



# Generation II

## Cartridge Filters

Model GEN 60 — Item No. 0-1802-013  
Model GEN 120 — Item No. 0-1802-016

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## Owner's Guide



\*GEN 120 Shown with Power Pak I, 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.

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

## MATERIALS REQUIRED

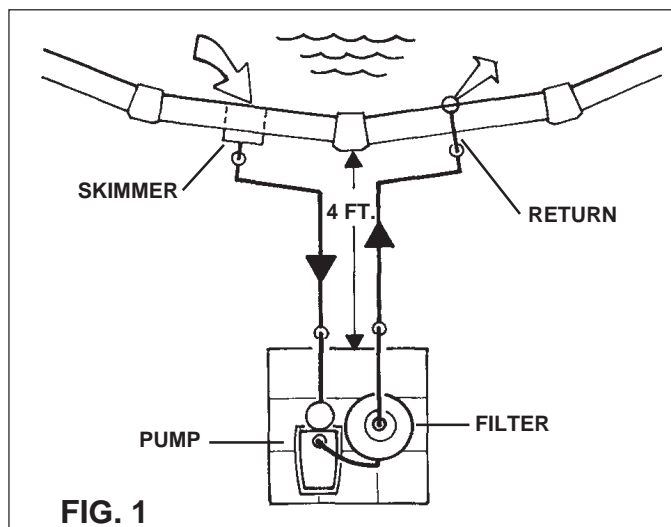
- Nine 12" x 12" patio blocks

## 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, use a shovel and carpenter's level to level ground before placing the blocks.



### POSITIONING FILTER and PUMP

Position the filter and pump as shown in FIG. 1.

### HOSE INSTALLATION

(See Fig. 1 and Exploded Parts Illustration)

**IMPORTANT:** Incorrect hose hook-up could cause damage to your filter system. Follow the instructions below carefully.

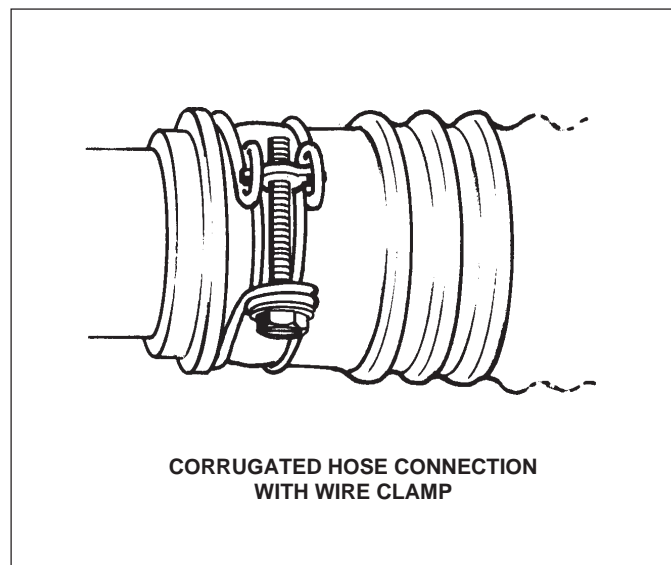
Suction and return lines should be partially buried to prevent accidental tripping that could cause personal injury or damage to the filter system.

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

Starting at least 12" from the pool wall, make two 3-4" deep trenches, one from the pool skimmer to the front of the pump and the other from the pool return fitting to the filter return port (located at top of tank).

The two 8 ft. long hoses (12) are interchangeable and used for the suction and return lines. Slip a hose clamp over the ends of each hose prior to installing. Connect one long hose (suction line) between the pool skimmer and front port of the pump. Connect the other long hose (return line) between the pool return fitting and filter return port (located at top of tank). Connect the short hose (16) between the pump discharge port (located at top of pump) and the filter pump port on side of tank. Tighten clamps firmly using a flathead screwdriver or 5/16" nutdriver. Cover the trenches with a firm board when finished.

NOTE: Do not completely bury the hoses with dirt.



### TANK DRAINAGE

During the cleaning operation of the cartridges, the filter tank must be drained. To prevent accumulation of several gallons of water around the base of the filter, you may wish to dig a shallow trough from near the filter tank drain to a remote area.

Note: The drain water will contain pool water treatment chemicals that may harm certain plants.

### 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 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 to 7 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 THE CARTRIDGE**

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 particles. Frequently check the pressure gauge reading and clean the cartridges when required. Clean cartridge when the pressure gauge increases 5 to 7 pounds above the clean filter starting pressure.

### **CLEANING THE CARTRIDGE**

As the cartridge becomes saturated with dirt and debris, the return flow back to the pool will reduce. At this time the cartridge 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. **REMOVE TANK DRAIN CAP**  
Remove the tank drain cap with sealing gasket and allow the tank to start draining. When the tank cover is removed, the drainage flow will increase.
4. **REMOVE TANK COVER**  
Loosen the V-Clamp knob counter-clockwise and remove the clamp, cover and large O-Ring. Take care not to scratch or dent the O-Ring sealing surface on cover. Allow the tank to drain completely.

### **5. LIFT OUT CARTRIDGE**

Carefully rotate and lift out the 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.**

### **6. 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.

### **7. CLEAN CARTRIDGE**

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 cartridge, be aware that chlorine and acids kill lawns and plant life. Clean the cartridge in a suitable area.

### **8. SOLUTION CLEAN CARTRIDGE**

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

### **9. RINSE**

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

### **10. HARD WATER**

Hard water will eventually coat the cartridge with calcium deposits that cut off good filtering performance. To correct, mix a solution (1 part muriatic acid to 4 parts water). Soak the cartridge 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.

### **11. REINSTALL CARTRIDGE**

With the handle end of the cartridge pointed down, lower the cartridge into the tank and center the raised circular ring on the bottom of the cartridge with the ring on the internal tank base. Push cartridge down until fully seated.

### **12. REPLACE COVER**

Wipe tank O-Ring and the mating sealing surfaces of the tank and cover clean. Position tank cover over tank opening and guide the end of the cartridge



collector assembly into the top of the cartridge. Make sure that the cartridge remains seated in the internal tank base. Position the cover groove over the tank o-ring and push cover down. Install the v-clamp and tighten until ends of the clamp are 3/8" apart.

#### 13. REPLACE TANK DRAIN

Clean any debris from the drain opening and threads. Then, reinstall drain cap with gasket.

#### 14. REMOVE RAGS FROM SKIMMER AND RETURN FITTING

#### 15. RESUME NORMAL OPERATION

Start pump and check for any leaks around cover and drain. Correct if necessary.

### VACUUMING YOUR POOL

When vacuuming your pool, the filter must work harder. Consequently, all of that debris is caught in the filter at a very rapid rate. This causes a rapid increase in filter pressure as will be indicated on the pressure gauge. Frequent cleaning of the cartridge may be necessary during this process depending on the amount of sediment 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. 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 most 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 are available at your pool dealer and 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. Stuff a rag into the return fitting opening.
3. Remove pump strainer lid, referring to your pump owners guide and lubricate the o-ring and mating seal areas with silicone lubricant.
4. Replace strainer lid.
5. Remove rags from skimmer and return fitting. Resume normal filter operation.

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

### 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 inlet from flowing out of disconnected hoses.

1. Remove skimmer cover and basket and plug inside bottom hole with rag.
2. Referring to your instructions for your return inlet, remove the inlet cover and eyeball. Insert the "SHUT-OFF" disc and reinstall the cover. 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.

### 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 pool 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. Remove tank drain cap and allow tank to drain fully.
3. Remove V-Clamp from filter and remove cover and o-ring.
4. Remove cartridge, flush out tank, clean cartridge thoroughly and allow to dry completely.
5. Reinstall cartridge only after they have dried completely. Replace cover and drain cap.
6. Disconnect all hoses.
7. Store all components in a warm dry area indoors.


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

**Model GEN 60 & GEN 120**

TO POOL RETURN

TO SKIMMER

TO TOP PUMP PORT



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## PARTS LIST - GEN II, MODELS GEN 60 & GEN 120

ITEM	PART #	QTY	DESCRIPTION
1	1121-1534	1	Tank - Model GEN 60
	1121-1565	1	Tank - Model GEN 120
2	1119-1065	1	60 Sq. Ft. Cartridge -GEN 60
	1119-1066	1	120 Sq. Ft. Cartridge - GEN 120
3	343-1100	1	Air Relief
4	1107-1568	1	Cartridge Collector Assembly - GEN 60
	1107-1569	1	Cartridge Collector Assembly - GEN 120
5	308-1046	1	O-Ring - 1.609 I.D.
6	308-1251	1	O-Ring - 11.475 I.D.
7	1121-1535	1	Tank Cover
8	387-1030	1	V-Clamp
9	395-1014	1	2" Pressure Gauge
10	308-1110	1	Return Fitting Gasket
11	340-2134	1	90 Degree Return Fitting
12	346-1035	2	1-1/2" x 8' Hose
13	387-1003	6	1-1/2" Wire Hose Clamp
14	308-1109	1	Port Gasket
15	340-1960	1	Hose Adaptor
16	346-1013	1	1-1/2" x 2-1/2' Hose
17	340-1962	1	Drain Cap
18	307-1001	1	Drain Cap Gasket
19	340-1970	1	Drain Fitting Nut
20	330-1245	1	5/16-18 x 1-1/4" Bolt
21	308-1225	1	5/16" Thread Seal
22	308-1206	1	O-Ring - 1.287 I.D.
23	340-1957	1	Drain Fitting
24	340-1682	1	Diffuser
25	1121-1486	1	Internal Tank Base w/Insert
26	340-2160	1	Washer - 1.85 O.D. x 1.42 I.D.
27	343-1042	1	Blaster Nozzle w/Washer
28	368-1066	1	Warranty Card
29	365-1761	1	Owners Guide

## STRAINER POT ASSEMBLY AND PARTS MODELS GEN 60 & GEN 120

ITEM	PART #	QTY	DESCRIPTION
30	1300-1014	1	Strainer Pot Assembly
31	340-1779	1	Strainer Pot Body
32	1300-1002	1	Basket Assembly
33	308-1004	1	O-Ring - 4.225 I.D.
34	1121-1436	1	Lid with Decal

## TROUBLESHOOTING CARTRIDGE FILTERS

PROBLEM	POSSIBLE CAUSE	REMEDIES
1 - High gauge pressure, low return flow.	1 - Cartridge contaminated with suspended solids. 2 - Algae growth on cartridge cloth. 3 - Calcium crustation on cartridge cloth.	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.	1 - Cartridge cloth completely clogged with suspended solids or algae growth.	1 - Clean cartridges.
3 - Low gauge pressure, low return flow, bubbles returning to pool.	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.	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.	1 - Opening in cartridge cloth. 2 - Cartridge not seated inside filter. 3 - Pool water chemically out of balance.	1 - Replace cartridge. 2 - Reassemble cartridges inside filter. 3 - Chemically treat and balance pool water condition.
5 - Short filter cycles.	1 - Cartridges clogged with contaminants or algae. 2 - Calcium crustation on cartridge cloth. 3 - Vacuuming large amounts of sediments from pool floor.	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.	1 - Pump impeller plugged with debris or impeller threads are stripped. 2 - Skimmer or pump basket clogged.	1 - Service pump to remove obstruction or replace impeller. 2 - Clean out baskets.
7 - Debris flowing into pool from return inlet.	1 - Opening in cartridge cloth. 2 - Cartridge not seated properly.	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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