

2019-2629  
2019-10-10

T-CELL-5

Replacement cell for Swimpure RJ Above-Ground Pool Automation  
REGISTRATION NUMBER 28593.01, PEST CONTROL PRODUCTS ACT. This cell must only be used  
on this model of chlorine generating device.

KEEP OUT OF REACH OF CHILDREN

Read the Label, the Installation and Operation Manual of the Swimpure RJ Above-Ground Pool  
Automation before using.

Hayward Pool Products Canada Inc.  
2880 Plymouth Drive  
Oakville, ON L6H 5R4

1-888-238-7665 (POOL)

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## Wiring

Both the Turbo Cell and flow switch use plug-in connectors to attach to the Swimpure RJ Above-Ground Pool Automation. Be sure that the panels are not removed on the control when attaching cables.

### Turbo Cell

Refer to the diagrams below for proper location of each control's plug-in location.

### Flow Switch

Refer to the diagrams below for proper location of each control's plug-in location. Ensure that the connector catch "snaps" in order to provide a reliable connection.

{Diagram}

{Diagram}

2019-2629

2019-10-10

## Compatibility

The T-Cell-5 electrolytic chlorine generator cell is designed to work with the Swimpure RJ Above-Ground Pool Automation, PCP 28593.01. The kit includes a Turbo Cell, flow switch, and 5 cm (2") cell unions for installation.

## Plumbing

### Turbo Cell

The Turbo Cell (used for chlorine generation) should be plumbed AFTER the filter and heater. If installed on a pool/spa combination system, the cell should be plumbed BEFORE the pool/spa return valve in order to allow proper chlorination of both the pool and the spa. Refer to plumbing diagram below:

{Diagram}

The cell may be mounted vertically or horizontally, and water can move in either direction through the cell. Install using the 5 cm (2") unions provided. Tighten unions BY HAND for a watertight seal. For systems under 5 cm (2") plumbing, use adaptors (provided by installer).

### Flow Switch

The flow switch must be plumbed in the same section of plumbing as the Turbo Cell. The flow switch is a safety device that ensures that water is flowing through the cell before the Swimpure RJ Above-Ground Pool Automation starts to generate chlorine. Failure to properly install the flow switch can result in explosive gases accumulating in the pool plumbing system. There must be at least a 12" (30cm) straight pipe run before (upstream) the flow switch. To ensure proper operation, verify that the arrow on the flow switch points in the direction of water flow.

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**Swimpure RJ**  
Above-Ground Pool Automation  
by  
Goldline Controls Inc. A Hayward Company

CONTROLS BACTERIA AND ALGAE  
In Swimming pool Waters DOMESTIC

A maximum of 67,500 L of water can be treated with one Swimpure RJ Above-Ground Pool Automation.  
Maximum output of hypochlorous acid equivalent to 0.817 Kg of free available chlorine per day.

For swimming pools, a range of 1.0-3.0 ppm of free available chlorine must be maintained.

KEEP OUT OF REACH OF CHILDREN

WARNING : Operating Swimpure RJ Above-Ground Pool Automation without water flow through the cell can cause a build up of flammable gases which can result in FIRE OR EXPLOSION.

**Do not use this device with bromide products.**

READ THE LABEL AND ATTACHED MANUAL BEFORE USING

Registration Number 28593.01 PEST CONTROL PRODUCTS ACT

Hayward Pool Products Canada Inc.  
2880 Plymouth Drive  
Oakville, ON L6H 5R4

1-888-238-7665 (POOL)

## **IMPORTANT SAFETY INSTRUCTIONS**

When using this electrical equipment, basic safety precautions should always be followed, including the following:

- READ AND FOLLOW ALL INSTRUCTIONS**
- KEEP OUT OF REACH OF CHILDREN**
- Warning:** To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label.
- Follow all aspects of the local and National Electric Code(s) when installing the Swimpure RJ Above-Ground Pool Automation.
- People with a medical condition should consult a physician before entering a pool.
- Disconnect all AC power during installation.
- A green colored terminal marked "Earth Ground" is located inside the wiring compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying the equipment.
- Two bonding lug are provided on the external surface. To reduce the risk of electric shock, connect the local common bonding grid in the area of the swimming pool to these terminals with an insulated or bare copper conductor not smaller than 6 AWG in Canada.
- All field installed metal components such as rails, ladders, drains, or other similar hardware within 3 meters of the pool shall be bonded to the equipment grounding bus with copper conductors not smaller than 6 AWG in Canada.
- Do not use this device with bromide products.
  
- SAVE THESE INSTRUCTIONS**

# Table of Contents

## OPERATION

The Swimpure RJ Above-Ground Pool Automation.....	1
Recommended water parameters .....	1
Controls .....	6
Maintenance.....	8

## INSTALLATION

Mounting.....	9
Plumbing.....	10
Wiring.....	11

## TROUBLESHOOTING

Troubleshooting.....	13
----------------------	----

## WARRANTY

Warranty.....	15
---------------	----

## OPERATION

The Swimpure RJ Above-Ground Pool Automation is an automatic chlorine generation system with a built-in filter pump timer designed specifically for above ground pools. The operation requires a low concentration of salt (sodium chloride) in the pool water at levels low enough that it normally will not be tasted. The Swimpure RJ Above-Ground Pool Automation automatically sanitizes your pool by converting the salt into free chlorine which kills bacteria and algae in the pool through a process called electrolysis. Because chlorine will revert back to sodium chloride after killing the bacteria, these reactions will continuously recycle virtually eliminating the need to add sanitizing chemicals to your pool. The only time you may need to add more salt to the pool is when water is replenished due to backwashing, draining, or splashing (not evaporation).

The Swimpure RJ Above-Ground Pool Automation incorporates a built in timer to control the pool filter. This timer insures that the proper daily filtration and sanitization occurs. The Swimpure RJ Above-Ground Pool Automation is designed to produce hypochlorous acid for most residential above ground pools up to 67,500 liters (18,000 gallons). The actual amount of chlorination required to properly sanitize a pool varies depending upon bather load, rainfall, temperature, and the pool's cleanliness.

The cell may be mounted directly to the pool return jet. The electrical connections are made via 120V/15A "straight blade" linecord and receptacle.

### Recommended water parameters

As with any pool, it is important that you maintain chemical makeup of the pool water. The table on the top of page 2 summarizes the levels that must be maintained. The only special requirement for the Swimpure RJ Above-Ground Pool Automation is the salt level and stabilizer. It is important to maintain these levels in order to prevent the corrosion or scaling and to ensure maximum enjoyment of the pool. Test your water periodically. Your local pool store can provide you with the chemicals and procedures to adjust the water chemistry. Be sure to tell the pool store that you are using a Swimpure RJ Above-Ground Pool Automation.

- Do not add pool chemicals directly to the skimmer, this may damage the cell.
- Maintaining high salt and chlorine levels above recommended ranges can contribute to corrosion of pool equipment.
- Check the expiry date of the test kit as test result may be inaccurate if used after expiration date.

Note: For outdoor pools, chlorine residuals can be protected from destruction by sunlight by the addition of stabilizer (cyanuric acid). Regulation may exist regarding the use of cyanuric acid. Please consult with your local authority.

CHEMICAL	IDEAL LEVELS
Free available chlorine	1.0 – 3.0 ppm
pH	7.2 to 7.8
Total Alkalinity	100 – 120 ppm
Calcium hardness	200 – 300 ppm
Salt	2700 – 3400 ppm
Cyanuric Acid (Stabilizer)	30 100 ppm (Goldline recommends 80 ppm)
Metals	0 ppm (ideal)
Saturation Index	-0.2 to 0.2 (0 Best)

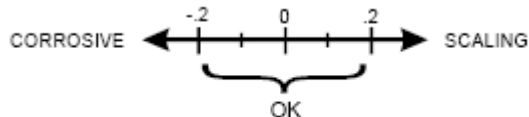
**Saturation index**

The saturation index (Si) relates to the calcium and alkalinity in the water and is an indicator of the pool water "balance". Your water is properly balanced if the Si is 0 ±.2. If the Si is below -0.2, the water is corrosive and plaster pool walls will be dissolved into the water. If the Si is above +0.2, scaling and staining will occur. Use the equation and chart below to determine the saturation index.

$$Si = pH + Ti + Ci + Ai + 12.1$$

°C	°F	Ti	Calcium Hardness	Ci	Total Alkalinity	Ai
12	53	.3	75	1.5	75	1.9
			100	1.6	100	2.0
16	60	.4	125	1.7	125	2.1
			150	1.8	150	2.2
19	66	.5	200	1.9	200	2.3
			250	2.0	250	2.4
24	76	.6	300	2.1	300	2.5
			400	2.2	400	2.6
29	84	.7	600	2.4	600	2.8
			800	2.5	800	2.9
34	94	.8				
39	103	.9				

How to use: Measure pool pH, temperature, calcium hardness, and total alkalinity. Use the chart above to determine Ti, Ci, and Ai from your measurements. Insert values of pH, Ti, Ci and Ai into the above equation. If Si equals .2 or more, scaling and staining may occur. If Si equals -2 or less, corrosion or irritation may occur.





## Salt Level

Use the chart on page 4 to determine how much salt in Kgs (or lbs) needs to be added to reach the recommended levels. Use the equations below (measurements are in meters/liters and feet/gallons) if pool size is unknown.

	<b>Gallons</b> (pool size in feet)	<b>Liters</b> (pool size in meters)
<b>Rectangular</b>	Length x Width x Average Depth x 7.5	Length x Width x Average Depth x 1000
<b>Round</b>	Diameter x Diameter x Average Depth x 5.9	Diameter x Diameter x Average Depth x 785
<b>Oval</b>	Length x Width x Average Depth x 6.7	Length x Width x Average Depth x 893

The ideal salt level is between 2700-3400 ppm (parts per million) with 3200 ppm being optimal. If the level is low, determine the number of gallons in the pool and add salt according to the chart on page 4. A low salt level will reduce the efficiency of the Swimpure RJ Above-Ground Pool Automation and result in low chlorine production. A high salt level can cause the Swimpure RJ Above-Ground Pool Automation to shutdown and may begin to give a salty taste to your pool (generally, the salt will begin to be tasted at a level of about 3500-4000 ppm). The salt in your pool is constantly recycled and the loss of salt throughout the swimming season should be small. This loss is due primarily to the addition of water because of splashing, backwashing or draining (because of rain). Salt is not lost due to evaporation.

### Type of Salt to Use

It is important to use only sodium chloride (NaCl) that is 99% pure. This is common food quality or water softener salt. It is usually available at building supply stores in 20kg - 40kg (44-88 lbs). bags labeled "Coarse Solar salt". Do not use rock salt, salt with more than 1% yellow prussiate of soda, salt with more than 1% of anti-caking additives, or iodized salt.

### How to Add or Remove Salt

Turn the filter pump on and add the salt directly into the pool. Brush the salt to speed up the dissolving process--to not allow the salt to sit in a pile on the bottom of the pool. Run the filter pump for 24 hours with the suction coming from the main drain (use the pool vacuum if there is no main drain) to allow the salt to evenly disperse throughout the pool. The salt display may take 24 hours to respond to the change in salt concentration.

The only way to lower the salt concentration is to partially drain the pool and refill with fresh water.

Kg (Pounds) of salt needed for 3200ppm							
Liters and (Gallons) of pool water							
Current salt level ppm	22 500 (6 000)	30 000 (8 000)	37 500 (10 000)	45 000 (12 000)	52 500 (14 000)	60 000 (16 000)	67 500 (18 000)
0	73 (160)	97 (213)	121 (267)	145 (320)	170 (373)	427 (194)	218 (480)
200	69 (150)	91 (200)	114 (250)	136 (300)	159 (350)	182 (400)	205 (450)
400	64 (140)	85 (187)	106 (233)	127 (280)	148 (327)	170 (373)	191 (420)
600	59 (130)	79 (173)	98 (217)	118 (260)	138 (303)	158 (347)	177 (390)
800	55 (120)	73 (160)	91 (200)	109 (240)	127 (280)	145 (320)	164 (360)
1 000	51 (110)	67 (147)	83 (183)	100 (220)	117 (257)	133 (293)	150 (330)
1 200	46 (100)	61 (133)	76 (167)	91 (200)	106 (233)	121 (267)	136 (300)
1 400	41 (90)	55 (120)	68 (150)	82 (180)	95 (210)	109 (240)	123 (270)
1 600	36 (80)	48 (107)	61 (133)	73 (160)	85 (187)	97 (213)	109 (240)
1 800	32 (70)	42 (93)	53 (117)	64 (140)	74 (163)	85 (187)	95 (210)
2 000	27 (60)	36 (80)	45 (100)	55 (120)	64 (140)	73 (160)	82 (180)
2 200	23 (50)	30 (67)	38 (83)	45 (100)	53 (117)	61 (133)	68 (150)
2 400	18 (40)	24 (53)	30 (67)	36 (80)	42 (93)	48 (107)	55 (120)
2 600	14 (30)	18 (40)	23 (50)	27 (60)	32 (70)	36 (80)	41 (90)
2 800	9 (20)	12 (27)	15 (33)	18 (40)	21 (47)	24 (53)	27 (60)
3 000	4 (10)	6 (13)	8 (17)	9 (20)	11 (23)	12 (27)	14 (30)
3 200	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal	Ideal
3 400	OK	OK	OK	OK	OK	OK	OK
3 600+	Dilute	Dilute	Dilute	Dilute	Dilute	Dilute	Dilute

### Stabilizer (Cyanuric Acid)

Always check stabilizer (cyanuric acid), when checking salt. These levels will most likely decline together. Use the chart below to determine how much stabilizer must be added to raise the level to 80 ppm.

Current stabilizer level ppm	Kg (Pounds) of stabilizer (Cyanuric Acid) needed for 80ppm Liters (Gallons) of pool water						
	22 500 (6 000)	30 000 (8 000)	37 500 (10 000)	45 000 (12 000)	52 500 (14 000)	60 000 (16 000)	67 500 (18 000)
0 ppm	1,8 (4,0)	2,4 (5,3)	3,0 (6,7)	3,6 (8,0)	4,3 (9,4)	4,9 (10,7)	5,4 (12,0)
10 ppm	1,6 (3,5)	2,1 (4,7)	2,6 (5,8)	3,2 (7,0)	3,7 (8,2)	4,3 (9,4)	4,8 (10,5)
20 ppm	1,4 (3,0)	1,8 (4,0)	2,3 (5,0)	2,7 (6,0)	3,2 (7,0)	3,6 (8,0)	2,2 (9,0)
30 ppm	1,1 (2,5)	1,5 (3,3)	1,9 (4,2)	2,3 (5,0)	2,7 (5,9)	3,0 (6,7)	3,4 (7,5)
40 ppm	0,9 (2,0)	1,2 (2,7)	1,5 (3,3)	1,8 (4,0)	2,1 (4,7)	2,4 (5,4)	2,7 (6,0)
50 ppm	0,7 (1,5)	0,9 (2,0)	1,1 (2,5)	1,4 (3,0)	1,6 (3,5)	1,8 (4,0)	2,0 (4,5)
60 ppm	0,5 (1,0)	0,6 (1,3)	0,8 (1,7)	0,91 (2,0)	1,1 (2,4)	1,2 (2,7)	1,4 (3,0)
70 ppm	0,2 (0,5)	0,3 (0,7)	0,4 (0,8)	0,45 (1,0)	0,54 (1,2)	0,64 (1,4)	0,68 (1,5)
80 ppm	0,0	0,0	0,0	0,0	0,0	0,0	0,0

## **Controls**

### Timer

The pool filter pump should run long enough to circulate the entire volume of pool water each day. This will vary depending on pump size, pool plumbing and pool size. Consult a local pool store to help determine the appropriate run time for your pool.

Set the Swimpure RJ Above-Ground Pool Automation's timer by rotating the clock hands in a clockwise direction. The arrow (positioned approximately 2 o'clock on dial) points to the current time. The internal "hands" show time at a glance. On the outside of the timer, there are a series of small slide trippers. Each tripper controls a 15 minute interval. Set the trippers for the desired run time.

OFF - Push trippers IN (toward center)  
ON - Pull trippers OUT (away from center)

### Manual Control

There is a switch on the timer (located at approximately the 4 o'clock position) that allows the pump to be manually turned on or off.

"1" (up) - pump ON  
" " (center) - timer controls pump "0"  
(down) - pump OFF

### Main Switch

**AUTO:** For normal operation, the main switch should be left in the AUTO position. In this position, the Swimpure RJ Above-Ground Pool Automation will produce chlorine according to the "Desired Level %" adjustment setting for the entire filtering/pumping cycle.

**SUPER CHLORINATE:** When you have an abnormally high bather load, a large amount of rain, a cloudy water condition, or any other condition which needs a large amount of purification to be introduced, put the main switch in the SUPER CHLORINATE position. This electronically "super chlorinates" (shocks) the water for 24 hours (filter pump must be on during this time) or until the power has been turned off, whichever comes first. At the end of the super chlorinate time, be sure to put the switch back into the AUTO position.

**OFF:** The OFF position prevents the Swimpure RJ Above-Ground Pool Automation from energizing the electrolytic cell. In this position, there is no chlorine generation. **NOTE:** To service any of the pool equipment or the Swimpure RJ Above-Ground Pool Automation, turn the power off at the circuit breaker.

### "Desired Level %" adjustment knob

This setting is used to control the amount of chlorine the Swimpure RJ Above-Ground Pool Automation generates. Raise this setting to increase chlorine level and lower it to decrease chlorine level.

### Indicator LED's

**POWER** When illuminated, the Swimpure RJ Above-Ground Pool Automation has input power.

**GENERATING** This LED is on steady during normal operation. When flashing, the pool water is too hot or too cold to operate.

**SUPER CHLORINATE** Illuminates during Super Chlorination. See description above.

**NO FLOW** When illuminated, the flow switch has detected no flow and the Swimpure RJ Above-Ground Pool Automation has stopped generating chlorine. A flashing LED indicates a 15/60 second time delay period.

**TEST SALT LEVEL** When flashing, the salt level is low (below 2700ppm) and Swimpure RJ Above-Ground Pool Automation is generating at low efficiency. When illuminated steady, the salt level is too low and Swimpure RJ Above-Ground Pool Automation has shut down. Before adding large quantities of salt, it is advisable to have your salt level professionally checked.

**HIGH SALT** When illuminated, the salt level is too high and Swimpure RJ Above-Ground Pool Automation has shut down.

**INSPECT CELL** A flashing indicator signifies that either the cell efficiency is reduced or that it is time for regularly scheduled cell inspection. In either case, inspect the cell and clean if necessary. Pressing the "diagnostic" button next to the display for 3 seconds will stop the flashing LED. When illuminated steady, cell efficiency is greatly reduced and the Swimpure RJ Above-Ground Pool Automation has stopped producing chlorine. Inspect, clean or replace if necessary.

#### Salt Display

The Salt Display shows the current salt concentration of the pool water. Readings are in ppm (parts per million). Refer to the Water Chemistry section for recommended salt levels as well as how to add/remove salt.

The factory default display is in English (ppm). If Metric units (grams per liter) are preferred, push the "diagnostic" button next to the display once. The display will now show the pool water temperature in degrees Fahrenheit. With the temperature displayed, move the main switch from AUTO to SUPER CHLORINATE to AUTO. The temperature display will instantly change to degrees Celsius and the salt display will switch to grams/liter. Repeat this process to switch back to English units (ppm and Fahrenheit).

## Operation

By understanding how the Swimpure RJ Above-Ground Pool Automation operates, you'll be sure to use it more effectively for maximum convenience and performance. Assuming that the water chemical levels are in the recommended range, there are three factors that you can control which directly contribute to the amount of chlorine the Swimpure RJ Above-Ground Pool Automation will generate:

1. filter time each day (hours)
2. the amount of salt in the pool
3. the "Desired Level %" setting

To find the optimum "Desired Level %" setting, start at a fairly high setting and work downward. It will take a few days of adjustments to find the ideal setting for your pool. Once determined, it should only take minor adjustments, if at all, to compensate for differing salt levels due to splashing, backwashing, rain, etc. Because the production of chlorine is affected by water temperature, it is important to check chlorine levels during periods of unusually high or low pool water temperatures. The Swimpure RJ Above-Ground Pool Automation control will not produce chlorine at temperatures below 10°C (50° F). If your pool will be below this temperature for any length of time, you must chlorinate manually. **WARNING** : Heavy pool usage and higher temperature may require higher chlorine output to maintain proper free available chlorine residuals.

If additional chlorine is required due to heavy bather load, use a chlorine sanitizer to maintain an appropriate free available chlorine residual in the water.

## Maintaining the Swimpure RJ Above-Ground Pool Automation

To maintain maximum performance, it is recommended that you open and visually inspect the cell every 3 months or after cleaning your filter. The Swimpure RJ Above-Ground Pool Automation will remind you to do this by flashing the "Inspect Cell" LED after approximately 500 hours of operation. After you inspect the cell (and clean, if necessary) press the small "diagnostic" button next to the display for 3 seconds to stop the flashing "Inspect Cell" LED and start the timer for the next 500 hours inspection period.

The Swimpure RJ Above-Ground Pool Automation electrolytic cell has a self cleaning feature incorporated into the electronic control's logic. In most cases, this self cleaning action will keep the cell working at optimum efficiency. In areas where water is hard (high mineral content) and in pools where the water chemistry has been allowed to get "out of balance", the cell may require periodic cleaning. The "Inspect Cell" LED will indicate if cell efficiency is decreased and servicing is necessary. If the "Inspect Cell" LED remains on after a thorough cleaning, the cell may be worn and require replacement. When replacing the cell, only use replacement cells having a label that clearly states that it is a replacement cell for the Swimpure RJ Above-Ground Pool Automation, REGISTRATION NUMBER 28593.01, PEST CONTROL PRODUCT ACT.

The life expectancy of the electrolytic cell is 10,000 hours under normal use conditions.

### Servicing and Cleaning the Swimpure RJ Above-Ground Pool Automation cell

Turn off power to the Swimpure RJ Above-Ground Pool Automation before removing the electrolytic cell. Once removed, look inside the cell and inspect for scale formation (light colored crusty or flaky deposits) on the plates and for any debris which has passed through the filter and caught on the plates. If no deposits are visible, reinstall. If deposits are seen, use a high pressure garden hose and try to flush the scale off. If this is not successful, use a plastic or wood tool (do not use metal as this will scratch the coating off the plates) and scrape deposits off of the plates. Note that a build upon the cell indicates that there is an unusually high calcium level in the pool (old pool water is usually the cause). If this is not corrected, you can expect to have to periodically clean the cell. The simplest way to avoid this is to bring the pool chemistry to the recommended levels as specified.

**Mild Acid Washing:** Use only in severe cases where flushing and scraping will not remove the majority of deposits. To acid wash, turn off power to Swimpure RJ Above-Ground Pool Automation. Remove cell from piping. In a clean plastic container, mix a 4:1 solution of water to muriatic acid (3.78 liters (one gallon) of water to one liter (quart) of muriatic acid). ALWAYS POUR ACID INTO WATER - NEVER POUR WATER INTO ACID. Be sure to wear rubber gloves and appropriate eye protection. The level of the solution in the container should just reach the top of the cell so that the wire harness compartment is NOT submerged. It may be helpful to coil the wiring before immersing the cell. The cell should soak for a few minutes and then rinse with a high pressure garden hose. If any deposits are still visible, repeat soaking and rinsing. Replace cell and inspect again periodically.

### Winterizing

The Swimpure RJ Above-Ground Pool Automation electrolytic cell and flow detection switch will be damaged by freezing water just as your pool plumbing would. In areas of the country which experience severe or extended periods of freezing temperatures, be sure to drain all water from the pump, filter, and supply and return lines before any freezing conditions occur. The electronic control is capable of withstanding any winter weather and should not be removed.

### Spring Start-up

DO NOT turn the Swimpure RJ Above-Ground Pool Automation on until the pool water chemistry has been brought to the proper levels. This information can be found on page 2.

# INSTALLATION

Installation must be performed in accordance with Local and NEC codes.

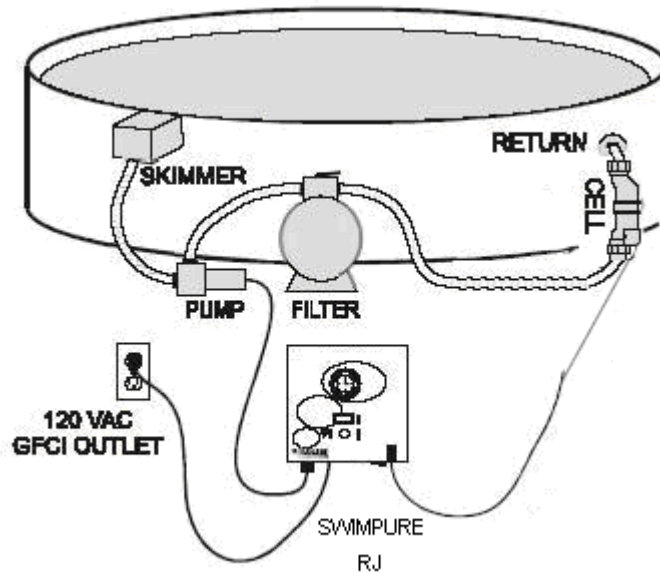
## Preparing Pool Water

Refer to page 2 for recommended chemical levels. The pool's chemistry must be balanced **BEFORE** activating the Swimpure RJ Above-Ground Pool Automation. **NOTE:** If the pool does not have new water, add 1 quart (1 liter) of metal remover and 1 quart (1 liter) of non-copper based algaecide to the pool, per manufacturer's instructions. This ensures a quick, trouble free transfer to the Swimpure RJ Above-Ground Pool Automation.

## Mounting the Swimpure RJ Above-Ground Pool Automation Control

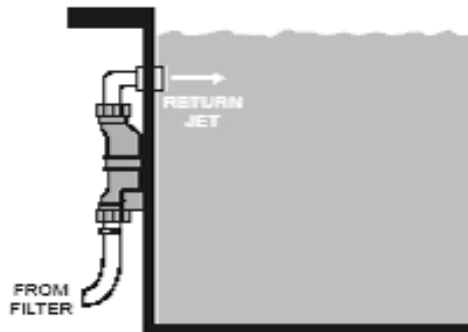
The Swimpure RJ Above-Ground Pool Automation is contained in a raintight enclosure that is suitable for outdoor mounting. The control must be mounted a minimum of 2 meters (5 ft.) horizontal distance (or more if local codes require) from the pool.

The control is designed to mount vertically on a flat surface. Because the enclosure also acts as a heat sink (disperses heat from inside the box), it is important not to block the four sides of the control. Do not mount the Swimpure RJ Above-Ground Pool Automation in a panel or tight enclosed area.



## Plumbing

Return Jet installation: Unscrew the hose adaptor from the pool return jet fitting and, in its place, screw in the right-angle cell mounting adaptor. Note that this installation does NOT require a flow switch--however it is very important that the cell be mounted vertically directly below the return jet in order to allow the gases produced in the cell to naturally dissipate in the pool. Attach the cell to the union and then use the fittings supplied to attach the lower end of the cell to either the hose or rigid PVC pipe coming from the pools filtration system. Tighten all union nuts BY HAND for a watertight seal.



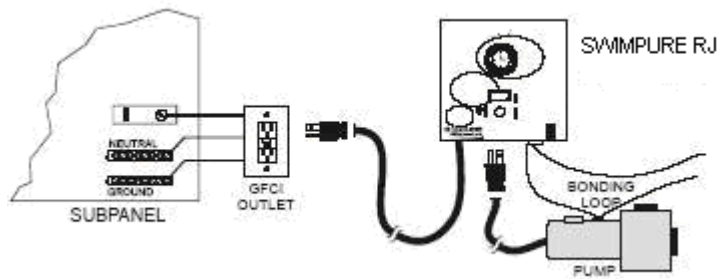


## Wiring

Power must be shut off at the circuit breaker before performing any wiring. Be sure to follow Local and NEC/CEC electrical codes. The Swimpure RJ Above-Ground Pool Automation has been designed to easily wire into typical above ground pool systems. To provide safe operation, the Swimpure RJ Above-Ground Pool Automation must be properly grounded and bonded.

### Input Power

Models with the standard 120 VAC line cord should be plugged into a GFCI receptacle. Twist lock models should be plugged into a twist lock receptacle wired to a GFCI circuit breaker. For Canadian installations: Connect to a circuit protected by a Class-A ground fault interruptor. See diagram below.



### Bonding

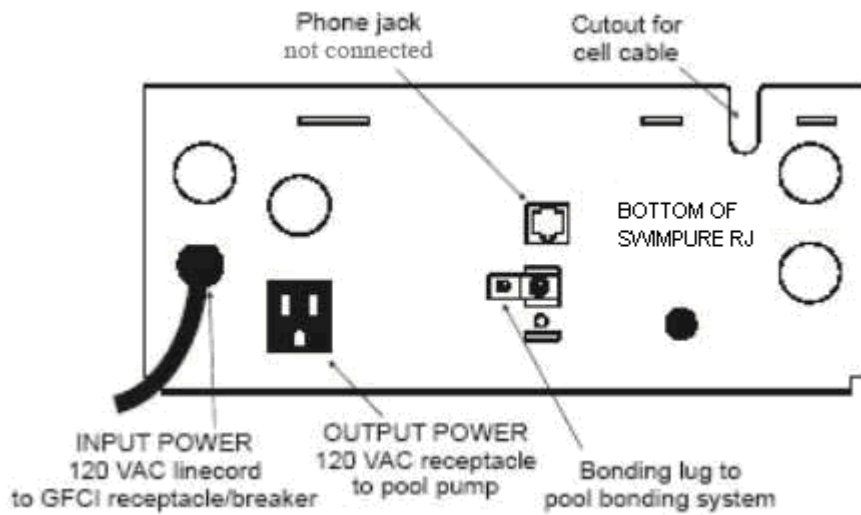
A lug used for bonding is attached to the bottom of the Swimpure RJ Above-Ground Pool Automation enclosure. Connect to the pool bonding system using minimum 6 AWG copper wire if required by code.

### Pump Output

The Swimpure RJ Above-Ground Pool Automation's filter pump output is rated at 120 VAC, 15A max. Check the electrical rating marked on the pump motor. Connecting a pump with a higher amperage rating may result in permanent damage to the Swimpure RJ Above-Ground Pool Automation. The 120 VAC standard or twist lock pump receptacle is located outside, on the bottom of the enclosure.

### Electrolytic Cell

The cell plugs into connectors on the Swimpure RJ Above-Ground Pool Automation electronics unit. See diagram below.



## Troubleshooting

Contact Hayward Canada for helpful information on operation, maintenance and

troubleshooting your Swimpure RJ Above-Ground Pool Automation. You may also call for technical assistance at [1-888-238-7665 \(POOL\)](tel:1-888-238-7665) Technicians at the factory are available from 8:30 AM to 5:00 PM Eastern Standard Time, Monday through Friday. Be sure to have the following information when you call:

1. Model and Serial # of control and cell
2. Date of installation
3. Installing Company or Dealer
4. Salt level and diagnostic

### Diagnostic Displays

Sequential pushes of the small "diagnostic" button next to the LCD display will cause the Swimpure RJ Above-Ground Pool Automation to display the following information:

1. Pool temperature (xx degrees Fahrenheit or Celsius)
2. Cell voltage (typically 22.0 to 26.0 volts when chlorine is being generated, otherwise 0-35V)
3. Cell current (typically 2.50 to 4.00 amps when chlorine is being generated, otherwise 0 amps)
4. Desired Output % ("0P"--"100P" depending on knob position or input from Jandy AquaLink RS)
5. Instant salinity ( -xxxx ppm or -x.xx grams/Liter)
6. Product name sent to the Jandy AquaLink RS display ("AL-0" which signifies "Swimpure RJ")
7. Software revision level (r1.xx)

On the 8th push of the button, the display will revert back to the default salt display. Also, if the button is not pushed for 30 seconds, the display will revert back to the standard salt display.

### Common Problems and Solutions

1. "Power" LED not on Check to make sure 120VAC input power is connected to the Swimpure RJ Above-Ground Pool Automation control. Verify input voltage with a voltmeter. If there is input power, the circuit breaker may have tripped. The Swimpure RJ Above-Ground Pool Automation is protected by a circuit breaker located on the bottom of the enclosure, next to the wiring knockouts (see diagram on page 12) .
2. Filter pump not running Check that the time clock manual switch is in the "auto" (center) position or in the "on" (top) position. If in "auto", then check that the time is correct (check am/pm by using the 24 hour indicator located near the 2 o'clock position) and that the trippers are in the "out" position.
3. "Generating" LED not on The Swimpure RJ Above-Ground Pool Automation only generates chlorine when the filter pump is running, the main switch is in the "AUTO" or "SUPER CHLORINATE" position, and none of the red fault LEDs are illuminated.
4. "Generating" LED flashing The temperature of the pool water is too high or low to operate. You can override this by switching the main switch to SUPER CHLORINATE. The Swimpure RJ Above-Ground Pool Automation will run at maximum output for the remainder of the current pump cycle or 24 hours , whichever comes first.

5. "No Flow" LED illuminated

The Swimpure RJ Above-Ground Pool Automation has sensed a no flow condition and has stopped generating chlorine. Check that the flow switch is plugged into the connector on the bottom of the control unit and that the wire is not cut or damaged. Make sure you have at least 30 mm (12") of straight pipe before the flow switch. If there is adequate flow and the LED is still on, check that the arrows on the flow switch (on top of hex) are pointing in the direction of flow.

6. "Test Salt Level" LED illuminated or flashing

Take a sample of your pool water to your local authorized Swimpure RJ Above-Ground Pool Automation dealer and have the salt level tested. No salt test is completely accurate. The test results may vary from the salt level on the Swimpure RJ Above-Ground Pool Automation display. If salt level is low, add salt according to chart on page 4.

7. "High Salt" LED illuminated

Check salt level in pool. If salt level is too high, lower salt level by draining some of the pool water out of the pool and replace with fresh water. Continue until the salt concentration is at recommended levels.

8. "Inspect Cell" LED flashing

Inspect and clean cell according to directions on page 8. When done, press the "diagnostic" button for 3 seconds to stop the "Inspect Cell" LED flashing.

9. "Inspect Cell" LED illuminated

Remove and inspect the cell for scale. If the cell is scaled, follow the directions on page 8 for cell cleaning. If the pool has the proper amount of salt and the "Inspect Cell" LED is still illuminated, the cell may be worn and need replacement.

10. Possible causes of little or no free chlorine residual

- Swimpure RJ Above-Ground Pool Automation switch in OFF position.
- Desired Level % adjustment setting is too low.
- Low stabilizer (Cyanuric Acid).
- Filter pump switched off or filter pump time too short (8 hours for average size pools, more for large pools)
- Salt level too low (below 2500 ppm, Low Salt LED on).
- Salt level too high (High Salt LED on).
- Very warm pools increase chlorine demand--increase Desired Level % or filter runtime.
- Cold water (below 10°C (50°F)) causes Swimpure RJ Above-Ground Pool Automation to stop generating (Generating LED flashing).
- Excessive scaling on cell.
- High level of nitrogen in pool water.
- "Yellow Out" or similar treatment recently used. Some yellow algae treatments will use chlorine at a very high rate and deplete the residual free chlorine. Manually shock the pool if indicated in the directions on the algae treatment. It still may be a matter of days before the pool returns to "normal" and chlorine tests will show the desired 1-3 ppm free chlorine reading.

11. "-Pcb-" displayed and all 4 red/yellow LEDs are illuminated.

A possible Printed Circuit Board fault has been detected. Call for service.

## Limited Warranty Pool Automation & Chlorination Products

1/1/2004

This warranty statement is applicable to all pool automation and chlorination products manufactured by Goldline Controls, Inc. (Goldline) on or after January 1, 2004. See the appropriate warranty statement for other Goldline products or for pool automation and chlorination products produced prior to January 1, 2004.

Swimpure RJ Above-Ground Pool Automation - Residential pools in Canada:

Goldline warrants Swimpure RJ products (products with Goldline part numbers starting with Swimpure) installed on private, residential swimming pools within the Canada to be free from defects in material or workmanship, under normal use and service for five years from date of the initial system installation, provided it is installed in accordance with the Goldline installation instructions and specifications provided with the product. If written proof of the date of the initial system installation is not provided to Goldline, the manufacturing datecode on the Swimpure RJ Above-Ground Pool Automation electronics unit will be the sole determinant of the date of the initial system installation.

If a product is defective, in workmanship or materials and is removed and returned freight prepaid within three (3) years after the date of the initial system installation, Goldline Controls will, at its option, either repair or replace the defective product and return it freight prepaid. If the defective product is returned freight prepaid to Goldline more than three (3) years but within five (5) years of the date of the initial system installation, Goldline, at its option, will either repair or replace the defective product and will charge sixty percent (60%) of the current list price for such repairs or replacements, plus shipping charges. The costs incurred in removal and/or reinstallation of the product are NOT covered under this warranty.

Accessory Products and Replacement parts—any pools :

Goldline warrants any replacement parts or accessory products (any pool automation or chlorination product or part with a part number other than AQ-TROL) to be free from defects in material or workmanship, under normal use and service for one year from date of the initial system installation, provided it is installed in accordance with the Goldline installation instructions and specifications provided with the product. If written proof of the date of the initial system installation is not provided to Goldline, the manufacturing datecode on the product or part will be the sole determinant of the date of the initial system installation.

If a product is defective, in workmanship or materials and is removed and returned freight prepaid within one (1) year after the date of the initial system installation, Goldline will, at its option, either repair or replace the defective product and return it freight prepaid. The costs incurred in removal and/or reinstallation of the product are NOT covered under this warranty.

Warranty exclusions:

1. Material supplied or workmanship performed by others in the process of installation
2. Damage resulting from improper installation including installation on pools larger than the product rating.
3. Problems resulting from failure to operate the products in accordance with recommended instructions contained in product's owner's manual.
4. Problems resulting from failure to maintain pool water chemistry in accordance with recommended levels.
5. Problems resulting from tampering, accident, abuse, negligence, unauthorized repairs or alterations, fire, flood, lightning, freezing, external water, war, or acts of God.

THE EXPRESS LIMITED WARRANTY ABOVE CONSTITUTES THE ENTIRE WARRANTY OF GOLDLINE CONTROLS, INC. WITH RESPECT TO ITS POOL AUTOMATION AND CHLORINATION PRODUCTS AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL GOLDLINE CONTROLS, INC. BE RESPONSIBLE FOR ANY CONSEQUENTIAL, SPECIAL OR INCIDENTAL DAMAGES OF ANY NATURE WHATSOEVER. NO WHOLESALER, AGENT, DEALER, CONTRACTOR, OR OTHER PERSON IS AUTHORIZED TO GIVE ANY WARRANTY ON BEHALF OF GOLDLINE CONTROLS, INC. THIS WARRANTY IS VOID IF THE PRODUCT HAS BEEN ALTERED IN ANY WAY AFTER LEAVING THE FACTORY.

TEST	IDEAL RANGE	ADJUSTMENT REQUIRED
Free available chlorine	1.0 - 3.0 ppm	Turn output dial up to increase, down to decrease OR increase or decrease pump filtration time.
pH	7.2 - 7.8	Too high - add muriatic acid Too low - add soda ash
Total alkalinity	100 - 120 ppm	Add baking soda to increase Add acid as required to decrease

### Questions?

Visit your local Authorized Swimpure RJ Above-Ground Pool Automation Dealer or call 1-888-238-7665 (POOL) for assistance.

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