

# **ROBOTIC CLEANER**

OWNER'S MANUAL



# TigerShark / TigerShark QC / TigerShark 2

Hayward robotic cleaners represent the highest standard in design, performance, and quality. The cleaner independently scrubs, vacuums, and filters your pool. It is completely automatic and requires no installation, no attachments. Just drop it in and turn it on. Filter cleaning is much easier with the top-access filter cartridge element. Adaptive Seek Control Logic (ASCL®) Microprocessor control optimizes cleaning routine for each individual pool size and shape. Electronic Self-Diagnostics, Overload Protection, and simple Direct Drive design with non-corrosive bearings provide high reliability.

#### **SAVE THIS INSTRUCTION MANUAL**



HAYWARD POOL EUROPE - 1070 Allée des Chênes - CS 20054 Saint Vulbas - 01154 Lagnieu Cedex - France



Basic safety precautions should always be followed, including the following: Failure to follow instructions can cause severe injury and/or death.

This is the safety-alert symbol. When you see this symbol on your equipment or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

**WARNING** warns about hazards that **could** cause serious personal injury, death or major property damage and if ignored presents a potential hazard.

CAUTION warns about hazards that will or can cause minor or moderate personal injury and/or property damage and if ignored presents a potential hazard. It can also make consumers aware of actions that are unpredictable and unsafe.

The NOTICE label indicates special instructions that are important but not related to hazards.



WARNING - Read and follow all instructions in this owner's manual and on the equipment. Failure to follow instructions can cause injury.

WARNING – This document should be given to the owner of the swimming pool and must be kept by the owner in a safe place.

WARNING – This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.



WARNING – Hayward only guarantees the quality, performance and safety of its products when assembled with genuine Hayward manufactured parts. Use of non genuine Hayward manufactured parts will void all warranty.

CAUTION – Regularly inspect the cleaner and hoses; do not use if damaged or if any rough edges are visible on the cleaner as this can cause damage to the pool.

MARNING – Never operate the cleaner when there are people in the pool.

**WARNING** – Before installing this product, read and follow all warning notices and instructions which are included. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage.

CAUTION – Deterioration, discoloration or brittleness of any pool finish can be caused over time separately by, or in combination with, age, incorrect pool water chemistry, improper installation, and other factors. Customer hereby disclaims any and all claims, and releases Manufacturer from any and all claims for damages to any pool plaster or vinyl liner in Customer's pool by reason of the use and/or operation of the Cleaner. Under no circumstances shall the Manufacturer be liable for any loss or damage, whether direct, consequential or incidental, arising out of the use or inability to use the cleaner in Customer's pool.









# WARNING: Electrical Hazard. Failure to follow instructions can result in serious injury or death. FOR USE WITH PRIVATE SWIMMING POOLS

## **CONSUMER INFORMATION AND SAFETY**

<b>⚠ DANGER</b>	Risk of electrical shock or electrocution  The electrical supply to this product must be installed in accordance with all applicable local codes (see p.13) and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users or others due to electrical shock, and may also cause damage to property.
<b>⚠ WARNING</b>	Do not play with cleaner or cable or apply to body. Can trap or tear hair or body parts. Cable can trip or entangle swimmers which could result in drowning.
<b>⚠</b> CAUTION	Before installing the cleaner, understand cleaner coverage. The cleaner was not designed to automatically clean steps or to work under a solar cover. It was also not designed to do initial cleanup for a new pool installation.

# Operating the Cleaner

<b>⚠ WARNING</b>	A 30 mA differential protection device must be installed to protect your electrical outlet and to prevent any possible electric shock. Failure to do so could create an electrical hazard which could result in death or serious injury to pool users or others due to electrical shock and may also cause damage to property.
<b>⚠</b> CAUTION	<b>DO NOT</b> switch the pool cleaner to " <b>ON</b> " if it is not immersed in the water. Operating the cleaner out of the water may cause severe damage and will result in loss of warranty. Always remember to turn off the power supply " <b>OFF</b> " and unplug it from the power outlet before removing the cleaner from the pool.
<b>⚠ WARNING</b>	It is mandatory to allow a safety distance between the power supply and the pool as required by the current installation standard (3.5 m minimum).





# READ THESE IMPORTANT OPERATING TIPS BEFORE USING YOUR UNIT!

Dear Hayward Robotic Cleaner Owner:

Thank you for choosing Hayward. In order to achieve optimal performance, please read and follow these steps:

- 1. Cleaner filter cartridges should be thoroughly cleaned after each use or as often as needed to ensure cleaner's optimal performance.
- Before using your cleaner and especially when opening the pool for the first time remove larger items from the pool that may diminish the cleaner's performance. Clean filter frequently when pool is excessively dirty.
- 3. For the first use, run cleaner for the full cycle (4 hours) to ensure a clean pool and give yourself a full understanding of the cleaner's capabilities.
- 4. Cleaner may periodically go to the wall but not necessarily climb to the vertical position. This is a normal part of the programmed cycle.
- 5. Cleaner may stop in the middle of the pool and reverse during cleaning cycle. This is a normal part of the programmed cycle.
- 6. DO NOT start cleaner out of the water. Power button should only be switched to "On" position when unit is fully submerged. The unit will automatically shut off, but it is best to put power switch in "OFF" position when unit completes cleaning.
- 7. Plug in only to a protected 230 V  $\sim$  outlet that is close and protected from short circuits. Fit a 30 mA differential protection device to protect people from electric shock caused by a possible break in the electrical insulation.
- 8. Place the cleaner power supply so that it is at a minimum distance of 3.5 meters from the pool edge.



#### Use:

Take some time to become acquainted with your TigerShark by looking at the drawings (Figures 1 and 2). Throughout the handbook we refer to these drawings when we are talking about the various components of TigerShark.

- 1. Choose a 230 V ∼ socket (outlet) that is close and protected from short-circuits. Fit a 30 mA differential protection device to protect people from electric shock caused by a possible break in the electrical insulation.
- 2. Install the power supply box (1) so that your TigerShark can reach all of the walls/surfaces of the pool. The power supply box should be at least 3.5 metres from the edge of the pool (Figure 1a). The standard length of the TigerShark cable is 16.76 metres (TigerShark 2:30 metres).
- 3. Plug the floating cable into the power supply box.

#### Caution: use the original power supply box only.

- 4. TigerShark has an adaptable handle (3). The handle should be locked in the diagonal position in order to guarantee optimum cleaning results. Reverse the position of the handle after use every time it is used (Figure 1b) to enable the cord to be wound up without twisting.
- 5. Place TigerShark in the pool. It will sink gently to the bottom of the pool as it gradually empties itself of the air that it contains.
- 6. Plug the power supply box into the socket and switch on the appliance. TigerShark will programme a self-diagnostic test for a few minutes before it starts cleaning the pool.

#### Caution:

DO NOT SWITCH TigerShark ON OUTSIDE THE WATER. You might damage the pump and render the warranty NULL AND VOID.

- 7. TigerShark switches off automatically after a 4-hour cycle (TigerShark 2 : 7 hours).
  - If your pool is clean in under 4 hours, you can switch off the cleaner by switching off the power supply box.
  - If a second clean is necessary, wait for 30 seconds before switching back on again.
- 8. Once the pool is clean, switch off the power supply box before you take TigerShark out of the water.
- 9. Take TigerShark out of the water from the shallow end of the pool by pulling the cable until the cleaner comes up to the surface. Then, lift it out gently by using the handle, NOT the cable.

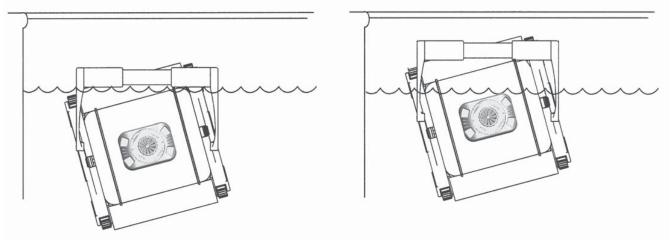
**CAUTION**: while pulling the cable, wind it in around both of your hands and above all not around your arm. To make TigerShark last, remove the water from it after use, every time it is used.

#### DO NOT GO INTO THE POOL WHILE TigerShark IS OPERATING.

Check the height of the waterline on TigerShark:

- Ensure that the filter is clean.
- Put the cleaner in the water and observe the height of the waterline on the cleaner. For this purpose, let it perform several cleaning cycles in order to determine an average height.
- Once the waterline is settled, if the cleaner regularly makes excessive rattling noises, takes air in through the bottom cover, climbs up the edge of the wall instead of going back the other way, or if it tends to stagnate in the same zone of the pool, it is probable that TigerShark is climbing too high: install the reducer kit.





Optimum waterline height

Incorrect waterline height

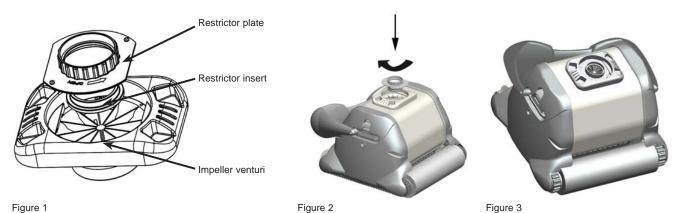
#### **Installing the Thrust Restrictor Plate**

If your units' average climbing height is incorrect, it can be corrected by installing a Thrust Restrictor Plate.

Install the restrictor plate as show in Figure 2 by placing restrictor plate in the slot and rotate clockwise to lock in place.

Restrictor insert may be needed if cleaner is still climbing too high.





#### For the cleaner to operate properly...

The best water temperature for optimum operation of TigerShark lies in the range 10°C to 35°C. However, TigerShark can be used in water at a different temperature.

Regular cleaning of the filter cartridge after use, every time the cleaner is used, epitomizes performance of the appliance. If TigerShark is struggling to climb up the walls of the pool, wash the filter and then resume pool cleaning.

Replace the brushes (12) when they are worn to maintain effective cleaning.

If granulated chemical products are used on a daily basis in the pool, we recommend using a floating or automatic metering feeder because such a feeder retains the calcium sediment that is sometimes contained in that type of product.

It is recommended not to use TigerShark before all of the chemical powders are not dissolved because they could clog the filter.

In a hard-water pool, more frequent cleaning of the filter is advised. Keep the TigerShark packaging for storing it or transporting it (in case any repairs are necessary).

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Use of non genuine Hayward manufactured parts will void all warranty.

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Rev. B



The motor unit (13) and the power supply box (1) do not contain any parts that are of use to the user. If they are opened the warranty automatically becomes **NULL AND VOID**.

#### TigerShark Quick Clean

- 1. For installation and normal use of TigerShark QC, please refer to the chapter on general use.
- 2. In order to select the normal cycle or the economy cycle, please follow the following instructions: on switching on, the economy programme is automatically selected. The "Quick Clean" light, situated on the control box, then comes on. In this mode, TigerShark will switch off automatically after 90 minutes.
- 3. In order to select the normal programme, please press the "Full Cycle" button. The light situated above the button comes on and indicates that the normal programme is running. In this mode, TigerShark will switch off automatically after 4 hours. If the economy mode is finished, you should switch off TigerShark and then switch it back on in order to select normal mode: normal mode can be selected only during an economy cycle.

#### Warning: Robotic cleaner equipped with Foam:

First run: Remove plastic sleeve protecting the foams before using the cleaner.

Do not use sharp tools to remove this plastic sleeve in order to avoid foams deterioration.

Put the cleaner in the water to soak the foams as they must be wet, press the foams with both hands under water to speed the process.

Repeat the above process before each use.

#### Maintenance:

1- Clean the cartridge of the filter after use, every time the cleaner is used:

Lay TigerShark on its side. Undo the fastenings of the bottom cover (6) (Figures 1c-1d) and remove the bottom cover assembly (7) (Figure 1e)

Remove the filter cartridge. If your filter is in 3 parts (ref. RCX70100), remove each element and clean it thoroughly using a hosepipe with a spray head so to remove all of the waste. Hold the elements as shown in Figure 1f to enable the waste to fall off.

Wash the inside of the bottom cover.

Put the filter cartridge back (Figure 1g)

Fit the bottom cover and re-engage the fastenings.

2- Clean the moving parts frequently.

**CAUTION:** unplug the power supply box before performing this cleaning operation.

Inspect the orifice of the pump to check that no waste or hair is obstructing the Venturi tube. It can be cleaned by removing the tube (9) and by turning it (Figure 1h). Clean off all of the waste that has built up between the tracks (10) and the wheels (11). Regularly inspect the cleaner and cable; do not use if damaged or if any rough edges are visible on the cleaner; this can cause damage to the pool.

#### Storage:

When it is out of the water, lay TigerShark on its side in a dry and shady place at a temperature between 5°C and 46°C (Figure 1i)

#### Maintenance for the cable:

After a while and with use, the cable can become twisted (like a telephone cord). To remedy this, wedge the handle in the opposite diagonal position (Figure 1b). TigerShark will then turn in the pool in the opposite direction and the cable will untwist itself. It is also possible to pull regularly on the cord in the sun in order to solve the problem.

Above all, remember to reverse the position of the handle after use, every time the cleaner is used.

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**IMPORTANT**: check the cable regularly to make sure that it has no external damage.

If the supply cord is damaged, it must be replace by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

#### SOLUTIONS TO FREQUENTLY ASKED QUESTIONS:

#### TIGERSHARK WILL NOT CLIMB THE WALLS

Clean the filter. It might be cloqged or too heavy due to waste or to too much algaecide being present.

The brushes might be worn. Examine them and change them if necessary.

Check the electrical installation and make sure that the voltage is correct: 230 V  $\sim$  50/60Hz

The water temperature should be greater than 15°C, otherwise the PVC brushes might stiffen and affect TigerShark's capacity to climb the walls.

Replace the PVC brushes with foam brushes. Ensure that the handle is in the diagonal position.

#### TIGERSHARK HAS LOST SUCTION

Clean the filter. It might be clogged and be preventing suction.

Check that the feeds in the bottom cover are not blocked, and clean them if necessary. Check the Venturi tube for any waste or damage. Clean or replace if necessary.

An intake that clips onto the bottom cover is available from your dealer. This makes it possible to achieve a higher speed and thus improved suction of small or heavy waste.

#### TIGERSHARK STOPS SUDDENLY WHILE IT IS CLEANING

The Venturi tube might be clogged with waste. Check and clean if necessary, by following the instructions in the chapter on maintenance.

The bearings of the brushes or the tracks are stuck. Check whether there is any dirt; clean them if necessary.

Put the TigerShark back in the water and switch it back on. In order to protect the fragile components, TigerShark will cut out automatically if it is removed from the water.

#### TIGERSHARK IS NOT WORKING ANY MORE

Check the socket for the voltage surge switch system to ensure that the power supply is correct.

Check the power of the power supply box per section (see below).

Check the floating cable per section

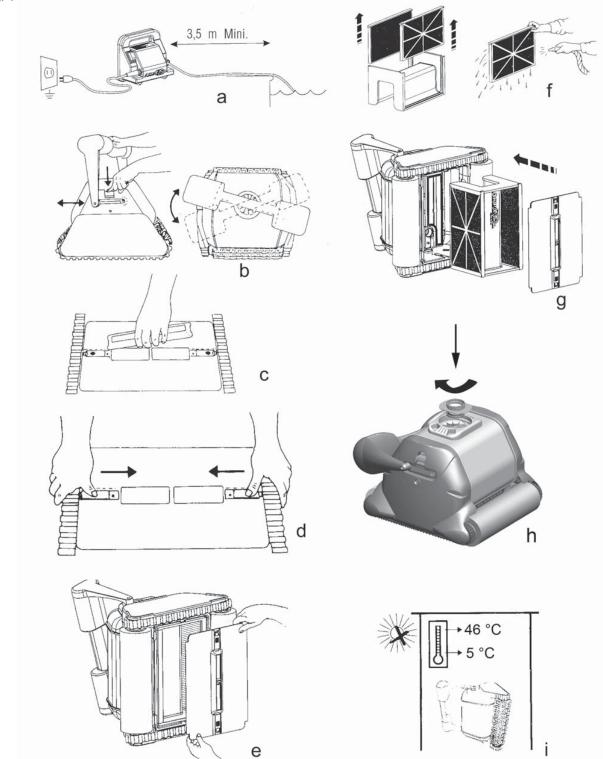
#### CHECKING THE POWER SUPPLY BOX

The power supply box is protected by an automatic circuit that interrupts the current. To switch it back on, move to the "OFF" position and then to the "ON" position.

The power supply box is equipped with an internal circuit. The voltage across terminals 1 and 2 of the power supply socket for the cleaner must be 24 V ==-.

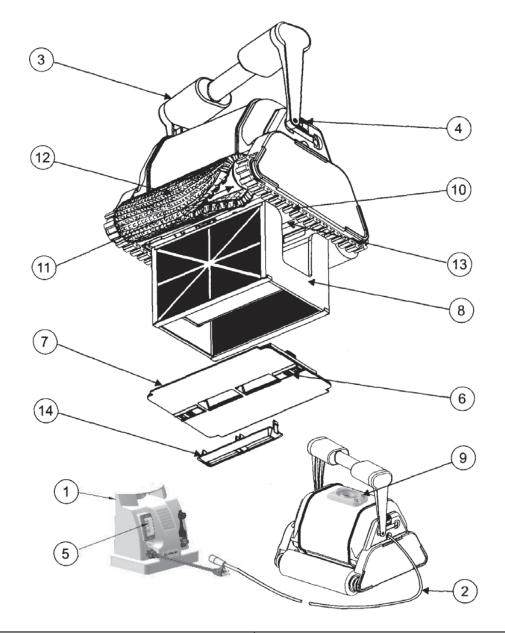
# **HAYWARD**

Fig. 1



# **HAYWARD**

Fig. 2



Power supply box	8. Filter cartridge box
2. Floating cable	9. Venturi tube
3. Handle	10.Track
4. Handle adjustment notches	11. Wheel
5. ON/OFF button	12.Spiky brush or foam brush
6. Bottom cover latch	13.Sealed motor unit
7. Bottom cover assembly	14.High-speed insert (not included)



# **SPECIFICATIONS**

Weight (w/o cable)	10.45 Kg			
Cable Length, Type	16,76 m (TigerShark 2 : 30 m)			
Materials	High Impact ABS - Metal Parts of Non-Ferous Stainless Steel			
Motor Unit	Pump	Drive	PCB	
Speed (rpm)	2 700	55	-	
Voltage	24 V ===	22 V ===	5 V ===	
Current (amp)	2.62 A	0.63 A	-	
Waterproof Sealing	<u> </u>		aft Seals & O-rir	<u> </u>
Motor Housing			pact Polypropyle	
Overload Protection	Electronic O	verload Monitor	ing with auto-sh	utoff
Optimum water operating temperature	10°C - 35°C			
Filter				
Туре	Removable, Re-Usable, Pleated Element Cartridge			
Media	Pleated Cellulose/Polyester Blend			
Cleaning Routine Control				
Туре	Adaptive Seek Control Logic (ASCL®) Microprocessor			
Drive System	Direct Drive w/Polyurethane Drive Track & Acetal Stainless Steel Bearing System			
Power Supply				
Input Primary Voltage	230 V ∼			
Output Secondary Voltage	24 V ===			
Rated Output Current	3.5 A			
Weight	3.8 Kg			
Shipping				
	Length	Width	Height	
Carton Dimensions (mm)	483	483	483	
Shipping Weight with Caddy	addy 15,9 Kg			



## IMPORTANT SAFETY INSTRUCTIONS

This robotic swimming pool cleaner has been manufactured with the highest degree of care and concern for safety. We suggest the following safety precautions become part of your pool safety regulations:

### SAVE THESE INSTRUCTIONS

- 1. ALWAYS PUT THE MACHINE INTO THE WATER BEFORE CONNECTING IT TO THE ELECTRICAL OUTLET.
- 2. T IS IMPORTANT FOR SWIMMERS' SAFETY TO REMOVE THE UNIT IMMEDIATELY FOLLOWING USE. THIS CAN ALSO IMPROVE THE OPERATING LIFE OF YOUR CLEANER.
- 3. BE CERTAIN THE MACHINE IS ONLY PLUGGED INTO A PROTECTED 230  $V \sim$  OUTLET THAT IS PROTECTED FROM SHORT-CIRCUITS. FIT A 30 MA DIFFERENTIAL PROTECTION DEVICE TO PROTECT PEOPLE FROM ELECTRIC SHOCK CAUSED BY A POSSIBLE BREAK IN THE ELECTRICAL INSULATION.
- 4. DO NOT HANDLE MACHINE WHILE IT IS PLUGGED INTO THE ELECTRICAL OUTLET.
- 5. DO NOT USE AN EXTENSION CORD. THIS COULD CREATE A SAFETY HAZARD AND/OR DAMAGE YOUR CLEANER.
- 6. ALWAYS STAY OUT OF THE POOL WHILE CLEANER IS IN OPERATION.
- 7. NEVER ALLOW PLUG TO ENTER THE POOL.
- 8. DO NOT OPERATE THE MACHINE OUT OF WATER. THIS WILL DAMAGE THE MOTOR SEAL AND VOID THE WARRANTY.
- 9. DO NOT DRAG THE MACHINE OUT OF THE POOL AGAINST THE SIDE WALL. THIS COULD DAMAGE UNIT AND/OR YOUR POOL WALL.

#### 10.DO NOT BURY CORD, REPLACE DAMAGED CORDS.

- 11. A WARNING TO REDUCE THE RISK OF INJURY, DO NOT PERMIT CHILDREN TO USE THIS PRODUCT UNLESS THEY ARE CLOSELY SUPERVISED AT ALL TIMES.
- 12.IF THE SUPPLY CORD IS DAMAGED IT MUST BE REPLACED BY THE MANUFACTURER, SERVICE AGENT, OR SIMILARLY QUALIFIED PERSONS IN ORDER TO AVOID A HAZARD.

While the cleaner has been made to operate as safely as possible, we suggest you exercise reasonable care in the handling of the vacuum and inspect the electrical cord frequently for damage or wear, as with any other electrical appliance. After use, remove the unit and rinse with fresh water and remove any twists that may be present in the cord.



# **HAYWARD®** Limited Warranty

All HAYWARD products are covered for manufacturing defects or material defects for a warranty period of 2 years as of date of purchases. Any warranty claim should be accompanied by evidence of purchase, indicating date of purchase. We would therefore advise you to keep your invoice.

The HAYWARD warranty is limited to repair or replacement, as chosen by HAYWARD, of the faulty products, provided that they have been subjected to normal use, in compliance with the guidelines given in their user guides, provided that the products have not been altered in any way, and provided that they have been used exclusively with HAYWARD parts and components. The warranty does not cover damage due to frost and to chemicals. Any other costs (transport, labour, etc.) are excluded from the warranty.

HAYWARD may not be held liable for any direct or indirect damage resulting from incorrect installation, incorrect connection, or incorrect operation of a product.

In order to claim on a warranty and in order to request repair or replacement of an article, please ask your dealer.

No equipment returned to our factory will be accepted without our prior written approval.

Wearing parts are not covered by the warranty.

#### **EXCEPTIONS AND EXCLUSIONS FROM WARRANTY**

The cleaner must be used with electrical requirements as indicated on the Power Supply. Otherwise damage, defects, malfunctions or other failures of the cleaner arising from use on electrical supply not as indicated are excepted and excluded from this warranty.

Defects, malfunctions, failure or damage of the cleaner caused by improper, unreasonable, or negligent use or abuse by the consumer, are excluded from this warranty.

If any repair is made on your cleaner by anyone other than authorized personnel (designated to perform such work) without first having obtained factory instructions, HAYWARD, at its sole option, may determine that this warranty will not apply and that reimbursement for such repair will not be made because of failure to comply with such factory specified instructions.

Filter cartridges are not covered by this warranty and will be replaced only with your prior approval of the charges.

#### Electric standard/country

F	NF C 15-100	GB	BS7671:1992
D	DIN VDE 0100-702	EW	EVHS-HD 384-7-702
Α	ÖVE 8001-4-702	Н	MSZ 2364-702:1994 / MSZ 10-533 1/1990
E	UNE 20460-7-702 1993, REBT ITC-BT-31 2002	М	MSA HD 384-7-702.S2
IRL	Wiring Rules + IS HD 384-7-702	PL	PN-IEC 60364-7-702:1999
- 1	CEI 64-8/7	CZ	CSN 33 2000 7-702
LUX	384-7.702 S2	SK	STN 33 2000-7-702
NL	NEN 1010-7-702	SLO	SIST HD 384-7-702.S2
Р	RSIUEE	TR	TS IEC 60364-7-702



#### **OWNER'S MANUAL**

Congratulations on your purchase of a microprocessor controlled fully automatic pool cleaner. This manual contains important information regarding the operation and maintenance of your cleaner. Please retain it for reference. For Technical Assistance, call Hayward at +33 474 465 962.

# TO REGISTER YOUR CLEANER IN OUR DATABASE, GO TO: www.hayward.fr (section Services)

<b>&gt;</b>			
For You	r Records		
	the following information for your convenience	e:	
1)	Purchase Date		-
2)	Complete Name		_
3)	Address		-
4)	Zip code_		-
5)	Email Address		_
6)	Part numberSeri	al number	_
7)	Pool Dealer		_
8)	Address		_
9)	Zip codeCountry		_
Note			
Note			
<b>*</b>			

Hayward Robotic Cleaners should not be used to clean the pool for spring start-up. On those occasions, where your pool is subjected to an abnormal debris load, maintenance steps should be taken to return the pool to "pre-installations" condition.