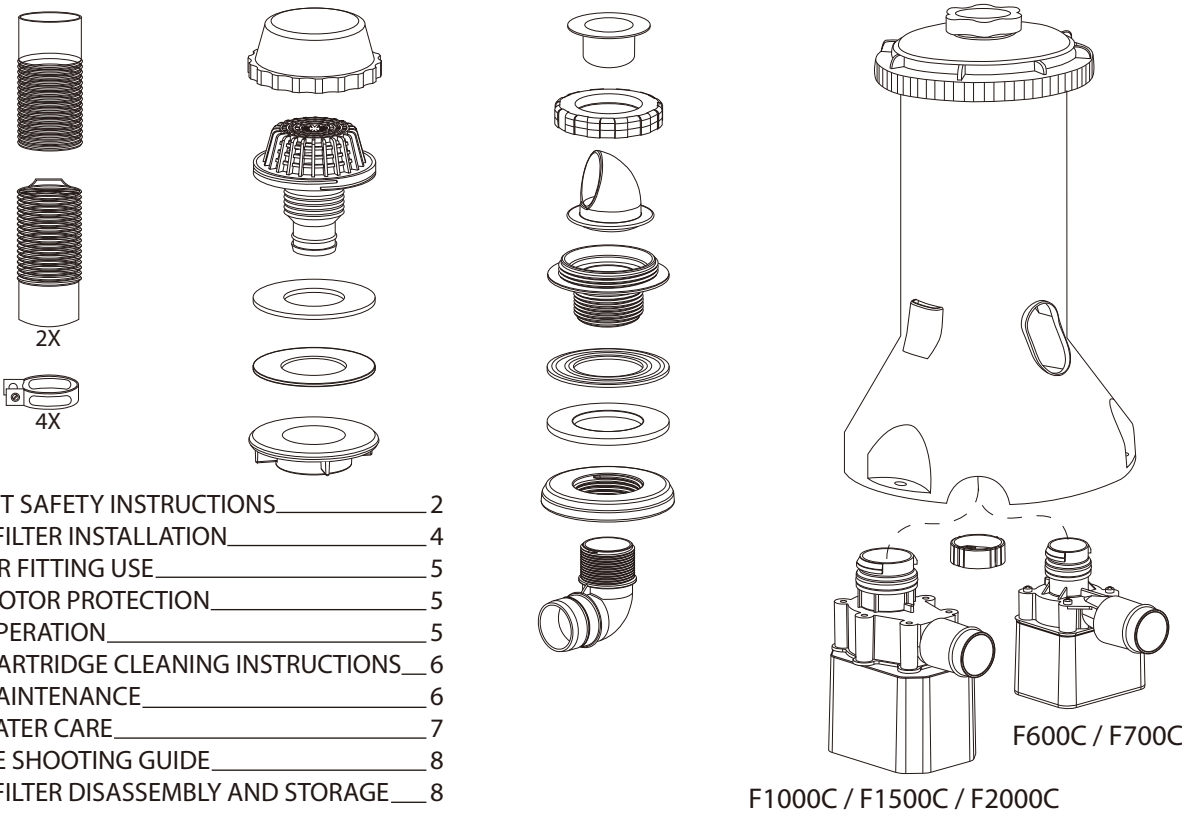


# RP TYPE SWIMMING POOL FILTER SYSTEM

## 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](http://WWW.POLYGROUP.COM) Customer Service: (888) 919-0070

DISTRIBUTED BY: POLYGROUP LIMITED (MCO)  
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IMPORTANT SAFETY INSTRUCTIONS	2
1. POWER FILTER INSTALLATION	4
2. DIVERTER FITTING USE	5
3. PUMP MOTOR PROTECTION	5
4. PUMP OPERATION	5
5. FILTER CARTRIDGE CLEANING INSTRUCTIONS	6
6. POOL MAINTENANCE	6
7. POOL WATER CARE	7
8. TROUBLE SHOOTING GUIDE	8
9. POWER FILTER DISASSEMBLY AND STORAGE	8
ASME COMPLIANT SUCTION FITTING INFO	9

### LIMITED WARRANTY

Polygroup Limited (Macao Commercial Offshore), (hereinafter "Polygroup") warrants to the original purchaser only, the RP 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 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.

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](http://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.

## 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

- 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.
- WARNING** - Risk of electrical shock. Connect only to a grounded receptacle protected by a ground-fault circuit-interrupter (GFCI). A GFCI must be provided in accordance with Section 680-31 of the National Electrical Code. Contact a qualified electrician if you cannot verify that the receptacle is protected by GFCI.
- 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.
- 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.
- CAUTION** - For continued protection against possible electric shock, use only original equipment manufactured (OEM) parts for your replacement requirements.

### 7. SAVE THESE INSTRUCTIONS.

## PRELIMINARY STEPS

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

## POWER FILTER

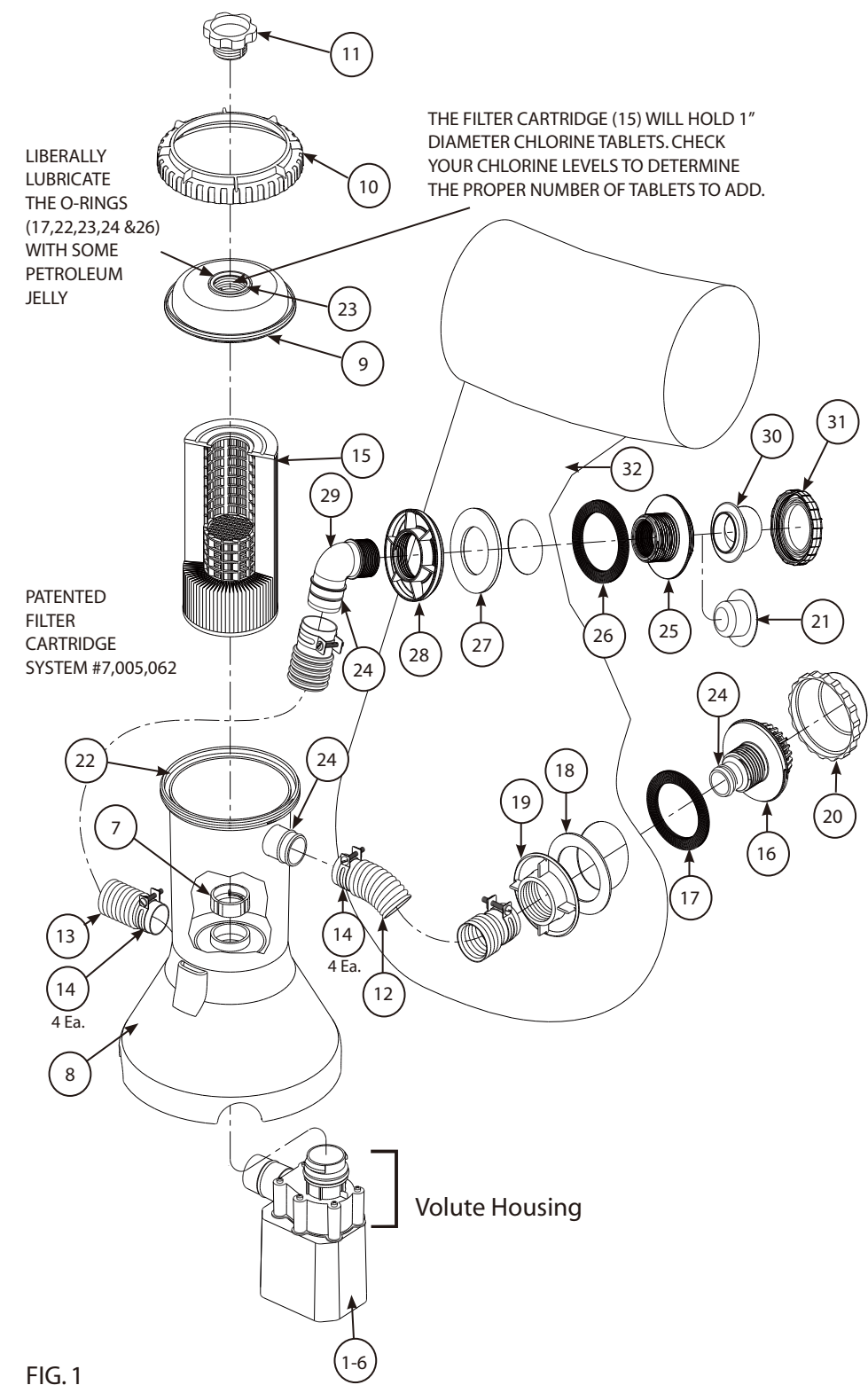
### IMPORTANT NOTES:

- Installer shall follow written instructions provided for operation of the circulation systems.
- 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.
- The Filter Cartridge (15) 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 (15) 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.**

4. The RP Type pump/filter systems are manufactured by Polygroup and ETL control number 4000608 - double insulated and grounded - 115 V.A.C. - 60 Hz. (ALL Units must have a minimum of 105 V.A.C. to start and run properly.)

Pump System	Wattage	Amperage	Flow Rate
RP600 Filter System with F600C Pump	46 watts	0.8 amps	580 G.P.H.
RP800 Filter System with F700C Pump	57 watts	1.1 amps	780 G.P.H.
RP1000 Filter System with F1000C Pump	80 watts	2.2 amps	1075 G.P.H.
RP1000 Filter System with F1500C Pump	120 watts	2.2 amps	1500 G.P.H.
RP2000 Filter System with F2000C Pump	210 watts	2.2 amps	2000 G.P.H.

\*GPH - Gallons Per Hour



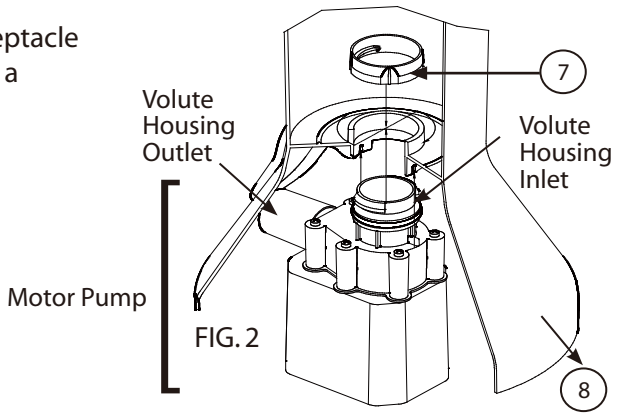
KEY	DESCRIPTION
1-6	MOTOR PUMP
7	PUMP RETAINING NUT
8	FILTER CASE
9	SEAL TOP
10	SEAL TOP RETAINER
11	VENT SCREW
12	SUCTION HOSE
13	RETURN HOSE
14	HOSE CLAMPS
15	FILTER CARTRIDGE
16	SUCTION FITTING (SF)
17	SF GASKET (Black)
18	SF THRUST WASHER (White)
19	SF NUT
20	SF WATER CAP (Use for service only)
21	RF PLUG (Use for service only)
22	O-RING (On Filter Case)
23	O-RING (On Vent Screw)
24	O-RING (On Hose Connections)
25	RETURN FITTING (RF)
26	RF GASKET (Black)
27	RF THRUST WASHER (White)
28	RF NUT
29	RF ELBOW 90°
30	RF DIVERTER FITTING
31	RF LOCKING RING
32	POOL WALL

FIG. 1

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

# 1 POWER FILTER INSTALLATION: (Reference Page 3, Fig. 1) WARNING - EXTREMELY IMPORTANT!

- Risk of electrical shock, connect only to a grounding type receptacle protected by a ground fault circuit interrupter, (GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI.
- 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.

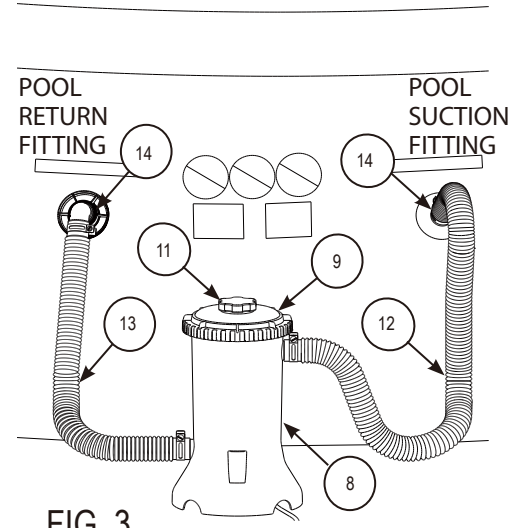


**NOTE** - The Power Filter will be in four sections: a pump; filter assembly; hardware bag; and suction / return hoses. A. First, remove the Seal Top Retainer (10), Seal Top (9), and Filter Cartridge (15) from the assembled Filter Case.

Lubricate the pump O-ring with petroleum jelly. Hold the filter case (8) securely, and insert motor pump so that the outlet on the volute housing extends out of the opening in the side of the filter case. 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 filter case and place the Pump Retaining Nut (7) over the top of the volute housing inlet. Twist the Nut (7) clockwise until it is snug. See Fig. 2.

B. Get the Suction and Return Hoses (12, 13), and remove two Hose Clamps (14), from the hardware bag. Loosen the hose clamps and slide them over one end of each hose. Lubricate O-rings (24) on the Filter Case (8) and Volute Housing liberally with petroleum jelly. Install one hose on the filter case suction inlet at the top, and one hose on the filter case return outlet at the base. Tighten both of the Hose Clamps (14).

C. Locate the Return Fitting assembly parts (21, 25-31). Lubricate the (black) RF Gasket (26) liberally with petroleum jelly and install it over the threads on the Return Fitting (25). Insert the Return Fitting (25) with the RF Gasket (26) through the pool return fitting hole in the wall from the inside of the pool, see Fig. 3 for correct location. Place the (white) RF Thrust Washer (27) over the Return Fitting and then thread the RF Nut (28) onto the fitting until it is hand tight. DO NOT over tighten the RF Nut or wrinkle the pool wall around the RF Thrust Washer (27) or the RF Gasket (26). Plug the pool's Return Fitting (25) with the RF Plug (21) from the inside of the pool. Set the RF Diverter Fitting (30) and RF Locking Ring (31) aside for later installation. Now locate the Pool Suction Fitting assembly parts (16-20). Lubricate the (black) SF Gasket (17) liberally with petroleum jelly and install it over the threads on the Suction Fitting (16). Insert the Suction Fitting (16) with SF Gasket (17) through the pool suction fitting hole in the wall from the inside of the pool. Place the (white) SF Thrust Washer (18) over the Suction Fitting and then thread the SF Nut (19) onto the fitting until it is hand tight. DO NOT over tighten the SF Nut or wrinkle the pool wall around the SF Thrust Washer (18) or the SF Gasket (17). Cap the pool's Suction Fitting (16) with the SF Water Cap (20). Only hand tighten the Water Cap (20). Start filling pool.



D. After the pool is filled, position the Filter Assembly between the two fittings on the side of the pool, about 6 inches out from the base. The suction hose (12), coming from the top of the filter case should be facing the right, and the return hose (13) coming from the pump, on the lower side of the case, should be facing the left; see Fig. 3.

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



- E. Slip both of the remaining Hose Clamps (14) over the ends of the two hoses. Lubricate O-rings (24) on the wall fittings liberally with petroleum jelly then connect the hoses to the Suction and Return wall fittings located on the side of the pool. The Pool Suction Fitting is on the right, and the return fitting is on the left, see FIG. 3. Secure both of the hoses in place by tightening the two Hose Clamps (14).
- F. Unscrew the Vent Screw (11) from the Seal Top (9) about 1-1/2 turns. NOTE: VENTING THE SYSTEM IS NECESSARY FOR AIR TO ESCAPE AS THE FILTER CASE FILLS WITH WATER.
- G. Remove the RF Plug (21) from the return fitting (25) on the inside of the pool. Also remove the SF Water Cap (20) from the Suction Fitting (16). This allows the filter system to fill with water. DO NOT discard the RF Plug (21) and the SF Water Cap (20). You will need them when you change the Filter Cartridge or service the pump. When full, water should be coming out of the groove of the vent screw. Hand-tighten the vent screw into the seal top until the O-Ring seals around the screw and no more water is escaping.
- H. At this point, the filter system should be water-tight. Check all hoses and fittings, as well as the vent screw, to make sure there is no leakage. If any leaks are found, see #4 in Trouble Shooting guide on page 8. Now place the RF Diverter Fitting (30) and the RF Locking Ring (31) on the Return Fitting (25).

**[2] DIVERTER FITTING USE:**

**Purpose; diverts direction of return water entering the pool,** see part #30 FIG.1. You can adjust the RF Diverter Fitting (30) by loosening the RF Locking Ring (31) FIG 1. The RF Diverter Fitting (30) can be used to help generate clockwise rotation of the pool’s water toward the Suction Fitting (16). To do so slightly loosen the Locking Ring and rotate the Diverter upward pushing water horizontally under the waters surface pointing away from the Suction Fitting area. DO NOT POINT it directly toward the Suction Fitting as this will deeply decrease water circulation and filtration. Tighten the RF Locking Ring to hold the RF Diverter Fitting in the desired positio you choose. You can position the RF Diverter Fitting downward later to assist in keeping sediment from building along the bottom of your pool.

**[3] PUMP MOTOR PROTECTION:**

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

**[4] PUMP OPERATION:**

- 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 filter into a properly grounded receptacle, located at least 10 feet away, protected with a ground fault circuit interrupter (GFCI).
- B. 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.
- C. 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!**

- D. 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.

**[5] FILTER CARTRIDGE CLEANING INSTRUCTIONS:**

- A. You will need to clean the Filter Cartridge (15). First, unplug (turn off) the Power Filter, remove the RF Fitting Locking Ring (31), and the RF Diverter (30) and plug the Return Fitting (25) with the RF Plug (21). Press the plug squarely into the opening, to assure a leak-proof fit. Now cap the Pool Suction Fitting (16) with the SF Water Cap (20), only hand tighten the Water Cap. To vent the filter, slowly unscrew the Vent Screw (11). Press down with both hands and twist the Seal Top Retainer (10) counter-clockwise to remove and then pull out the Seal Top (9) and Filter Cartridge (15). After you are finished cleaning the filter cartridge, liberally lubricate the O-Ring (22) with petroleum jelly and re-assemble in reverse order, be sure to remove the RF Plug (21) and Water Cap (20).
- 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 filters’ 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 remove the Vent Screw (11) and put chlorine tablets into the Filter (15) 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.

**[6] 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). Additional patches are available from Polygroup or your local pool supply store.

7 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).
  - 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 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.
- \*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.
- 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:**
- A. 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.
- CAUTION** - 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.

8 TROUBLE SHOOTING GUIDE

DISCONNECT ELECTRICAL CORD BEFORE TROUBLESHOOTING FILTER

SYMPTOM	PROBLEM	POSSIBLE SOLUTION
1 Motor fails to start or kicks on and off.	<b>A</b> Unit Not Plugged In	<b>A</b> Unit must be plugged into a 3-wire grounded outlet with a GFCI type circuit breaker.
	<b>B</b> GFCI Breaker Tripped	<b>B</b> Reset circuit breaker. If problem persists, have an electrician check circuit.
	<b>C</b> Low Voltage	<b>C</b> Check line voltage - must be 105 to 125 AC volts.
2 No flow or low flow through return hose	<b>A</b> Low Water Level	<b>A</b> Water depth must be no more than 2” from the bottom of inflatable ring or it must cover the intake by at least 4”
	<b>B</b> Inlet / Discharge Clogged	<b>B</b> Check for obstructions at suction fitting and in return hose.
	<b>C</b> Filter Dirty	<b>C</b> Clean (see page #6) or replace cartridge. Spare cartridges make service more convenient.
3 Filter is not cleaning pool (water cloudy, green, etc.)	<b>A</b> Chlorine Level	<b>A</b> Maintain chlorine level between 1.0 and 1.6 ppm
	<b>B</b> Filter Dirty	<b>B</b> Clean (see page #5) or replace cartridge. Spare cartridges make service more convenient.
	<b>C</b> pH Level	<b>C</b> Maintain pH Level between 7.3 and 7.8.
	<b>D</b> Cartridge Damaged	<b>D</b> Check cartridge for damage and/or holes. Replace if damaged.
	<b>E</b> Low Water Flow	<b>E</b> Check for obstructions at suction fitting and in return hose fitting.
	<b>F</b> Other Chemicals Required	<b>F</b> Have water tested at pool supply store. It may be necessary to add other chemicals due to varying water quality in different localities.
4 Water Leakage	<b>G</b> Pool Water Very Dirty	<b>G</b> Run pump more often, but never when pool is in use. Clean filter more often.
	<b>A</b> Suction Hose / Return Hose	<b>A</b> Adjust hose clamp (14) on cuff. Check O-ring (24) and retighten. Check hose for any holes or cracks. Replace if needed. See page #3.
	<b>B</b> Vent Screw in Seal Top	<b>B</b> Check O-ring (23) for damage. Replace if needed. Lubricate with petroleum jelly.
	<b>C</b> Seal Top Retainer/Seal Top	<b>C</b> Check O-ring (22) for damage. Replace if needed. Lubricate with petroleum jelly.
	<b>D</b> Pump to Volute Housing	<b>D</b> Tighten screws.
	<b>E</b> Volute Housing to Filter	<b>E</b> Check Volute Housing O-Ring for damage.
<b>PROBLEMS: Should you encounter any problems, contact the Customer Service at (888) 919-0070. Extended operating days and hours during peak season requirements.</b>		

9 POWER FILTER DISASSEMBLY AND STORAGE

- A. First, unplug the Power Filter. Now remove the RF Diverter Fitting (30) and the RF Locking Ring (31) from the Return Fitting (RF) and then plug the Return Fitting (25) with the RF Plug (21). Now thread the Water Cap (20) onto the Suction Fitting (16) and hand tighten it only!
- B. Slowly unscrew the Vent Screw (11) from the Seal Top (9) allowing the filter system to depressurize.
- C. Remove the Seal Top Retainer (10) by turning counter-clockwise to unscrew. Remove the Seal Top (9). Remove the Filter Cartridge (15) and remove any chlorine tablets left inside the core section of the filter.
- D. Loosen all four Hose Clamps (14), remove the Suction and Return Hoses (12, 13) and allow water to drain out.
- E. Clean and dry all filter pump parts including filter cartridges.
- F. Liberally lubricate the O-rings (22), at the Seal Top (9) and (23) on the Vent Screw (11), with petroleum jelly, and then reassemble it along with the Seal Top (9), Seal Top Retainer (10), Vent Screw (11) onto the Filter Case (8). Store all filter parts carefully.

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## ASME COMPLIANT SUCTION FITTING INFO

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### PSF-100A AND PSF-100B SUCTION OUTLET FOR ABOVE GROUND POOL

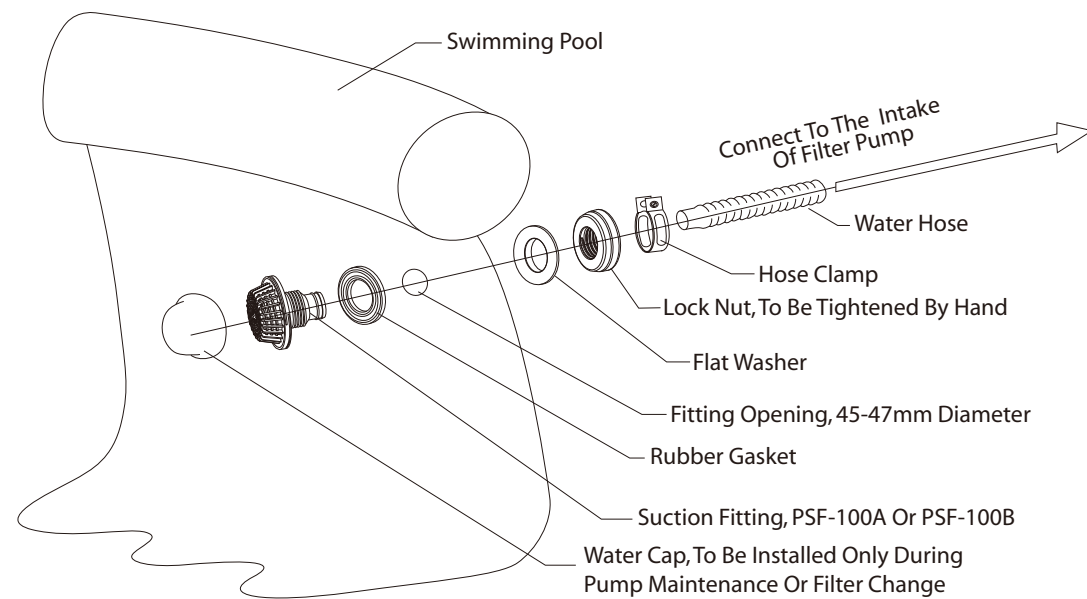
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#### IMPORTANT SAFETY INSTRUCTIONS

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##### (1) READ AND FOLLOW ALL INSTRUCTIONS

- (2) This is a submerged suction outlet for use with above ground swimming pool.
- (3) For single drain only. Use only ONE outlet for each pump.
- (4) Do not locate this suction outlet on sitting areas or on the backrest for such seating area.
- (5) Install this outlet at location recommended by the pool manufacturer.
- (6) The maximum allowable flow rate of this suction outlet is 45 gallon per minute (2,700 gallon per hour).
- (7) Connection Hose:
- Model PSF-100-A is to be connected with 1 1/4" (31.8mm) diameter hose.
  - Model PSF-100-B is to be connected with 1 1/2" (38.1mm) diameter hose.
- (8) The suction outlet is to be mounted at the suction outlet opening as specified by the manufacturer of the above ground pool. The diameter of this opening should be within the range of 1.77" to 1.85" (45.0mm to 47.0mm). Refer to the following diagram for detail assembly instructions:



- (9) The suction outlet PSF-100A or PSF-100B is to be replaced every 5 years.
- (10) No tool is required for installation.
- (11) Service and Winterizing Instructions

##### CAUTION! DO NOT EXCEED THE MAXIMUM ALLOWABLE FLOW RATE:

- 45 Gallon per minute (2,700 Gallon per hour).
- Carefully observe and inspect the suction outlet for damage and tampering before each use of the pool.
- Missing, broken or cracked suction outlet must be replaced before using the pool.
- Loose suction fitting should be reattached or replaced before using the pool.
- Remove and store Suction Outlet assembly if temperatures are expected to fall below 32° F.

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**READ, THEN KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE**

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