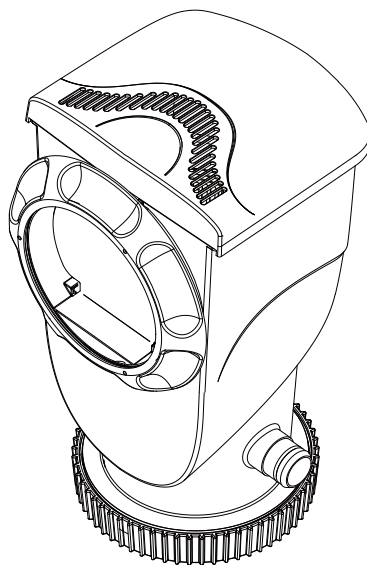


SUMMER WAVES® SKIMMERPLUS® FILTER PUMP

FOR ABOVE GROUND SWIMMING POOLS
SFX600-GS / SFX1000-GS / SFX1500-GS models
SFX600-BS / SFX1000-BS / SFX1500-BS models
SFX600-S / SFX1000-S / SFX1500-S models



READ, AND KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

Should you encounter a problem with your Polygroup® Product, please do not return the product to the place of purchase. All Warranty claims must be made directly to Polygroup®. Prior to contacting Customer Service, please first review the Troubleshooting Guide in the Installation Manual, or review the FAQ at www.Polygroup.com. Please review setup instruction videos on www.Polygroup.com/video. If you are still unable to correct the problem, please contact Polygroup® Customer Service at Appendix . Have the product type and your purchase receipt ready. Our Customer Service Representative will assist you in resolving the problem. You may be asked to return all or part of the product for inspection and/or repair. Do not return any product to Polygroup® without a Return Authorization number.

LIMITED WARRANTY

Polygroup® Limited (Macao Commercial Offshore), (hereinafter "Polygroup®") warrants to the original purchaser only, the SFX type Electric Filter Pump against defects in material and workmanship for 180 days from the date of purchase. Original Purchaser must retain proof of such purchase in the form of an original store sales receipt and must produce such upon request by Polygroup® or its designated agents. Warranty claims cannot be processed without a valid proof of purchase. This Limited Warranty applies only to the original purchaser of the product and is limited solely to the repair or replacement of the product, to be decided in Polygroup®'s sole discretion. Consequential damages, including claims for loss of water, pool chemicals, damage, or labor are not covered under this Limited Warranty.

This Warranty will be declared invalid should the Purchaser modify or repair the product themselves or by unauthorized persons; use non-Polygroup® parts or accessories with the product; use the product in contravention of the manufacturer's Instructions; use improper voltage; abuse the product in any way; or through accident or negligence. Normal wear-and-tear is not covered under this Warranty, nor are acts of God outside the control of Polygroup®.

IN NO EVENT SHALL Polygroup®, THEIR AUTHORIZED AGENTS, RELATED ENTITIES, OR EMPLOYEES BE LIABLE TO THE BUYER OR ANY OTHER PARTY FOR DIRECT OR CONSEQUENTIAL DAMAGES. Some states or countries, or others jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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IMPORTANT SAFETY INSTRUCTIONS


When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

READ AND FOLLOW ALL INSTRUCTIONS

Keep for Future Reference. Failure to follow these warnings and instructions can result in serious injury or death to users, especially children.



 DANGER	
PREVENT DROWNING Watch children at all times. Observe all Safety Rules.	NO DIVING! NO JUMPING! Shallow Water - You can be permanently injured.

 WARNING	
DO NOT SIT ON OR LAY OVER POOL WALL You can be permanently injured.	AVOID ENTRAPMENT Stay away from suction fittings. You may drown.

NOTICE: CUSTOMERS THAT PURCHASE POOLS MAY BE REQUIRED BY LOCAL OR STATE LAW TO INCUR ADDITIONAL EXPENSES WHEN INSTALLING A POOL, IN ORDER TO COMPLY WITH STATE OR LOCAL LAWS REGARDING FENCING AND OTHER SAFETY REQUIREMENTS. CUSTOMERS SHOULD CONTACT THEIR LOCAL BUILDING CODE ENFORCEMENT OFFICE FOR FURTHER DETAILS.



Please read carefully and keep for future reference

WARNING

Safety Care for Children

1. Children, especially children younger than five years, are at high risk of drowning. Drowning occurs silently and quickly and can occur in as little as 2 in. (5 cm) of water.
2. Keep children in your direct sight, stay close, and actively supervise them when they are in or near this pool and when you are filling and emptying this pool.
3. When searching for a missing child, check the pool first, even if the child is thought to be in the house.
4. Locate pumps and filters in such a way that children cannot climb on them and gain access to the pool.
5. **WARNING:** To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

Swimming Pool Barriers

Very Important: Swimming pool barriers, which restrict access to the pool by small children, may be required by law. A barrier is necessary to provide protection against potential drowning and near drowning. Barriers are not a substitute for constant supervision of children. Check state or local laws and codes before setting up pool.

Swimming Pool Equipment

1. Keep all electrical lines, radios, speakers, and other electrical appliances away from the pool.
2. Do not place pool near or under overhead electrical lines.

Filter Pump Awareness

1. **WARNING!** Following the pool manufacturer's instructions and install your pool properly before installing this filter pump.
2. **WARNING!** Adult assembly required.
3. **WARNING!** Before starting, check all pipes and accessories for correct installation and reliable connection.
4. **WARNING!** Do not bury the electric cords. Place the cords where lawn mowers, hedge trimmers and other equipment will not damage them.
5. **WARNING!** Do not use an extension cord to connect unit to electric supply.
6. **WARNING!** Prevent children from using the filter pump without an adult's supervision.
7. **WARNING!** Do not use the filter pump when pool is empty. This pump is designed only for dismount able storable pools above the ground, not for permanently installed pools. Improper use may lead to overheating and permanent damage of the product.
8. **WARNING!** To avoid the risk of electric shock, always be aware of damaged cords.

9. WARNING! The power cord of the transformer and the filter pump cannot be replaced. If the cord is damaged, the transformer and the filter pump should be disposed of.
10. WARNING! To avoid the risk of electric shock, connect the filter pump only to a receptacle protected by a ground fault circuit interrupter (GFCI) or Residual-current device (RCD). The pump must be supplied through a ground fault circuit interrupter (GFCI) or residual current device (RCD) having a rated residual operating current not exceeding 30 mA. Contact a qualified electrician if you cannot verify that the receptacle is GFCI / RCD protected. Use a qualified electrician to install the GFCI / RCD.
11. WARNING! This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
12. WARNING! Children should be supervised to ensure that they do not play with the appliance.
13. WARNING! Filter system can be used as many hours as desired, but NEVER when the pool is occupied.
14. WARNING! Pollution of the liquid could occur due to leakage of lubricants.
15. CAUTION: This pump is for use with storable pools only. Do not use with permanently-installed pools. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity. A permanently-installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage.
16. CAUTION: For continued protection against possible electric shock this unit is to be mounted to the base in accordance with the installation instructions.
17. The Filter Pump is to be assembled by an adult; care should be taken in the unpacking and assembly of the Filter Pump, this pool may contain accessible potentially hazardous sharp edges or sharp points that are a necessary part of the function of the Filter Pump.
18. If a drain or suction outlet cover is missing or broken, do not use the pool. Suction can cause body part entrapment, hair and jewellery entanglement, evisceration, or drowning. Repair or replace the drain or suction outlet cover before allowing the pool to be used. During night-time pool use, artificial lighting shall be used to illuminate all safety signs, ladders, steps, deck surfaces, and walks.
19. The floor of the pool shall be visible at all times from the outside perimeter of the pool.
20. Post a list of emergency telephone numbers such as the nearest available police, fire, ambulance, and/or rescue unit. These numbers are to be kept near the telephone, which is closest to the pool.
21. Basic lifesaving equipment, including one of the following should be on hand at all times:
 - A light, strong, rigid pole (shepherds crook) not less than twelve feet (12') [366cm] long.
 - A minimum one-fourth inch (1/4") [6.35 mm] diameter rope as long as one and one half (1-1/2) times the maximum width of the pool or fifty feet (50') [15.24 meters], whichever is less, which has been firmly attached to a Coast Guard-approved ring buoy having an outside diameter of approximately fifteen inches (15") [38.1 cm], or similarly approved flotation device.
22. Warning. Only for domestic use.
23. Warning. Never leave your child unattended – drowning hazard.
24. Children can drown in very small amounts of water. Empty the pool when not in use.
25. Do not install the paddling pool over concrete, asphalt or any other hard surface.
26. Place the product on a level surface at least 2 m from any structure or obstruction such as a fence, garage, house, overhanging branches, laundry lines or electrical wires.
27. Warning. Choking hazard - Small part.
28. Only to be used in water in which the child is within its depth and under adult supervision.
29. It should only be used in shallow water.
30. Check seam regularly.
31. Warning. Use only under competent supervision.
32. The product must be assembled/disassembled by an adult.
33. A weekly check is recommended for backwashing or cleaning.
34. It is essential to check that the suction openings are not obstructed.
35. It is advisable to stop the filtration during maintenance operations on the filtration system.
36. Regularly monitor the filter clogging level.
37. It is essential to change any damaged element or set of elements as soon as possible. Use only parts approved by the person responsible for placing the product on the market.

Circulation Systems

1. Installers shall follow written instructions regarding positioning of all equipment connected to the circulation systems.
2. The installer shall follow written instructions provided for operating the circulation system components.
3. All circulation system components and pump that require replacement or servicing shall be installed according to the pump's instruction manual.
4. Circulation equipment shall be installed per manufacturer's instructions to provide proper mounting and support, to prevent damage from misalignment, settlement, and vibration, and to minimize the potential for the accumulation of debris and moisture. Please refer to pump's instruction manual.

Chemicals

For safety's sake, ensure the deepest part of the pool is always visible. The user must properly maintain clarity of the pool water at all time. Check the pH and chlorine levels periodically, and make sure they are within the recommended limits. Additional water treatment chemicals might be needed from time to time. Have the water sample tested by a local pool supply store to determine if additional chemical is needed. Turn on the filter pump system for at least six hours per day. Clean and replace filter cartridge frequently. Replace only with genuine Polygroup® / Summer Wave® Brand filter cartridge. Refer to the Filter Pump manual for additional water care information.

Entrapment Risk

1. Entrapment Avoidance: There shall be no protrusions or other obstruction in the swimming area, which may cause entrapment or entanglement of the user. If a suction outlet cover is missing or broken, do not use the pool. Suction can cause body part entrapment, hair and jewellery entanglement, evisceration, or drowning. Repair or replace the suction outlet cover before allowing the pool to be used.
2. DANGER! TO AVOID SERIOUS INJURY OR DEATH, CLOSE THE POOL OR SPA TO BATHERS IF ANY SUCTION OUTLET COVER/GRATE IS MISSING, BROKEN, OR INOPERATIVE.
3. Never play or swim near drains or suction fittings. Your body or hair may be trapped causing permanent injury or drowning.
4. Never enter the pool or spa if a suction fitting or drain cover is loose, broken, or missing.
5. Immediately notify the pool/spa owner or operator if you find a drain cover loose, broken, or missing.

Drowning Risk

1. Keep unsupervised children from accessing the pool by installing fencing or other approved barriers around all sides of pool. State or local laws or codes may require fencing or other approved barriers. Check state or local laws and codes before setting up pool.
2. Toys, chairs, tables, or similar objects that a young child could climb shall be at least four feet (4') [121.92 cm] from the pool. The pump filter system shall be positioned so as to prevent it being used as a means of access to the pool by young children. Do not leave toys inside pool when finished using, since toys and similar items might attract a child to the pool.
3. Position furniture (for example: tables, chairs) away from pool and so that children cannot climb on it to gain access to the pool.

Electrocution Risk

1. Keep all electrical lines, radios, speakers, and other electrical appliances away from the pool.
2. Do not place pool near or under overhead electrical lines.

First Aid

1. Keep a working phone and a list of emergency numbers near the pool.
2. Become certified in cardiopulmonary resuscitation (CPR). In the event of an emergency, immediate use of CPR can make a lifesaving difference.

Special Warning

1. Local building codes may require obtaining a building or electrical permit. Installer shall follow regulations on setback, barriers, devices, and other conditions.
2. DO NOT attempt to assemble this pool in adverse weather conditions, windy conditions, or when the temperature is below 16°C (60°F).
3. This is a storable filter pump, which should be disassembled and stored when temperatures are expected to fall below 0°C (32°F).

Extra Safety Warning

1. Adult supervision is always required.
2. Parents should learn CPR.
3. Keep all electrical radios, speakers, and other appliances away from the swimming pool.
4. When you touch the filter, pump, or electrical parts, be sure the ground under your feet is "Bone Dry."
5. Connect power cords to a 3-wire grounding-type outlet only.
6. Keep all breakable objects out of the pool area.
7. Alcohol consumption and pool activities do not mix. Never allow anyone to swim, dive, or slide under the influence of alcohol or drugs.
8. Severe electrical shock could result if you install your pump or filter on a deck. The pump or filter could fall into the water, causing severe shock or electrocution.
9. Do not install on a deck or other surface at, above, or slightly below the top rail of the pool.
10. Do not use the filter pump during severe weather conditions, i.e. electrical storms, tornadoes, etc.
11. Be aware of overhead power lines when vacuuming your pool or using a telescoping pole.
12. Check regularly for signs of wear or loose bolts that could make the deck unsafe.
13. Please contact pool site dealer or manufacturer for additional safety signs if deemed necessary.
14. For pool service, select a certified pool professional.

ANY MAINTENANCE WORK TO AVOID RISK OF SERIOUS INJURY OR EVEN DEATH.

15. GENERAL INFORMATION: The pool must be stored away if temperature is expected to fall below 4°C (39°F).
16. All parts should be cleaned using mild soap and lukewarm water only. DO NOT use detergent or hot water.
17. Make sure that all parts are dry before storing them to prevent mildew from forming.
18. Store all parts in a dry, heated location where temperature does not fall below 4°C (39°F) or exceed 51°C (124°F).
19. Failure to follow the storage instructions could cause damage to your pool and void your warranty.
20. YOU MUST FOLLOW THE ASSEMBLY INSTRUCTIONS TO REASSEMBLE YOUR POOL FOR THE NEXT SEASON.
21. The site for the pool must be cleared and levelled.
22. Do not leave an above-ground pool outside when empty.



This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

Electrical product waste should not be discarded with household waste, use separate collection facilities.

Contact your local government or council for information regarding the collection systems available.

Maximum Water Temperature: 35 degree

Maximum total head: 1.5 meter.

WARNING! Keep this product more than 2m away from the pool. Keep this product more than 3.5m away from the pool (for France only).

WARNING! Keep the plug of this product more than 3.5m away from the pool.

WARNING! If the product provide with transformer, the transformer must be located outside zone 1(2m away from the swimming pool).

According to the International Standard, IEC 60364-7-702, on electrical installation of swimming pools and other basins equipment, the following installation distances must be respected:

- The filter pump must be position more than 2m away from the pool walls.
- The power cord plug to the 220-240 Volt electrical power source of filter pump must be position more than 3.5m away from the pool walls.

Check your local authorities to determine the appropriate standard and requirements for "electrical installation of swimming pools and basins equipment". The following table is for reference only.

Country/Region	Standard Number	Country/Region	Standard Number
International	IEC 60364-7-702	Germany	DIN VDE 0100-702
France	NF C 15-100	Netherlands	NEN 1010-702

SAVE THESE INSTRUCTIONS

Preliminary Steps:

1. READ ALL INSTRUCTIONS CAREFULLY and get a thorough understanding of what is required to assemble your SFX series Filter Pump.
2. Before you begin to assemble the pool, identify, count, and check all parts needed for assembly.
3. It is recommended that you have some PETROLEUM JELLY on hand for lubricating the gaskets.

Filter Pump Important Notes:

1. Installer shall follow written instructions provided for operation of the filter pump systems.
2. All electrical components shall be installed in accordance with Article 680 of the National Electrical Code (NEC) "Swimming Pools, Fountains and Similar Installations" or its latest approved edition. or other International Electrical Code / Directive / Regulation.
3. The Type D Filter Cartridge (7) will hold as many as 2 of the 1" diameter chlorine tablets and the Type A/C Filter Cartridge (7) will hold as many as 6 of the 1" diameter chlorine tablets. Check your chlorine levels to determine the proper number of chlorine tablets to add. The filter cartridge will automatically dispense chlorine into the pool as the Filter Pump runs. You must have the type of Filter Cartridge (7) with a central core mesh divider (See page 8) to use the chlorine dispenser. DO NOT use this to dispense powdered chlorine, shock treatment or any other type of chemicals as damage to the pump, filter cartridge, and pool will occur.
4. The SFX Series Filter Pump systems are manufactured by Polygroup® and ETL control number 4000608 and 4006317 - double insulated and grounded - 240 V.A.C. - 50 Hz.

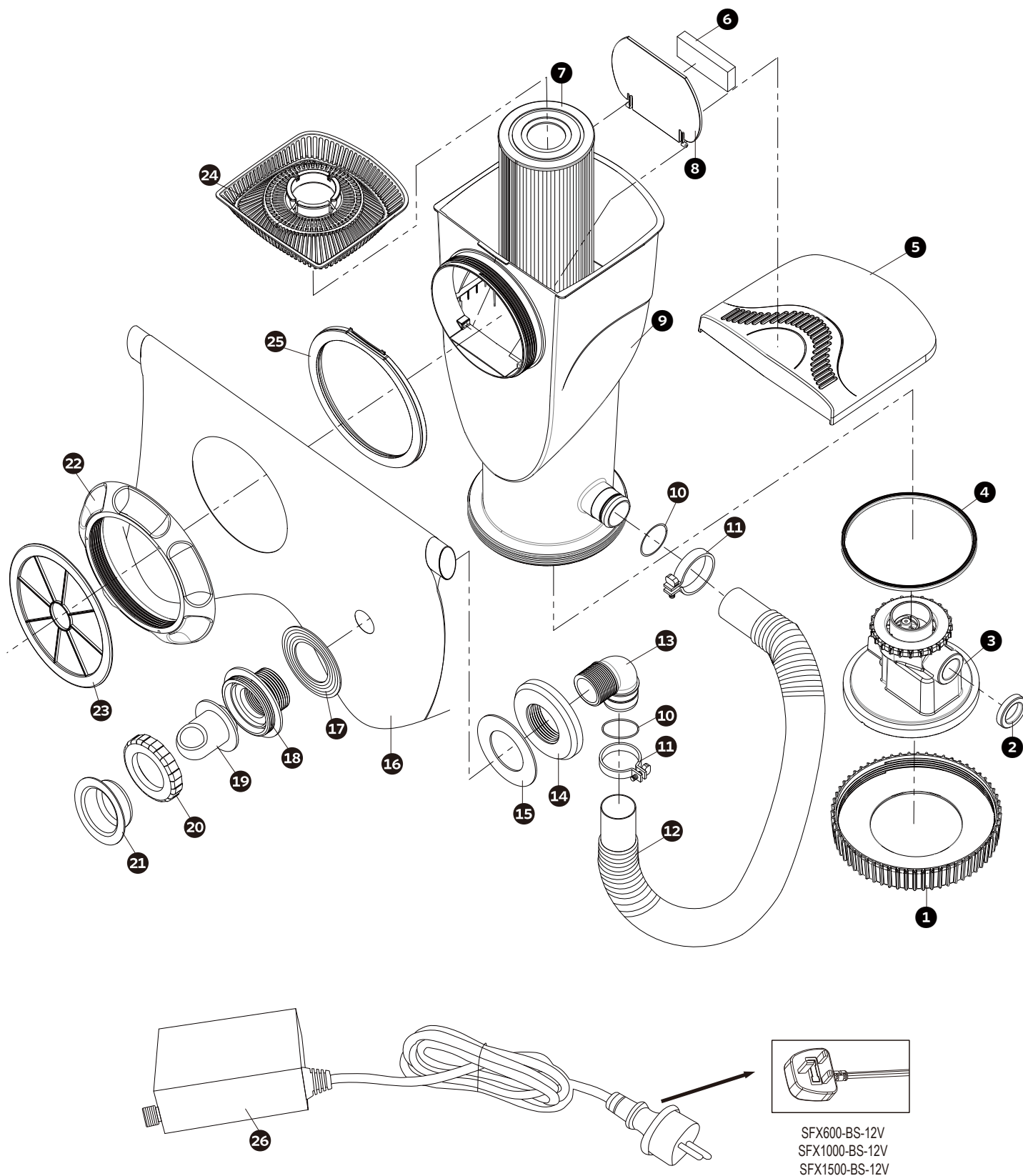
FILTER PUMP POWER INFORMATION

Model	Voltage	AMPERAGE	Wattage (W)	Water Proof Level
SFX600-GS Filter System SFX600-BS Filter System SFX600-S Filter System	Input voltage 220-240V, Pump operating voltage 12V	0.35 Amps	40 Watts	IPX7
SFX1000-GS Filter System SFX1000-BS Filter System SFX1000-S Filter System	Input voltage 220-240V, Pump operating voltage 12V	0.45 Amps	90 Watts	IPX7
SFX1500-GS Filter System SFX1500-BS Filter System SFX1500-S Filter System	Input voltage 220-240V, Pump operating voltage 12V	1.1 Amps	185 Watts	IPX7

PARTS LIST

ITEMS	PARTS NAME	QTY.	ITEMS	PARTS NAME	QTY.
1	Motor Seal Nut	1	16	Pool Wall (Ref.)	1
2	Nozzle	1	17	Rubber Gasket	1
3	A: SFX600/1000 Motor Assembly	1	18	Pool Wall Fitting	1
	B: SFX1500 Motor Assembly	1	19	Diverter Fitting	1
4	Canister Gasket	1	20	Locking Ring	1
5	Top Cover	1	21	Service Plug	1
6	Weir Foam	1	22	Skimmer Seal Ring	1
7	Type D Filter Cartridge (SFX600-GS / BS / S)	1	23	Water Stopper	1
	Type A/C Filter Cartridge (SFX1000-GS/BS/S-12V & SFX1500-GS/BS/S)	1	24	Strainer Basket	1
8	Weir	1	25	Skimmer Gasket	1
9	Filter Pump Canister	1	26	Transformer	1
10	O-ring	2	27	A: SFX600/1000 Rotor Assembly	1
11	Hose Clamp	2		B: SFX1500 Rotor Assembly	1
12	Return Hose	1	28	A: SFX600/1000 Volute Cover	1
13	Elbow 90°	1		B: SFX1500 Volute Cover	1
14	Nutt	1	29	Volute Cover Lock Nut (X-600 & X-1000)	1
15	Thrust Washer	1	30	Volute Cover Bolt And Nut Set (X-1500 ONLY)	1
			31	A: SFX600/1000 Motor body B: SFX1500 Motor body	1

THE FILTER CARTRIDGE **7** WILL HOLD 1" DIAMETER CHLORINE TABLETS. CHECK YOUR CHLORINE LEVELS TO DETERMINE THE PROPER NUMBER OF TABLETS TO ADD.

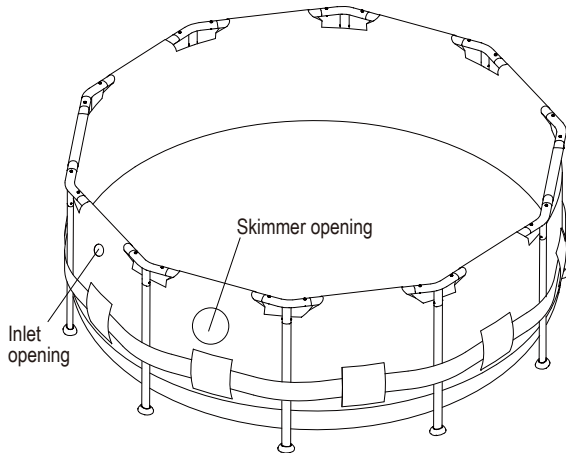


SETUP INSTRUCTIONS

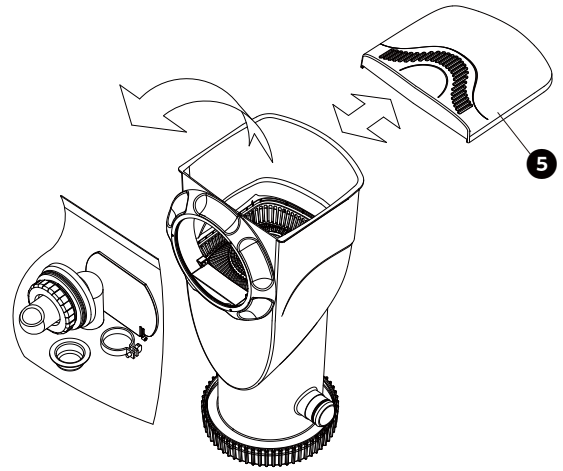
Before assembling your product, please take a few minutes to check the contents and become familiar with all the parts.

⚠ WARNING: POSITION THIS PRODUCT AWAY FROM THE POOL, SO AS TO PREVENT CHILDREN FROM CLIMBING ON IT AND ACCESSING THE POOL.

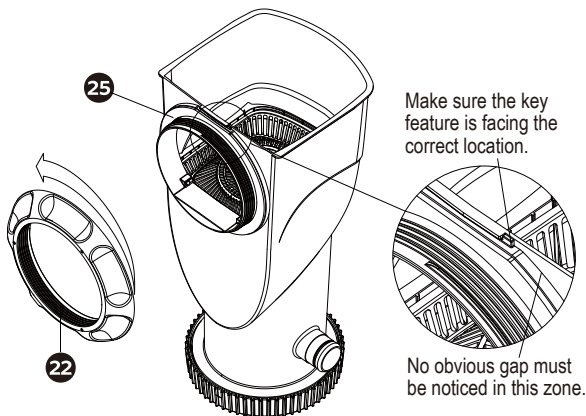
1. Set up the pool by following all instructions comes with the pool. Do not fill water until the Filter Pump is properly installed. Locate the Skimmer and Inlet openings on the pool wall.



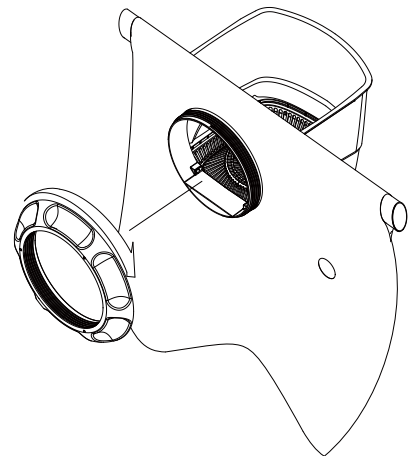
2. Dismount the Skimmer Top Cover **5** and take out the parts contained inside.



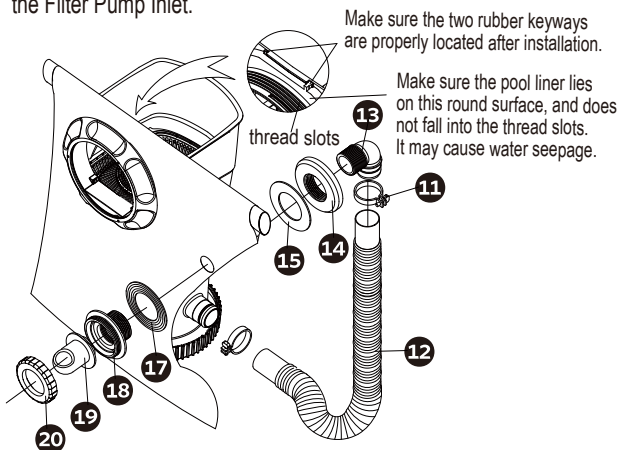
3. Remove the Seal Ring **22** by unthreading it counter clockwise Keep Skimmer Gasket **25** on its proper location.



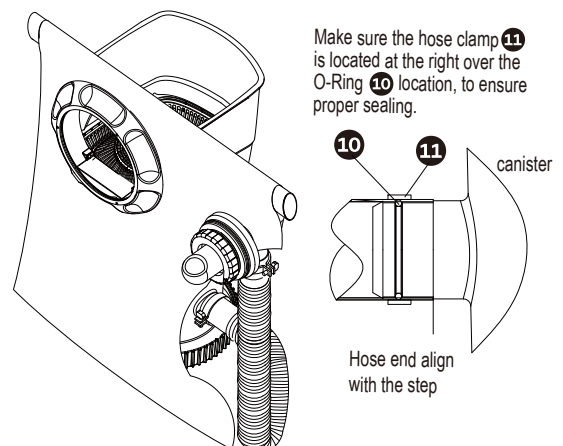
4. After placing the threaded intake of the skimmer inside its corresponding pool hole, screw back the seal ring **22** tightly on its place.



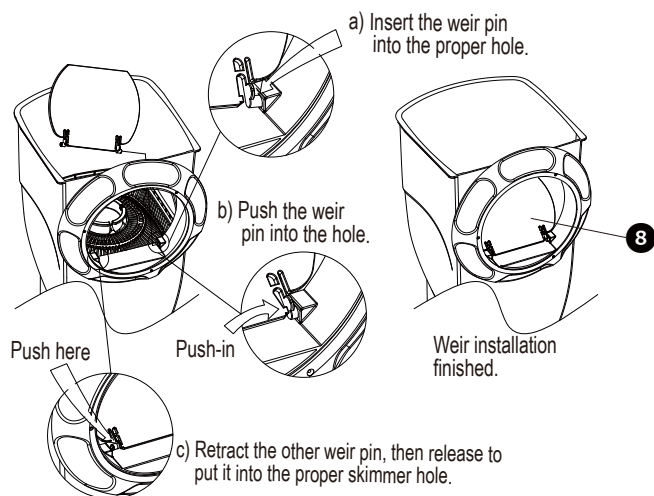
5. Assemble the wall fitting parts according to the following schematic and the Filter Pump Inlet.



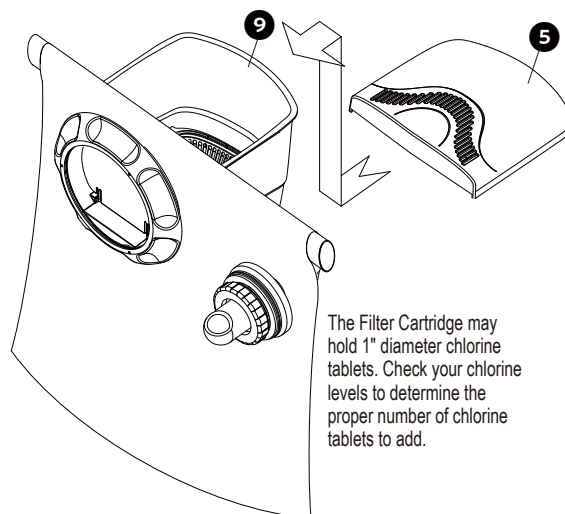
6. Final assembly must look like the following schematic.



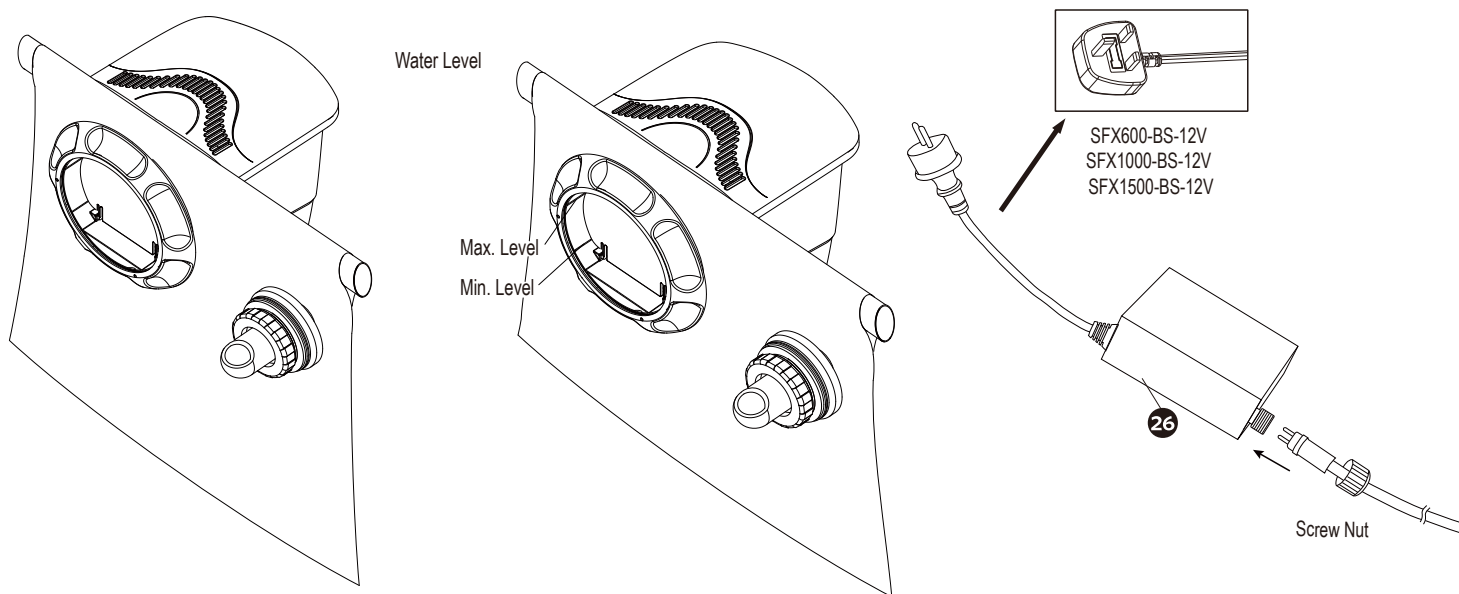
7. Install weir **8** onto the canister.



8. Slip the Top Cover **5** onto the skimmer canister **9**.



9. Fill water to a proper level, Connect the transformer and extension power cord from the motor assembly and then tighten the screw nut by hand, plug in the pump, and enjoy clean pool water.



FILTER PUMP OPERATION

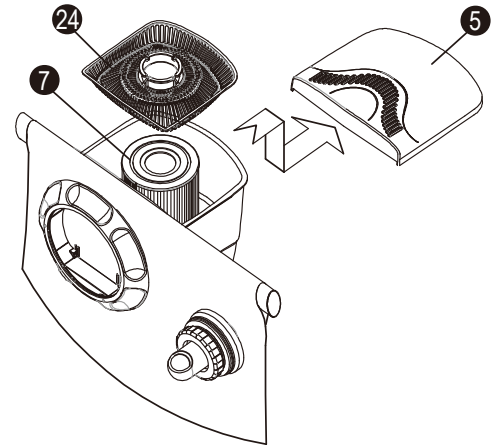
1. Plug the pump transformer to a properly grounded receptacle at least 15 feet (4.5m) away from the pool.
2. Check the return fitting on the inside of the pool for correct flow; it should feel like a solid stream of water returning to the pool. You can use the return flow as a gauge to determine when the filter needs cleaning or replacement. If you feel a reduction in flow, clean or replace filter.
3. Test water and adjust as needed, read - "POOL WATER CARE". VERY IMPORTANT- FILTER PUMP ALONE WILL NOT PREVENT ALGAE FROM GROWING IN POOL WATER; THIS CAN ONLY BE DONE BY MAINTAINING PROPER CHLORINE AND pH LEVELS AT ALL TIMES!
4. The filter cartridge may need to be cleaned and/or replaced several times at start up until the correct chlorine and pH levels are attained. We recommend that you keep at least one spare filter cartridge on hand at all times. Filter cartridges may be purchased at the store you purchased your pool from, or ordered from Polygroup®.
5. To turn off the filter pump, unplug the transformer power cord.

PUMP MOTOR PROTECTION

IMPORTANT! Your filter pump is protected by a thermal switch. The switch senses the temperature of the filter pump. If it gets too hot, the switch will stop the pump from running until it cools off. It will automatically turn back on when the filter pump has cooled down. This is a safety device to prevent pump damage and prolong service life. If your pump is automatically turning off, it is because of high pool water temperature and/or low water flow through the pump. If this happens you need to check the water flow and correct it if needed, as this filter pump uses the water flow for cooling. You may also want to run the pump at night when the temperature is lower.

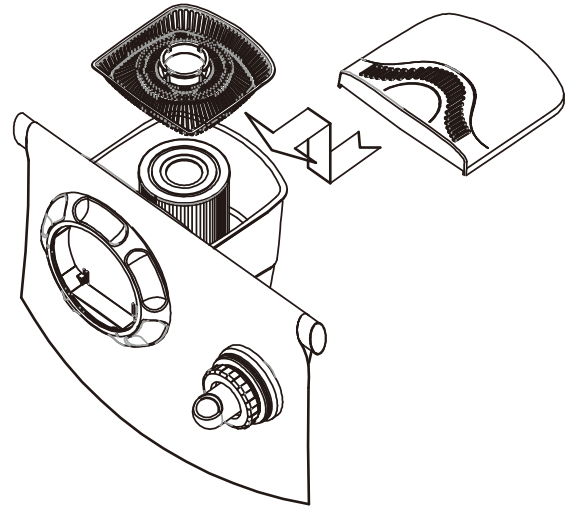
FILTER CARTRIDGE CLEANING AND REPLACEMENT

1. First, unplug (turn off) the Power Filter. Then remove the Top Cover **5**. Remove the Strainer Basket **24** and the Filter Cartridge **7**.



2. Basic Cleaning: Clean the filter cartridge thoroughly ressure washing inside and out with a garden hose. Allow a few hours for the filter to fully dry and CAREFULLY BRUSH the pleats (to avoid wear out, do not scrub the pleated surface areas). Cleaning and scrubbing a filter too vigorously will also wear out the cartridge much faster than if it is simply hosed off correctly.

3. To remove tough oils (e.g. suntan, body oils, algae, etc.) it is recommended to soak cartridge in a 1lb trisodium phosphate solution (or any other strong detergent) to 5Ga water for up to 12hrs. Rinse cartridge to remove dirt. To remove algae, add 1/2pint of pool chlorine or 1 pint of liquid household bleach to the cleaning solution, 1 hour before retrieving the cartridge. Thoroughly rinse before usage on filter case.



4. Excessive calcium and/or mineral deposits may build up on a filter cartridge and should be handled differently. Contact your local pool supply store to ask about additional filter cartridge cleaners or treatment for calcium or mineral deposits. Check pool chemistry for high pH or alkalinity; this may cause a calcium or mineral build-up.

5. re-assemble in reverse order.
6. A spare "stand-by" Filter Cartridge **7** is an excellent investment. It provides a convenient way to continue filtration of your pool while cleaning or replacing a dirty Filter Cartridge **7**. Also, a well-maintained, clean cartridge assures you that your filter will always be ready to operate at peak efficiency.
7. Filter cartridges may be purchased at the store you purchased your pool from, or ordered from Polygroup®. Always replace with genuine Polygroup® SUMMER WAVES® filter cartridges.

POOL MAINTENANCE

1. Check and adjust pH and chlorine levels daily using required chemicals. See Section "POOL WATER CARE".
2. Check filter pump output daily. If flow is reduced, see Symptom 2 in Section "TROUBLE SHOOTING GUIDE".
3. Check filter pump, hoses, fitting for leaks. If a leak is found, see Symptom 4 in Section "TROUBLE SHOOTING GUIDE".

POOL WATER CARE

1. The following items are required and readily available from your local pool supply store:

- TEST KIT - Used to check chlorine and pH levels.
- 1" CHLORINE TABLETS - Used to disinfect pool water and help control the growth of algae.
- pH CONTROL CHEMICALS - Used to adjust pH levels Up (Soda Ash) or Down (Acid).
- ALGAECIDES - Used to eliminate algae.
- SUPERCHLORINATOR - Used to destroy combined chlorine, ammonia, nitrogen, and organic compounds.
- LEAF NET with handle - Used to remove leaves, trash, insects, etc. from pool.
- CHLORINE DISPENSER (Supplied with Polygroup's patented Filter Cartridge U.S. Pat. 7,005,062) - Used to dispense 1" chlorine tablets ONLY.

2. Use test kit daily to check pH and chlorine levels. Adjust accordingly using the required chemicals.

NOTE : Excessive levels of chlorine or low pH levels will damage pool liner.

3. The pool can be cleaned using a garden hose powered vacuum from Polygroup® or a pool supply store.

4. Using a foot bath near the pool to wash off your feet prior to entering the pool will assist in keeping the pool clean.

5. Well water often presents special problems with water chemistry. If you must use well water, take a sample to your local pool chemical supplier for analysis before adding ANY chemicals.

6. Refer to the POOL's USER MANUEL for the capacity of your pool. You will need this information to determine the amount of chemicals you will need to correct the pool water. NOTE: It is recommended to use a 5 gallon bucket of water to mix and dissolve your chemicals and then applying directly to the pool water.

Follow manufacturers label directions on all chemicals.*Most pool supply stores will test your pool water for free and advise you of what chemicals you need, and the correct amount to use for your pool. You will need to tell them the pool capacity in gallons.

7. **IMPORTANT** - We cannot over-stress the importance of proper and adequate daily chemical treatment. Chlorine and pH levels must be properly maintained at all times. PUMP AND FILTER ALONE WILL NOT PREVENT ALGAE FROM GROWING IN POOL WATER; THIS CAN ONLY BE DONE BY MAINTAINING PROPER CHLORINE AND pH LEVELS AT ALL TIMES.

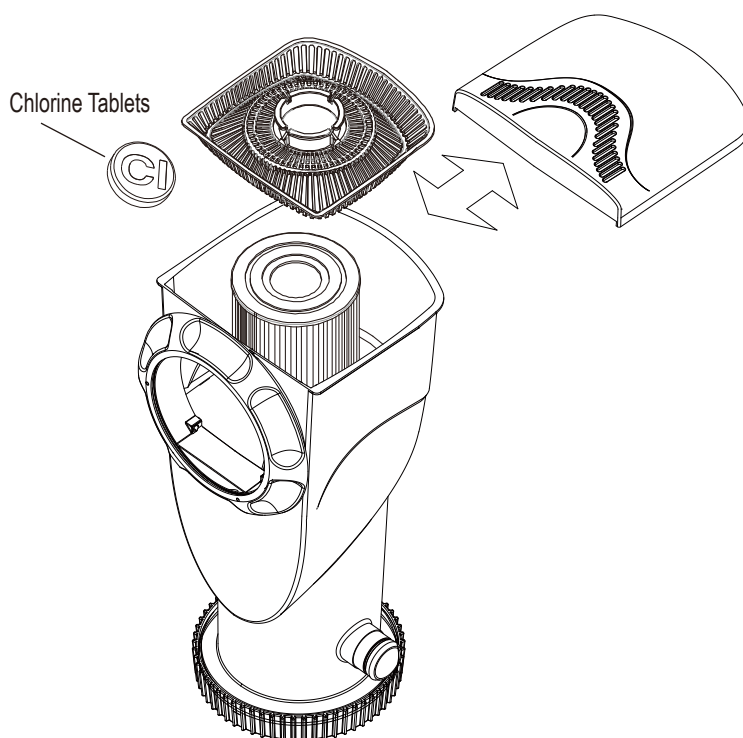
- Maintain pH level between 7.3 and 7.8.
- Maintain chlorine level between 1.0 and 1.6 ppm (parts per million).
- Superchlorinate your pool at least every other week.

NOTE :

1. Hot weather/heavy use may require pH and chlorine levels to be maintained on the upper side of the scale and superchlorination of the pool every week.

2. Using a pool cover and/or solar cover will assist in maintaining your pH and chlorine levels by reducing the amount of evaporation from your pool.

CAUTION - Concentrated chlorine levels and low pH levels will damage pool. You must follow the instructions for the pool chemicals you use, as to quantity and recommended usage. NEVER drop lumps or pellets of chemicals in pool; this may present a hazard to swimmers and/or damage your liner.



TROUBLESHOOTING GUIDE

⚠ WARNING: UNPLUG THE POWER CORD BEFORE TROUBLESHOOTING THE FILTER PUMP.

PROBLEM	CAUSE	SOLUTION
1. Motor fails to start or kick on and off	A Pump transformer not plugged in	A Pump transformer must be plugged into a grounded power outlet.
	B Low Voltage	B Check the line voltage. It must be 215 to 245AC volts.
2. No flow or low flow through return hose	A Low water level	A Water level must be within the range of Water Limit Line marked on Skimmer canister.
	B Inlet / Discharge Clogged	B Check for obstructions at strainer basket and in return hose.
	C Filter Dirty	C Clean or replace cartridge. Spare cartridges make service more convenient.
3. Filter is not cleaning pool(water cloudy, green, etc..)	A Chlorine Level does not lie in the suitable range	A Maintain chlorine level between 1.0-1.6ppm.
	B Filter Dirty	B Clean or replace cartridge. Spare cartridges make service more convenient.
	C pH Level does not lie in the suitable range	C Maintain pH level between 7.3-7.8.
	D Cartridge Damaged	D Replace cartridge.
	E Low Water Flow	E Check if obstructions at strainer basket and in return hose.
	F Other Chemicals Required	F Have water tested at pool supply store. It may be necessary to add other chemicals due to varying water quality in different localities.
	G Pool Water Very Dirty	G Run pump more often, but never when pool is in use. Clean filter more often.
4. Water Leakage	A Hose area : Return hose does not fit well with skimmer cuff and wall fitting elbow	A Adjust hose clamp 12 , check O-Ring 10 and retighten. Check hose for any holes or cracks. Replace if needed.
	B Bottom of canister: Motor does not been screwed tightly onto canister	B Retighten the motor.
	C Between canister and liner: Incorrect installation.	C Recheck the Seal Rubber 24 with correct direction. The key feature should be at top side and engage with canister ribs like the installation procedure described. Made sure the liner should not be in the thread groove. Screw the Seal Ring 22 as tight as can.

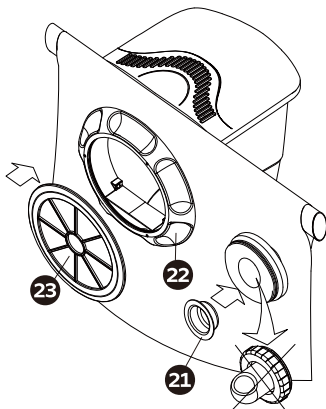
POOL PUMP DISASSEMBLY & STORAGE

1. First, unplug the main power cord of the system.
2. Remove the Top Cover **5**, Strainer Basket **24** and Filter Cartridge **7** and remove any chlorine tablets left inside the core section of the filter.
3. Loosen all Hose Clamps **12**. Remove the Return Hose **13** and allow water to drain out.
4. Remove the Return Fitting **15-21** and clean the parts and lubricate Gasket **16** with petroleum jelly and reassemble all parts then place them in a safe place.
5. Remove the Motor assembly **3** out by turning the Motor Seal Nut **1** counter-clockwise. Now clean the pump, dry it off, and then lubricate the Motor Seal **4** on the motor with petroleum jelly and place it in a safe place.
6. Please refer to below illustration to reassemble the motor.
7. Remove the Filter pump canister **9** from liner by turning the Skimmer Seal Ring **22** counter-clockwise. Remove the Weir **8** and Strainer Basket **24**. Clean all parts and dry them off. Then reassemble the filter cartridge, strainer basket, weir, top cover, etc. onto the canister. Place the assembled unit in a safe place.

MOTOR REPLACEMENT INSTRUCTION

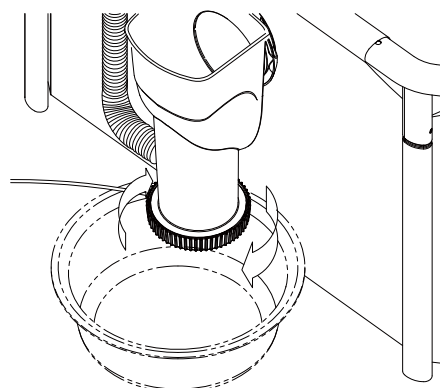
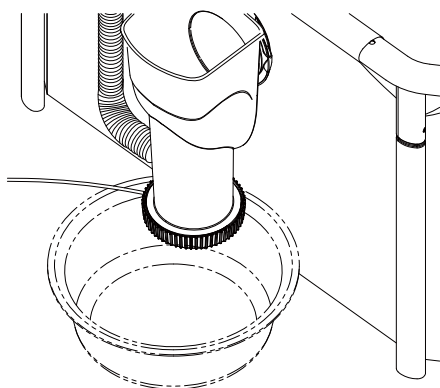
IMPORTANT: The Preferred Method Is To Drain Enough Water From The Pool First Then Dismount The Entire Skimmer System Before Replacement. If User Prefer To Operate It On The Pool, Please Refer To Below Process. Please Note Incorrect Handling Method May Cause Water Leakage Between Canister And Liner.

1. Insert the Water Stopper into the water intake of pump. Push the Stopper **23** to make it engage with Skimmer Seal Ring **22** closely.

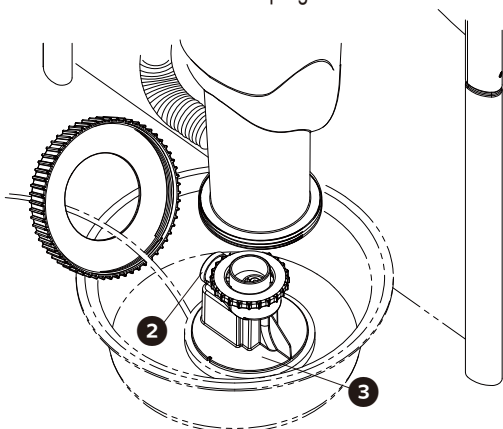


2. Unplug the power.

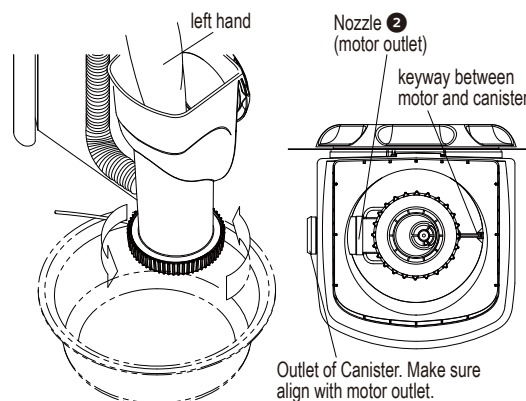
3. Detach the Locking Ring **20** and Diverter Fitting **19** by anticlockwise turning. Insert the Return fitting plug (RF Plug) **21**.



4. Remove Top Cover **5**, Strainer Basket **22**, Filter Cartridge **7**, it is advised to use a water container, such as a bucket shown with dotted line in the illustration to collect the purged water.



5. Remove the Motor Seal Nut **1** by turning according to the arrow direction. Do not pull or push the canister as you can to avoid engagement damage between canister and pool liner.

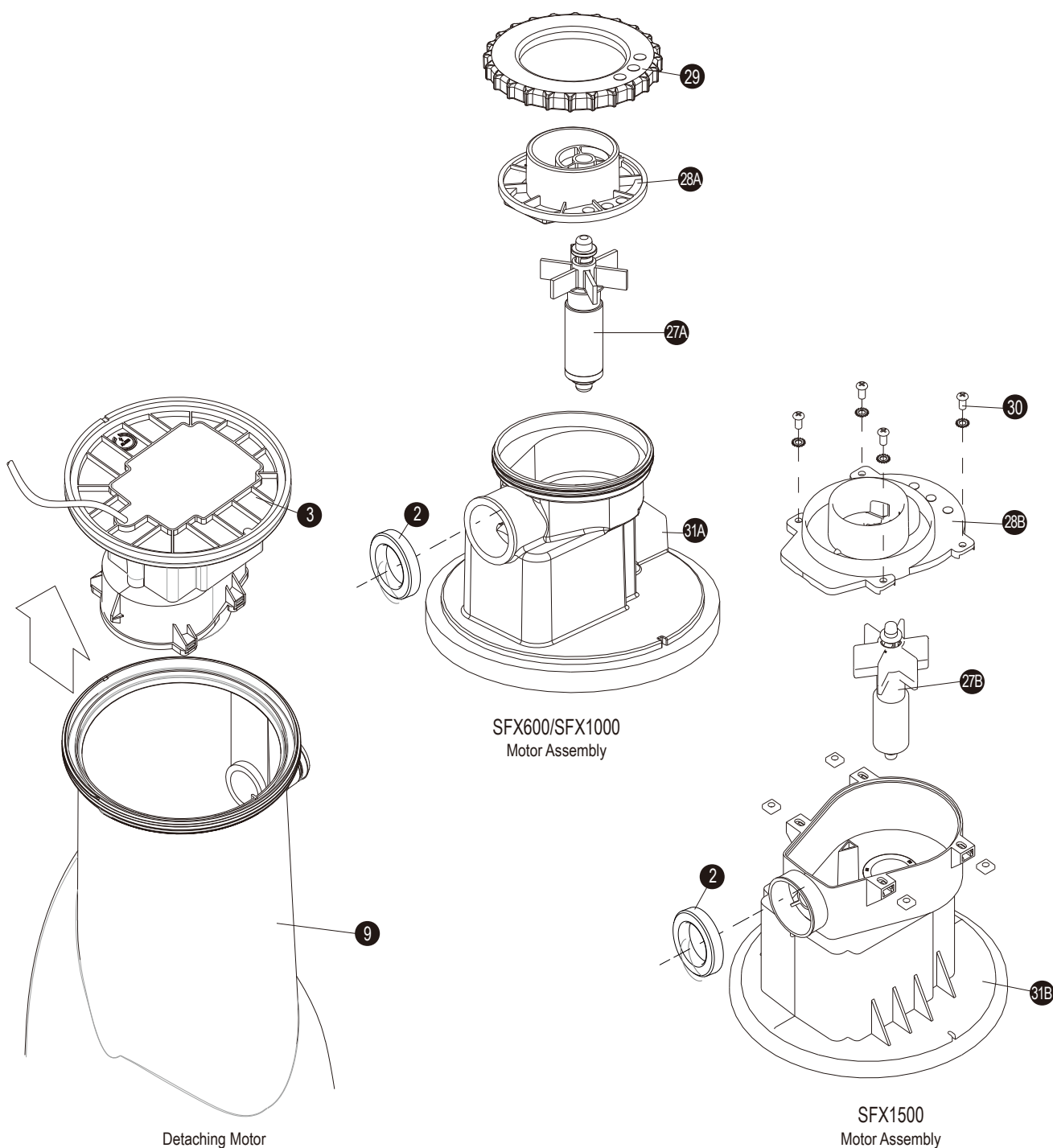


6. Disassemble Motor assembly **3**
Be careful not to lose the rubber nozzle **2**

7. Check the Motor Seal **4** from bottom side to make sure it at the original slot correctly. Use left hand to hold the motor from Canister inside. Make sure the motor water outlet align with Canister outlet direction. Then use right hand to tighten the Motor Seal Nut **1** like the arrow direction (One more people help will be easier for replacement).

ROTOR REPLACEMENT INSTRUCTION

1. Disassemble the wall fitting and canister like above 7 POWER FILTER DISASSEMBLY AND STORAGE procedure.
2. Detach the motor assembly **3** from canister **9** by turning the counter-clockwise. Be careful not to lose the Nozzle **2**.
3. Refer to below motor assembly illustration to replace the Rotor Assembly **27**, remove the Volute Cover **28** and pull out the Rotor Assembly **27** from the Motor body **31**. Insert new Rotor Assembly **27** into the Motor body **31**.
4. Align the Shaft properly and fasten the Volute cover **28** with the Volute Cover Lock Nut **29** or with the Volute Cover Bolt and Nut Set **30**.
5. Attach the Nozzle **2** to the outlet of Motor Assembly.
6. Slowly insert the motor assembly back into the Canister **9**, so that the Nozzle **2** is aligned with the outlet port of the Canister **9**. Also please refer to the motor assembly process "G" in 7 POWER FILTER DISASSEMBLY AND STORAGE.
7. Tighten the Motor Seal Nut **1** by turning the clockwise, be sure the Nozzle **2** is properly in place.



REPLACEMENT PARTS ORDERING INFORMATION

Key	Description	SFX600	SFX1000	SFX1500
		PART #		
1	Motor Seal Nut	P58PP1954W05	P58PP1954W05	P58PP1954W05
2	Nozzle	P58182601K01	P58182601K01	P58185201K01
3	Motor Assembly	P58X6001C2G0	P58X1000C2G0	P58X1500C2G0
4	Canister Gasket	P58147800K01	P58147800K01	P58164800K01
5	Top Cover	P58PP1950W05	P58PP1950W05	P58PP1950W05
6	Weir Foam	P58SFX000W01	P58SFX000W01	P58SFX000W01
7	Type D Filter Cartridge	P581041037PR	--	--
	Type A/C Filter Cartridge	--	P581041080PR	P581041080PR
8	Weir	P58PP1956W05	P58PP1956W05	P58PP1956W05
9	Filter Pump Canister	P58PP1984W05	P58PP1951W05	P58PP1983W05
10	Filter Pump Port / Fitting O-ring	P58030001K01	P58037000K01	04R037000K01
11	Hose Clamp	P58220221W05	P58219221W05	P58219221W05
12	Return Hose	P58125009W01	P58150012W01	P58150012W01
13	Elbow 90°	P58PF1740W05	P58PF1700W05	P58PF1700W05
14	Fitting Lock Nut	P58PF1690W05	P58PF1690W05	P58PF1690W05
15	Return Fitting Washer (RF Washer)	P58PF2960W05	P58PF2960W05	P58PF2960W05
16	Pool Wall (Ref.)	--	--	--
17	Fitting Gasket	P58PF1730K01	P58PF1730K01	P58PF1730K01
18	Pool Wall Fitting	P58PF1680W05	P58PF1680W05	P58PF1680W05
19	Return Fitting Diverter	P58PF1721W05	P58PF1721W05	P58PF1721W05
20	Locking Ring	P58PF1710W05	P58PF1710W05	P58PF1710W05
21	Return Fitting Plug (RF Plug)	P58PF0620K01	P58PF0620K01	P58PF0620K01
22	Skimmer Seal Ring	P58PP1953W05	P58PP1953W05	P58PP1953W05
23	Water Stopper	P58PP2163K01	P58PP2163K01	P58PP2163K01
24	Strainer Basket	P58PP1952P01	P58PP1952P01	P58PP1952P01
25	Skimmer Gasket	P58PP1957W05	P58PP1957W05	P58PP1957W05
27	Rotor Assembly	P58050137001	P58050505001	P58050506001
28	Volute Cover	P58PF1009K01	P58PF1009E09	P58184501K01
29	Volute Cover Lock Nut (X-600 & X-1000)	P58PF1010K01	P58PF1010K01	--
30	Volute Cover Bolt And Nut Set (X-1500 ONLY)	P53FX060GW05	P53FX100GW05	P53FX150GW05

PUMP STORAGE & WINTERIZING

Winterizing Your Pump and Long-term Storage

After usage, you can easily empty and store away your pump in a safe place. Some pump owners, however, choose to leave their pump up all year round. In cold areas, where freezing temperatures occur, there can be a risk of ice damage to your pump. We therefore recommend you drain, disassemble, and properly store the pump, when the temperature drops below 0°C (32°F).

Clean the Pump Water Thoroughly

1. Let the pump cool down for at least 30 minutes before storage. Clean the pump water thoroughly.
2. Use only damp cloth soaked in mild soap / detergent and water to clean the outer surfaces of the pump. Do not use any kind of chemical or solvent. Always unplug the pump and stow the cord during cleaning.
3. Keep out of reach of direct sunlight and chemical substances.
4. Save the original packing box for storage purposes.
5. Remove the pipes (if applicable) and store in a safe place. Be sure all accessories parts are clean and completely dry before storage.
6. Bring pump and accessories indoors and store in a safe and dry area, preferably between 0°C (32°F) and 40°C (104°F).

CUSTOMER SERVICES CONTACT

COUNTRIES / REGIONS	SERVICE CENTER LOCATIONS
United Kingdom	Telephone: 44(0) 1702208172 Address: Geemac sales & Marketing Limited 12 Eldon Way Hockley Essex SS5 4AD
France	Telephone: 33(0) 969360535
Spain	Telephone: 0902848775
Italy	Telephone: 0800788298 Address: 12 Eldon Way Hockley Essex
Germany	Telephone: 49(0) 6218455210 Address: Germany Sales & Service Office RMS GmbH Besselstr.25, 68219 Mannheim Service@rms-gruppe.de
Australia and Islands	Telephone: 1800-451-190
For answers to most frequently asked questions, please visit : https://polygroup.zendesk.com/hc/en-us	

