

## **OWNER'S MANUAL** INSTALLATION, OPERATION, & PARTS



### MAGIC CLEAN / SCUBA / WHALY / AQUACRITTER ABOVE-GROUND AUTOMATIC POOL CLEANER

Hayward® automatic pool cleaners are specifically engineered for the demanding requirements of today's above-ground swimming pools.

To prevent potential injury and to avoid unnecessary service calls, read this manual carefully and completely.

**CAUTION** – Hayward<sup>®</sup> Automatic Pool Cleaners are intended for use on permanently installed above-ground swimming pools only. A permanently installed pool is constructed on the ground such that it cannot be readily disassembled for storage.

WARNING – This manual contains important safety information that must be furnished to the end user of this product. FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS COULD RESULT IN SERIOUS INJURY.

## SAVE THIS INSTRUCTION MANUAL



# HAYWARD POOL PRODUCTS, INC.

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### **Important Safety Information**

### **IMPORTANT SAFETY INSTRUCTIONS**

When installing and using electrical equipment always follow basic safety precautions.

## CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS IN THIS OWNER'S MANUAL AND ON EQUIPMENT.

#### KEEP SAFETY LABELS IN GOOD CONDITION AND REPLACE IF MISSING OR DAMAGED.

This is the **SAFETY ALERT SYMBOL.** When you see this symbol on your system or in the Owner's Manual, look for one of the following words and be alert to the potential for personal injury.

**DANGER** indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.

**WARNING** indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

**CAUTION** indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

**WARNING** – Pump and Filter System Operates Under High Pressure. Failure to remove pressurized air trapped in pump and filter system could result in violent component separation that can cause death or severe personal injury.

<u>To Relieve High Pressure:</u> Open Manual Air Relief Valve before servicing or starting pump and filter system. Close Air Relief Valve when a steady stream of water, not air and water, is discharged from the valve.

A WARNING – Hazardous Pressure. Pumps, filters, and other equipment/components of a



swimming pool filtration system operate under pressure. Incorrectly installed and/or improperly tested filtration equipment and/or components may fail resulting in injury and/or property damage. A qualified pool professional MUST conduct all pressure tests. Do NOT connect to a high-pressure system such as a municipal water main. To prevent explosion caused by entrapped air in the filtration system use provided air relief valve to bleed air from the system. Confirm that ALL filtration system component clamps, bolts, and covers have been tightened to the manufacturer's recommendations.

A WARNING – Never operate or test the filter system at more than 2 BAR.

**WARNING** – Explosion Hazard. Purging the system with compressed air can cause components to explode, with risk of severe injury or death to anyone nearby. Use only a low pressure (below 0.4 BAR, high volume blower when air purging the pump, filter, or piping.

🗥 WARNING – To reduce risk of injury, do not permit children to use or climb on the filtration system.

**CAUTION** – All suction and outlet valves MUST be OPEN when starting the filter system. Failure to do so could result in severe personal injury and/or property damage. All drains and suction covers MUST have properly installed covers securely attached with the screws supplied with the covers. If screws are lost, order replacement parts from your supplier.

## **Important Safety Information (cont.)**



**DANGER** – Suction Entrapment Hazard. Never use the pool or spa if a drain cover is damaged, cracked, missing, or not securely attached. Suction in drains and suction outlets can cause drowning, disembowelment, hair or body entrapment, severe injury, and death. Disembowelment, entrapment, or drowning is possible when body parts or hair come in contact with damaged, broken, cracked, missing, or unsecured drain covers and suction outlets. Suction from pumps with only one drain or suction outlet can cause

disembowelment, entrapment, or drowning. Pumps for pools and spas require two (2) functioning suction outlets at least three (3) feet apart, on two (2) walls or on the

floor and one (1) wall of the pool or spa. Installation of pump and suction outlets must be in compliance with all applicable local building codes. Replace damaged, broken, cracked, missing, or unsecured drain covers and suction outlets immediately.

/ WARNING – Risk of Electric Shock. Connect only to a grounding type receptacle by a Ground



Fault Circuit Interrupter (GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by a (GFCI).

WARNING – To reduce the risk of electric shock replace damaged cord immediately. Do NOT bury cord. Locate cord to minimize abuse from lawn mowers, trimmers, and other equipment.

**WARNING** – To reduce the risk of electric shock, do NOT use an extension cord to connect unit to electric supply. Provide a properly located outlet. Qualified personnel MUST do all electrical wiring.

## SAVE THESE SAFETY INSTRUCTIONS

## **General Information**

#### Introduction

This manual contains information for the proper installation and operation of Hayward's automatic pool cleaners. The instructions in this manual **MUST** be followed precisely.

#### Features

- Patented SmartDrive programmed steering system ensures the entire bottom of the pool is cleaned quickly and completely
- Installs in less than 10 minutes, without tools
- Unique turbine/gearing system provides constant balanced water flow assuring quiet operation and gentle
  movement across the pool bottom
- Improves water circulation by pulling water from the pool bottom as it moves
- Advanced, contoured head design allows Hayward's automatic pool cleaners to complete their steering pattern in minimal time
- Deluxe bumper ring minimizes friction for easy movement away from walls and resumption of the programmed steering pattern
- 2 year warranty

### **Installation Instructions**

#### Step 1

Clean or backwash the filter, and clean the pump strainer basket prior to installing your Hayward automatic pool cleaner.

NOTE: If the pump does not have a strainer basket, it is absolutely necessary that the Hayward AEW560 Leaf Canister be installed. The Hayward AEW560 Leaf Canister can be purchased separately from your local Hayward dealer.

Following the installation of your Hayward automatic pool cleaner, clean the system at regular intervals according to individual pool conditions.

#### Step 2

Check the water chemistry. Make sure that the water is properly balanced and that the pool is free from algae. Also, check the pool and remove any objects that might clog your cleaner's bottom intake, including large amounts of leaves.

#### Step 3 – Head Assembly (Magic Clean, AquaCritter, & Whaly only)

#### Magic Clean/AquaCritter

1. Antenna Installation - Pull Antenna through the back of the head to the front. Align flat section of Antenna base to Key inside of head. Pull until it snaps into place. (See Fig. 1)

 Head Installation - Insert the tab at the bottom of the head into its corresponding hole on the cleaner body. Then swing the top of the head forward. Align tab with top hole. Apply forward pressure until head snaps firmly in place. (See Fig. 2)

Figure 1



Figure 2



Figure 3

Whaly

1. **Tail Installation -** Insert the tab at the top of the tail into its corresponding hole on the cleaner body. Then swing the bottom of the tail down. Align the two (2) tabs with the corresponding holes. Apply forward pressure until the tail snaps firmly in place. (See Fig. 3)

#### Step 4

There are eleven (11) 81 cm connector hoses and one (1) 81 cm leader hose with a gray cuff. Connect the special cleaner hose sections together by pushing and twisting the tapered male connector end of each hose firmly into the female end of the adjacent hose sections (See Fig. 4). Depending on the size and shape of your pool, all hose sections might not be used. However, the leader hose MUST **ALWAYS be used or your cleaner will not operate properly**. It is not necessary to "Bottom Out" the connections, but they **MUST** be tight enough to prevent any air leaks. Wetting the hose ends will make it easier to connect the hose sections.

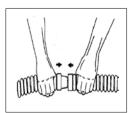


Figure 4

## **Installation Instructions (cont.)**

#### Step 5 – Measure Hose Lengths

A simple rule of thumb to measure hose requirements is to measure the distance from the skimmer (or dedicated suction line) to the farthest point in the pool then add three (3) extra hose sections. This extra length is absolutely necessary for proper operation of your cleaner. If the total hose length is not long enough, it will be necessary to purchase additional hose sections from your Hayward dealer. The hose length supplied (9,75 meters) has been determined to be sufficient for the majority of pools, nationally. If your hose requirement is more than this, you must purchase additional hose sections for your cleaner to work properly.

#### Step 6

Check the bumper ring located on the bottom of your cleaner to make sure it turns freely. It may be necessary to reposition the ring on the small wheels. Next, read the instructions on the warning label applied to the top of the cleaner. Submerge your cleaner into the water and remove all of the entrapped air. When escaping air bubbles cease, you are ready to connect the leader hose. The leader hose has a gray cuff that reads "REMOVE LABEL AND CONNECT TO CLEANER". Connect the gray cuff of the leader hose to your cleaner (See Figure 5) and submerge the entire lengths of hose to remove all of the air as when vacuuming the pool with a standard hand vacuum.



Figure 5

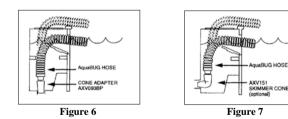
#### Step 7

With the filter system turned OFF, connect the hose to the skimmer according to Figures 6, or 7.

## NOTE: The optional methods for installing the hose over the pool rail or through the top opening in the skimmer.

Figure 6 shows the proper way to connect the hose to a skimmer with a bottom suction port using the AEXV093BP Skimmer Cone Adapter (included).

Figure 7 shows the proper way to connect the hose into a skimmer that has a back or side suction port. In this case, the standard AEXV093BP cannot be used because of the skimmer configuration, and the optional AEXV151 90-degree Elbow must be purchased from your Hayward dealer.



#### **Installation Instructions (cont.)**

#### Step 8

Turn **ON** your filter system. Now that your cleaner is operating, check to see that the cleaner is moving about the pool. It should be operating with left and right turns. It should turn away from the walls in a short time frame. If the cleaner is performing as stated above, your installation is complete.

NOTE: Hayward automatic pool cleaners are powered by your pool's filter system and are designed to work with most systems for above-ground pools. Therefore, the performance of your cleaner will be relative to the power source. It may be necessary to purchase a AEV096P "In-Line" Vacuum Gauge from your Hayward dealer to verify performance of your system.

#### Step 9

Observe your cleaner in operation. The pool's return water flow may affect the operation of your cleaner by interfering with the hose on the surface of the water or the cleaner on the bottom of the pool. If the pool is equipped with an adjustable-type "eyeball" return fitting, redirect the water flow so that it does not interfere with the cleaner's movement. If the return water flow is preventing the cleaner from functioning properly, and the pool is not equipped with an adjustable-type "eyeball" fitting, it will be necessary to purchase a Hayward AEXK19A Return-line Diverter from your cleaner only long enough to clean the pool bottom, not for the entire filter cycle. It is, however, a good idea to run your cleaner daily, as this is an excellent way to improve water circulation and chemical distribution in the pool because your cleaner functions as a moving "bottom drain".

## **Important Tips**

- 1. Periodically check to make sure all other outlets to the pump are securely closed (i.e., other skimmers or bottom drain) when operating your cleaner.
- 2. Periodically check to make sure that the cleaner hose is securely attached to the suction fitting in the skimmer.
- 3. Disconnect the cleaner hose from the skimmer prior to backwashing the filter. This will assure the flow of water necessary for effective backwashing.
- 4. A CAUTION When shock treating your pool, the cleaner and hoses MUST be removed from your swimming pool until such time that the chlorine levels have normalized.
- 5. A CAUTION Never coil the cleaner hose. Coiled hose is not under warranty.
- 6. When the cleaner is out of the pool, always disconnect the leader hose from the cleaner head.
- 7. When carrying or lifting the cleaner, always use the molded-in handle. Do NOT carry it by the hose.
- 8. When swimming in the pool, remove the cleaner and hoses from the water.
- Pools bottoms that are severely wrinkled, have large bubbles, deep footprints, or other imperfections, might affect the cleaner's operation.
- 10. Keep rear screen clear of fixed debris by brushing regularly.

NOTE: We do NOT recommend installation of your cleaner until these conditions are corrected.

#### Disclaimer

- 1) Vinyl can be affected by age, sunlight, and water chemistry.
- 2) Vinyl can become brittle and weak.
- 3) Vinyl can also be affected by the installation and the pool's surroundings.
- 4) When installing your cleaner, you must assume all responsibility for the condition of the pool and the pool's surroundings.

## Troubleshooting

Problem	Cause	Solution
Slow/no forward movement	Lack of/improper water flow through cleaner	Clean In-Line Leaf Canister Clean Hair and Lint Pot Clean Filter System
	Partial blockage of cleaner throat	Clear blockage
	Worn shoes	Replace shoes
	Worn wings	Replace wings
Cleaners movement is fast and erratic	Remove AEV512A	Turn off filter and turn cleaner upside down. Insert a small screwdriver in the notch at the rear of the opening. Using a prying motion, remove the throat.
Cleaner sticks at ladder or wall	Improper vacuum	It may be necessary to purchase an AEV096P, "In-Line" vacuum gauge from your Hayward dealer to verify performance of your system.
	Worn shoes	Replace shoes
	Hose too short	Add additional hose per installation instructions
	Stuck on ladder	Remove ladder or install a Hayward AEXW100 Ladder Bumper
	Steering failure	Check and clean rear screen Check to see if cone gear rotates smoothly in both directions

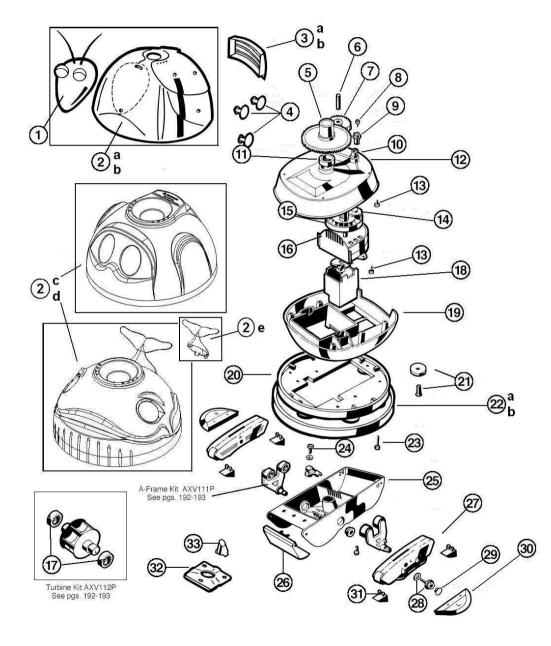
If the cleaner appears to be stuck or "hung up" at the wall, ladder, or other obstruction, or anywhere else in the pool, and does not return to normal operation within a minute or so, turn the filter system OFF. Remove the cleaner from your pool. Check for blockages or any other obvious problems. Check the Bumper Ring for free rotation. Check filter system for water flow and re-install the cleaner. If the cleaner is getting stuck, contact your Hayward dealer. Under no conditions should the cleaner remain in the pool connected to the filter system if the problem of getting stuck or "hung up" is not corrected.

To better serve you, please have the following information available if you call Hayward's Technical Service Department at (33) 825 000 549 (France):

- The purchase date of your cleaner.
  The serial number (located on the bottom) of your cleaner.

## **Replacement Parts**

## Parts Diagram



## **Replacement Parts (cont.)**

## Parts Listing

Ref. No.	Part No.	Description	Ctn. Qty.	No. Req'd
1	AEXV464	Head Assembly (includes Head, Eyes & Antennae	) 10	1
2a	AEXV457OR	Shell, Magic Clean	*	1
2b	AEXV457YL	Shell, AquaCritter	*	1
2c	AEXV457SD	Head Assembly for Scuba	*	1
2d	AEXV457W	Head Assembly for Whaly including Tail	*	1
2e	AEXV457WT	Tail Assembly for Whaly	*	1
3	AEXV513BK	Screen, Black	10	1
4	AEXV443	Magic Clean Spots, 4 lg. & 2 sm.	10	1
5	AEXV070	Cone Gear	*	1
6	AEXV309	Intermediate Gear Shaft	*	1
7	AEXV301	Intermediate Gear	25	1
8	AEXV068	Spindle Gear Screw	*	1
9	AEXV303	Spindle Gear	25	1
10	AEXV066A	Spindle Gear Bushing	25	1
11	AEXV306	Cone Gear Bushing	50	1
12	AEXV060WH	Upper Middle Body	*	1
13	AEXV065P	Lower / Upper Body Screw (6 pack)	*	1
14	AEXV064A	Medium Turbine Drive Gear	25	1
15	AEXV062C	Medium Turbine	25	1
16	AEXV009	Medium Turbine Case with Axle	25	1
17	AEXV055P	Turbine Bearings (2)	50	1
18	AEXV518P	Gear Box	10	1
19	AEXV050CWH	Lower Middle Body	*	1
20	AEXV525A	Base Plate Assembly	5	1
21	AEXV551P	Wheel Kit (6 wheels, axles)	25	1
22	AEXV458	Ring, Black	5	1
23	AEXV057P	Middle Body Screw (6 pack)	*	1
24	AEXV313	Lower Body Screw	*	1
25	AEXV030A	Lower Body (fixed throat)	10	1
26	AEXV442	Flap Kit, White (2 flaps, front & rear)	25	1
27	AEXV417WHP	Pod Kit	25	1
28	AEXV015P	Pod Screw Kit (2 hex head screws & 2 washers)	50	1
29	AEXV016P	Pod Plug (6 pack)	50	1
30	AEXV552WHP	Wing Kit, White	50	1
31	AEXV014SP	Slotted Santoprene Shoes (4 pack)	50	1
32	AEXV304A	Bottom Plate	25	1
33	AEXV512A	Nozzle	*	1

\*Special order

## HAYWARD<sup>®</sup> LIMITED WARRANTY

To the original Consumer/Purchaser:

HAYWARD POOL PRODUCTS warrants the CLEANER excluding shoes (motion devices on bottom of unit), wings (motion devices on side of unit), and flaps (motion devices on the front and rear of unit) for **TWO (2)** years from the original date of purchase, to be free of defects in materials and workmanship.

Should a defect in workmanship and/or materials in the CLEANER become evident during the term of this Limited Warranty, the original consumer/purchaser shall ship the item freight prepaid to an authorized Factory Service Center as soon as possible after the discovery of the defect, together with a letter stating the CLEANER serial numbers or letters, date of purchase of the item claimed to be defective, the name and address of the consumer/owner and a brief description of the problems/defects encountered. Call (33) 825 000 549 for the name and address of the econsumer for the claimed to be the problems/defects encountered. Call (33) 825 000 549 for the name and address of the name and address of the consumer freight prepaid. HAYWARD POOL PRODUCTS will at its option, repair or replace all defective CLEANER parts covered by this Limited Warranty at its own cost and expense and return same to consumer freight prepaid. HAYWARD POOL PRODUCTS is not responsible for any costs or expenses of handling, packing, shipping or transporting the CLEANER or any parts thereof to or from the service facility, unless expressly provided to the contrary by state law. No dealer, distributor or other similar person has any authority to make any warranties or representations concerning HAYWARD POOL PRODUCTS, its CLEANER or to extend this warranty beyond the express terms contained herein. HAYWARD POOL PRODUCTS assumes no responsibility for any warranties beyond express terms contained in this Limited Warranty. This Limited Warranty is valid and enforceable only in the United States of America and Canada.

You must provide, in some form, reasonable, acceptable to HAYWARD POOL PRODUCTS, written proof of the original date of purchase of the CLEANER.

THIS LIMITED WARRANTY EXCLUDES THE FOLLOWING:

- (1) Hoses, which are warranted by the hose manufacturer, to be free of defects in material and workmanship for a period of **TWO** (2) years.
- (2) Shoes (motion devices on bottom of unit) on the CLEANER.
- (3) Wings (motion devices on side of unit) on the CLEANER.
- (4) Flaps (motion devices on the front and rear of unit) on the CLEANER.
- (5) Defects or damage caused by unauthorized service or the use of other than genuine HAYWARD parts.
- (6) Any injury, loss, damage, defect, or malfunction of the CLEANER or failure to function resulting from any failure to operate or maintain the CLEANER in accordance with the directions contained in Owner's manual or operating instructions provided by HAYWARD POOL PRODUCTS; or any injury, loss, damage, defect, malfunction, or failure to function resulting from any accident, acts of God, alterations in the CLEANER by anyone other than HAYWARD POOL PRODUCTS, or misuse, unreasonable use, tampering, abuse, acts, omissions, failure or negligence by anyone other than HAYWARD POOL PRODUCTS, including but not limited to such damages or injuries to parts resulting from improper installation, or damage to pump parts resulting from running pump dry (e.g., interruption in or inadequate supply of water to internal pump parts due to loss of prime, or obstruction in lines, or otherwise); or damage, defect, or malfunction resulting from defects in, failure or malfunction of, or negligence, abuse, or misuse with respects to equipment other than the CLEANER.
- (7) Malfunction of, damage to, materials failure in, or changes in the appearance of CLEANER resulting from chemical reaction to substances with which any part of the CLEANER may come in contact.
- (8) Loss of time, inconvenience, incidental expenses such as telephone calls, labor or material charges incurred with the removal or reinstallation of the CLEANER, or any parts or device used with the CLEANER or ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages so that the above limitation or exclusion may not apply to you. As a matter of policy, HAYWARD POOL PRODUCTS will not refund the consumer's purchase price.

Vinyl liner pools are sometimes subject to brittleness of the vinyl due to a variety of factors including aging, pool chemicals, deficiencies caused by improper installation or cleaning of supporting walls or base and general wear and tear. Consequently the Manufacturer disclaims all liability for damage to any vinyl liner in the Customer's pool by reason of use and/or operation of CLEANER. Customer claims against the Manufacturer shall be limited to those claims which may be asserted under the Limited Warranty relating to any defect or malfunction of the CLEANER.

OTHER RIGHTS. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

\*Supersedes all previous publications.

Hayward Pool Products, Inc. 620 Division Street Elizabeth, NJ 07207 Hayward Pool Europe P.I.P.A. - Allée des Chênes 01150 St Vulbas - France

Retain this Warranty Certificate in a safe and convenient location for your records.