



FOR GARDENS THAT GO THE EXTRA YARD

AUTO PRESSURE FILTER UVC

INSTRUCTION MANUAL



MODEL
03PE291 - PF50000UV
03PE292 - PF75000UV

DATE
FEBRUARY 2024

www.pondmax.com.au



WELCOME TO THE WORLD OF PONDMAX™.
YOU MADE THE **RIGHT** CHOICE INVESTING IN THIS
QUALITY PRODUCT. THANK YOU AND **ENJOY.**

BEFORE USING THIS PRODUCT, PLEASE READ THESE INSTRUCTIONS OF USE CAREFULLY AND MAKE YOURSELF FULLY FAMILIAR WITH THE UNIT. PLEASE KEEP THESE INSTRUCTIONS IN A SAFE PLACE FOR FUTURE REFERENCE.

TECHNICAL SPECIFICATIONS

DESCRIPTION	PF50000UV	PF75000UV
PRODUCT CODE	03PE291	03PE292
MAXIMUM POND SIZE WITHOUT FISH SHADED (L)	80,000	100,000
MAXIMUM POND SIZE WITH FISH FULL SUN (L)	40,000	50,000
MAXIMUM FLOW RATE (L\H)	18,000	20,000
VOLTS	240	240
ULTRAVIOLET CLARIFIER (UVC)	55	55
FILTER VOLUME (L)	170	300
RECOMMENDED TUBING SIZE	50	50
DIMENSIONS (L&W X H IN MM)	600 x 815	750 x 880
CABLE LENGTH (M)	5	5

PF50000UV - PF75000UV

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IMPORTANT SAFEGUARDS

Please read the operating instructions and familiarise yourself with the equipment before placing it in service. Correct and safe use of the system requires strict compliance with the safety instructions. For safety reasons, persons less than 16 years of age or infirm persons that are not familiar with these instructions should not use this equipment.

- For your own safety, disconnect from the power supply before any maintenance of any equipment is attempted on the tank or water body.
- Do not operate the filter if any components of the system, such as the power cable, have been damaged.
- If required, have a qualified electrician install a weather proof power point near to the pond or water feature (within the cable length of the filter).
- Always use a properly grounded power supply that is connected to an RCD with a rated residual operating current not exceeding 30mA. As per AS/NZS 3350.2.41:1997
- The drip loop method should be used to prevent water from traveling down the cable and onto the plug or power supply. If the plug does get wet, do not unplug the cable. Disconnect the circuit breaker that supplies power to the power supply point. Then unplug and examine the plug and power supply point for presence of water. If the power point has become wet, you should consult an electrician before using the power point again.
- Always unplug the pump from the power supply when not in use or before performing any maintenance on the pump or on the aquarium. Never pull the power cord to disconnect the plug from the power supply. Grasp the plug and pull to disconnect. Care should be taken to arrange the power cable so that it cannot be accidentally tripped over or pulled.
- Do not install or store the appliance where it will be exposed to extreme hot or cold temperatures. Do not use with water above 35 ° C or below +4 ° C
- Do not cut the cable as this will result in voiding your warranty. The power cord cannot be replaced. If the cord is damaged, the filter must be discarded.
- Do not attempt to repair the electrical appliance yourself. Return to an authorized service centre or place of purchase if a fault occurs, (regular maintenance is not considered repair and is required by user).

PRODUCT SPECIFIC SAFEGUARDS

- Do not submerge this filter in water!
- Do not operate the filter without water at any time, permanent damage may occur.
- Do not look at an unshielded UV-C globe. Ultra Violet light is harmful to your eyes and may cause blindness.
- When the buoy in the middle of the function switch floats it means the inner filter sponges should be cleaned.
- Do not over pressurise. Max head pressure is 3m.
- The filter is designed to be used in a pond environment. It is not to be used in any other manner or purpose. The filter should only be used with water. Do not use the filter with any harsh chemicals such as a solvent or petrol.
- All pumps and filters are water cooled. If the flow becomes restricted it could cause permanent damage. The filter needs to be cleaned regularly to prevent the filter becoming blocked, thus causing damage. This is not a warrantable event.



FOR GARDENS THAT GO THE EXTRA YARD

BENEFITS

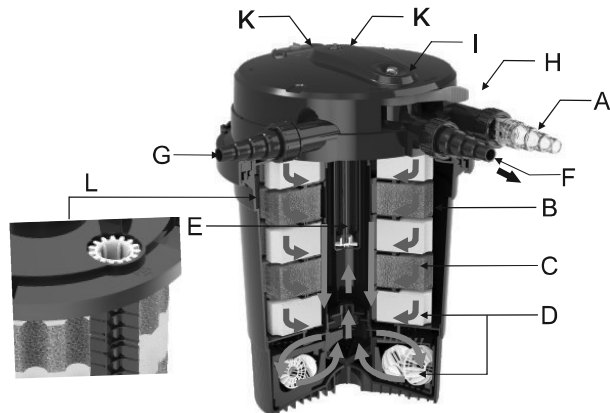
Your PondMAX pond filter has been manufactured with advanced technology to provide you with the best quality filter for your pond water.

- The easy-clean backwash function, back flushes the filter, and compresses the foam sponge media aiding easy cleaning. The back-flush function completely reverses the flow, to aid with removing sludge build-up in the bottom of the filter.
- In normal operation the water enters the filter and is forced around the perimeter creating a vortex where larger particles are precipitated through gravity and the smaller particles get caught as they flow through the sponge filters horizontally.
- The yellow and blue filter sponges differ in density. The higher density foam allows the water to pass through at a slower flow rate promoting colonization of Nitrosomonas bacteria and the lower density sponge allows the water to pass through faster promoting colonization of Nitrobacta bacteria. The large surface area of the Bio-spheres aid biological filtration and ensures maximum biological purifying action. The water is then cleaned by the Ultraviolet ray which inhibits algae growth and the clean water exits the filter back into the pond

HOW THE FILTER WORKS

Your PondMAX pond filter has been manufactured with advanced technology to provide you with the best quality filter for your pond water.

- The pressure filter with integrated UV is a sealed filter system for the biological and mechanical cleaning of pond water.
- **A) Water inlet:** The pump is connected to the water inlet with a pressure hose.
- **B) Vortex system:** Under the action of gravity, suspended solids and mud are separated.
- **C) Mechanical filtration:** When the water through the filter sponge into the internal, dirt particles will be stopped by sponge surface.
- **D) Biological clarifying:** The pores of the filter sponge from a large inner surface which microorganisms can colonize. The yellow and blue filter sponges differ in size and density. This creates zones in which the water can flow at different speeds. Zones with a high flow speed (blue filter sponges) favour the colonization of microorganisms which convert ammonium to nitrate via nitride (nitrification). Zones with a low flow speed (yellow sponges) support the colonization of anaerobic microorganisms which reduce nitrate to nitrogen (denitrification). Biological materials can help cultivate all kinds of anaerobic bacteria, and the anaerobic bacteria will turn the nitrate into ammonia gas. Note: Some models do not contain biochemical materials.
- **E) UV-C filtration:** As the water flow out, it is briefly exposed to ultraviolet radiation under the UV lamp. This kill off germs and bacteria and inhibits algae growth. The water subsequently flow from the edge into the filter in a circular fashion.
- **F) Water outlet:** At the water outlet, the clarified water is fed back into the garden pond via pressure hose or a watercourse etc.
- **G) Cleaning connection:** When cleaning the filter, a drainage hose can be connected to the cleaning connection which diverts the dirty water into the sewerage system or onto a flower bed.
- **H) Function switch:** The function switch is used to switch between normal water discharge into the pond "filter" and the cleaning connection "clean".
- **I) Dirty Water indicator:** If the bouy floats up, it means the filter is too dirty and needs to be cleaned.
- **J) UV lamp indicator:** When the UV lamp works normally, the indicator light is on. If not, please checking settings or take it out for inspection.
- **K) Timing switch:** It is recommended to set 24 hours in summer and 12 hours in spring and autumn. The UV lamp can be turned off when the temperature is low in winter or when the filter is just starting to work.
- **L) Clean gear set:** Through gear transmission, the sponges will be thoroughly cleaned



NOTE: Parts may differ slightly from shown



IMPORTANT

These accessories and attachments are recommended for use with your PondMAX product specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use the accessory or attachment for its stated purpose.

PF50000UV - PF75000UV AUTO PRESSURE FILTER UVC

INSTALLATION

Identify a suitable location for your new pressure filter.

- Do not submerge this product in water. The pressure filter should be used inline, between a pump and a water feature or waterfall. The filter can also be partially buried to help disguise it in your garden.
- Place the filter on a firm and level base, e.g. on a slab. Please make sure that there is unhindered access to the lid in order to be able to carry out maintenance on the filter, e.g. cleaning the filter sponges.
- It is good practise to design the plumbing beforehand. Ensure the pipes are laid out such that the clean filtered water return is to the opposite end of your pond to where the pump suction is located. This aids circulation and is to avoid stagnant spots.
- Select the hose tail, locking nut, and flat rubber washer. Assemble as per diagram. Insert into the end of tubing.
- Connect anti-kink hose or poly tubing from your pump outlet to the inlet of the filter.
- If your filter has a three step hose tail to suit smaller tubing, then be sure to cut off the hose tails that are smaller than the hose size you are using. For example, If using 40mm hose, cut off the 25 & 32mm sections. Please use the largest size tubing possible. We recommend using PondMAX hose clamps for a leak free connection.
- Connect the tubing from the outlet of the filter back into your pond at the opposite end to where you are pumping from. It's possible to have the outlet of the filter running into a waterfall. For the automatic cleaning it is recommended to connect a hose to the waste water outlet and to make it long enough to reach a garden bed or sewerage system to discharge dirty water
- If the flow from your pump is greater than the recommended max flow, you must reduce the flow, or bypass some of the water with a Y junction piece between the pump and the filter. The flow of water through branch of the Y junction can be varied by use of an optional valve. The pressure must not exceed 3M head pressure.
- The filter must be operational 24 hours every day for it to function effectively.
- Turn your pump on and then plug in the UV-C unit on the filter. The UV-C unit should not be turned on if there is no water flowing past the UV-C unit.
- Set the working time of the UV lamp as required (0/12/24 hours). It is recommended to set the timer to 24 hours in summer, 12 hours in spring and autumn. The UV lamp can be turned off when the temperature is low in winter.
- The UV lamp should be replaced after 8000 hours of operation.
- It is recommended to boost the biological function of your filter with PondMAX Bacteria. This will greatly increase the efficiency of the unit.
- Now sit back, relax and enjoy a clean and healthy pond
- The filter system must be cleaned regularly. Attention: in the case of a new installation, the pressure filter only reaches its full biological cleaning effectiveness after a few weeks. Extensive bacterial activity only starts at temperature of +10°C or above.

CLEANING INSTRUCTIONS

Begin by ensuring that the mains power supply is disconnected before attempting any maintenance or adjustment of the unit or the water body. Remove the unit from the water.

The filters and sponges in this unit will clog over time. Please clean regularly (at least once a month) to ensure strong water flow. Failure to maintain the unit will result in a burnt out motor and other damage.

- Disconnect power cord from the power supply before performing maintenance. Never lift the filter by the power cord.
- Check the UV-C globe regularly and replace every 8 000 operating hours. Failure to replace the globe before the end of its life span may cause electrical damage. Also, the globe UV intensity diminishes over time. To visually check the globe, look through the clear UV-C indicator on the top of the filter and if the light is working you will see a faint purple glow. This may have to be done at night to see distinctly.

USING THE AUTO BACKWASH

The filter system must be cleaned regularly. In the case of a new installation, the pressure filter only reaches its full biological cleaning effectiveness after a few weeks. Extensive bacterial activity only starts at temperature of +10°C or above.

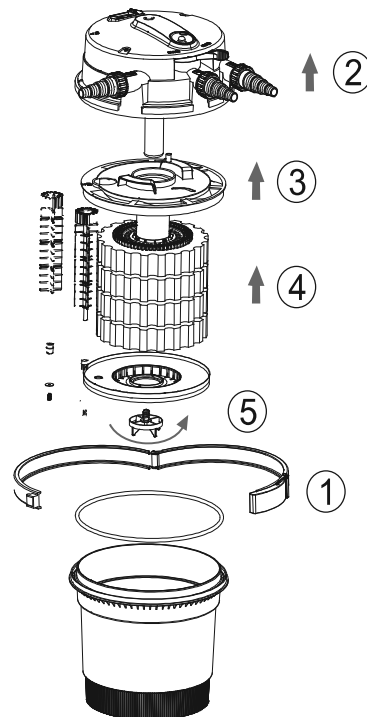
Washing the filter sponges

- Suspended matter and dirt are deposited in the filter sponges over time. These deposits reduce the effectiveness of the filter, so the filter sponges should be cleaned regularly, e.g. Every week.
- If the dirty water indicator floats to the surface or dirty water flows out of the outlet, the sponge should be cleaned.
- Turn the function switch to the “clean” position.
- The filter will automatically enter the anti-cleaning mode and clean the sponge.
- The filter now will be rinsed. Once clean water could be seen through the transparent spiral stepped hose adapter at the cleaning connection, turn the function switch back to the “filter” position.
- The filter is now operating again. Check the water flow

REPLACEMENT OF FILTER SPONGES

Turn off your pump and disconnect the power cord from any electrical source. Undo the threaded inlet and outlets hoses from the filter, unclip the lid clamp and carefully remove the lid.

- If the water flow is too slow due to dirty filter sponges and can not be improved through cleaning handle. The filter sponges must be washed or replaced.
- Please do not use any chemical cleaning agents as this will not kill off the microorganisms in the filter sponges.
- 1. Disconnect the mains plug of the filter.
- 2. Remove protective buckle, then open the clamp.
- 3. Lift off the lid. Place the lid upside down on another clean surface.
- 4. Lift off the support plate(with sponges), rotating to remove the sponge fix part(or diversion pipe), remove the screw on the gear, and then remove the separate plate.
- 5. Remove the filter sponges to replace or clean
- 6. Pull off the filter sponges and clean them in dechlorinated water or pond water. Give the filter sponges a good squeeze.
- 7. Clean the container, filter sponges, O-ring and the edge of the container by spraying them with a water hose.
- 8. Put the sponge part as follow, put on the separate plate, fixed clean gear set, fasten the sponge fix part(or diversion pipe).
- 9. Place the O-ring onto the upper edge of the container (to easily fit you should make it wet). Press down on the lid.
- 10. Fasten the lid clamp in place, pull on the pull-tab, finally push the safety latch in.
- 11. Fasten all hoses with flat seals or flow vane to the corresponding connection by screwing the union nuts on tight.
- 12. Start the pressure filter up again.
- Note: as the difference between models, please refer to the actual prevail.

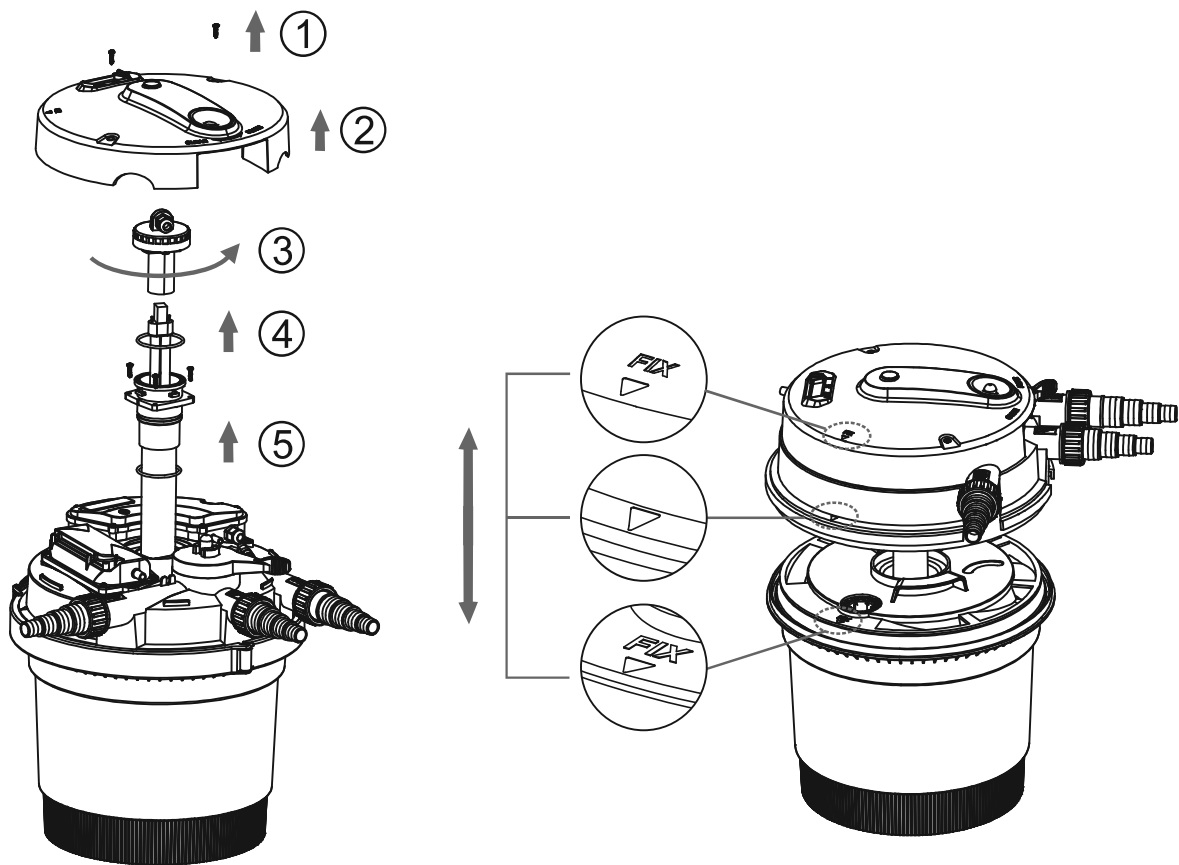


PF5000 - PF2500 - PF5000UV PRESSURE FILTER / UV CLARIFIER

CLEANING THE QUARTZ SLEEVE AND REPLACING THE UV GLOBE

Replacement UV Globes can be purchased from your local stockist or ordered from Aquatec Equipment.

- Turn off power supply to the filter and remove plug from power outlet. Turn off the water pump.
- Remove the screws on the decorative cover.
- Find and disconnect the three-core plug-in wire in the UV head. Rotate the UV lamp to replace it.
- Unscrew the fixing screw on the quartz tube and tilt upwards.
- Remove the quartz glass tube with a wet cloth.
- Check the quartz glass tube for damage, change it if broken.
- Set up all part of the filter as before (Note: the mark " F X " must be aligned).

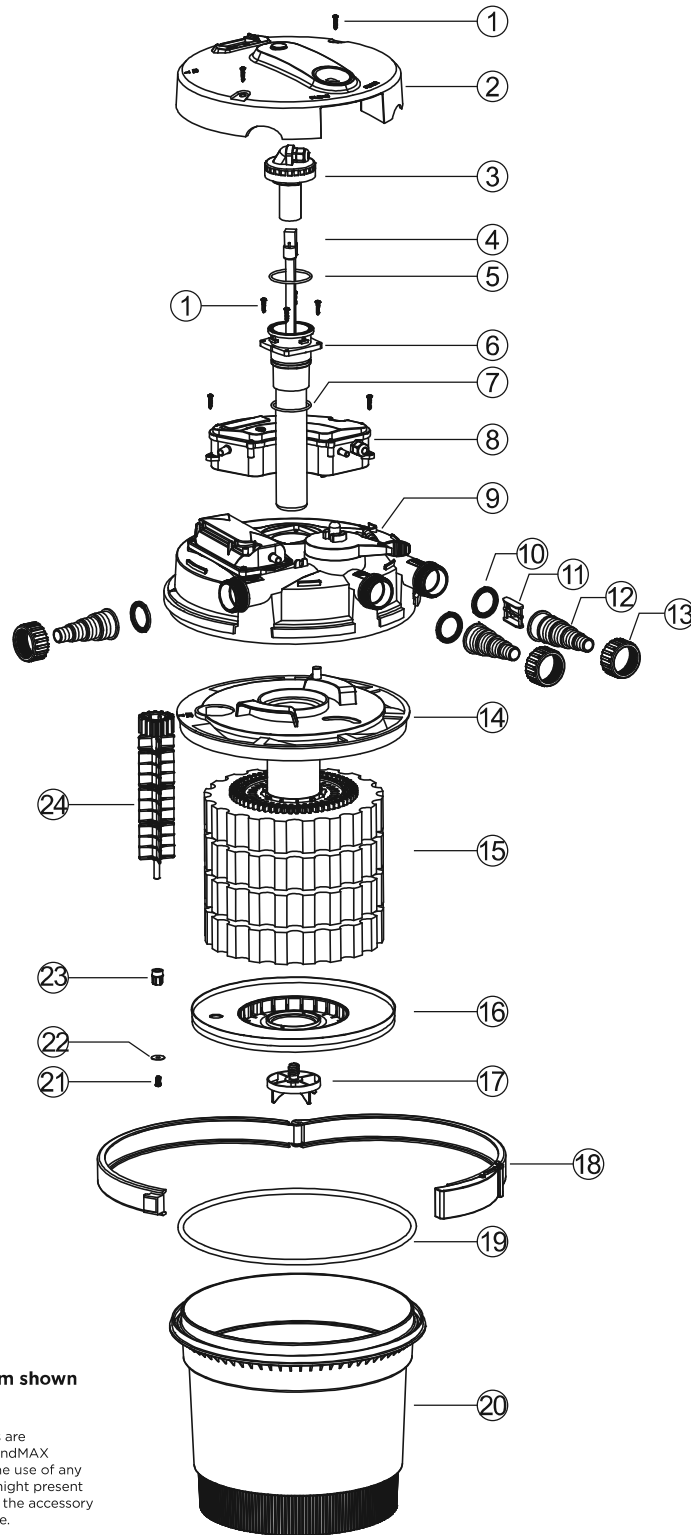




SPARE PARTS: PF50000UV / PF75000UV

PART NO.	DESCRIPTION	PF50000UV	PF75000UV
1	Screw		
2	Decorative Cover		
3	UV head		
4	UV Lamp		
5	O- Ring 1		
6	Quartz Glass tube set		
7	O-ring 2		
8	Control box assembly		
9	Lid		
10	Gasket		
11	Impeller		
12	Inlet & Outlet		
13	Inlet & Outlet Nut		
14	Support Plate		
15	Sponge		
16	Seperate Plate		
17	Sponge fix part		
18	Clamp		
19	O'rings 3		
20	Container		
21	Screw 2		
22	Washer		
23	Down Bearing		
24	Clean gear set		

PF5000UV - PF7500UV AUTO PRESSURE FILTER UVC



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TROUBLESHOOTING

Problem	Reason	Solution
Water Not Clearing up	Units has not been allowed to run long enough	Full effect of the biological cycle has not been allowed to mature. This can take up to 8 weeks.
	Inappropriate pump size	Water flow is too fast for the Biological cycle settle mature, or the total water flow is not enough for the for the pond volume.
	The Pond as a whole is extremely dirty	Remove debits from the pond, for example stringy algae, leaves, long standing sludge build-up from the bottom of the pond
	Fish stocks are too high for system	Increase filter and pump size
	Filter sponges are dirty	Increase the frequency of filters back flush and easy cleaning function till water becomes clearer over time. Some Extreme situations may require weekly back flushes
	UV Quartz sleeve is dirty	Remove and clean as per cleaning instructions
UV Lamp indicator is not lit	The faint blue glow from the UV globe may not be visible during bright sunlight hours	Wait till evening to check the illumination.
	Check that the UV Unit has power and the power point is turned on	Turn on power
	The UV globe may be defective	Replace the UV Bulb.
No water discharge out of the filter outlet	Function switch set to clean	Turn function switch back to filter
	The pump may not be connected to power	Turn on power
	Pond plumbing is blocked	Find blockage & remove
No water discharge out of the waste water outlet	The Inlet and outlet hoses may be on the wrong way round	Switch the positions for hoses, such that the inlet is connected to the correct port
	Function switch set to filter	Turn function switch back to clean
	The back flush knob has jumped the cogs in the lid unit	Open up the filter lid and re-alien the cogs so that the teeth match up correctly

PF5000UV - PF7500UV AUTO PRESSURE FILTER UVC

LIMITED WARRANTY

- This product comes with a warranty against defects and motor failure (Warranty). The benefits provided in this Warranty are in addition to other rights and remedies available to you under the Australia Consumer Law. The Warranty is provided to the original purchaser of the product on the following terms:
- The Warranty is given by AQUATEC EQUIPMENT PTY LTD trading as Aquatec Equipment: PO Box 2087, Seville Grove, WA 6112. Tel 1300 552 202 or email sales@aquatecequipment.com.
- To make a claim under the Warranty you must return the faulty product to the place of purchase with a valid receipt or proof of purchase.
- **A Warranty claim must be made within 2 years of the date of purchase.**
- If your claim complies with the above terms and the product is not an Exhaustible Item and no Voiding Events have occurred, we will (at our sole discretion):
 - repair the product, if possible; or
 - provide a replacement product; or
 - if a replacement product is not available, provide a refund for the purchase price paid.
- You will bear the cost associated with claiming under the Warranty such as the cost of transportation and delivery of the product to and from the place of purchase.
- The product contains a complete Impellor Set, O Ring, UV Globe & Sponge Filters. These items are exhaustible (wear & tear) and are not covered under the Warranty.
- The Warranty will be void if any of the following events occur, as determined by us, at our sole discretion (Voiding Events):
 - any tampering/removal of warranty/identification labels or electrical components is evident;
 - the defect has arisen due to: an accident, incorrect or inadequate installation, misuse or abuse of the product (including improper maintenance and service), excessive wear and tear, not following manufacturer's guidelines/ instructions, or the product has been used in a manner contrary to the purpose or suitability of the product;
 - the product has been modified without our authority;
 - the defect is caused by power surges/spikes brownouts.
- Loss of livestock, damage to property or personal injury caused by the improper use or abuse of the product will not be covered and the manufacturer excludes all liability for such events, to the extent permitted by law.
- In addition to the Warranty set out above, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Please consult your retailer for quality original PondMAX replacement parts.

Visit www.aquatecequipment.com for your nearest stockists.

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