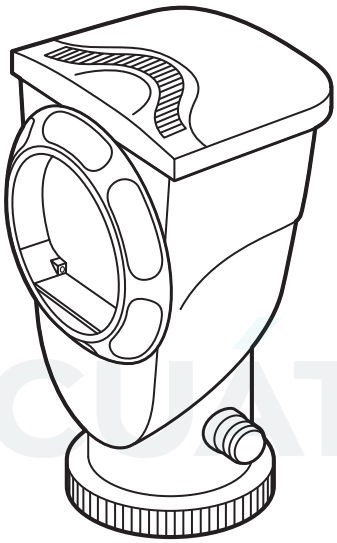
SUMMER WAVES™

USER MANUAL

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SKIMMERPLUS™ FILTER PUMP

FOR ABOVE-GROUND SWIMMING POOLS
SFX600 / SFX1000 / SFX1500 models



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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™. For any setup and troubleshooting issues, visit support.polygroupstore.com. 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 Merchandise Authorization Number.

DISTRIBUTED BY: Polygroup Pacific Limited
Unit 606, 6th Floor, Fairmont House,
8 Cotton Tree Drive, Central, Hong Kong.

Polygroup™

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LIMITED WARRANTY

Polygroup Pacific Limited (hereinafter “Polygroup™”) makes products at the best quality we are able to offer. Polygroup™ is pleased to offer warranty for the repair or replacement of pool products for 180 days from the date of purchase. The provisions of this Limited Warranty only apply to the original purchaser. Please keep your original store sales receipt, as this proof of purchase will be required and must accompany warranty claims to Polygroup™ or its designated agents. This Limited Warranty does not apply without proof of purchase; or should the purchaser modify or repair the product themselves or by unauthorized people; 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. This Limited Warranty will not cover consequential damages, including claims for loss of water, pool chemicals, damage, or labor, normal wear-and-tear; nor acts of God outside the control of Polygroup™. Non-manufacturing defects, such as grasses that may grow through the ground cloth and/or pool liner are examples of which Polygroup™ cannot be held responsible for.

IN NO EVENT SHALL Polygroup™, ITS 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 other jurisdictions, do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Limited Warranty is not extended to close-outs, factory seconds, or resold products (i.e. garage sales, online auctions, or online retailers not purchased directly from Polygroup™). Any issues with items purchased from these types of vendors / sellers will need to be addressed through these stores. Items purchased from seasonal stores will be treated with an “All Sales Final” Policy.

IMPORTANT SAFETY INSTRUCTIONS

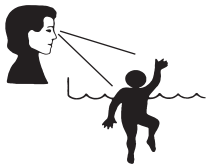
When installing and using this product, basic safety precautions should always be followed, including the following:

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.

⚠ WARNING

PREVENT DROWNING!
Watch children at all times. Follow all safety rules.



NO DIVING! NO JUMPING!
Shallow Water - You can be permanently injured.



DO NOT SIT ON OR LAY OVER POOL WALL
You can be permanently injured.



AVOID ENTRAPMENT!
Stay away from suction fittings. You may drown.





Please read carefully and keep for future reference

Notice: Customers who 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. Polygroup™ is not responsible for any additional expenses that you may incur.

⚠ WARNING

Safety Care for Children

1. Children, especially children younger than five years old, are at high risk of drowning. Drowning occurs silently and quickly and can occur in as little as 5 cm (2 inch) 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. Place pumps and filters in places where 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

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. 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.
3. The filter pump is for household use only, not for commercial use.
4. Always unplug the filter pump:
   a. on raining days.
   b. before cleaning or other maintenance.
   c. when leaving it unattended on holidays.
5. Do not plug or unplug the filter pump with wet hands.
6. When the filter pump will be not used for long time, such as in the winter, the spa or pool set should be disassembled and stored indoor.
7. Read the instruction before using the filter pump and assemble/disassemble each time. Cleaning and user maintenance must be performed by an adult over 18 years old who is familiar with the risk of electric shock.

Filter Pump Awareness

1. Following the pool manufacturer's instructions and install your pool properly before installing this filter pump.
2. Adult assembly required.
3. Before starting, check all pipes and accessories for correct installation and reliable connection.
4. Do not bury the electric cords. Place the cords where lawn mowers, hedge trimmers and other equipment will not damage them.
5. Do not use an extension cord to connect unit to electric supply.
6. Prevent children from using the filter pump without an adult's supervision.
7. Do not use the filter pump when pool is empty. This pump is designed only for above-ground pools that can be disassembled, not for permanently installed pools. Improper use may lead to overheating and permanent damage of the product.
8. To avoid the risk of electric shock, always be aware of damaged cords.
9. 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. 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. This appliance can be used by children aged from 8 years old and above and people 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. Children should be supervised to ensure that they do not play with the appliance.
13. Filter system can be used as many hours as desired, but NEVER when the pool is occupied. The pump must not be used when there is people in the water.
14. Pollution of the liquid could occur due to leakage of lubricants.
15. 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. 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 assembling 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 jewelry entanglement, evisceration, or drowning. Repair or replace the drain or suction outlet cover before allowing the pool to be used. During nighttime 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 (shepherd's crook) not less than 366 cm (12 ft) long.
    - A minimum 6.35 mm (0.25") diameter rope as long as 1.5 times the maximum width of the pool or 15.2 m (50 ft), whichever is less, which has been firmly attached to a Coast Guard-approved ring buoy having an outside diameter of approximately 38.1 cm (15"), or similarly approved flotation device.
22. For domestic use only.
23. 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. Place the product on a level surface at least 2 m (6.6 ft) from any structure or obstruction such as a fence, garage, house, overhanging branches, laundry lines or electrical wires.
26. Choking hazard - small parts.
27. Check seams regularly.
28. Use only under competent supervision.
29. The product must be assembled/disassembled by adult.
30. 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.
31. Disconnect the pump from the supply mains before carrying out user maintenance such as cleaning the filter.
32. The supply cord cannot be replaced. If the cord is damaged, the appliance should be scrapped.

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 sake, ensure the deepest part of the pool is always visible. The user must properly maintain the clarity of the pool water at all times. 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 pump for the recommended hours daily. If you are unsure of the time frames please refer to support.polygroupstore.com for the recommended Pump Operation Hours based on pool types and sizes. Clean and replace filter cartridge frequently. Replace only with genuine Polygroup™ / Summer Waves™ 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 jewelry 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 122 cm (4 ft) 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 pool is not in use, as toys and similar items may 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.

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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, e.g. thunderstorms, 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 pool unsafe.
13. Please contact pool site dealer or manufacturer for additional safety signs if deemed necessary.
14. Select a certified pool professional. to perform pool service.
    ANY MAINTENANCE WORK TO AVOID RISK OF SERIOUS INJURY OR DEATH.
15. GENERAL INFORMATION: The pool must be stored away if temperature is expected to fall below 4ºC (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 4ºC (39°F) or exceed 51ºC (125°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 FUTURE USE.
21. The site for the pool must be cleared and levelled.
22. Do not leave an above-ground pool outside when empty. Cover the pool or disassemble and store the pool when not in use.

Installation recommendation

1. Filter can be permanently accessible and check the type of the filter media on filter packaging.
2. A weekly check is recommended for backwashing or cleaning.
3. It is essential to check that the suction openings are not obstructed.
4. It is advisable to stop the filtration during maintenance operations on the filtration system.
5. Regularly monitor the filter clogging level.
6. Minimum daily filtration operating time is 8 hours.



This marking indicates that this product should not be disposed of 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 wasted, use separate collection facilities.

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

Maximum Water Temperature: 35ºC (95 ºF)

Maximum total head (GS): 4.9 ft (1.5 m) / (S/BS/NF): 1.3 ft (0.4 m) (Not applicable for SFX330 & RX330 filter pump models).

IMPORTANT NOTES:

1. Keep this product more than 2 m (6.6 ft) away from the pool (Not applicable for SFX filter pump models).
2. Keep the plug of this product more than 3.5 m (11.5 ft) away from the pool.
3. If the product is provided with a transformer. The pump is only to be used with the power supply unit provided with the pump. The pump must only be supplied with a safety extra low voltage corresponding to the marking on the appliance.

The UK plug and Australia plug cannot be used outdoors, and can only be plugged into an indoor socket outlet or a waterproof socket outlet.

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 positioned more than 2 m (6.6 ft) away from the pool walls (Not applicable for SFX filter pump models).
- The power cord plugged to the 220-240 V electrical power source of filter pump must be positioned more than 3.5 m (11.5 ft) 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

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PRELIMINARY STEPS

1. READ ALL INSTRUCTIONS CAREFULLY and get a thorough understanding of what is required to assemble your 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 (not included) on hand for lubricating the gaskets and o-rings.

IMPORTANT NOTES

1. Installer shall follow written instructions provided for operation of the filter pump systems.
2. DO NOT use this product to dispense powdered chlorine, shock treatment, or any other type of chemicals as this will cause damage to the pump filter cartridge and the pool.
3. The SFX Series Filter Pump systems are manufactured by Polygroup™, double-insulated and grounded 220-240 V.A.C. - 50 Hz.

FILTER PUMP POWER INFORMATION

Model		Voltage(V)	Wattage (W)	Waterproof Level
SFX600	S/BS	220-240V~, 50Hz	65W	IPX5/IPX7
	NF	220-240V~, 50Hz	65W	IPX5/IPX7
	GS	12V~, 50Hz	60W	IPX5/IPX7

Model		Voltage(V)	Wattage (W)	Waterproof Level
SFX1000	S/BS	220-240V~, 50Hz	90W	IPX5/IPX7
	NF	220-240V~, 50Hz	90W	IPX5/IPX7
	GS	12V~, 50Hz	90W	IPX8

Model		Voltage(V)	Wattage (W)	Waterproof Level
SFX1500	S/BS	220-240V~, 50Hz	190W	IPX5/IPX7
	NF	220-240V~, 50Hz	190W	IPX5/IPX7
	GS	12V~, 50Hz	185W	IPX8

PARTS LIST

Refer to "Parts & Setup Instructions" booklet for parts illustrations.

Item	Parts Name	Qty.	Item	Parts Name	Qty.
❶	Motor Seal Nut	1	⓲	Return Fitting (RF), threaded	1
❷	Rubber Nozzle	1	⓳	RF Diverter	1
❸	A: SFX600/1000 Pump Motor Assembly	1	⓴	RF Locking Ring, threaded	1
	B: SFX1500 Pump Motor Assembly	1	㉑	Return Fitting Service Plug	1
❹	Motor Seal / Canister Gasket	1	㉒	Skimmer Seal Ring	1
❺	Top Cover	1	㉓	Water Stopper	1
❻	Weir Foam	1	㉔	SFX Skimmer Strainer Basket	1
❼	Type D Filter Cartridge (SFX600)	1	㉕	Skimmer Gasket Rubber Seal	1
	Type A/C Filter Cartridge (SFX1000 & SFX1500)	1	㉖	Transformer	1
❽	Weir	1		Power Cord	1
❾	Filter Pump Skimmer Canister	1	㉗	SFX600/1000 Rotor Assembly	1
❿	O-ring for Hose Connections	2		SFX1500 Rotor Assembly	1
⓫	Hose Clamp	2	㉘	SFX600/1000 Volute Cover	1
⓬	Return Hose	1		SFX1500 Volute Cover	1
⓭	90° Elbow	1	㉙	Volute Cover Lock Nut (SFX600 & SFX1000)	1
⓮	Return Fitting Lock Nut	1	㉚	Volute Cover Bolt And Nut Set (SFX1500 only)	4
⓯	RF Thrust Washer (White)	1	㉛	SFX600/1000 Motor body	1
⓰	Pool Wall (for reference only)	1		SFX1500 Motor body	1
⓱	Fitting Gasket	1			

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SETUP INSTRUCTIONS

Before assembly, take a few minutes to identify and become familiar with all the parts.

⚠ **WARNING:** CLIMBING HAZARD! PLEASE PREVENT CHILDREN FROM CLIMBING ON THE FILTER CANISTER TO GAIN ACCESS TO THE POOL.

Suction & Return Fittings Installation

1. Set up your pool following the pool Owner's Manual instructions. Do NOT fill water until the Filter Pump is properly installed. Locate the Outlet and Inlet openings on the pool wall.
2. Follow the steps as illustrated in “Setup Diagrams No.1 to 7” to set up the filter pump to your pool.

FILTER PUMP OPERATION

1. Plug the pump to a properly grounded receptacle at least 3.5 m (11.5 ft) 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 chemicals as needed, read "POOL WATER CARE" section.
   NOTE: 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 power cord.

PUMP MOTOR PROTECTION

IMPORTANT! This Filter Pump is protected by a thermal switch, a safety device that stops the pump from running when it's overheated, to prevent pump damage and prolong service life. If your pump turns off automatically, it’s likely the pool water temperature is too high or the water flow through the pump is insufficient for cooling the pump down. Check and correct the water flow, make sure motor rest 15 minutes at least and then restart the pump, or run the pump at night when the temperature is lower. If pump turns off automatically again, inspect your pump to clear any dirt blocked in the rotor.

PUMP MAINTENANCE

1. Check and adjust pH and chlorine levels daily using required chemicals. See POOL WATER CARE below.
2. Check the pump output daily. If water flow reduces, see Symptom 2 in TROUBLESHOOTING GUIDE.
3. Check the Pump, Hoses and Fittings for leaks. If a leak is found, see Symptom 4 in TROUBLESHOOTING GUIDE.
4. It is essential to replace any damaged parts as soon as possible. Use only spare parts from approved, reliable dealers, or from **polygroupstore.com**

5. Inspect the filter and all filter media regularly to ensure that there's no build-up of detritus that prevents good filtration. See FILTER CARTRIDGE USE & CARE below. The disposal of any used filter media should also be in accordance with applicable regulations/legislation.
6. Run the Pump for the recommended number of hours daily. If you are unsure of the time frame, please see Pump Operation Hours at **support.polygroupstore.com**.

FILTER CARTRIDGE USE & CARE

1. First, turn off & unplug the Pump.
2. Then remove the Top Cover ❺. Remove the Strainer Basket ㉔ and the Filter Cartridge ❼. To ensure pool water stays clean,please clean the filter cartridge every day and change when required.
3. Basic Cleaning: Clean the filter cartridge by pressure washing it inside and out with a garden hose. Allow a few hours for the filter to fully dry and CAREFULLY BRUSH the pleats to avoid damaging the filter cartridge. 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.
4. After cleaning the Filter Cartridge ❼, put it back to the canister, then, replace the Strainer Basket ㉔ and the Top Cover ❺.
5. A spare "stand-by" Cartridge is an excellent investment. You may need to clean or replace the Filter Cartridge when it's dirty, or before the correct chlorine and pH levels are attained. Also, a clean, well-maintained cartridge assures that your Pump will always be ready to operate at peak efficiency.
6. Suntan oils, body oils and algae can quickly build up and clog the pleats of the Cartridge, reducing the filtration efficiency. Therefore, it is imperative to remove such films of oils and/or algae.
   To remove oils: mix 0.45 kg (1 lb) of tri-sodium phosphate (TSP) or any other strong detergent and 19 L (5 gal) of water, and soak the Cartridge for 12 hours.
   To remove oils AND algae: same as above, and add 237 ml (0.5 pint) of pool chlorine or 473 ml (1 pint) of liquid household bleach to the solution ONE HOUR BEFORE removing the Cartridge from the solution. Thoroughly rinse the Cartridge before reusing it.
7. Excessive calcium and/or mineral deposits may also build up in the Cartridge, and requires to be handled differently. Contact and consult your local pool supplies store for solutions/treatment, and maintain an adequate pH level of pool water (see POOL WATER CARE below).
8. Dispose any used filter media in accordance with applicable regulations/legislation.
9. Always use genuine Polygroup™ Summer Waves™ Filter Cartridges; they are available at where you purchased your pool or from **polygroupstore.com**.

POOL WATER CARE

1. The following items are required to get your pool ready for use. They are available at polygroupstore.com or your local pool supplies stores:
   a. **Test kit** – for checking the chlorine and pH levels of the pool water
   b. **Floating chlorine dispenser (not included) and chlorine tablet** – for water disinfection and prevention of the growth of algae
   c. **pH control chemicals** – for adjusting the pH level up (soda ash) or down (acid)
   d. **Algaecides** – to eliminate algae
   e. **Superchlorinator** – to destroy ("shock") the combined chlorine, ammonia, nitrogen, and organic compounds that build up in pool water over time and with extended use
   f. **Leaf net with handle** – for removing leaves, trash, insects, etc. from the pool
2. IMPORTANT: The chlorine and pH levels must be maintained at all times:
   a. Check and adjust the pH and chlorine levels daily. 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.
   b. Recommended pH level: between 7.3 and 7.8
   c. Recommended chlorine level: between 1.0 ppm and 1.6 ppm
   d. Superchlorinate your pool at least every other week.
   e. Hot weather and heavy use may require the pH and chlorine levels to be maintained on the upper side of the scale as well as a weekly superchlorination.

f. Using a pool and/or solar cover will help maintain the pH and chlorine levels by reducing evaporation of pool water.
g. CAUTION: High chlorine concentration and low pH level will damage the pool/pool liner. You must follow the instructions on quantity and safe usage of the pool chemicals you use.
NEVER drop lumps or pellets of chemicals into the pool – this may present a hazard to the swimmers and/or damage your pool liner.

3. Clean your pool regularly with a garden-hose-powered vacuum from Polygroup™ or any pool supplies stores.
4. Using a foot bath prior to entering the pool will help keep the pool clean.
5. Avoid using well water. If you must use well water, always seek professional advice from your local pool chemical suppliers before adding ANY chemicals into it.
6. Find out the water capacity (in gallon) of your pool from the pool Owner's Manual. You will need it to determine the amount of chemicals required, or when you contact a pool supplies expert for water testing and advice on safe use of chemicals.
NOTE: Always follow the manufacturer label directions of the chemicals you choose to use.

PUMP DISASSEMBLY & STORAGE

1. First, turn the pump off and unplug the main power cord of the system.
2. Remove the Top Cover ❺, Strainer Basket ㉔ and Filter Cartridge ❼.
3. Loosen all Hose Clamps ⓫. Remove the Return Hose ⓬ and allow water to drain out.
4. Remove the Return Fitting ⓯ - ㉑ and clean the parts and lubricate Gasket ⓱ with petroleum jelly and reassemble all parts, then place them in a safe place.
5. Remove the Motor assembly ❸ out by turning the Motor Seal Nut ❶ counter-clockwise. Now clean the pump, dry it off, and then lubricate the Motor Seal ❹ on the motor with petroleum jelly. After this is done, reassemble the motor.
6. Remove the Skimmer Canister ❾ from liner by turning the Skimmer Seal Ring ㉒ counter-clockwise. Remove the Weir ❽ 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.

PUMP SERVICING INSTRUCTIONS

The most efficient way to troubleshoot or replace the Pump is to disassemble the entire filtration system. Please drain the water level to below the pool's Skimmer Opening, then disassemble the system following the steps below.

CAUTION:

1. You may get wet.
2. Please read and follow the instructions carefully. Incorrect handling may cause damages resulting in leaks between the Skimmer Canister ❾ and the pool wall.
3. Remember to keep all the parts in a safe place for reassembly later.

STEP 1: Removal of the Motor Assembly ❸

1. Unplug the filter pump from the power outlet.
2. Slide open the Skimmer Top Cover ❺, remove the Strainer Basket and the Filter Cartridge.
3. At the Return Fitting ⓲:
a. Unscrew and remove the RF Locking Ring and RF Diverter. Then insert the Service Plug to block the water flow.
b. Loosen the Hose Clamp attaching to the 90° Elbow ⓭. Carefully detach the Hose, and let the water drain from the Hose and the Canister.
NOTE: you may also detach the other end of Hose attaching to the Canister, but it is not required.

4. Unscrew the Skimmer Seal Ring ㉒ to remove the entire filtration system from the pool.
5. Flip the Canister upside down. Unscrew the Motor Seal Nut ❶ and take out the Motor Assembly.

IF YOU PREFER TO LEAVE THE SYSTEM ATTACHED TO THE POOL, please follow the process below instead.

CAUTION: You will need two people for some of the steps. Incorrect handling may cause damages resulting in leaks between the Skimmer Canister ❾ and the pool wall.

1.1 Unplug the filter pump from the power outlet.

1.2 Block the water flow:
a. Unscrew and remove the RF Locking Ring ⑳ and RF Diverter ⑲. Then insert the Service Plug ㉑ to block the water flow.
b. Push the Water Stopper ㉓ tightly into the Skimmer Seal Ring ㉒.

1.3 Put a water container (not included) under the Skimmer to collect water. Slide open the Top Cover ❺, and take out the Strainer Basket ㉔ and Filter Cartridge ❼.

1.4 Have one person holding the Water Stopper and Skimmer Canister ❾, while the other person unscrews the Motor Seal Nut ❶.
CAUTION: DO NOT PUSH OR PULL THE CANISTER as this may cause damage between the Canister and pool liner.

1.5 Slowly take out the Motor Assembly ❸. Be careful not to lose the Rubber Nozzle ❷ or Canister Gasket ❹.

STEP 2: Rotor Inspection/Replacement

The Pump ❸ is consisted of a Rotor Assembly ㉗ and its related parts. If the Rotor and/or its parts is/are broken, or the Rotor, even in perfect condition, is not seated in place between the Volute Cover ㉘ and Pump Body ㉚, the Pump will not function properly.

2.1 Loosen the Volute Cover Screws ㉙, and remove the Volute Cover ㉓.

2.2 Pull the Rotor Assembly ㉗ out from the Pump Body ㉚.
Inspect the Rotor to make sure that the Shaft End Cap (A), Washer (B), Impeller (C), Magnet Axle (D), Rotor Shaft (E) are intact. The Rotor Shaft (E) should go through all the parts and into both Shaft End Cap (A). If any of the parts is broken, you can purchase a new Rotor Assembly from **polygroupstore.com** without having to replace the whole Pump. For more details, please see Pool Support – Filtration System Troubleshooting at **support.polygroupstore.com**

2.3 Once the inspection or replacement is done, carefully insert the Rotor Assembly ㉗ back into the Pump Body ㉚. The force of the magnet will pull the Rotor down in place.

2.4 Align the Volute Cover ㉘ with the top Shaft End Cap, then tighten with the Volute Cover Screws ㉙.

2.5 Attach the Rubber Nozzle ❷ to the outlet of the Pump Body ㉚.

STEP 3: Pump Replacement/Reassembly

3.1 Lubricate the Canister Gasket ❹. Turn the Skimmer Canister ❾ upside down, place the Gasket into the inner groove at the bottom.
IMPORTANT: Make sure that the cord of the Motor Assembly ❸ is placed through the Motor Seal Nut ❶ BEFORE replacing the Pump.

3.2 a. If your Pump is removed from the pool, slowly insert the Motor Assembly back into the upside-down Canister. There's an indent on the inside of Canister (only visible from bottom), which needs to be aligned with an indent at the bottom of the Motor (marked "ALIGN"); to this end, make sure that the arrow of the "ALIGN" mark is pointing to the Canister indent.

3.2 b. If your Pump is left attached to the pool, reach in through the Canister to pull the Motor Assembly up and insert it back into the Canister. Make sure that the key of the Canister is slotted into the notch on the Pump to align the Rubber Nozzle ❷ with the hose opening of the Canister. Outlet of Canister and Rubber Nozzle ❷ on the pump should be aligned, otherwise the Pump may leak even already locked in place.

3.3 Once the Motor is correctly aligned, match the threads of the Motor Seal Nut ❶ to that of the Canister, and tighten by twisting the Nut counterclockwise.
IMPORTANT: Make sure the Nut and Canister are not cross-threaded; otherwise leaks may occur.

PUMP STORAGE & WINTERISING

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 recommend you drain, disassemble, and properly store the pump, when the temperature drops below 0°C (32°F).

Winterising Your Pump and Long-Term Storage

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, where the temperature is above 0°C (32°F) and below 40°C (104°F)

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TROUBLESHOOTING GUIDE

Symptom		Cause	Solution
1	Motor fails to start or kicks on and off	A. Not plugged in	A. Plug the Power Cord Set to a 3-wire grounded power outlet.
		B. Low Voltage	B. Check the line voltage. It must be 215 to 245 V AC.
2	No or slow water flow through the return fitting	A. Low pool water level	A. Water level must be between the Min/Max Limit Lines marked on Skimmer canister ring.
		B. Clogged Inlet or Return	B. Check for obstructions at strainer basket, filter cartridge, return hose and return fitting.
		C. The Filter Cartridge is too dirty	C. Clean or replace the Cartridge following the steps of **FILTER CARTRIDGE USE & CARE**.
		D. Motor Rotor blocked by dirt	D. Refer to pump servicing instructions to clean dirt.
3	Filter pump is not cleaning the pool properly (e.g. cloudy/green water)	A. Inadequate chlorine level	A. Maintain the chlorine level between 1.0 - 1.6ppm.
		B. The Filter Cartridge is too dirty	B. Clean or replace the Cartridge following the steps of **FILTER CARTRIDGE USE & CARE**.
		C. Inadequate pH level	C. Maintain the pH level between 7.3 - 7.8.
		D. The Filter Cartridge u is damaged	D. Inspect the filter cartridge for holes or tears. If it's visibly damaged, replace the filter cartridge.
		E. Water flow is slow	E. Check for obstructions at strainer basket, filter cartridge, return hose and return fitting.
		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 is too dirty	G. Chemicals are essential to keep the pool water clean. Clean pool and filter more often.
4	Water leakage at	A. Hose area: Return hose does not fit well with skimmer cuff and wall fitting elbow	A. Make sure the Hose Clamp ⑪ is positioned properly over the hose and O-ring ⑩ to ensure a proper seal. Adjust hose clamp, check o-ring and retighten. Check hose for any holes or cracks and replace if needed.
		B. Bottom of canister	B. 1) The Motor Seal must sit in the inner groove in the bottom of the canister before installing pump (Exception – the SFX1500 only has one groove). 2) Check pump alignment. The arrow with the indentation on the pump **MUST** point to the matching indentation on the canister. 3) Make sure that the Motor Seal Nut (Locking ring) is not cross threaded.
		C. Between the canister and the pool liner - Incorrect installation.	C. Make sure the Skimmer Gasket Rubber Seal ㉕ is installed properly. Make sure the liner is not in the threaded grooves. No gap should be visible in this area. Screw the Seal Ring ㉒ tightly onto canister.

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