

Deltec®

MCE600 Series Hang On (HOB) Protein Skimmers (MCE 601)



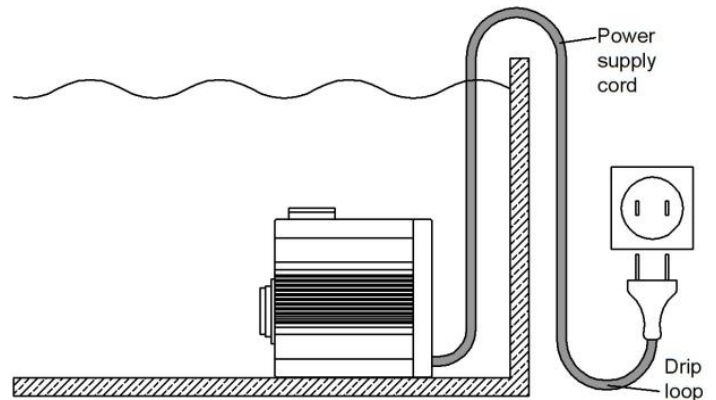
**Operating instruction
and Spare parts list**

IMPORTANT SAFETY INSTRUCTIONS

WARNING 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) If the appliance shows any sign of abnormal water leakage, immediately unplug it from the power source. (Immersible equipment only)
 - b) Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
 - c) 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.
 - d) To avoid the possibility of the appliance plug or receptacle getting wet, position aquarium stand and tank to one side of a wall-mounted receptacle to prevent water from dripping onto the receptacle or plug.

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



If the plug or socket does get wet, **DON'T**

unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the appliance. Then unplug and examine for presence of water in the receptacle.

- 3) Close supervision is necessary when any appliance is used by or near children.
- 4) Always unplug an appliance from an outlet when not in use, before putting on or taking off parts, and before cleaning. Never yank cord to pull plug from outlet. Grasp the plug and pull to disconnect.
- 5) 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.
- 6) Make sure an appliance mounted on a tank is securely installed before operating it.
- 7) Read and observe all the important notices on the appliance.
- 8) If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less amperes or watts than the appliance rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
- 9) 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 cord 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 **External Protein Skimmer MCE 601**

Operating Instructions

The Multi Compact External skimmer is ideal for 'hang on' installation directly onto the outside of the aquarium or sump and requires no further supply pump for highly efficient operation.

Assembly

The skimmer has been packed in a partially disassembled state to prevent damage in transit. Do not switch on the recirculation pump however unless the pump is immersed or flooded with water.

Important

Before you install the unit in position fill the body with fresh water from the mains supply to ensure that there has not been any damage in transit.

Installation

Hang the skimmer body on the outside of the aquarium in a suitable position. The skimmer sits on the black support bar where the outlet pipes come out of the body and is held in place by the clear retaining clamp, which tightens onto the outlet pipe. Hang the skimmer body on the outside of the aquarium in a suitable position. The inlet pipe is fitted with a strainer on one end, which simply pulls off for future cleaning. The outlet pipe consists of a 40mm clear pipe to direct water back over any stress bars and into the tank. To prevent bubbles from entering the aquarium an ingenious degassing plate pushes into the end of the outlet pipe.

Operation and setting

With the unit secured in position, fill the body with tank water by removing the skimmer cup and pouring water down the opening until the water exits the skimmer. Refit the cup, initially positioned quite high out of the body close the tap on the air intake pipe, only now fit the inlet pipe and switch on the pump on stage 4 (controller). Open the air intake tap and set it to the 12 o'clock position. The body of the skimmer should now be white with fine dense foam. Leave the skimmer to settle down for a day or so before fine adjustment. After two to three days, or earlier in a previously unskimmed tank, a thick brown foam will be produced at the neck of the skimmer. Move the skimmer cup up or down to collect this foam. Moving the cup downwards will result in an increased quantity of wetter foam and moving it up a darker, foam which is preferable. It is recommended that the skimmer cup is emptied every 2-4 days or as required. The cup should be wiped clean of any fatty deposits as build up of this waste product will greatly reduce the performance. Whilst cleaning leave the pump switched off, for 15 minutes to allow any salt deposits in the venturi tube to dissolve.

Please Note

The skimmer cup is reversible by 180° so that, depending on the mounting position of the skimmer, the clear side is always visible.

Media Chamber

The chamber below the outlet pipe has been provided to allow the addition of media such as Deltec Phosphatadsorber, Deltec Special Carbon or biological media to be used easily and effectively in a position of good flow. Media used in this chamber must be contained in a bag to prevent carry over back to the aquarium. To prevent the bag from floating up and blocking the outlet pipe, the skimmer comes as standard with a sliding outlet protection plate, which must be fitted at any time that media is used in the unit.

This plate is fitted above the media bag with the horizontal section at its lowest point.

Optional Media Box with sliding lid

This item is available as an optional extra to allow use of the multi compact with a greater volume of media. Larger media can be added directly to the box, which has a perforated base and a perforated sliding lid. Finer media can be used by the addition of sponge top and bottom to prevent the media from washing out or by use of a mesh bag.

Use with ozone

Deltec skimmers are suitable for use with ozone and will automatically suck the gas through the venturi hose. A maximum volume of 25 mg/h should be used on tank volumes that are suitable for this skimmer. Do not use excessive ozone, as it is dangerous and can cause severe headaches.

Maintenance

The Deltec skimmer range should require very little adjustment and maintenance due to the high levels of calcium in marine aquariums and large volumes of air drawn in, it is common for deposits to accumulate. Regular introduction of a small amount of RO water into the inlet tap whilst running may help to prevent any build up of salt and debris in the venturi.

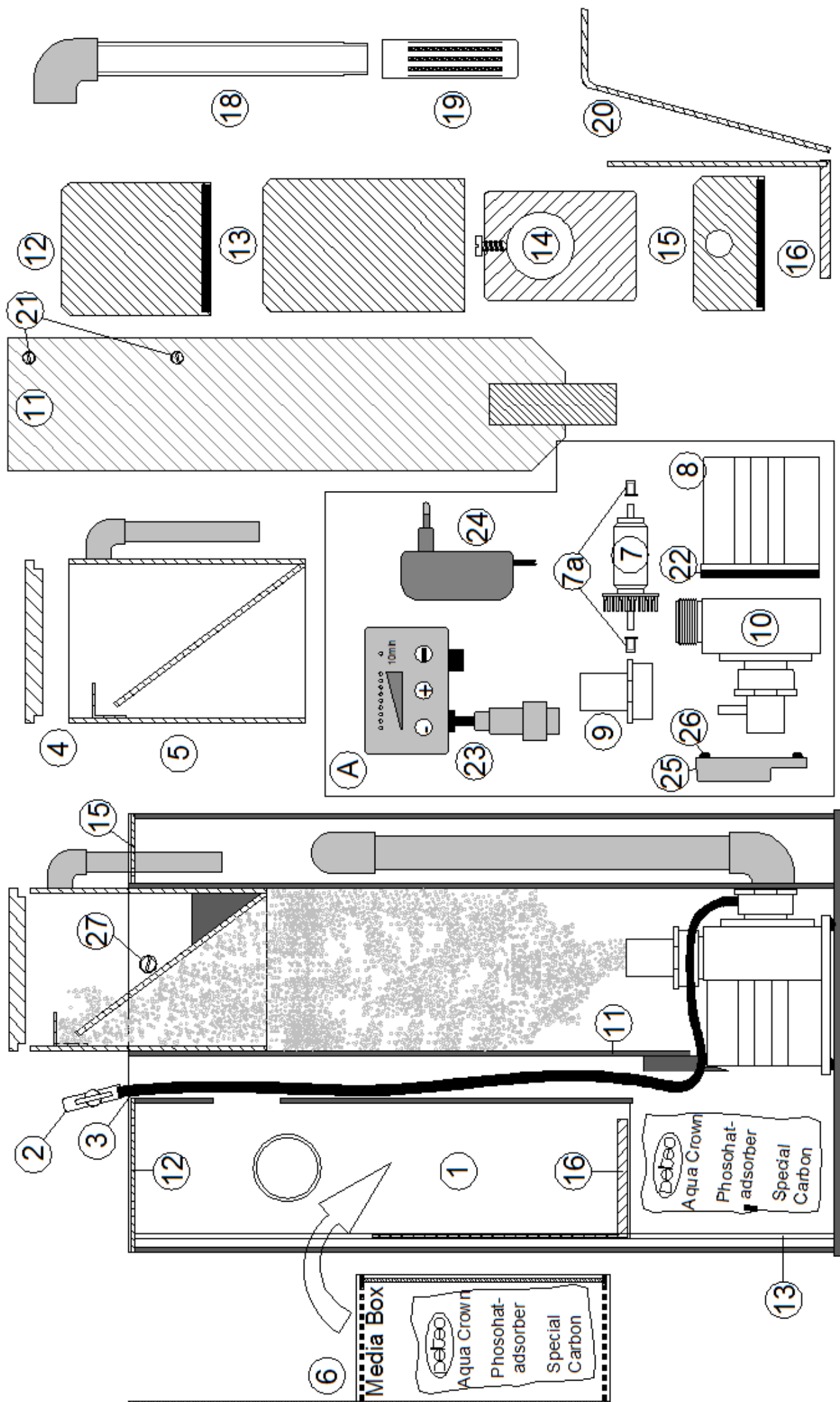
The **MCE 601** is fitted with an electronically controllable 24V DC pump. It is recommended every 3 months to strip down the pump to check and clean the impeller of debris.

Fault finding

Malfunction	cause	remedy
Pump produces insufficient air	airline or venturi blocked	clean
	airline kinked	remove kink
	ozonizer 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, open air tap fully. This condition may last for several weeks.
	air tap closed to far	open air tap
Pump has stopped after it has been running without water	Dry running protection is activated	Disconnect from mains, wait 1 minute and restart.

Technical data	Dimensions (l/w/h) app.	Power consumption	Air flow app.	min. height for sump installation	Aquarium size normal stocking	Aquarium size light stocking
MCE 601	260x85x500mm	12 Watt	400 ltr./h (stage4)	575mm	500 ltr.	600 ltr.

MCE 601



Spare Parts List

rt.	M rt.	Bezeichnung	Description	Descrizione	Description
A	28007000	Pumpe DCC 2 Komplet	Pump DCC2 cl.	Pompa DCC 2 cl.	Pompe DCC 2 cl.
1	31117100	Gehäuse	Skimmer body on v	A arecchio base senza Pos. 2-	Corps decumeur seu
2	93010010	Mini Regulatorventil	Tap	Mini valvola di regolazione	Robinet d'air
3	61751048	Silikonschlauch 5/8	Silicon hose 5/8mm	Tubo di silicone 5/8	Tuyau de silicone 5/8 mm
4	31116300	Schaumtopf Deckel	Lid	Coperchio del recipiente di	Couvercle
5	31117200	Schaumtopf mit Oberlauf	Skimmer cup	Recipiente di raccolta	Gobelet (sans couvercle)
6	31132000	Media Box anif	Media Box v anif	Media Box facoltativamente	Media box sur if
7	27084000	Laufeinheit DCC2	Needle wheel DCC2	Girante a sazzola per DCC2	Rotor modifié brevete DCC2
7a	27084100	Lager DCC2	Bearings DCC2	Cuscinetto	Palier
8	26084000	Stator DCC2	Stator DCC2	Statore er DCC2	Stator DCC2
9	81123900	Adapter	Adapter	Adattatore	Entree de em (l rise d'air)
10	28008000	Pumpegehäuse	Pump housing	Alloggiamento a m	Carter em
11	31117951	Trennplatte	Divide plate	Piastra di sezionamento	Plaquette deversoir realable
12	31117910	Deckel Filterkammer	Lid	Coperchio della camera filtrante	Seoaration
13	31117920	Distanzplatte	Plate	Distanziatore	Plaquette
14	31119730	Halter	Holder	Su o o	Su o 1
15	31117940	Deckel klein	Lid	Coperchio piccolo	Se arafion efite
16	31117960	Abstandhalter	Sliding spacer	Distanziale camera filtrante	Plaquette hauteur realable
18	31117810	Ansauerohr mit Winkel	Suction e i	Tubo d'as irazione	Coude PVC 90 diametre 20mm
19	10100460	Ansauakorb	Strainer	Griglia di as irazione	Corbeille
20	31117970	Ablaufschötte	Deaerating plate	Piastra di deaeramento	Plaquette de deaazae
21	12350000	Kunststoffschraube M4	Screw M4	Vite di lastica M4	Vis M4
22	29084000	O-Ring	O-Ring	O-Ring	O-Ring
23	26084000	Kontroller DCC 2	Controller DCC 2	Controllore	Contrôleur
24	29002000	Netzteil DCC 2 1,5A	Ballast DCC 2 1,5A	Alimentazione	Source de courant
25	29012000	Fußplatte DCC 2	Footplate	Pedali	Marche pied
26	29012100	Silikonfuß	Silicone foot	Piedi di silicone	Pied de silicone
27	12350000	Randelschraube rot	Knurled-head-screw	Vite rosso	Vis a ailenes

Deltec GmbH
Steller Straße 75
D-27755 Delmenhorst

Deutschland / Germany
www.deltec-aquaristic.com