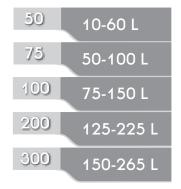
MARINA

Air Pump Instruction Manual





50/75/100/200/300

CONGRATULATIONS

Thank you for purchasing the new Marina air pump. For a complete understanding of the air pump's operation and capabilities, please read and follow these instructions.

IMPORTANT SAFETY INSTRUCTIONS

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

1 READ AND FOLLOW ALL SAFETY INSTRUCTIONS

and all important notices on the appliance 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 aquarium equipment. For each of the following situations, do not attempt repairs yourself; return the appliance to the manufacturer for service or discard the appliance.
- A. DO NOT immerse in water. If the appliance falls into the water, DO NOT reach for it! First unplug it and then retrieve it. If electrical components of the appliance get wet, unplug the appliance immediately. (Non-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 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.
- 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" (ill. A) should be arranged by the user for each cord connecting an



aquarium appliance to a receptacle. A "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 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. It is recommended to always use a Check Valve in the airline between the air pump and the aquarium.

- 3. WARNING: This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- 4. To avoid injury, do not contact moving parts or hot parts such as heaters, reflectors, lamp bulbs, and the like.
- 5. CAUTION: Always unplug or disconnect all appliances in the

aquarium 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.

- 6. 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.
- 7. For Indoor, household use only. Do not install or store the appliance where it will be exposed to weather or to temperatures below freezing.
- 8. This is an aquarium air-pump. Do not use this air pump for other than its 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 filter pump in swimming pools or other situations where people are immersed.
 - Do not use this air pump with inflammable or drinkable liquids.
- **9.** Make sure an appliance mounted on a tank is securely installed before operating it.
- **10.** Read and observe all the important notices on the appliance.
- 11. 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 air pump should be installed by following either of the two recommended methods:

 Place the air pump on a surface lower than the water level of the aquarium. To avoid damage from accidentally spilled water, do not place the air pump directly below the aquarium. ill. B Check valve Drip loop

Important: It is highly recommended to always use a Check Valve (sold separately) in the airline between the air pump and the aquarium. **(ill. B)**.



The Check Valve will help prevent water from siphoning out of the aguarium through the air hose and into the

suphoning out of the aquarium through the air hose and into the pump in the event of a power failure, or when removing filters and other air-driven accessories from the aquarium.

2. Place the air pump on a surface higher than the water level, such as a shelf. The surface should be at least 12 inches (30 cm) higher than the water level of the aquarium, but not be positioned directly above the aquarium. The surface should have a raised edge to prevent the air pump from sliding off. Use a Check Valve (sold separately) in the airline between the air pump and the aquarium to prevent back-siphoning. (ill. C).

Once the air pump has been installed, do the following:

- 1. Attach one end of the airline tubing (sold separately) to the air outlet on air pump.
- 2. Attach the other end of the airline tubing to a filter, an air stone, an

ornament or any other air-driven aquarium accessory. Ensure that the airline tubing has no restrictions or kinks .--

3. Plug air pump into outlet. Be sure to allow for a "drip loop".

INSTALLATION TIPS:

- . The pump should be placed in a location which is dry and relatively free from dust. Do not place the air pump on carpet, as fibers might collect on pump and clog free-flowing air from entering pump. This will decrease the air output, cause overheating and reduce the service life of the pump.
- Air control valves with multiple outlets may also be used to power additional apparatus in the aquarium. When using multiple air valves, it is recommended to have one more outlet than required by the accessories; this will be used to bleed over production of air due to back pressure build up. Please refer to BACK PRESSURE section for more information about back pressure.
- · Air Pumps can be used to operate a variety of aquarium accessories such as air stones, corner filters, under gravel filters, and ornaments, Follow installation instructions for your particular aquarium accessory product.
- **CAUTION:** Care must be taken during installation to ensure that water cannot siphon out of the aquarium through the air hose and damage the air pump. To prevent back-siphoning when removing the filter, air stone, ornament or any other air-driven aquarium accessory from the aquarium, do the following:

1. Install a Check Valve.

- 2. Leave pump running while you disconnect tubing from pump. Disconnect tubing and tape this end of the tubing to the very top frame of your aquarium.
- 3. Filter(s), air stone(s) and other air-driven ornaments can now be safely removed from your aquarium.

AIR FLOW ADJUSTMENT

In order to achieve correct airflow, a balance between the valve setting and the pump output is necessary. The ideal setting is obtained by minimum back pressure or non restriction of flow of air. Never physically restrict the output of the pump. Restriction causes damage to the diaphragm (see BACK PRESSURE section for more information). Adjust air valve output as required (Sold separately).

To regulate air volume using an air control valve with multiple outlets, it is recommended to have the last valve available to release excess air pressure build up (see BACK PRESSURE section for more

information). In regulating the air pressure, it is best to work from the valve farthest from the input of the air valve. Remember to have the last valve completely closed so as not to lose any air pressure. Proceed to make adjustments on the remaining valves. Once the adjustments are complete, slowly open



the last valve to the point where no loss of air output is noticed from the items controlled by the other valves. To achieve and maintain an equal balance of air pressure to the accessories in the aquarium, further adjustments of the air valve may be required depending on the items powered by the air pump.

Note: If the first valve on the air control assembly is fully opened, air volume to the remaining outlets will be reduced.

To alleviate excess air pressure or overproduction of air, it is recommended to open the last valve every 2 weeks or when required. In doing this, you will increase the life of the pump and diaphragms by preventing premature wear.

BACK PRESSURE

Back pressure is the buildup of pressure on the diaphragm due to restricted air flow. This occurs when excess air is produced by the air pump, or when the air channels are inadvertently blocked.

Back pressure over time resulting from clogged air stones or other air system blockages and restrictions will cause the diaphragm to expand or rupture. An expanded diaphragm leads to a loss of air volume while a rupture results in the total loss of air.

MAINTENANCE (EXTERNAL APPEARANCE)

Remove dust and grime with a soft, damp cloth. Do not immerse pump in water. Do not use detergents.

AIR STONE, AIRLINE, AND ORNAMENT MAINTENANCE

This pump requires no regular internal maintenance during its life. The rest of the air system should be periodically checked and cleaned.

- Airlines should be carefully inspected whenever standard aguarium maintenance is performed. Adjust, or if required, replace all sections which are pinched, kinked, or otherwise damaged.
- All attached air-driven aguarium ornaments should be regularly maintained. Algae growths should be removed from moving parts and kept as clean as possible. Internal air tubes should be cleaned.
- · Air stones should be kept clean and free of debris or algae build-up. The ideal situation is to replace them every month, alternating with an extra set which has been dried over that period and cleaned before being placed in the aquarium.

Two complete sets of air stones alternately changed each month will extend the life of the air stones and help keep back pressure to a minimum. Clogged air stones and air-driven aguarium ornaments will lead to low air pressure output and also reduce the life of the diaphragms.

TROUBLE SHOOTING TIPS

- If the air pump fails to produce air, check the following:
- 1. Ensure that the air pump is plugged in.
- 2. Ensure that there are no blockages in the air hose assembly and that all valves allow air passage. If no air is produced by the accessories in the aquarium, remove the air line from the pump and ensure that air is being produced.
- 3. If the air pump produces no output, the most common problem encountered with any air pump is a ripped or weakened diaphragm. Remove airline. Unplug appliance. Inspect the diaphragm for tears or rips. Any opening in the diaphragm will make it impossible for the pump to produce air for aeration purposes. Always inspect the diaphragm first before replacing other parts in the pump.

REMOVING THE PUMP

Important: Whenever the air pump must be shut off and removed from the aeration system, always take off the airline before the pump is unplugged. This will prevent water from siphoning back into the pump. If the airline cannot be removed before unplugging the power cord, raise the pump above the water level.

REPLACEMENT PARTS

Repair kits for all wearable parts are available for all Marina Air Pumps. These can be easily obtained at your local aquarium and pet supply store. Failure of the electric coil or any other electrical part requires proper service, and should be returned to the manufacturer for repairs or replacement (see warranty for full details).

- A-18033 50 Repair kit
- A-18034 75 Repair kit
- A-18035 100 Repair kit
- A-18036 200 Repair kit
- A-18037 300 Repair kit

To register your warranty on line or for more information on this and other products go to www.hagen.com

FOR AUTHORIZED GUARANTEE REPAIR SERVICE:

For Authorized Warranty Service please return (well packaged and by registered post) to the address below enclosing dated receipt and reason for return. If you have any queries or comments about the operation of this product, please let us try to help you before you return the product to your retailer. Most gueries can be handled promptly with a phone call. When you call (or write), please have all relevant information such as model number, age of product, details of aquarium set-up, as well as the nature of the problem.

UK: Rolf C. Hagen (UK) Ltd, Customer Service Department California Drive, Whitwood Ind Est., Castleford, West Yorkshire WF10 50H

Call Customer Services on 01977 556622 Between 9:00 AM and 5:00 PM, Monday to Friday (excluding Bank Holidays).

WARRANTY

The Marina air pump is guaranteed against defects in material or workmanship under normal aquarium usage and service for 2 years. We offer a 2 year guarantee on all non-replaceable rubber parts which means that the air pump 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. This warranty does not apply to any air pump 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.

RECYCLING

This symbol bears the selective sorting symbol for waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European Directive 2002/96/EC in order to be recycled or dismantled to minimize its impact on the environment. Check with your local Environmental Agency for possible



disposal instructions or take to an official council registered refuse collection point. Electronic products not included in the selective sorting process are potentially dangerous for the environment and human health due to the presence of hazardous substances. Ver: 38/10-UK