EFX 600















Instruction Manual

Important Safeguards

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.

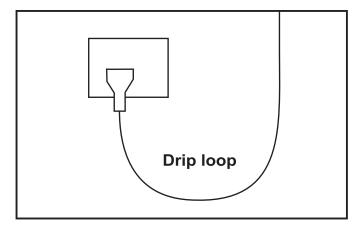
Warning: To guard against injury, basic safety precautions should be observed, including the following:

- 1. Read and follow all safety instructions before using this appliance.
- 2. Danger: To avoid possible electric shocks, 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 an authorised service facility for service or discard the appliance.
- a) If the filter falls into water, do not reach for it, unplug it and then retrieve it. If the electrical components of the appliance get wet, unplug the appliance immediately (non immersible equipment only).
- b) If the filter shows any sign of abnormal water leakage, immediately unplug all electrical appliances from the power source.
- c) Carefully examine the filter after installation. It should not be plugged in when there is water on parts which are not intended to be wet.
- d) Do not operate any aquarium electrical appliance if they have a damaged cord or plug, or if they are malfunctioning, or dropped or damaged in any manner.
- e) The power cord of the motor cannot be replaced. If the cord is damaged the motor should be scrapped.

A "drip loop" (See the diagram) should be arranged by the user for each cord connecting the electrical appliances in the aquarium to a receptacle. The drip loop is the part of the cord below the level of the receptacle. It is used to prevent water traveling along the cord and coming in contact with the receptacle. If the plug or receptacle does get wet, do not unplug the appliance. Disconnect the fuse or circuit breaker that supplies the power to the appliance, then unplug and examine for presence of water in the receptacle.

- 3. Close supervision is necessary when the appliance is used by or near children.
- 4. Always unplug all electrical appliances in the aquarium from the electrical outlet, when not in use, before putting on or taking off parts, before any type of maintenance, or cleaning. Never yank the cord to pull it from the outlet. Grasp the plug and unplug to disconnect.

- 5. Do not use the filter for reasons other than the intended use. The use of attachments that are not recommended or sold by the filter manufacturer may cause the product to be unsafe. This is not recommended.
- 6. Do not install or store the filter where it will be exposed to weather or temperatures below freezing.
- 7. Make sure any component mounted on the aquarium is securely installed before operating it.
- 8. Read and observe all the important notices on the filter.
- 9. Ensure input voltage is the same voltage as your local power supply.
- 10. Ensure your hand is dry when turning the power switch on/off and when inserting/removing the power cord from the receptacle.
- 11. If you are in any doubt about the electrical installation or safety of this product you must consult a qualified electrician.
- 12. The filter (including the motor) is for indoor use only.
- a) Do not use the filter in water above 35°C.
- b) Always disconnect from electrical outlet before cleaning, maintenance or handling the filter.
- c) To protect against the risk of electrical shock, do not immerse the plug of the motor and motor in water or other liquid.



For Guarantee Conditions, please refer to the Guarantee form that is enclosed with this product.



Warning:

This appliance must not be disposed of together with domestic waste. It must be disposed of at an authorised centre set up

for the recycling of electrical and electronic appliances. By collecting and recycling waste, you help save our natural resources. Please Make sure this product is disposed of in an environmentally friendly and safe way.

1

Connecting your appliance to the mains electricity supply - Country specific instructions.

United Kingdom

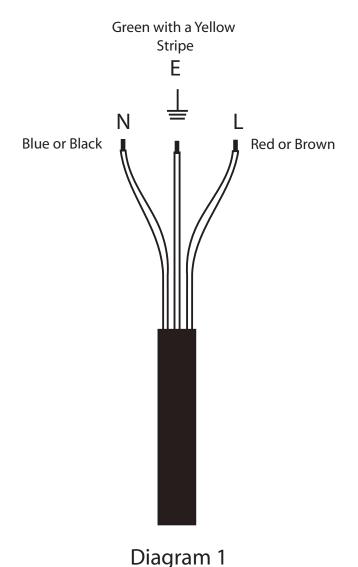
The plug supplied with this product is a sealed plug and we do not recommend removing or changing it. However, should the need arise, only a suitable plug should be connected using the following diagram 1

An approved earth leakage circuit breaker (RCCB) or otherwise known as an Residual circuit current device (RCCD) must be also fitted in the supply line.

IF YOU ARE IN ANY DOUBT ABOUT INSTALLING YOUR APPLIANCE YOU SHOULD CONSULT A QUALIFIED ELECTRICIAN.

Australia, New Zealand and Hong Kong

In Australia, New Zealand and Hong Kong all products are supplied with fitted plugs. This plug should **NOT** be tampered with in any way or removed. Removal or tampering with the plug invalidates our guarantee offered with this product.

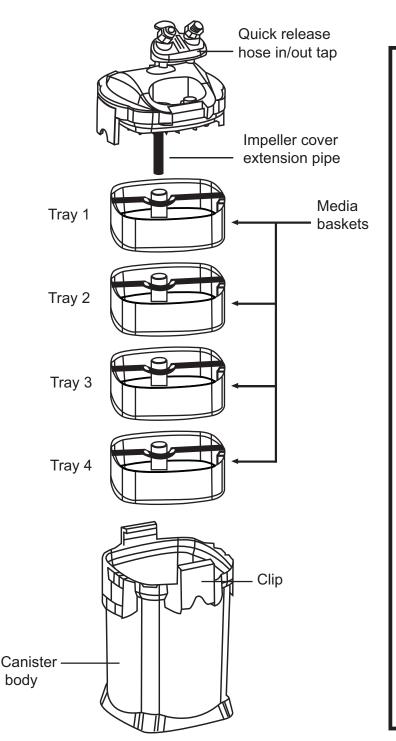


Before First Use / Preparation

Read and follow all the instructions, even if you feel you are familiar with the product and find a place to keep the instructions handy for future reference. Your attention is drawn particularly to the sections concerning "IMPORTANT SAFE-GUARDS" and the "Aquamanta GUARANTEE". Please ensure you retain your original purchase receipt in the event that guarantee service is required.

Know Your Filter

EFX 600 External Canister Filter



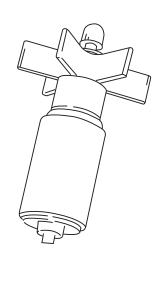
Carefully unpack the product making sure you keep all the packing material until all the parts of the product have been found and the product has been assembled.

This product is shipped to you in a factory sealed carton. Should the product malfunction in any way or if the unit is damaged and requires replacement, contact the retailer where the product was purchased for inspection.

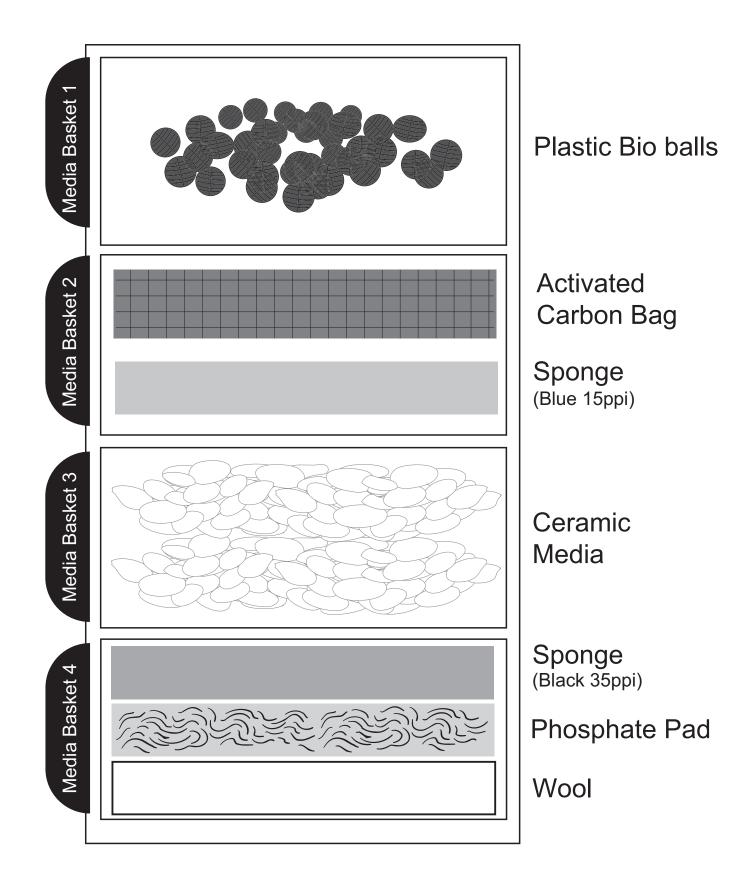
The plug supplied with this product is a sealed plug and we do not recommend removing or changing it.

Replacement Parts & Filter Media

Use Aquamanta Genuine Spare Parts Only. See your local Aquamanta Dealer and look for the number listed below for the spare part you require. Alternatively you will find these numbers on the silver label located on the product.



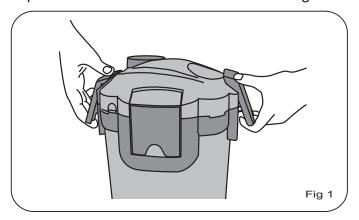
EFX 600



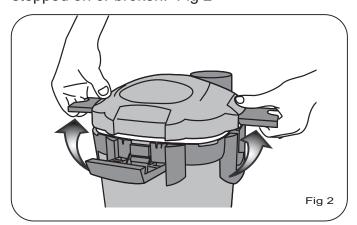
Set Up Instructions

NOTE: The O-ring needs to be put into position before the unit is set up. The o-ring is supplied in a separate bag. It is pre lubricated prior to being packed.

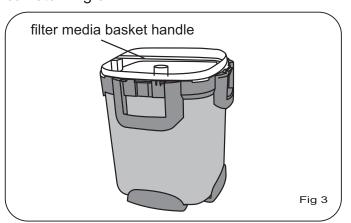
- 1. Remove the boxed accessory pack and the filter unit from the box.
- 2. Open the filter unit. To do this release the 2 clips located on either side of the filter. Fig 1



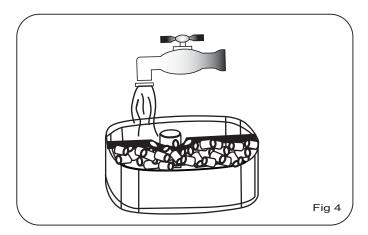
3. Lift the head unit off the canister body. To do so lift the other 2 handles, this will release the seal and allow you to remove the head unit Place it somewhere safe where it will not be stepped on or broken. Fig 2



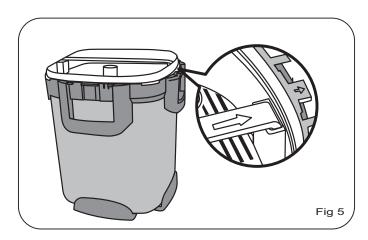
- 4. Take the canister body to the sink. Ensure the area is clean and free from detergents.
- 5. Remove the filter media baskets from the canister. Fig 3



6. Follow the filter media setup instructions on the previous page. Remember to remove all media from the plastic bags and rinse in tap water to remove excess dust. The simplest way to do this is empty the correct media into its basket and run tap water through it. Rinse the inside of the canister body in tap water also, remember DO NOT USE ANY SOAPS OR DETERGENTS. Fig 4

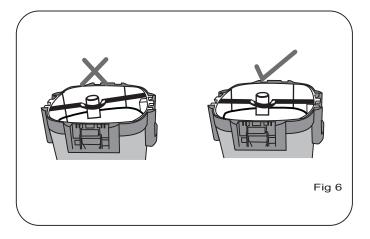


7. Once all the filter media and the canister have been washed and the sponges have been inserted into the filter baskets place the filter media baskets in the correct order (Refer to previous page) back into the canister body. Ensure the arrows on the filter media baskets and the canister body all line up. Fig 5

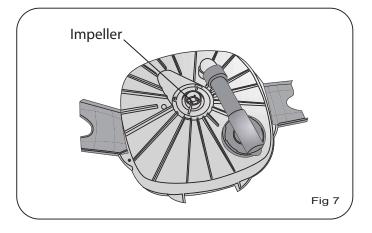


8. Ensure the filter media baskets are sitting flat on top of each other. Fig 6

Set Up Instructions



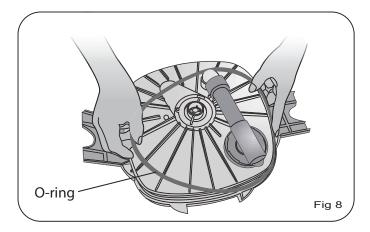
9. Prior to installing the head unit, turn it over, remove the impeller cover extension pipe so you can see the impeller. Make certain that the power cord is not wet and plug it into the receptacle. Turn it on and ensure the impeller is spinning. You should be able to hear the impeller spinning. If the impeller does not turn see "Cleaning Your Filter" for instructions on how to assess the impeller. Fig 7



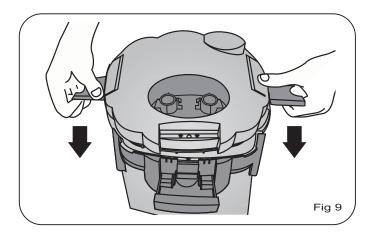
10. **NOTE:** The O-ring needs to be put into position before the unit is set up. Lubricate it with an aquarium safe lubricant.

This lubrication allows the head unit to go on easily, ensures a good water tight seal and makes removing the head unit easier when maintenance is required. IT IS VERY IMPORTANT THAT ANY TIME THE FILTER IS DISASSEMBLED THE O-RING IS LUBRICATED USING AN AQUARIUM SAFE LUBRICANT. Fig 8

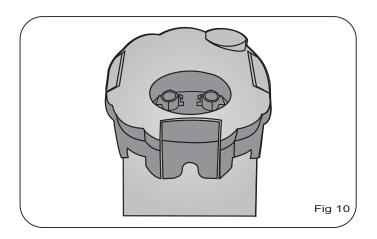
Place the Impeller cover extension pipe pipe back into position before placing the head back on the canister.



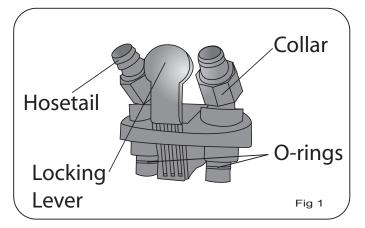
11. Place the head unit back on top of the canister body; ensure the power cord is not jammed between filter head and the canister body. Press down gently to the point where the head will not go any further.



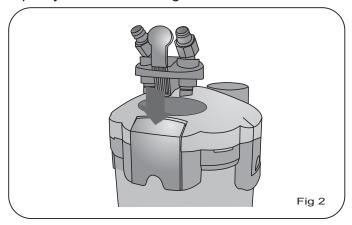
- 12. Close the 2 handles. Do not force the unit together! If it feels tight do not apply any excess pressure to close it simply, remove the head unit and filter baskets and try again. Fig 9
- 12. Latch and secure the clips. The filter unit is now ready to be installed. Fig 10



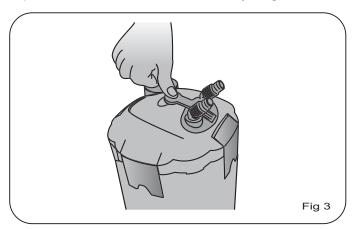
- 1. Remove all remaining components from the plastic bags.
- 2. Locate your quick release tap connections. Ensure the collars on the hose tails are all the way in, the locking lever is in the up right position and that the O-rings are lubricated. Fig 1



3. Insert the quick release tap connector into the top of your filter unit. Fig 2

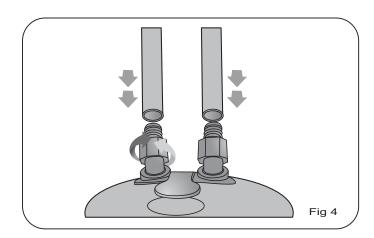


4. Now push the locking lever down. Ensure the tap connector is inserted correctly. Fig 3

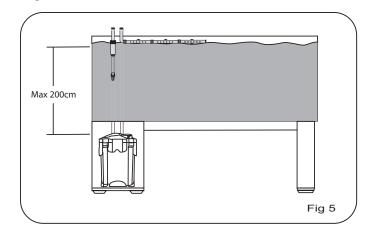


5. Locate your 2 pieces of 32mm hose.

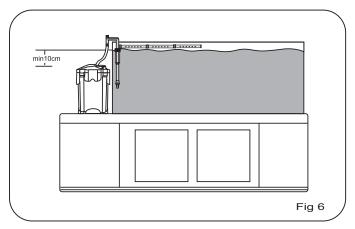
6. Attach one to either hose tail on the quick release tap connector. Push the hose on as far as possible. Screw the collars antic lock wise to lock the hoses into position. It is very important that this is done correctly. Fig 4



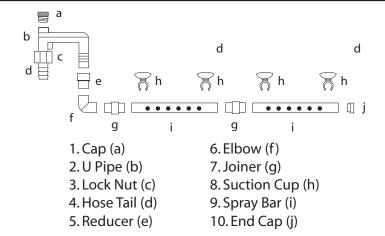
7. Insert the canister in the desired location. Maximum height from the top of the canister to the water lever of the aquarium is 200cm. Fig 5



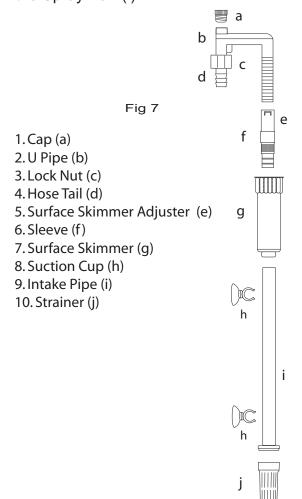
8. And the minimum height is 10cm. Fig 6



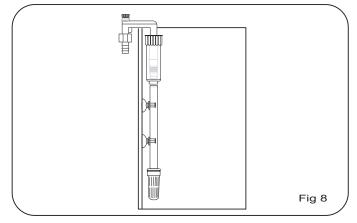
9. It is now time to assemble the inlet and the outlet. You will find the required components in the remaining plastic bags.



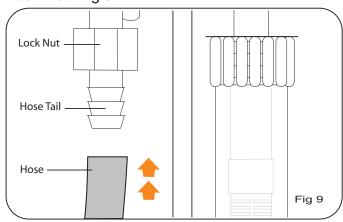
10. You will find that the Cap, (a) U Pipe, (b) Locking Nut (c) and Hose Tail (d) come as one piece from the factory. Attach the reducer (e) on to the shorter side of the U Pipe, (b) insert an Elbow (f) into that. Then attach a Joiner (g) onto the other end of the Elbow. (f) Insert the Spray Bar (i) into the other end of the Joiner. (g) Press together firmly. Attach another Joiner (g) followed by the spray bar (i) which has the End Cap (j) inserted in it. Attach Suction Cups (h) to the Spray Bar. (i)

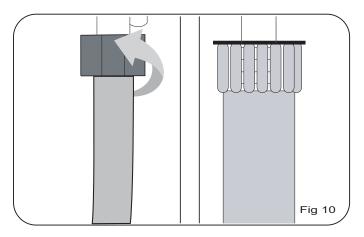


- 11. Refer to Figure 7 to assist you in assembling the intake. You will find that the Cap, (a) U Pipe, (b) Locking Nut (c) and Hose Tail (d) come as one piece from the factory. So to do the Surface Skimmer Adjuster, (e) Sleeve (f) and the Surface Skimmer. (g) If you wish to adjust how much water is drawn into the filter (once operating) by the Surface Skimmer (g) the Sleeve (f) can be adjusted to the desired level. Attach the Surface Skimmer (g) as a complete unit onto the longer side of the U pipe. (b) Attach the Intake Pipe (i) to the Surface Skimmer (g) then attach the Strainer (j) to the bottom of the Intake Pipe. (i) Attach Suction Cups (h) to the Intake Pipe. (i)
- 12. Install the inlet first. (One with the Strainer) Place it into the aquarium, stick it to the glass with the Suction Cups on the intake pipe. Fig 8

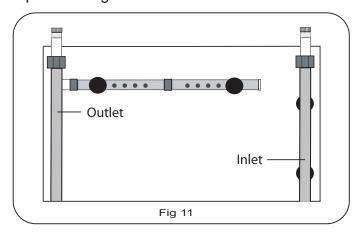


- 13. Pull the hose from the inlet side of the filter up next to the Hose Tail and line up.
- 14. Measure a good 10cm more that what you need past the bottom of the Hose Tail.
- 15. Cut the hose using a sharp blade, try to cut it straight and be careful not to cut yourself.
- 16. Force the hose on the Hose Tail. You should be able to get it on to but up to the bottom of the Lock Nut. Fig 9





- 17. Turn the Lock Nut anti-clock wise to lock the hose into position. Hand tight will do, No tools are required.
- 18. Repeat steps 14 to 17 for the outlet.
- 19. Place the Suction caps on the Spray Bar then attach it to the back or side of the aquarium. Fig 11



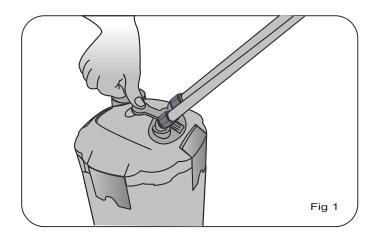
20. You are now ready to start your filter.

Starting Your Filter

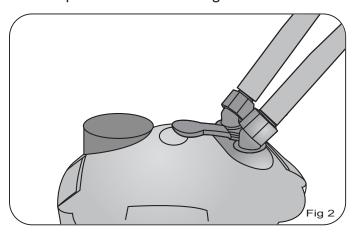
NOTE: Your aquarium must be filled with water to prime your filter.

Ensure your quick release tap connector is sitting correctly. Open the taps by pressing the Locing Lever down.Fig 1

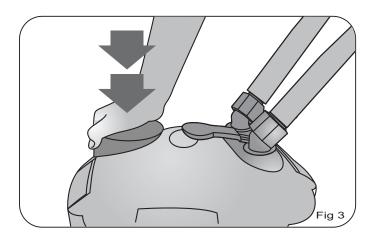
NOTE: Once the filter is running, double check the fittings and seals for water tightness.



1. The Primer for your canister filter is located at the top of the head unit. Fig 2



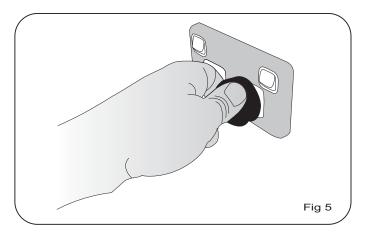
2. Press the primer down with your your palm Fig 3



- 3. Depress all the way then release. Continue to pump the primer until the water flows down the inlet tube and begins to fill the canister.
- 4. Stop pumping and allow the canister to fill with water.
- 5. The filter is primed when the intake pipe and canister are completely filled and the water starts to travel up the outlet tube.

Cleaning Your Filter

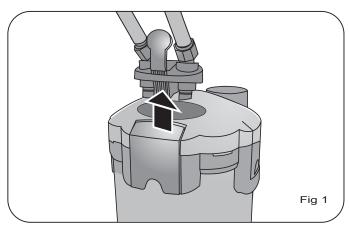
7. Wait until the canister is completely full of water. You will know this when water starts to rise up through the outlet hose. Ensure there are no leaks or water on parts of the filter which are not intended to be wet. Plug the unit into the power supply and switch on.



NOTE: If you require any further information about starting your filter please consult your Aquamanta retailer.

Notes

- 1. Turn the canister filter off at the socket and unplug.
- 2. Place a towel or a shallow container under the canister unit. This will prevent any water spilling onto your cabinet or stand and damaging it.
- 3. Lift the Locking Lever to turn the taps off. Remove the quick release tap connector. Fig 1



- 4. Fill a bucket with water from your aquarium and take it to the sink or wherever you intend to clean your filter. Keep in mind cleaning your filter can be messy, cleaning is recommended outside or at a sink. Ensure the area is clean and free from soaps and detergents.
- 5. Open the canister. Follow directions at the beginning of this manual under the section Set Up Instructions, points 2 to 5.
- 6. Extend the handles on the media baskets and remove them from the canister body.
- 7. Remove the filter sponges and the white wool from the media baskets and dunk the baskets with the BioNood and CeramiSub (Or any other type of biological media which may be in them) several times into the bucket. This will clear some of the dirt that can build up and clog the media and prevent the good bacteria which aid in breaking down pollutants in your aquarium from being killed by the chlorine in tap water.
- 8. Either replace or rinse the white wool pad using a high pressure hose. It should be replaced regularly or when it begins to deteriorate and can no longer be cleaned properly.

Cleaning Your Filter

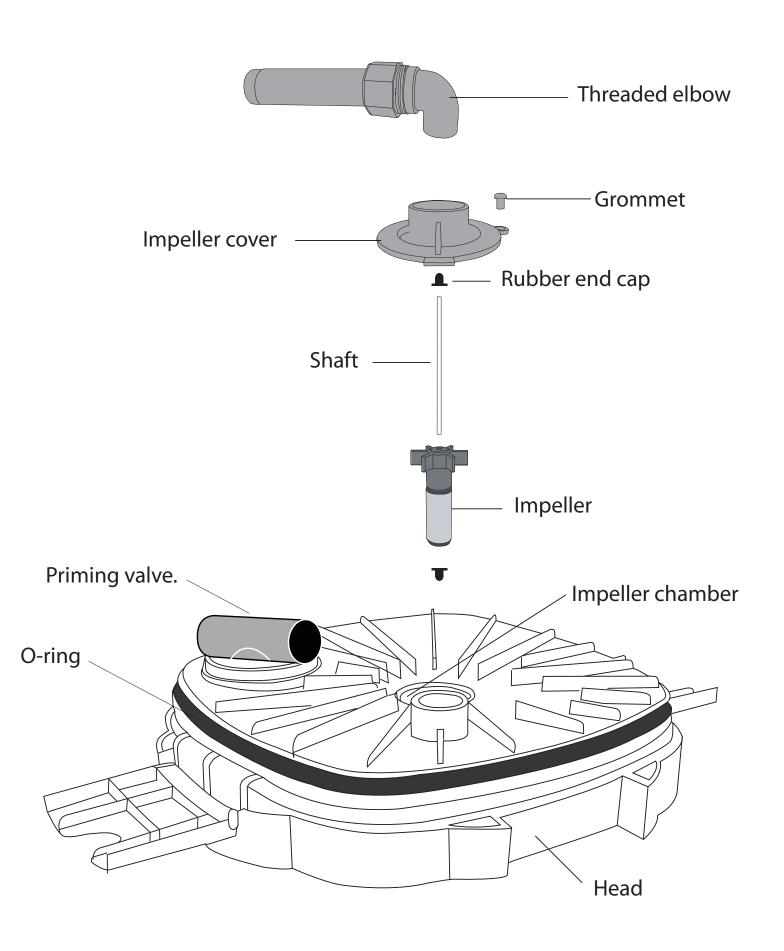
- 9. The sponges can also be rinsed in the bucket of aquarium water (Providing the water is not dirty. Replace if necessary) they will also require replacement eventually as over time they clog and prevent water from traveling through them easily.
- 10. Empty the bucket of aquarium water into the canister body. (Avoid tipping any dirt which may have settled on the bottom of the bucket into the canister)
- 11. Place the sponges back into there respective positions and reinsert the media baskets back into the canister body ensuring that each media basket sits nicely on top of the other.

Please refer to the diagram on the next page for the following steps.

- 12. The impeller should also be cleaned when ever the filter is disassembled.
- 13. Turn the head unit over and remove the grommet. Use a small flat headed screw driver.
- 14. Turn the impeller cover anti clock wise and remove it. This will uncover the impeller.
- 15. Remove the impeller from the impeller chamber.
- 16. If possible remove the shaft also.
- 17. Turn the threaded elbow anti clockwise until the end of it has come out of the priming valve.
- 18. Clean the impeller, impeller chamber and the outlet channel using a double ended pipe brush.
- 19. Use the pipe brush and clean the inlet tube which runs through the base of the head unit to the top where the quick release taps connector sits.
- 20. Run water through the hole in the middle of the impeller. Clean any debris which may have built up on the shaft off, along with any slime build up on the impeller. Use an aquarium safe lubricant to lubricate the shaft.

- 21. Put the impeller back together and ensure that it rotates freely on the shaft. Then reassemble the head unit, ensure there is no water on the power cord, plug the head unit in and turn on. Make certain the impeller is spinning. Apply an aquarium safe silicon based lubricant to the O-ring on the head unit. This will provide a better water seal and make the removal of the head easier next time the filter has to be disassembled for maintenance.
- 22. Check your inlet, outlet U Pipes and hoses. If residue has built up on the inside of them remove them from the aquarium. Take to the sink, run hot water through them to loosen the slime. Run a double ended pipe brush through them, and flush again with hot water. This build up will reduce the flow rate of your filter considerably, so clean when ever it is possible.
- 23. Return the canister filter to your cabinet or stand and reattach quick release tap connector.
- 24. Refer to the section in this instruction manual "Starting You Filter" for details on restarting the unit.

Notes		



THE FILTER UNIT IS LEAKING

- 1. Check all O-rings are in place and that they are not damaged or soiled.
- 2. Re-apply Silicon based aquarium safe lubricant.
- 3. The media baskets may not aligned properly.
- 4. Ensure the quick release tap connector is inserted correctly and locked into position.

THE FILTER WILL NOT PRIME

- 1. Check tubing for kinks.
- 2. Make sure the Quick release tap connector is inserted correctly.
- 3. The aquarium needs to be filled with water.
- 4. Make sure the intake U pipe and/or intake strainer is not blocked.
- 5. Ensure the hoses are connected to the unit correctly. IN to IN and OUT to OUT.
- 6. Ensure the canister has no water in it.

THE FILTER WILL NOT START

- 1. As the previous tips.
- 2. Check the impeller and shaft are in good condition.
- 3. Verify the filter is plugged in.

LOW WATER FLOW

- 1. As both previous tips.
- 2. Clean the filter media.
- 3. Clean the inlet and outlet U pipes.
- 4. Clean all tubing.

BOTH WATER & AIR COMING FROM OUTLET PIPE

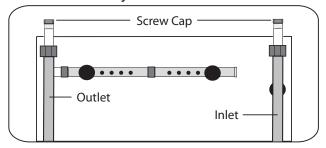
- 1. Leave 3-5 minutes.
- 2. Make sure an air stone is not operating near the intake strainer.
- 3. Check all tubing is connected firmly.
- 4. Check all O-rings and re-apply aquarium safe lubricant.
- 5. Gently rock filter back and forth trying to discharge the air in the canister.

FILTER IS MAKING NOISE

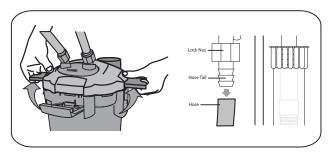
- 1. As per previous tips.
- 2. Outlet or inlet flow is restricted.

HEAD UNIT STUCK ON CANISTER BODY

1. While pump is still plugged in and running, remove the screw cap from the intake pipe. The intake pipe is the one which feeds the water into the filter unit. This will create an airlock in the canister body.

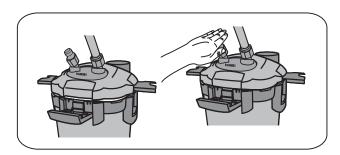


- 2. Once the airlock has been created (you will know when the water stops flowing from the outlet) turn the filter off at the receptacle and remove the screw cap from the outlet pipe.
- 3. Release the 2 locking clips and the 2 locking levers and remove a hose from either the inlet or outlet U pipe by loosening the lock nut and pulling the hose from the hose tail.



4. Remove the other hose at the tap.

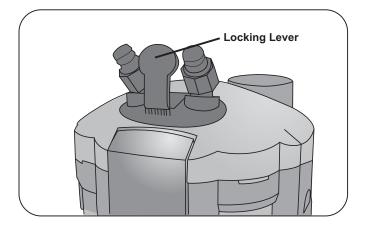
Now place one hand over the tap where the hose has been removed and blow into the hose.



5. This will create pressure in the canister body and pop the head unit off.

HEAD UNIT STUCK ON CANISTER BODY Cont...

If the filter is new and the head unit is on tight simply attach the tap unit and ensure the locking lever is down so the taps are open.



Ensure all clips are released.

Cap either the "IN" or "OUT" with your hand and blow into the other. This will create pressure and pop the head off.

NOTE: To avoid having this problem in the future maintain your filter regularly! Prior to refitting the head remove the o-ring and lubricate it with an aquarium safe lubricant. This will not only improve the seal but make removing the head a lot easier.

Notes

Canister Model: EFX 600 Number of Media Baskets: 4

Dimensions: 33 x 33 x 54cm

Max Aquarium Volume: Up to 600L

Maximum Flow Rate*: 2700L\hr

Max Head Height: 2M Filter Volume: 22 Litres

Power Requirements: 220 ~ 240V

Power Consumption: 32W

Suitable: Cold water, Tropical, Marine

* Maximum flow rates are based on measurements taken as the water exits the filter unit when it is positioned next to the aquarium with no filter media in the canister.





Manufactured in China

Aquamanta is a trademark of Kong's (UK) Limited.

220 - 240V ~ 50HZ



