PRESSURE CARTRIDGE FILTER INSTRUCTIONS





TOOLS REQUIRED

- 1. Flat Head Screwdriver
- 2. Pliers



PARTS IDENTIFICATION

1. OPEN CARTON #1 AND UNPACK THE FILTER TANK

A. Remove all packing material from filter carton.

B. Open tank, remove any packing materials and inspect cartridge.

2. OPEN CARTON #2 AND UNPACK ALL COMPONENTS

- A. Filter base
- B. (2) 6' long filter connection hoses
- C. (1) Flex pipe with connection fittings
- D. (4) Stainless steel hose clamps
- E. Pressure gauge
- F. Teflon tape
- G. Straight fitting
- H. Hardware bag
- I. (2) Slide valves
- J. Union adapter
- K. Side Mount Union



3. PRE-ASSEMBLY

Hooking up the filter and motor to the base will vary based on the style of pump you have. Please note that steps 4A, 4B, or 4C will help you determine the style of pump and proper hook-up to the base.

Prior to attaching the filter or pump to the base, locate one of the slide valves (I). Cover threads of slide valve entirely with Teflon tape (F) to protect from leaks at the connection. Thread slide valve into the opening marked "TO POOL" on tank, which is the lower open port on the filter (see Figure 1).

The slide valves will enable you to stop the flow of water to the filter when performing routine maintenance, like cleaning your cartridge. The location of the second slide valve will vary based on the style of pump you have. Directions for the installation of this valve will be found in steps 4A, 4B, or 4C. Directions for how to use the slide valves are located in section 6 USING SLIDE VALVES.



Figure 1 — Slide valve attached "TO POOL" on tank

4. ATTACHING PUMP TO BASE & FILTER

As mentioned in the pre-assembly, there are different styles of mounts which will affect the way your pump is attached to the base. Inspect your pump and determine which of the three mounts below is most similar to yours. Use the corresponding directions for your hook-up (4A, 4B or 4C) and then proceed to step 5.



4A— Cradle style mount pump



4B — Plastic pump housing mount



4A. CRADLE STYLE MOUNT



Pumps with cradles located directly under the motor (see Figure 2) should be aligned with the holes inside the raised area of the base (see Figure 3a). This type of mount will require the use of FOUR mounting bolts from the hardware bag **(H)**.

Figure 2 — Cradle style mount pump



Figure 3b — Pump with slide valve in pump inlet Cover threads of slide valve entirely with Teflon tape **(F)** to protect from leaks at the connection. Thread the slide valve into the FRONT of the pump or pump strainer basket if applicable (see Figure 3b).



Figure 3a — Raised area on base



If there are NO THREADS on the inside of your pump inlet or on the inside of the pump basket, attach slide valve to the bottom of thru-wall skimmer (in place of standard fitting). This valve will allow you to stop the flow of water FROM the pool in the event of filter maintenance (see Figure 4).

Figure 4 — Slide valve installed in bottom of skimmer

Place tank on top of round opening on base and rotate until the holes in the tank bottom line up with the holes in the base. Use the remaining mounting bolts from hardware bag **(H)** to secure in place. BEFORE bolting down, make sure that the port labeled "TO PUMP" (open port, without slide valve) is facing the back of the base (longer part of base indicates back). See Figures 5 and 6 below.



4B. PLASTIC PUMP HOUSING MOUNT



Pumps with plastic pump housing mounts (see Figure 7) should be attached by aligning the openings with the two holes outside the raised area (see Figure 8a). This type of mount will require the use of TWO mounting bolts from the hardware bag **(H)**.

Figure 7 — Plastic pump housing mount



Figure 8b — Pump with slide valve in pump inlet

Cover threads of slide valve entirely with Teflon tape **(F)** to protect from leaks at the connection. Thread the slide valve into the FRONT of the pump or pump strainer basket if applicable (see Figure 8b).



Figure 8a — Holes outside raised area



If there are NO THREADS on the inside of your pump inlet or on the inside of the pump basket, attach to bottom of thru-wall skimmer (in place of standard fitting). This valve will allow you to stop the flow of water FROM the pool in the event of filter maintenance (see Figure 9).

Figure 9 — Slide valve installed in bottom of skimmer

Place tank on top of round opening on base and rotate until the holes in the tank bottom line up with the holes in the base. Use remaining mounting bolts from hardware bag **(H)** to secure in place. BEFORE bolting down, make sure that the port labeled "TO PUMP" (open port, without slide valve) is facing the back of the base (longer part of base indicates back). See Figures 10 and 11.





5

4C. SIDE-MOUNT PUMPS



Side-mount pumps (see Figure 12) allow you to attach the pump DIRECTLY to the filter body. Prior to attaching the pump, you must attach the tank to the base in order to determine which set of holes to use for the pump.

Figure 12 — Side mount pump

Place tank on top of round opening on base and rotate until the holes in the tank bottom line up with the holes in the base. Use remaining mounting bolts from hardware bag **(H)** to secure in place. BEFORE bolting down, make sure that the port labeled "TO PUMP" (open port, without slide valve) is facing towards motor mount.





Attach Side Mount Union (K) to pump by using Teflon tape on threads and screwing into the pump opening. When properly installed, the 2" locking ring should face the filter body. Place the pump onto the raised part of the base (see Figure 13a) and line up with the set of holes which allows the union to line up with the "TO PUMP" filter port. Use the mounting bolts to secure on base (see Figure 13b).

Thread the ring of the union onto the threads on the outside of the "TO PUMP" port. Once this is secure, cover threads of slide valve entirely with Teflon tape **(F)** to protect from leaks at the connection. Thread the slide valve into the FRONT of the pump or pump strainer basket if applicable (see Figure 14).



Figure 14 — Pump with slide valve in pump inlet



If there are NO THREADS on the inside of your pump inlet or on the inside of the pump basket, attach to bottom of thru-wall skimmer (in place of standard fitting). This valve will allow you to stop the flow of water FROM the pool in the event of filter maintenance (see Figure 15).

Figure 15 — Slide valve installed in bottom of skimmer

5. ATTACHING FITTINGS & HOSES TO YOUR PUMP & FILTER

There are several ways to hook up hoses to your filter and pump and the best way will depend on your set-up. Some pumps have female threads only (inside), some have male threads only (outside) and others may have both or none. There are parts included in CARTON 2 which will allow for set-up with virtually any style of pump. Below are the options available for hook-up based on the threads that your pump has.



Figure 16 — Fitting threaded into slide valve

First, cover the threads on the straight fitting **(G)** and thread it into the slide valve which you have attached to the filter's "TO POOL" opening (see Figure 16). Attach the 6' hose **(B)** to the fitting you just threaded in and clamp in place using hose clamp **(D)**. The free end of this hose should be attached to the thru wall return using another hose clamp (see Figure 17).



Figure 17 — Free end of hose attached to return



There should be at least one hose fitting provided with your pump (or that you may need to purchase separately), which you will thread into the second slide valve which has been threaded into the bottom of your skimmer OR into your pump (see Figure 18a & 18b). Cover the threads of that fitting with Teflon tape before screwing it into the opening on the second slide valve.

Now it's time to attach the flex pipe with connection fittings (**C**) to your filter and pump. Keep in mind that the hose is bent so that the pump will accept the 'higher' part and the filter will accept the 'lower' part of the connection. Check the flex pipe with connection fittings to ensure that o-Rings are inside (see Figure 19). Lubricate o-Ring with o-Ring Lube (sold separately) prior to installation.

- **NOTE:** If you have a SIDE-MOUNT PUMP, you will NOT need to attach this piece to your filter as the pump is already connected.
- **NOTE:** If you have a pump that has NO THREADS then you will need to purchase additional items to set up your new filter system. You will need to get a 3' hose (1-1/4" or 1-1/2" depending on the size your pump accepts) to attach directly onto your pump's outlet as the threaded fitting provided will not fit and an elbow fitting is necessary to thread into the female threads in the filter "FROM PUMP" port to attach your hose. Please remember you will need additional hose clamps to install with this method (see Figure 20).



Figure 18b



Figure 19 — O Ring for flex pipe connection fitting



Figure 20 — Hooking up to pump with no threads



If your pump has threads on the **outside** of the outlet (top of the pump) then you will thread one of the connection fittings directly onto it. Thread opposite side directly onto the "FROM PUMP" port of the filter and hand tighten connection (see Figures 21 & 22).

Figure 21 — Attaching flex pipe to filer

If your pump ONLY has threads on the **inside** of the outlet (top of the pump) then you will need to use the union adapter (J). Cover the male threads of the union adapter with Teflon tape and thread the union adapter directly into the outlet on the pump. At this point you may thread one of the connection fittings directly onto the union adapter and the other onto the "FROM PUMP" port of the filter and hand tighten the connection (see Figures 21 & 22).



Figure 22 — Attaching flex pipe to pump



Figure 23a — Hose attached to thru wall skimmer with valve

Finally, attach second 6' filter hose **(B)** using clamps **(D)** to the fitting on the bottom of your thru wall skimmer and the other end onto the front of your pump (see Figure 23a and 23b). Once clamped in place you are done installing the filter system.



Figure 23b — Hose attached to thru wall skimmer

6. USING SLIDE VALVES

The slide valves are used to stop the flow of water to the filter for routine maintenance. While the filter is in operation, the slide valves **MUST** remain in the open position To open the valve, turn the red handle to the left and pull straight up (see Figure 23a for open valve).

When you need to clean the cartridge you will have to move the slide valves into the closed position. First, turn off your pump to avoid damage due to excessive pressure. Next, push the red handle straight down and turn it to the left to lock valve in place (see Figure 24).

Remember to open BOTH valves again prior to restarting pump after cleaning.



Figure 24 — Slide valve in closed position

Make sure that the cartridge is installed inside the filter body, the lid o-ring is lubricated and the lid is closed securely. The pressure gauge **(E)** should be screwed into the opening on the tank lid after covering the threads with Teflon tape. (see Figures 25a & 25b).





Figure 25b — Installing pressure gauge

Fill the water in the pool to the middle of your thru-wall skimmer BEFORE operating your filter. Once water has reached mid-skimmer you may turn on the pump. You **MUST** bleed the air out of the system using the air relief valve on top of the tank (see Figure 25a). Turn the valve to the left, you will hear a hiss of air and once all the air is cleared some water will spurt out. Close the valve and the filter is ready to operate.

READ AND FOLLOW SAFETY INSTRUCTIONS!
This is the safety alert symbol. When you see this symbol on your system or in this manual, look for one of the following signal words and be alert to the potential for personal injury.
DANGER Warns about hazards that will cause death, serous personal injury, or major property damage if ignored.
WARNING Warns about hazards that can cause death, serious personal injury, or major property damage if ignored.
CAUTION Warns about hazards that will or can cause minor personal injury or property damage if ignored.
NOTICE Indicates special instructions not related to hazards.
CAREFULLY READ AND FOLLOW ALL SAFETY INSTRUCTIONS IN THIS MANUAL AND ON EQUIPMENT Keep safety labels in good condition; replace if missing or damaged.



Incorrectly installed or tested equipment may fail, causing severe injury or property damage. Read and follow instructions in owner's manual when installing and operating equipment.

- 1. Do not connect system to a high pressure or city water system.
- 2. Use equipment only for a pool installation
- 3. Trapped air in system can cause explosion. BE SURE all air is out of system before operating or testing equipment.

BEFORE OPERATING, MAKE THE FOLLOWING SAFETY CHECKS

- 1. Check all clamps, bolts, lids and system accessories before testing.
- 2. Release all air in system before testing.
- 3. Tighten trap lids.
- 4. Water pressure must be less than 25 PSI (172 kPa).
- 5. Water temperature must be less than 100° F. (38° C).

DANGER	BEFORE WORKING ON FILTER:
If filter clamp is adjusted under pressure,	1. Stop pump.
tank will blow off base, causing severe injury	2. Open air release valve.
or major property damage.	3. Release all pressure from system.

GENERAL INFORMATION

ANGER Hazardous pressure. If filter is improperly disassembled or assembled, it will explode under pressure. To avoid danger of severe injury or major property damage, always follow service instructions in this manual (Pages 11 to 13) when working on filter. WARNING Risk of explosion. Never operate this filter system at more than 50 pounds per square inch (50 PSI/345kPa) pressure! Clean a new pool as well as possible before filling pool and operating filter. Excess dirt and large particles of foreign matter in the system can cause serious damage to the filter and pump. With a cartridge filter system in place and operating correctly, clean water is returned to the pool faster than the pool water is being contaminated. A typical pool installation will require approximately one week to obtain and maintain the sparkle that your filter is capable of giving you. Keep pool water pH at recommended level (7.2 to 7.6).

- Be sure both clamps are in place and knobs are securely tightened before starting filter.
- Maintain pressure gauge in good working order. Replace gauge if it fails or is damaged.
- Cleaning interval is based on pressure differential, not on length of time filter is operated.

NOTICE Some pool disinfectants may clog filter media. To maximize media life and filter cycle time, closely follow disinfectant manufacturer's instructions when cleaning pool or filter.

POOL CHEMISTRY GUIDELINES

SUGGESTEI	D POOL LEVELS	ACTION REQUIRED TO CORRECT POOL CHEMISTRY					
		TO RAISE	TO LOWER				
рН	7.2 to 7.6	Add pH UP	Add pH DOWN				
TOTAL ALKALINITY	100 to 130 ppm	Alkalinity Up	Add pH DOWN				
CHLORINE (Unstabilized)	0.3 to 1.0 ppm	Add Chlorine Chemical	No action - Chlorine will naturally dissipate				
CHLORINE (Stabilized)	1.0 to 3.0 ppm	Add Chlorine Chemical	No action - Chlorine will naturally dissipate				
CHLORINE STABILIZER (Cyanuric Acid)	40 to 70 ppm	Add Stabilizer (Cyanuric Acid)	Dilution — partially drain & refill pool with water that has not been treated with Cyanuric Acid				

INSTALLATION — GENERAL

FILTER LOCATION SHOULD:

- Provide space and lighting for easy access for routine maintenance.
- Provide adequate ventilation and drainage for pump.
- Be reasonably level.
- Be as close to pool as possible to reduce line loss from pipe friction.

PIPING

• Never use pipe joint sealing compound on pipe and fittings that are plastic or may come into contact with plastic. To seal threaded connections on PVC pipe and fittings, use only teflon tape. Pipe joint compound may cause stress cracking of plastic components.

NOTICE

Filter locations remote from pool are possible but may require larger pipe to produce adequate flow through filter.

- Check local codes if considering a remote installation.
- Fittings restrict flow; for best efficiency use fewest possible fittings.
- Keep piping tight and free of leaks. Pump suction line leaks may cause trapped air in filter tank or loss of prime at pump. Pump discharge line leaks may show up as dampness or jets of water.

VALVES

A check valve installed between pool and filter outlet will prevent contaminants from draining back into pool.

NOTICE

A check valve between filter and pool will also prevent possible backflow which could dislocate element from its seat.

 A check valve installed between filter and heater will prevent hot water from heater from backing up into the filter and deforming filter elements.

NOTICE Damaging filter elements through excessive heat voids the warranty.

ELECTRICAL

• BE SURE filter grounding and bonding meets local and National Electrical Code standards. All wiring, grounding and bonding of associated equipment must also meet local and National Electrical Code standards.

ASSEMBLING FILTER

Filter Cartridge may shift position during shipping. To make sure cartridge is in place, follow procedure below before using filter. When disassembling filter, place all parts in a clean area.

- 1. Place filter in a clean area near its permanent location.
- 2. Remove filter head by turning Locking Ring counter clockwise Figure 1. Remove clamp by lifting straight up over tank.
- 3. As clamp is turned the Filter Head will rise from the tank body. Please note the Filter Head and Locking Ring are one piece.
- 4. Set tank head in a clean place; check for missing or damaged parts.
- 5. Filter element should be installed firmly by pressing into base.
- 6. Replace tank head evenly on filter tank shell for a tight seal. (Use pool lube)

NOTICE Be sure O-Ring and O-Ring seating area are clean.

7. Replace Filter Head and Locking Ring assembly on tank.

NOTICE

To properly engage threads make sure Filter Head is on straight and push downward.

- 8. Tighten Locking Ring by turning clockwise until it stops Hand Tighten Only.
- 9. Attach pressure gauge and air release valve as shown in Figure 1. Apply Teflon tape to threads of pressure gauge.

NOTICE Tighten gauge hand tight only. Tighten air release valve finger tight only.

CONNECTING FILTER PIPING

NOTICE

For ease of installation, plastic pipe and fittings are recommended for all piping to and from pool. DO NOT use pipe joint compound on base of filter. To do so will cause stress cracking of base, which will void warranty and may cause property damage.

ACAUTION Risk of damage to filter. Do not tighten fittings into base ports past thread stops. To do so will ruin filter base and void warranty, and may cause property damage.

NOTICE If pool water level is higher than filter base, shut-off valves must be installed in suction and return lines.

FILTER PRESSURE HEAD GAUGE 1. Wrap 1-1/2 to 2 layers of teflon tape to male threads only on all piping and fittings. LOCKING RING 2. Hand tighten fitting in each port. Be careful not to cross thread. 3. Tighten fittings to a snug fit with wrench. FILTER Be careful not to thread fittings past thread stop. BODY 4. If pipe connections leak, remove teflon tape, re-apply teflon tape and re-tighten in ports. Do not overtighten. **FIGURE 1**

	START UP								
A WARNING	HAZARDOUS PRESSURE. Risk of severe injury or major property damage if tank explodes. READ the								
	1. Turn pump OFF before starting procedure.								
	2. Properly seat filter clamps and securely tighten clamp knobs before proceeding.								
NOTICE	1. Tightly close plugs on Tank Drain Port (Figure 2). 2. Open air release valve located on top of filter tank head.								
NOTICE	Air trapped inside the filter greatly increases the explosion hazard. The air release valve allows you to get accumulated air out of the filter tank. At startup, open the air release valve and make sure that it is running a solid stream of water before putting the filter in service. 1. Start pump.								
	2. When a steady stream of water comes from air release valve, close valve.								
	3. After filter is operating, record filter pressure gauge reading in owner's manual for future use.								
NOTICE	When installed on a new pool, filter element may need cleaning after approximately 48 hours of operation.								
NOTICE	A new or recently cleaned filter element may pass some foreign material until it builds up a sufficient coating to stop all "fines". This is normal. A short operational period will correct the condition.								
	Check pressure gauge. If pressure has risen more than 10 PSI (70kPa) above startup pressure, remove and clean element.								
	PRESSURE AIR GAUGE RELIEF								
	FILTER BODY								
	DRAIN PORT								

FIGURE 2

FILTER DISASSEMBLY

A DANGER

Releasing either ring with pressure on system will cause tank or tank head to blow off base, causing severe injury or major property damage. NEVER adjust, tighten or loosen ring when tank is under pressure. If filter leaks at the ring, do not adjust the ring. Instead, follow instructions under "Filter Disassembly", below and "Filter Assembly", Page 8.



Regularly inspect clamp assemblies for cracked, corroded or broken welds and worn or stripped threads. If any wear or damage shows, replace the complete ring.



Tension stresses and aggressive pool chemicals can aggravate mechanical wear. Tank clamp assemblies and nuts or plastic knobs should be replaced every five years.



Do not use a filter that shows cracks, corrosion or distortion.

FILTER DISASSEMBLY

1. STOP PUMP.

- 2. CLOSE suction and return line valves (if used).
- 3. OPEN air release valve on top of filter.
- 4. WAIT until all pressure is released from filter tank and system before loosening either clamp.

WARNING To prevent severe or fatal injury, make sure that all pressure has been released from filter tank BEFORE proceeding.

- 5. Remove drain plug or open drain valve at "Tank Drain Port" and drain filter.
- 6. Loosen clamp ring; remove clamp by lifting it straight up over tank.
- 7. Remove tank head from tank body. Be careful not to damage O-Ring. Place tank head in clean area.
 - **NOTICE** If heavy dirt deposits have collected around bottom of filter element and base, wash out base before removing element.
- 8. Remove the O-Ring from the filter. Clean the O-Ring and inspect it. If you see cuts, cracking, deformation or wear, replace it.
- 9. Rock filter element to one side to free seal.
- 10. Lift element out of tank body. Do not drop filter element. Place element in clean area where it can be cleaned with hose and spray nozzle attachment.

FILTER REASSEMBLY



NOTICE Keep track of filter operating pressure. When pressure reaches 10 pounds per square inch (PSI) (70kPa) above initial operating pressure, clean filter element.

NOTICE If filter is used with a spa, soak element (see Step 2, "Special Cleaning Instructions") at each regular cleaning. With hose, wash foreign material from inside of base. Try to avoid washing debris into outlet port (See figure 4)

NOTICE Be sure inside surface of base is clean.

WASHING FILTER ELEMENT (See Figures 4, 5 and 6)

- 1. Use a garden hose with straight flow nozzle to wash down filter element (Figure 4). For best results use a spray nozzle cleaning system.
- 2. Work from the top down; wash down all pleats. Wash between all pleats.
- 3. Turn element while spraying to wash down entire outside of element.
- 4. Repeat wash down process for inside of filter element. Hold nozzle as close to inside of pleats as possible (Figure 6).

NOTICE

- BE SURE all dirt and foreign materials are washed away from INSIDE pleats of element.
- Allow cartridge to dry thoroughly before replacing it in filter
- TIP Have a second cartridge on hand and ready to use; this will avoid filter down time.

SPECIAL CLEANING INSTRUCTIONS

DANGER Risk of fire or explosion. Isolate filter from system before chemical cleaning; rinse filter and elements completely before returning to service.

If filter cannot be isolated, remove media and clean at another location. Follow chemical manufacturer's instructions for use. Do not mix chemicals except as directed by manufacturer. Do not allow cleaning chemicals to mix with or to come in contact with chlorine, bromine, other chemicals, or chemical feed devices.



NOTICE Some pool disinfectants may clog filter media. To maximize media life and filter cycle time, closely follow disinfectant manufacturer's instructions when cleaning pool or filter.

For stubborn deposits, proceed as follows:

- 1. Follow Filter Cleaning Procedure (Page 9).
- 2. If deposits remain, soak element at least one hour with a solution of Filter Flush and water.
- 3. Wash off with water to remove oils, dirt and remaining cleaner solution.
- 4. If filter element does not come clean with this procedure, consult your pool professional. Acid washing should be done only by trained professionals who have proper safety equipment and acid disposal facilities.

WINTERIZING

A DANGER Hazardous pressure. To avoid severe injury or major property damage, follow instructions below exactly.

WARNING Explosion hazard. Purging the system with compressed air can cause components to explode, with risk of severe injury or death to anyone nearby. Use only a low pressure (below 5 PSI), high volume blower when air purging the pump, filter or piping.

NOTICE Filter must be protected from the weather and drained if freezing is anticipated. Allowing filter to freeze can cause damage to filter and WILL VOID THE WARRANTY!

- 1. Stop pump.
- 2. Open air release valve.
- 3. Remove drain plugs from ports or open valves at "Tank Drain Ports".
- 4. Drain ALL piping to and from filter.
 - a) Gravity drain system as far as possible.
 - b) Protect areas which retain water with non-toxic propylene glycol antifreeze (RV antifreeze) or pipeline Anti-Freeze.
- 5. Turn to Page 7 for filter disassembly instructions.
- 6. Remove filter element and store in a warm, dry area.

ACAUTION Do not remove or damage safety and instruction labels during cleaning. Replace any decals which may have been damaged.

TROUBLESHOOTING GUIDE

SHORT CYCLE:

NOTICE

Time between cleanings will vary with each installation. The following causes and remedies are for cycle times shorter than normal.

NOTICE Some pool disinfectants may clog filter media. To maximize media life and filter cycle time, closely follow disinfectant manufacturer's instructions when cleaning pool or filter.

- 1. Chlorine residual too low maintain proper residual (consult pool professional for recommendation).
- 2. Flow rate too high restrict flow to rated capacity of filter (see instruction decal on filter).
- 3. Filter too small install larger filter or additional filter.
- 4. Unstable water consult pool professional.
- 5. Filter element not cleaned properly or plugged with algae, iron, calcium, etc see "Special Cleaning Instructions".
- 6. Heavy or improper application of powdered chlorine or chlorine pills that contain a binder see "Special Cleaning Instructions".
- 7. Algae in pool apply heavy dose of chlorine or algaecide as recommended by pool manufacturer. Continue until algae is controlled.

LOW FLOW:

- **1. Element is plugged** see "Special Cleaning Instructions".
- 2. Pipe blocked downstream from filter remove obstruction.
- 3. Piping too small replace with larger pipe (consult dealer for recommendation).
- 4. Pump hair and lint trap is plugged empty and clean.
- 5. Pump impeller and diffuser worn replace with new parts. Consult pump owner's manual for information.
- 6. Pump too small for system replace with larger pump.

POOL WATER NOT CLEAR:

- 1. Chlorine dosage too low maintain adequate chlorine residual (consult pool professional for recommendation).
- 2. Element cloth torn or punctured replace element.
- 3. Filter too small, flow too low, or daily operating time too short, giving inadequate turnover rate consult dealer to verify that equipment is properly sized for your pool.
- 4. Pump too large overpumping reduce flow rate.
- 5. Filter installed backward replumb.

LONG RECOVERY TIME AFTER HEAVY USAGE:

- **1. Residual Chlorine level is too low** add chlorine.
- 2. Filter too small replace with larger unit.
- 3. Pump too large reduce flow rate.

FILTER BY-PASSES DIRT:

- **DANGER** To avoid severe injury or major property damage, follow instructions under "Disassembly" and "Assembly" (Pages 7 and 8) EXACTLY.
- 1. Element cloth torn or punctured replace element.
- Filter element is not seated properly in filter base follow instructions under "Filter Disassembly Reassembly" and reposition properly.
- 3. Filter is plumbed backwards and element cloth is ruptured replumb properly and replace element.
- 4. Colloidal fines (very small suspended dirt particles) are present and passing through element covering use Crystal Clear or if fines have already settled, vacuum to waste.

FILTER PARTS LIST

PART #	DESCRIPTION	BS PRC30	BS PRC60	BS PRC90 NE635	BS PRC120 NE636	BS PRC150	BS PRC180	BS PRC30BD	BS PRC60BD	BS PRC90BD	BS PRC120BD	BS PRC150BD	BS PRC180BD
BS 40061BLK	Hose Adapter	1	1	1	1	1	1	1	1	1	1	1	1
BS PRCBASE	Filter Base	1	1	1	1	1	1	1	1	1	1	1	1
AC 26875	Complete LID	1	1	1	1	1	1	1	1	1	1	1	1
AC 26859	Slide Valve	2	2	2	2	2	2	2	2	2	2	2	2
BS 10022	6' 1/2 Hose	2	2	2	2	2	2	2	2	2	2	2	2
BS 17396GRY	Threaded Plug	1	1	1	1	1	1	1	1	1	1	1	1
BS 35815	Clamps	4	4	4	4	4	4	4	4	4	4	4	4
BS 35858	Teflon Tape	1	1	1	1	1	1	1	1	1	1	1	1
AC 04723	Molded Hoses	1	1	1	1	1	1	1	1	1	1	1	1
BS 39349	Rearmount Gauge	1	1	1	1	1	1	1	1	1	1	1	1
BS 11762	1/4 Air Relief Plug	1	1	1	1	1	1	1	1	1	1	1	1
AC 11991	Horizontal Union	1	1	1	1	1	1	1	1	1	1	1	1
AC 08524	Union Adapter	1	1	1	1	1	1	1	1	1	1	1	1
AC 09474	Body Only	1	—	—	_	—	-	1	—	—	-	_	-
AC 09644	Body Only	_	1	_	_	_	-	_	1	_	_	_	_
AC 09687	Body Only	—	—	1	_	—	-	-	—	1	-	_	-
AC 15873	Body Only	_	-	_	1	_	-	_	_	_	1	_	_
AC 15903	Body Only	—	—	—	_	1	-	-	—	—	-	1	-
AC 16314	Body Only	_	_	_	—	_	1	_	_	_	_	_	1
BS 00477	30 Cartridge	1	—	-	—	-	-	-	—	—	_	_	-
BS 55387	60 Cartridge	_	1	_	_	_	-	_	_	_	_	_	_
BS 55956	90 Cartridge	—	—	1	_	—	-	-	—	—	-	_	-
BS 55336	120 Cartridge	_	_	_	1	_	-	_	_	_	_	_	_
BS 08753	150 Cartridge	—	—	-	_	1	-	_	—	_	-	_	_
BS 08788	180 Cartridge	_	_	_	_		1	_	_	_	_	_	_



HYDRO[™] ABOVE-GROUND CARTRIDGE FILTER SYSTEM NE635 & NE636

One Year HydroTM Cartridge Filter System Warranty Registration Card 1745 Wallace Ave, Ste. B St. Charles, IL 60174

- 1. Hydro[™] Cartridge Filter System has a one year warranty against defects in materials and workmanship. To receive the warranty, the card must be filled out completely and returned.
- 2. Hydro[™] Cartridge Filter System must be returned with a receipt showing date of purchase, purchase price, and the dealer from which the cartridge was purchased. **No warranty claim will be honored without a receipt.**
- 3. Please notify Blue Wave Products in advance of any Hydro[™] warranty claim prior to shipping the item back. Contact our warranty claim department at <u>warranty@splashnetxpress.com</u>.
- 4. The freight on the Hydro[™] Cartridge Filter when returned must be prepaid.
- 5. Warranty claims will only be resolved with the shipment of a replacement product, no refunds will be given.
- 6. <u>Improper installation, misuse or damages resulting from acts of nature will render this warranty null and void.</u>
- 7. This warranty is in lieu of all other warranties expressed or implied and no responsibility is assumed for future damage due to misuse. This warranty does not cover any damage from the elements such as wind, snow, heavy rains, etc. We are not responsible for damage to the cartridge filter due to improper installation or excessive wear.

To send in this warranty card: Fill out below, detach and mail to the following address:

BLUE WAVE PRODUCTS 1745 Wallace Ave. Suite B St. Charles, IL 60174

 HYDRO™ ABOVE-GROUND CARTRIDGE FILTER SYSTEM WARRANTY REGISTRATION FORM

 Date Purchased: ____/____

 Purchaser: _______

 Address: _______

 City/State/Zip: _______

 Phone: (___) ______

 Email: _______

 Purchased from: _______

 Purchase Price: ______