NEW WATER® Cycler Instruction Manual
Chlorine Pool-Care System

To minimize the risk of serious injury, death or damage, before installing or first using this equipment, read Instruction Manual and all safety labels and follow all safety instructions and precautions. Save manual for future reference.

Customer Service 800-222-0169
kingtechnology.com

Ver la versión en español de este manual en kingtechnology.com/brands/new-water
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For information on King Technology’s entire product line, visit our website at kingtechnology.com
Thank you for choosing New Water. This system will maintain a clean, clear swimming pool while you spend less time on maintenance and more time having fun! There are three models to choose from:

**New Water Cycler 400/430**

The water treatment center that controls the flow of water to the New Water Cycler Pac. For pools 7,000 to 40,000 gallons. Uses the Cycler Pac Model 407C. (Sold separately).

- **Model 400 In-Line**
  - Product # 01-01-0400

- **Model 430 Off-Line**
  - Product # 01-01-0430

**Cycler Pac Model 407C**

Prefilled with chlorine tablets and fits inside the New Water Cycler Models 400 and 430.

- **Model 407C**
  - Product # 01-03-4613

**New Water Cycler 120**

The water treatment center that controls the flow of water to the New Water Cycler Pac. For pools 7,000 to 25,000 gallons. Uses the Cycler Pac Model 105C. (Sold separately).

- **Model 120 In-Line**
  - Product # 01-01-0120

**Cycler Pac Model 105C**

Prefilled with chlorine tablets and fits inside the New Water Cycler Model 120.

- **Model 105C**
  - Product # 01-03-1413
General Notes

These instructions contain information for the safe and proper operation of this New Water Cycler. Observe the following principles:

- Ensure that everyone using this New Water Cycler follows the instructions and safety precautions.
- Keep the instructions nearby and available for reference throughout the service life of this New Water Cycler.

These instructions do not provide for every possible contingency that might be encountered in connection with installation, operation or maintenance of this equipment. Should further information be desired or should particular issues arise which are not covered sufficiently in this manual, contact King Technology at 800-222-0169.

Explanation of the signal words

Signal words, which depict the probability and severity of harm, are used in these instructions. They are defined as follows:

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Meaning</th>
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<tbody>
<tr>
<td><strong>DANGER</strong></td>
<td>Indicates an imminently hazardous situation which, if not avoided, will result in death, serious injury or major property damage.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
<td>Indicates a hazardous situation which, if not avoided, could result in serious injury, death, or major property damage.</td>
</tr>
<tr>
<td><strong>NOTICE</strong></td>
<td>Indicates special instructions that are important but not related to physical injury hazards.</td>
</tr>
</tbody>
</table>

Explanation of the safety pictographs

The following pictographs illustrate the type and source of a hazard.

<table>
<thead>
<tr>
<th>Pictograph</th>
<th>Type of Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Safety Alert/General Hazard" /></td>
<td>Safety Alert/General Hazard</td>
</tr>
<tr>
<td><img src="image" alt="Explosion Risk" /></td>
<td>Explosion Risk</td>
</tr>
<tr>
<td><img src="image" alt="Hazardous Pressure" /></td>
<td>Hazardous Pressure</td>
</tr>
<tr>
<td><img src="image" alt="Flammable Fire Hazard" /></td>
<td>Flammable Fire Hazard</td>
</tr>
</tbody>
</table>

Identification of warnings

Warnings are intended to help you recognize risks and avoid death, injury or property damage. This is how warnings are identified:

**Signal Word**

**Pictographs**

**Description of danger.**

Consequences if ignored.

☞ The arrow signals a safety precaution to be taken to eliminate or reduce the risk.
Fire, explosion and high pressure hazards
To minimize the risk of serious injury, death or property damage while using the New Water Cycler:

- Read, understand and follow all instructions and safety precautions in the manual, and on this Cycler and on any label for chemicals used with this Cycler including New Water Cycler Pacs.

DANGER

- Never use fast dissolving chlorine tablets, liquid bleach, or calcium hypochlorite in the New Water Cycler.
- Never mix Trichlor chlorine tablets with Calcium Hypochlorite, or with any other form of concentrated chlorine or other chemicals.
- Never add any other types of chlorine, pH adjusters, shock treatments or algaecides through the skimmer. These products should be added directly into the pool if required.
- Do not contaminate the New Water Cycler or New Water Cycler Pacs with dirt, organic matter, pool chemicals (such as calcium hypochlorite or pool shocks), fertilizers or other household chemicals. Contact between any of these substances and the New Water Cycler or New Water Cycler Pacs, will result in a chemical reaction with the generation of heat, liberation of hazardous gasses and fire or explosion.

WARNING

- Use only New Water Cycler Pacs in the New Water Cycler. Never use bulk chemicals.
- To prevent the build up of gas pressure in the New Water Cycler, be sure the pool return line valves are open – except when opening or servicing the unit.
- Do not inhale fumes from the New Water Cycler or New Water Cycler Pacs.
- Avoid sparks, smoking, or any open flame near New Water Cycler or chemicals.
- Do not exceed maximum operating pressure of 50 psi or maximum temperature of 104°F.
- Do not remove the cap while under pressure. Always turn off pump and bleed off pressure before opening New Water Cycler.
- Do not install automatic or fast shut off valves downstream of New Water Cycler.
- Always install the New Water Cycler AFTER a heater (if applicable) on the return line.
- Always install any additional sanitizing equipment AFTER and NEVER BEFORE the New Water Cycler is installed on the return line.
- Do not permit children to use or climb on this product. This product must be positioned to prevent children from using it as a means of access to the pool.
- Always stand clear of the New Water Cycler during pump start-up.
- Replace New Water Cycler if you see signs of cracks, damage or degradation to the Cycler body or cap.

NOTICE

- Prior to pressurizing, check with your dealer to ensure your plumbing connections meet building codes.
- Failure to properly winterize your New Water Cycler could result in freeze damage. (See page 18 for winterizing details.)
Installation Tips to Ensure Proper Performance

Before installing, read all directions carefully and contact your dealer for installation support.

**WARNING**
- Do not exceed maximum operating pressure of 50 psi.
- Do not install automatic or fast shut off valves downstream of feeder.
- Always install the New Water Cycler AFTER the heater (if applicable) on the return line.
- Always install any additional sanitizing equipment AFTER and NEVER BEFORE the New Water Cycler is installed on the return line.

1) If using a multi-speed pump, run pump for at least 6 hours per day at high speed (at least 40 gpm).

If the pump will run on low speed 24 hours per day or less than 6 hours per day on high speed, you must bleed the air while the pump is on by unscrewing either the cap knob or back knob until water appears. Then screw the knob back in. Repeat this process each time the cap is removed for any reason.

2) Install Cycler with 4-8 psi back pressure.

Lower back pressures could result in under chlorination. Change the eyeball fittings in the return jets to a smaller size to increase back pressure. Contact King Technology at 800-222-0169 for a specially designed Cycler pressure gauge to determine back pressure at pool start-up.

3) Special Installation Requirements:

**IMPORTANT:** Over chlorination or damage to the New Water Cycler or other equipment could result if special installations A, B or C are not used in these situations:

- If water flow is higher than 80 gallons per minute (gpm), see diagram A.
- If an in-floor cleaner is included with pool, see diagram B, with two options. Preferred installation is Option 1 with two separate lines.
- If set-up is a pool and spa combination with common equipment, see diagram C.

**Questions?** Call Customer Service at 800-222-0169 Monday thru Friday, 8 am to 5 pm central standard time.
Filter Flex-Hose Installation - Model 120

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

2. Screw one end of nipple into the filter return. Hand tighten. Finish tightening by turning 1 to 2 revolutions with a pipe wrench. **DO NOT OVER TIGHTEN.**

3. Screw either side of New Water Cycler on to open nipple end until upright and secure.

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

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

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

7. To prevent damage to heaters or filters, see your dealer about installing a corrosion resistant check valve which will reduce the back flow of chlorine gas when the New Water Cycler is turned off.

**TOOLS NEEDED**
- Screwdriver
- Pipe Wrench

**MATERIALS NEEDED**
- Pipe Thread Tape or Sealant
- One 6” x 1½” TBE PVC Nipple
- One Hose Adapter 1½” x 1½” x 1¼”
- One Section of 1½” or 1¼” Flex Hose (provided with filter)
- One Hose Clamp

**RECOMMENDED**
- 4-8 psi Back Pressure
  - To avoid over or under chlorination, replace eyeball fittings in the return jets to a smaller or larger size to adjust back pressure. For best results use King Technology’s pressure gauge, order part number 01-22-4000.
Base Flex-Hose Installation - Model 120

The New Water Cycler should always be installed between the filter and pool (or between heater and pool if applicable). Never install New Water Cycler before the heater or damage to the heater could occur.

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

2. Screw adapters into each end of New Water Cycler. Hand tighten. Finish tightening by turning 1 to 2 revolutions with a pipe 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 installation in either flow direction.

4. To prevent damage to heaters or filters, see your dealer about installing a corrosion resistant check valve which will reduce the back flow of chlorine gas when the Cycler is turned off.

5. For better stability, New Water Cycler may be mounted on a treated wood base using Phillips pan head screws, one in front and two in back. If you have questions about stability, please contact your dealer or King Technology.

TOOLS NEEDED

Screwdriver
Pipe Wrench

MATERIALS NEEDED

Pipe Thread Tape or Sealant
Two Hose Adapters
1 1/2” X 1 1/2” X 1 1/4”
Two Sections of 1 1/2” or 1 1/4” Flex Hose (one provided with filter)
Two Hose Clamps

RECOMMENDED

4-8 psi Back Pressure
To avoid over or under chlorination, replace eyeball fittings in the return jets to a smaller or larger size to adjust back pressure. For best results use King Technology’s pressure gauge, order part number 01-22-4000.
Hard-Plumbed Installation - Model 120

The New Water Cycler should always be installed between the filter and pool (or between heater and pool if applicable). Never install New Water Cycler before the heater or damage to the heater could occur.

Do NOT install New Water Cycler Model 120 off-line.

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

Screw adapters into each end of New Water Cycler following directions for a male adapter or a female adapter. Hand tighten. Finish tightening by turning 1 to 2 revolutions with a pipe wrench. **DO NOT OVER TIGHTEN.**

1½” Male Adapter (slip x MPT)

or

2” Female Adapter (slip x FPT)

1a.
If using male adapters, apply pipe thread tape or sealant to the threaded end of each adapter.

1b.
If using female adapters, apply pipe thread tape or sealant to the threaded end of each feeder port.

2.
Measure the distance between the outside adapters and cut out a section of pipe 3” less than that dimension.

3.
Following primer directions, brush primer on the inside of the adapters and to ends of pipe. Repeat this process with PVC cement following directions on that product.

4.
Insert PVC pipe into adapters with a twisting action. Hold in place 5 to 10 seconds to bond.

5.

To prevent damage to heaters or filters, see your dealer about installing a corrosion resistant check valve which will reduce the back flow of chlorine gas when the Cycler is turned off.
**TOOLS NEEDED**
- Pipe Wrench
- Hacksaw
- Tape Measure

**MATERIALS NEEDED**
- Pipe Thread Sealant
- Primer and PVC Cement
- Two 2" Threaded x 2" or 1½" Slip male adapters (not Included)

**SECURE CYCLER**

For better stability, New Water Cycler may be mounted on a treated wood base using Phillips pan head screws, one in front and one in back. If you have questions about stability, please contact your dealer or King Technology.

**In-line Installation - Model 400**

The New Water Cycler should always be installed between the filter and pool (or between heater and pool if applicable). Never install New Water Cycler before the heater or damage to the heater could occur.

Do NOT install New Water Cycler Model 400 off-line.

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

**1.**

Follow pipe thread sealant directions, brush sealant onto New Water Cycler threads in both ports and both male adapters. **DO NOT USE PIPE THREAD TAPE**

**2.**

Screw a male adapter into each port of New Water Cycler. Hand tighten. Finish tightening by turning 1 to 2 revolutions with a pipe wrench. **DO NOT OVER TIGHTEN.**

**3.**

Measure the distance between New Water Cycler male adapters and cut out a section of pipe 3” less than that dimension.

**4.**

Following primer directions, brush primer on the inside of the male adapters and to ends of pipe. Repeat this process with PVC cement following manufacturer’s directions on that product.

**5.**

Insert PVC pipe into male adapters with a twisting action. Hold in place 5 to 10 seconds to bond.

**6.**

To prevent damage to heaters or filters, see your dealer about installing a corrosion resistant check valve which will reduce the back flow of chlorine gas when the Cycler is turned off.

Do NOT install in copper pipe as chemical corrosion may lead to pipe failure.

Allow a minimum of 12” above and on each side of New Water Cycler to ensure room for easy replacement of New Water Cycler Pac.
Off-line Installation - Model 430

The New Water Cycler should always be installed between the filter and pool (or between heater and pool if applicable). Never install New Water Cycler before the heater or damage to the heater could occur.

Do NOT install New Water Cycler Model 430 in-line as this Cycler is different than an in-line unit.

**1.** DO NOT USE PIPE THREAD TAPE as the threads on these units are not suitable for this use and leaking or fitting failure could result.

**2.** Screw a male adapter into each port of New Water Cycler and hand tighten. Completely tighten turning 1 to 2 revolutions with a pipe wrench. **DO NOT OVER TIGHTEN.**

**3.** Following Primer directions, brush Primer on reducer bushings and inside of male adapters. Repeat this process with PVC cement following manufacturer’s directions on that product.

**4.** Insert reducer bushing into male adapter on both sides with a twisting action. Hold in place 5 to 10 seconds to bond.

**5.** Following pipe thread sealant directions, brush sealant onto elbow threads.
6. Screw elbow into reducer bushings on both sides.

7. Cut tubing to size for each New Water Cycler connection and attach one to each elbow with clamps.

8. Tighten clamps with a screwdriver.

9. When pipe is totally dry, drill two 19/32” or 5/8” holes, between 2” - 36” apart, on the return line. Be careful not to go through other side of pipe.

10. Attach a gasket to each scoop.

11. Place scoops inside holes so the inlet scoop faces the water flow and the outlet scoop faces away from the water flow. Scoop arrows should be facing each other when correct.

12. Attach scoop clamps over the scoops and around the pipe.

13. Tighten scoop clamps with a screwdriver.

14. Attach each hose to venturi scoop male nipple with a small clamp and tighten with screwdriver.

15. For better stability, New Water Cycler may be mounted on a treated wood base using Phillips pan head screws, one in front and one in back. If you have questions about stability, please contact your dealer or King Technology.

16. To prevent damage to heaters or filters, see your dealer about installing a corrosion resistant check valve which will reduce the back flow of chlorine gas when the Cycler is turned off.
Step 1: Preparing the Pool

1. Make sure the pool has adequate circulation. The total volume of 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 of circulation. Check with your dealer for the proper circulation time for your pool.

2. 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.

3. Check the Water Hardness of your fill water before adding to the pool. If calcium content is higher than 400 ppm, find a soft water source to fill your pool instead; otherwise water balance will be very difficult.

4. Check for metals in the pool such as iron or copper. Before attempting water balance, these should be removed. See your dealer for a metal out or sequesterant and follow the label directions carefully.

5. 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) to test for the important Water Balance Guidelines.

   **IMPORTANT:** Always follow printed instructions on the balancing chemical packages. Add balancing chemicals in small increments one at a time with circulation running. **For best results, wait 8-12 hours** before testing again and adding any additional balancing chemicals.

<table>
<thead>
<tr>
<th>Water Balance Guidelines</th>
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<tbody>
<tr>
<td>pH:</td>
</tr>
<tr>
<td>Total Alkalinity:</td>
</tr>
<tr>
<td>Calcium Hardness:</td>
</tr>
<tr>
<td>Total Dissolved Solids:</td>
</tr>
<tr>
<td>Stabilizer:</td>
</tr>
<tr>
<td>Free Chlorine:</td>
</tr>
</tbody>
</table>

**WARNING**
Do not exceed maximum operating pressure of 50 psi.
Continue... Step 1: Preparing the Pool

For best results in achieving water balance, follow steps 5a through 5e in order.

5a. Take a water sample from the pool and dip a Test Strip into it.

5b. Look at the Total Alkalinity reading first. Adjustments should be made to bring the Total Alkalinity in the range of 80 – 120 ppm prior to making any adjustments to pH even if it throws pH off further.

5c. After Total Alkalinity is in range, test for pH. It should be between 7.2 and 7.8. If higher or lower, add a pH adjuster.

5d. Then test your Water Hardness again. If lower than 200 ppm, add Calcium Increaser. Always maintain 200-400 ppm.

5e. Lastly, test for stabilizer or conditioner levels. Add conditioner if the level is below 20 ppm. This will prevent chlorine burn off. If stabilizer level is above 80 ppm, partially drain water and re-fill.

6. Initially shock the pool with chlorine shock only to rid the water of contaminants and establish a chlorine residual. Always follow the manufacturer’s directions carefully. See the DANGER box below for important guidance on shocking.

- Never add any other types of chlorine, pH adjusters, shock treatments or algaecides through the skimmer. These products should be added directly into the pool if required.
- Never use fast dissolving chlorine tablets, liquid bleach, or calcium hypochlorite in the New Water Cycler.
Step 2: Putting the System to Work

**DANGER**
Never use fast dissolving chlorine tablets, liquid bleach, or calcium hypochlorite in the New Water Cycler.

**WARNING**
Avoid sparks, smoking, or any open flame near New Water Cycler or chemicals.

**IMPORTANT:** Read the label on the New Water Cycler Pac carefully before using.

1. Turn off pump. Turn dial to 0 or Minimum. This reduces the flow of water into the unit when the cap is open.

2. Open the cap. For Model 400/430 pools use the cap tool included with New Water Cycler to loosen cap by hitting the handle with the flat of your hand counterclockwise. Stand back to allow any chlorine fumes to dissipate.

3. Cut handle from New Water Cycler Pac using a PVC cutting tool (KEEP OUT OF REACH OF CHILDREN)
   - **3A.** Find the indent in the plastic.
   - **3B.** Place curved section of tool around the narrow end of one pac tower and line up blade on indent
   - **3C.** Squeeze the handles together. Repeat for other side.
   - **3D.** Make sure the blade comes straight across on the indent line for a clean cut.

4. Invert New Water Cycler Pac and shake slightly until chlorine tablets fall into tower areas.

5. Insert New Water Cycler Pac into New Water Cycler, lining up the openings in New Water Cycler Pac with keys in New Water Cycler.
   **NOTE:** Openings are a different shape than keys.

6. Replace cap by hand only. DO NOT OVERTIGHTEN.

7. DO NOT USE CAP TOOL TO TIGHTEN CAP. FOR REMOVAL ONLY.

The New Water Cycler Pacs are made of HDPE plastic. Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Rinse thoroughly before recycling or discarding in trash.

8. Mark your calendar ahead for the approximate replacement times for the New Water Cycler Pac.

**WE RECYCLE**
**Step 3: Setting Control Dial**

1. This system is designed to work effectively with a variety of pool equipment as long as the following procedures are followed.

   Set control dial on New Water Cycler 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 #2 below for adjusting directions.

   **IMPORTANT:** If using a multi-speed pump, pump-run times of at least 6 hours per day at high speed are recommended for proper performance. If running the pump at low speed only or on high speed less than 6 hours, please follow the 24 hour low-speed directions below.

   **24 HOUR, LOW-SPEED PUMP RUN TIME**

   In order to ensure proper performance when running the pump on low speed for 24 hours per day or high speed less than 6 hours per day, bleed the air while the pump is on by unscrewing the cap or back knob until water appears. Then screw the knob back in. Repeat this process each time the cap is removed for any reason. Set the control dial at 6 and follow the adjustment directions in Step 2 to determine the correct setting for your pool.

   **EXAMPLE**

   Find your starting dial setting by matching up the parameters of your pool on the above chart. An above ground pool with approximately 12,000 gallons, with a 1 1/2 horsepower pump running 12 hours a day, would require a starting setting of 2.5.

   **2.** For the first week, test the pool water daily for free chlorine to ensure correct dial setting. Continue to test weekly throughout the season.

   After each testing, adjust the dial up by 1/2 increment if the free chlorine reading has dropped or down by 1/2 increment if the reading has risen. Continue this process each day until the reading stabilizes at your desired level between 1.0-3.0 ppm. Remember to adjust dial by 1/2 increments only.

   **IMPORTANT:** Control dial settings in excess of these recommendations could result in excess trichlor levels 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. In addition, excess trichlor in the pool can create health hazards to bathers.

   Use the handle end of cap tool if the dial is hard to turn.
Step 4: Routine Pool Care

1. **WARNING**
   To prevent the build up of gas pressure in the New Water System, be sure the pool return line valves are open except when opening or servicing the unit.

2. **DANGER**
   Do not contaminate the New Water Cycler or New Water Cycler Pacs with dirt, organic matter, pool chemicals (such as calcium hypochlorite or pool shocks), fertilizers or other household chemicals. Contact between any of these substances and the New Water Cycler or New Water Cycler Pacs will result in a chemical reaction with the generation of heat, liberation of hazardous gasses and fire or explosion.

3. Regularly test water with to maintain pH and Total Alkalinity.
   **NOTE:** Water balance is affected by bather load, chemical usage, evaporation and the makeup of source water, so maintaining water balance regularly is important.

4. **DANGER**
   • Never add any other types of chlorine, pH adjusters, shock treatments or algacides through the skimmer. These products should be added directly into the pool if required.
   • Never use fast dissolving chlorine tablets, liquid bleach, or calcium hypochlorite in the New Water Cycler.

   Shock the pool every week or as needed with a non-chlorine or chlorine shock.

Run filtration system enough hours to circulate all water 1 to 2 times per day. More than that could result in over chlorination.

Maintain 1.0 - 3.0 ppm free chlorine level at all times.
Winterizing (Model 120 or Model 400/430)

1. Turn pump off.
   Turn dial to 0  OR  Turn dial to minimum

   Model 120
   Model 400/430

2. Remove cap.

   Model 120
   Model 400/430

3. Unscrew knob from New Water Cycler. Allow all water to drain.

   Model 120
   Model 400/430

4. Remove Pac.

   If New Water Cycler Pac still contains chlorine, wrap in plastic bag and store in shed or cool, dry, well-ventilated location away from children, pets, cars, motorcycles or anything metal that can rust, pit, etc.
   If empty, rinse and recycle.

   Model 120
   Model 400/430

5. Replace the cap and knobs loosely.

   Model 120
   Model 400/430

WARNING
Avoid sparks, smoking, or any open flame near New Water Cycler or chemicals.
## Troubleshooting

For help in troubleshooting, call King Technology at 800-222-0169.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. What do I do if the water looks cloudy?</strong></td>
<td>1. Make sure your filtration system is working properly (i.e. clean filter, skimmer and pump basket).&lt;br&gt;2. Make sure circulation time is adequate – increase pump time if not.</td>
</tr>
<tr>
<td><strong>2. What do I do if the water turns color?</strong></td>
<td>1. Algae may be trying to form – shock the pool, increase circulation time if needed and clean the filter.</td>
</tr>
<tr>
<td><strong>3. What do I do if algae forms in or on my pool?</strong></td>
<td>1. Use an algaecide per the directions on the bottle and brush the sides of the pool often.</td>
</tr>
<tr>
<td><strong>4. What do I do if I am under chlorinating with the New Water Cycler Pac?</strong></td>
<td>1. If you are unable to maintain at least 1.0 ppm, first make sure there are chlorine tablets in the tower areas of the New Water Cycler Pac and it is installed properly. If a correction was made, test the water in 24 hours.&lt;br&gt;2. If still low, turn the dial up one setting and test the water again in 24 hours. Continue raising the setting by one increment each day until the proper reading is achieved.</td>
</tr>
<tr>
<td><strong>5. What do I do if I am over chlorinating with the New Water Cycler Pac?</strong></td>
<td>1. If the chlorine reading is over 3.0 ppm, remove the New Water Cycler Pac from the New Water Cycler and test the water daily until the reading is down to 1.0 ppm.&lt;br&gt;2. Reinsert the New Water Cycler Pac, lower the dial one setting and test the water again in 24 hours. If the reading has risen, lower the dial one setting again. Continue this process until proper reading is achieved.</td>
</tr>
</tbody>
</table>
### Included with New Water 120

<table>
<thead>
<tr>
<th>REF. #</th>
<th>DESCRIPTION</th>
<th>QTY. INCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>Cap w/O-Ring</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Body</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Pressure Relief Valve</td>
<td>1</td>
</tr>
<tr>
<td>5, 6, 7, 8</td>
<td>Control Dial with O-Rings,</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Locking Pin and Number Plate</td>
<td></td>
</tr>
<tr>
<td>9 &amp; 10</td>
<td>Knob with O-Ring</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Mounting Base</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Silicone Lubricant</td>
<td>1</td>
</tr>
</tbody>
</table>

### Replacement Parts for New Water 120

<table>
<thead>
<tr>
<th>REF. #</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>01-22-1410</td>
<td>Cap w/O-Ring</td>
</tr>
<tr>
<td>2</td>
<td>01-22-1926</td>
<td>Cap O-Ring</td>
</tr>
<tr>
<td>4</td>
<td>01-22-9486</td>
<td>Pressure Relief Valve</td>
</tr>
<tr>
<td>5, 6, 7, 8</td>
<td>01-22-1446</td>
<td>Control Dial with O-Rings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Locking Pin and Number Plate</td>
</tr>
<tr>
<td>6</td>
<td>01-22-1456</td>
<td>Control Dial O-Ring Set</td>
</tr>
<tr>
<td>9 &amp; 10</td>
<td>01-22-9946</td>
<td>Knob with O-Ring</td>
</tr>
<tr>
<td>11</td>
<td>01-22-1485</td>
<td>Mounting Base</td>
</tr>
<tr>
<td>12</td>
<td>01-22-9970</td>
<td>Silicone Lubricant</td>
</tr>
<tr>
<td>13</td>
<td>01-22-1710</td>
<td>Nipple Kit</td>
</tr>
<tr>
<td>14</td>
<td>01-22-4000</td>
<td>Pressure Gauge</td>
</tr>
<tr>
<td>15</td>
<td>01-22-1470</td>
<td>25k Tune-Up Kit</td>
</tr>
</tbody>
</table>
## Parts List • Models 400 and 430

### INCLUDED WITH • Model 400 and 430

<table>
<thead>
<tr>
<th>REF. #</th>
<th>DESCRIPTION</th>
<th>QTY. INCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>Cap w/O-Ring</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Body</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Pressure Relief Valve</td>
<td>1</td>
</tr>
<tr>
<td>5, 6, 7</td>
<td>Control Dial with O-Rings</td>
<td>1</td>
</tr>
<tr>
<td>8 &amp; 9</td>
<td>Knob with O-Ring</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>Cap/Control Dial Tool</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>Silicone Lubricant</td>
<td>1</td>
</tr>
</tbody>
</table>

### REPLACEMENT PARTS • Model 400 and 430

<table>
<thead>
<tr>
<th>REF. #</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>01-22-9418</td>
<td>Cap w/O-Ring</td>
</tr>
<tr>
<td>2</td>
<td>01-22-9926</td>
<td>Cap O-Ring</td>
</tr>
<tr>
<td>4</td>
<td>01-22-9486</td>
<td>Pressure Relief Valve</td>
</tr>
<tr>
<td>5, 6, 7</td>
<td>01-22-9446</td>
<td>Control Dial with O-Rings</td>
</tr>
<tr>
<td>6 &amp; 7</td>
<td>01-22-9456</td>
<td>Control Dial O-Ring Kit</td>
</tr>
<tr>
<td>8 &amp; 9</td>
<td>01-22-9946</td>
<td>Knob with O-Ring</td>
</tr>
<tr>
<td>18</td>
<td>01-22-8870</td>
<td>Cap/Control Dial Tool</td>
</tr>
<tr>
<td>19</td>
<td>01-22-9970</td>
<td>Silicone Lubricant</td>
</tr>
<tr>
<td>20</td>
<td>01-22-4000</td>
<td>Pressure Gauge</td>
</tr>
<tr>
<td>21</td>
<td>01-22-9950</td>
<td>40k Tune-Up Kit</td>
</tr>
</tbody>
</table>

### Off-line Installation Parts Included with Model 430

### INCLUDED WITH OFF-LINE Model 430

<table>
<thead>
<tr>
<th>REF. #</th>
<th>DESCRIPTION</th>
<th>QTY. INCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>2&quot; Male Adapter</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>2&quot; X 1/2&quot; Bushing</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>90 Degree Elbow</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Small Clamp</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>6' PVC Tubing</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>Scoop Gasket</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>Venturi Scoop</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>Scoop Clamp</td>
<td>2</td>
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</tbody>
</table>

### REPLACEMENT PARTS • Model 430

<table>
<thead>
<tr>
<th>REF. #</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>01-22-8620</td>
<td>2&quot; X 1/2&quot; Bushing</td>
</tr>
<tr>
<td>12</td>
<td>01-22-7800</td>
<td>90-Degree Elbow</td>
</tr>
<tr>
<td>13</td>
<td>01-22-7690</td>
<td>Small Clamp</td>
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<tr>
<td>14</td>
<td>01-22-7700</td>
<td>6' PVC Tubing</td>
</tr>
<tr>
<td>15</td>
<td>01-22-7850</td>
<td>Scoop Gasket</td>
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<tr>
<td>16</td>
<td>01-22-7790</td>
<td>Venturi Scoop</td>
</tr>
<tr>
<td>17</td>
<td>01-22-7910</td>
<td>Scoop Clamp</td>
</tr>
</tbody>
</table>

Replacement part 10 not available. See your dealer.

2" to 36" apart on straight pipe

OUTLET
After filter and heater

INLET
Between pump and filter
Cycler Maintenance

Replacing Control Dial O-Rings

• Model 120

1. In the back of the New Water Cycler depress center of locking pin with a finger and pull pin out of dial.

2. Turn control dial back and forth as you pull it out of the housing.

3. Replace both O-rings. Apply silicone lubricant that came with your New Water Cycler on O-rings.

4. Carefully insert control dial back into housing.

5. Replace locking pin by pushing it through the slots on the dial until it locks into place.

• Models 400/430

1. Using a needle nose pliers, find the snap ring tail located at approximately the 5 o’clock position under the control dial.

2. Pull down and out of the groove.

3. Using a large screwdriver, loosen the control dial. Carefully pry the dial until it pulls out.

4. Carefully replace the rubber O-ring without stretching it. Apply silicone lubricant that came with your New Water Cycler on O-ring.

5. Push control dial completely into the housing and turn the dial to setting 2.

6. Insert the non-lipped end of snap ring into the groove opening beginning at the 5 o’clock position and push it up so that it threads itself around the control dial.

7. Using a small screwdriver or pointed tool to help guide it, make sure the snap ring stays in the groove as it is inserted.
Replacing the Cap O-Ring

Model 120

1. Remove old O-ring.

2. Place new O-ring in bottom half of groove.

3. Place your thumbs on each side of the cap over the O-ring in the groove.

4. Roll your thumbs back and forth over the O-ring while pushing upward until the O-ring falls into the top of the groove.

Models 400/430

1. Remove old O-ring.

2. Place new O-ring in bottom half of groove.

3. Place your thumbs on each side of the cap over the O-ring in the groove.

Product # 01-22-9970

Lubricate O-ring every couple of months with silicone lubricant that came with your New Water Cycler. DO NOT USE petroleum based lubricants.

Replacing Cycler Knobs

To replace, simply unscrew old knob and replace with the new one.
Limited One-Year Warranty

King Technology, Inc. will warrant this unit with a complete replacement for the original purchaser, should it prove defective by reason of improper workmanship and/or material for a period of one (1) years from the date of original purchase/installation. This warranty covers body, cap and control dial excluding O-rings. King Technology holds the option of replacing any defective part without charge if it is determined to be all that is needed to correct any situation. Parts used for replacement, with the exception of O-rings, are warranted for the remainder of the original warranty.

1. To obtain warranty service, you must deliver product 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 at frogproducts.com/find-a-dealer or by calling King Technology at 1-800-222-0169. Proof of purchase is required when requesting warranty service. Purchaser must present the sales receipt or other document which establishes proof of purchase.

2. This warranty does not cover defects caused by: modification, alteration, repair or service of the product 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. Any express warranty not provided for herein, and any remedy for breach of warranty or breach of contract which, but for this provision, might arise by implication or operation of law, is hereby expressly excluded and disclaimed. The implied warranties of merchantability and of fitness for any particular purpose are expressly limited to a term of one year. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

4. 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 special, incidental or consequential damages or losses, whether arising out of breach of warranty, breach of contract or otherwise. Some states do not allow the exclusion or limitation of incidental consequential damages, so the above limitation or exclusion may not apply to you.

5. Misuse or failure to use the proper New Water Cycler Pac may cause damage to equipment or personal injury. All warranty null and void if this product is not used with the recommended New Water Cycler Pac.

Register your warranty at kingtechnology.com/product-registration.

MANUFACTURED BY

King Technology

530 11th AVENUE SOUTH
HOPKINS, MINNESOTA 55343

952-933-6118 • 800-222-0169

kingtechnology.com

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