

**Installation and Operation Manual** 

## Welcome

Congratulations on the purchase of your new E-Z Vac<sup>™</sup>, the aboveground pool cleaner from Pentair Pool Products. You'll soon see that E-Z Vac *really is* the easy way to keep your aboveground pool clean. First, however, you'll have to install E-Z Vac and perhaps make some minor adjustments. This manual covers the steps needed to install and adjust E-Z Vac.

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Before you begin to install E-Z Vac in your pool, please record the serial number of your E-Z Vac in the space below. This way, if you need to refer to the serial number in the future, it will be readily available. The diagram on page 3 shows where E-Z Vac's serial number is located.

E-Z Vac Serial Number:	

## **Activate E-Z Vac's Warranty**

You will also need to record the serial number on E-Z Vac's warranty registration card. Complete and return the card to activate E-Z Vac's limited warranty.

## **Toll-Free Customer Helpline**

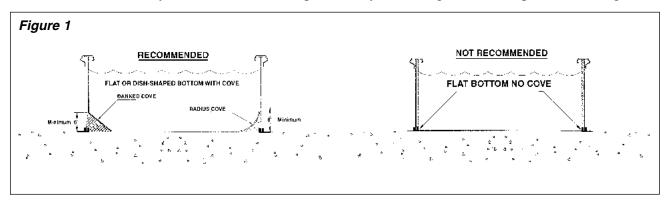
If you have questions about your E-Z Vac, check the instructions in this manual first. **If you still have a question, call your Pentair Pool Products dealer or call our Toll-Free Customer Helpline at 800-443-5711.** Please have your E-Z Vac serial number ready when you call.

## **Warranty Note**

Cleaners purchased in the United States of America from entities outside the United States do not qualify for any United States programs including warranty, trade-in, or rebate programs.

## I. Pool Requirements

- E-Z Vac <u>is recommended</u> for use in pools that have a cove\* height of at least 6 inches. Pool coves less than 6 inches may inhibit the cleaner's operation.
- \*The pool "cove" is the embankment between the pool wall and floor. It is generally constructed with either a banked or radius shape as shown in Figure 1.
- E-Z Vac is not recommended for use in pools with no cove (with a 90° floor-to-wall angle). The absence of a cove may affect the cleaner's operation by inhibiting its random-pattern coverage.



## **II. Preparation Of Your Pool**

Before assembling and installing your E-Z Vac, your pool should be clean and algae-free so as not to inhibit the cleaner's traction. If necessary, make the following preparations before proceeding:

- 1. Chemically balance the pool water.
- 2. Brush pool and let the debris settle.
- 3. Hand vacuum thoroughly.
- 4. Clean filter and pump strainer basket.

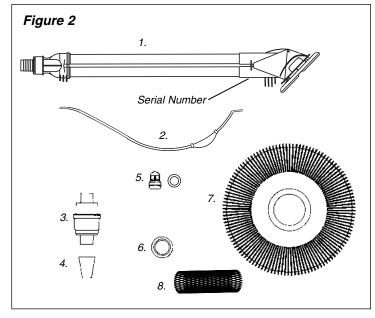
## III. Assembly

Remove E-Z Vac and all of its parts from the box and check to make sure that all components were

included. Refer to Figure 2.

#### **Components Check List**

- 1. E-Z Vac
- 2. Weighted Bumper Strap
- 3. Automatic Regulator Valve
- 4. Valve Cone
- 5. Eyeball Diverter & Outer Ring
- 6. Hose Weight
- 7. Aboveground Seal
- 8. Hose Protector
- 9. Hose 32 ft. total length (not shown)

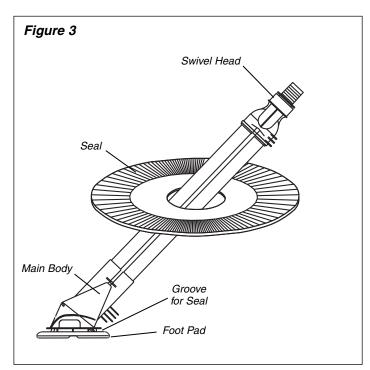


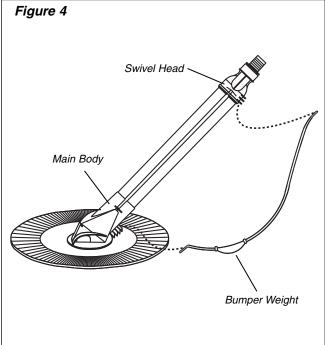
## Step 1. Attach The Seal

Slide the Aboveground Seal over the top of the swivel head and down over the main body as illustrated in Figure 3. The seal should seat in the groove just above the footpad. Once in place, the seal should rotate and turn freely.

## Step 2. Attach The Bumper Strap

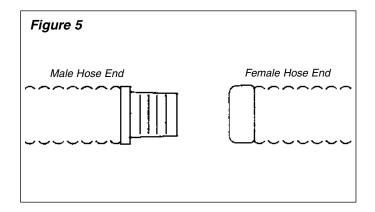
Insert the bottom end of the bumper strap (end closest to the bumper weight) into the slot provided on the main body. Insert the top end of the bumper into the slot provided in the swivel head. See Figure 4.





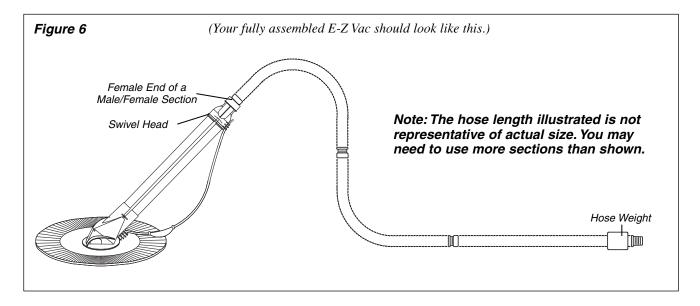
## Step 3. Attach The Hose Weight And Assemble The Hose

E-Z Vac's Hose comes in sections which must be assembled. You will also have to attach one hose weight to the end of the third hose section. See Figure 6.



#### NOTE: One section is fitted with two female ends. See Figure 5. Attach this section last.

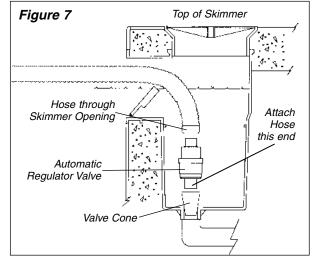
Begin by attaching the female end of a male/female hose section to the swivel head of your E-Z Vac. See Figure 6. Connect two more male/female hose sections to the first section. Then install the hose weight near the male end of the third hose section as shown in Figure 6. Finally, assemble the complete hose, ending with the female/female section. To ease the assembly of the hose dampen the hose ends with water as you assemble them together.



## IV. Installation

#### **Standard Installation**

- 1. **IMPORTANT: Turn the pool pump off before proceeding with this step.** Make sure all other suction lines, including the main drain (if your pool *has* a main drain), are closed EXCEPT for the suction line from the skimmer.
- 2. Remove the skimmer basket and fit the valve cone down into the suction line located in the bottom of the skimmer. Press down until snug.
- 3. Press the automatic regulator valve down into the valve cone until snug. See Figure 7. (The end of the valve that is marked "attach hose this end" must point up.)



NOTE: The automatic regulator valve must be <u>below</u> the surface of the water in order to operate. If it does not fit into the skimmer, or if you are unable to install the regulator valve as instructed above, use the "Optional In-Line Installation" on this page.

- 4. Place the E-Z Vac into the pool, with the hose attached and allow it to sink to the pool floor. Continue to feed the hose vertically down into the pool to fill it with water and purge the air.
- 5. Bring the end of the hose through the skimmer opening and push it onto the regulator valve, as shown in Figure 7. Ensure that all connections are snug. In some cases it may be necessary to bring the hose through the top of the skimmer, instead of through the skimmer opening, to connect it to the automatic regulator valve. Installing the hose through the top of the skimmer can help to avoid a sharp bend or "kink" in the hose, which may affect the cleaner's performance.

#### **Non-Standard Installation**

#### **Optional In-Line Installation**

When it is not possible to install the automatic regulator valve in the skimmer as described in the standard installation, use this Optional In-Line Installation.

We strongly recommend the use of the automatic regulator valve for maximum safety and performance. The valve automatically adjusts to changes in the amount of water flow to provide E-Z Vac with the power necessary to ensure proper cleaning performance.

- 1. Turn pool pump off.
- 2. Remove the skimmer basket and fit the valve cone down into the suction line located in the bottom of the skimmer. Press down until snug. See Figure 9.
- 3. As a safety measure, the automatic regulator valve should be encased in a strainer guard. The strainer guard keeps swimmers and other objects safely away from the flow going into the automatic regulator valve. NOTE: The strainer guard is an accessory available for purchase from

AUTOMATIC REGULATOR VALVE with STRAINER GUARD

BEDDESCRIPTION OF THE STRAINER GUARD

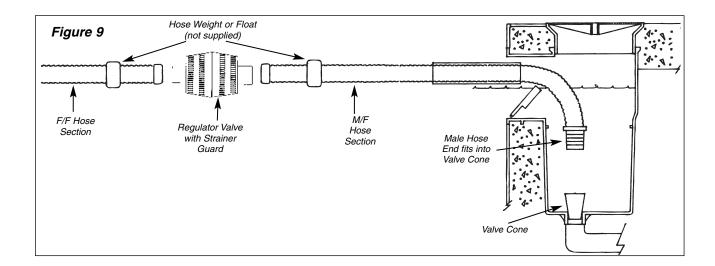
AND DESCRIPTION OF THE STRAINER GUARD

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guard is an accessory available for purchase from your Pentair Pool Products dealer.

4. Place the ends of the automatic regulator valve through the halves of the strainer guard and snap the halves together. See Figure 8.

- 5. You will have to change the order of hose sections before you attach the hose to the automatic regulator valve. Instead of ending in a female/female section as shown in Figure 6, the last hose section will be a male/female section and the second to last will be the female/female hose section.
- 6. Install the automatic regulator valve (encased in the strainer guard) between the last two sections of hose with the **suction port facing the pool floor.** See Figure 9.
- 7. Place E-Z Vac into the pool and allow it to sink to the floor. Continue to feed the hose vertically down into the pool until it is completely filled with water and purged of air.
- 8. Connect the male end of the last hose section to the valve cone already positioned in the skimmer. See Figure 9.
- 9. You may need to put either a hose weight or hose float onto the sides of the automatic regulator valve to ensure that the valve remains submerged. (Both can be purchased from your E-Z Vac dealer.) When connected, the automatic regulator valve should be approximately 12 to 18 inches below the surface of the water so that air does not enter the system.
- If the automatic regulator valve is **floating** less than 12 inches below the water's surface, place a hose weight on **each** side of the valve. See Figure 9.
- If the automatic regulator valve is **sinking** more than 18 inches below the water's surface, place **one** hose float on **either** side of the valve. See Figure 9.
- You may need to vary the distance of the floats/weights from the automatic regulator valve to obtain the correct depth for the automatic regulator valve. Check that the suction port on the automatic regulator valve is down, so it faces the pool floor. This will keep the suction port submerged at all times.



## V. Adjustments

After completing the installation, **turn the pool pump on.** Allow the pump to run for a couple of minutes to allow air to cycle out of the system. E-Z Vac should be moving about the pool at a rate of 8 to 12 feet per minute. Check each of the following initial adjustments to E-Z Vac at this time.

### **Hose Length**

**IMPORTANT:** The pump must be on when you check the hose length. The hose contracts when the pump is operating and will look longer when the pump is off.

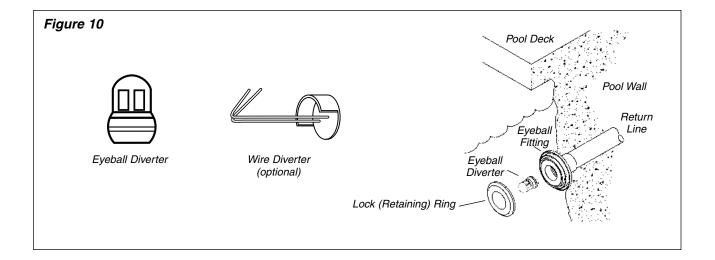
Position E-Z Vac at the furthest point of the pool from the skimmer. (It is easy to position E-Z Vac in the pool by moving it about with your pool pole and brush.) E-Z Vac's hose should be long enough to reach to the end of the pool, plus one hose section. If necessary, remove extra hose sections from the center portion of hose. Removing center hose sections avoids having to disturb the hose weight placement. Save extra hose sections for use as needed for replacement.

#### **Return Line Water Flow**

**IMPORTANT:** The water flow from your return line can push the cleaner's hose and affect its performance. It may cause the cleaner to steer away from the end of the pool where the return line is located, or it may cause it to remain in one section of the pool. To correct this, use the eyeball diverter included with your cleaner.

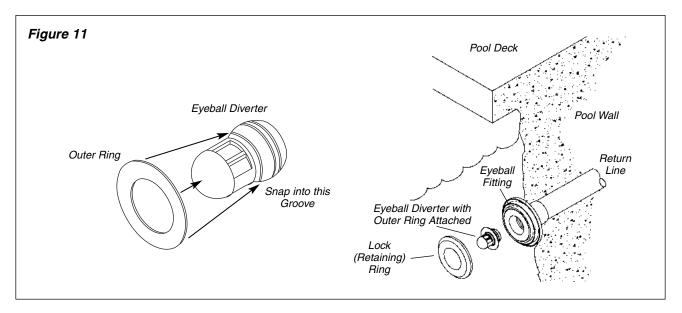
To install the eyeball diverter:

- First make sure your pool pump is off. Remove the original eyeball diverter from the return line at the pool by unscrewing the lock ring. See Figure 10.
- Replace the original eyeball diverter with the E-Z Vac's eyeball diverter.
- Replace the lock ring and tighten. Make sure the opening of the eyeball diverter points in the proper direction before tightening fully. See eyeball diverter positions.



**IMPORTANT:** The eyeball diverter must fit snugly into the eyeball fitting. Some eyeball fittings, like Aqua Leader or Olympic, may be too large for the eyeball diverter. In this situation, use the outer ring supplied with your E-Z Vac to adjust for the discrepancy in size.

- Snap the outer ring onto the eyeball diverter and position it in the first groove as shown in Figure 11.
- Insert the eyeball diverter/outer ring assembly into the eyeball fitting in the return line. See Figure 11.
- Install the lock (retaining) ring and tighten.



#### **Eyeball Diverter Positions**

- Make sure the opening of the eyeball diverter points to the side, at a "9 o'clock position," before tightening fully.
- Usually, directing the return line water flow against the side of the pool, as described above, works best. However, you may want to try pointing the flow downward or in different positions to see which works best in your pool.

NOTE: If the Eyeball or Eyeball with outer ring do not fit your pool, use the Wire Diverter accessory available for purchase from your dealer.

After installing the eyeball diverter, turn the pool pump on. Your cleaner should begin moving across the pool floor vacuuming up debris in its path.

## VI. Troubleshooting

Because of the individual characteristics of your pool, some additional adjustments may be required to get the best performance from your E-Z Vac. If there seems to be a problem, check these common causes of cleaner problems. If you still need help, call your Pentair Pool Products Dealer or call our Customer Helpline at 800-443-5711.

\_ Is filter clean? Clean filter
\_ Is pump strainer basket clean? Clean basket
\_ Is debris blocking the bottom of E-Z Vac? Remove debris
\_ Are there any leaks in the hose? Replace leaky section
\_ Is automatic regulator valve free of debris? Clean valve

# NOTE: When E-Z Vac is operating, we recommend that you remove your pool's ladder.

Otherwise, the ladder can "trap" E-Z Vac and prevent it from moving about the pool.

#### If E-Z Vac is not moving or pulsating

- Check to ensure that the main drain and all suction lines are closed, *except* for the suction line to which E-Z Vac is attached.
- Check for debris in the filter or pump basket.
- Check for debris in E-Z Vac's flapper. Debris may prevent flapper movement or restrict flow. See page 11 for instructions.
- Pool pump and filter system may be too small (incapable of providing 14 gallons per minute water flow). Consult your pool professional.

#### If E-Z Vac tracks in a repetitive pattern

- Check the swivel on the top of E-Z Vac. It should turn freely.
- Check the return line water flow and re-direct as necessary with an eyeball diverter. Refer to page 9, "Eyeball Diverter Positions."
- Check E-Z Vac's hose to ensure it has not become bent or kinked. It only takes one bent or kinked hose section to hinder the cleaning coverage. One way to check for kinks in your hose is to lay each section flat on your pool's deck (or other flat surface). The hose should be perfectly straight and flat. Do not coil the hose when taking your E-Z Vac out of the pool because it will retain the coil shape, forming a bend or kink.

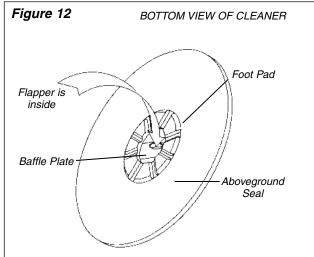
#### TO REMOVE DEBRIS FROM THE FLAPPER

- Sometimes debris may clog the bottom of the cleaner and prevent flapper movement or restrict flow. The flapper is located inside the main body and must move freely at all times.
- You can see the flapper through the opening in the baffle plate, when you turn the cleaner upside down as shown in Figure 12. Jiggle the flapper with your finger or flush the

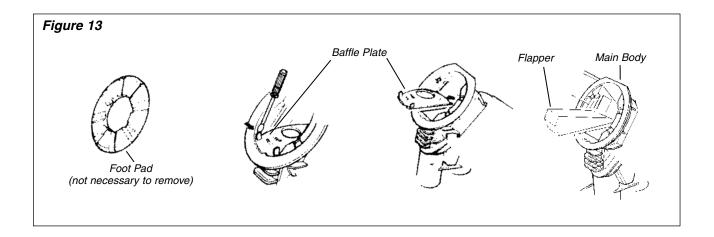
cavity with a hose to force out any debris

lodged inside the main body.

• If debris is still lodged inside, you must remove the flapper. First, lift the lip of the foot pad up and insert a flat-headed screwdriver along side one of the two tabs found on either side of the baffle plate. See Figure 13. Push the tab inward with the screwdriver until the baffle plate releases. Place a finger into the center opening of the baffle plate and pull up until it pops out. Then pull the flapper out. NOTE: You should be able to do this without taking the foot pad off.



• Once the debris is dislodged, insert the flapper back into the main body and snap the baffle plate back into position. Be sure that it is securely in place. See Figure 13.



#### VII. Maintenance

E-Z Vac requires almost no maintenance. Visually inspect your E-Z Vac from time to time to make sure that:

- The flapper is moving freely and is not obstructed by debris.
- The footpad is not excessively worn. When the traction pads on the bottom have worn down, it is time for replacement.

We recommend that you leave E-Z Vac in your pool, <u>except during chemical shock treatments.</u> During swimming it is easy to unplug E-Z Vac and pull it to one side.

When storing E-Z Vac, do not coil the hose. Lay the hose out flat in an area protected from direct sunlight. If hose sections are disconnected, try not to disturb the hose weight location.

To ensure optimum performance from your E-Z Vac, we recommend the use of blue sectional hose by Kreepy Krauly.

#### VIII. Customer Service

Your satisfaction is important to us, so we're happy to help you get the best performance possible from your new E-Z Vac. This manual covers the standard performance adjustments, which may apply to your pool. If you still need help, call your Pentair Pool Products dealer or call our Customer Helpline at 800-443-5711. Please have your E-Z Vac serial number ready when you call.

# Disclaimer of Liability – About Your Pool and E-Z Vac.

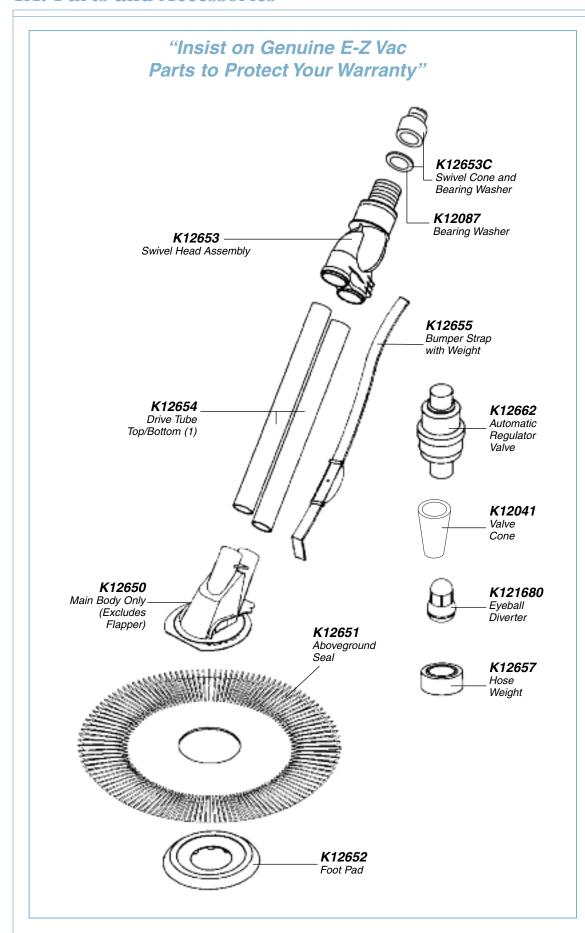
There are a multitude of factors that contribute to the life of your pool. The E-Z Vac product is a very passive product that will have no impact on pool life.

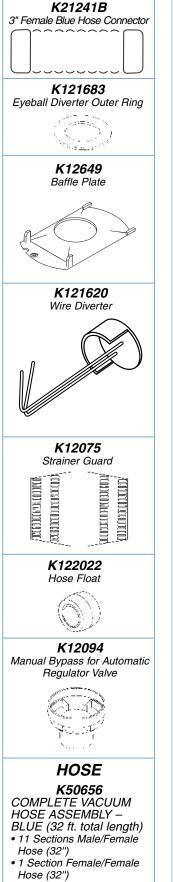
Please be aware that over time, deterioration, discoloration, weakness and brittleness of vinyl liners can be caused separately by, or in combination with, age, the environment, an imbalance in pool water chemistry, sunlight and the pool's surroundings. In addition, vinyl-lined pools are affected by the workmanship, composition and installation of the liner; and the workmanship and quality of construction of the supporting walls and pool base. These are all factors which can contribute to liner failure. The existence of any of these types of conditions in your pool is not caused by the use or operation of E-Z Vac. The manufacturer disclaims any liability for repairs or replacement to any of these structures or components in the customer's pool.

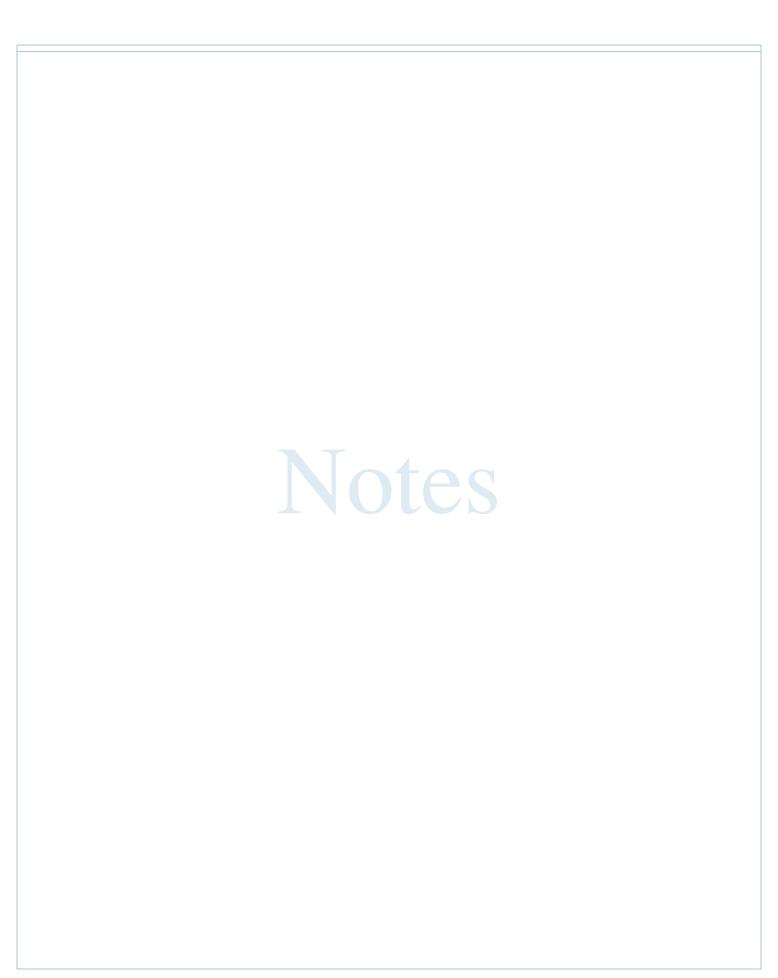
E-Z Vac cleans any aboveground pool that has a banked or radius cove height of at least 6 inches (floor-to-wall angle). Pool coves of less than 6 inches, or the absence of a cove, will inhibit the cleaner's operation. See Figure 1 on page 3.

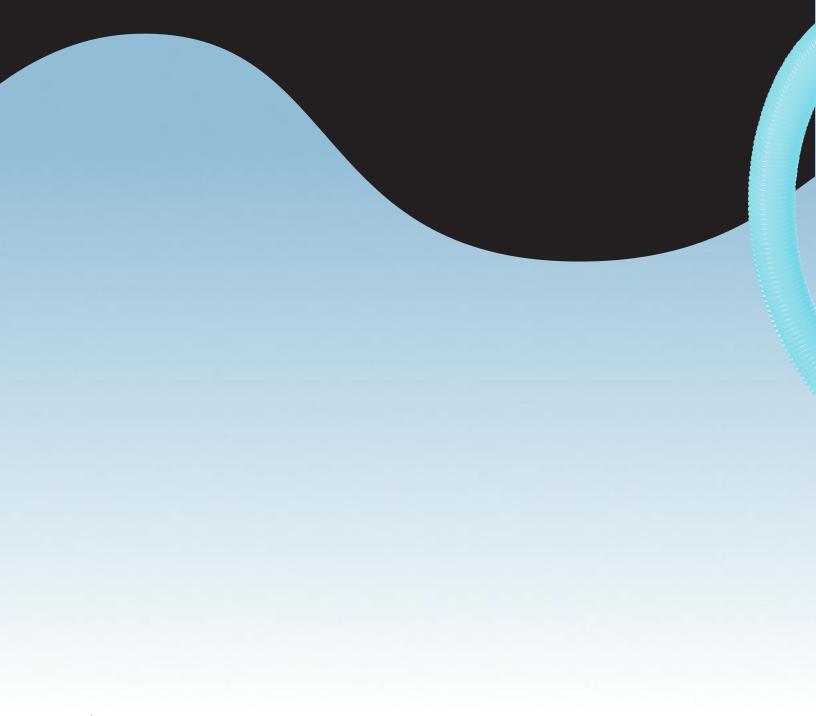
The pool owner must assume all responsibility for the condition and maintenance of the pool's surface, water and deck.

## IX. Parts and Accessories











Because reliability matters most

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10M/Jan 04 Part #K50677 Rev. A Printed in the U.S.A. @ Pentair Pool Products, Inc.

Patent Number 4,023,227; 5,706,540 and Other U.S. and Foreign Patents and Patents Pending