



Generation II

Cartridge Filter with 6 Position Valve

Model GEN 180 — Item No. 0-1802-019

Model GEN 240 — Item No. 0-1802-022

Owner's Guide



*Shown with Power Pak III, not included.



“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 secured tightly.

TOOLS REQUIRED

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

The following tools are for Models GEN 240 only:

- Hack saw
- File

MATERIALS REQUIRED

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

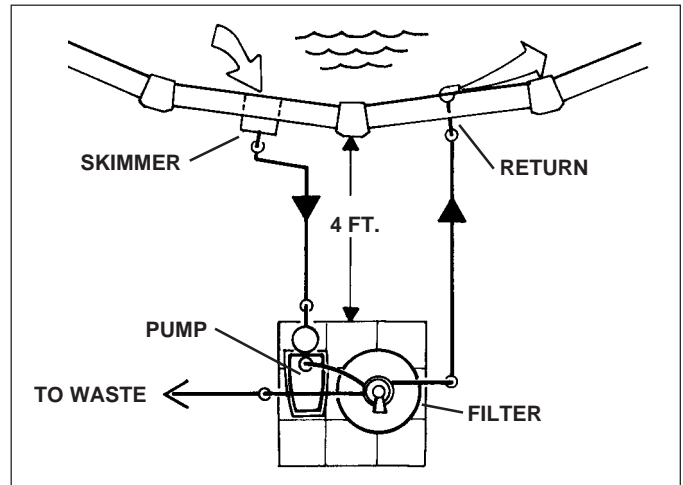
The following material are for Models GEN 240 only:

- 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

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 circulation lines may occur during wet seasons. Position patio blocks as illustrated in the following, 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.

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 skimmer to the front of pump and the other from the pool return fitting to the filter/valve port marked "RETURN".

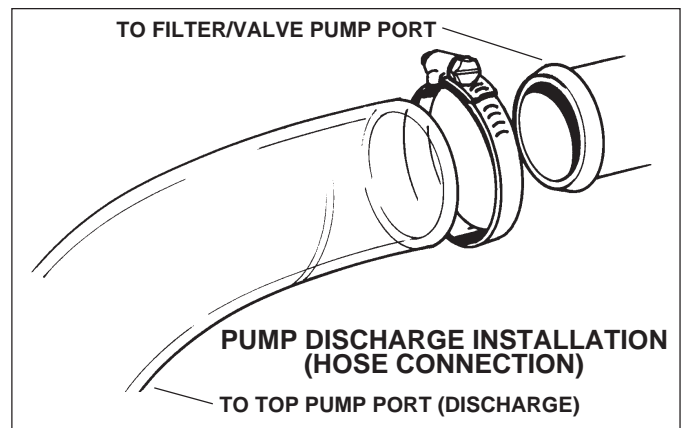
Be sure the hoses are routed so that water flow through them is not restricted.

POSITION FILTER ON BASE

Position filter in the base with the valve port labeled "PUMP" pointing towards the pump discharge.

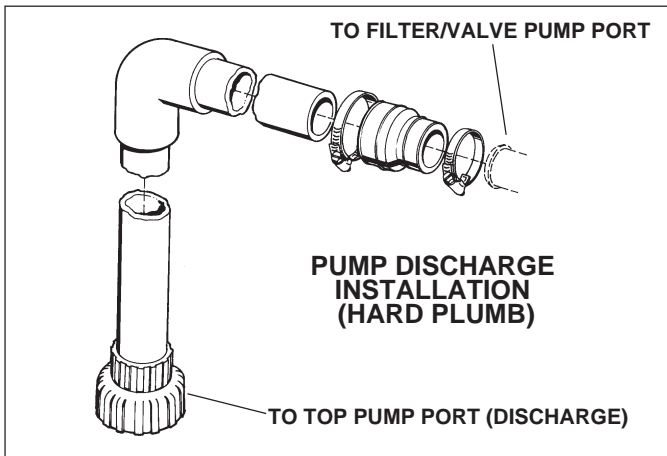
INSTALL PUMP DISCHARGE HOSE

The pump discharge hose is provided with a hose barbed fitting and a 1-1/2" pipe socket fitting. Install the hose barbed fitting to the pump discharge per the pump instructions and discard the socket fitting unless your option is to hard plumb this connection with PVC pipe. (Refer to "Option for hard plumbing"). Slip a hose clamp over each end of hose prior to installing. Push each hose end fully onto the valve port label "PUMP", then tighten clamps firmly using a flat head screwdriver or 5/16" nutdriver.



OPTION FOR HARD PLUMBING

If your option is to hard plumb the pump discharge to filter inlet, it will be necessary that you order a "hard plumb adaptor" (P/N 348-1036) and one "Clamp" (P/N 387-1024). Refer to "Cut and loosely assemble piping" and "Solvent welding" for PVC piping assembly, then install as shown.

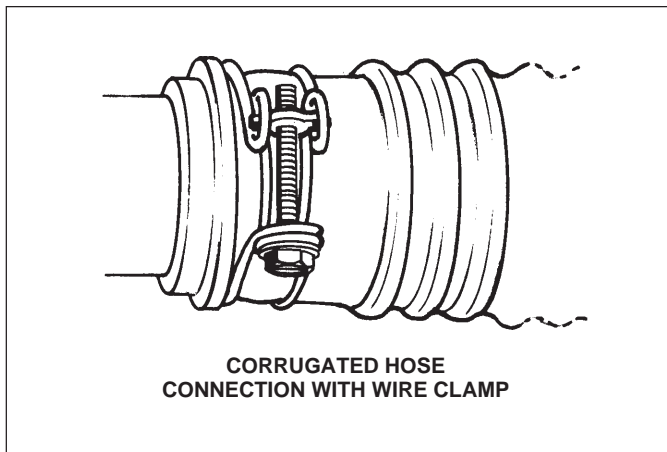


INSTALL RETURN LINE

An 8 foot long hose is provided for filter Model GEN 180 and a special high flow return fitting with filter Model GEN 240 for the return line.

MODEL GEN 180 ONLY

Slip a hose clamp over the ends of the hose and push one end onto the filter/valve **RETURN** port and the other end onto the pool **RETURN** fitting. Tighten clamps firmly using a flathead screwdriver or 5/16" nutdriver.

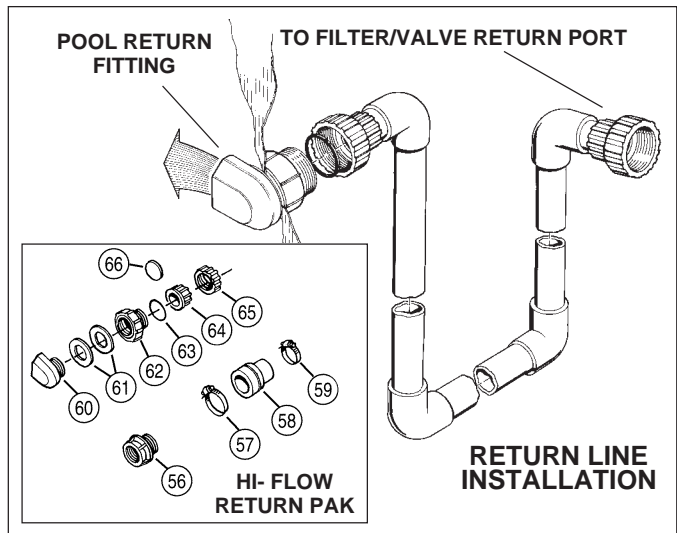


MODEL GEN 240

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

INSTALL RETURN FITTING MODEL GEN 240 ONLY

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

INSTALLATION

(without pressure type pool cleaner)

1. Slip a gasket (61) over the threads of the return fitting (60) and push threaded end through the wall from inside pool. Place the second gasket over the threads now exposed outside the pool.
2. Hold the return fitting (60) so the opening is facing away from the skimmer and slightly downward. Thread the union adaptor (62) onto the return fitting and tighten firmly. **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 (61) over the threads of the return fitting adaptor (56) and push threaded end through the wall from inside pool. Place the second gasket over the threads now exposed outside the pool.
2. Hold the return fitting adaptor (56) and thread the union adaptor (62) onto it and tighten firmly. **Hint:** Using an oil filter wrench to tighten the union adaptor will make the job easier.
3. Your pressure type pool cleaner will attach to the return fitting adaptor.

HARD PLUMB INSTALLATIONS

Using a 1-1/2" Schedule 40 PVC pipe with ends cut square, remove any burrs. Cut pipe to length as required between joints and loosely assemble for proper fit prior to solvent welding. Slip the union nut (65) onto the pipe with the female threads facing the union adaptor (62). Then, solvent weld the union socket (64) 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 connections and tighten firmly by hand.

Insert the o-ring (63) into the union adaptor groove, then secure the cemented pipe assembly onto the union adaptor (62) with the union nut (65).

SOLVENT WELDING

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

TO WINTERIZE POOL

Drain pool down below the return fitting. Loosen union nut (65) and pull back the union socket (64). Insert the winterizing disc (66) between o-ring (63) and union socket. Retighten union nut onto union adaptor firmly.

INSTALL SUCTION LINE

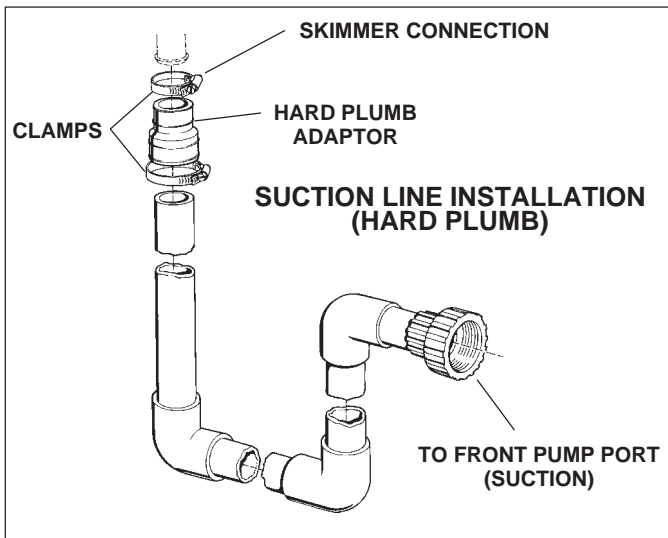
An 8 foot long hose is provided for filter Model GEN 180 and a hard plumb adaptor with clamps for filter Model GEN 240 for adapting hard plumbing to the skimmer outlet.

MODEL GEN 180 ONLY

The pump suction is provided with a hose barbed fitting and a 1-1/2" pipe socket fitting. Install the hose barbed fitting to the pump suction per the pump instructions and discard the socket 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.

MODEL GEN 240

The pump suction is provided with a hose barbed fitting and a 1-1/2" pipe socket fitting. Use the socket fitting and discard the barbed fitting. Refer to **HARD PLUMB INSTALLATION** and **SOLVENT WELDING** for assembling piping between skimmer and pump suction. Slip clamp onto small end of hard plumb adaptor and push onto skimmer outlet. Slip clamp onto large end of adaptor and insert pipe. Tighten clamps firmly.



WASTE LINE HOOKUP

The discharge waste water will contain pool water treatment chemicals that may harm certain plants and vegetation. Therefore, position the discharge end of the waste line in a safe, out-of-sight area capable of accepting 200 to 400 gallons of waste water.

MODEL GEN 180

Install a 1-1/2" inside diameter waste discharge hose (not supplied) on the **waste** port located on the 6 position valve. Slip a 1-1/2" hose clamp (not supplied) over one end of the hose. Then, push hose onto the port fully and tighten clamp firmly.

IMPORTANT

The union plug (#340-2046) must be removed from the waste port and replaced with the union hose adaptor (#340-1969) prior to backwashing the filter. Replace the union plug after backwashing.

MODEL GEN 240

Loosen the waste port "Union Nut" and remove both the union nut and socket fitting. Caution: Take care not to lose the o-ring seated in the valve body. Slip union nut onto 1-1/2" PVC (N.P.S.) drainage pipe (not supplied) with female threads facing end of pipe. Then solvent weld the union socket onto the pipe end, using ABS to PVC Cement available at your pool store. Avoid allowing solvent to run onto the end sealing surface. Position onto the waste port, making sure o-ring is in place and firmly hand tighten union nut.

ELECTRICAL OUTLET

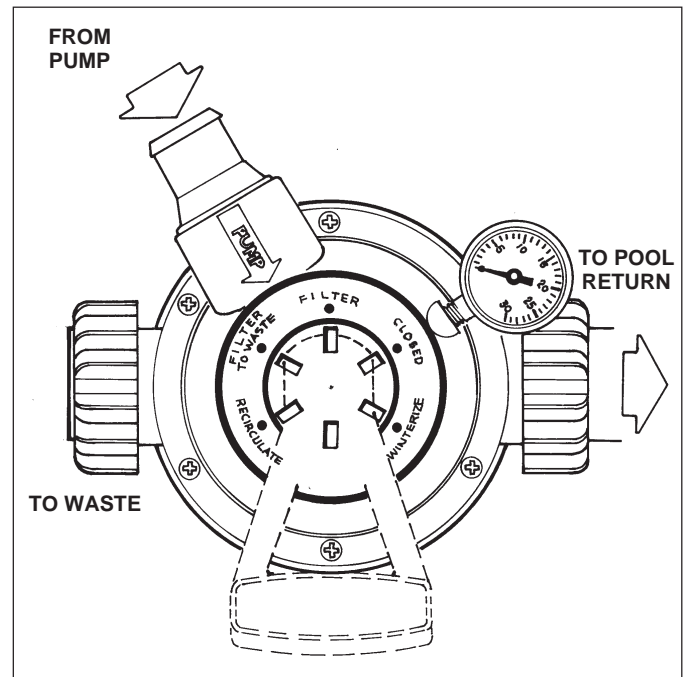
Refer to your pump owners guide for detailed information pertaining to the requirements and regulations for safe electrical installation of the power supply, receptacle outlet, switching and ground fault interrupter.

FINISH FILLING POOL

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

VALVE OPERATIONS

Your filter has multiple positions of operation, which are explained below. To change positions of the valve, make sure the pump is **OFF**. Press down on the valve handle enough to free the locking notch. Rotate the handle so the tab **LOCKS** into the notch in the desired position.



FILTER: Normal pool filtering position. May also be used when vacuuming the pool.

CLOSED: This position is used only when servicing pump or cleaning strainer basket. In this position, flow from the return fitting is prevented from back flowing through filter. Stuff a rag into the skimmer's bottom outlet when performing this operation to prevent flow of water coming out strainer housing. Remove rag when resuming normal operation.

WINTERIZE POSITION: This position allows you to drain trapped water from the filter valve and relieve compression on the rotor valve gasket during winter storage. **CAUTION:** Do Not operate pump in this position as waste water contaminants will be discharged from the filter back into the pool.

RECIRCULATE: This position allows you to increase the water flow rate to circulate chemicals throughout the pool more quickly. Pool water passes through the valve on top of the filter, bypassing internal filter components and travels back to the pool at a rapid rate. This position may also be used when servicing the filter to shut off flow from the return fitting and the pump. Filter cover may be removed from valve when in this position

PUMP TO WASTE: This position allows you to vacuum heavy debris or larger amounts of settled contaminants from the pool floor directly to waste.

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 cleaning intervals will be extended (less frequent) allowing longer time periods between cleaning the cartridges.

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.

FILTER OPERATION

Because all pool installations vary in environmental conditions (wind, rain, airborne debris, heat and pool use, etc.), it is impossible to provide an accurate filtering time for normal usage. 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 electricity demands in your community. Check with your local electric utility company for the best times they recommend for operating your filter pump.

WHEN TO CLEAN CARTRIDGES

The cleaning of the cartridges may occur depending on local environmental conditions and sudden changes. 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, removing excess amounts of airborne particulates. Frequently check the pressure gauge reading and clean the cartridges when required. Clean 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 diminish. At this time the cartridges must be cleaned.

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. Pull valve handle to full up position with a counterclockwise twisting motion. Allow the tank to start draining. When the tank cover is removed, the drainage flow will increase.
4. **DISCONNECT HOSE/PIPING**
Disconnect the pump discharge connection at the valve and the return line at the valve.
5. **REMOVE TANK COVER WITH VALVE**
Loosen the V-Clamp knob counterclockwise and remove the clamp. Lift cover with valve straight up until clear. Note: Hard plumbed lines 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 coupling/pipe assembly and unscrew counterclockwise and lift it and cartridge collector out of the tank. Unscrew the lower riser tube and remove from tank.
7. **LIFT OUT CARTRIDGES**
Carefully rotate and lift out each cartridge, taking care not to damage the cartridge pleated material.
CAUTION: Never lay cartridge on its side 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 drain and remove any large debris that may have passed through the skimmer and/or pump strainer baskets and 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.

NOTE: Before solution cleaning the cartridges, be aware that chlorine and acids kill lawns and plant life. Clean the cartridges in a suitable area.

10. SOLUTION CLEAN CARTRIDGES

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). Add one cup of chlorine or household bleach.

Totally submerge the cartridges and soak for 15-30 minutes. Agitate the cartridge vigorously to dislodge trapped particles.

11. RINSE

Rinse cartridges thoroughly before reinstalling in the filter. If the cartridges are not rinsed clean, soapy bubbles will appear on the pool surface near the return fitting.

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). Soak the cartridges fully submerged 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. 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 coupling and pipe assembly on the end of the riser tube.

15. REPLACE TANK COVER

Wipe the tank O-Ring and the mating sealing surfaces of the tank and cover clean. Position the O-Ring on the tank sealing surface. Then, being sure to maintain proper alignment of the valves **PUMP** and **RETURN** ports to your pools plumbing, guide the end of the coupling/pipe assembly into the bottom of the valve. Be sure to position the cover groove over the tank o-ring and carefully push cover down onto o-ring. Check that o-ring is seated evenly in cover groove. Install the v-clamp and tighten until the ends of the clamp are approximately 3/8" apart.

16. CLOSE TANK DRAIN

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, drain and connections. Correct if necessary.

VACUUMING YOUR POOL

Use the **FILTER** position on your valve when vacuuming under normal conditions. 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 of the pool floor. If the bottom of the pool is extremely dirty with heavy sediment and debris, you may wish to use the **PUMP TO WASTE** position on your valve. This will help prevent a quick heavy buildup of debris in your filter.

NOTE: The pool water level will decrease when using **PUMP TO WASTE** position. Be sure to check the pool water level and refill as required.

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. Keep moving parts lubricated and 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 the plastics. **DO NOT** use petroleum base lubricants. Many people consider "PETROLEUM JELLY" safe for babies and can be applied to anything. But, it will **DESTROY** most plastics. Silicone lubricants available at your pool dealer are safe for use on plastics.

LUBE STRAINER O-RING

Before removing pump strainer lid, prevent the backflow of water from your skimmer and filter from exiting out the strainer housing opening. You will experience some water coming out the strainer housing (residual from hoses and filter tank), but not a large volume.

1. Remove skimmer cover and basket and plug inside bottom hole with rag.
2. Rotate valve handle to the **CLOSED** position.
3. Remove pump strainer lid, referring to your pump owner's guide and lubricate the o-ring and mating seal areas with silicone lubricant.
4. Replace strainer lid.
5. Remove rag from skimmer. Resume normal filter operation.

It is good practice to keep silicone lubricant handy near the filter and pump for periodically lubricating these vital areas.

LUBE VALVE SHAFT

To lubricate the O-Ring on the valve shaft, depress valve handle fully and apply lubricant on the shaft between handle and valve cover. Then, rotate handle to distribute lubricant. Resume normal filter operation by rotating handle to the **Filter** position and start pump.

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 not properly assembled. See your dealer for original replacement parts.

CAUTION

BEFORE removing filter or pump from pool for servicing, prevent the backflow of water from your skimmer and return fitting inlet from flowing out of disconnected hoses.

1. Remove skimmer cover and basket and plug inside bottom hole with 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 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 O-Ring and sealing areas are free of any dirt or grit and the o-ring is evenly seated before replacing cover.

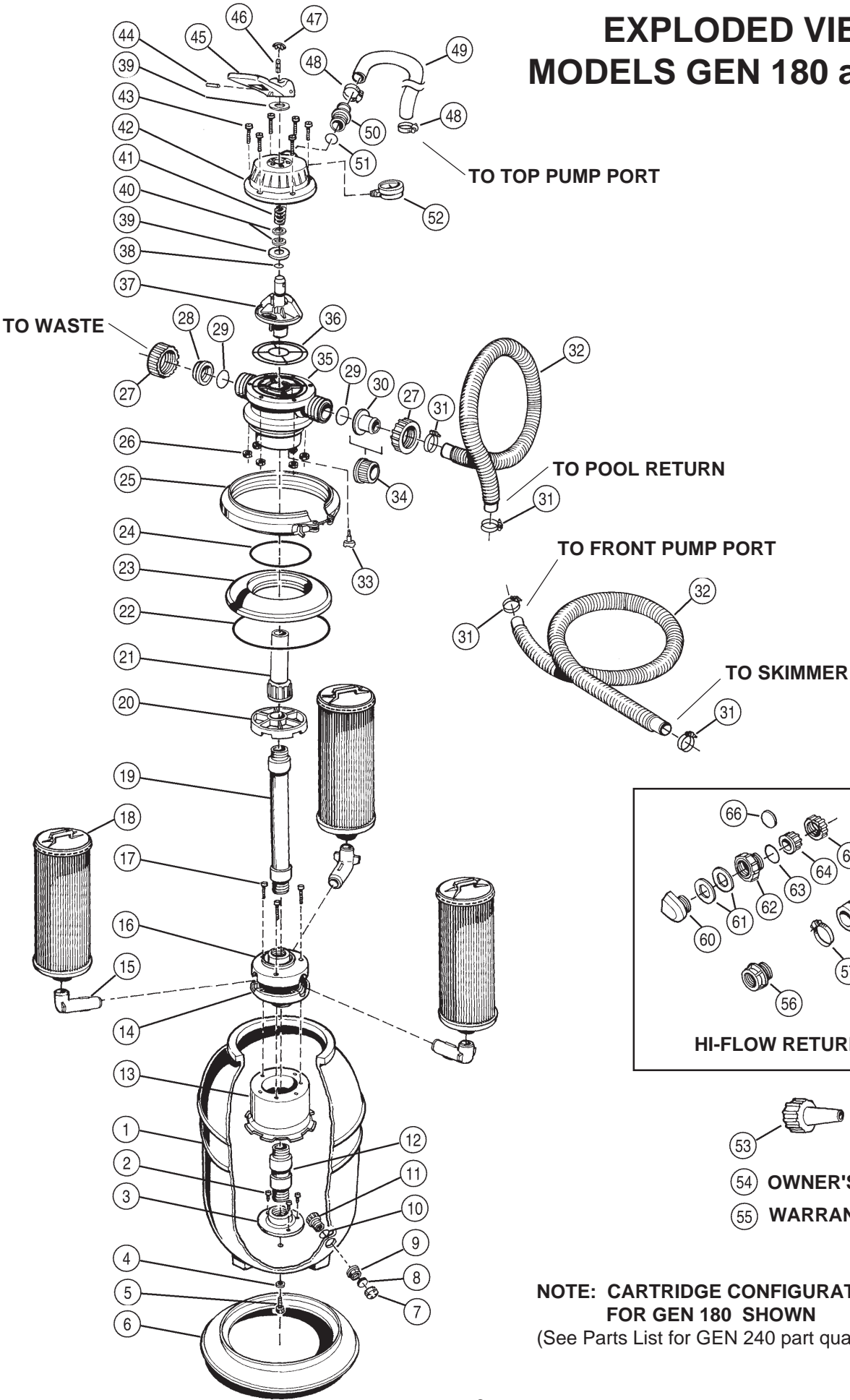
WINTERIZING FILTER

In areas subject to freezing damage, it is mandatory that the filter, pump and any related components be removed from the pool and stored indoors. (Refer to individual components owners 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 water to flow to an area that can accept a couple of thousand gallons or more.
2. Drain tank completely.
3. Disconnect all line connections.
4. Remove V-Clamp from filter and remove cover and gasket.
5. Remove cartridges, flush out tank, clean cartridges thoroughly and allow to dry completely.
6. Reinstall cartridges only after they have dried completely. Replace 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 MODELS GEN 180 and 240



PARTS LIST
GENERATION II, MODELS GEN 180 AND 240

ITEM	PART #	QTY	DESCRIPTION
1	1121-1544	1	Tank - Model (GEN 180)
	1121-1545	1	Tank - Model (GEN 240)
2	330-1172	3	#10 x 1/2" Screw
3	1121-1543	1	Tank Internal Adaptor w/Insert
4	308-1225	1	5/16" Thread Seal
5	330-1245	1	5/16-18 x 1-1/4" Bolt
6	340-2148	1	Tank Base
7	340-1962	1	Drain Cap
8	307-1001	1	Drain Cap Gasket
9	340-1970	1	Drain Fitting Nut
10	308-1206	1	O-Ring - 1.287 I.D.
11	340-1957	1	Drain Fitting
12	1107-1599	1	Threaded Adaptor Assembly
13	340-2145	1	Manifold Support
14	340-1930	1	Manifold Collector- Bottom (GEN 180)
	340-1929	1	Manifold Collector- Bottom (GEN 240)
15	340-1932	3	Manifold Elbow (GEN 180)
	340-1932	4	Manifold Elbow (GEN 240)
16	340-2023	1	Manifold Collector - Top (GEN 180)
	340-2024	1	Manifold Collector - Top (GEN 240)
17	330-1237	3	#10 x 3" Screw (GEN 180)
	330-1237	4	#10 x 3" Screw (GEN 240)
18	1119-1065	3	60 Sq. Ft. Cartridge (GEN 180)
	1119-1065	4	60 Sq. Ft. Cartridge (GEN 240)
19	1107-1573	1	1-1/2" Riser Tube Assembly
20	340-1950	1	Cartridge Locator (GEN 180)
	340-1949	1	Cartridge Locator (GEN 240)
21	1107-1402	1	Coupling/Pipe Assembly (GEN 180)
	1107-1510	1	Coupling/Pipe Assembly (GEN 240)
22	308-1251	1	O-Ring - 11.475 I.D.
23	340-2017	1	Valve/Tank Adaptor
24	308-1234	1	O-Ring - 5.850 I.D.
25	387-1030	1	V-Clamp
26	330-1235	6	12-24 Nut
27	340-1835	2	Union Nut
28	340-2046	1	Union Plug (GEN 180 only)
29	308-1241	2	O-Ring - 1.984 I.D.
30	340-1969	2	Union Hose Adaptor (GEN 180 only)
31	387-1003	4	1-1/2" Wire Hose Clamp
32	346-1035	2	1-1/2" x 8' Hose (GEN 180 only)
33	343-1100	1	Air Relief
34	340-1837	2	Union Socket (GEN 240 only)
35	1121-1476	1	Valve Body/Gasket Assembly
36	307-1022	1	Valve Gasket
37	340-1187	1	Valve Rotor
38	308-1044	1	O-Ring - .862 I.D.
39	327-1007	2	Friction Washer
40	327-1006	2	Bearing Washer
41	396-1018	1	Spring
42	1107-1519	1	Valve Cover w/Decal
43	330-1234	6	12-24 x 1-1/4" Screw
44	378-1016	1	Valve Handle Pin
45	340-1188	1	Valve Handle

**PARTS LIST
GENERATION II, MODELS GEN 180 AND 240**

ITEM	PART #	QTY	DESCRIPTION
46	340-1195	1	Pin Retainer
47	340-1189	1	Valve Handle Cap
48	387-1023	2	#28 Band Clamp
49	346-1049	1	1-1/2" x 4' Hose
50	340-1224	1	Hose Adaptor
51	308-1039	1	O-Ring - 1.925 I.D.
52	395-1014	1	2" Pressure Gauge
53	343-1042	1	Nozzle Blaster w/Washer
54	368-1066	1	Warranty Card
55	365-1775	1	Owner's Guide

NOTE: Item 35 includes items 33 and 36.

HI-FLOW RETURN PAK - MODEL GEN 240 ONLY

ITEM	PART #	QTY	DESCRIPTION
56	340-1791	1	Return Fitting Adaptor
57	387-1024	1	#36 Band Clamp
58	348-1036	1	Hard Plumb Adaptor
59	387-1023	1	#28 Band Clamp
60	340-2051	1	Return Fitting
61	308-1110	2	Return Gasket
62	340-2052	1	Union Adaptor
63	308-1241	1	O-Ring - 50mm I.D.
64	340-2047	1	Union Socket
65	340-2048	1	Union Nut
66	340-2099	1	Winterize Disc

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.

"the original portable pool"

doughboy®



DOUGHBOY RECREATIONAL • 10959 Jersey Blvd., • Rancho Cucamonga, CA 91730-5194

DB 1197-013

Made in the United States of America

Copyright © 1997