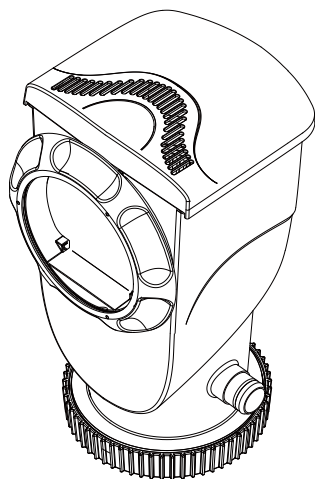


SUMMER WAVES™ SKIMMERPLUS™ FILTER PUMP

FOR ABOVE GROUND SWIMMING POOLS

SFX600 / SFX1000 / SFX1500 models



READ, AND KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

For any set up and troubleshooting issues, please visit
<https://polygroup.zendesk.com/hc/en-us> Customer Service: (888)919-0070

DO NOT RETURN PRODUCT TO STORE

To order parts and accessories,
 please visit www.polygroupstore.com

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 (888) 919-0070. 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 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.

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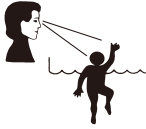
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IMPORTANT SAFETY INSTRUCTIONS

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.



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 Equipments

1. The use of artificial pool lighting is at the discretion of the pool owner. Lighting, when installed, should be in accordance with Article 680 of the National Electrical Code (NEC) or its latest approved edition and in consultation with a licensed electrical professional.
2. Keep all electrical lines, radios, speakers and other electrical appliances away from the pool.
3. Do not place pool near or under overhead electrical lines.
4. All electrical components installed in and/ or adjacent to an aboveground/onground residential swimming pool shall be installed in accordance with and shall comply with the requirements of the latest published edition of NFPA 70, National Electrical Code (NEC®) Article 680, Swimming pools, fountains, and similar installations, and any state or local code.

Filter Pump Awareness

1. **WARNING:** Risk of Electric Shock. Connect only to a grounding type receptacle. This product is provided with a ground-fault circuit-interrupter. If replacement of the plug or cord is needed, use only identical replacement parts.
2. **WARNING:** To reduce the risk of electric shock, replace damaged cord immediately.
3. **WARNING:** To reduce the risk of electric shock, do not use extension cord to connect unit to electric supply; provide a properly located outlet.
4. **CAUTION:** To reduce the risk of electric shock the pool must be installed no closer than 6 feet (1.8 m) from any electrical outlet. Do not place portable appliances closer than 5 feet (1.5 m) from the pool.
5. **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.

6. **CAUTION:** For continued protection against possible electric shock this unit is to be mounted to the base in accordance with the installation instructions.
7. Do not bury cord. Locate cord to minimize abuse from lawn mowers, hedge trimmers, and other equipment.
8. The unit is provided with a ground-fault circuit-interrupter (GFCI). To test the GFCI, push the test button. The GFCI should interrupt power. Push the reset button. Power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the pump without the test button being pushed, a ground current is flowing, indicating the possibility of an electric shock. Do not use this pump. Disconnect the pump and have the problem corrected by a qualified service representative before using.
9. 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.
10. 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.
11. The floor of the pool shall be visible at all times from the outside perimeter of the pool.
12. 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.
13. 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') [366 cm] 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.
14. Pool shall be located at a minimum distance of 6 ft (1.83 m) from any receptacle, and all 125-volt 15- and 20-ampere receptacles located within 20 ft (6.0 m) of the pool shall be protected by a ground fault circuit interrupter (GFCI), where distances are by measuring the shortest path the supply cord of an appliance connected to the receptacle would follow, without piercing a floor, wall, ceiling, doorway with hinged or sliding door, window opening, or other effective permanent barrier, to the inside wall of the pool.

Circulation Systems

1. Installers shall follow written instructions regarding positioning of all equipment connected to the circulation systems.
2. The installer shall follow written instruction provided for operation of 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 clarify 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 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 barrier 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. Safety signs shall comply with requirements of ANSI-Z535 and to use signal wording.
3. DO NOT attempt to assemble this pool in adverse weather conditions, windy conditions or when the temperature is below 60°F.
4. This is a storable filter pump, which should be disassembled and stored when temperatures are expected to fall below 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. All electrical outlets should have a GFCI and connections should be a minimum of 5 feet (1.52 m) from the outside perimeter of the wall of the pool.
From 5–10 feet (1.52–3.05 m), there should be either a fixed connection (outlet box) or twistlock connection with a GFCI.
6. Connect power cords to a 3-wire grounding-type outlet only.
7. Keep all breakable objects out of the pool area.
8. Alcohol consumption and pool activities do not mix. Never allow anyone to swim, dive or slide under the influence of alcohol or drugs.
9. 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.
10. Do not install on a deck or other surface at, above, or slightly below the top rail of the pool.
11. Do not use the filter pump during severe weather conditions, i.e. electrical storms, tornadoes, etc.
12. Be aware of overhead power lines when vacuuming your pool or using a telescoping pole.
13. Check regularly for signs of wear or loose bolts that could make the deck unsafe.
14. Please contact pool site dealer or manufacturer for additional safety signs if deemed necessary.
15. For pool service, select a certified pool professional.

For additional safety information, see www.APSP.org.

Consumer Awareness Booklets and Information Source

Contact: U.S. Consumer Product Safety Commission at www.CPSC.gov/cpsc/pub/pubs/pool/pdf, Pub. #362 "Safety Barrier Guidelines for Home Pools".

1. The Sensible Way to Enjoy Your Aboveground/Onground Swimming Pool
2. Children Aren't Waterproof
3. Layers of Protection
4. Pool and Spa Emergency Procedures for Infants and Children
5. Be Safety Aware Copies of the above brochures are available free from the APSP. Go to: www.APSP.org.

Safety Education Programs and Materials Educational programs and materials (i.e., seminars, workshops, brochures, videos, instructional guides) are available from the APSP, other aquatic safety groups, and by private firms. As a means of communicating useful safety information to pool owners/operators, and users, industry members are permitted to provide such information to owners/operators and to request or require owners/operators to sign a statement that they have received, read, and will follow the guidelines.

Other sources of safety information:

- www.cdc.gov
- www.cpsc.gov
- www.drowningpreventionalliance.com
- www.nspf.org
- www.safekids.org

ANSI American National Standards Institute

25 West 43rd Street, New York NY 10036
Contact: 212-642-4900
www.ansi.org

APSP Association of Pool & Spa Professionals

(formerly National Spa and Pool Institute)
2111 Eisenhower Avenue, Alexandria VA 22314
Contact: 703-838-0083
www.apsp.org

ASME American Society of Mechanical Engineers

3 Park Avenue, New York NY 10016

Contact: 212-591-8562

www.asme.org

NSPI National Spa and Pool Institute (ss APSP)**UL Underwriters Laboratories**

333 Pfingsten Road, Northbrook IL 60062-2096

Contact: 847272-8800

www.ul.com

NSF NSF International

789 N. Dixboro Rd,

P.O. Box 130140

Ann Arbor MI 48113-0140

734-769-8010

www.nsf.org

ASTM ASTM International (formerly American Society of Testing & Materials)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959

Contact: 610-832-9585

610-832-9555 (fax)

www.astm.org

NEC National Electrical Code (see NFPA)

NFPA National Fire Protection Association

1 Batterymarch Park, Quincy MA 02269

Contact: 617-770-3000

www.nfpa.org

Filtration Systems

Any equipment connected to the circulation systems shall be positioned so as to prevent their being used as a means of access to the pool by young children. (See the latest published edition of ANSI/APSP-8 Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs.)

Barrier

Barrier is necessary to provide protection against potential drowning and near drowning and that barriers are not a substitute for the constant supervision of children. (See latest published edition of ANSI/APSP-8 Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs.)

Risk of Drowning, Entrapment, and Diving Accidents

Publications are available that describe the risk of drowning, entrapment, and diving accidents. Available publications related to pool safety include the Association of Pool and Spa Professionals' (APSP) booklets entitled: The Sensible Way to Enjoy Your Aboveground/ Onground Swimming Pool, Children Aren't Waterproof, Pool and Spa Emergency Procedures for Infants and Children, Layers of Protection, and the latest published edition of ANSI/APSP-8 Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs.

Installer Responsibilities

All of these components shall be positioned so as to prevent their being used as a means of access to the pool by young children.

(See the Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs.)

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.
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 - 120 V.A.C. - 60 Hz. (ALL Units must have a minimum of 105 V.A.C. to start and run properly.)

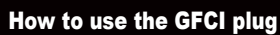
FILTER PUMP POWER INFORMATION

FILTER PUMP MODEL	WATTAGE	AMPERAGE
SFX600 Filter System	70 watts	1.7amps
SFX1000 Filter System	115 watts	1.4amps
SFX1500 Filter System	180 watts	3.1amps

PARTS LIST

ITEMS	PARTS NAME	QTY.	ITEMS	PARTS NAME	QTY.
1	Motor Seal Nut	1	14	Fitting Lock Nut	1
2	Nozzle	1	15	Return Fitting Washer (RF Washer)	1
3	Motor Assembly	1			
4	Canister Gasket	1	16	Pool Wall (Ref.)	1
5	Top Cover	1	17	Fitting Gasket	1
6	Weir Foam	1	18	Pool Wall Fitting	1
7	Filter Cartridge	1	19	Return Fitting Diverter	1
8	Weir	1	20	Locking Ring	1
9	Filter Pump Canister	1	21	Return Fitting Plug (RF Plug)	1
10	Filter Pump Port / Fitting O-ring	1	22	Skimmer Seal Ring	1
			23	Water Stopper	1
11	Hose Clamp	1	24	Strainer Basket	1
12	Return Hose	1	25	Skimmer Gasket	1
13	Elbow 90°	1	26	GFCI Power Cord Set	1

Should you encounter any problems, contact Customer Service at (888) 919-0070 from 8 AM to 5 PM Mon. thru Fri.
EST. Extended operating days and hours during peak season requirements.



**Press
"RESET"
Button
To Start
Pump
Operation**

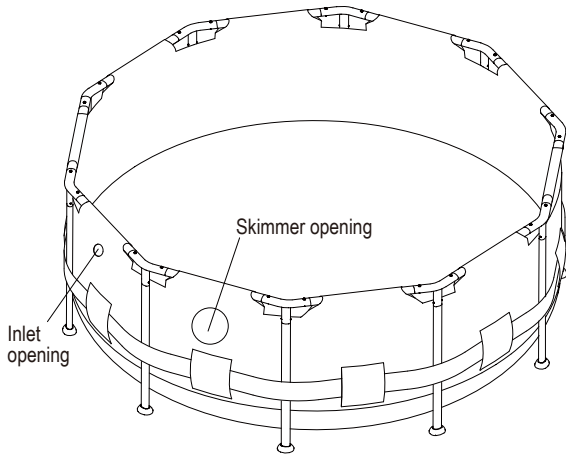
***Do not connect to a timer device**

SETUP INSTRUCTIONS

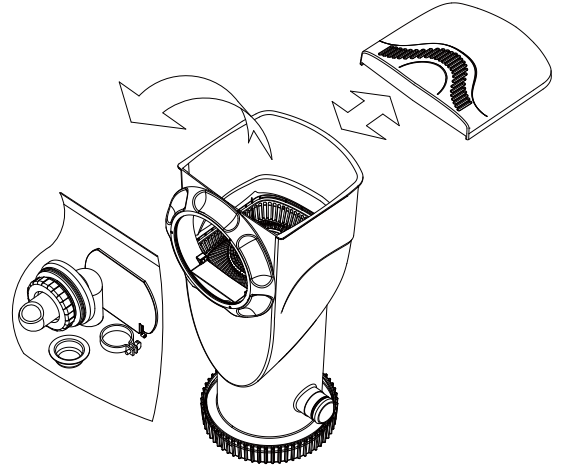
Before assembling your product, please take a few minutes to check the contents and become familiar with all the parts.

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

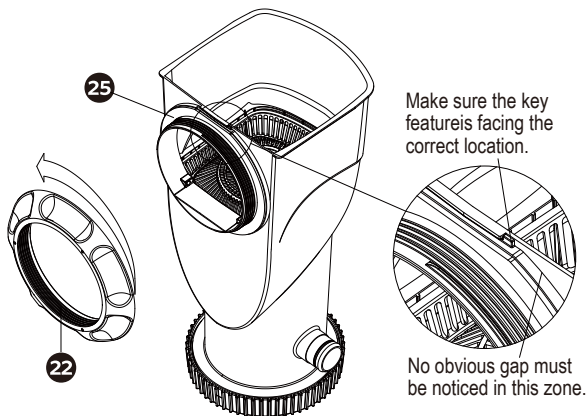
1. Set up the pool by following all instructions comes with the pool. Do not fill water until the Filter Pump is properly installed. Locate the Skimmer and Inlet openings on the pool wall.



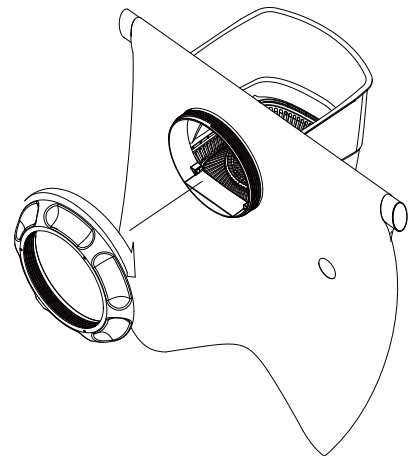
2. Dismount the Skimmer Top Cover **5** and take out the parts contained inside.



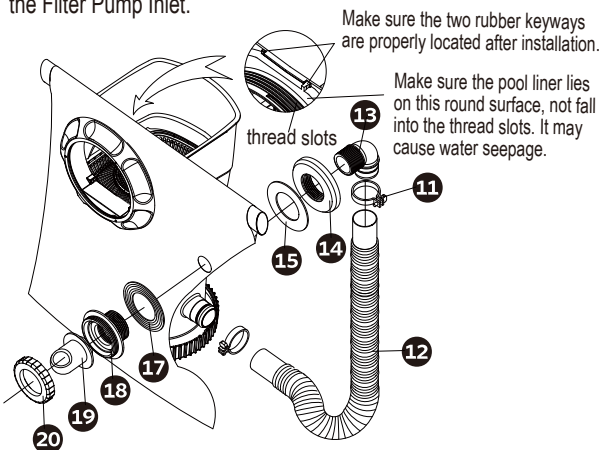
3. Remove the Seal Ring **22** by unthreading it counterclockwise. Keep Skimmer Gasket **25** on its proper location.



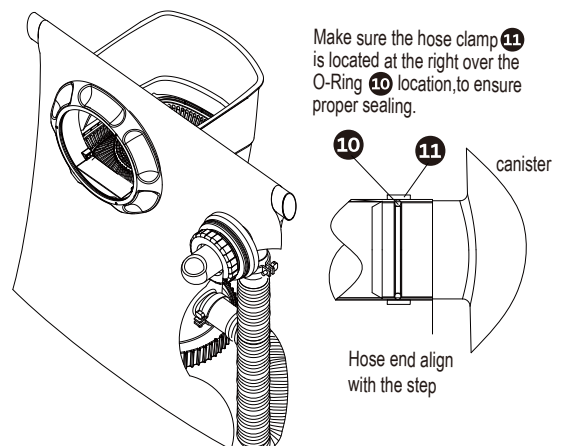
4. After placing the threaded intake of the skimmer inside its corresponding pool hole, screw back the seal ring **22** tightly on its place.



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

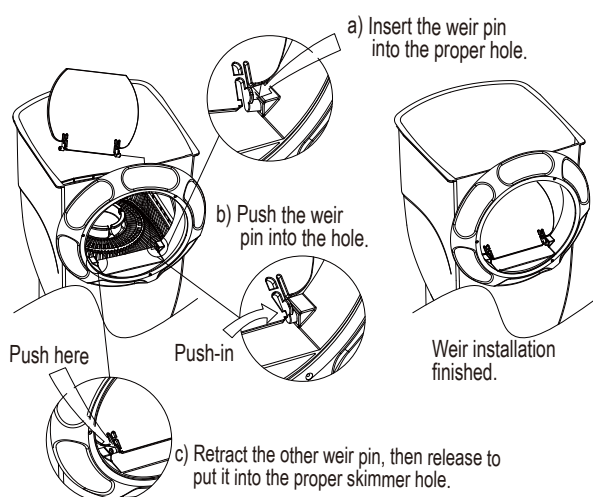


6. Final assembly must look like the following schematic.

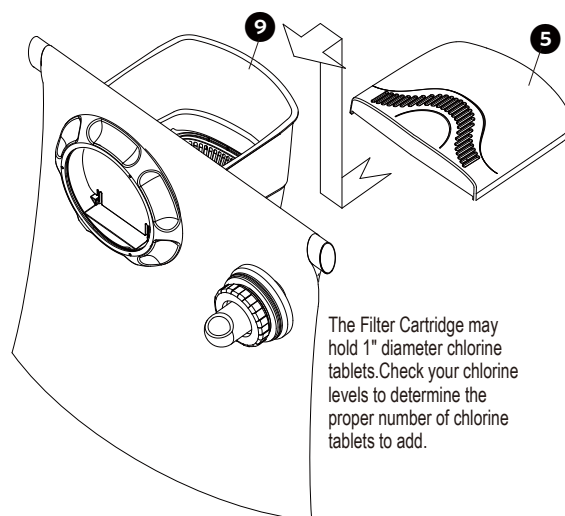


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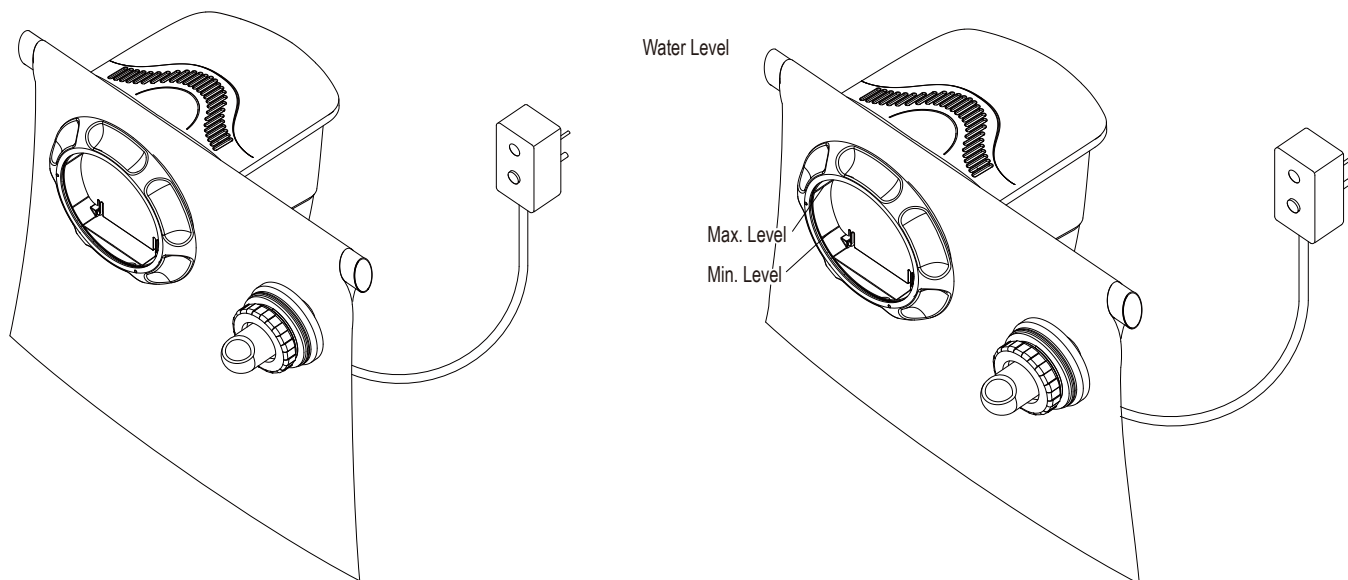
7. Install weir **8** onto the canister.



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



9. Fill water to a proper level, plug in the GFCI, and enjoy clean pool water.



FILTER PUMP OPERATION

1. Plug the GFCI power cord to a properly grounded receptacle at least 15 feet (4.5m) away from the pool.
2. **IMPORTANT:** To start the filter pump, press the RESET button on the GFCI plug **26**.
3. 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.
4. Test water and adjust as needed, read Section 9 - "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!
5. 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®.
6. To turn off the filter pump, unplug the GFCI power cord **26**.

How to use the GFCI plug

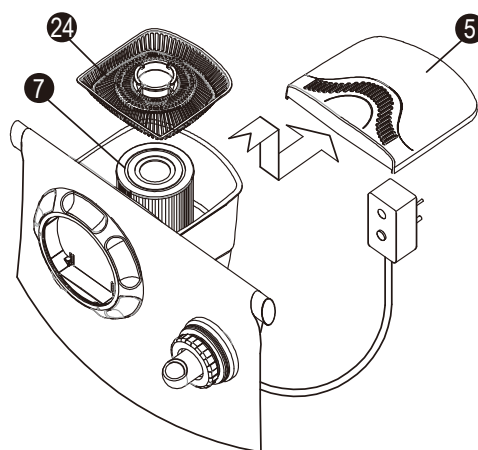


PUMP MOTOR PROTECTION

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.

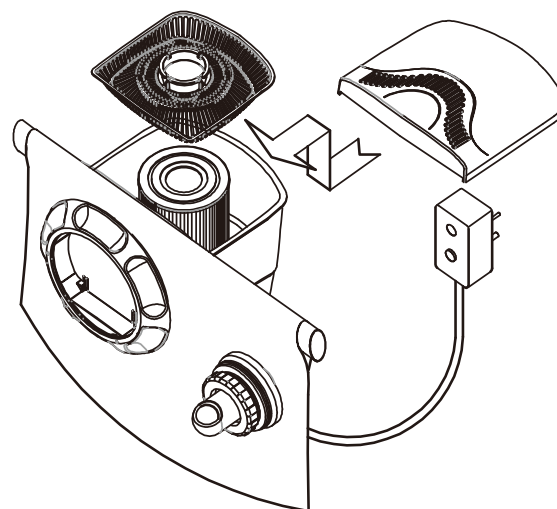
FILTER CARTRIDGE CLEANING AND REPLACEMENT

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 by thoroughly pressure 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, bodyoils, 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 1pint 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".

Should you encounter any problems, contact Customer Service at (888) 919-0070 from 8 AM to 5 PM Mon. thru Fri.
EST. Extended operating days and hours during peak season requirements.

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 MANUAL 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.

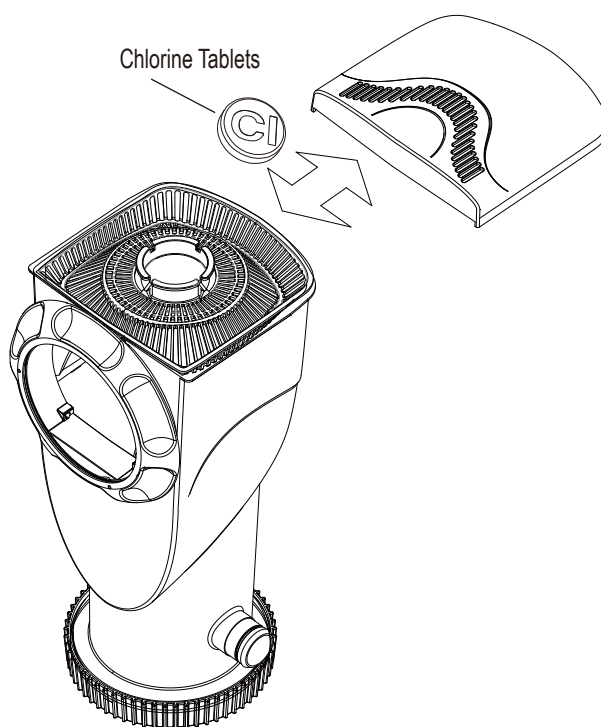
- Maintain pH level between 7.3 and 7.8.
- Maintain chlorine level between 1.0 and 1.6 ppm (parts per million).
- Superchlorinate your pool at least every other week.

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 kicks on and off	A Unit Not Plugged In	A Plug the GFCI into a 3-wire grounded outlet.
	B GFCI Breaker Tripped	B Reset circuit breaker. If problem persists, have an electrician to check circuit.
	C Low Voltage	C Check the line voltage. It must be 105 to 125AC 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

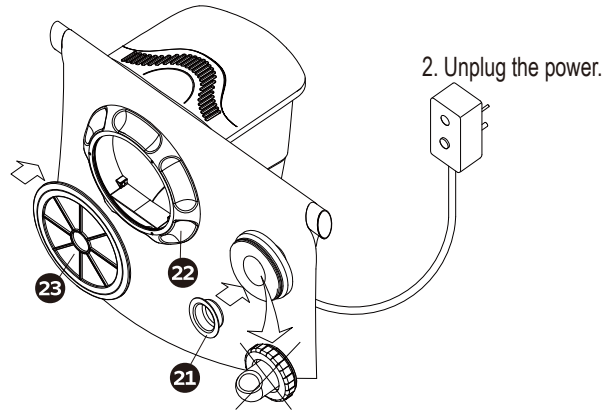
1. First, unplug the main power cord of the system.
2. Remove the Top Cover **5**, Strainer Basket **24** and Filter Cartridge **7** and remove any chlorine tablets left inside the core section of the filter.
3. Loosen all Hose Clamps **12**. Remove the Return Hose **13** and allow water to drain out.
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.

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EST. Extended operating days and hours during peak season requirements.

MOTOR REPLACEMENT INSTRUCTION

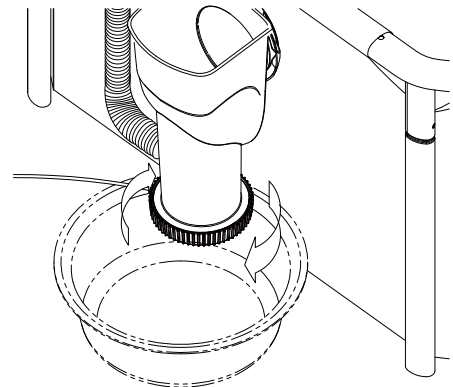
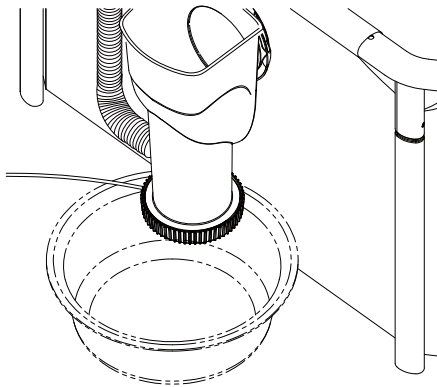
IMPORTANT: The Preferred Method Is To Drain Enough Water From The Pool First Then Dismount The Entire Skimmer System Before Replacement. If User Prefer To Operate It On The Pool, Please Refer To Below Process. Please Note Incorrect Handling Method May Cause Water Leakage Between Canister And Liner.

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.

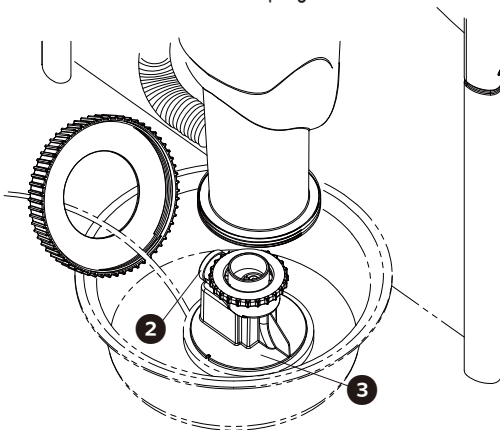


2. Unplug the power.

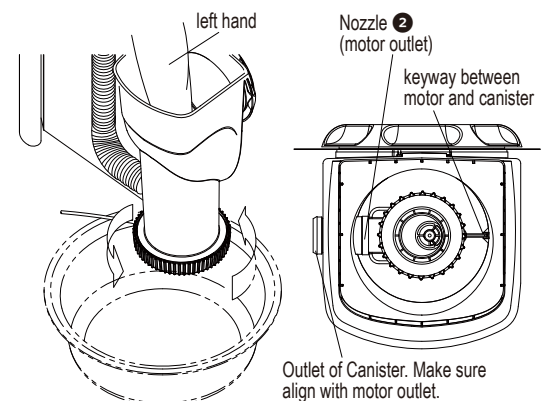
3. Detach the Locking Ring **20** and Diverter Fitting **19** by anticlockwise turning. Insert the Return fitting plug (RF Plug) **21**.



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.

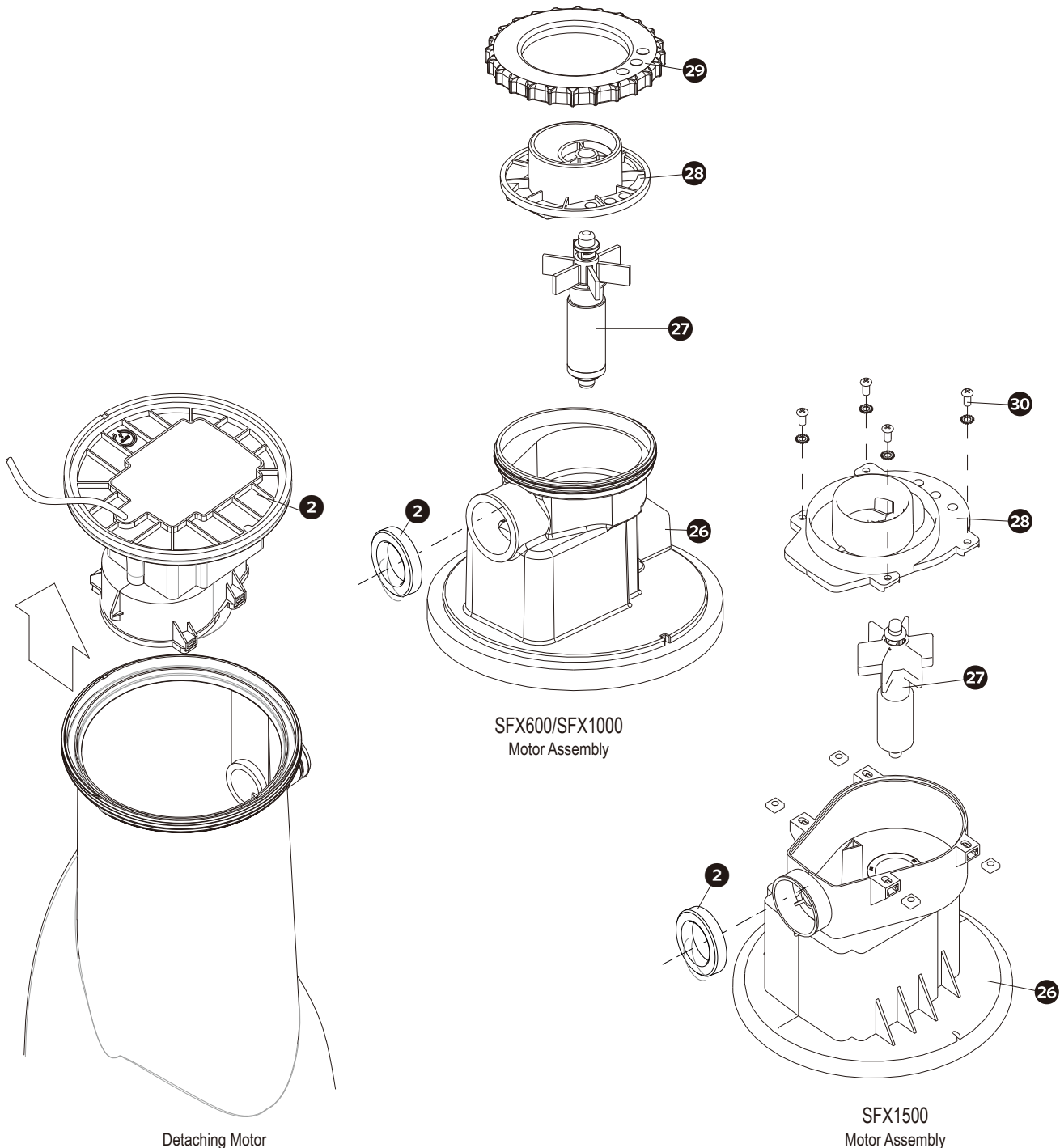


6. Disassemble Motor assembly **3**
Be careful not to lose the rubber nozzle **2**

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 Motor Seal Gasket ②.
3. Refer to below motor assembly illustration to replace the Rotor Assembly ②⑤, remove the Volute Cover ②⑥ and pull out the Rotor Assembly ②⑤ from the Stator ②④. Insert new Rotor Assembly ②⑤ into the Stator ②④.
4. Align the Shaft properly and fasten the Volute cover ②⑤ with the Volute Cover Lock Nut ②⑦ or with the Volute Cover Bolt and Nut Set ②⑧.
5. Attach the Motor Seal ④ to the outlet of Motor Assembly.
6. Slowly insert the motor assembly back into the Canister ⑨, so that the Motor Seal ④ 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 Motor Seal ④ is properly in place.



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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	P58X0601C000	P58X1001C000	P58X1500C000
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	P58PF1720W05	P58PF1720W05	P58PF1720W05
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)	--	--	P5800400080A

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