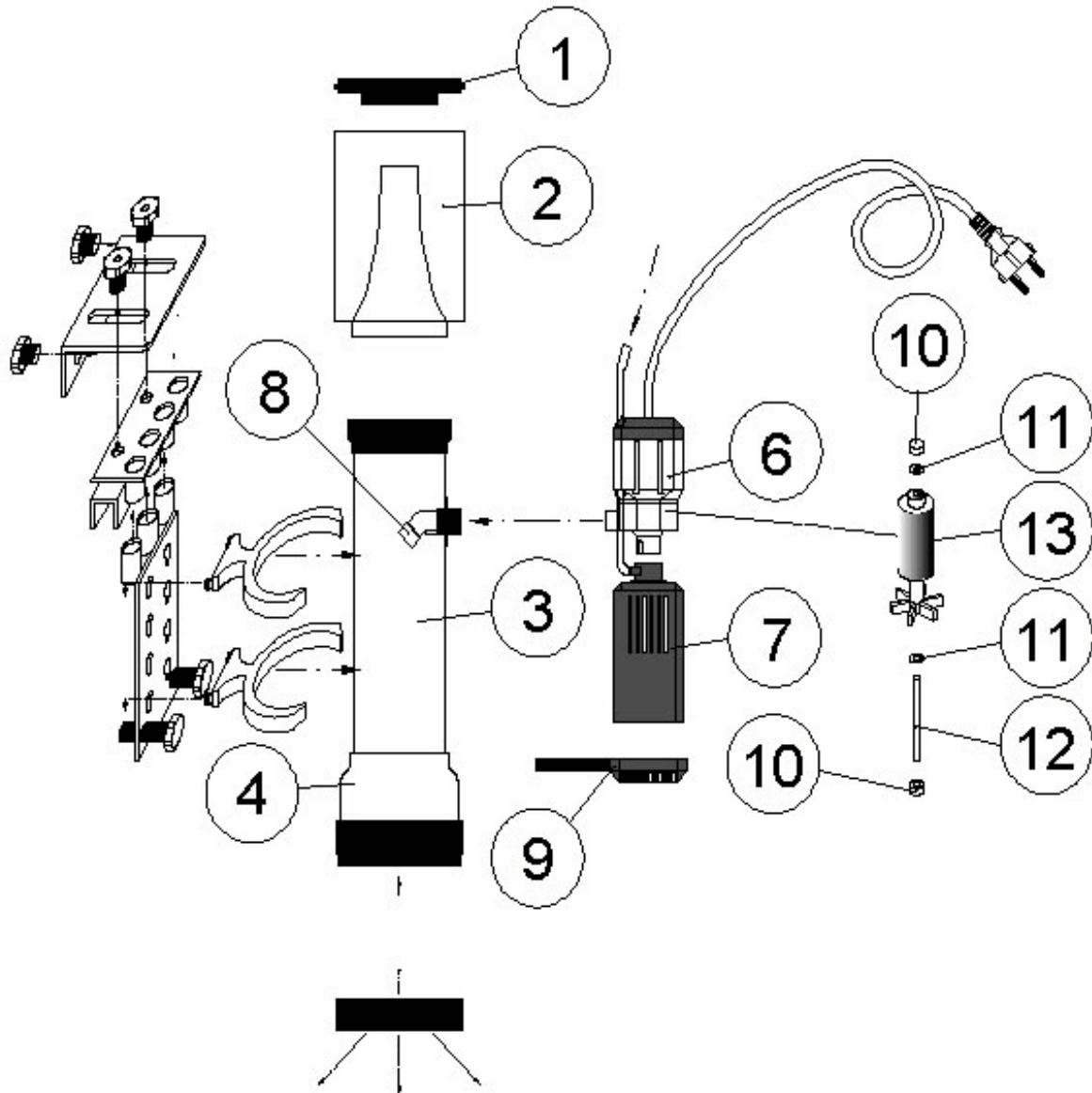


Fig. 1: Parts of the *Turboflotor 750*


1. Top for collection cup
2. Collection cup
3. Reaction pipe
4. Expansion cone
6. venturi pump
7. prefilter housing
8. 45°-elbow
9. lid of prefilter
10. rubber bearings
11. washer
12. ceramic shaft
13. Impeller

2. Theory

Protein skimming is a way of physical water treatment. It uses a phenomenon known from our daily experience: the adsorption of surface active substances to air water layers. If we give a drop of oil on a water surface, it will form a thin film which is only one molecule thick. Surface active components like proteins behave in the same way. The *Turboflotor 750* with its air bubbles, creates a huge water surface, where the waste substances can attach to.

These air bubbles are pushed into the reaction pipe, in a way, that they have a long retention time in the counter current. Enriched with organic substances, they rise to the top and form a strong foam which is dehydrated and pushed into the collection cup. With this method, organic wastes can be removed from the aquarium water before they are integrated into the biological waste treatment cycle.

3. Set-Up

The  **AQUA MEDIC** *Turboflotor 750* is hanged into the aquarium. If possible, put it into the back corner of the tank and hide it with the decoration. The skimmer should be placed in a way that the pump is fully submerged and that the foam cup reaches the water level with its bottom. A 6 mm air tube has to be connected to the air injection nozzle of the pump and raised above the water level. At the end of the tube, a silencer can be connected.

Connection to the aquarium - holding system:


The strong holding system fits nearly every aquarium frame. To fix it, you have several possibilities:

1. Tank with horizontal glass bar. The horizontal clamp of the holder 1 (see fig. 2) is fixed to the glass bar. To stabilise the *Turboflotor*, you can fix it with the delivered screws. Adjust it in a way that the holding plate is supported at the glass.

2. Vertical glass bar. The lower clamp of the holder is fixed on the vertical glass bar or on the aquarium glass plate and fixed with 2 screws from the outside. The holding plate can be adjusted with 2 short screws, so that it is parallel with the aquarium glass.

3. Tank with plastic frame. Here you can use the extendable top of the holder. Extend it so that it fits over the plastic frame of the aquarium and tighten the screws. Adjust the holding plate with the long distance screws in a way that it is exactly parallel with the aquarium glass.

4. Starting

Start the *Turboflotor* by plugging in the venturi pump. The rotation of the  **AQUA MEDIC** *Impeller* causes an underpressure that sucks in air and water into the pump housing and pushes this mixture into the reaction pipe of the skimmer. This air is cut into small bubbles by the rotation of the impeller. The amount of air bubbles varies with the concentration of organics. If the concentration is high, the reaction pipe is filled with more bubbles than at lower concentrations. After the first start, it takes some hours or even days until the first foam is produced and is pushed into the foam collection cup. This is caused by a chemical reaction of the acrylic pipe with the aquarium water - a change of electrical loadings. After this time, the foam should be transported equally into the foam cup. The total amount of removed organics depends of course on the organic load of the aquarium.

5. Maintenance

The mechanical prefilter of the skimmer should be cleaned - depending on the organic load of the aquarium - every 2-4 weeks, latest if it is clogged and the capacity of the skimmer decreases. The air input into the skimmer is then reduced. The pump housing with the impeller should be cleaned from time to time, latest when the air input decreases.


The foam collection cup should be cleaned regularly - as with all skimmers. You can remove it easily from the reaction pipe.

6. Failures

- **Too little air - no foam.** The pump is not placed deep enough into the water. The bottom of the collection cup should touch the water level. Clean the air injection.

- **Pump failure.** Check the magnet and the impeller. If there are calcareous residues in the pump housing, remove them mechanically or with vinegar. If the impeller is damaged it must be replaced.

7. Warranty

 **AQUA MEDIC** GmbH guarantee for 24 months after date of purchase on production and material defects. Further claims or claims caused by improper use are not possible.

Warranty only by proof of purchase by the original invoice.

- Technical changes reserved -