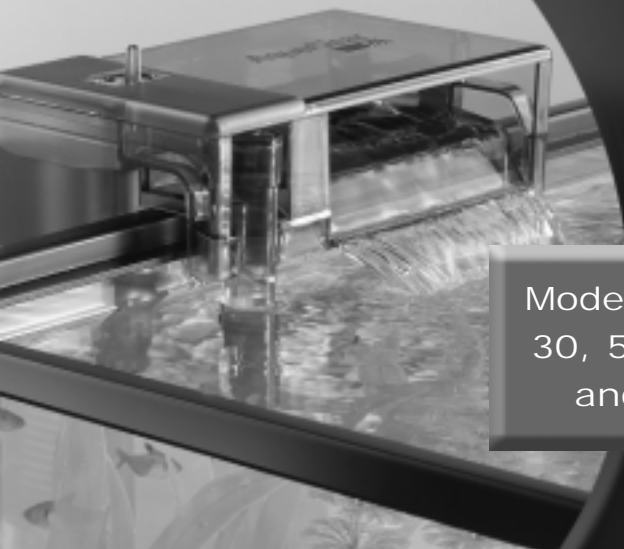


AquaClear

Power Filter

Instruction Manual

See inside for Quick Start Guide!



Models 20,
30, 50, 70
and 110

English

IMPORTANT SAFEGUARDS

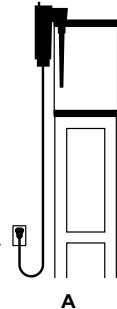
WARNING—To guard against injury, basic safety precautions should be observed, including the following:

1. For the complete enjoyment, use and understanding of this product,

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

and all-important notices on the AquaClear Power Filter before using. Failure to do so may result in damage to the unit.

2. **DANGER**—To avoid possible electrical shock, special care should be taken since water is employed in the use of this equipment. For each of the following situations, do not attempt repairs yourself; return the AquaClear Power Filter to an authorized service facility for service or discard the appliance.
 - I. If the AquaClear Motor Unit falls into the water **DO NOT** reach for it! First unplug it and then retrieve it. If any of the electrical components of the AquaClear Power Filter gets wet, unplug it immediately.
 - II. If the AquaClear Motor Unit shows any sign of abnormal water leakage or if RCD (or GFCI- Ground Fault Current Interrupter) switches off disconnect the power supply cord from mains and remove pump from water.
 - III. Carefully examine the AquaClear Power Filter after installation. It should not be plugged in if there is water on parts not intended to be wet.
 - IV. Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or if it is dropped or damaged in any manner. The power cord of this appliance cannot be replaced; if the cord is damaged, the appliance should be discarded. Never cut the cord.
 - V. To avoid the possibility of the AquaClear Power Filter's plug or receptacle getting wet, position the unit to one side of a wall mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip loop" (**A**) should be arranged to the receptacle. The "drip loop" is the 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 and coming into contact with the receptacle. If the plug or receptacle does get wet, **DO NOT** 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. To avoid injury, do not contact moving parts or hot parts such as heaters, reflectors, lamp bulbs, etc.
5. **CAUTION**— Always unplug or disconnect all appliances in the aquarium from electricity supply before placing hands in water, before putting on or taking off parts and whilst the equipment is being installed, maintained or handled. When inserting or removing the pump from the water, always pull out the main electricity plug. Never yank cord to pull plug from outlet. Grasp the plug and pull to disconnect. Always unplug an appliance from an outlet when not in use.
6. Do not use this pump for other than intended use (i.e.: do not use in swimming pools, bathrooms, etc.). The use of attachments not recommended or sold by the appliance manufacturer may cause an unsafe condition.
 - Do not use this pump in swimming pools or other situations where people are immersed.
 - This pump is suitable for use in water temperatures up to 35 °C.
 - Do not use this pump with inflammable or drinkable liquids.
7. This pump is suitable for INDOOR use only. Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.
8. Make sure an appliance mounted on a tank is securely installed before operating it.
9. Read and observe all the important notices on the appliance.
10. 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. The connection should be carried out by a qualified electrical installer.
11. The pump must not run dry.

SAVE THESE INSTRUCTIONS

For the complete use and understanding of this power filter it is recommended that this manual is thoroughly read and understood. Failure to do so may result in damage to this filter.

HOW IT WORKS

The AquaClear Power Filter draws water from the aquarium through an extension tube into the motor which then pumps water out of the impeller assembly. The intake "U" tube directs the flow of unfiltered water through filter inserts to trap particles, debris, and purify the water.



CYCLEGUARD® MULTI-STAGE FILTRATION SYSTEM

Provides optimal Mechanical, Chemical, and Biological filtration



A healthy aquarium requires "beneficial" bacteria. Invisible and harmless, beneficial bacteria are essential in the removal of toxic ammonia and nitrite.

With cartridge filtration systems, when you throw away the cartridge, you throw away beneficial bacteria. It can take weeks for the bacteria to recolonize, resulting in a stressful environment.

The AquaClear® multi-stage filtration system is different. Only one of three filtration components is changed at a time. This ensures that significant amounts of beneficial bacteria remain. There is never a sudden depletion of bacteria so biological filtration remains at highly effective levels.

Stage 1: Mechanical—Foam Filter Insert

AquaClear Foam Filter Inserts perform mechanical filtration by trapping particles and debris as they pass through the insert. This unique foam, designed for use with AquaClear Power Filters, features optimal pore size for efficient mechanical and biological filtration.

Stage 2: Chemical—Activated Carbon insert

AquaClear Activated Carbon Filter Insert contains 100% premium research grade carbon. Premium research grade carbon provides large amounts of surface area for adsorption of undesirable impurities. The activated carbon filter insert will remove unwanted odors, discoloration and impurities resulting in a crystal clear aquarium.

Stage 3: Biological—BioMax Insert

AquaClear BioMax Filter Insert contains BioMax ceramic rings. The surface of BioMax is made up of a complex pore system that allows bacteria to thrive. Each ceramic ring contains approximately 100 square feet of surface area providing more biological power than a traditional cartridge. Use of the BioMax Insert will provide optimal living space for beneficial bacteria and enhance the removal of ammonia and nitrites resulting in a healthy aquarium environment.

NOTE: Regular replacement of AquaClear filter inserts is essential for optimum filter performance.

PATENTED REFILTRATION SYSTEM For a healthy aquarium and clear water

Sometimes delicate fish and plants require a gentler water flow. AquaClear's patented refiltration system allows you to control the flow rate without compromising filtration efficiency.

When the flow rate is reduced, up to 50% of the water within the filter chamber is processed multiple times. More impurities are filtered out, creating a healthier tank with sparkling clean and clear water.

NOTE: A reduced flow rate is also recommended for use during feeding, to ensure more efficient food consumption and less waste.

AQUACLEAR POWER FILTERS FLOW RATES

MODEL #	20	30	50	70	110
Maximum Flo Rate	100 gph 378 lph	150 gph 568 lph	200 gph 757 lph	300 gph 1135 lph	500 gph 1890 lph
Minimum Flo Rate	33 gph 125 lph	50 gph 190 lph	66.6 gph 250 lph	100 gph 380 lph	166.6 gph 630 lph
Watts	6 Watts	6 Watts	6 Watts	6 Watts	14 Watts
RPM	3600 rpm	3600 rpm	3600 rpm	3600 rpm	3600 rpm

POWER FILTER MAINTENANCE

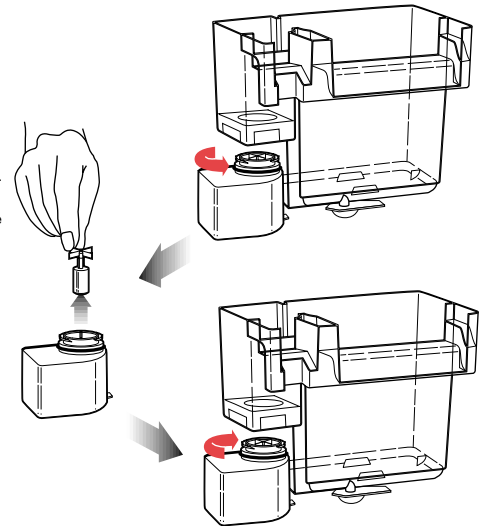
Always unplug power filter prior to cleaning. Remove cover, filter basket, and discard water remaining in the filter case. Thoroughly rinse collected debris from the case, impeller cover and impeller assembly in clean lukewarm water. The intake "U" tube and extension tube can be cleaned with a filter stem brush to remove any buildup of deposits. When all parts have been cleaned and thoroughly rinsed, reassemble filter and replace onto aquarium.

(See Quick Start Guide 2, 3 and 4.)

Follow operating instructions to restart and prime power filter.

(See Power Filter Start-up.)

Every three months the motor should be thoroughly cleaned. Remove cover, filter basket and discard water remaining in filter case. Remove motor by twisting a 1/4-turn gently in the direction of the arrow on front. Ease motor down slowly to prevent damage to the filter and motor guide.



Pull impeller out of impeller well and rinse to remove accumulated slime deposits.

A cotton swab or impeller well brush (not supplied) can be used to remove more stubborn deposits. Wet motor seal ring to prevent damage before placing into filter case.

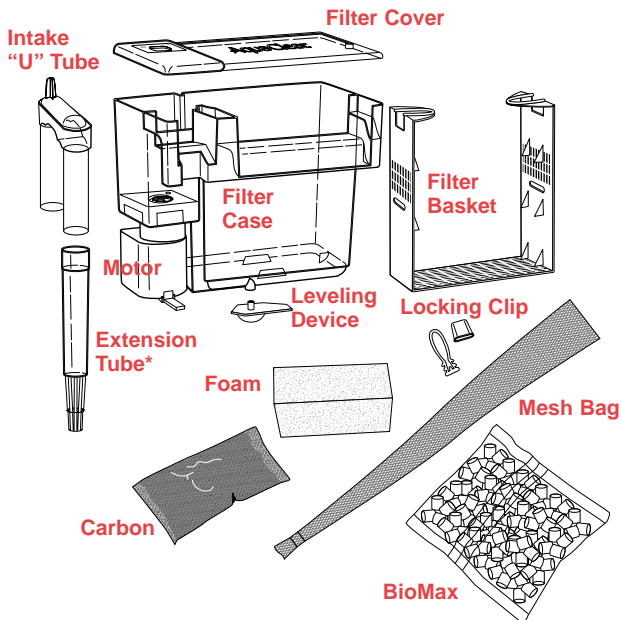
AquaClear® Power Filter Quick Start Guide

1

PACKING LIST

Congratulations on the purchase of your new AquaClear Power Filter. Please allow approximately 15-20 minutes for the complete installation of filter parts and inserts. The rewards to your aquatic adventures will be worth it!

Inspect AquaClear power filter for any visible signs of shipping damage and verify that motor is securely fastened to filter case. The following parts should be included in your package.

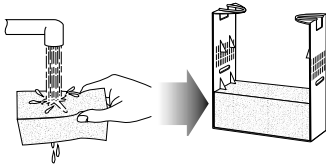


*All AquaClear Power Filters, except Model 20, are shipped with two extension tubes.

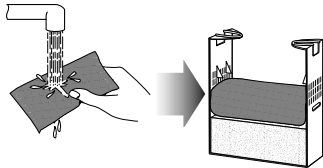
2

PREPARING FILTER INSERTS

ALL FILTER INSERTS MUST BE RINSED THOROUGHLY PRIOR TO INSTALLATION.



AquaClear Foam: Rinse foam insert and place into filter basket first. The foam block should totally fill the bottom of the basket leaving no space between the filter basket base and sides. Replace foam insert every two months.

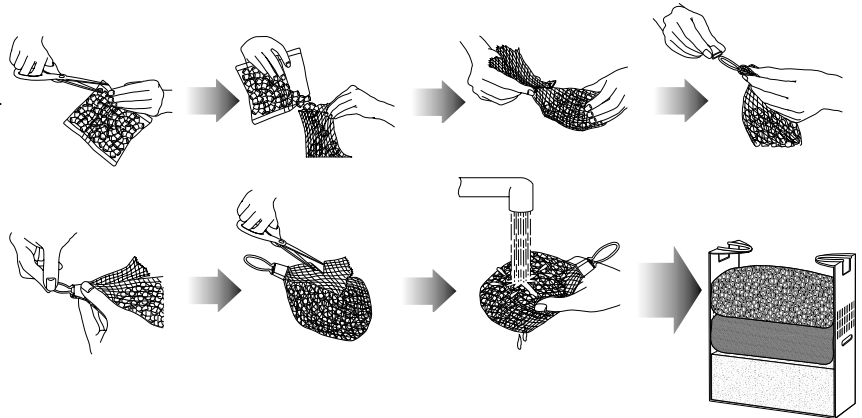


AquaClear Carbon: Remove carbon insert from dust sleeve and rinse pouch to remove any carbon dust particles. Flatten carbon insert and place horizontally on top of foam insert. Replace carbon insert every month.

AquaClear BioMax: Open poly bag and transfer contents into mesh bag. Apply locking clip as shown, trim excess mesh, and thoroughly rinse insert materials before placing on third level of the basket.

Replace BioMax insert every three months.

NOTE: Regular replacement of AquaClear filter inserts is essential for optimum filter performance.



FILTER INSERTS MAINTENANCE

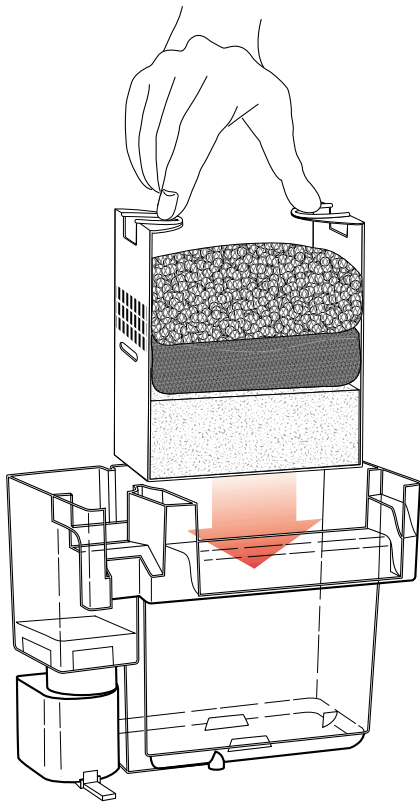
The AquaClear Foam, Carbon and Bio-max inserts should be changed alternately in order to maintain continuous biological activity. Follow individual packaging instructions for recommended replacement intervals.

Never replace all Filter Inserts in any AquaClear Power Filter at the same time.

3

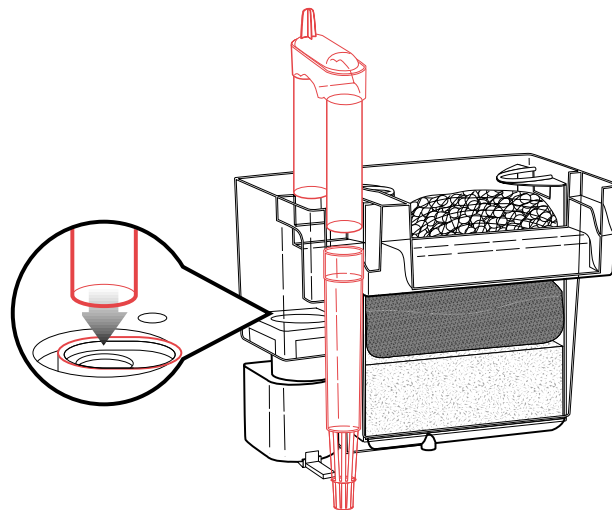
INSTALLING FILTER INSERTS

After preparing filter inserts as indicated, place filter basket into filter case. Gentle pressure may be necessary to ease filter basket into position due to the snug fitting foam insert.

**4**

ATTACHING INTAKE "U" TUBE

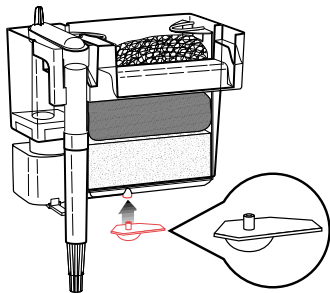
- Install intake "U" tube as shown and apply gentle pressure to "click" into position.
- Additional slight pressure is then applied to ensure base of tube "clicks" into the opening over impeller cover.
- Attach extension tube on aquarium side of intake.
- Add more than one extension tube if tank depth requires it.



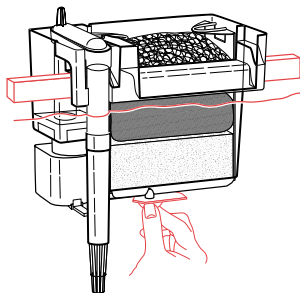
5

ATTACHING LEVELING DEVICE

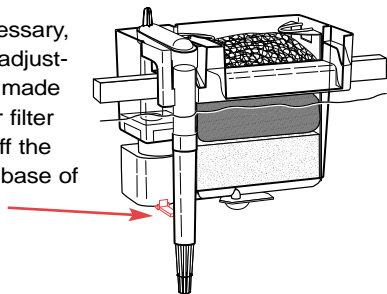
Power filter must be level to ensure optimal performance. Insert leveling device into bottom of filter case.



Mount power filter onto rear of aquarium and adjust leveling device by turning to required setting.



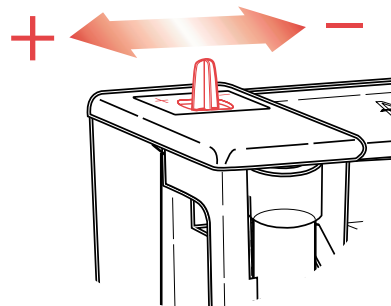
NOTE: If necessary, an additional adjustment may be made to level power filter by breaking off the leveler bar at base of motor.



6

POWER FILTER START-UP

- Fill power filter case completely with water and replace cover.
- Adjust water flow control lever on intake "U" tube to its maximum position for initial start-up.
- Plug power cord into electrical outlet. Allow 30-45 seconds for priming (air to be expelled from "U" tube.)
- After priming has been completed, move adjustment control on intake "U" tube to adjust water flow rate as required. (See *How it Works— Patented Refiltration System.*)



IMPORTANT DO NOT OPERATE FILTER WITHOUT WATER

NOTE: For maximum filter operation and efficiency, regular cleaning of the filter and its parts is recommended every two weeks. Soap or detergents are **NOT** recommended for filter maintenance. (See *Power Filter Maintenance.*)

TROUBLE-SHOOTING & FAQs

Q. What if the power filter motor doesn't start or makes a mechanical noise?

- A. Check to make sure impeller blades are free moving on magnet assembly.

Q. Why won't the power filter motor re-start after performing filter insert maintenance?

- A. Make sure unit has been plugged back into power outlet and that all parts are thoroughly clean and replaced as directed.

(See [Power Filter Maintenance.](#))

Q. What should I do if the priming process doesn't occur?

- A. Verify that:

- all parts are installed correctly
- filter case is completely filled with water
- unit is plugged into power outlet
- ensure "U" tube lever is set to maximum position

Q. Why is the water cloudy in my new aquarium?

- A. Bacterial cloudiness may occur during the first week of a new aquarium set-up and may last up to six weeks. If the condition persists, consult your local aquarium professional.

Q. What happens if I forget to clean my filter inserts?

- A. If the power filter is left unattended for too long, the filter inserts become clogged with debris. In extreme cases, the filter basket may be forced up from the filter case due to the pump pressure. This is an indication that the efficiency of the filtration is very low and that the filter inserts require immediate rinsing or replacement. (See [Filter Inserts Maintenance.](#))

Q. When should I operate a reduced flow?

- A. Reduced flow is most helpful during feeding times, or when the input suction or output stream is too strong for small or delicate fish. (See [How it Works—Patented Refiltration System.](#))

Q. Why should I use only aquarium water to rinse my filter inserts after they are installed?

- A. Most cities add chlorine or other chemicals to eliminate harmful bacteria in drinking water for human consumption. These additives, while harmless to us, are very toxic to fish.

ALSO AVAILABLE FROM AQUACLEAR®

Occasionally, it might be necessary to use alternate filter inserts to maintain a well balanced, healthy aquatic environment. We offer the following alternative chemical stage inserts as superior solutions to your filtration system.

AquaClear Ammonia Remover Insert

- Removes and controls harmful ammonia
- Ideal for new or heavily populated aquariums
- Reduces stress on fish
- For freshwater use only

AquaClear Ammonia Remover Insert contains a natural ammonia removing resin. This resin chemically bonds with ammonia to remove it from the aquarium water. Use of the ammonia remover insert will reduce and control toxic ammonia resulting in a healthy aquarium environment.

AquaClear Zeo-Carb Filter Insert

- Combines activated carbon and ammonia remover in one
- Removes toxic ammonia, odors, discoloration and impurities
- For use to prevent buildup of toxic ammonia
- Reduces stress on fish
- For freshwater use only

AquaClear Zeo-Carb Filter Insert contains a mixture of ammonia removing resin and premium research grade carbon. This dual purpose insert gives you the combined benefits of carbon and ammonia remover, while allowing you additional space in your filter for other types of inserts.



NUTRAFIN® WATER CARE PRODUCTS

For Improved Aquarium Health



AquaPlus®: Patented stress relief water conditioner. Makes tap water safe. Protects fish and helps heal damaged fins, cuts, and wounds. Ideal for new tank set-up and water changes.

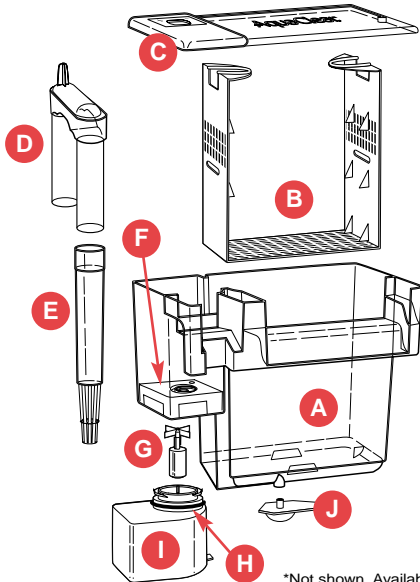


Cycle®: Biological aquarium supplement. Introduces beneficial bacteria to accelerate the maturation of new tanks. Promotes tank health and reduces fish loss when used as part of weekly maintenance.

REPLACEMENT PARTS

To re-order parts for your AquaClear Power Filter please refer to Parts List below..

NEW MODEL #	20	30	50	70	110
Formerly model	Mini	150	200	300	500
Article #	A595	A600	A610	A615	A620
A Filter Case	A16020	A16120	A16220	A16320	A16420
B Filter Basket	A16040	A16140	A16240	A16340	A16440
C Filter Cover	A16030	A16130	A16230	A16330	A16430
D Intake "U" Tube	A16050	A16150	A16150	A16350	A16350
E Extension Tube	A625	A625	A625	A627	A627
F Impeller Cover	A16015	A16015	A16015	A16315	A16415
G Impeller Assembly	A630	A632	A634	A636	A638
H Seal Ring	A16017	A16017	A16017	A16017	A16417
I Motor Unit	A16000	A16000	A16000	A16000	A16400
J Leveling Device	A16325	A16325	A16325	A16325	A16325
* Intake "U" Tube Adaptor	N/A	N/A	N/A	N/A	A16412



*Not shown. Available for Model 110 only.

HOW TO CONTACT US

If you have a problem, or have questions about the operation of this product, please let us try to help you before returning product to your dealer. Most problems can be handled promptly with a toll-free phone call. Or if you prefer, you can contact us on our web site at www.hagen.com.

When you call (or write), please have all relevant information, such as model number and/or part numbers available, as well as the nature of the problem.

CALL US ON OUR TOLL FREE NUMBER 1-800-724-2436 between 8:30 am and 4:00 p.m. Eastern Standard Time. Ask for Customer Service.

FOR AUTHORIZED GUARANTEE CONSUMER SERVICE: Return unit with dated receipt plus \$5.00 for shipping and handling to:

Rolf C. Hagen (U.S.A.) Corp.
Consumer Repair
50 Hampden Road
Mansfield, MA 02048

LIFETIME GUARANTEE

AquaClear Power Filters are guaranteed against defects in material or workmanship under normal aquarium usage and service for as long as you own the filter. We offer a Lifetime Guarantee on all non-replaceable parts which means that the filter will be repaired or replaced at the manufacturer's discretion, free of charge, when the complete pump is returned with proof of purchase and postage paid. Please include \$5.00 to cover shipping and handling. This warranty does not apply to any filter that has been subjected to misuse, negligence, or tampering. No liability is assumed with respect to loss or damage to livestock or personal property irrespective of the cause thereof.

REGISTER ON-LINE: www.hagen.com.

- To learn more about Hagen products.
- For a copy of our FREE full color, 40 page, Basic Aquarium Guide.

