SFS TYPE SWIMMING POOL FILTER SYSTEM
OWNER’S MANUAL FOR ABOVE GROUND
SWIMMING POOLS

To order parts, accessories, or answers to frequently asked questions about your product please visit
WWW.POLYGROUP.COM Customer Service: (888) 919-0070

DISTRIBUTED BY: POLYGROUP LIMITED (MCO)
Avenida Xian Xing Hai, Centro Golden Dragon, 11 Andar M, Macau

LIMITED WARRANTY
Polygroup Limited (Macao Commercial Offshore), (hereinafter “Polygroup”) warrants to the original purchaser only, the SFS 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 stone 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 Polygroup Limited (Macao Commercial Offshore), (hereinafter “Polygroup”) warrants to the original purchaser only, the SFS 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 stone 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 Manufacturers 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.

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

1. READ AND FOLLOW ALL INSTRUCTIONS
2. WARNING - To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times by an adult who is capable of assisting a child in distress.
3. WARNING - Risk of electrical shock. Connect only to a grounding type receptacle. This product is provided with a ground-fault circuit-interupter. If replacement of the plug or cord is needed, use only identical replacement parts.
4. WARNING - To reduce the risk of electrical shock, replace damaged cord (with pump body) immediately. NEVER bury cord. Locate cord to eliminate abuse or contact from lawn mowers, hedge trimmers, and other equipment. NEVER use an extension cord to connect unit to electric supply; provide a properly located outlet.
5. CAUTION - The power filter is for use with storable pools only. DO NOT use with permanently installed pools. A storable pool is constructed so that it may be 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 so that it cannot be readily disassembled for storage.
6. The unit is provided with a ground-fault circuit-interrupter (GFCI) to interrupt the electrical power flow in the case of electrical shock. Pushing the TEST button will interrupt the power flow. Pushing the RESET will restore power. 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.
7. SAVE THESE INSTRUCTIONS.

PRELIMINARY STEPS
1. READ ALL INSTRUCTIONS CAREFULLY and get a thorough understanding of what is required to assemble your Type SFS Power Filter.
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.

POWER FILTER IMPORTANT NOTES:
1. Installer shall follow written instructions provided for operation of the circulation 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 Filter Cartridge (9) 3-3/4" will hold as many as 2 of the 1" diameter chlorine tablets and the 8" 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 pump runs. You must have the type of Filter Cartridge (9) with a central core mesh divider (See page 3) 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.

Should you encounter a problem with your Polygroup Product, please do not return the product to the place or 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. 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.

How to use the GFCI plug:

Press "RESET" Button To Start
Pump Operation

*Do not connect to a timer device

F1000C / F1500C / F2000C & F600C & F700C
084-120839 with GFCI - 2013
4. These Skimmer Filter Systems are manufactured by Polygroup and ETL control number 4000608 - double insulated and grounded - 115 V.A.C. - 60 Hz. (Unit must have a minimum of 105 V.A.C. to start and run properly.) The units' wattage and capacity is as follows:

<table>
<thead>
<tr>
<th>Pump System</th>
<th>Wattage</th>
<th>Amperage</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF5600 Filter System with F600C Pump</td>
<td>46 watts</td>
<td>0.8 amps</td>
<td>580 G.P.H.</td>
</tr>
<tr>
<td>SFS600 Filter System with F700C Pump</td>
<td>57 watts</td>
<td>1.1 amps</td>
<td>780 G.P.H.</td>
</tr>
<tr>
<td>SFS1000 Filter System with F7000C Pump</td>
<td>57 watts</td>
<td>1.1 amps</td>
<td>1075 G.P.H.</td>
</tr>
<tr>
<td>SFS1000 Filter System with F1000C Pump</td>
<td>80 watts</td>
<td>2.2 amps</td>
<td>57 watts</td>
</tr>
<tr>
<td>SFS1000 Filter System with F700C Pump</td>
<td>120 watts</td>
<td>2.2 amps</td>
<td>1500 G.P.H.</td>
</tr>
<tr>
<td>SFS2000 Filter System with F2000C Pump</td>
<td>210 watts</td>
<td>2.2 amps</td>
<td>2000 G.P.H.</td>
</tr>
</tbody>
</table>

NOTE: These Skimmer Filter Systems are manufactured by Polygroup and ETL control number 4000608 - SFS600 Filter System with F600C Pump 46 watts 0.8 amps 580 G.P.H. SFS1000 Filter System with F600C Pump 57 watts 1.1 amps 780 G.P.H. SFS1000 Filter System with F700C Pump 57 watts 1.1 amps 1075 G.P.H. SFS1000 Filter System with F7000C Pump 80 watts 2.2 amps 57 watts SFS1000 Filter System with F700C Pump 120 watts 2.2 amps 1500 G.P.H. SFS2000 Filter System with F2000C Pump 210 watts 2.2 amps 2000 G.P.H.

**Important!**

When Pump needs servicing or working on Return Hose (13), turn off power and install the Service Plug (30). When Pump needs servicing or working on Return Hose (13), turn off power and install the Service Plug (30) only when servicing system.

NOTE: When Pump needs servicing or working on Return Hose (13), turn off power and install the Service Plug (30) into Pool Wall Fitting (15) after removing Locking Ring (21) and Diverter Fitting (20). Also install a Service Plug (30) into center hole of the Skimmer Canister (8) after removing the Pump Retaining Nut (7). See Fig. 1. When service is complete remove both Service Plugs (30) reversing the procedures above.

Should you encounter any problems, contact the Customer Service at (888) 919-0070. Extended operating days and hours during peak season requirements.

**POWER FILTER INSTALLATION:** (Reference Page 3, Fig. 1)

**WARNING - EXTREMELY IMPORTANT!**

- Risk of electrical shock, connect only to a grounding type receptacle.
- Receptacle must be at least 10 feet away from pool.
- Filter system can be used as many hours as desired.
- Do not use an extension cord to connect unit to electric supply; provide a properly located outlet.
- Do not bury the cord.

**NOTE** - The Power Filter will be in four sections: a pump/filter assembly/hardware bag; and return hose.

A. First, locate the filter assembly, remove the Lock Top (11), Strainer Basket (10), and Filter Cartridge (9) from the assembled Filter Case. Locate the mounting location for the power filter on the Pool Wall (32). Install one Gasket (22) over the four alignment pins on the skimmer canister (8) and place it up to the outside pool wall inserting the four large holes in the pool wall. Now locate and screw the skimmer to hold it in place add the inside gasket (22) over the pins on the inside of the pool wall. Now place the Face Plate (23) over the alignment pins. Place the Hex Head Screws (24) into the holes. Start all the Hex Head Screws one and a half turns each. Then proceed in tightening them in equal turns each in sequence around the Face Plate until all are equally tight and you have a good even seal. Warning! Be sure to not over tighten them, you just need a water tight seal.

B. Now lubricate the pump O-ring with petroleum jelly (not provided). Hold the Skimmer Canister (8) securely, and install motor pump so that the outlet on the volute housing extends out of the opening in the side of the filter case as shown in Fig. 2. Insert the motor pump until the two ribs on the inlet of the volute housing protrude through the bottom of the filter case. Reach down inside the canister and place the Pump Retaining Nut (7) over the top of the volute housing inlet as shown in Fig. 2. Twist the Nut (7) clockwise until it is snug.

C. Locate the Pool Wall Fitting assembly parts (15-21). Lubricate the black Wall Fitting Gasket (16) with petroleum jelly and install it over the threads on the Pool Wall Fitting (15). Insert the pool wall fitting with the gasket through the hole in the wall from the inside of the pool. Place the Thrust Washer (17) over the pool wall fitting and then thread the Wall Fitting Nut (18) onto the fitting until it is hand tight. DO NOT over tighten the wall fitting nut or wrinkle the pool wall around the Wall Fitting Thrust Washer (17) or Wall Fitting Gasket (16). Now apply some petroleum jelly to the thread of the Elbow (99) (19) and install the elbow into the wall fitting assembly. Install the Diverter Fitting (20) and Locking Ring (21) onto the wall fitting.

D. Get the Return Hose (13) and remove the two Hose Clamps (14) from the hardware bag. Loosen the hose clamps and slide them over the end of the hose. It is recommended to lubricate the O-Rings (12) on the Volute Housing and the Elbow (19) before installing the hose (13). Install the hose on the pump volute housing and on the Elbow (19). Tighten both of the Hose Clamps (14). See Fig. 3.

E. Place the Filter Cartridge (9) and the Strainer Basket (10) back into the Skimmer Canister (8). It is important that the Filter Cartridge (9) slips over the Pump Retaining Nut (7) and seals at the bottom of the canister so that the Strainer Basket (10) will seat in it's groove inside the canister. See Fig. 4. Place the Lock Top (11) on top of the Skimmer Canister (8) and lock it in place by turning it clockwise until it is locked. Push the Weir Foam Pad (25) into the Weir (26) and under the tabs, to hold it in place. Take the Weir (26) and slide it into the grooves from inside the pool. See Fig. 4. Once the weir is pushed inside the grooves, flip it over as shown by the Arrow #2 in Fig. 4, to lock it in place. NOTE: The weir can ONLY be pushed into the grooves as shown by arrows #1 in Fig. 4, by holding it horizontal. Be sure the weir moves freely through the opening, if not carefully trim away any obstructing material to allow the weir to move freely.

F. After the pool is filled, SEE (WATER LEVEL Fig. 4) check the hose connections and fittings to make sure there is no water leakage. If any leaks are found, see #4 in the Troubleshooting guide on page 8.
**FILTER CARTRIDGE CLEANING INSTRUCTIONS:**

A. First, unplug (turn off) the Power Filter. Then remove the Lock Top (11) by turning it counter clockwise.

B. The filter cartridge can be cleansed of coarse dirt and debris by pressure washing inside and out with a bleaching agent, such as household bleach. or 

C. Suntan oils, body oils, and algae can form a coating on the filter pleats which may not be thoroughly removed after hosing the cartridge. Therefore, after hosing the cartridge, allow the filter to dry and CAREFULLY BRUSH, but 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.

D. Excessive calcium and/or mineral deposits may build up on a filter cartridge and should be handled as a calcium or mineral build-up. Now is a good time to put chlorine tablets into the Filter (9) if needed for the treatment of calcium or mineral deposits. Check pool chemistry for high pH or alkalinity; this may cause a calcium or mineral build-up. Now is a good time to put chlorine tablets into the Filter (9) if necessary.

E. A spare “stand-by” Filter Cartridge is an excellent investment. It provides a convenient way to continue filtration of your pool while cleaning or replacing a dirty Filter Cartridge. Also, a well-maintained, clean cartridge assures you that your filter will always be ready to operate at peak efficiency.

**PUMP OPERATION:**

**IMPORTANT: PRESS “RESET” BUTTON ON THE GFCI PLUG TO START BEFORE USING.**

IMPORTANT: FILTER CARTRIDGE MUST BE FIRMLY SEATED OVER THE PUMP INTAKE PORT TO FILTER THE POOL WATER EFFICIENTLY.

NOTE: ONLY FILTER CARTRIDGES WITH A 1-3/4” INCH DIAMETER HOLE WILL WORK PROPERLY. ANY OTHER SIZE HOLE WILL PREVENT PROPER FILTRATION. THE CARTRIDGE MUST SEAL TIGHTLY AROUND BOTH ENDS.

A. Plug the GFCI power cord of the filter assembly into a properly grounded receptacle, located at least 10 feet away from the pool.

B. **Press the RESET Button to Start the Pump.**

C. 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 and/or replacement. If you feel a reduction in flow, clean and/or replace filter.

D. Test water and adjust as needed, see “POOL WATER CARE” page #7. **VERY IMPORTANT – 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!**

E. The filter 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 cartridge on hand at all times. Filter cartridges may be purchased at the store you purchased your pool from, or ordered from Polygroup.

F. There is a Drain Cap (#28) and Seal Gasket (#29) at the bottom of the Filter Canister (#8) to allow you to drain off sediment and debris at the bottom of the canister. Place them back on and hand tighten only after allowing them to drain off a little water to flush the canister bottom out.

**FILTER CARTRIDGE CLEANING INSTRUCTIONS:**

A. First, unplug (turn off) the Power Filter. Then remove the Lock Top (11) by turning it counter clockwise. Remove the Strainer Basket (10) and the Filter Cartridge (9).

B. The filter cartridge can be cleansed of coarse dirt and debris by pressure washing inside and out with a garden hose, making sure to wash between all pleats. Fine particles of dirt are more easily removed from the filter pleats when the cartridge is dry. Therefore, after hosing the cartridge, allow the filter to dry and CAREFULLY BRUSH, but 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.

C. Suntan oils, body oils, and algae can form a coating on the filter pleats which may not be thoroughly removed by hosing. Such films of oils and/or algae will rapidly clog up the filter’s pores, greatly reducing filtration. Therefore, it is imperative to remove such materials from the filter element as soon as possible. To remove oils, we recommend soaking the cartridge in a solution of 1 pound of trisodium phosphate (or any other strong detergent) to 5 gallons of water for up to 12 hours. Trisodium phosphate is available in many supermarkets, hardware stores, or janitorial supply stores. After the oils have been removed, rinse the filter cartridge to remove any dirt. If algae is a problem, add 1/2 pint of pool chlorine or 1 pint of liquid household bleach to the cleaning solution, 1 hour before removing the filter cartridge from the solution. Thoroughly rinse the filter cartridge before replacing it in the filter case. Check the pool chemistry to determine the cause of algae growth.

D. 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. Now is a good time to put chlorine tablets into the Filter (9) if necessary.

E. A spare “stand-by” Filter Cartridge is an excellent investment. It provides a convenient way to continue filtration of your pool while cleaning or replacing a dirty Filter Cartridge. Also, a well-maintained, clean cartridge assures you that your filter will always be ready to operate at peak efficiency.

**USING THE DIVERTER FITTING AND VACUUM ADAPTER**

A. **DIVERTER FITTING USE:** divers direction of return water entering the pool, see part #20 FIG.5. You can adjust the fitting by loosening the LOCKING RING see part #21 FIG.5. The DIVERTER FITTING can be used to help generate clockwise rotation of the pools water toward the SKIMMER intake opening area of your pools wall. To do so slightly loosen the LOCKING RING and rotate the DIVERTER FITTING upward pushing water horizontally under the waters surface pointing away from the SKIMMER Intake area. DO NOT POINT it directly toward the SKIMMER this will deeply decrease skimming and filtration. Tighten the LOCKING RING to hold the DIVERTER FITTING in the desired position you choose. You can position the DIVERTER FITTING downward later to assist in keeping sediment from building along the bottom of your pool.

B. **VACUUM ADAPTER USE:** allows you to vacuum your pool, see part #27 FIG.4. The VACUUM ADAPTER is included with the SKIMMER unit, it will be necessary for you to purchase a Vacuum, Vacuum handle, and a Vacuum hose from your local pool supply retailer, also your home improvement centers, and large retail stores sometime carry these as seasonal items and they range from economy to deluxe.

C. To install the VACUUM ADAPTER turn off your pump, remove the WEIR part # 26 FIG.4, see the section on WEIR installation page 4 (step E) and reverse the process by lowering the WEIR and sliding it out through the openings in the FACE PLATE part # 23 shown in FIG.4. Place the WEIR in a safe place because you need to reinstall it after vacuuming so that your skimmer operates properly.

D. Next attach your vacuum to it’s handle and place the swivel end of the hose on the vacuum unit and lower vacuum into the pool. Place your vacuum hose into the pool (it will float somewhat), keep the remaining end near the DIVERTER FITTING, now turn on the pump and hold the hose up to the DIVERTER FITTING filling the hose, this primes the hose with water pushing out the air. The hose will sink as it fills. Now that the hose is filled, turn off the pump again and slide the VACUUM ADAPTER into the SKIMMER opening and attach hose to the adapter. Now start your pump, keeping the vacuum under water at all times during this process. Now you can move your vacuum along the bottom cleaning your pool. **Never use the hose alone without the vacuum attached, liner damage could occur, also Never vacuum with the Strainer Basket removed or Filter out, pump blockage and damage will occur. Never leave hose hanging out of the pool because a siphon can occur draining your pool.**

E. When you finish vacuuming turn off the pump once more. Slide the VACUUM ADAPTER out of the SKIMMER and reinstall the WEIR back into place. Remove the hose and vacuum draining the hose back into the pool as you raise it out of the water. Remove the STRAINER BASKET, empty and rinse it, also remove your FILTER CARTRIDGE and clean it according to instructions page 5 step 3. Now place the FILTER CARTRIDGE back in and add your chlorine tablets, install the STRAINER BASKET and the LOCK TOP.

**NOTE:** It’s a good practice to store the Vacuum Adapter, Vacuum Unit, Vacuum Hose, and Handle in a good location to prevent damage or loss and possible UV weathering which might result in early failure.

**USING THE SERVICE PLUGS:** When Pump needs servicing or working on Return Hose (13), turn off power and install the Service Plug (30) into Pool Wall Fitting (15) after removing Locking Ring (21) and Divertor Fitting (20). Also install a Service Plug (30) into center hole of the Skinner Canister (8) after removing the Pump Retaining Nut (7). See Fig. 1 page 3 for location of each. When service is complete remove both Service Plugs (30) by reversing the procedures above.

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Should you encounter any problems, contact the Customer Service at (888) 919-0070.

Extended operating days and hours during peak season requirements.
**5 POOL MAINTENANCE:**
A. Check and adjust pH and chlorine levels daily using required chemicals. See "POOL WATER CARE," below.
B. Check filter output daily. If flow is reduced, see Symptom 2 in "TROUBLE SHOOTING GUIDE," page 8.
C. Check filter for leaks. If a leak is found, see Symptom 4 in "TROUBLE SHOOTING GUIDE," page 8.
D. Check seams in pool periodically. Minor repairs may be made with the patch kit (supplied with pool).
E. Well water often presents special problems with water chemistry. If you must use well water, take a water sample to your local pool supply store.

**6 POOL WATER CARE**
A. 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).
   - **ALGAECEDES** - 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 Filter)** - Used to dispense 1” chlorine tablets ONLY.
B. 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.
C. The pool can be cleaned using a garden hose powered vacuum from Polygroup or a pool supply store.
D. Using a foot bath near the pool to wash off your feet prior to entering the pool will assist in keeping the pool clean.
E. 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.
F. Use the gallons for your pool to calculate the amount of chemicals you will need to correct the pool water based on the gallons of water in your pool.
   - **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.
G. IMPORTANT - We cannot over-stress the importance of proper and adequate daily chemical treatment. Chlorine and pH levels must be 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:** 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.
B. 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.
   - **DANGER** - 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.

**7 TROUBLE SHOOTING GUIDE**
**DISCONNECT ELECTRICAL CORD BEFORE TROUBLESHOOTING FILTER**

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>PROBLEM</th>
<th>POSSIBLE SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Motor fails to start or kicks on and off</td>
<td>A Unit Not Plugged In</td>
<td>A Unit must be plugged into a 3-wire grounded outlet.</td>
</tr>
<tr>
<td>2 Low voltage</td>
<td>B GFCI Breaker Tripped</td>
<td>B Reset circuit breaker. If problem persists, have an electrician check circuit.</td>
</tr>
<tr>
<td>3 No flow or low flow</td>
<td>C Low Water Level</td>
<td>C Check line voltage - must be 105 to 125 AC volts.</td>
</tr>
<tr>
<td>4 Chlorine level</td>
<td>D No Water Flow</td>
<td>D Check for obstructions at strainer basket and in return hose.</td>
</tr>
<tr>
<td>5 Filter is not cleaning pool</td>
<td>E Chlorine Level</td>
<td>E Maintain chlorine level between 1.0 and 1.6 ppm.</td>
</tr>
<tr>
<td>6 Chlorine dirty</td>
<td>F Filter Dirty</td>
<td>F Clean (see page #5) or replace cartridge. Spare cartridges make service more convenient.</td>
</tr>
<tr>
<td>7 Water Leakage</td>
<td>G Return Hose</td>
<td>G Return hose clamps (14) on ouf, check O-Ring (12) and retighten. Check hose for any holes or cracks. Replace if needed. See page #3.</td>
</tr>
<tr>
<td>8 Motor fails to start or kicks on and off</td>
<td>H Pump to Volute Housing</td>
<td>H Tighten screws.</td>
</tr>
<tr>
<td>9 Motor fails to start or kicks on and off</td>
<td>I Volute Housing to Filter</td>
<td>I Check Volute Housing O-Ring for damage.</td>
</tr>
</tbody>
</table>

**PROBLEMS: Should you encounter any problems, contact the Customer Service at (888) 919-0070. Extended operating days and hours during peak season requirements.**

**8 POWER FILTER DISASSEMBLY AND STORAGE**
A. First, unplug the main power cord of the Power Filter.
B. Remove the Lock Top Retainer (11) by turning counter-clockwise to unscrew. Remove Strainer Basket (10) and the Filter Cartridge (9) and remove any chlorine tablets left inside the core section of the filter.
C. Loosen all the Hose Clamps (14), remove the Return Hose (13) and allow water to drain out.
D. Remove the Pool Wall Fitting (15-21) clean the parts and lubricate Gasket (16) with petroleum jelly and reassemble all parts then place them in a safe place.
E. Remove the Pump Retaining Nut (7) by turning it counter-clockwise and then remove the Pump from the Pool Wall Fitting (15). Check the O-Rings (6, 12) on the pump with petroleum jelly and place it in a safe place.
F. Remove the Hex Head Screws (24) from the Skimmer Plate (23) being sure to support the Skimmer Canister (8) from falling and carefully remove the Face Plate (23), the Weir (26) and the Gasket (22). Next remove the Skimmer Canister (8) and the remaining Gasket (22). Clean all parts, dry them off, and reassemble partially tightening the Hex Head Screws (24). Clean and reassemble the Strainer Basket (10) and the Lock Top (11) onto the Filter Case (8). Place the assembled unit in a safe place.
G. Clean and dry all filter cartridges, place them with the Skimmer Canister unit, Pump, Return Hose, Clamps and the Wall Fitting in a safeplace.

**CAUTION -** Concentrated chlorine levels and low pH levels will damage pool.

**DANGER** - 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.