



Generation II

Cartridge Filter with 6 Position Valve

Model GEN 180 — Item No. 0-1803-019

Model GEN 240 — Item No. 0-1803-022

Owner's Guide



* Shown with Power Pak III, not included.

⚠ WARNING

“READ ALL INSTRUCTIONS” Failure to follow these important safety instructions and other basic safety precautions may result in serious personal injury.

IMPORTANT SAFETY INSTRUCTIONS

Before you begin installing your filter, refer to your pump owners guide for very important installation and electrical information related to your filter.

ELECTRICAL/BUILDING PERMIT

Local building codes may require obtaining an electrical or building permit and may have regulations on set backs and barriers that must be followed.

ELECTRICAL

We recommend you have a qualified electrical contractor install the electrical power supply as specified in your pump instructions.

INSTALLED LOCATION

Position filter, pump and any other related components a minimum of 4 feet from pool to prevent their being used as a means to climb into the pool by young children. **DO NOT** store toys, chairs, tables, containers or other objects within 4 feet of the pool for the same reason.

WARNING

SEVERE ELECTRICAL SHOCK could result if you install your filter and pump on a deck or above pool water level. They could fall into the water, causing severe shock or electrocution. **DO NOT** install on a deck or other surface at, above or slightly below the top rail of the pool.

PROPERLY SUPPORTED

Filter, pump and any other related components should be properly supported to prevent damage from misalignment, settlement, vibration and mounted so as to minimize the potential for the accumulation of debris and moisture.

ACCESSIBILITY

The circulation system components should be installed to allow accessibility for inspection, repair or replacement.

DO NOT alter the pump electrical cord in any way or change the plug end to any style.

DO NOT use an extension cord(s). Severe electrical shock may occur.

PREVENT SEVERE SHOCK

To prevent the risk of severe electrical shock, plug your pump cord end into 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.

DO NOT allow children to operate or play around this product unless they are closely supervised by adults at all times.

Replace damaged cord immediately to reduce the risk of electrical shock.

DO NOT BURY CORD

An exposed cord may accidentally become damaged or severed by a sharp object or shovel resulting in severe electrical shock. Position cord to prevent accidental damage from lawn mowers, hedge trimmers or other equipment.

BARE FEET/WET GROUND

This is a dangerous combination around electrical equipment. Always be sure the ground under your feet and body is dry before you touch electrical equipment. Failure to heed this warning may cause severe personal injury or electrocution due to severe electrical shock.

WARNING

Avoid direct water spraying with a garden hose around electrical outlets, pump or any other electrical devices. Severe electrical shock or electrocution may occur.

SERVICING YOUR PUMP

Always unplug your pump from the receptacle before servicing, adjusting or repairing.

Did you read the **IMPORTANT SAFETY INSTRUCTIONS?** If not, **READ THEM NOW.** They contain very important safety information related to the installation of your filter.

Familiarize yourself with the installation sequences by reading these instructions first. **AVOID SHORTCUTS** that may result in reworking the installation.

BEFORE YOU BEGIN

The pool must be properly erected per your pool assembly and installation instructions before installing the filter. Install the surface skimmer and return fitting. Before completing the filling of the pool to the water level indicator marks on the skimmer face plate, the filter and pump should be installed with all connections securely tightened.

NOTE: For Gen 240 only: Install the Hi-flow Return Pack according to the instructions in this guide and discard the standard return fitting furnished with your skimmer.

TOOLS REQUIRED

- Flat head screwdriver
- Crescent wrench
- Measuring tape
- Carpenters level
- Flat nose shovel
- Rags
- 5/16" Nutdriver (optional)

The following tools are required for Model GEN 240 only:

- Hack saw
- File

MATERIALS REQUIRED

- Nine 12" x 12" patio blocks (All filters)
- 1-1/2" Hose clamp (Model GEN 180 only)

The following materials are required for Model GEN 240 only; They are optional for Model Gen 180.

- 1-1/2" Schedule 40 PVC pipe
NOTE: Quantity depends on length of pipe runs desired.
- 10 to 12 1-1/2" 90 degree socket PVC elbows
- PVC pipe primer
- ABS to PVC solvent cement with applicator

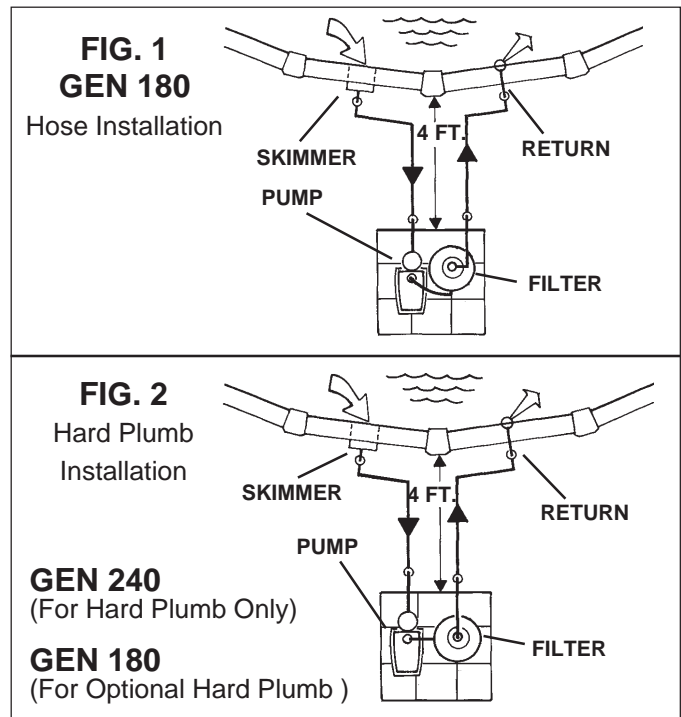
OPTIONAL PARTS REQUIRED

GEN 180 ONLY: If you wish to hard plumb your filter installation with PVC pipe, you can purchase a Hard Plumb Adaptor Kit Model 0-2060-000 which includes six (6) adaptors and the necessary clamps to adapt 1-1/2" PVC Pipe to your filter and pool.

INSTALLATION

INSTALLATION LOCATION

Install your filter and pump and any other related components at least 4 feet from the pool to prevent their being used as a means of access to the pool by young children. Patio blocks provide firm support and keeps standing water and weeds away from electrical parts. **DO NOT** install your filter and pump directly on the ground surface. Settling and stressing of the circulation lines may occur during wet seasons. Position patio blocks as shown in the following illustrations, using a shovel and carpenter's level to level ground before placing the blocks.



POSITIONING FILTER/PUMP

Position filter and pump on pad as shown in Fig. 1 for Model Gen 180, or Fig. 2 for Model Gen 240 or Gen 180 when hard plumbing.

Suction and return lines should be partially buried to prevent accidental tripping that could cause personal injury or damage to the filter system. Starting at least 12" from the pool wall, make two 3-4" deep trenches, one from the pool's skimmer toward the front of the pump and the other from the pool's return fitting toward the filter port located on the tank cover, marked "TO POOL". Be sure the hoses are routed so that water flow through them is not restricted.

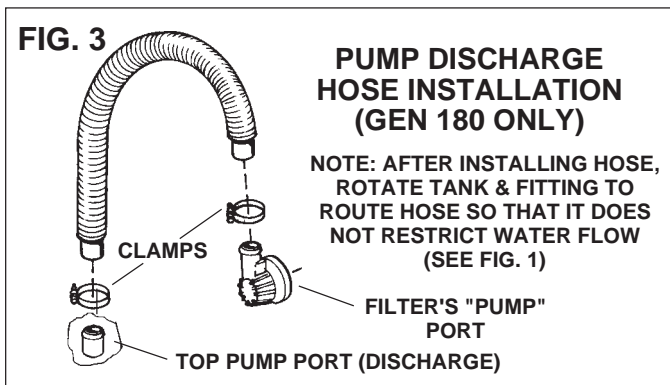
POSITION FILTER ON TANK BASE

Position filter in the tank base with the tank port labeled "TO PUMP" oriented to the pump discharge as shown in Figs 1 or 2.

IMPORTANT: After orienting the filter on the pad, and prior to filter start-up, you must install the tank o-ring. Loosen the v-clamp and remove it and the cover. Install the o-ring onto the tank flange. Reinstall the cover, being sure that the o-ring is seated into the cover groove. Reinstall the v-clamp and tighten until there is approx. 3/8 inch clearance between the clamp ends.

INSTALL PUMP DISCHARGE HOSE (Model GEN 180)

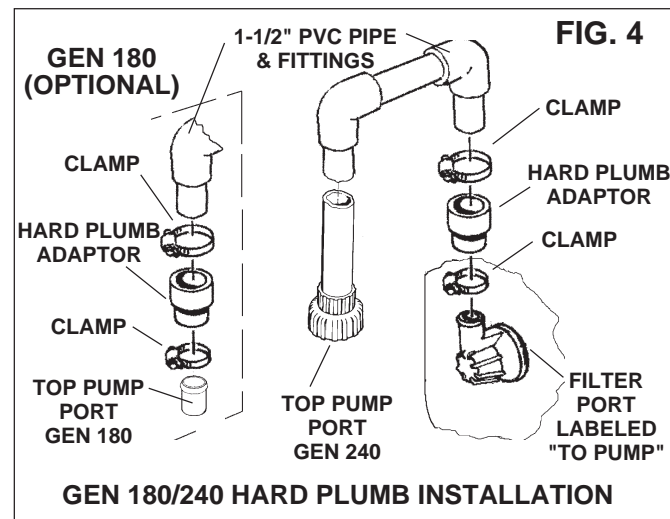
The pump discharge hose is provided to install onto barbed hose fittings. Install the barbed hose fitting into the pump discharge per the pump instructions (See Fig. 3). Slip a hose clamp over each end of hose prior to installing. Push one hose end fully onto the filter port labeled "TO PUMP," and the other end over the discharge port located on the top of pump. Tighten clamps firmly using a flat head screwdriver or 5/16" nutdriver.



HARD PLUMBING PUMP DISCHARGE (See Fig. 4)

Gen 180 (Optional): If your option is to hard plumb the pump discharge to filter inlet, it will be necessary that you use two (2) hard plumb adaptors (P/N 348-1036), and four (4) clamps: (2) P/N 387-1023 (2) P/N 387-1024

Gen 180 & 240: Refer to "Hard Plumb Installations" and "Solvent Welding" for instruction on PVC piping assembly, and then install the piping as shown.

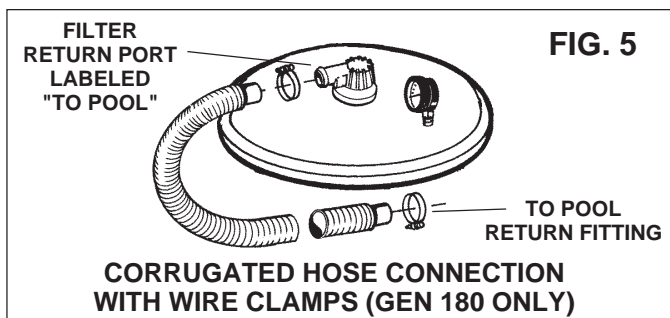


INSTALL RETURN LINE

An 8 foot long hose is provided for filter Model GEN 180 only, and a special Hi-flow Return fitting is provided with filter Model GEN 240 only.

MODEL GEN 180

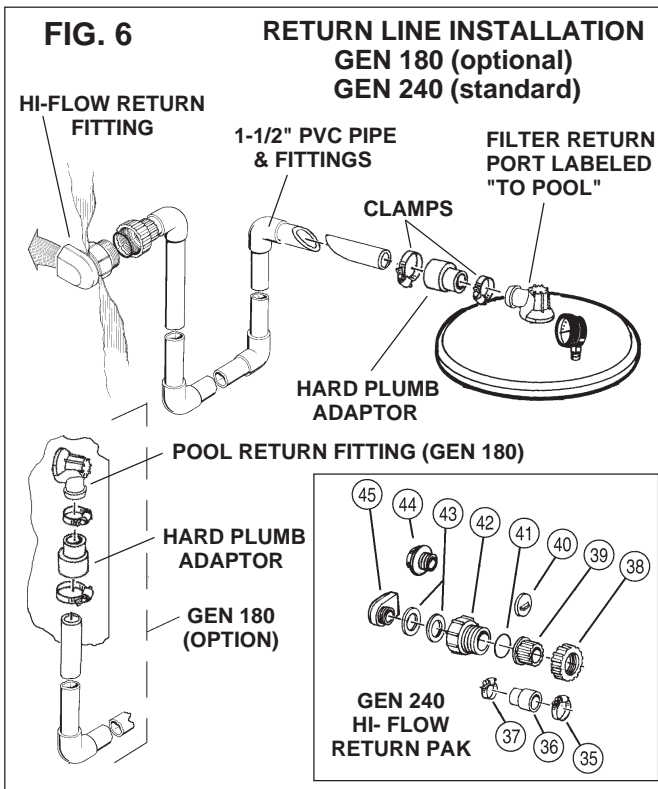
Slip a hose clamp over each end of the hose and push one end onto the filter's return port labeled "TO POOL," and the other end onto the pool's RETURN fitting. Tighten clamps firmly using a flathead screwdriver or 5/16" nutdriver.



Gen 180 (Optional, see Fig.6): If your option is to hard plumb the return line, it will be necessary that you use two (2) hard plumb adaptors (P/N 348-1036), and four (4) clamps: (2) P/N 387-1023 (2) P/N 387-1024

MODEL GEN 240

This filter model is designed for a hard plumbing installation ONLY and is provided with a special high flow return fitting, hard plumb adaptor, clamps, and a 1-1/2" pipe socket for installing 1-1/2" PVC pipe.



INSTALL HI-FLOW RETURN FITTING MODEL GEN 240 (See Fig.6)

Discard the EYEBALL RETURN FITTING provided with your pool and **replace** it with the HIGH FLOW RETURN FITTING as shown.

Locate a board large enough to cover the return fitting cut-out. From the inside of the pool, use the board to hold the liner against the pool wall cut-out. Keep hands away from hole to avoid injury. From the outside of pool, use the cut-out as a guide, and cut away the liner with a razor knife.

INSTALLATION

(without pressure type pool cleaner)

- Slip a gasket (43) over the threads of the return fitting (45) and push threaded end through the wall from inside pool. Place the second gasket over the threads now exposed on the outside of pool.
- Hold the return fitting (45) so the opening is facing away from the skimmer and slightly downward. Thread the union adaptor (42) onto the return fitting and tighten firmly. **Helpful Hint:** Using an oil filter wrench to tighten the union adaptor will make the job easier.

INSTALLATION

(With pressure type pool cleaner)

1. Slip a gasket (43) over the threads of the return fitting adaptor (44) and push the threaded end through the wall from the inside of pool. Place the second gasket over the threads now exposed on the outside of pool.
2. Hold the return fitting adaptor (44) and thread the union adaptor (42) onto it and tighten firmly. **Helpful Hint:** Using an oil filter wrench to tighten the union adaptor will make the job easier.
3. Item (45) will screw into (44) for filtering operations. For pressure vacuuming, remove (45) and install your Pressure Type Pool Cleaner into (44).
4. Connect the filter end of the return line to the filter's Return port Labeled "TO POOL," using a hard plumb adaptor and clamps as shown.

HARD PLUMB INSTALLATIONS

Use 1-1/2" Schedule 40 PVC pipe. Cut pipe to length as required between the joints. With ends cut square, remove any burrs and loosely assemble for proper fit prior to solvent welding. Slip the union nut (38) onto the pipe with the female threads facing the union adaptor (42). Then, solvent weld the union socket (39) onto the pipe using primer and PVC/ABS solvent cement. **DO NOT** Allow solvent cement to contact the sealing surface of the union socket. When dry, assemble the threaded connections and tighten firmly by hand.

Insert the o-ring (41) into the union adaptor groove, then secure the cemented pipe assembly onto the union adaptor (42) with the union nut (38).

SOLVENT WELDING

Contact your pool dealer for ABS to PVC Solvent, PVC Cement, and PVC Primer. Follow directions on the labels.

TO WINTERIZE POOL

Drain pool down below the return fitting. Loosen union nut (38) and pull back the union socket (39). Insert the winterizing disc (40) between o-ring (41) and union socket. Retighten union nut onto union adaptor firmly. **IMPORTANT:** Remember to remove the winterizing disk prior to operating the filter at the start of the next swimming season.

INSTALL SUCTION LINE

An 8 foot long hose is provided for filter Model GEN 180 only. A hard plumb adaptor with clamps is provided with filter Model GEN 240 for adapting hard plumbing to the skimmer outlet.

MODEL GEN 180 ONLY

The pump suction is provided with a barbed hose fitting. Slip a hose clamp over each hose end and push one end onto skimmer outlet and the other end onto the pump suction port. Tighten clamps firmly using a flathead screwdriver or 5/16" nutdriver.

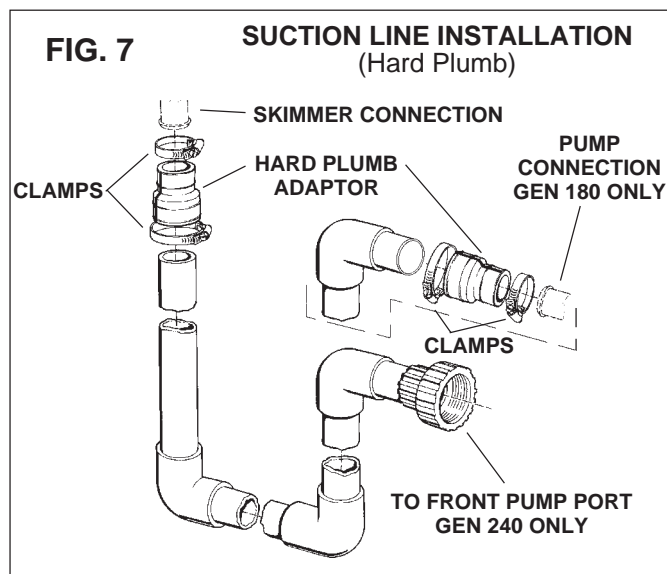
Gen 180 (Optional, See Fig. 7): If your option is to hard plumb the suction line, it will be necessary that you use two (2) hard plumb adaptors (P/N 348-1036), and four (4) clamps: (2) P/N 387-1023
(2) P/N 387-1024

Slip a clamp onto the small end of the hard plumb adaptor and push the adaptor onto the skimmer outlet as shown. Slip a clamp onto the large end of adaptor

and insert the pipe. Slip a clamp onto the small end of the hard plumb adaptor and push it onto the pump's suction port. Tighten all clamps firmly.

MODEL GEN 240 (See Fig. 7)

Model Gen 240 is designed for a hard plumbing installation **ONLY**. The pump suction is provided with a 1-1/2" pipe socket fitting. Refer to **HARD PLUMB INSTALLATIONS** and **SOLVENT WELDING** for assembling piping between the skimmer and pump's suction port. Slip a clamp onto the small end of the hard plumb adaptor and push the adaptor onto the skimmer outlet as shown. Slip a clamp onto the large end of adaptor and insert the PVC pipe. Tighten clamps firmly.



ELECTRICAL OUTLET

Refer to your pump owners guide for detailed information pertaining to the requirements and regulations for safe electrical installation of the power supply, receptacle outlet, switching and ground fault interrupter.

FINISH FILLING POOL

Finish filling your pool, referring to skimmer installation and pool assembly instructions for proper water level.

INITIAL START UP

A newly filled pool is normally filled with unfiltered water and usually requires continuous filtering for 24 to 48 hours along with chemical treatment of the pool water. Excessively contaminated water with suspended particles and algae, may require you to clean the cartridges once or twice during this initial stage of filtering the new raw water. After this initial filtering stage, the cartridge cleaning process will be less frequent and will allow longer time periods between cartridge cleanings.

1. Loosen the pump strainer pot lid to allow air to escape. Tighten lid when water begins to flow between strainer pot lid and strainer body. **DO NOT** over tighten.
2. Plug in your pump to the GFCI protected receptacle. **Refer to "WARNINGS"**.
3. Start pump. Check all fittings and hose connections for leaks and correct if necessary. Note the pressure reading on the pressure gauge. Clean the cartridges when the pressure has increased 5 pounds over the clean cartridge filter pressure.

FILTER OPERATION

Because all pool installation environmental conditions are so variable (wind, rain, airborne debris, heat, and pool use, etc.), it is difficult to provide an accurate normal filtering time for normal usage. You must determine how long your filter must operate each day. Generally, 6 to 8 hours of filtering each day is sufficient to maintain pool clarity if the pool chemical treatment is correct. Consult your local pool store for helpful advice in keeping your pool clean and sanitary. When possible, avoid operating your filter during peak times for electricity demands in your community. Check with your local electric utility company for their recommendation on the best times for operating your filter and pump.

WHEN TO CLEAN CARTRIDGES

When to clean the cartridges largely depends on local environmental conditions and sudden changes in the weather. Windy areas or a sudden high windy day, spring time pollen releases, excessive pool use or neglect in pool chemical treatment can cause your filter to work harder to remove excess amounts of airborne particulates. **Check the pressure gauge reading frequently and clean the cartridges when the pressure gauge increases 5 pounds above the clean filter starting pressure.**

CLEANING CARTRIDGES

As the cartridges become saturated with dirt and debris, the return flow back to the pool will slow. To clean the cartridges, follow the steps below:

1. **STOP PUMP** and unplug from receptacle.
2. **PLUG SKIMMER AND RETURN**
To prevent the backflow of pool water from exiting the filter tank when the cover is removed, stuff a rag into the following openings:
A - Inside skimmer, bottom hole.
B - Return inlet fitting opening (from inside of pool).
3. **DRAIN TANK**
Remove the tank drain cap. Allow the tank to start draining. The drainage flow will increase when the tank cover is removed.
4. **DISCONNECT HOSE/PIPING**
Loosen the return line hose clamp at the the tank cover connection. Remove end of hose from fitting.
5. **REMOVE TANK COVER**
Loosen the v-clamp knob counterclockwise and remove the clamp. Lift cover straight up until clear. Note: Hard plumbed lines (if used) may have to be shifted to one side in order to clear cover from tank. Set aside, taking care not to scratch or dent the o-ring sealing surface on cover. Remove tank o-ring from tank flange. Allow tank to drain completely.
6. **REMOVE CARTRIDGE LOCATOR**
Grip the center pipe coupling and unscrew counterclockwise. Lift it and cartridge collector out of the tank. Unscrew the lower riser tube and remove it from the tank.
7. **LIFT OUT CARTRIDGES**
Carefully rotate and lift out each cartridge, taking care not to damage the cartridge's pleated material.

CAUTION: Never lay the side of a cartridge on a rough textured surface such as concrete, asphalt, gravel, etc.. Damage to the pleated filtering material may occur. **THIS WILL SERIOUSLY REDUCE FILTERING PERFORMANCE.**

8. **FLUSH OUT TANK**
With a garden hose, flush out tank through the drain and remove any large debris that may have passed through the skimmer and/or pump strainer baskets into the filter.
9. **CLEAN CARTRIDGES**
Attach the **BLASTER NOZZLE** to a garden hose. Position cartridge in an upright position, supporting with one hand when cleaning. Hold the blaster nozzle away from the cartridge about 18". Starting at the top of the cartridge, spray between each pleat, working downward.
10. **SOLUTION CLEAN CARTRIDGES**
NOTE: Before solution cleaning the cartridges, be aware that chlorine and acids kill lawns and plant life. Clean the cartridges in a suitable area. **Always wear protective clothing such as gloves and goggles.**

If the cartridge becomes impregnated with algae, pour a mild chlorine solution (1 part chlorine to 4 parts water) over all pleated surfaces and let soak for 10 minutes. Hose off thoroughly. Then, mix a solution of warm water and detergent (1 cup per 5 gallons of water). Then add one cup of chlorine or household bleach to the solution.

Totally submerge and soak the cartridges for 15-30 minutes. Agitate the cartridges vigorously to dislodge trapped particles.
11. **RINSE**
Rinse cartridges thoroughly before reinstalling in the filter. Soapy bubbles will appear on the pool surface near the return fitting if the cartridges are not rinsed clean,.
12. **HARD WATER**
Hard water will eventually coat the cartridges with calcium deposits that cut off good filtering performance. To correct, mix a solution (1 part muriatic acid to 4 parts water). With the cartridges fully submerged, soak them for about 15 minutes. Rinse thoroughly with clean water.

NOTE: Muriatic acid solution will kill lawns and plant life. Perform this service in a suitable area.
13. **REINSTALL CARTRIDGES**
Grasping the cartridge handle, lower each cartridge into the tank and align the hole on the bottom of each cartridge with a manifold elbow port. Gently push cartridges down until fully seated.
14. **REPLACE CARTRIDGE LOCATOR**
Install the riser tube by screwing clockwise into the manifold collector (be careful not to cross thread). Tighten firmly by hand. Slide the cartridge locator (slotted ribs facing down) over the riser tube. Align and insert the curved ribs of the cartridge locator onto the top of each cartridge. Secure the assembly by screwing the pipe coupling onto the end of the riser tube.

15. REPLACE TANK COVER

Wipe the tank's o-ring and the mating sealing surfaces of the tank and cover clean. If dry, lubricate the o-ring with silicone lubricant. Position the o-ring on the tank's sealing surface. Then, being sure to maintain proper orientation of the tank cover's **RETURN** port to your pool's plumbing, guide the end of the pipe adaptor assembly into the socket of the pipe coupling. Be sure to position the cover groove over the tank o-ring and carefully push the cover down onto the o-ring. Make sure that the cover is sitting evenly on the tank with the o-ring in the cover groove before proceeding. Install the v-clamp and tighten until the ends of the clamp are approximately 3/8" apart.

16. CLOSE TANK DRAIN

Clean any debris from the drain opening and it's threads. Replace the drain cap and gasket. Tighten securely by hand.

17. REMOVE RAGS FROM RETURN AND SKIMMER

18. RESUME NORMAL OPERATION

Start pump and check for any leaks around cover, tank drain, and all connections. Correct if necessary.

VACUUMING YOUR POOL

Follow the hook-up instructions supplied with your vacuum equipment or skimmer.

GEN 240 Only: If you're using a pressure type vacuum system, unscrew the pools return fitting (45) and install your Pressure Type Pool Cleaner into (44). Be sure to replace (45) when you are ready to resume filtering operations.

Debris is caught in the filter at a very rapid rate while vacuuming. Consequently, the filter must work harder, causing a rapid increase in filter pressure as will be indicated on your pressure gauge. Frequent cleaning of the cartridges may be necessary during this process depending on the amount of dirt being vacuumed off the pool floor.

MAINTENANCE

Preventative maintenance will provide continued smooth performance and extend the life of your filter for many years. Neglect will cause parts to wear or bind, leaks to occur and result in costly repairs. Always keep moving parts lubricated and maintain a clean environment around your filter and related components.

LUBRICATION

There are various types of lubricants available. However, most are intended for moving metal parts. Unfortunately, these lubricants will harm or degrade plastics. **DO NOT** use petroleum based lubricants. Many people consider "PETROLEUM JELLY" safe for babies and can be applied to anything. But, it will DESTROY most plastics and o-rings. Silicone lubricants available at your pool dealer are safe for use on plastics and o-ring seals.

LUBE STRAINER O-RING

Before removing the pump's strainer lid, you must prevent the backflow of water from your skimmer and filter from exiting out the strainer housing opening.

1. Remove skimmer cover and basket and plug the port at the bottom of skimmer with a rag, or close your pump's inlet valve if so equipped.

2. Remove pump strainer lid, referring to your pump owner's guide and lubricate the o-ring and mating seal areas with silicone lubricant.
NOTE: You will experience some water coming out the strainer housing (residual from hoses and filter tank), but it should not be a large volume.
3. Replace the strainer lid.
4. Remove rag from skimmer, or open the pump inlet valve, if so equipped. Resume normal filter operation.

It is good practice to keep a supply of silicone lubricant handy to periodically lubricate your filter and pump's o-rings.

REPAIRS

Servicing should be performed by a qualified dealer. **If disassembly is attempted, mark each of the parts assembled position as it relates to its mating parts.** This assures proper alignment when reassembled. Malfunction will occur if the filter is not properly assembled. See your dealer for original replacement parts.

CAUTION

BEFORE removing the filter or pump from pool area for servicing, always disconnect the pump from its electrical source and prevent the backflow of water from your skimmer and return fitting ports from flowing out of the disconnected hoses.

1. Remove skimmer cover and basket and plug the port at the bottom of the skimmer with a rag.
2. Referring to the instructions for your return fitting, install the **Shutoff disc**. Option: stuff a rag into the return fitting opening.
3. Disconnect hoses on the filter or pump as necessary when removing for service or repairs.

DRAIN TANK See Caution Above

1. Remove tank drain cap to drain.
2. Remove v-clamp, cover, and large o-ring from tank.
3. After servicing, reassemble and install in reverse. Make sure tank's o-ring and sealing areas are free of any dirt or grit, and that the o-ring is lubricated with silicone lubricant. Be sure that the o-ring is evenly seated in the cover groove before replacing the cover and v-clamp.

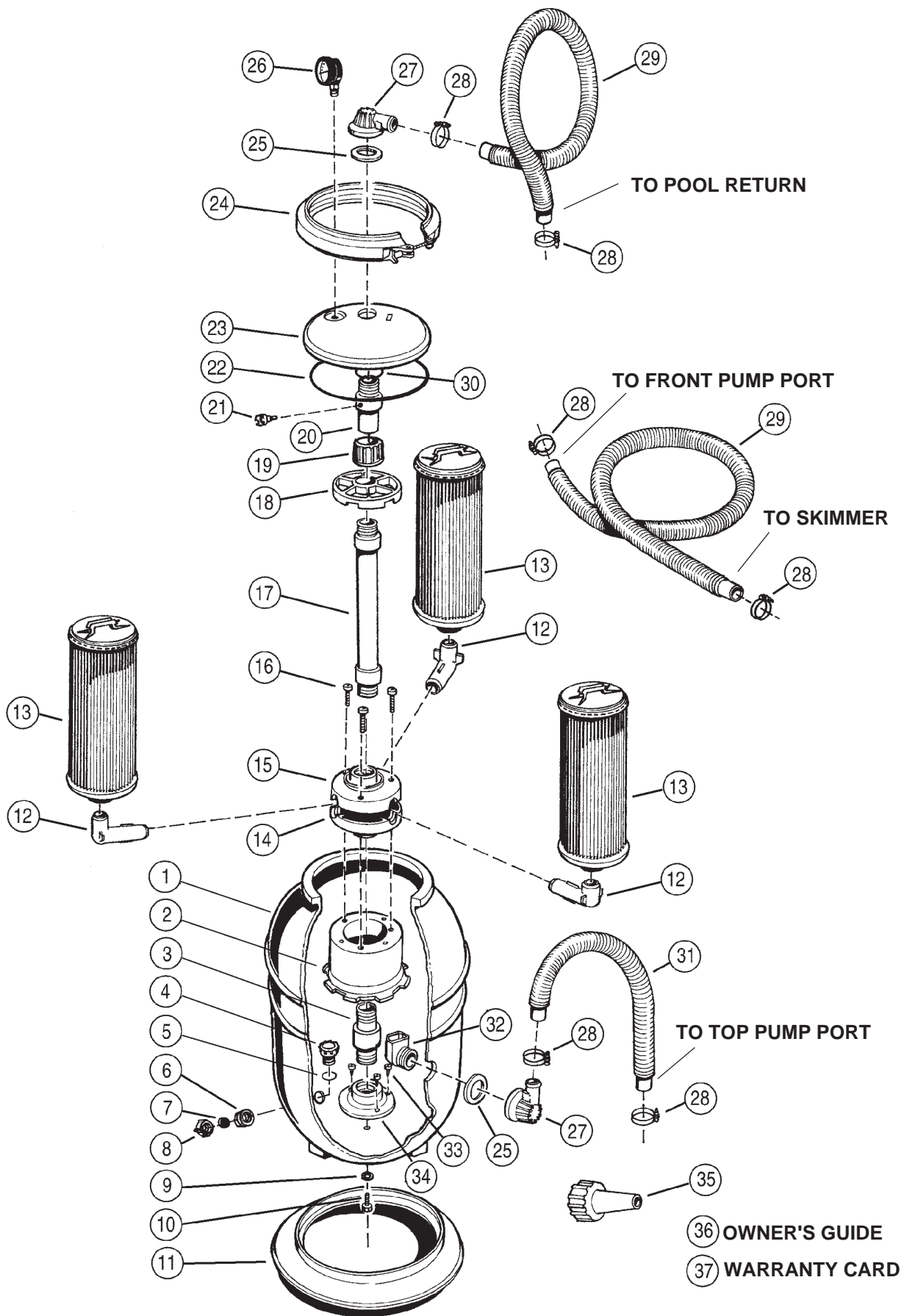
WINTERIZING FILTER

In areas subject to freezing damage, it is **mandatory** that the filter, pump and any related components be removed from the pool area and stored indoors. (Refer to the individual components owner's guide such as pump, skimmer, chlorinator, etc., for specific winterizing instructions.)

1. Siphon water level down below skimmer opening by using your vacuum hose and allow the water to flow to an area that can accept a thousand gallons or more.
2. Drain the tank completely.
3. Disconnect all line connections.
4. Remove v-clamp from the filter and remove the cover and gasket.
5. Remove cartridges, flush out tank, clean the cartridges thoroughly and allow to dry completely.
6. Reinstall the cartridges only after they have dried completely. Replace the cover and drain cap.
7. Store all components in a warm dry area indoors.

DAMAGE CAUSED BY FREEZING TEMPERATURES IS NOT COVERED BY PRODUCT WARRANTY.

EXPLODED VIEW - MODEL GEN 180

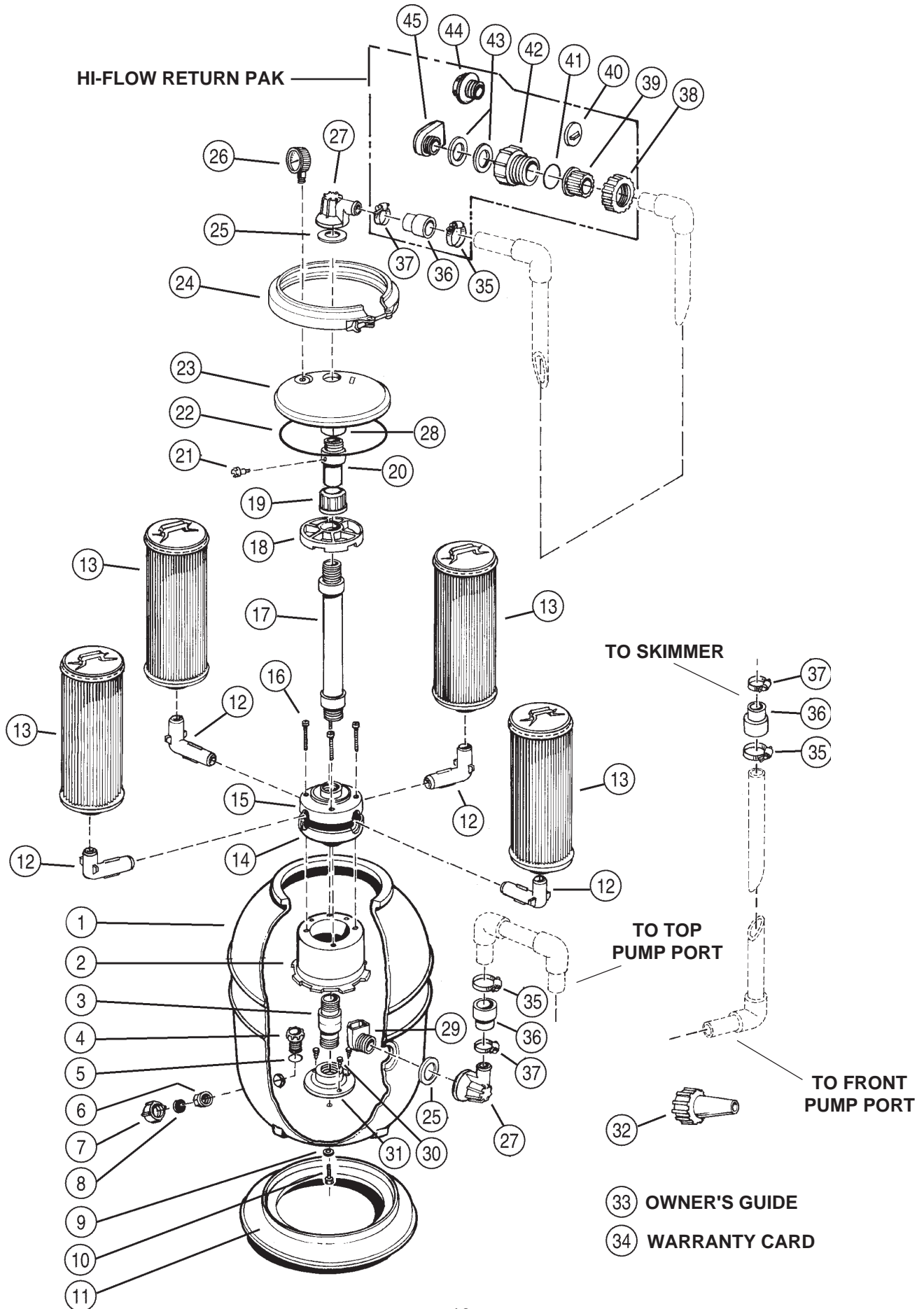


**PARTS LIST
GENERATION II, MODEL GEN 180**

ITEM	PART #	QTY	DESCRIPTION
*1	1121-1580	1	Tank - 19" Gen 180
2	340-2145	1	Manifold Support
3	1107-1599	1	Threaded Adaptor Assembly
4	340-1957	1	Drain Fitting
5	308-1206	1	O-ring - 1.475 I.D. x .210 c/s
6	340-1970	1	Drain Fitting Nut
7	307-1001	1	Drain Cap Gasket
8	340-1962	1	Drain Cap
9	308-1225	1	5/16" Thread Seal
10	330-1245	1	5/16-18 x 1-1/4" Bolt
11	340-2148	1	Tank Base
12	340-1932	3	Manifold Elbow
13	1119-1065	3	Cartridge
14	340-1930	1	Manifold Collector - Bottom
15	340-2023	1	Manifold Collector - Top
16	330-1237	3	#10 x 3" Screws
17	1107-1573	1	Riser Tube Assembly
18	340-1950	1	Cartridge Locator
19	340-1947	1	1-1/2" Coupling (s x t)
20	1107-1571	1	Pipe Adaptor Assembly
21	343-1100	1	Air Relief
22	308-1251	1	Tank O-ring
23	1121-1579	1	Tank Cover w/Decal
24	387-1030	1	V-clamp
25	308-1110	2	Return Gasket
26	395-1014	1	2" Pressure Gauge
27	340-2134	2	Return Fitting
28	387-1003	6	1-1/2 Wire Hose Clamp
29	346-1035	2	1-1/2" x 8' Hose
30	308-1046	1	O-ring - 1.609 I.D. x .139 c/s
31	346-1013	1	1-1/2" x 2-1/2' Hose
32	340-1839	1	Return Fitting
33	330-1172	3	#10 x 1/2 Screw
34	1121-1543	1	Tank Internal Adaptor w/Insert
35	343-1042	1	Nozzle Blaster w/Washer
36	365-1797	1	Owners Guide
37	368-1066	1	Warranty Card

* Includes Items 4, 5, 6, 7 & 8.

EXPLODED VIEW - MODEL GEN 240



**PARTS LIST
GENERATION II, MODEL GEN 240**

ITEM	PART #	QTY	DESCRIPTION
*1	1121-1578	1	Tank - 22" Gen 240
2	340-2145	1	Manifold Support
3	1107-1599	1	Threaded Adaptor Assembly
4	340-1957	1	Drain Fitting
5	308-1206	1	O-ring - 1.475 I.D. x .210 c/s
6	340-1970	1	Drain Fitting Nut
7	340-1962	1	Drain Cap
8	307-1001	1	Drain Cap Gasket
9	308-1225	1	5/16" Thread Seal
10	330-1245	1	5/16-18 x 1-1/4" Bolt
11	340-2148	1	Tank Base
12	340-1932	4	Manifold Elbow
13	1119-1065	4	Cartridge
14	340-1929	1	Manifold Collector - Bottom
15	340-2024	1	Manifold Collector - Top
16	330-1237	4	#10 x 3" Screws
17	1107-1573	1	Riser Tube Assembly
18	340-1949	1	Cartridge Locator
19	340-1947	1	1-1/2" Coupling
20	1107-1638	1	Pipe Adaptor Assembly
21	343-1100	1	Air Relief
22	308-1251	1	Tank O-ring
23	1121-1579	1	Tank Cover w/Decal
24	387-1030	1	V-clamp
25	308-1110	2	Return Gasket
26	395-1014	1	2" Pressure Gauge
27	340-2134	2	Return Fitting
28	308-1046	1	O-ring - 1.609 I.D. x .139 c/s
29	340-1839	1	Return Fitting
30	330-1172	3	#10 x 1/2 Screw
31	1121-1543	1	Tank Internal Adaptor w/Insert
32	343-1042	1	Nozzle Blaster w/Washer
33	365-1797	1	Owners Guide
34	368-1066	1	Warranty Card

* Includes Items 4, 5, 6, 7 & 8.

HI-FLOW RETURN PAK - MODEL GEN 240 ONLY

ITEM	PART #	QTY	DESCRIPTION
35	387-1024	1	#36 Band Clamp
36	348-1036	1	Hard Plumb Adaptor
37	387-1023	1	#28 Band Clamp
38	340-2048	1	Union Nut
39	340-2047	1	Union Socket
40	340-2099	1	Winterize Disc
41	308-1241	1	O-Ring - 50mm I.D.
42	340-2052	1	Union Adaptor
43	308-1110	2	Return Gasket
44	340-1791	1	Return Fitting Adaptor
45	340-2051	1	Return Fitting

TROUBLESHOOTING CARTRIDGE FILTERS

PROBLEM	POSSIBLE CAUSE	REMEDIES
1 - High gauge pressure, low return flow.	<ol style="list-style-type: none"> 1 - Cartridge contaminated with suspended solids. 2 - Algae growth on cartridge cloth. 3 - Calcium crustation on cartridge cloth. 	<ol style="list-style-type: none"> 1 - Clean cartridges. 2 - Chemically shock pool with chlorine or clean cartridges. 3 - Solution clean cartridges with muriatic acid, refer to "Hard Water".
2 - Very high pressure, no return flow	<ol style="list-style-type: none"> 1 - Cartridge cloth completely clogged with suspended solids or algae growth. 	<ol style="list-style-type: none"> 1 - Clean cartridges.
3 - Low gauge pressure, low return flow, bubbles returning to pool.	<ol style="list-style-type: none"> 1 - Skimmer or pump strainer baskets clogged and restricting flow. 2 - Pool water level low, pump drawing in air. 3 - Pump strainer lid not firmly secured. 4 - Crack in suction hose or loose connection. 5 - Vacuum hose too small in diameter. 6 - Vacuum cleaner clogged with debris. 	<ol style="list-style-type: none"> 1 - Clean out baskets. 2 - Fill pool to proper level. 3 - Firmly secure pump strainer lid. 4 - Replace hose or tighten all suction connections. 5 - Replace vacuum hose to a larger diameter and smooth inside. 6 - Remove restriction.
4 - High return flow, low gauge pressure. Pool water won't clear up.	<ol style="list-style-type: none"> 1 - Opening in cartridge cloth. 2 - Cartridge not seated inside filter. 3 - Pool water chemically out of balance. 	<ol style="list-style-type: none"> 1 - Replace cartridge. 2 - Reassemble cartridges inside filter. 3 - Chemically treat and balance pool water condition.
5 - Short filter cycles.	<ol style="list-style-type: none"> 1 - Cartridges clogged with contaminants or algae. 2 - Calcium crustation on cartridge cloth. 3 - Vacuuming large amounts of sediments from pool floor. 	<ol style="list-style-type: none"> 1 - Clean cartridges. 2 - Clean cartridges, (Refer to "Hard Water"). 3 - Chemically treat and balance pool water condition.
6 - No gauge pressure, low or no flow, pump running OK.	<ol style="list-style-type: none"> 1 - Pump impeller plugged with debris or impeller threads are stripped. 2 - Skimmer or pump basket clogged. 	<ol style="list-style-type: none"> 1 - Service pump to remove obstruction or replace impeller. 2 - Clean out baskets.
7 - Debris flowing into pool from return inlet.	<ol style="list-style-type: none"> 1 - Opening in cartridge cloth. 2 - Cartridge not seated properly. 	<ol style="list-style-type: none"> 1 - Replace cartridge. 2 - Reassemble cartridges inside filter.

Note: Contact your pool dealer for any problems you cannot solve.

Change of Design: Doughboy Recreational expressly reserves the right to change or modify the design and construction of any product in due course of our manufacturing procedures, without incurring any obligation or liability to furnish or install such changes or modifications on products previously or subsequently sold.

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