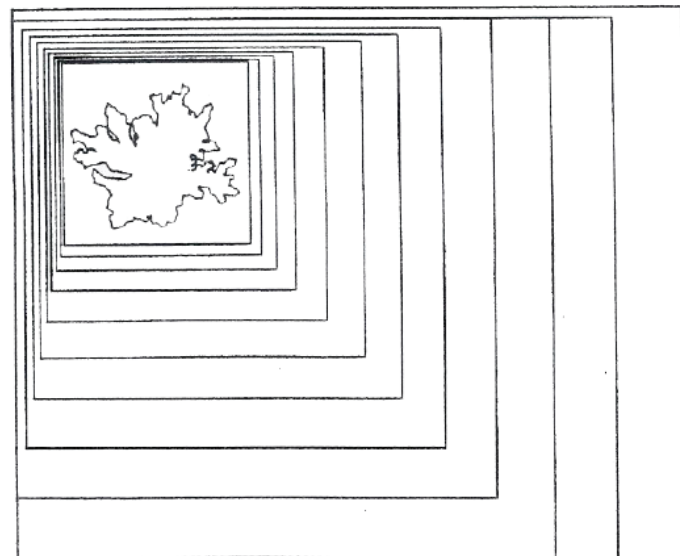


SKILTER 400™

Supreme®
SKILTER 400™

IMPORTANT SAFETY INSTRUCTIONS

WARNING - To guard against injury, basic safety precautions should be observed, including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

DANGER - To avoid possible electric shock, special care should be taken in the usage of aquarium equipment. For each of the following Situations, do not attempt repairs yourself; return the appliance to an authorized service facility for service or discard the appliance.

1. A. If the appliance shows any sign of abnormal water leakage, immediately unplug from the power source.

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

C. 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 at right 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 traveling along the cord. If the plug or receptacle 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.

2. Close supervision is necessary when any appliance is used by or near children.

3. To avoid injury, do not contact moving parts or hot parts such as heaters, reflectors, lamp bulbs, etc.

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.

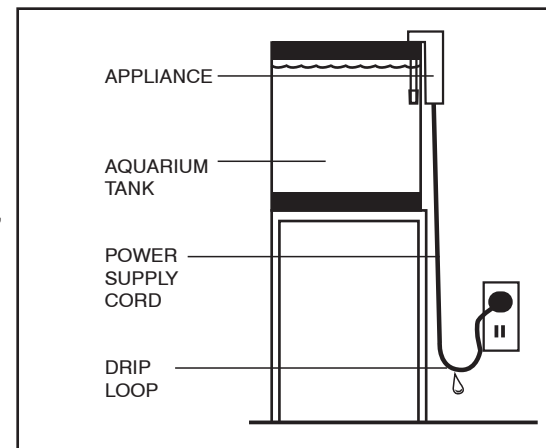
5. Do not use an appliance for other than intended use. The use of attachments not recommended or sold by the appliance manufacturer may cause an unsafe condition.

6. Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.

7. Make sure an appliance mounted on a tank is securely installed before operating it.

8. Read and observe all the important notices on the appliance.

9. 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.



SAVE THESE INSTRUCTIONS

The Supreme SKILTER is a protein skimmer and aerating power filter in one compact, easy-to-use product. It is designed to be as simple to use as most conventional power filters. The added protein skimming capability helps remove many waste products before they become harmful to the aquarium environment. Although this product was primarily designed for saltwater aquariums, many experts feel that protein skimmers can be as effective for freshwater aquariums as they are in saltwater use.

Assembly

1) Unpack SKILTER. Make sure you have all parts listed on parts diagram. Inspect product for any obvious damage.

2) Remove power unit (9) from packaging and install in filter box: Turn filter box upside down so that the lip of the filter box faces forward. Position power unit so power cord faces forward. Push down on the power unit with a firm, even pressure so that "O" ring in power unit seats properly. Turn power unit counter-clockwise 90 degrees (1/4 turn). The cord on the power unit should now face the filter box.

3) Attach airline tubing (5) with adjusting valve (6) to air inlet on impeller cover (7). Insert impeller cover into the nozzle of the lower skimmer tower section (12). The nozzle on the skimmer tower should butt against stop on impeller cover.

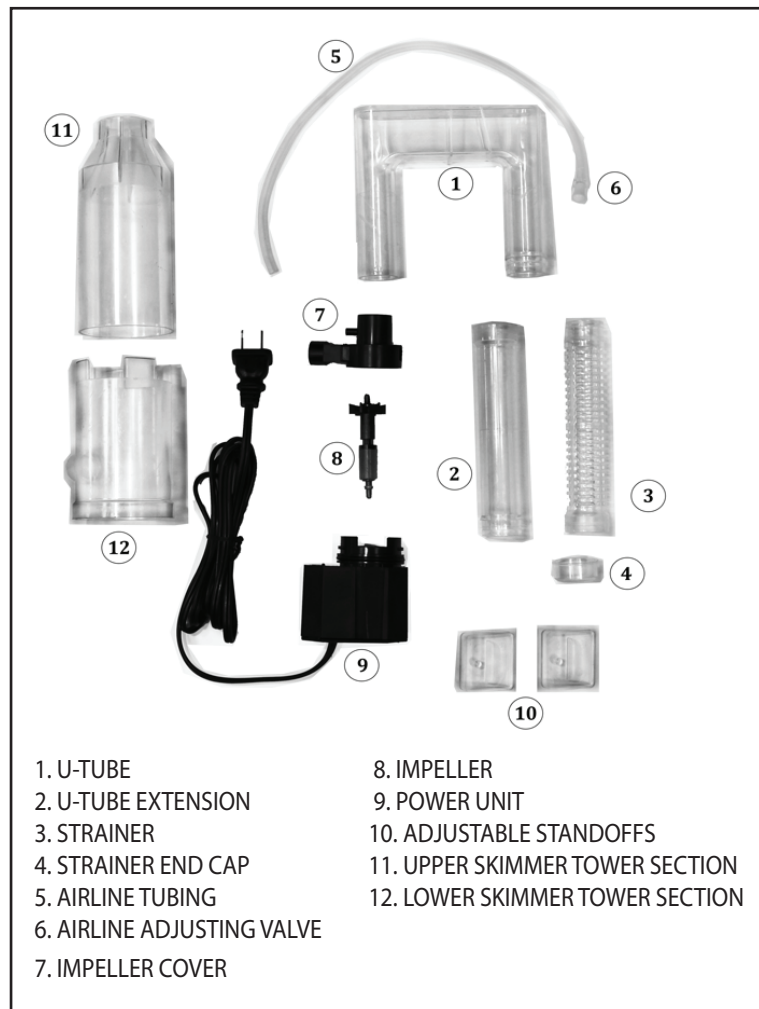
4) Carefully slide the impeller cover and lower skimmer tower into place in the filter box. The skimmer tower should fit onto the round plastic tabs in the bottom of the filter box. The impeller cover should seat firmly into the round groove on the power unit.

5) Attach smooth end of U-tube (1) into upper section of impeller cover (7). Push U-tube extension (2) into position on ribbed end. Put Strainer (3) into U-tube extension and then place strainer end cap (4) at open end of strainer. The entire U-tube assembly should be installed so that the top of the U-tube is flush with the rest of overflow indicating area.

6) Put the adjustable standoffs (10) in place on the bottom of the filter box by gently twisting standoff into hole. The filter box should be positioned on the aquarium so the top edge of the filter box is parallel to the top of the aquarium. The adjustable standoff rotates to accommodate different aquariums, so that one of these positions should be correct for your aquarium.

7) Next, attach upper skimmer tower (11) to lower tower. Route airline tubing out of U-tube overflow area so that the air valve is exposed and readily accessible for adjustment. Insert the BIO-MATRIX filter cartridges (17) into the slots on the inside of the filter box. The cartridges should seat on all sides including the bottom. The cartridges should be placed so that the white polyester side faces into the filter box and the black carbonized material faces toward the aquarium.

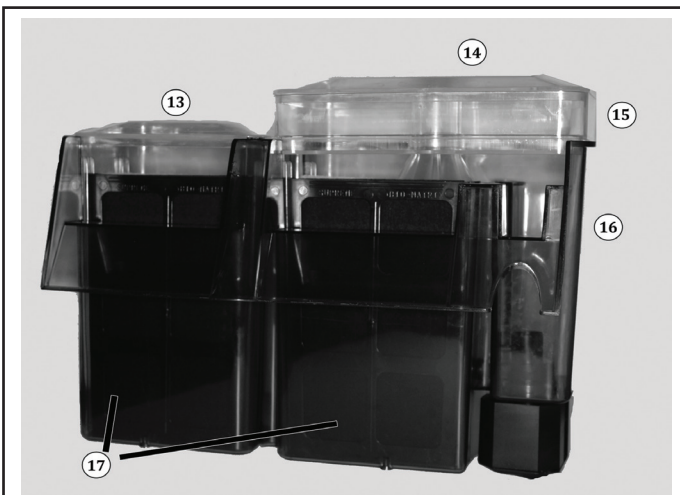
8) Fill the filter box at least half full of water. Put the collection tray (15) in place so that the tube from the upper skimmer tower goes through the hole in the collection tray and the corners of the tray rest on the upper edge of the filter box. Put covers (13 & 14) in place as illustrated.



- | | |
|----------------------------|---------------------------------|
| 1. U-TUBE | 8. IMPELLER |
| 2. U-TUBE EXTENSION | 9. POWER UNIT |
| 3. STRAINER | 10. ADJUSTABLE STANDOFFS |
| 4. STRAINER END CAP | 11. UPPER SKIMMER TOWER SECTION |
| 5. AIRLINE TUBING | 12. LOWER SKIMMER TOWER SECTION |
| 6. AIRLINE ADJUSTING VALVE | |
| 7. IMPELLER COVER | |

9) The aquarium should be filled from 1/2 to 1-1/2 inches from the top. For initial startup, make sure the air adjusting valve on the SKILTER is closed. Plug the power cord into a receptacle following precautions listed in IMPORTANT SAFETY INSTRUCTIONS. The filter should start automatically within approximately 30 seconds. If it does not start to pump water, slide the U-tube up and down a few times to make sure it is aligned properly. If this does not solve the problem, see the PROBLEM SOLVING section of these instructions. Please note that the air adjustment feature needs to be shut off only on initial startup or when the SKILTER has been taken apart for periodic maintenance. If the SKILTER has been turned off to make a filter change or to feed your fish, it should start back up with the air valve open.

10) After operating for a few minutes, the unit should be checked for leakage. If there is leakage, inspect power unit to make sure it is installed correctly on the filter box. Care should be taken when removing or reinstalling power unit on the filter box, since there is an "O" ring seal on the power unit that can be damaged if it is not handled with care. If the unit continues to leak, it should be returned to dealer for further inspection or replacement.



13. Small Filter Cover 16. Filter Box
14. Large Filter Cover 17. Bio-Matrix Filter Cartridges
15. Collection Tray

Skilter/Filter Operation

To operate the skimmer section of the SKILTER, make sure pump is pumping water properly, then slowly open the white cap on the air adjusting valve until a uniform mixture of fine bubbles

is present both in the skimmer tower and in the filter box itself. Typically, the valve should not have to be opened more than half way to create the correct mixture of air and water.

The finer the bubbles are, the better the SKILTER works. All protein skimmers produce a foamy, frothy waste product that ranges from off-white to dark green in color. As the Foam collects, it breaks down into a liquid. The collection tray of the SKILTER should hold a fair amount of liquid, but should be monitored so it does not overflow out of the receptacle. Foam production depends to a large extent on the quality of the water in the aquarium. In a new saltwater aquarium, foam may not be produced by the skimmer for 4 to 6 weeks. On an established aquarium, depending on water quality, it may take time to produce foam as well. The foam produced should be fairly "dry" in consistency as it comes from the tube at the top of the skimmer tower.

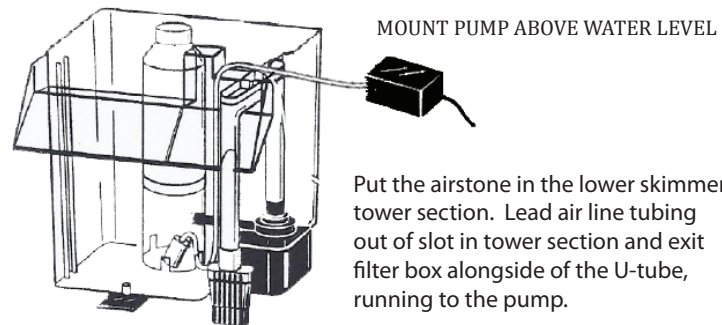
If you're using the SKILTER on an established (at least six months old) aquarium and foam has not been produced within 2-3 weeks, we would suggest that you take your SKILTER off the aquarium and wash the entire unit in warm water. Dry with a soft cloth or paper towel and reinstall.

All protein skimmers tend to "cycle". They will remove large amounts of waste product for a period of time, then seem dormant until waste products in the aquarium reach a point where the skimmer can start collecting them again.

How To Reduce Noise and Increase Efficiency

The SKILTER produces very small bubbles by injecting air directly into the Impeller Cavity. Some people may find the noise associated with this air production disruptive. If this is the case, we suggest closing the air valve for quiet operation when

the room is occupied and opening the valve when the room is vacant. "Cycling" the filter in this way should not prove detrimental. Another solution received from a SKILTER enthusiast is to use a standard 1" airstone connected to a small to medium size air pump (see diagram). This greatly increases efficiency and, with the SKILTER's air valve shut down, reduces the noise level to acceptable levels when the aquarium is in quiet living areas.

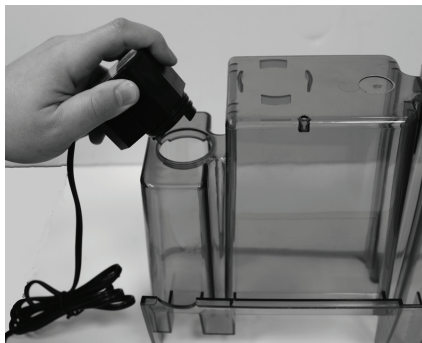


MOUNT PUMP ABOVE WATER LEVEL
Put the airstone in the lower skimmer tower section. Lead air line tubing out of slot in tower section and exit filter box alongside of the U-tube, running to the pump.

How To Remove/Install Power Unit

1) Turn filter box upside down so that the power unit is to the right side.

2) To remove power unit, rotate power unit 90 degrees (1/4 turn) clockwise. Gently pull upward on power unit to detach from filter box.



3) To reinstall power unit, align power unit so that the cord faces toward the front of the filter box. Push down on the power unit with a firm, even pressure so that "O" ring on power unit seats properly. Turn power unit counter-clockwise 90 degrees (1/4 turn).

4) Power unit is properly installed when power cord faces toward the filter box.

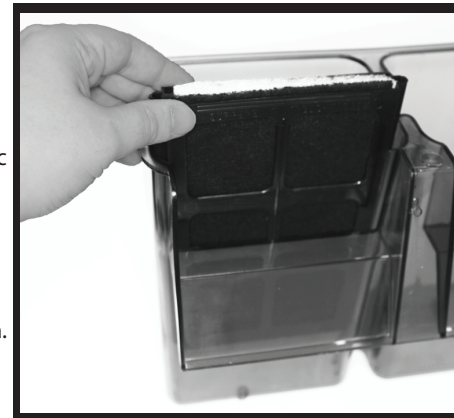
LIMITED WARRANTY

E.G. Danner Mfg. Inc. will repair or replace any Skilter Power Filter found to be defective within 90 Days of original purchase. This warranty covers defects occurring under normal use and applies to the original purchaser at retail from a certified Supreme dealer and may not be transferred. Cutting or altering cord removing or defacing product labels voids any warranty consideration. It will be based upon Danner Mfg. discretion as to whether the defects are of manufacturing origin. For warranty repair return only the part that is defective to our factory. Please include \$5.00 USD for postage and handling. This warranty does not include damage due to handling, transportation, unpacking, setup, installation, repair or replacement of parts supplied by any other than Danner Mfg.; improper maintenance, modification or repairs by the purchaser; abuse, misuse, neglect, accident, fire, flood, or other acts of God. Any oral statements about this product made by the seller, the manufacturer, their representatives or any other parties do not constitute warranties and shall not be relied upon by the user and are not part of this contract. Neither the seller nor the manufacturer shall be liable for any injury, loss or damages, direct, incidental, or consequential, including but not limited to incidental or consequential damage for lost profits, lost sales, injury, and inability to use the product and the user agrees that no other remedy is available. Before using, the user shall determine the suitability of the product for their intended use and the user shall assume all risk liability whatsoever in connection therewith. To validate this warranty, keep your proof of purchase (copy of sales receipt). Warranty covers the repair or prorated replacement of the Danner Mfg. products. Danner Mfg. denies all liability for any other loss including but not limited to loss of equipment, income, livestock, vegetation or personal injury. This warranty gives you specific legal rights. You may have other rights which vary from state to state. To validate this warranty, include your dated proof of purchase (copy of sales receipt from a certified Supreme dealer).

DANNER MFG. INC.
160 OVAL DRIVE, ISLANDIA, NY 11749
www.dannermfg.com

Bio-Matrix™ Filter Cartridge

The BIO-MATRIX cartridge is the only filter cartridge that allows partial media changes to assure uninterrupted aerobic bacterial filtration. The filter media should be replaced when water flows excessively from U-tube overflow area.



Filter media changes are simple:

- Remove collection tray and cover from SKILTER.
 - Remove BIO-MATRIX cartridge from filter box, allowing excess water from cartridge to drain back into filter box.
 - If you've purchased a single pack BIO-MATRIX cartridge, simply install new cartridge in filter box and reinstall collection tray and cover.
 - If you've bought the economical 4 or 12 pack of BIO-MATRIX replacement media, simply open frame and replace either one or both filter elements and reinstall in filter box.
- Many hobbyists feel that by replacing only one filtering element at a time they maintain uninterrupted bacterial filtration and assure maximum biological activity within the filtering system.

Filter Replacement Options

Available in 3 convenient money-saving sizes. Ask your dealer for the package that fits your needs.

1. THE 12-PAK. This package contains 12 polyester filters specially die cut to fit precisely in the Bio-Matrix cartridge. This is your most economical replacement buy.

2. THE 4X4 PAK. This package contains four complete media replacements polyester and carbon, specially die cut to fit precisely in the Bio-Matrix cartridge.

3. THE COMPLETE PAK. This package contains one complete Bio-Matrix filter-polyester, carbon and snap-apart cartridge. For quick, easy and total replacement of the filtering media.



Problem Solving

If your filter doesn't start or run properly, first check to see if there is electrical power to the outlet. Test the electrical outlet by plugging a lamp or other electrical product that you know is operational into the outlet. If there is electrical power to the outlet, please follow these instructions:

1) Disconnect the AC power cord. Pull the impeller cover off the power unit. The magnetic impeller assembly should come out with the impeller cover. Examine the visible portions of the steel shaft between the impeller body and the end caps. With a pair of tweezers or a needle, remove any stringy material or debris that may have wrapped around the shaft. Hold the impeller assembly between two fingers by the end caps and spin the impeller by hand. It should spin freely. If it doesn't, wash it under a faucet and examine again for any debris that may be binding the shaft. Hold the impeller by the cylindrical magnet portion of the impeller, the impeller itself should rotate almost one full turn in either direction before hitting a stop.

2) If the magnetic impeller assembly spins freely and the filter still doesn't pump, there may be an accumulation of dirt in the well of the power unit. Run the faucet into the well and clean the well with a cotton swab. You may want to remove the power unit from the filter box to clean the well more easily. Follow the instructions on HOW TO REMOVE/INSTALL POWER UNIT if you do remove the power unit.

3) To determine if the power unit itself is operational, insert the magnetic impeller assembly into the power unit well. Plug the power unit into an electrical outlet. If the impeller vibrates, spins, or if you feel a magnetic attraction between the impeller and the power unit, the power unit is functional.

4) If the unit is stored and then put back into service, the impeller may fail to spin freely on the shaft due to salt build-up. Try soaking the entire impeller in tap water overnight.

Skilter 400 Replacement Parts

Filter Box	21880	Impeller Cover w/Air Valve	21860	Bio Matrix Cartridge	11802
U-Tube w/Strainer	21835	Power Unit w/O-Ring	11810		
Complete Impeller Assembly	21855	O-Ring Only	11809		