

# **Pool Care System for Above Ground Pools**



## **Instruction Manual**

Customer Service 800-222-0169

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**For information on King Technology's entire product line, visit our website at [www.kingtechnology.com](http://www.kingtechnology.com)**

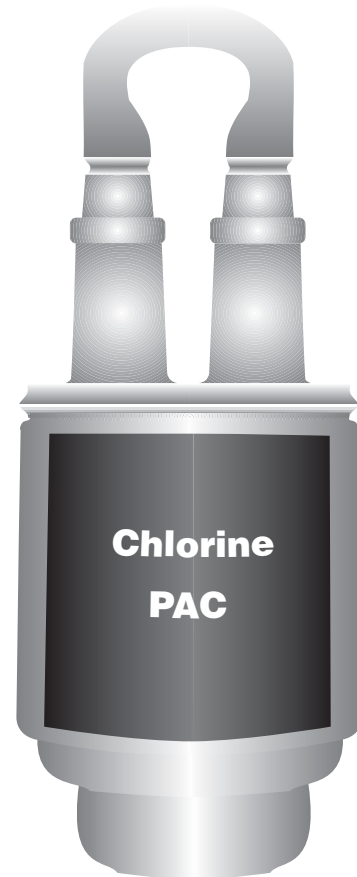
# INTRODUCTION

Welcome to easier pool care that ensures crystal clear, sparkling water in your pool. This manual will explain how to install and operate the cycler for a more enjoyable experience with less work and worry and more time relaxing and having fun.



## Cycler

Automatically dispenses chlorine with precise metering for continuous sanitation.



## Chlorine Pac

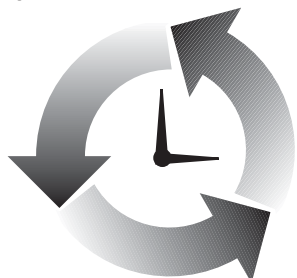
The replacement Pac is prefilled with chlorine and fits inside the Cycler. No touching chlorine or breathing its fumes. One Pac lasts 2 to 4 weeks.

*(Pac sold separately )*

# Swimming Pool Tips

## Start-up and Yearly Maintenance

1.



- Make sure the pool has adequate circulation. The pool water must completely circulate through the pump and filter at least 1 to 2 times per day. This usually requires 8 to 12 hours. Check with your dealer for the proper circulation time for your pool.

2.

- Before beginning with any pool care program, you must first balance your pool water. Take a water sample to your local pool professional or use a complete test kit that will test for the following important elements

### Water Balance Guidelines

pH:	7.2 – 7.8
Total Alkalinity:	60 – 120 ppm
Calcium Hardness:	150 – 400
Total Dissolved Solids:	<1500
Stabilizer:	20 – 80 ppm
Free Chlorine:	1.0 – 3.0 ppm

3.

Cu  
Mg Fe

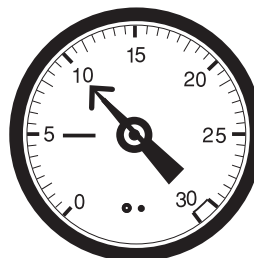
- If your fill water is high in metals, use a sequestering agent or metal out at start-up only before inserting a Pac. See your local dealer for details on using these products and always follow manufacturer's directions carefully.

4.



- After your pool is up and running smoothly, continue to test your water for pH, total alkalinity and chlorine and maintain its balance by adding any necessary adjustment products (see your dealer for details).

5.



- Check the pool's filter gauge often and periodically clean filter per the manufacturer's directions. A dirty filter will slow the flow of water which could hamper proper circulation.

# Start-up and Operation

1.



- Add a stabilizer or conditioner to the pool at the beginning of the season if the stabilizer level is below 20 ppm. This will prevent chlorine burn off. Follow manufacturer's directions carefully.

2.

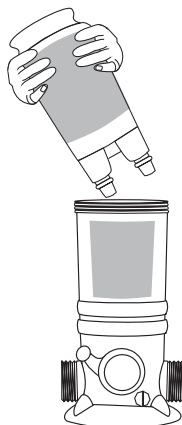


- Shock the pool with chlorine to rid the water of all contaminants before beginning. Follow manufacturer's directions carefully.
- This step is very important to start-up. Use chlorine shock only.



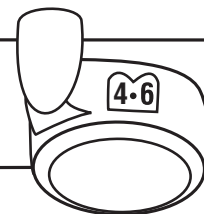
- Do not add shock in or near the skimmer or into the Cyclizer as it could damage equipment, risk potential explosion or discolor your pool surface.

3.



- When chlorine reading is down to 1.0 ppm, which may take a few days, insert pac into cyclizer. **(Follow directions on Page 6.)**

## SETTING CONTROL DIAL



4. • Set control dial by matching up the parameters of your pool on the chart below. **THIS IS A STARTING POINT ONLY** and may need to be adjusted to fit your individual pool needs. See #5 for below for adjusting directions. **IMPORTANT:** Pump run times less than 8 hours could result in under chlorination due to inadequate flow through the System.

POOL SIZE Gallons Diameter	12 Hour Pump Run Time				24 Hour Pump Run Time			
	PUMP SIZE							
	1/2 hp	3/4 hp	1 hp	1 1/2 hp	1/2 hp	3/4 hp	1 hp	1 1/2 hp
7,000 (18')	2.5	2	1	* 3	1.5	1	1	* 2
9,000 (21')	3	2.5	2	* 3.5	2	1.5	1	* 2.5
12,000 (24')	3.5	3	2.5	2	2.5	2	1.5	* 3
15,000	4	3.5	3	2.5	3	2.5	2	1.5
20,000	4.5	4	3.5	3	3.5	3	2.5	2

Dial settings based on 1.5 ppm. \* Bypass installation recommended.  
RECOMMENDED FLOW RATE 20-60 gpm

5.



- For the first week test the pool water daily for free chlorine to ensure correct dial setting. Continue to test weekly throughout the season. Test strips recommended.



- After each testing, adjust the dial up by 1/2 increment if the free chlorine reading has dropped below 1.0 ppm or adjust down by 1/2 increment if the reading has risen above 3.0 ppm.

Continue this process each day until the reading stabilizes between 1.0 and 3.0 ppm.

**Remember to adjust dial by 1/2 increments only in order to prevent over chlorination which may bleach pool surfaces.**

6.

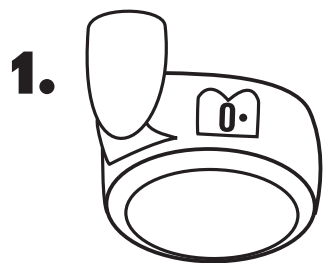


- Shock pool every two weeks or as needed to maintain water quality. Follow label directions on the shock treatment used.

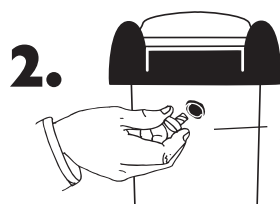
- **Do not** add shock in or near the skimmer or into the Cyclizer as it could damage equipment, risk potential explosion or discolor your pool surface.

# Replacing a Chlorine Pac

**CAUTION Read Carefully** – USE ONLY the factory recommended replacement Pac. (See label.) DO NOT USE any other Pac or bulk chemical tablets in the Cyclor. Use of any other product could result in over chlorination, bleached liners, unsafe pool conditions, fire or explosion. Warranty will be void if the correct Pac is not used.



- 1.**
- Turn off pump. Turn dial to 0. This reduces the flow of water into the unit when the cap is open so isolation valves are unnecessary.



- 2.**
- Back of Cyclor
- Unscrew knob to relieve pressure.



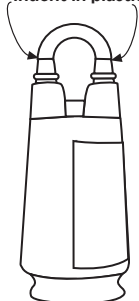
- 3.**
- Remove Cyclor cap. Stand back upon removing cap to avoid inhaling fumes.



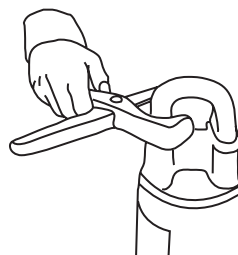
- 4.**
- The Pac is made of HDPE plastic. When the Pac is empty, triple rinse in pool water, drain, and recycle or wrap in newspaper and discard in trash.

- 5.** Cutting handle from Pac using a cutting tool or hacksaw (KEEP OUT OF REACH OF CHILDREN)

Indent in plastic



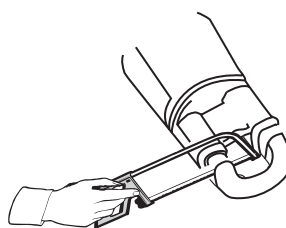
- A.** Find the indent in the plastic.



- B.** If using a cutting tool, place curved section of tool around the narrow end of one Pac tower and line up blade on indent.



- C.** Squeeze the handles together. Repeat for other side.



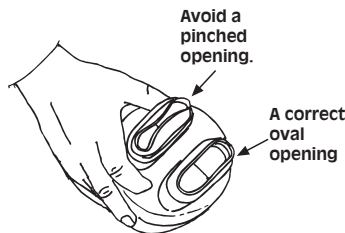
- D.** If using a hacksaw to cut the Pac, line up hacksaw blade on indent and cut with a smooth sawing action.

Finished cut ends



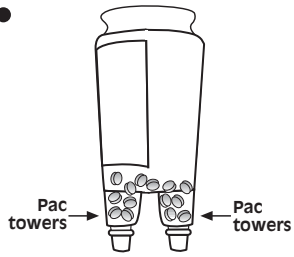
- E.** Whether using a cutting tool or a hacksaw make sure the blade comes straight across on the indent line for a clean cut.

Avoid a pinched opening.



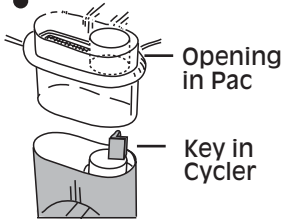
- F.** If openings are pinched together, open with fingers or re-cut closer to the colored screens inside Pac. Leave at least 1/4" of plastic to fit into Cyclor base.

6.



• Turn Pac over and shake slightly until tablets fall into tower areas.

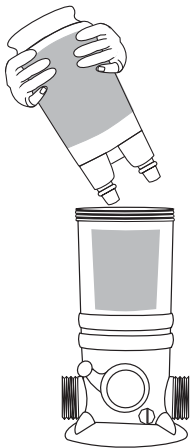
7.



• Insert Pac into Cyclor, lining up the openings in Pac with keys in Cyclor.

**NOTE: Openings are a different shape than keys.**

8.



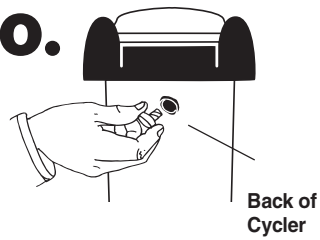
• Insert Pac into Cyclor. Avoid sparks, open flame or smoking when handling the Pac.

9.



• Replace cap by hand only.  
**DO NOT OVER TIGHTEN.**

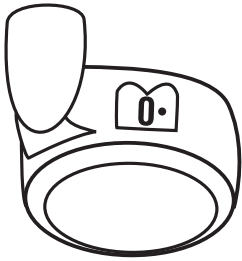
10.



• Replace knob on the Cyclor.

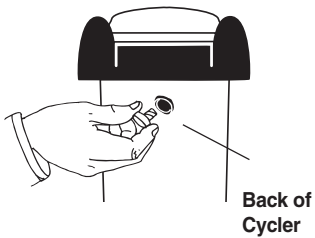
# Winterizing

**1.**



- Turn pump off and turn dial to Setting 0.

**2.**



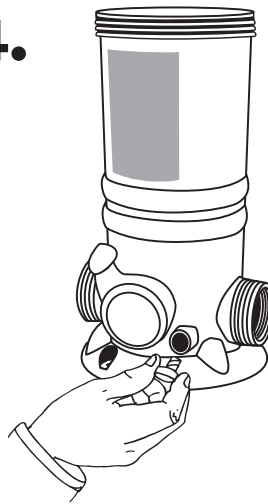
- Unscrew knob to relieve pressure.

**3.**



- Remove cap.

**4.**



- Unscrew knob from the front of Cyclor. Allow all water to drain.

**5.**



- If Pac still contains chlorine wrap in plastic bag and store in shed or cool well-ventilated location away from children, pets, motorcycles, cars or anything metal that can rust, pit, etc. Make sure Pac is away from open flame.

**6.**

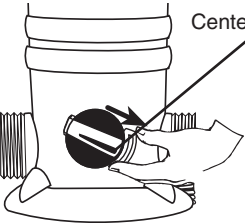


- Replace the cap and knobs loosely.

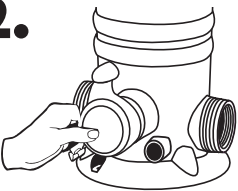
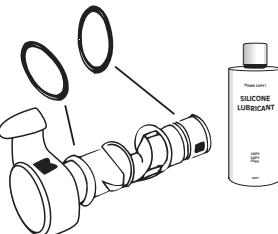
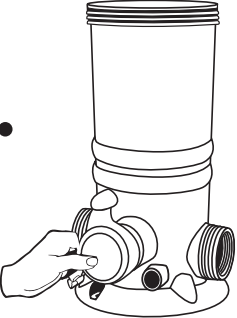
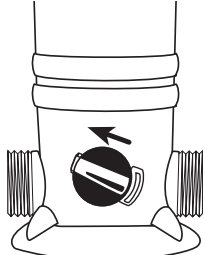


# Cycler Maintenance

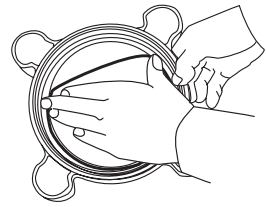
## Replacing the Control Dial O-Rings

- 

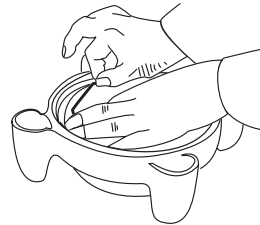
Center of locking pin

  - In the back of the Cycler depress center of locking pin with a finger and pull pin out of dial.
- 
  - Turn control dial back and forth as you pull it out of the housing.
- 
  - Replace both o-rings. Apply silicone lubricant that came with your Cycler on o-rings.
- 
  - Carefully insert control dial back into housing.
- 
  - Replace locking pin by pushing it through the slots on the dial until it locks into place.

## Replacing Cap O-Ring



1. Hold cap in front of you upside down with the o-ring groove facing up. Place one end of o-ring into cap groove at the point closest to you. Hold o-ring down with the thumb and index finger of one hand.



2. Take hold of the far end of the o-ring with the thumb and index finger of the other hand. Roll o-ring slightly back towards you as you stretch the o-ring into the remainder of the cap groove.

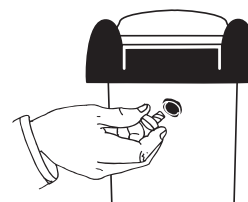


3. Lubricate o-ring often with silicone lubricant that came with your Cycler. **DO NOT USE** petroleum based lubricants.

## Replacing a Knob



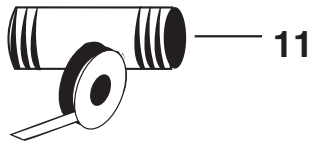
• Front of Cycler



• Back of Cycler

- To replace, simply unscrew and replace with the new one.

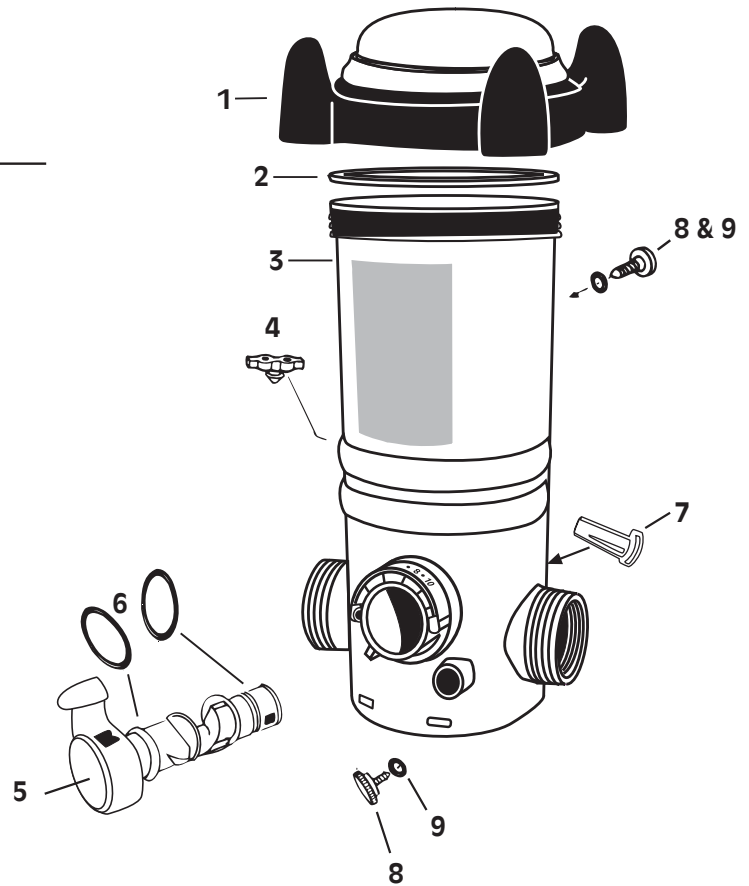
# Parts List



11

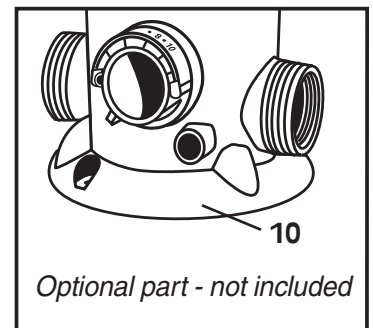


12



## Included with Above Ground Model 170 and 6700

REF. #	DESCRIPTION	QTY. INC.
1 & 2	Cap w/O-Ring	1
3	Body	1
4	Pressure Relief Valve	1
5, 6, 7	Control Dial with O-Rings & Locking Pin	1
8 & 9	Knob with O-Ring	2
11	Nipple Kit	1
12	Silicone Lubricant	1



## Replacement Parts for Above Ground Model 170 and 6700

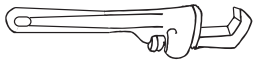
REF. #	ORDER #	DESCRIPTION
1 & 2	01-22-1418	Cap w/O-Ring
2	01-22-1920	Cap O-Ring
4	01-22-9480	Pressure Relief Valve
5, 6, 7	01-22-1443	Control Dial with O-Rings & Locking Pin
6	01-22-1450	Control Dial O-Ring Set
8 & 9	01-22-9940	Knob with O-Ring
10	01-22-1480	Mounting Base
11	01-22-1710	Nipple Kit
12	01-22-9971	Silicone Lubricant

**TOOLS NEEDED:**

Screwdriver

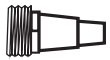


Pipe Wrench



**INCLUDED WITH CYCLER:**

One Hose Adapter  
1 1/2" X 1 1/2" X 1 1/4"

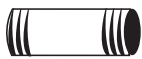


Pipe Thread Tape  
or Sealant



**MATERIALS NEEDED:**

One 6" X 1 1/2" TBE  
PVC Nipple



One Section of  
1 1/2" Flex Hose  
(provided with filter)



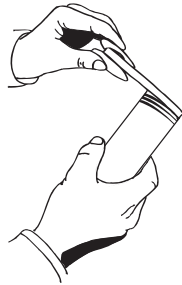
One  
Hose  
Clamp



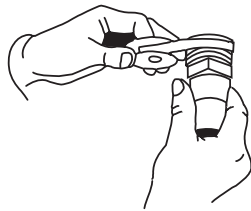
**RECOMMENDED:**

Corrosion Resistant  
Check Valve

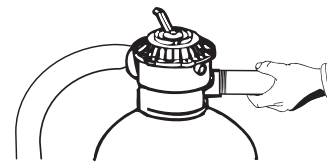
**Above Ground Filter Installation**



**1.** Apply pipe thread tape or sealant to each threaded end of nipple.



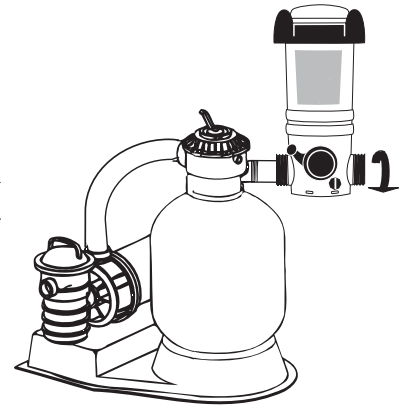
**4.** Apply pipe thread tape or sealant to threaded end of hose adapter.



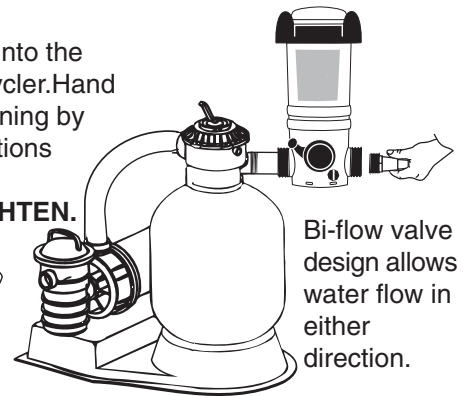
**2.** Screw one end of nipple into the filter return.

Tighten turning 1 to 2 revolutions with wrench. **DO NOT OVER TIGHTEN.**

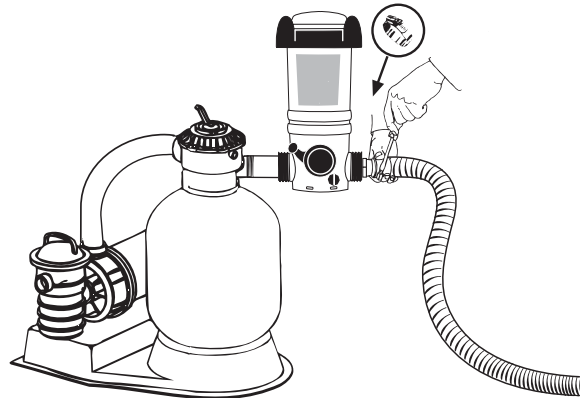
**5.** Screw adapter into the other side of Cyclor. Hand tighten. Finish tightening by turning 1 to 2 revolutions with wrench. **DO NOT OVER TIGHTEN.**



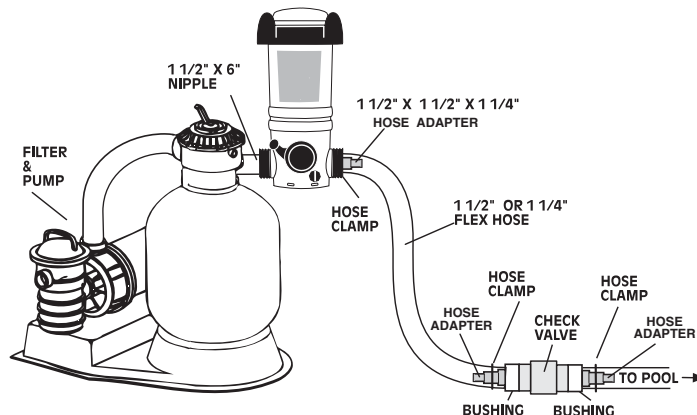
**3.** Screw either side of Cyclor on to open nipple end until upright and secure.



Bi-flow valve design allows water flow in either direction.



**6.** Attach return section of hose to the adapter with clamp. Tighten clamp with screwdriver.

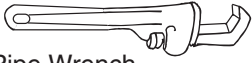


**7.** When using a Chlorine Pac, installing a corrosion resistant check valve is recommended.

**TOOLS NEEDED:**



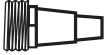
Screwdriver



Pipe Wrench

**INCLUDED WITH CYCLER:**

Two Hose Adapters  
1 1/2" X 1 1/2" X 1 1/4"

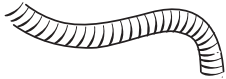


Pipe Thread Tape  
or Sealant



**MATERIALS NEEDED:**

Two Sections of  
of 1 1/2" Flex Hose  
(one provided with  
filter)



Two  
Hose  
Clamps



**RECOMMENDED:**

Corrosion Resistant  
Check Valve

#10 X 1 1/4" Phillips Pan  
Head Screws with  
Washers



**OPTION:**

Half Union



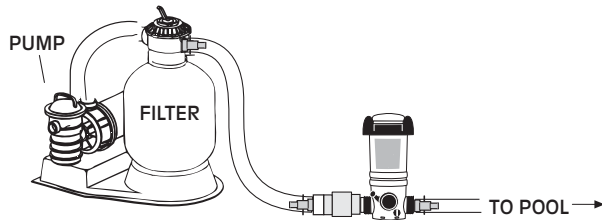
or



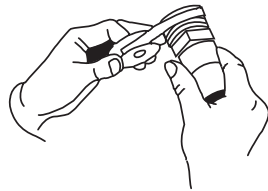
1 1/2" Threaded by  
1 1/2" Slip Bushing.

When installing with  
hard PVC pipe, use  
either a half union on  
the outside port threads  
or a bushing on the  
inside port threads.

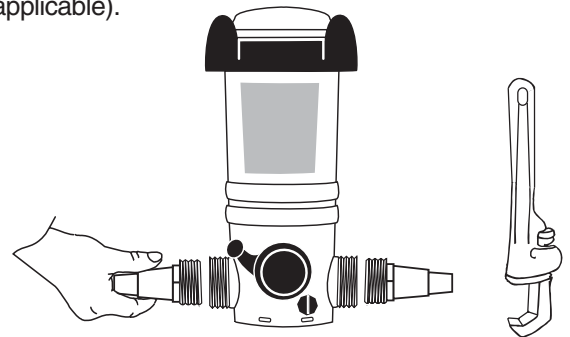
# Above Ground, Base Installation



The Cyclor should always be installed between the filter and pool (or between heater and pool if applicable).



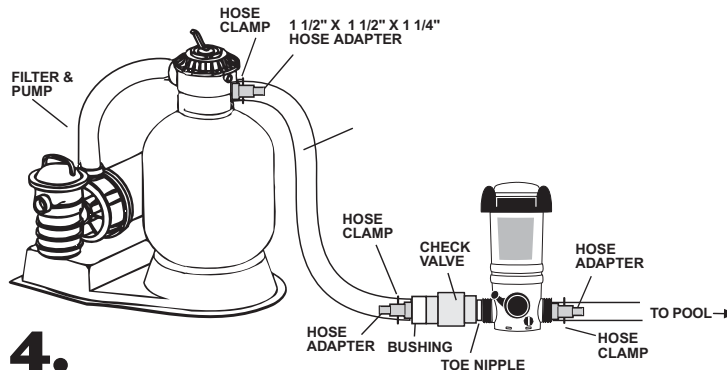
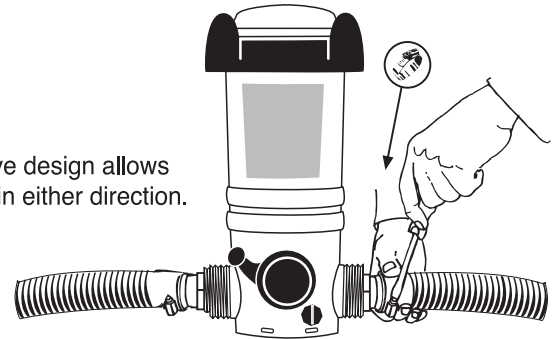
**1.** Apply pipe thread tape or sealant to the threaded end of both hose adapters.



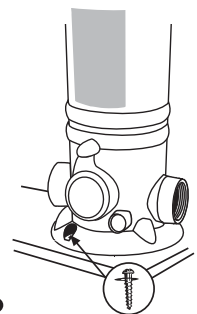
**2.** Screw adapters into each end of Cyclor. Hand tighten. Finish tightening by turning 1 to 2 revolutions with wrench. **DO NOT OVER TIGHTEN.**

**3.** Attach the filter section of flex hose to one hose adapter and the return section of flex hose to the other hose adapter with clamps and tighten with screwdriver.

Bi-flow valve design allows water flow in either direction.



**4.** Installing a corrosion resistant check valve is recommended.



**5.** For better stability, Cyclor may be mounted on a base using Phillips pan head screws. One in front and two in back.

# Limited One-Year Warranty

*King Technology, Inc. warrants to the original purchaser this unit will be free from any defects in workmanship and/or material, for a period of one (1) year from the date of original purchase. This warranty covers body, cap and control dial, but specifically excludes o-rings. King Technology at its option may replace any defective parts or the entire unit without charge after it is determined what is needed to correct any deficiency. Replacement parts with the exception of o-rings are warranted for the remainder of the original warranty.*

1. To obtain warranty service, you must deliver the unit to King Technology or its nearest authorized dealer. Shipping expenses are the purchaser's responsibility. The name of the nearest authorized dealer can be obtained by writing or calling King Technology at the address and telephone number provided on back page. Proof of purchase is required when requesting warranty service. Purchaser must present the sales receipt or other documentation verifying proof of purchase.

2. This warranty does not cover defects caused by: Modification, alteration, repair or service of the unit contrary to the accompanying instructions; physical abuse to or misuse of the product or operation or installation in a manner contrary to the accompanying instructions. This warranty also excludes all costs arising from the installation, adjustment, removal or replacement of defective units or parts. This warranty also excludes any and all claims arising out of the chemicals used in the product or their characteristics.

**3. CAUTION - Read carefully – Failure to follow these instructions will void the warranty. Do not add shock in or near skimmer.**

**A. This unit is not designed for shock treatment of pools. See your pool dealer or distributor for further information concerning shock treatments.**

**B. Control dial settings in excess of the recommended setting levels for trichlor can result in excess sanitizers being discharged into the pool. This can result in bleaching or discoloration of areas around the pool inlet or in some cases bleaching or discoloration of the entire pool liner or paint.**

**C. Excess trichlor in the pool can create health hazards to bathers. Consult each chemical manufacturer's warnings and cautions for specifics.**

**D. Misuse or failure to use the proper chlorine Pac for product as directed in the instruction manual may cause damage to equipment or personal injury. This warranty will be null and void if this unit is not used with the recommended chlorine Pac or Trichlor tablets.**

4. This warranty is the exclusive warranty for the 170 and 6710 Cyclor. This warranty is not transferable. **KING TECHNOLOGY MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER MATTER CONCERNING THE 170 and 6710 CYCLER.** Any express warranty not provided herein, and any remedy for breach of contract but which for this provision might arise by implication or operation of law is hereby excluded and disclaimed. **THE EXCLUSIVE REMEDY FOR ANY CUSTOMER IS THE REPAIR OR REPLACEMENT OF THE UNIT, AND THE RECOVERY OF DAMAGES WILL NOT EXCEED THE PURCHASE PRICE OF THE UNIT. IN NO EVENT WILL KING TECHNOLOGY BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES FROM ANY CAUSE.**

5. Under no circumstance shall King Technology be liable to purchaser or any other person for any damage or loss incurred because of any chemicals used in the product or their physical characteristics, or interruption of service of the product, or any resulting special, incidental or consequential damages or losses. Some states do not allow the exclusion or limitation of incidental consequential damages, so the above limitation or exclusion may not apply to you.



**DO NOT FORGET – Fill out warranty card and return postage paid.**

**Manufactured by: KING TECHNOLOGY, INC.  
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**Made in U.S.A.**  
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6,210,566; D540,906 and other U.S. and Foreign Patents Pending.*

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