

DATE **JAN 2020 v2.0**

888.868.1185

MODEL 23PF312



CONGRATULATIONS ON YOUR PURCHASE OF THIS PRODUCT BY **PONDMAX**, THE ANSWERS FOR YOUR WATERGARDEN MADE EASY.

TECHNICAL SPECIFICATIONS

Vol	tage	Power Consumption*	UVClarifier Power	Max Head	Water Flow	IP Rating Pump & UVC	Cord Length	Outlet Thread Size
12	.0V	57 W	13W	8 Ft	660 GPH	IP68	30 Ft	1/2 Inch

^{*} SUBJECT TO VARIATION ACCORDING TO LOAD.

BENEFITS

The PondMAX All in One SF650 Complete Pond and Filter System is designed to clean pond and water feature water utilising the latest advanced technology.

- · Mechanical & Biological Filtration
- · 13W Ultraviolet Clarifier for green water clarification.
- Powerful 660 GPH pump with wear resistant ceramic

bearings.

- Dual Flow Control T-Piece
- · Multiple fountain nozzles help aeration of water



IMPORTANT SAFEGUARDS

Please read the operating instructions and familiarize 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, or pets, or people that are not familiar with these instructions should not use this equipment.

Any damage of the equipment or unmerited operation will bring dangerous UV Rays to the skin and eyes. So if there is any damage of the equipment, it must not to be used. The equipment should be placed out of reach of children.

- For your own safety, disconnect from the power supply before any maintenance of any equipment is attempted on the tank or water body.
- Be sure the equipment is submerged completely in the water. The depth should not be greater than 3ft.
- Do not operate the pump if the appliance or any components of the system, such as the power cable, have been damaged.
- Always use a properly grounded power supply that is protected with a ground fault circuit interupter (GFCI)
- 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 use care when placing and removing the unit

- in the pond. DO NOT USE THE FOUNTAIN NOZZLE STAND PIPE TO LIFT THE FILTER. This will effectively damage the outlet pipe.
- Always unplug the pump from the power supply when not in use or before performing any maintenance on the pump or in the pond. Never pull the cable to disconnect the plug from the power supply. Grasp the plug and pull to disconnect.
- Always unplug the appliance from the power supply when not in use or before performing any maintenance.
- If required, have a qualified electrician install a weatherproof power supply point near to the pond or water-feature (within the cable length of the appliance).
- Do not install or store the appliance where it will be exposed to extreme hot or cold temperatures. Do not use in water above 95°F(35°C).
- Do not cut the cable as this will result in voiding your warranty.
- Care should be taken to arrange the power cable so that it cannot be accidentally tripped over or pulled.
- 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 look at an unshielded UVC lamp. Ultraviolet light is harmful to your eyes and may cause blindness. Do not
 operate UV Lamp out of the housing.
- As the UV Clarifier Lamp is made of quartz glass, please avoid sudden jolts, as this will break the quartz.
- In cold temperatures where frost or freezing may occur, please cease to use the unit. Remove from the environment.
 Frozen water will crack the Quartz glass sleeve.

INSTALLATION

Once a fountain nozzle has been selected, assemble the fountain kit as per the attached diagram. Screw the T-piece onto the pump outlet and adjust the telescopic riser to the desired height and align vertically. On the Dual-control flow adjuster, on the T-piece, you can vary the flow between the fountain head and the waterfall outlet. Close the second outlet of the T-piece if this is not required for an optional waterfall.

Lower the filter into the water slowly allowing it to fill with water. Take care to not hold the fountian by the stand pipe. Position the device in the pond horizontally, on a solid base, free from sludge, in such a way that it is fully covered with water and the fountain kit protruding out of the water.

Insert the plug into a GFCI protected 120 volt outlet. Ensure the connection is protected from any moisture.

Note: Use the power supply switch for turning the unit on and off.

CLEANING INSTRUCTIONS

Begin by ensuring that the main power supply is disconnected before attempting any maintenance or adjustment of the unit. Remove the unit from the water. (Take care to no lift the unit by the fountain nozzle.) 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.

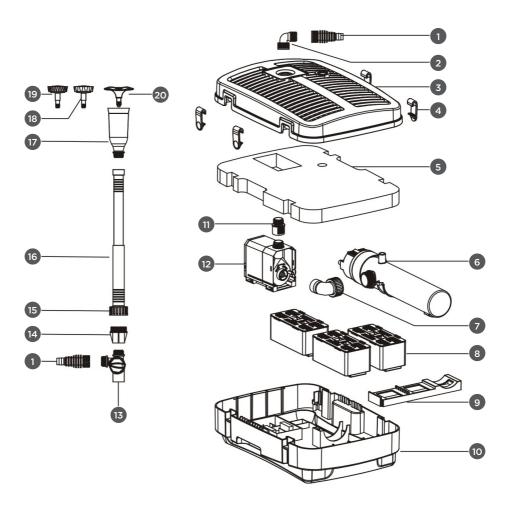
- · Take off the fountain set first, and then open the 4 clips on the side of the filter cover.
- Take out the filter sponge and filter media boxes and clean. It is recommended that this is done in a bucket of pond
 water to ensure the good bacteria are not killed by the chlorine in tap water. Check for wear and tear of
 the sponge and replace if necessary.
- Maintain the filter sponge regularly according to how quickly the sponge gets clogged up. When the flow starts to get reduced, check and clean if necessary.
- · You can help boost the biological function of your filter with a bacterial additive, available from your local dealer.
- The UV lamp should be replaced regularly at the end of its design life. This is approximately 12 months of use. To take out the UV clarifier lamp, first remove the whole pump and UV unit from the base of the filter by remove the two screws holding them in place. Open the safety catch on the side of the casing and turn the UV Clarifier casing in anti-clockwise direction to the stop position. Then slide the the casing and quartz glass lamp off of the lamp and transformer. Now you can change your UV lamp. Take care when replacing the lamp to not touch the new lamp with your bare hands. Use the box or some paper to handle the lamp and avoid getting skin oils on the new lamp.
- Dirt on the Quartz glass sleeve will influence the efficiencies of the UV Clarifier. Please remove and clean regularly.
 To clean the quartz glass sleeve, take the quartz sleeve assembly out by pulling the locking nut (No. 4 Fig. 3) out of the casing. The Locking nut and sleeve are held into place in the casing by the compression of the o-ring so it may be tight at first. Use caution to not break the glass. Once it is out of the casing you can then clean the glass using non toxic products (vinegar) and a scrubber.
- To maintain the impeller of the pump, turn the impeller cover in an anti-clockwise direction to the stop position, and then you can separate the impeller cover and pump body. Take out the impeller, clean it with clean water and suitable brush. Inspect for signs for ware. Replace if necessary.
- Once the cleaning and inspection process is completed, reassemble in the reverse manner. The pump suction elbow is
 pushed firmly onto the impeller cover inlet of the pump. Pay attention to the UV clarifier casing when inserting it back
 together. The inspection hole needs to be positioned upwards towards the lid.

WATERGARDENING TO THE MAX

PMAX All In One Instructions.indd 3 22/1/20 8:36 am



COMPLETE SYSTEM (FIG. 1)



- 1 Hose tail 1/2 Inch Barb to 1/2
- 2 Inch BSP
- 3 Elbow 1/2 Inch to 1/2 Inch BSP
- 4 Top Filter Cover
- 5 Filter cover clips (x4)
- 6 Blue Filter Sponge
- 7 UVClarifier unit

- 8 Pump Suction Elbow
- 9 Filter Media Cassett (x3)
- 10 Filter Media Cassatt's Mounting Plate
- 11 All-in-One Filter Base
- 12 1/2 inch Pump Threaded Adapter
- 13 Water Pump
- 14 Dual Control T-piece Adaptor

- 15 Riser to T-piece Adaptor
- 16 Extendable Riser Locking Nut
- 17 Extendable Riser
- 18 Fountain Nozzle Mount
- 19 Fountain Head (Fine Daisy Nozzle)
- 20 Fountain Head (Corse Daisy Nozzle) Fountain Head (Bell Nozzle)

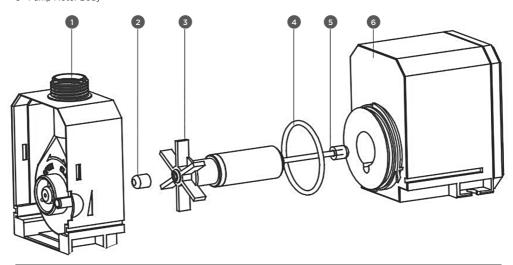
PUMP (FIG. 2)

- 1 Impeller Cover
- 2 Rubber Grommet
- 3 Impeller
- 4 0-Ring
- 5 Ceramic Impeller Shaft
- 6 Pump Motor Body



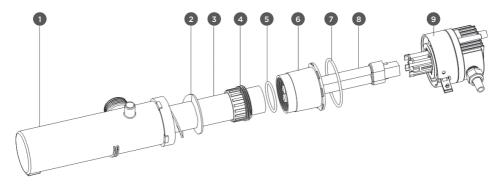
IMPORTANT

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.



UVC LAMP (FIG. 3)

- UV Light Casing
- 2 Water Flow Spiral
- 3 Quartz Glass Sleeve
- 4 Quartz Sleeve Locking Nut
- **5** 45mm x 4mm O-Ring
- 6 Plastic Quartz Sleeve Holder
- 7 60mm x 3.1mm O-Ring
- 8 13W UVC Lamp
- 9 UVC Transformer with Cable



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TROUBLESHOOTING

Problem	Reason	Solution	
Water Pump Not Working	No Power	Check that the plug is connected and turned on	
	Sponges and filter media blocked with sludge	Clean the sponges and filters	
	Impeller is blocked with sludge or limescale	Clean the Impeller as per the instructions	
	Running without sufficient water	Submerse the equipment underwater then plug in. Refill if necessary.	
	Water valve closed on the outlet	Open the valve and allow water to flow	
	Blocked Impeller chamber or ceramic shaft is broken	Clean the Impeller. Check for ware. Replace if necessary.	
Water Pump is noisy	Blockage in pump	Clear the blockage	
	Impeller & Shaft worn out	Replace Impeller & Shaft	
	Unit inlet is blocked or the water pump inlet is blocked	Clear all blockages	
UVC Lamp not working	UVC Lamp blown or Quartz Sleeve broken	Replace as necessary	
	Connection of the UVC Lamp not sufficient	Push UV Lamp in firmly until you hear a click sound	
Tripping GFCI	Water entering the Quartz Tube	Replace the broken glass tube or bad O-ring	

SPARE PARTS (NOTE: THESE ARE THE MOST USED)

Description	Product Code
PondMax SF650 Impeller Assembly	31PF042
PondMax SF650 UVC O-ring Kit	31PF041
PondMax SF650 Quartz Glass Sleeve	31PF040
PondMax SF650 Sponge Filter	31PF000
PondMax SF650 Complete Fountain Kit	31PF004
13W Low Voltage UV Bulb - Pondmax	31PS282

NOTES	

WATERGARDENING TO THE MAX



LIMITED WARRANTY

This product is warranted to the initial purchaser to be free of defects in materials and workmanship at the time of initial purchase and for a period of 2 years for Pond/MAXITM Ultra Series SF650 All-In-One Filter. Certain parts are consumable and must be replaced regularly as part of the ongoing product maintenance and are not covered by this Warranty. This includes filter pads and media, pump impeller and UV lamp and quartz sleeve. In the event this product malfunctions within two years from the date of purchase, the sole obligation of Pond/MAXITM International [hereinafter referred to as Pond/MAXITM) will be to repair the unit or replace with an equivalent new or factory refurbished unit at Pond/MAXITMs discretion, subject to the following condition:

- The malfunction is proved attributable to a defect in materials or workmanship, including repairs performed under this warranty.
 Malfunction for any other reason-including but not limited to misuse, negligence, accident, or tampering with parts, incorrect wiring, or improper installation-will not be remedied under this warranty.
- Pond/MAXTM specifically does not guarantee chemical compatibility, and expressly does not warrant units from any problems
 caused by chemical attack or failure due to incompatibility of fluid being circulated by pump.
- All warranty repairs must be performed by PondMAXTM or a PondMAXTM authorized dealer.
- Purchaser must retain the purchase receipt and present it with this certificate as proof of ownership and entitlement to warranty repairs. Unauthorized repairs will not be compensated by Pond/MAXTM, and are not the responsibility of Pond/MAXTM, and if such repairs damage the product, such damages are not remedied under this warranty.
- Purchaser shall bear all shipping, packing and insurance costs and all other costs, excluding labor and parts necessary to
 effectuate repairs under this warranty.
- This warranty is in lieu of all other express warranties which now or hereafter might otherwise arise with respect to this product. Any and all limited warranties, including the warranties of merchantability and fitness for particular purpose, shall have no greater duration than the duration period of the express written warranty applicable to this product, and shall terminate automatically the expiration of such duration period. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. No action shall be brought for breach of any implied or express warranty after one year subsequent to the expiration of the duration period of the express written warranty.
- Incidental and consequential damages caused by malfunction, defect, or otherwise, and with respect to breach of any express
 or implied warranty, are not the responsibility of Pond/MAXI^M, and, to the extent permitted by law, are hereby excluded
 for property damage, loss of livestock and, to the extent not unconscionable, for personal injury damage. Some states
 do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion
 may not apply to you.
- This warranty does not apply to any malfunction arising out of any application of this product other than normal use, unless such
 application is upon request specifically approved in writing by PondMAXTM.
- The provisions of this warranty are severable and if any provision shall be deemed invalid, the remaining provisions shall remain in full force and effect.
- Rights under this warranty are not assignable without the express prior consent in writing by PondMAXTM and, regardless of the terms of such consent in writing, such assignee shall have no greater rights than his assignor had against PondMAXTM.

To facilitate Warranty Registration please complete the enclosed Warranty Registration card and return: by mail to PondMAXTM International, PO.Box 341, San Leandro, CA 94577 or by email to info@PondMAXTM.com. Customer service can be reached by phone at toll free - 888 868.1185.

Please consult your retailer for quality original PondMAX replacement parts.

Visit pondmax.com for your nearest dealer.

E.&O.E.