

SC 2060 - SC 3070



Operating instruction

IMPORTANT SAFETY INSTRUCTIONS

To guard against injury, basic safety precautions should be observed, including the following.

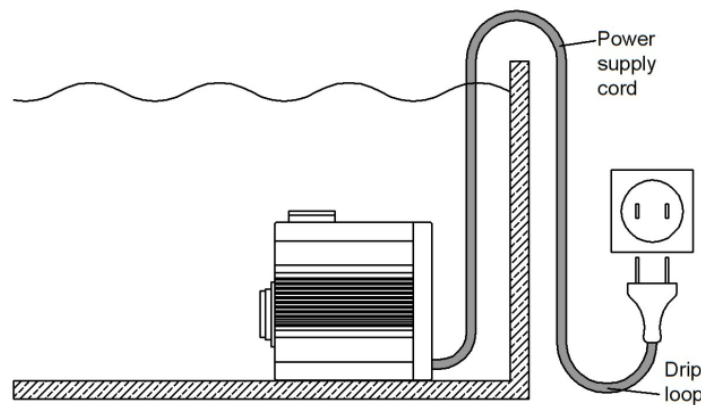
- 1) READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
- 2) DANGER – To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations, do not attempt repairs by yourself; return the appliance to an authorized service facility for service or discard the appliance.

a) Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or has been dropped or damaged in any manner.

b) To avoid the possibility of the appliance plug or socket getting wet, position aquarium stand and tank to one side of a wall-mounted socket to prevent water from dripping onto the socket or plug.

A “drip-loop”, shown in the figure below, should be arranged by the user for each lead connecting an aquarium appliance to a socket. The “drip-loop” is that part of the cord below the level of the socket, or the connector if an extension lead is used, to prevent water travelling along the lead and coming in contact with the socket.

If the plug or socket does get wet, **DO NOT** unplug the lead. Disconnect the fuse or circuit breaker that supplies power to the appliance. Then unplug and examine for presence of water in the socket.



- 3) Close supervision is necessary when any appliance is used by or near children.
- 4) Do not use an appliance for other than intended use. The use of attachments not recommended or sold by the appliance manufacturer may cause an unsafe condition.
- 5) Make sure an appliance mounted on a tank is securely installed before operating it.
- 6) Read and observe all the important notices on the appliance.
- 7) If an extension lead is necessary, a lead with a proper rating should be used. A lead rated for lower amperes or watts than the appliance rating may overheat. Care should be taken to arrange the lead so that it will not be tripped over or pulled.
- 8) This appliance has a polarized plug (one blade is wider than the other). As safety feature, this plug will fit in a polarized outlet only one way. If the plug does not fit, contact a qualified electrician. Never use with an extension lead unless plug can be fully inserted. Do not attempt to defeat this safety feature.

Exception: This instruction may be omitted for an appliance that is not provided with a polarized attachment plug.

Removing of the plug invalidates the warranty!

SAVE THESE INSTRUCTIONS

Deltec Protein Skimmer SC 2060 – SC 3070

Deltec "SC" series protein skimmers are very compact, highly efficient and are fitted with a special low energy skimmer pump.

The "SC" skimmers features

- precision water level adjuster
- remote skimmer cup drain
- silencer (the silencer can be opened for cleaning)
- designed to operate in external filter sumps (diagram a)

Installation

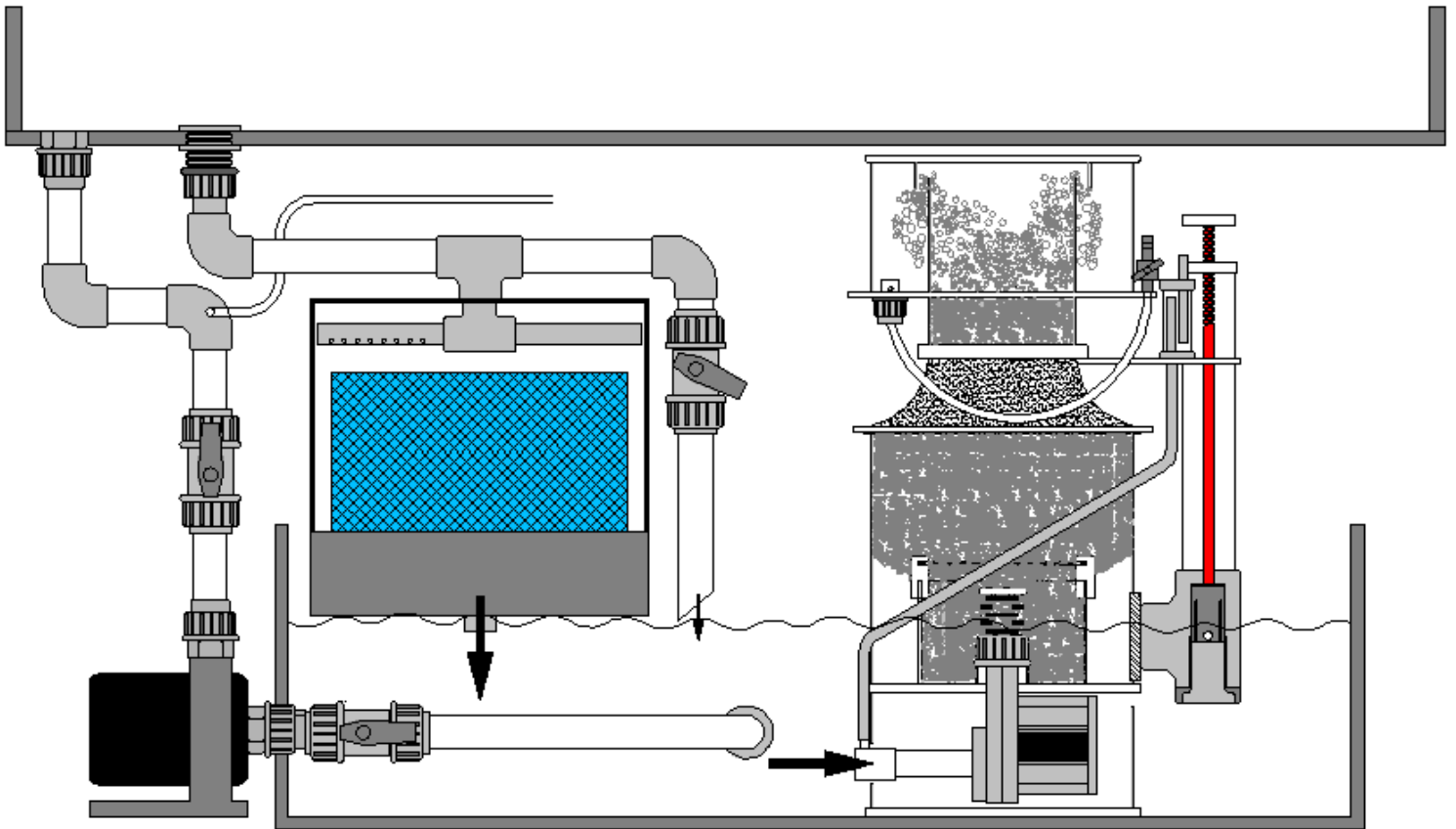
For best performance the water level in the filter sump should be between 180 and 250 mm. Protein skimmers of this design are very sensitive to any water level changes.

A prerequisite for continuous efficient performance is a constant water level in which the skimmer operates. Ideally, a water level top up system should be used such as the Deltec Aquastat 1000 or better still a separate skimmer compartment in the sump (diagram b).

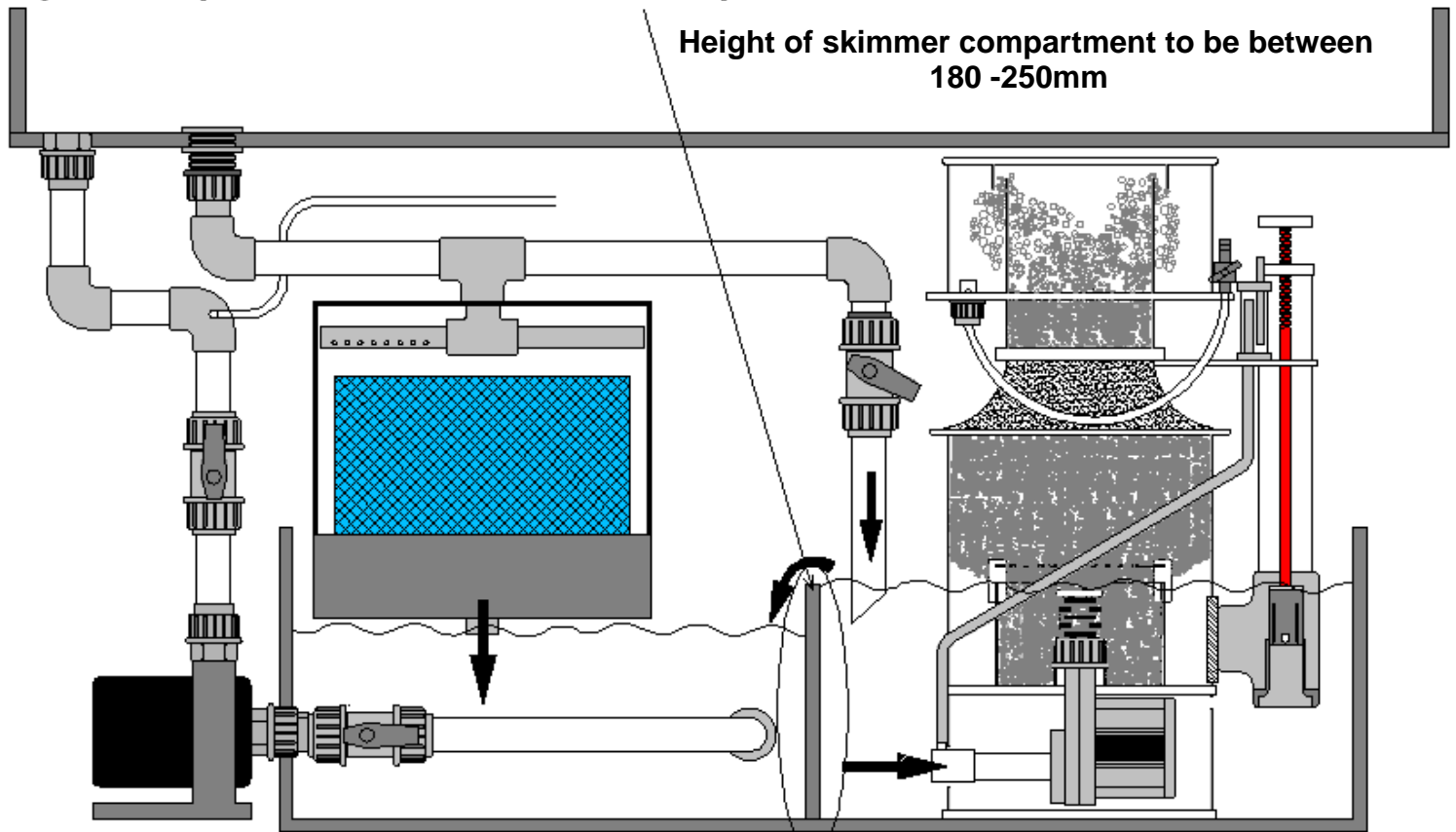
The water level in the skimmer compartment should be higher than in the rest of the sump but within the levels recommended for the skimmer model.

This compartment can be supplied with water from a bypass of the aquarium overflow.

a) Standard in sump installation



b) Sump with skimmer compartment

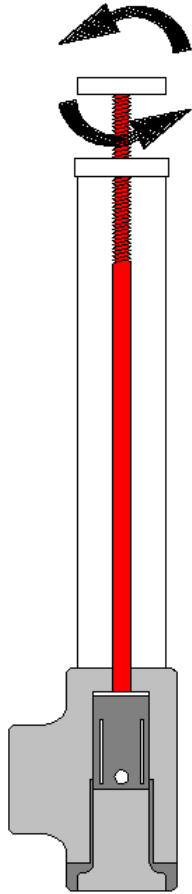


Starting the skimmer

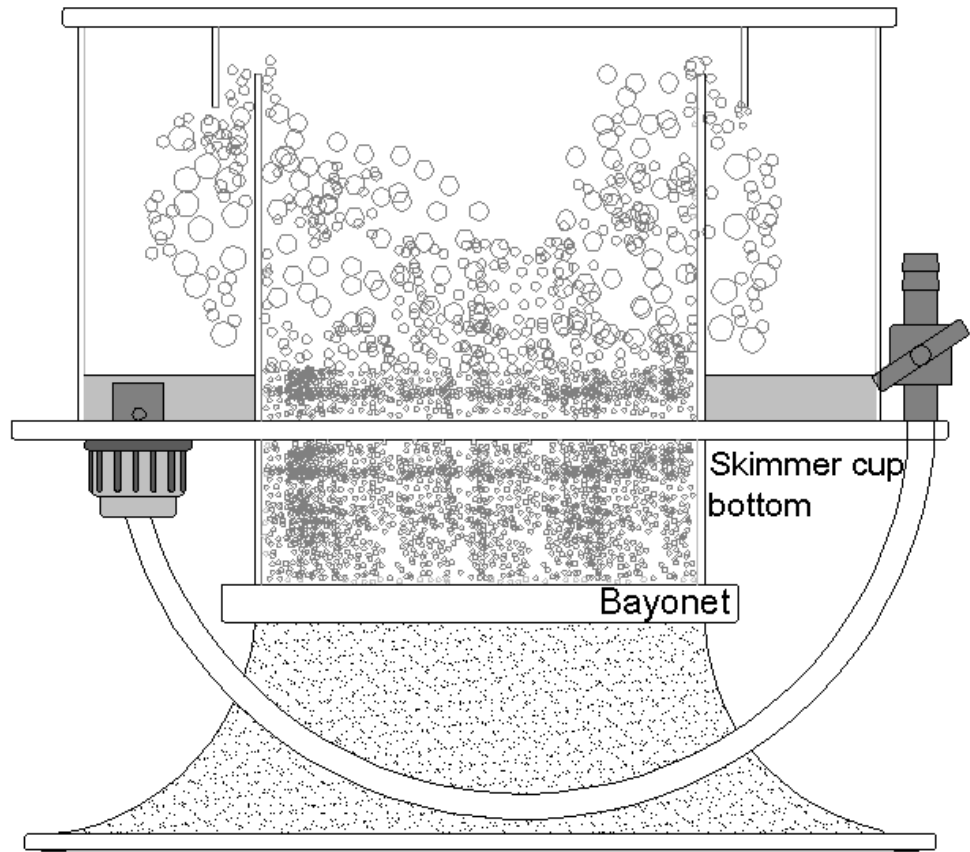
- position the skimmer in the sump
- feed water into the skimmer compartment (if applicable)
- open the water level adjuster (diagram c) fully by turning it anti-clockwise
- start the skimmer pump
- close the water level adjuster until fine bubbles are visible between the bayonet and the bottom of the skimmer cup (diagram d)
- initially keep the foam level in the skimmer cup low to avoid over skimming and possible flooding of the cup
- wait a minimum of 24 hours before the final adjustment
- turn the water level adjuster in or out until the fine air bubbles start bursting approximately half way up the cups riser tube
- for dry foam turn the water level adjuster anti-clockwise
- for wet foam clockwise (diagram d)
- **Important:** Never allow the pump to run dry.

Operation with Ozone

The Skimmer can be operated with ozone up to max. 50 mg/h per pump. One air connection of the ozoniser should be connected via a suitable silicon hose to the protein skimmer pump. The air is automatically sucked in the ozoniser by the skimmer pump. Should the skimmer performance deteriorate please check the ozoniser for blockage.



Water level adjuster (c)



Skimmer cup (d)

Fresh salt water

If the skimmer is used with new water on an aquarium it is common for you to find an excessive quantity of small bubbles produced and often the skimmer cup fills with a clear liquid. This is due to the high surface tension of the new water which prevents the bubbles from bursting. Once the water matures this effect will do away but can take up to 2-3 weeks. The effect is different on different salt brands and is often dependant on levels of conditioning agents added to the salt. Once these are skimmed out then the skimmer will act normally.

Heavier feeding in the initial stages will give the chemically pure water something to react with and allow it to mature into proper aquarium salt water rather than the initial chemical soup which is new salt water.

Technical data

Technical Data SC Series	Dimensions mm		Aquarium size litre		Water level height/mm		Power consumption Watt		Air litre/h		Connections Ø mm	
	Footprint	height	normal stocking	light stocking	min.	max.	min.	max.	min.	max.	Feedline	Outlet
SC 2060		600	1400	1700	180	260	25	28	1100	1300	xxx	50
SC 2560	270x320	600	2000	2400	180	260	29	31	1500	1600	xxx	50
SC 3070		700	4000	4800	180	260	2x29	2x31	2x1500	2x1600	xxx	50

Fault finding

Fault	Cause	Solution
Pump produces insufficient air	silencer, airline or venturi blocked	clean
	airline kinked	remove kink
	ozonizer blocked	clean
	pump flap blocked	clean
excessive air bubbles in aquarium water	caused by additives in certain sea salts and water conditions	Use different salt or feed heavily for a period, empty skimmer cup frequently. This condition may last for several weeks.
Pump does not start	Front bearing of the impeller stuck. When the pump (after having been used) has been stored dry for a period of time, the front bearing can "dry out".	Remove impeller with the extractor tool as illustrated and loosen the bearing by moving the bearing plate around and along the ceramic shaft in tap water.

Maintenance

The Deltec skimmer range should need very little adjustment and maintenance once set correctly however due to the high levels of calcium in marine aquariums it is common for deposits to build up on moving parts requiring periodical cleaning. Deltec pumps are fitted with little flaps inside the outlet of the pump and inside the housing, which flip from one side to the other depending on the direction of rotation thus ensuring that the pump always operates at full duty. It is recommended every 6 months, or when required, that the pumps are removed from the skimmer having first drained the body of Water.

Check and clean the impellor of debris. Ensure that the direction flaps move easily and if necessary soak the neck of the pump housing in white vinegar or lime scale remover to dissolve any calcium carbonate deposits. A build up of calcium, dust and salt can restrict or block the venturi inlet on the connecting pipe work and reduce the skimming efficiency. This should be checked and carefully cleaned with a toothpick or fine drill rotated between the fingertips.

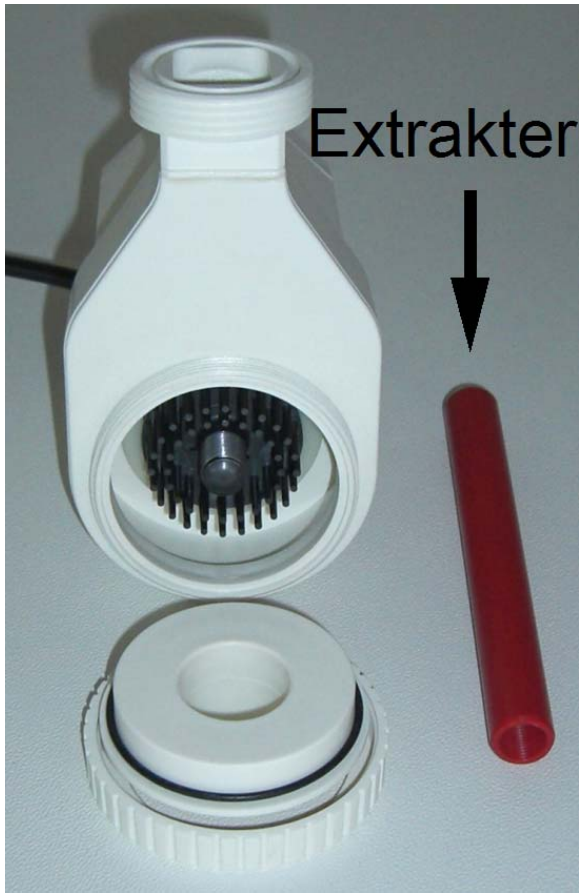
It is advisable to stop the pump for approximately 15 minutes once every week in order to dissolve any dust or salt crystals that may have collected in the venture tube.

Service hints

The skimmer pump is fitted with a very powerful rotor magnet. To remove the rotor from the pump use only the special extractor tool (picture 1). Screw the extractor onto the rotor's centre piece (picture 2) and pull the rotor out of the pumps housing slowly and deliberately in a straight line (picture 3). Be careful not to put any side forces onto the ceramic rotor shaft as this might break the hard and brittle material.

Use the same tool when inserting the rotor into the pump housing.

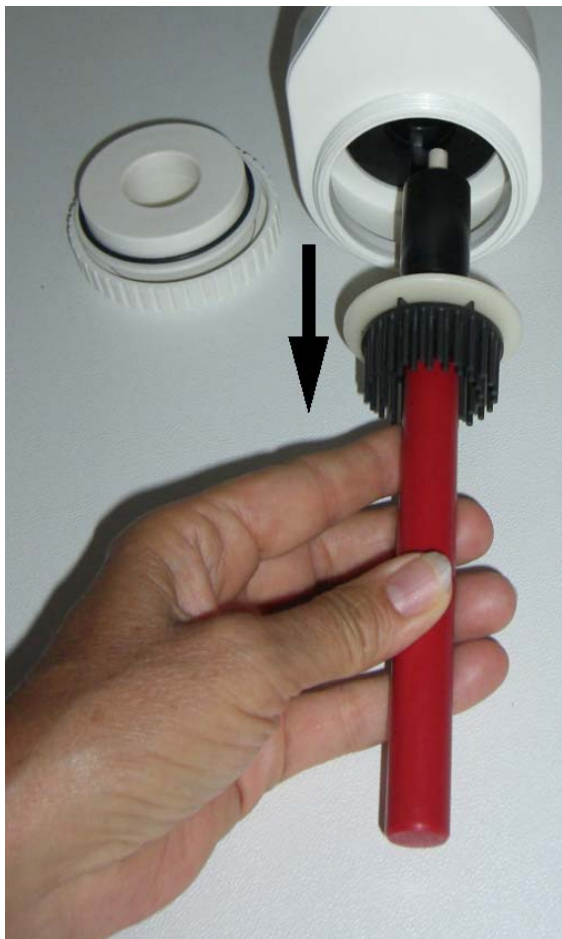
Make sure that the guide fitted to the bearing plate is located in the slot of the stator (picture 4). The Impeller is fixed inside the stator by an o-ring. It requires a certain pressure to push the impeller the last 2-3mm into its correct position.



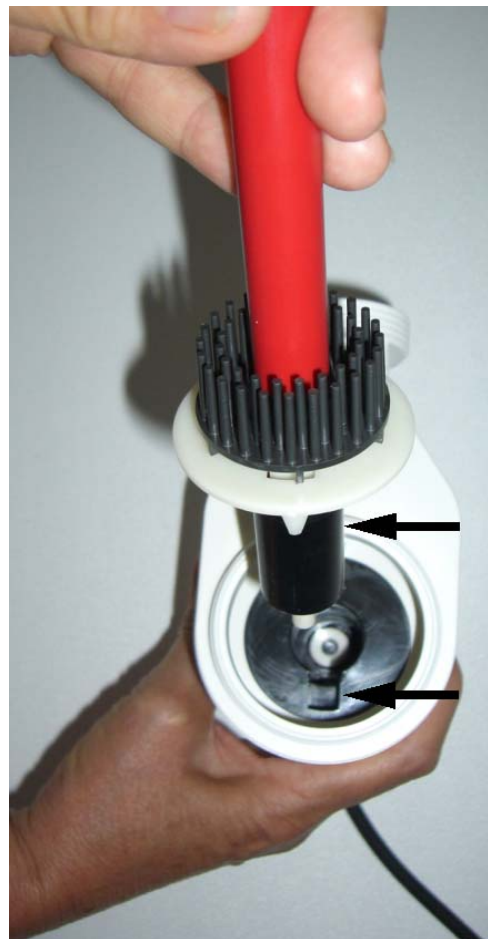
Picture 1



Picture 2



Picture 3



Picture 4

Deltec GmbH
Steller Straße 75
D-27755 Delmenhorst

Deutschland / Germany
www.deltec-aquaristic.com

Deltec GmbH 2009