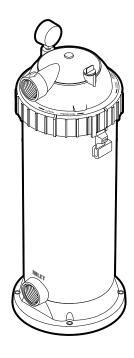
# STA-RITE®

# Above Ground Cartridge Filters Models PRC50, 5PRC50, PRC75 and 5PRC75

O W N E R'S M A N U A L



INSTALLATION, OPERATION & PARTS



This manual should be furnished to the end user of this filter; its use will reduce service calls and chance of injury and will lengthen filter life.

#### Sta-Rite Pool/Spa Group

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Union City, TN • Delavan, WI • Mississauga, Ont. • Murrieta, CA

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### **SPECIFICATIONS**

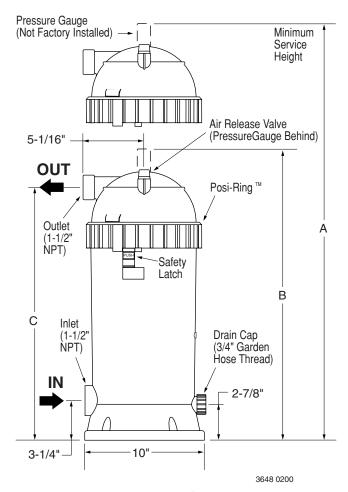


FIGURE 1 – Dimensions in inches (mm)

**Table 1 - Filter Specifications** 

	Model No.			
	PRC50 5PRC50	PRC75 5PRC75		
Filter Area sq. ft. (m²)	50(4.7)	75(7)		
Max. Rated Flow GPM (LPM)	50(189)	75(284)		
Max. Operating Pressure PSI (kPa)	30(207)	30(207)		
Max. Continuous Water Temperature F(C)	104°(40°)	104°(40°)		

**Table 2 - Filter Dimensions in inches (mm)** 

	Model No.			
	PRC50	PRC75		
Dimension	5PRC50	5PRC75		
Α	38-1/8 (816)	43 (1,092)		
В	23-9/16 (598)	28-15/16 (735)		
С	20-3/8 (518)	25-3/4 (654)		

# READ AND FOLLOW SAFETY INSTRUCTIONS!

This is the safety alert symbol. When you see this symbol on your filter or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

**A DANGER** warns about hazards that **will** cause death, serious personal injury, or major property damage if ignored.

**AWARNING** warns about hazards that **can** cause death, serious personal injury, or major property damage if ignored.

**A 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.

AWARNING
Hazardous
pressure

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

and operating equipment. Have a trained pool professional perform all pressure tests.



Do not connect filter to compressed air under any circumstances.



Do not connect system to a city water system or other external source of pressurized water.



Do not connect filter to pumps capable of exceeding 30 psi maximum pressure.



Use this filter only in above-ground pool installations.



Open air release valve to vent all air from system before operating the system.

**AWARNING Risk of falls and inury.** Filter surface is slippery. Do not allow children to stand or play on filter.

#### GENERAL INFORMATION

When to Clean the Filter: The filter cartridge should normally be cleaned when the pressure gauge reading increases 10 PSI over the start-up pressure.

In some pools, accessories such as fountains or pool cleaners may be noticeably affected by the normal decrease in flow as the filter becomes dirty. If so, clean the filter more frequently (that is, at a pressure increase of less than 10 PSI) in order to maintain the required flow.

Clean a new pool as well as possible before filling pool and operating filter.

A typical pool installation will require approximately one week to obtain and maintain the sparkle that your filter is capable of giving you.

Maximum pressure is 30 PSI (207 kPa). DO NOT connect the filter to a city water system or to an individual water well system.

The Sta-Rite cartridge filter is designed to filter water for above ground swimming pools only. On a new installation, we recommend:

- 1. Disassemble the filter after the initial cleanup. Follow "Filter Disassembly/Assembly Procedure" on Pages 4 and 5.
- Remove and hose down the cartridge to remove contaminants.

Maintain pool water pH between 7.2 and 7.6. Make sure that the Posi-Ring<sup>TM</sup> is securely locked in place before operating filter.

Maintain the pressure gauge in good working order. Replace a damaged gauge immediately.

Cleaning interval is based on pressure rise, not on the length of time the filter is operated. Different water conditions will have different normal cleaning intervals.

**NOTICE:** Some pool disinfectants may clog the filter cartridge. To maximize cartridge life and filter cycle time, closely follow the disinfectant manufacturer's instructions when cleaning pool or filter. Failure to follow these instructions may affect warranty coverage of the cartridge.

#### INSTALLATION

#### Filter mount must:

Provide weather and freezing protection.

Provide space and lighting for easy access for routine maintenance. (See Figure 1 for space requirements.) Provide ventilation and drainage for pump.

Be on a reasonably level surface and provide adequate drainage.

#### Piping:

**NOTICE:** Make sure that the filter and all piping can be drained for winterizing. See "Winterizing", Page 5.

**NOTICE:** Overtightening can crack filter ports.

Use teflon tape, Plasto-Joint Stik®1, or Silastic RTV #732® on all threaded connections of plastic pipe and fittings.

DO NOT use pipe compounds on filter; it will cause the connection to crack. Do not use sealant on unions – assemble them dry and hand tight.

Support pipe independently to prevent strains on filter. Keep piping tight and free of leaks: pump suction line leaks may cause trapped air in filter tank or loss of prime at pump.

<sup>&</sup>lt;sup>1</sup> Lake Chemical Co., Chicago, IL

#### **Electrical:**

**BE SURE** pump grounding meets local and National Electrical Code standards. All wiring and grounding of associated equipment must meet local and National Electrical Code Standards.

#### **INITIAL START-UP**



Be sure pump is OFF before starting procedure.



## Do not operate filter at more than 30 PSI (207 kPa).

- 1. Securely lock the Posi-Ring<sup>TM</sup> in place by rotating it CLOCKWISE until it "clicks" past the safety latch (see Figure 2). Stop turning as soon as the ring clicks past the latch. The ring may feel slightly loose, but it will tighten up when pump is on and filter is under pressure.
- 2. Install the pressure gauge and the air release valve (See Figure 2) on the tank lid.

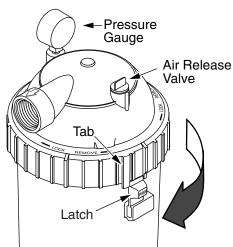


Figure 2 – Rotate Posi-Ring $^{\text{TM}}$  until tab locks behind the safety latch.

- 3. Fill the trap on the pump with water.
- 4. Open the air release valve on top of the filter.
- Open valves separating filter from the rest of the system.
- 6. Start the pump to purge air from the system.
- 7. When a steady stream of water comes from the air release valve, close the valve.

**NOTICE:** Leaking around the Posi-Ring<sup>TM</sup> may indicate that the ring is not fully locked. In this case, proceed as follows:

- A. Stop the pump and open the air release valve to release any pressure within the filter.
- B. Remove the drain plug and drain all water from the filter.
- C. Rotate the Posi-Ring<sup>™</sup> clockwise until it locks behind the safety latch (see Figure 2).

D. If the ring was already locked, remove it and the filter lid assembly. Inspect and clean the O-ring and all sealing surfaces. Relubricate the O-ring, if necessary.

**NOTICE:** Lubricate the O-ring only with silicone grease, as other lubricants may cause the ring to swell. DO NOT lubricate the Posi-Ring<sup>TM</sup> or the threads on tank shell as this may collect grit and make removal difficult.

After the filter is operating, record the filter pressure gauge reading in the owner's manual for future use.

#### FILTER DISASSEMBLY/ ASSEMBLY PROCEDURE

**Before disassembling filter:** 

- 1. STOP PUMP.
- 2. OPEN air release valve and drain fitting.
- 3. WAIT until all pressure is released and water drained from filter tank and system before loosening Posi-Ring™.

### Disassembly:

- 1. Stop the pump.
- 2. Open air release valve on top of filter tank to release all pressure from inside of tank.
- 3. Remove the drain cap and drain all water from the tank.
- 4. Remove filter lid assembly as follows:
  - a. Press the safety latch (below the ring) toward the tank to release it (see Figure 3).

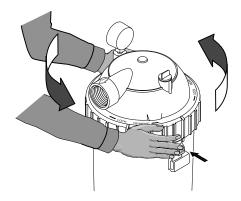


Figure 3 – Depress safety latch to unscrew the Posi-Ring<sup>TM</sup>.

- b. Hold the latch in the release position and rotate the ring COUNTERCLOCKWISE to remove it. If the ring is difficult to turn, tap it gently with a rubber mallet to overcome initial resistance.
- 5. Inspect the O-ring for cuts, cracking, deformation or signs of wear; replace if necessary.

**NOTICE:** Do not remove the O-ring unless you need to replace it. To remove it, hook it out of its groove with a stiff curved piece of wire inserted through the small access slot in the bottom of the tank lid assembly.

#### **SAFETY LATCH**

The purpose of the safety latch is to hold the Posi-Ring<sup>™</sup> in the locked position. If the latch is damaged, replace it as follows:

- 1. Press up on the small catch on the bottom of the safety latch and press or tap the latch out of the slot in the tank.
- 2. Slide the new latch into position until it latches in place.

**NOTICE:** DO NOT operate the filter if the safety latch is damaged or will not hold the Posi-Ring<sup>™</sup> in the locked position.

#### **Assembly:**

- 1. Inspect and clean the tank, ring threads and O-ring groove. Replace damaged parts as necessary.
- 2. Install the filter cartridge in the tank. Push down firmly to seal it.

**NOTICE:** Lubricate the O-ring only with silicone base grease, as other lubricants may cause the ring to swell. DO NOT lubricate the Posi-Ring<sup>™</sup> or the threads on the tank shell as this may collect grit and make removal difficult.

- 3. Install the O-ring in the tank lid assembly O-ring groove. Be sure that the O-ring is clean and not twisted.
- 4. Place the Posi-Ring™ squarely over the tank shell threads and rotate it CLOCKWISE until it is securely latched.
- 5. Follow instructions in the "Initial Startup" section of this manual.

#### CARTRIDGE CLEANING PROCEDURE

When to Clean the Filter: The filter cartridge should normally be cleaned when the pressure gauge reading increases 10 PSI over the start-up pressure.

Follow all steps in the "Disassembly" section of this manual (Page 4).

The filter cartridge should be removed and cleaned when pressure rises more than 10 psi (69 kPa) above startup pressure.

**NOTICE:** When sanitizing your pool using PHMB (polyhexamethylene biquanide based) cleaners, use *only* PHMB cleaners to clean the cartridge. When using PHMB sanitizers, the filter cartridge MUST be cleaned more thoroughly and frequently than for a pool using chlorine. Follow manufacturer's instructions carefully. Use of any other type of cleansers with PHMB pool sanitizers will void the filter's warranty.

- 1. Remove the drain cap and flush all foreign material from the inside of the tank before removing the filter cartridge.
- 2. Allow the tank to drain.
- 3. Lift out the cartridge and hose it down thoroughly.

- Spray the entire cartridge surface. Allow cartridge to drain.
- 4. Inspect the cartridge. If necessary, repeat the washing operation. If the cartridge is damaged, replace it.
- 5. Follow all steps in the "Assembly" and "Initial Startup" sections of this manual (Page 4).

**NOTICE:** When this procedure no longer adequately cleans the cartridge, discard the cartridge and replace it with a new one.

#### **SYSTEM INSPECTION**

#### General:

**NOTICE:** DO NOT use solvents to clean the filter; solvents may damage plastic components in the system.

**NOTICE:** Open the air release valve and bleed all air from the filter each time the pump is stopped and restarted.

#### **Weekly Inspection:**

- 1. Remove debris from the pool skimmer basket.
- 2. Stop the pump; open the air release valve to release all pressure.
- 3. Remove the pump trap cover and basket; remove debris.
- 4. Check the pump for leaks. If found, see the pump owner's manual.
- 5. Replace the trap basket and the cover. Tighten the cover securely hand tight. DO NOT use a lid wrench to tighten it.
- 6. Start the pump. When the filter air release valve runs a solid stream of water, close the valve.
- 7. When the system has returned to normal operation, check the filter pressure. If the filter pressure is 10 PSI (69kPa) or more higher than the initial startup pressure, the filter needs cleaning. See "Cartridge Cleaning Procedure", at left.

#### WINTERIZING

**NOTICE:** Protect the filter from freezing. Allowing the filter to freeze will damage it and will void the warranty. If possible, take the system indoors for storage.

- 1. Clean the filter according to instructions (left) before winterizing.
- 2. Stop the pump.
- 3. Open the air release valve; open any system valves.
- 4. Remove the drain plugs from the trap, pump, and filter.
- 5. Gravity drain system and filter as far as possible.
- 6. Disassemble the filter (follow instructions under "Filter Disassembly", Page 4). Remove the filter cartridge and store it in a warm, dry area.
- 7. Cover the filter with plastic or tarpaulin to prevent water entrance and freezing.

#### TROUBLESHOOTING GUIDE

#### 1. Short Cycle Time:

**NOTICE:** Cycle Time will vary with each installation and between different areas of the country. The following causes and remedies are for cycle times shorter than normal for your area.

- A. Chlorine residual too low; maintain proper residual (consult pool professional for recommendation).
- B. Filter cartridge is dirty or plugged; thoroughly clean the filter (see No. 4, "Plugged Cartridge", and "Cartridge Cleaning Procedure", Page 5).
- C. Water is chemically out of balance; consult pool professional.
- D. Algae in the pool. Apply heavy dose of chlorine or algicide as recommended by the pool manufacturer.
- E. Replace the cartridge.

#### 2. Low Flow/High Pressure:

- A. Cartridge plugged; clean filter thoroughly (see Page 5).
- B. Pipe blocked downstream from filter; remove obstruction.
- C. Piping too small; use larger pipe (consult dealer for sizing).

#### 3. Low Flow/Low Pressure:

A. Plugged pump or plugged hair and lint trap; clean thoroughly.

#### 4. Plugged Cartridge:

- A. Insufficient cleaning; follow cleaning instructions closely and clean thoroughly (see Page 5).
- B. Water is chemically out of balance; consult pool professional.
- C. Excessive air in filter. Vent air from tank and check for pump suction pipe leaks. Clean air bleed filter in cartridge assembly with a hose and soft flow nozzle.

- D. Pool water contains iron. Consult your pool professional.
- E. Heavy or improper application of powdered chlorine tablets using a binder. Consult your pool professional.
- F. Algae in the pool. Apply heavy dose of chlorine or algicide as recommended by the pool manufacturer.
- G. Use of incorrect chemicals with PHMB sanitizers. Replace filter cartridge.
- H. Replace the cartridge.

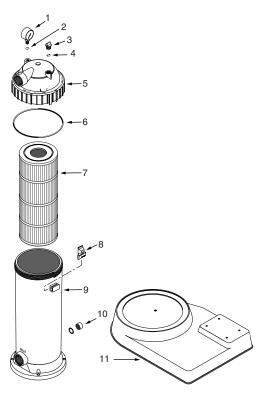
#### 5. Pool Water Not Clean:

- A. Chlorine residual too low; maintain adequate chlorine residual (consult pool service technician for recommendation).
- B. Filter cartridge torn, plugged, or punctured; replace cartridge.
- C. Pool water contains iron. Consult your pool professional.
- D. Heavy or improper application of powdered chlorine tablets using a binder. Consult your pool professional.
- E. Algae in the pool. Apply heavy dose of chlorine or algicide as recommended by the pool manufacturer.
- F. Replace the cartridge.

#### 6. Pool Cleaner Stops Working:

- A. Clean filter and observe performance of cleaner.
- B. If cleaner performs better after filter has been cleaned, use a shorter cleaning cycle for the filter (that is, clean the filter after a pressure rise of less than 10 PSI).

## **REPAIR PARTS**



Key No.	Description	Qty.	PRC50 5PRC50	PRC75 5PRC75
1	Pressure gauge	1	15060-0000T	15060-0000T
2	Screen filter	1	WC8-72D	WC8-72D
3	Air relief valve	1	25010-0004	25010-0004
4	O-ring	1	U9-359	U9-359
5	Tank lid assembly (includes Key No. 6)	1	25200-0103S	25200-0103S
6	Tank lid O-ring with silicone lube	1	25200-0011S	25200-0011S
7	Filter cartridge	1	25200-0150S	25200-0175S
8	Safety catch	1	25200-0007	25200-0007
9	Filter tank	1	25200-0001S	25200-0002S
10	Drain cap assembly with washer	1	32185-7074	32185-7074
•	Operating instruction decal	1	32155-4139	32155-4139

Not illustrated.

#### STA-RITE LIMITED WARRANTY

Pumps, filters, skimmers, underwater lights (except bulbs), accessories and fittings manufactured by Sta-Rite are warranted to be free of defects in material and workmanship for one (1) year from date of installation.

Product specific warranties: Year from date of installation

Of Histaliation
HRPB, DEPB, System 3, System 2 and Posi-Clear Tanks
Max-E-Therm - Pool/Spa Heaters 2 years Heater Enclosure only (Upper RH & LH; lower enclosure; and control board enclosure) 10 years
Automatic Pool Cleaners including Hose 2 years
Cristal-Flo filters - Tanks
Posi-Flo II - Tanks10 yearsElements1 year
PRC Cartridge - Filter Tanks 5 years pro-rated (1st 2 years full) Elements 1 year
System 2 Above Ground Systems - Tanks 10 years Pumps / Platform and Internals 1 year
Pumps
pumps sold as part of a systems package) 2 years
Traps / In-Line Strainers 1 year
Vertical Commercial Filter - Tanks
Horizontal Commercial Filter Tanks

\* Full warranty coverage is in effect for one year after installation. The pro-rated warranty covers the *tank only* during the 2nd through 10th year after installation. The amount covered decreases by 10% each year. (ie., 2nd year 90% covered, 3rd year 80% covered, etc.).

The foregoing warranties relate to the original consumer purchaser ("Purchaser") only. Sta-Rite shall have the option to repair or replace the defective product, at its sole discretion. Purchasers must pay all labor and shipping charges necessary to replace the product covered by this warranty. Requests for warranty service must be made through the installing dealer. This warranty shall not apply to any product that has been subject to negligence, misapplication, improper installation or maintenance, or other circumstances which are not in Sta-Rite's direct control.

This warranty sets forth Sta-Rite's sole obligation and Purchaser's exclusive remedy for defective products.

STA-RITE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR CONTINGENT DAMAGES WHATSOEVER.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE APPLICABLE EXPRESS WARRANTIES PROVIDED HEREIN.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Supersedes all previous publications.

Sta-Rite Industries 293 Wright St., Delavan, WI 53115

A Retain Warranty Certificate (upper portion) in a safe and convenient location for your records.

DETACH HERE: Fill out bottom portion completely and mail within 10 days of purchase/installation to:

Sta-Rite, Attn: Warranty Dept., 293 Wright St., Delavan, WI 53115

# STA-RITE

## Warranty Registration Card

Name			Years pool has been in service ☐ less than 1 ☐ 1-3 ☐ 3-5 ☐ 5-10						
Address				Purchased from: Company name					
City State Zip				_ Address					
Purchase Date	)				_ City		State	Zip	
Product Purch	ased				_				
□ New installation □ Replacement			Please send me more information on these other products from Sta-Rite.						
Type of Pool	□ Inground	☐ Vinyl	☐ Fiberglass	☐ Gunite	□P	umps	☐ Filters ☐ Auto	matic Pool C	Cleaners
Size of Pool				_	□ Main	itenance Equipmer		Strips	