

OWNER'S MANUAL

MODEL CP FILTER PUMP

FOR ABOVE GROUND SWIMMING POOLS

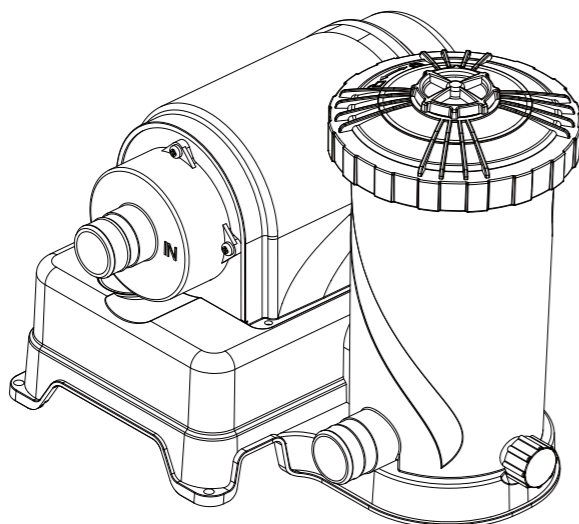
To order parts, accessories, or answers to frequently asked questions about your product please visit WWW.POLYGROUPSTORE.COM

Customer Service: (888) 919-0070

To watch how to setup your product please visit:
WWW.POLYGROUP.COM/VIDEO

DO NOT RETURN PRODUCT TO STORE

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



CP2000-C

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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. 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.

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



WARNING - To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

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.

WARNING - To reduce the risk of electric shock, replace damaged cord immediately.

WARNING - To reduce the risk of electric shock, do not use extension cord to connect unit to electric supply; provide a properly located outlet.



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.

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.

Do not bury cord. Locate cord to minimize abuse from lawn mowers, hedge trimmers, and other equipment.

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.

SAVE THESE INSTRUCTIONS

PRELIMINARY STEPS

1. **READ ALL INSTRUCTIONS CAREFULLY** and get a thorough understanding of what is required to assemble your Type CP 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.

FILTER PUMP 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 (21) 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 (21) 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 CP Type pump/filter systems are manufactured by Polygroup and ETL control number 4000608 - 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.)



How to use the GFCI plug:

Press "RESET" Button To Start Pump Operation



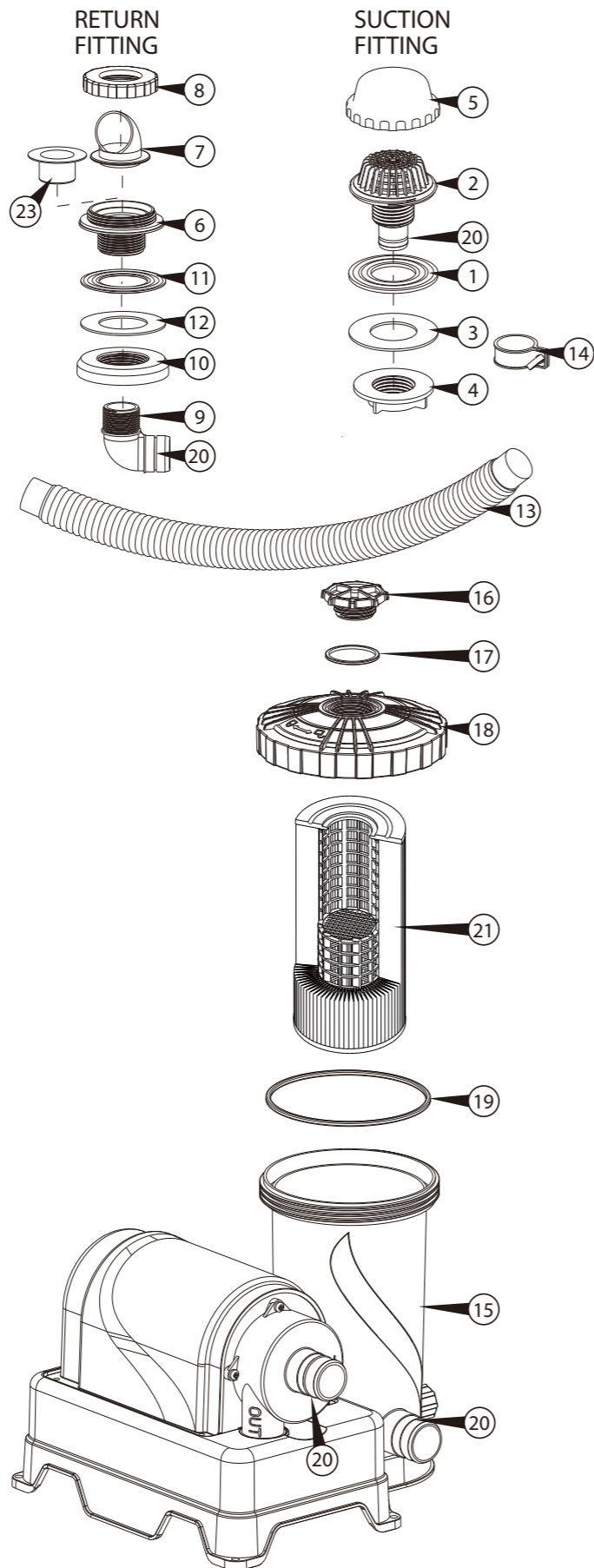
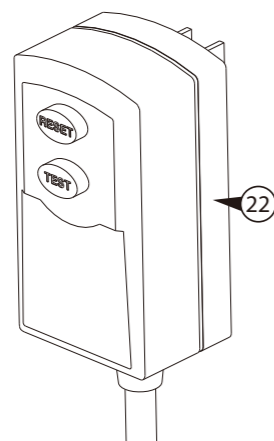
*Do not connect to a timer device

1 FILTER PUMP POWER INFORMATION

FILTER PUMP MODEL	WATTAGE	AMPERAGE
CP2000-C Filter System Pump	340 watts	2.8 amps

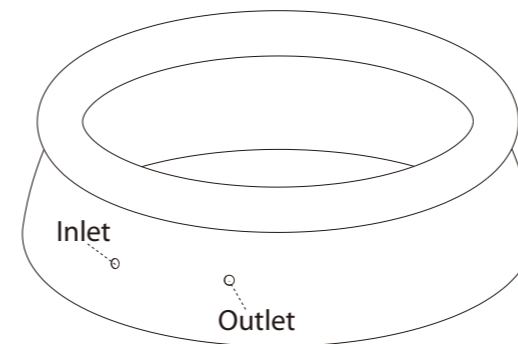
2 PART LIST

Item	Part Name	Qty
1	Fitting Gasket	1
2	Suction Fitting	1
3	Suction Fitting Washer (SF Washer)	1
4	Fitting Lock Nut	1
5	Suction Fitting Cap (SF CAP)	1
6	Return Fitting	1
7	Return Fitting Diverter (RF Diverter)	1
8	RF Locking Ring	1
9	RF elbow 90°	1
10	RF nut	1
11	RF Gasket	1
12	RF Thrust Washer	1
13	Hose	2
14	Hose Clamp	4
15	Filter Pump Assembly	1
16	Vent Screw	1
17	Vent Screw O-Ring	1
18	Seal Top	1
19	Canister Gasket	1
20	O-Ring (on hose connections)	4
21	Type D Filter Cartridge	1
22	GFCI Power Cord Set	1
23	Return Fitting plug (RF Plug)	1

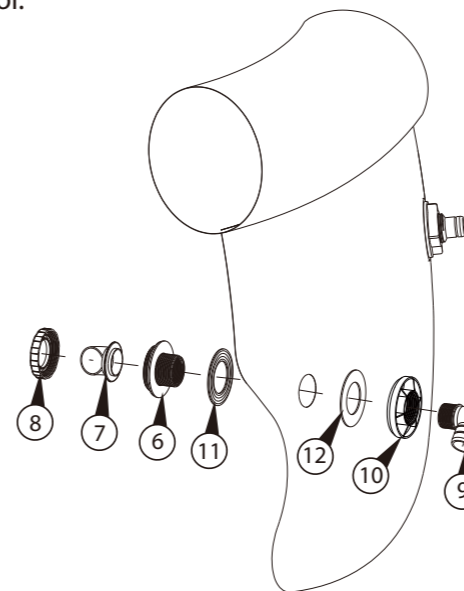


3 FILTER PUMP INSTALLATION

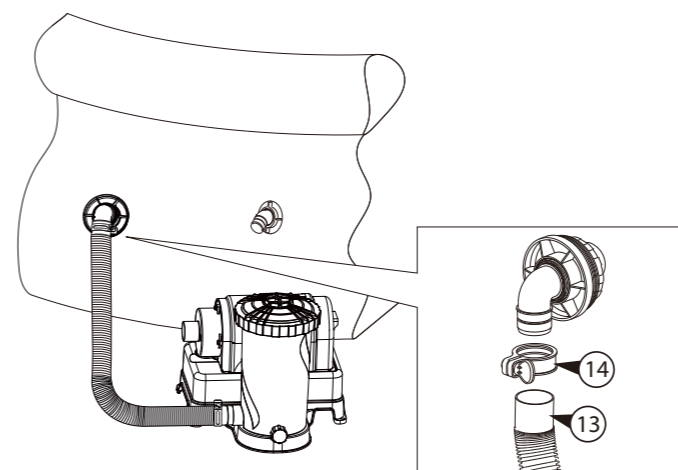
1 Set up the pool by following all instructions comes with the pool. Do not fill water until the Filter Pump is properly installed. Locate the outlet and inlet openings on the pool wall.



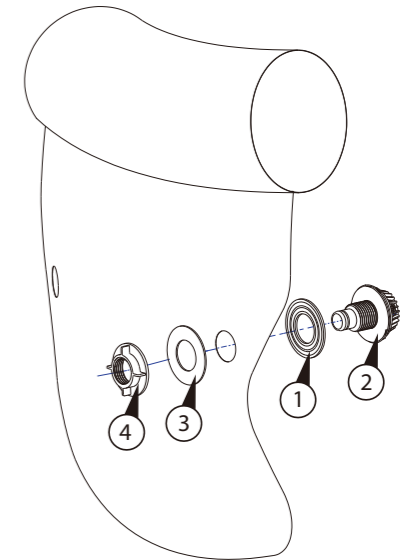
3 Install the Return Fitting on the inlet opening of the pool.



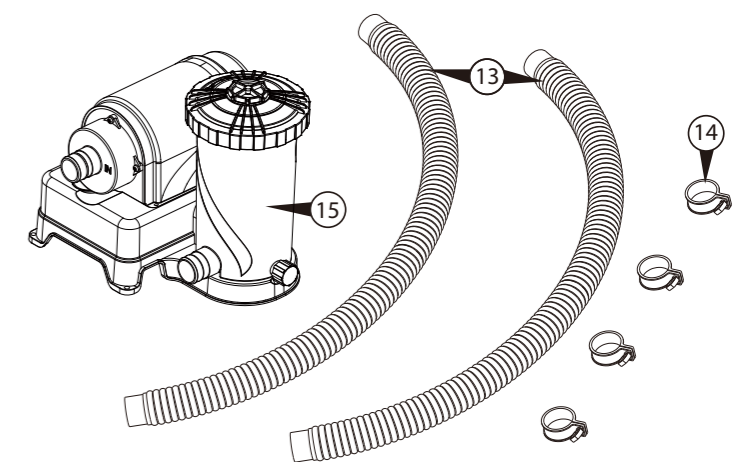
5 Attach one hose to the Suction Fitting and the Filter Pump inlet.



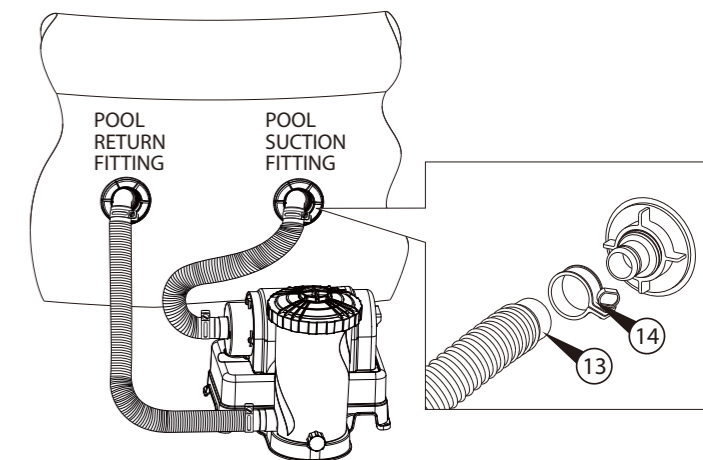
2 Install the Suction Fitting on the outlet opening of the pool.



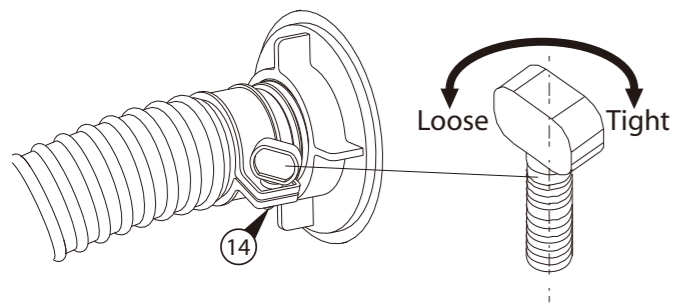
4 Remove the Filter Pump(15), Hoses (13) and Hose Clamps (14) from the package.



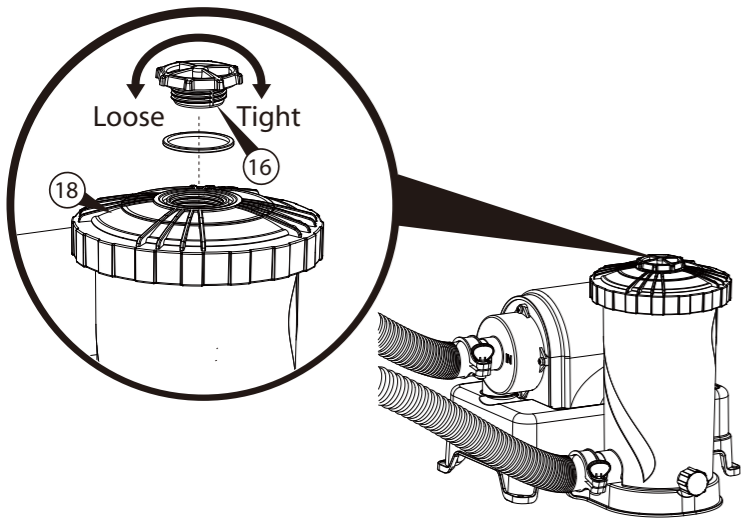
6 Attach the hose to the pool return fitting and the pump outlet.



- 7** Tighten all Hose Clamps (14) to prevent water leakage.

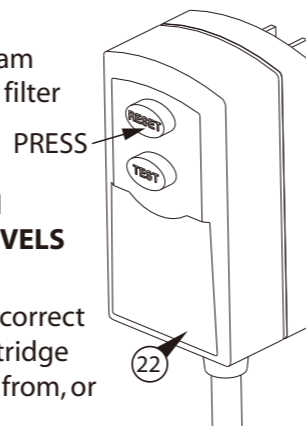


- 9** Air is now trapped inside the Filter Pump system, which will prevent the water from flowing smoothly. To VENT the system (release the trapped air), open the Vent Screw (16) at the top of the pump by turning it counter-clockwise. The water pressure will force out all the trapped air inside the Filter Pump system. Tighten the Vent Screw (16) when you see water flowing out from the Seal Top (18).

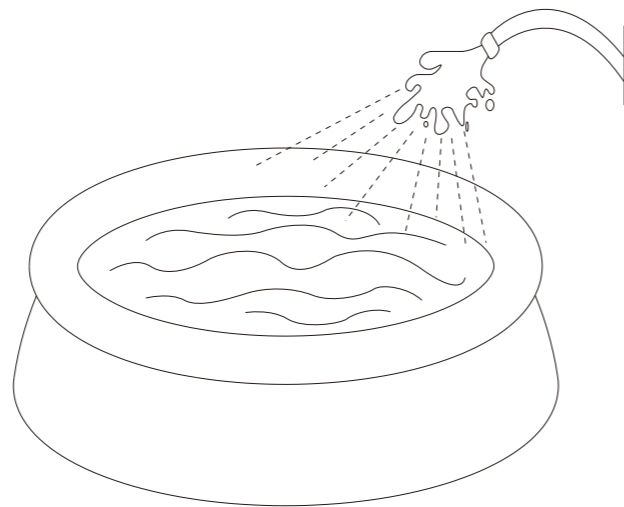


4 FILTER PUMP OPERATION

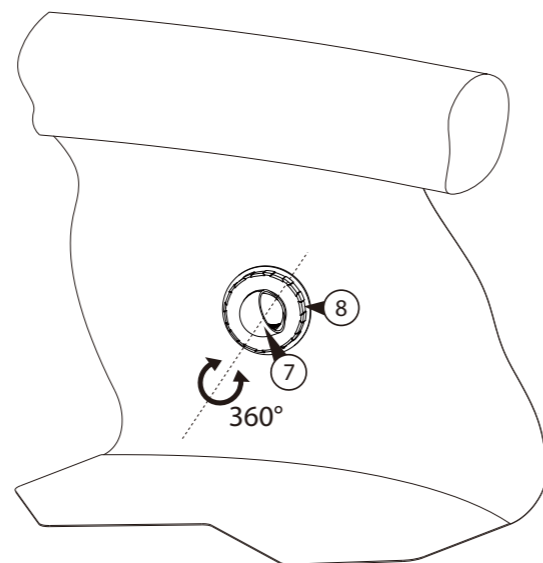
1. Plug the GFCI power cord to a properly grounded receptacle at least 15 feet (4.5m) away from the pool.
2. **IMPORTANT: To start the filter pump, press the RESET button on the GFCI plug (22).**
3. Check the return fitting on the inside of the pool for correct flow, it should feel like a solid stream 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 6 - "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 (22).



- 8** Do not plug in the filter pump at this point. Begin to fill water until the water level reaches the fill line.



- 10** Hand loosen the RF Locking Ring (8). Adjust the Return Fitting Diverter (7) to maximize the calculate of the pool water. Hand tighten the RF Locking Ring (8).

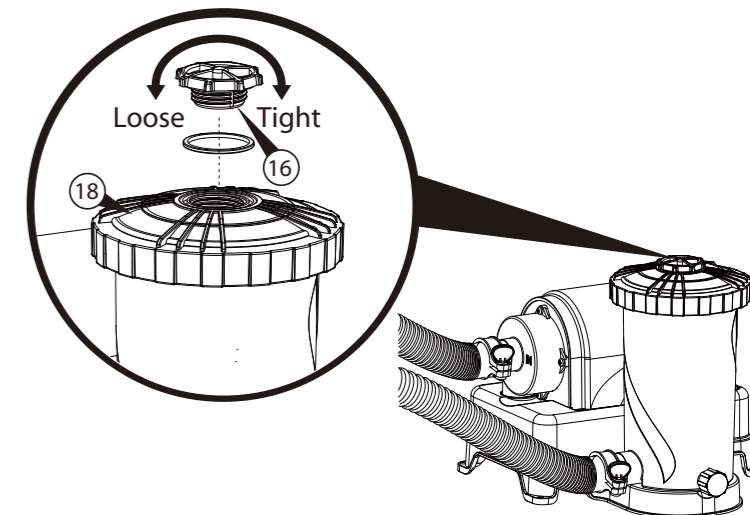
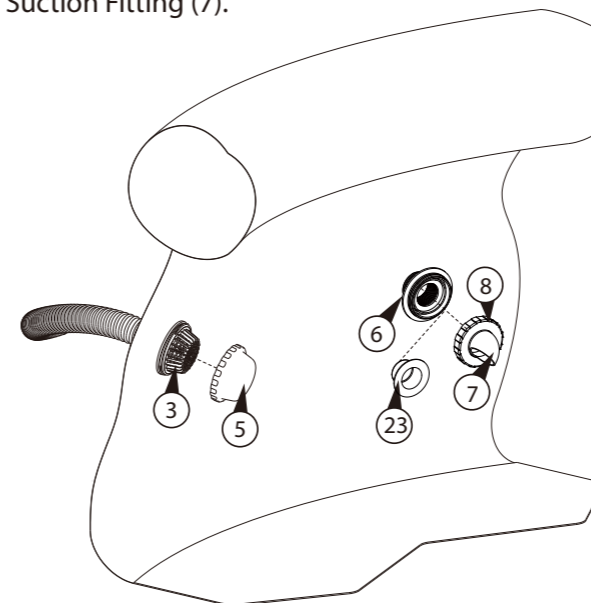


5 PUMP MOTOR PROTECTION

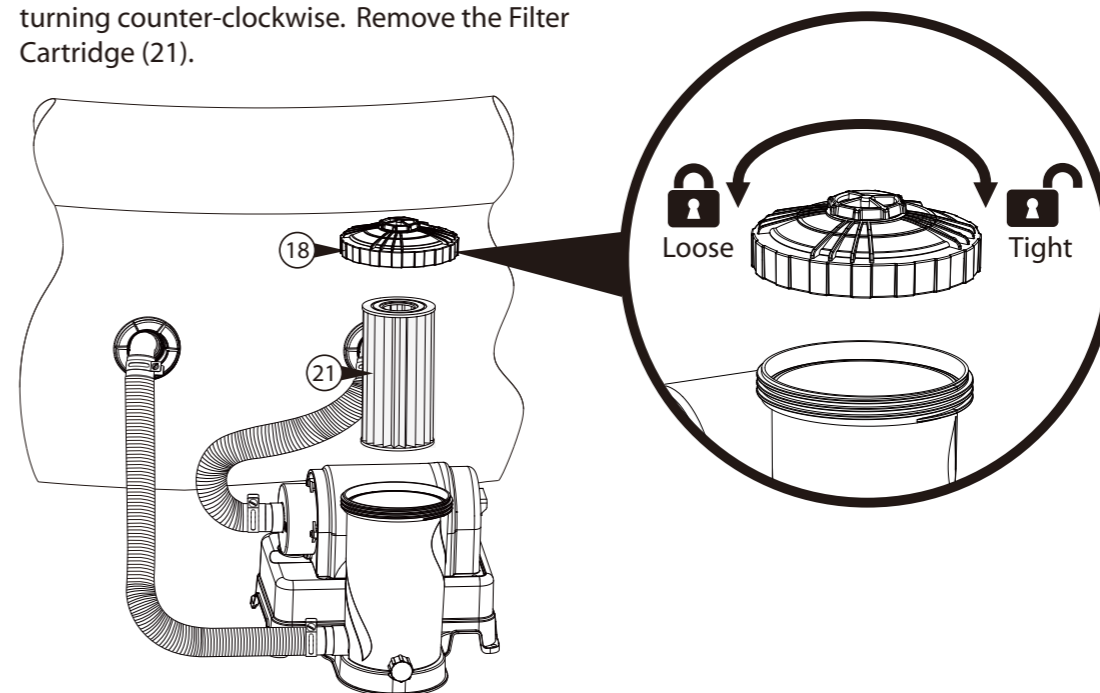
IMPORTANT! Your filter pump is protected by a thermal switch. The switch senses the temperature of the filter pump. If it gets too hot, the switch will stop the pump from running until it cools off. It will automatically turn back on when the filter pump has cooled down. This is a safety device to prevent 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.

6 FILTER CARTRIDGE CLEANING AND REPLACEMENT

1. Unplug the Power Filter Pump. Release the RF Locking Ring (8). Remove the RF Diverter (7) from the Return Fitting (6) and then plug the Return Fitting (6) with the RF Plug (23). Hand tighten the SF Cap (5) onto the Suction Fitting (7).
2. To depressurize the filter pump system, vent the filter pump by twisting the Vent Screw (16) counter-clockwise.



3. Use both hands to twist off the Seal Top (18) by turning counter-clockwise. Remove the Filter Cartridge (21).



- 4 After you are finished cleaning the filter cartridge, liberally lubricate the GASKET (19) with petroleum jelly and re-assemble in reverse order. Before restarting the filter pump, be sure to remove the RF PLUG (23) and SF CAP (5) and install back the return fitting diverter (7) and hand tighten the RF locking ring (8).
- 5 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.
- 6 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 tri-sodium phosphate (or any other strong detergent) to 5 gallons of water for up to 12 hours. Tri-sodium 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.
- 7 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.
- 8 A spare "stand-by" Filter Cartridge (21) is an excellent investment. It provides a convenient way to continue filtration of your pool while cleaning or replacing a dirty Filter Cartridge(21). Also, a well-maintained, clean cartridge assures you that your filter will always be ready to operate at peak efficiency.
- 9 Filter cartridges may be purchased at the store you purchased your pool from, or ordered from Polygroup. Always replace with genuine POLYGROUP™'s SUMMER ESCAPE™ filter cartridges.

7 POOL MAINTENANCE

1. Check and adjust pH and chlorine levels daily using required chemicals. See below Section 6 "POOL WATER CARE".
2. Check filter pump output daily. If flow is reduced, see Symptom 2 in Section 7 "TROUBLE SHOOTING GUIDE".
3. Check filter pump, hoses, fitting for leaks. If a leak is found, see Symptom 4 in Section 7 "TROUBLE SHOOTING GUIDE".
4. Check seams in pool periodically. Minor repairs may be made with the repair patch kit (supplied with pool). Additional patches are available from Polygroup or your local pool supply store.

8 POOL WATER CARE

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

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

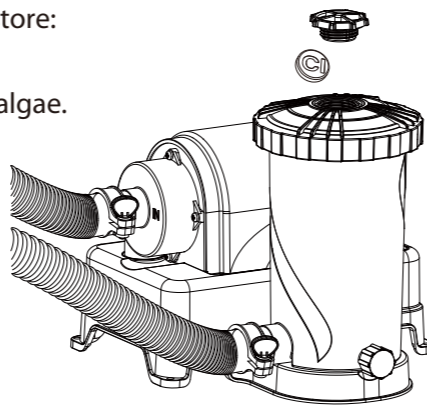
2. Use test kit daily to check pH and chlorine levels. Adjust accordingly using the required chemicals.

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

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

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

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



6. Refer to the POOL's USER MANUEL for the capacity of your pool. You will need this information to determine the amount of chemicals you will need to correct the pool water. **NOTE:** It is recommended to use a 5 gallon bucket of water to mix and dissolve your chemicals and then applying directly to the pool water. Follow manufacturers label directions on all chemicals.*Most pool supply stores will test your pool water for free and advise you of what chemicals you need, and the correct amount to use for your pool. You will need to tell them the pool capacity in gallons.
7. **IMPORTANT** - We cannot over-stress the importance of proper and adequate daily chemical treatment. Chlorine and pH levels must be properly maintained at all times. PUMP AND FILTER ALONE WILL NOT PREVENT ALGAE FROM GROWING IN POOL WATER; THIS CAN ONLY BE DONE BY MAINTAINING PROPER CHLORINE AND pH LEVELS AT ALL TIMES.
 - Maintain pH level between 7.3 and 7.8.
 - Maintain chlorine level between 1.0 and 1.6 ppm (parts per million).
 - Superchlorinate your pool at least every other week.

NOTE:

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

* 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.

9 TROUBLE SHOOTING GUIDE

WARNING UNPLUG THE POWER CORD BEFORE TROUBLE SHOOTING THE FILTER PUMP.

SYMPTOM	PROBLEM	POSSIBLE SOLUTION
1 Motor fails to start or kicks on and off	A) Unit not plugged in or GFCI not activated	A) Unit must be plugged into a grounded power outlet. Press the reset button on the GFCI to start the pump.
	B) GFCI Plug and/or circuit breaker tripped	B) Reset the GFCI plug and/or circuit breaker. If problem persists, have the circuit checked by a qualified electrician.
	C) Low voltage	C) Check the line voltage, it must be in the range of 105 to 125V.
2 No or slow water flow through the return fitting.	A) Low pool water level	A) Fill the pool to the fill line. The suction fitting must be at least 4" under water.
	B) Inlet/Outlet clogged	B) Check for obstructions(s) at the suction fitting and return fitting.
	C) Dirty filter cartridge	C) Clean or replace the filter cartridge. A spare cartridge makes service more convenient.
3 Filter pump is not cleaning the pool properly(Cloudy water, green.....etc.)	A) Chlorine level	A) Maintain chlorine level between 1.0 to 1.6 ppm.
	B) pH level	B) Maintain pH level between 7.3 to 7.8.
	C) Dirty filter cartridge	C) Clean or replace the filter cartridge.
	D) Damaged filter cartridge	D) Check filter for damage and holes. Replace new filter immediately.
	E) Slow water flow	E) Check for obstructions(s) at the suction fitting and return fitting.
	F) Other chemicals required	F) Have the pool water sample tested by a pool supply store. Obtain opinions on additional water treatment chemicals.
	G) Pool water very dirty	G) Run pump more often, but never when the pump is in use. Clean/replace filter cartridge more frequently.
4 Water leakage	A) Suction/return hose	A) Tighten the hose clamps. Check the o-rings on the suction/return fittings. Check hoses for damage. Replace if needed.
	B) Vent screw in Seal Top	B) Check if O-ring (17) for damage. Replace if needed.
	C) Seal Top	C) Check O-ring (19) for damage. Replace if needed.

10 POOL PUMP DISASSEMBLY & STORAGE

- (1) Unplug the Power Filter Pump. Release the RF Locking Ring (8). Remove the RF Diverter (7) from the Return Fitting (6) and then plug the Return Fitting (8) with the RF Plug (23). Now, hand tighten the SF Cap (5) onto the Suction Fitting (2).
- (2) Slowly unscrew the Vent Screw (16) from the Seal Top (18) allowing the filter pump to depressurize.
- (3) Remove the Seal Top (18) by turning counter-clockwise.
- (4) Remove the Filter Cartridge (21) and remove any chlorine tablets left inside the core section of the filter.
- (5) Loosen all four Hose Clamps (14), remove the Hoses (13) and allow water to drain out.
- (6) Clean and dry all filter pump parts including filter cartridges.
- (7) Liberally lubricate the O-rings (17) at the Seal Top (18) and Gasket (19) on the canister with petroleum jelly, and then reassemble it along with the Seal Top (18), Vent Screw (16) onto the canister. Store all filter parts carefully.

11 LIMITED WARRANTY

Polygroup Limited (Macao Commercial Offshore), (hereinafter "Polygroup") warrants to the original purchaser only, the CP type Electric Filter Pump against defects in material and workmanship for 180 days from the date of purchase. Original Purchaser must retain proof of such purchase in the form of an original store sales receipt and must produce such upon request by Polygroup or its designated agents. Warranty claims cannot be processed without a valid proof of purchase.

This Limited Warranty applies only to the original purchaser of the product and is limited solely to the repair or replacement of the product, to be decided in Polygroup's sole discretion. Consequential damages, including claims for loss of water, pool chemicals, damage, or labor are not covered under this Limited Warranty.

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

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

12 REPLACEMENT PART ORDERING INFO

Item	Part Name	CP2000-C Part #	Qty	Item	Part Name	CP2000-C Part #	Qty
1	Fitting Gasket	P58PF1520K01	1	12	RF Thrust Washer	P58PF2960W05	1
2	Suction Fitting	P58284283W05	1	13	Hose	P58150059W01	2
3	Suction Fitting Washer (SF Washer)	P58PF1510P01	1	14	Hose Clamp	P58219221W05	4
4	Fitting Lock Nut	P58PF1430W05	1	15	Filter Pump Assembly	P58PP1768W05	1
5	Suction Fitting Cap (SF CAP)	P58PF2820P01	1	16	Vent Screw	P58182201W05	1
6	Return Fitting	P58PF1680W05	1	17	Vent Screw O-Ring	P58182501K01	1
7	Return Fitting Diverter (RF Diverter)	P58PF1720W05	1	18	Seal Top	P58PP2098W05	1
8	RF Locking Ring	P58PF1710W05	1	19	Canister Gasket	P58147800K01	1
9	RF Elbow 90°	P58PF1700W05	1	20	O-Ring (on hose connections)	P58037000K01	4
10	RF Nut	P58PF1690W05	1	21	Type D Filter Cartridge	P581041080PR	1
11	RF Gasket	P58PF1730K01	1	22	GFCI Power Cord Set	P58GF90000K1	1
				23	Return Fitting plug (RF Plug)	P58PF0620K01	1

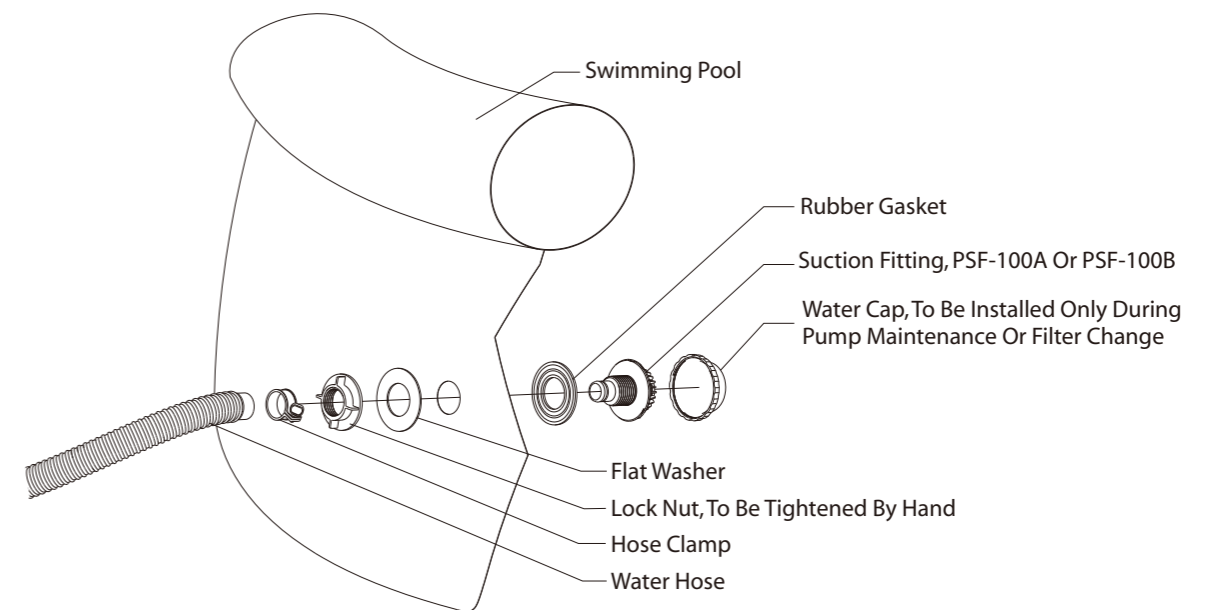
13 ASME COMPLIANT SUCTION FITTING INFORMATION

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

IMPORTANT SAFETY INSTRUCTIONS

(1) READ AND FOLLOW ALL INSTRUCTIONS

- (1) PSF-100A and PSF-100B Suction Outlets are certified by IAPMO in accordance with the ASME/ANSI A112.19.8b-2009 Suction Fitting for use in Swimming Pools, Wading Pools, Spas, and Hot Tubs.
- (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.

READ, THEN KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE