

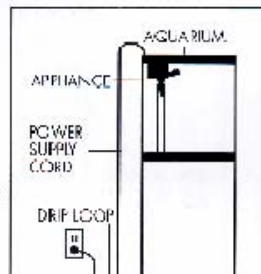
IMPORTANT SAFEGUARDS

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 use 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.

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



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.

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

MAXI-JET®

Ideal for powering undergravel filters or generating internal water movement, the Maxi-Jet delivers optimal water circulation, adjustable aeration and reliable, silent performance at all times. Its powerful flow maximizes oxygenation throughout the gravel bed to provide a viable biological filtration site for the growth and proliferation of BIO-Spira™, the bacteria responsible for nitrification in aquatic systems.

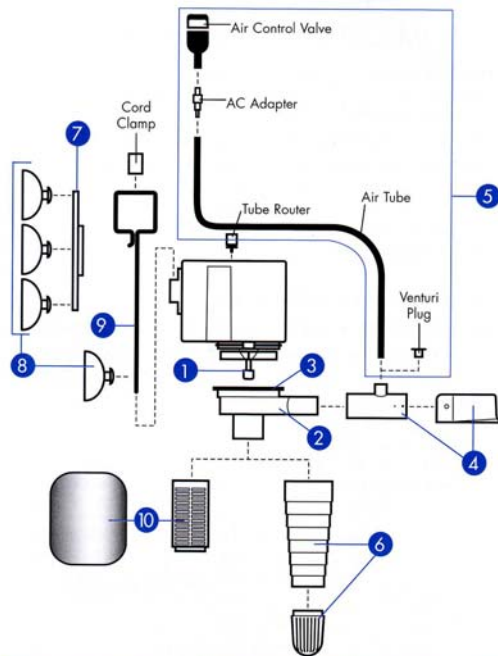
The compact, efficient Maxi-Jet design makes it suitable for freshwater or marine aquariums...and versatile enough for a multitude of internal/external applications - from creating gentle waterfall effects to powering fluidized bed filters.



CUSTOMER SERVICE INFORMATION

If parts are unavailable from the dealer where filter was purchased, call Aquarium Systems Customer Service at (800)822-1100, Monday -

REPLACEMENT PARTS LIST



Key/Item Description	400	600	900	1200
1 Impeller Assembly Rotor	00.45.052	00.45.008	00.45.010	00.45.012
2 Impeller Chamber	00.45.002	00.45.003	00.45.003	00.45.003
3 O-Ring (pkg.2)	00.45.004	00.45.004	00.45.004	00.45.004
4 Venturi Flow Deflector	00.40.012	00.40.012	00.40.012	00.40.012
5 Venturi Set	00.45.033	00.45.033	00.45.035	00.45.035
6 Undergravel Filter Adapter	00.40.010	00.40.010	00.40.010	00.40.010
7 Triple Suction Cup Support	00.40.005	00.40.005	00.40.005	00.40.005
8 Rubber Suction Cups (pkg.4)	00.45.001	00.45.001	00.45.001	00.45.001
9 Adjustable Hook w/Guide	00.40.005	00.40.005	00.40.005	00.40.005
10 Prefilter Grid Support /	9 Filto	9 Filto	9 Filto	9 Filto

ASSEMBLY/OPERATIONAL INSTRUCTIONS

IMPORTANT: READ THIS FIRST

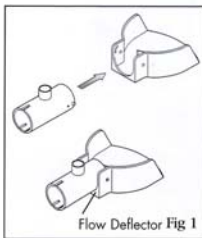
Assembly/Operational and Maintenance instructions for model 400, 600, 900 and 1200 Maxi-Jets are virtually identical. Most parts are preassembled and do not require disassembly prior to installation. We recommend that you read the Maintenance section that follows to familiarize yourself with overall power head operation. Depending on the intended application of your Maxi-Jet,

assembly procedures may differ. Mounting the Maxi-Jet on an undergravel lift tube or to an aquarium wall are covered in this manual, and all necessary parts are provided.

Applications outside the aquarium or as part of a waterfall configuration are not covered in this manual. These applications require additional parts and attachments not provided with your Maxi-Jet.

STEP 1: INSTALL ADJUSTABLE FLOW DEFLECTOR

Assemble **Flow Deflector** (open end up) as shown (Fig 1). Then attach Flow Deflector to outside of Maxi-Jet **Exhaust Outlet** (Fig 2). Press firmly to ensure secure fit.



Flow Deflector Fig 1

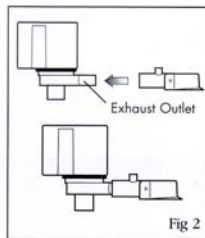


Fig 2

STEP 2: INSTALL UNDERGRAVEL FILTER ADAPTER OR PREFILTER CARTRIDGE GRID

Undergravel Filter: Attach **Adapter End Cap** to narrow end of **Undergravel Filter Adapter** (Fig 3).

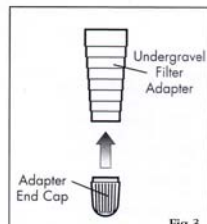


Fig 3

Fit wide end of assembled **Undergravel Filter Adapter** over bottom of **Impeller Chamber Outlet** (Fig 4). Press firmly into place.

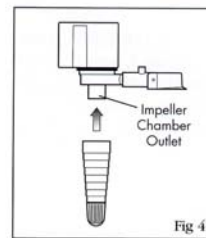


Fig 4

Prefilter Grid: Press open end of **Prefilter Grid** over bottom of **Impeller Chamber Outlet** (Fig 5).

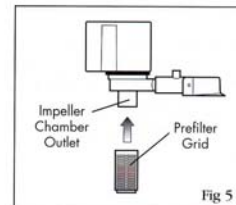


Fig 5

STEP 3: ASSEMBLE SUPPORT BRACKET

UNDERGRAVEL FILTER: Slide **Hook Mount** into mounting channel of choice (back or side, depending on preference) (Fig 6). Slide Adjustable Hook through Hook Mount (hook end up, open side of hook facing nearest aquarium wall surface). Attach a Suction Cup to bottom, then rout **Power Cord** through **Cord Clamp** and attach to top of Hook (Fig 7).

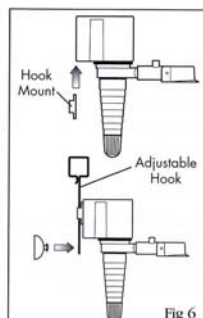


Fig 6

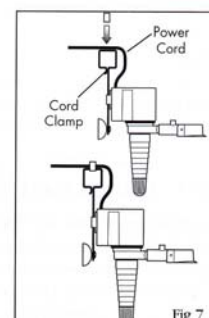


Fig 7

PREFILTER GRID: Attach **Suction Cups** to **Triple Suction Cup Support** (Fig 8). Slide Support into mounting channel of choice.

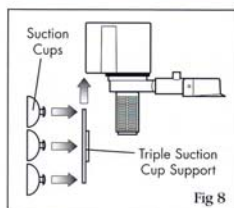


Fig 8

STEP 4: INSTALL AIR CONTROL VALVE AND TUBE

Assemble **Air Control Valve** and **AC Adapter** as shown. Push assembled Air Control Valve and Adapter onto one end of **Air Tube** (Fig 9).

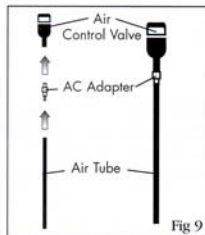


Fig 9

If desired, press small **Tube Router** into holes provided on top of Maxi-Jet. Rout open end of Air Tube through **Cord Clamp** (alongside Power Cord), Tube Router and firmly into **Venturi Collar** (Fig 10).

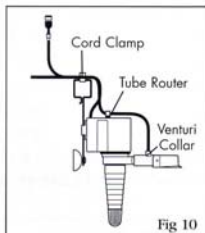


Fig 10

NOTE: Water flow decreases when the Venturi feature is used. If no air is desired - or if you prefer to use your Maxi-Jet with a Prefilter Grid, do not install the Air Tube. Cover the Venturi opening with the enclosed clear-plastic Venturi Plug.

STEP 5: INSTALL MAXI-JET

Locate Maxi-Jet over the **Undergravel Lift Tube**, to determine the proper height. *NOTE: When considering height allowance, keep in mind that the Impeller Chamber and Flow Deflector must be completely submerged to operate properly.*

Cut the Undergravel Lift Tube as needed. *NOTE: Take care to cut the Lift Tube straight, so that the Lift Tube Adapter sits level and seals properly.*

Anchor Maxi-Jet in chosen location by snapping Hook end over top of **Aquarium Frame** and firmly pressing Suction Cup against aquarium wall (Fig 11).

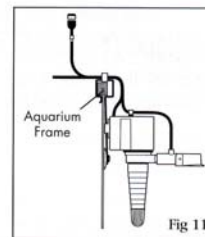


Fig 11

STEP 6: PLUG IN UNIT

Use a standard 115 volt polarized receptacle. **CAUTION:** Do not force plug into a non-polarized receptacle. Adapters are available at your local hardware store. *NOTE: Do not allow a Maxi-Jet to operate out of water at any time.*

STEP 7: OPTIMIZE FLOW

Rotate Exhaust Outlet from side to side, and adjust Flow Deflector. Fine tune air flow by adjusting Air Control Valve.

Clockwise = less air

Counterclockwise = more air.

NOTE: Set Flow Deflector to agitate surface of water; but never point it directly up. If water evaporates and aquarium water level drops, water could be pumped out of the aquarium (Fig 12).

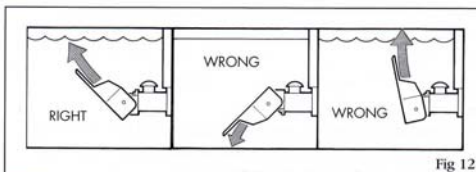


Fig 12

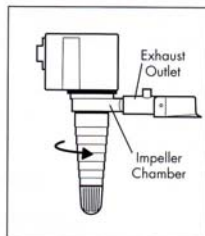
IMPORTANT NOTE: If you opt to use the Prefilter Grid attachment, installing a foam cartridge over the Prefilter Grid increases the waste-trapping efficiency of your Maxi-Jet. *Sponge Prefilter Pads, 9 Filto, are sold separately.*

MAINTENANCE

CAUTION!
UNPLUG UNIT BEFORE PERFORMING MAINTENANCE
NEVER use soap, detergents or any non-recommended cleaning agents around an aquarium.
ALWAYS rinse parts with cold water after cleaning.

Basic aquarium maintenance includes monthly 25% water changes and gravel cleaning, as well as regular media changes (at least every 2-4 weeks). *To ensure optimum performance, we recommend the following complete maintenance procedure for the Maxi-Jet at least every four weeks.*

1. Unplug Maxi-Jet. Lift unit up and off aquarium frame. Rotate **Exhaust Outlet** and gently uncouple **Impeller Chamber** from power unit. **Remove Impeller Assembly Rotor.**



2. Using a clean cloth and/or brush, clean Impeller, Undergravel Filter Adapter/Pre-filter Grid and Impeller Chamber. DO NOT use soap. Rinse with cold water. *NOTE: Impeller Assembly is not designed to be taken apart. Attempts to do so may result in malfunction. If Impeller Assembly does not rotate freely when clean and in good condition, a replacement should be installed (Customer Service section, pg 4).*

3. Reinstall Impeller Assembly, Impeller Chamber and Undergravel Filter Adapter or Pre-filter Grid. Readjust Flow Deflector and Air Control Valve as necessary.

TROUBLESHOOTING GUIDELINES

The motor of the MAXI-JET MP400, MP600 and MP900 is self-protected against uncharacteristic overheating caused by misuse, running-dry or jammed rotor. The MP1200 is provided with a self-resetting thermal protector. If the pump stopped working, please investigate if the thermal cut-off has been activated by first disconnecting the appliance from the electrical supply for approximately 1 hour, then remedy the cause that made the appliance stop, and reconnect to the socket again.

IF Maxi-Jet fails to pump water...

Make certain outlet has power and is functioning properly by first unplugging electrical cord momentarily, then reconnecting to power source.

Check to make sure Impeller Chamber is properly attached to power unit and is aligned correctly.

Remove Impeller Chamber and make sure the Impeller Assembly is free to rotate. A particle of carbon or gravel may be interfering.

IF Maxi-Jet fails to aerate...

Make certain the unit (especially Impeller Chamber) is completely clean.

Turn Air Control Valve knob counter-clockwise to ensure that it is open.

Check to make sure that Air Valve foam is clean and dry. If not, replace with small piece of foam or small amount of household cotton.

IF Impeller shows excessive wear...

Check to see that Maxi-Jet is not ingesting fine grit or gravel from aquarium bed. Very fine silica sand or oyster shell substrates used in aquarium should be rinsed thoroughly to remove finest particles. Gravel bed should be siphoned and cleaned regularly.

Make certain water flowing through Maxi-Jet is prefiltered by either Undergravel Filter Adapter Grid or Foam Cartridge or Pre-filter Grid.