

# PoolSystems

**AVENGER**<sup>®</sup>  
HIGH PERFORMANCE POOL CLEANER



Instruction  
Manual &  
Warranty



# **AVENGER**®

HIGH PERFORMANCE POOL CLEANER

- SECTION 1. INTRODUCTION**
- SECTION 2. ASSEMBLY COMPONENTS**
- SECTION 3. INSTALLATION INSTRUCTIONS**
- SECTION 4. IMPORTANT ADJUSTMENTS**
- SECTION 5. CARING FOR YOUR AVENGER**
- SECTION 6. AVENGER® SPARE PARTS**
- SECTION 7. REPLACING THE DIAPHRAGM**
- SECTION 8. TROUBLESHOOTING GUIDE**
- SECTION 9. AVENGER® TWO-YEAR WARRANTY**
- SECTION 10. PURCHASE DETAILS**
- SECTION 11. OWNER REGISTRATION**

*Warranty claims valid only with proof of purchase receipt.*

This product is protected by one or more of the following:

AUST. PATENT APP. 2008902923  
AUST. DESIGN APP. 11325/2008  
AUST. DESIGN APP. 11326/2008  
AUST. INNOVATION PAT. 2006100934  
INTERNATIONAL PATENTS PENDING

[www.avengerpoolcleaner.com](http://www.avengerpoolcleaner.com)  
Avenger® and AutoPilot® are registered trademarks

# POOL SYSTEMS - AVENGER® INSTRUCTIONS

## 1. INTRODUCTION

Congratulations on your purchase of the Avenger® High Performance Pool Cleaner.

The Avenger® has been designed to be user friendly and low maintenance providing years of trouble free service.

**Dependable** - contains just one internal moving part.

**Quiet Operation** - proven diaphragm technology.

**Efficient** - cleans the walls as well as the floor.

**Economical** - no additional running cost powered by suction from your filtration system.

**Durable** - no nuts, bolts, screws or gears.

**Performance - AutoPilot®** revolutionary steering and buoyancy control.

## 2. ASSEMBLY COMPONENTS

Please check the following items have been provided:

a. Avenger® Head Assembly (inc. Disc & Foot)

b. Hose (Twelve Lengths Total)

c. Hose Weight

d. Leader Hose

e. Deflector Wheel

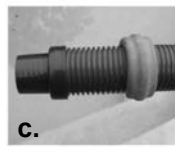
f. Speed Controller

g. Suction Tester

h. Instructions

i. 2 x 45° Elbow  
Skimmer Attachment

j. Weir Attachment



If any items are missing please contact your place of purchase.

### 3. INSTALLATION INSTRUCTIONS

Your Avenger® has been designed for simple installation and low maintenance.

**Step 1.** Clean or backwash your filter and empty the skimmer basket.

**Step 2.** Turn off all ancillary equipment such as waterfalls, spa seats and spillover spas while the Avenger® is operating to ensure maximum performance. Check the main drain opening is plugged (vacuum position) in the skimmer box and, if applicable, secondary skimmers are closed. Your Avenger® needs good suction to work correctly. Contact your place of purchase if you have questions or require advice about ancillary equipment.

**Step 3.** Unpack your Avenger® near the skimmer box of the pool.

**Step 4.** Check the Teflon slip ring is placed between the top of the Upper Body and the Outer Extension Pipe.



**Step 5.** Place the Deflector Wheel onto the main body of the Avenger Head Assembly and screw the hand nut tight to hold in place.



**Step 6.** Connect the Leader Hose to the Avenger® Head. Join together and attach the remaining hose lengths needed from the skimmer to the furthest point **plus** one additional hose length.



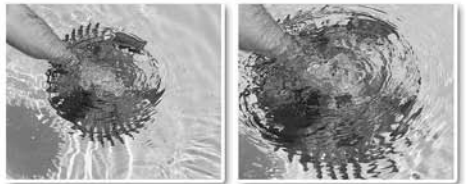
Note: The Leader Hose has Female Connection on both ends.



**Step 7.** Attach the Hose Weight on the second hose from cleaner head about midway. The Hose Weight can be adjusted up or down the hose to achieve the correct balance. The disc and foot should be flat/horizontal to the bottom of the pool when resting.



**Step 8.** Submerge the cleaner head and first hose length in the water - make sure that there are no air bubbles inside.



**Step 9.** Ensure there is no trapped air anywhere in the hose. An easy way to do this once the required hose is tightly joined is to hold the end of the final hose length over the pool return, allowing the flowing water to push the air through the hose and out of the cleaner.



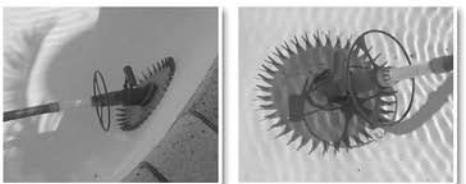
**Step 10.** Attach the Speed Control/Weir Cuff to the final hose length. Ensure that the vacuum plate in your skimmer box is properly fitted, and push the Speed Control/Weir Cuff into weir attachment. In order to do this, tightly join the 2 x 45° Elbows into the weir attachment and push tightly into the Vacuum Plate.



Remember the main drain opening in the skimmer must be plugged (vacuum position) and, if applicable, secondary skimmers are closed. Your Avenger® requires good suction to work correctly.



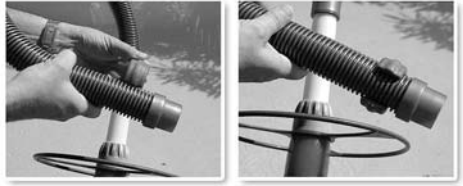
**Step 11.** Simply attach the In-Line Valve to the 2nd 45° Elbows. Switch the pump on and your Avenger® should start cleaning. Adjust the Speed Controller to the optimal setting. If you experience difficulties check for good suction where the Avenger® attaches to the hose using the suction tester gauge supplied.



## 4. IMPORTANT ADJUSTMENTS

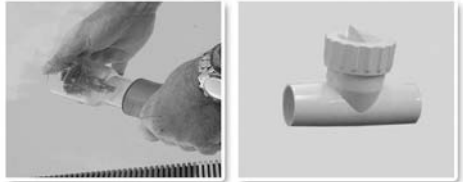
Here are some points to ensure your Avenger® operates at maximum performance.

- **Ensure that the Avenger® is properly balanced.** The cleaner at rest should sit flat on the floor of the pool. You can adjust the balance by moving the hose weight up or down the hose. You may also find the best balance without the Hose Weight attached.



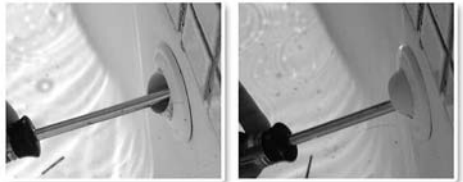
- **Ensure that the Avenger® has the correct amount of suction.**

Adjusting the speed controller varies the suction to the head of the cleaner, and thus alters its speed. Use the Suction Tester on the end of the hose (instead of the cleaner) to gauge the suction level and adjust the speed controller accordingly.



- **Ensure that the Avenger® covers all of the pool.**

Suction cleaners have no programmed route, and their movement depends largely on the flow of water throughout the pool. Making adjustments to the eyeball returns of the pool can help the cleaner cover dead spots, or prevent the cleaner from sticking in corners.



If you encounter any problems with the Avenger® automatic pool cleaner refer to the troubleshooting guide prior to contacting your place of purchase.

## 5. CARING FOR YOUR AVENGER®

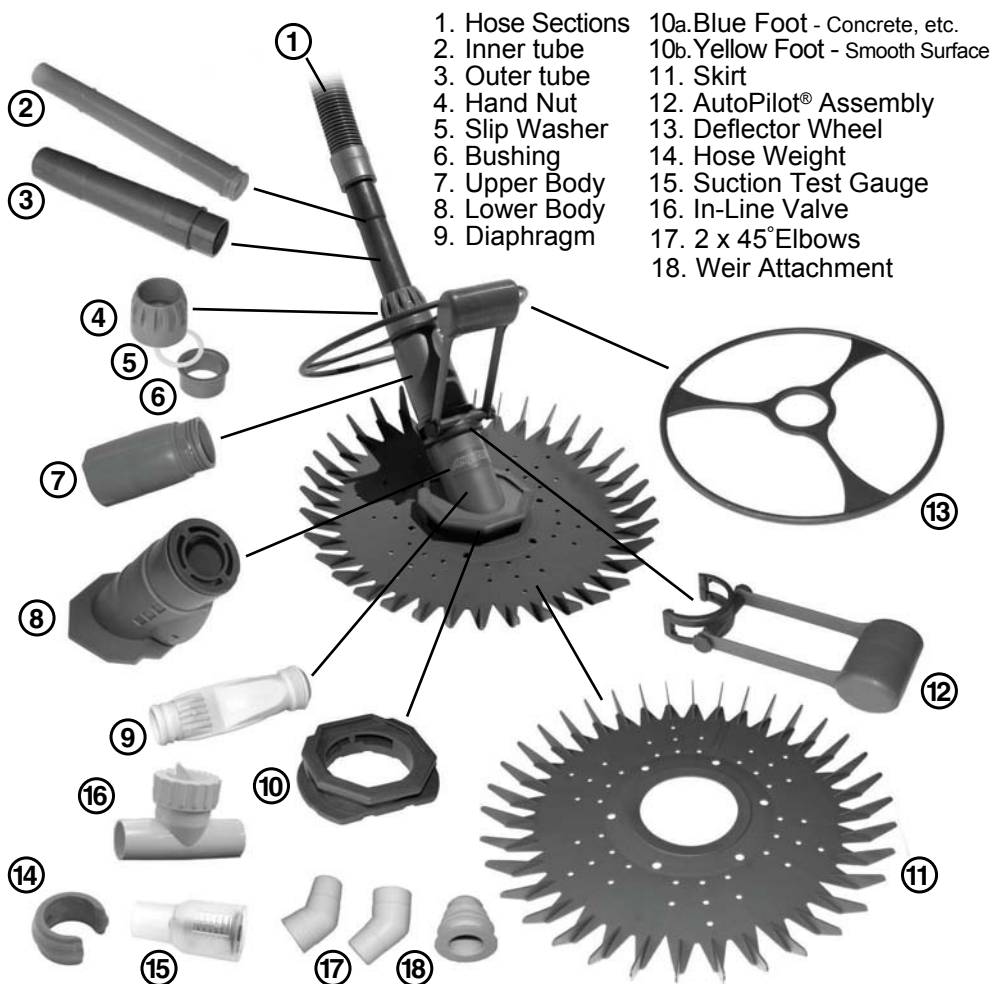
Here are some tips for looking after your Avenger®, to ensure that it provides many years of faithful service.

- **Don't leave your Avenger® out of the pool in the sun** for prolonged periods. If you take it out of the pool, store it in the shade. Prolonged summer sun can be detrimental to your Avenger®.
- **Store the hose lengths straight.** If the cleaner is out of the pool, ensure that the hose is dismantled and the lengths stored straight. Curling the lengths up can often impress a curled memory into the hose causing it to tangle in the pool and affect your Avenger® operation.

- **Take the Avenger® out in unusual circumstances.** If your pool is green and cloudy or if you are going to add any large doses of chemicals or superchlorinating, it's best to take the cleaner out of the pool until it returns to normal. Unusual chemical balance can severely damage and deteriorate your Avenger®.
- **Remove any sharp objects from the pool by hand.** Sharp twigs, nuts, small pool toys, stones and bottle caps can damage the soft diaphragm inside. It's best to remove these type of objects before your Avenger® gets there first.

Children and pets are responsible for most damage caused to pool cleaners. Please ensure your Avenger® is never used as a toy and it will give you years of dependable service.

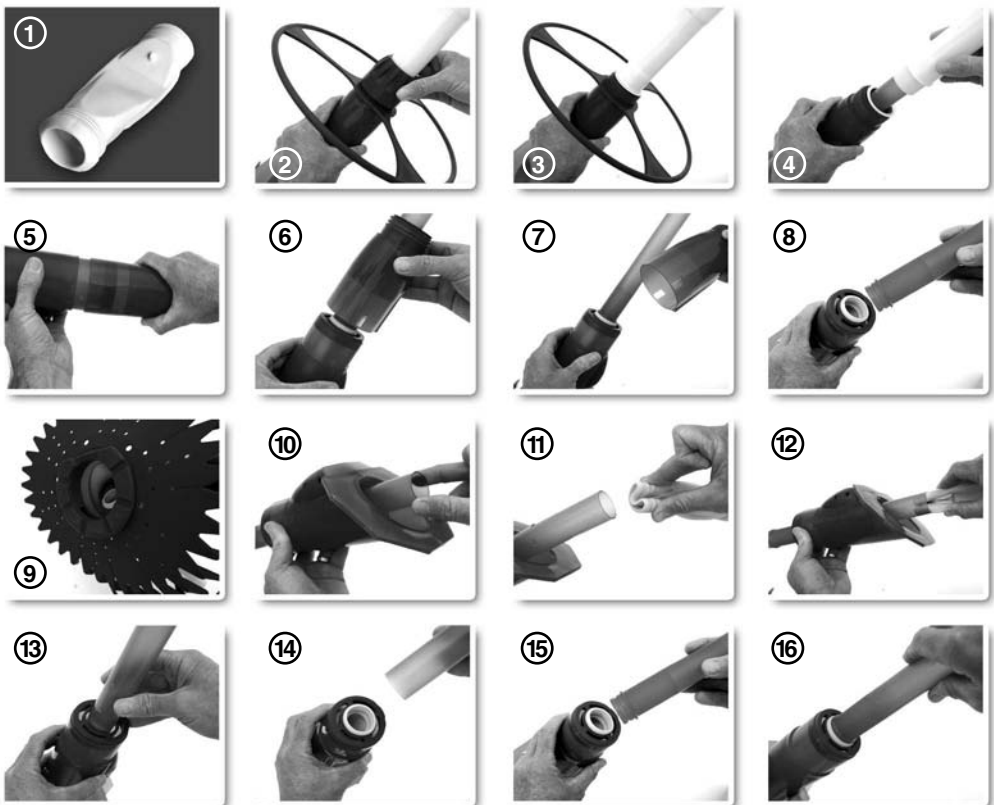
## 6. AVENGER® SPARE PARTS



## 7. REPLACING THE DIAPHRAGM

- A. Purchase a new Avenger® diaphragm - **Picture 1**
- B. Disassemble Avenger® head assembly - **Pictures 2-8**
- C. Remove the diaphragm from underneath the cleaner - **Picture 9**
- D. Feed the small end of the innertube through the cleaner - **Picture 10**
- E. Fold the new diaphragm in half and place inside the inner-tube - **Pictures 11 & 12**
- F. Pull the innertube through machine aligning the diaphragm in body - **Pictures 13 & 14**
- G. Push the innertube into end of diaphragm and reverse previous steps to reassemble the cleaner - **Pictures 15 & 16**

Note: If you have any difficulties in replacing the diaphragm in the cleaner take it back to your place of purchase for their assistance.



## 8. TROUBLESHOOTING GUIDE

If you encounter any problems with the Avenger® automatic pool cleaner check the following troubleshooting guide prior to seeking assistance from your place of purchase.

PROBLEM	POSSIBLE SOLUTIONS
Avenger® stops and starts, or won't move at all.	<ul style="list-style-type: none"> <li>• Check that the filter is clean and the pump is switched on.</li> <li>• Disengage the safety suction, ensure main drain is plugged.</li> <li>• Ensure that the vacuum plate is properly installed.</li> <li>• Check the cleaner and hose are free of trapped air.</li> <li>• Check the diaphragm for any damage or blockages.</li> </ul>
Avenger® is missing spots in the pool.	<ul style="list-style-type: none"> <li>• Ensure that the correct amount of hose is installed. Try adding or taking away one or two hose lengths.</li> <li>• Ensure that all the returns are directing water flow towards the floor of the pool, adjusting the eyeballs, or using water diverters available at your local pool shop.</li> <li>• Ensure that hose is straight and untangled.</li> </ul>
Avenger® doesn't climb	<ul style="list-style-type: none"> <li>• Increase the suction using the speed controller.</li> <li>• Ensure the pool water is properly balanced. For example, High pH and/or lack of chlorine, makes the walls very slippery.</li> <li>• Check float arm is in the correct position.</li> </ul> <p>Note: In pools with a sharp 90 degree wall-to-floor it is unreasonable to expect the cleaner to climb the walls.</p>
Avenger® spends too much time on the walls, and/or climbs out of the water.	<ul style="list-style-type: none"> <li>• Decrease the suction using the speed controller.</li> <li>• Adjust the hose weight provided towards the cleaner head..</li> <li>• Attach the AutoPilot® float assembly to another position.</li> </ul>
Avenger® sticks in corners, under ladders, on lights or on pool steps.	<ul style="list-style-type: none"> <li>• Ensure that the correct amount of hose is installed. Try adding or taking away one or two hose lengths.</li> <li>• Ensure that all the returns are directing water flow towards the floor of the pool, adjust the eyeballs, or use water diverters available at your local pool shop. Excess water movement on the water surface will hold or push the hose.</li> <li>• Add optional hose motors and / or replace wheel deflector with larger size available from your local pool shop.</li> </ul>

The AutoPilot® floatation chamber is factory set in the middle position.

If your Avenger® is staying on walls or staying on the floor simply try adjusting the float up or down as well as adjusting the hose weight and suction at the speed control valve.



That's it! From all of us at Pool Systems, we wish you all the best for summer after summer of hassle free pool cleaning with the Avenger®!

## 9. AVENGER® High Performance Pool Cleaner

### TWO-YEAR WARRANTY

This Avenger® Automatic Pool Cleaner was carefully inspected before shipment from our warehouse. Upon unpacking, if any parts are missing or found to be defective, please notify your dealer immediately. Please consult owner's manual for complete instructions on the installation and operation of your Avenger®.

POOL SYSTEMS USA, INC WARRANTS THE AVENGER® AUTOMATIC POOL CLEANER TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP TO THE ORIGINAL PURCHASER FOR A PERIOD OF TWO (2) YEARS FROM DATE OF PURCHASE. THE AVENGER® AUTOMATIC POOL CLEANER HOSE IS WARRANTED FOR TWO (2) YEARS AGAINST MANUFACTURING DEFECTS.

#### THIS LIMITED WARRANTY EXCLUDES THE FOLLOWING:

1. Discolouration of the Avenger® automatic pool cleaner caused by reaction to chemicals used in the pool water. Discolouration does not affect the operating ability of the Avenger® automatic pool cleaner. Therefore, this limited warranty does not cover the replacement of discoloured parts.
2. Damage to or malfunction of the unit resulting from excess chlorination or improper water chemistry balance.
3. Replacement of parts which fail or become defective as a result of improper installation, negligence, misuse, abuse or tampering by unauthorised repair personnel.
4. Age, pool water imbalance, and improper installation can cause pool liners to become brittle or unduly wrinkled. Corrosion of the supporting walls and/or irregularities in the pool base may also cause liner failure. The use of this product in such an environment is at the pool owner's risk. Therefore, the pool owner hereby releases the manufacturer from any and all claims for damage where these conditions exist.
5. Abrasion to the hose or damage caused by misuse or improper installation.

No claim will be recognised without proof of purchase. Only the original purchaser may submit a claim under this limited warranty. Purchaser's claims against POOL SYSTEMS USA, INC. shall be limited to those claims which may be asserted under the limited warranty relating to any manufacturing defect.

To obtain warranty replacement or repair, the unit should be returned, freight prepaid, to the place of purchase or directly to: POOL SYSTEMS USA, INC. 943 S. 48th Street, Suite 100. Tempe, AZ 85281 U.S.A. When submitting a claim, always supply serial number, evidence of purchase date, retailer and a brief description of the problems/defects encountered. POOL SYSTEMS USA, INC. reserves the right to repair or replace all defective or worn parts covered by this limited warranty and return same to purchaser, freight collect.

POOL SYSTEMS USA, INC assumes no responsibility for any warranties or representations made by other Individuals or businesses beyond the express terms contained in this limited warranty.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This warranty remains the property of POOL SYSTEMS USA, INC



[www.avengerpoolcleaner.com](http://www.avengerpoolcleaner.com)

**Pool Systems USA, INC**  
943 S. 48th Street, Suite 100.  
Tempe, AZ 85281 U.S.A  
[www.poolsystemsusa.com](http://www.poolsystemsusa.com)

Avenger® and AutoPilot® are registered trademarks

© Pool Systems USA, INC



Record your Avenger® Automatic Pool Cleaner purchase details here.

Date of purchase: \_\_\_\_\_

Purchased from: \_\_\_\_\_

Suburb: \_\_\_\_\_ State: \_\_\_\_\_ P/ C: \_\_\_\_\_

Serial No. \_\_\_\_\_ Please quote this number when you contact us

IMPORTANT - Keep this card with your purchase receipt  
Warranty claims valid only with proof of purchase receipt.



IMPORTANT- MAIL TODAY  
Warranty claims valid only with proof of purchase receipt.

Complete and mail within 14 days of purchase. Today's date:     /     /

I have read and understand the terms and conditions of the Avenger® Automatic Pool Cleaner

My Avenger® Automatic Pool Cleaner was purchased on:     /     /

Surname: \_\_\_\_\_ First Name: \_\_\_\_\_

Address: \_\_\_\_\_

Suburb: \_\_\_\_\_ State: \_\_\_\_\_ P/ C: \_\_\_\_\_

Contact Details: Phone (Home): (    ) \_\_\_\_\_ (Mobile): \_\_\_\_\_

Email: \_\_\_\_\_

Purchased from:

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Suburb: \_\_\_\_\_ State: \_\_\_\_\_ P/ C: \_\_\_\_\_

Shape of pool:  Kidney  Oval  Square  Other Pool Size: \_\_\_\_\_ Age of Pool: \_\_\_\_\_

Pool surface:  Concrete  Pebble  Fibreglass  Fully Tiled  Other \_\_\_\_\_

Avenger® is my first Automatic Pool Cleaner  It replaces a: \_\_\_\_\_

I heard about Avenger® from:  Pool shop  Pool builder  Ad  Friend  Internet  Other \_\_\_\_\_

Serial No. \_\_\_\_\_



# AVENGER<sup>®</sup>

HIGH PERFORMANCE POOL CLEANER

Warranty claims valid only  
with proof of purchase  
receipt.

PoolSystems

Important  
Keep this section  
of the card with  
your purchase  
receipt

PoolSystems

AFFIX  
STAMP  
HERE

Pool Systems USA INC.  
943 S. 48th Street. Suite 100.  
Tempe. AZ 85281 U.S.A

Important  
Complete & mail  
within 14 days  
of purchase