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# User's Manual

**For Installation Instructions, See Pages 2 – 4**

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## IMPORTANT SAFETY INSTRUCTIONS

### READ AND FOLLOW ALL INSTRUCTIONS

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.



#### **WARNING**

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

- ONLY A QUALIFIED TECHNICIAN SHOULD INSTALL AND SERVICE POOL THING®.
- USE EXTREME CAUTION WHEN OPENING CONTROL BOX. HIGH-VOLTAGE EXPOSED PARTS INSIDE. ALWAYS DISCONNECT POWER SOURCE BEFORE OPENING.
- To reduce risk of injury, do not permit children to use this device.
- Do not dismantle the electrodes, detach them from the end-cap or cut the electrode wire. Be cautious of their sharp edges.
- For continued protection against fire, only replace with a slow-blow fuse of the same type and rating.
- Do not modify POOL THING® in any way. Any modifications could be hazardous and will void the warranty.
- UNIT MUST NEVER BE MOUNTED INLINE WITH DRINKING WATER SUPPLIES.
- A BONDING CONDUCTOR not smaller than No.8 AWG (8.4mm<sup>2</sup>) must be connected from the grounding lug found beneath the control box to a similar lug on the pump motor, which must be connected to all metal parts. POOL THING® must be wired in accordance with NFPA 70 standards.
- COMMERCIAL POOL OPERATORS MUST COMPLY WITH ALL STATE AND LOCAL REGULATIONS.
- SAVE THESE INSTRUCTIONS!

# INSTALLATION OF POOL THING<sup>®</sup> CONTROL BOX

## INCLUDED:

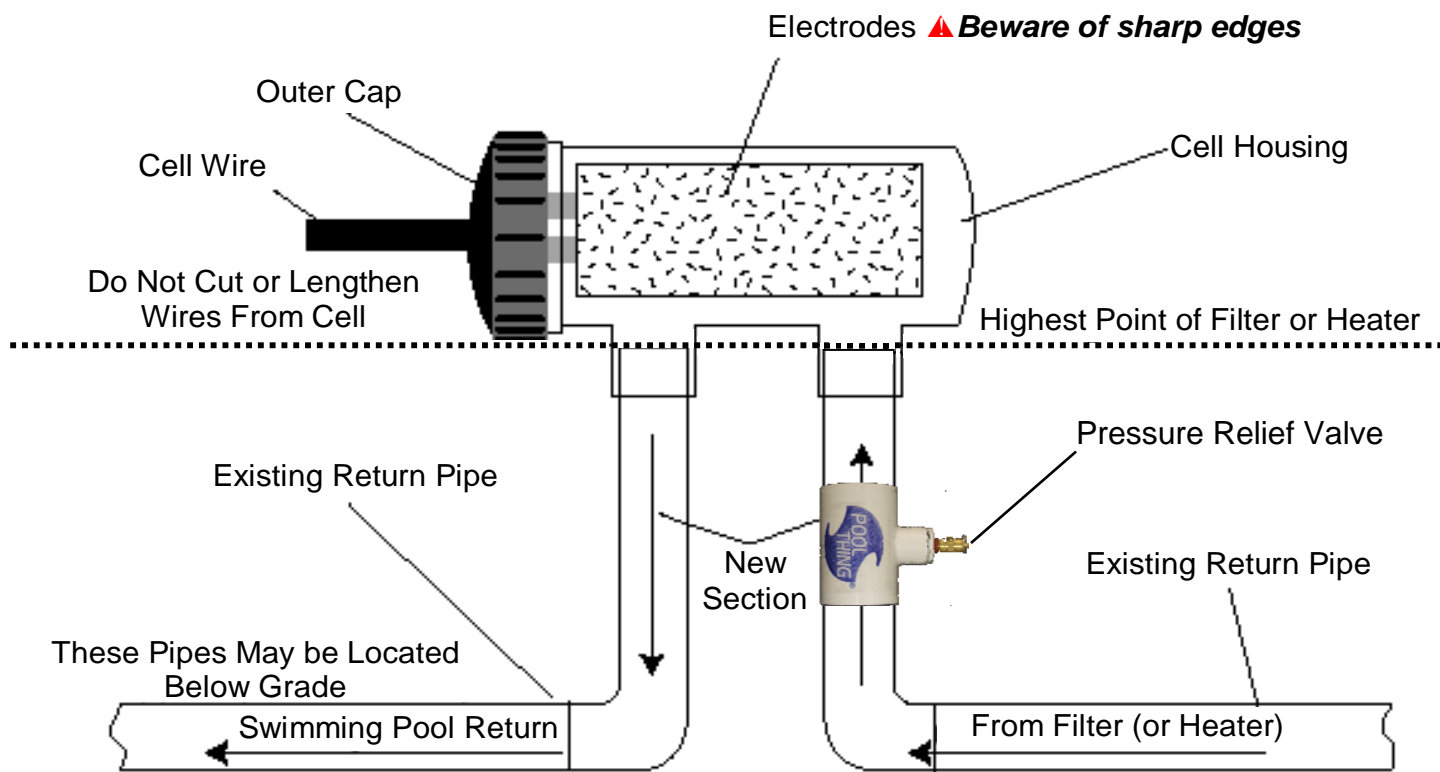
Control Unit Top (1)  
Control Unit Base (1)  
Cell Housing (1)  
Electrode Assembly and Cap (1)  
O-Ring for cell housing (1)  
User's Manual (1)  
Cleaning Tool (1)



1. Control box must be mounted within 3½ feet of **POOL THING<sup>®</sup>** cell. Wire from the cell cannot be lengthened or shortened. Doing so will damage the cell and void your warranty.
2. Control box **must** be mounted on a vertical surface. Height above the ground should be enough to comfortably read the controls, but not so high as to cause tension on the cell wire. **Never mount the control box above combustible material.**
3. Control box must be mounted with the appropriate wall anchors for your wall. Keyholes in the back of the control box are 16 inches apart, center-to-center, and approximately ¼ inch in diameter. Drill holes in mounting surface in a level line and fasten screws leaving the heads about 1/8" from wall. Line up keyholes over screw heads and rest control box on the screws, pulling down until securely seated.
4. The cell cord comes pre-wired with a plug, which will fit directly to the plug located at the bottom left side of the power supply. Please note that the cell cap is installed at the factory directly on the cell cord. The power cord comes pre-wired, with a 6 foot cord, designed to go directly to the power source. Should the unit come wired for 110V, it will have a 3 prong plug fastened to the terminated end of the power cable for use with a controller.
5. **▲** Locate the power cord. The power cord **must** be wired into the swimming pool timer box or pump junction box with the appropriate wiring **BY A QUALIFIED ELECTRICIAN—FAILURE TO DO SO COULD CAUSE SERIOUS INJURY OR DEATH. WIRING MUST BE IN ACCORDANCE WITH NFPA 70** to a 110-120/208-240V (note appropriate voltage on unit label) 6A 50-60Hz single-phase electrical circuit *active only when pump is running*.

**For questions, please call 1-877-NO WORRIES (1-877-669-6774).**

# INSTALLATION OF POOL THING® CELL



1. Turn all pumps, heaters and electricity near the installation OFF.
2. **POOL THING® must** be installed in the water return line of your pool system, after the filter and heater (if fitted). **POOL THING®'s cell housing must** be located on a plane above the highest point of the filter or heater, whichever is taller, if a gas or electric heater is present in your system. The **POOL THING® cell must** be mounted no more than 3½ feet from the control box. **The wiring from the cell housing to the control box MUST NOT be lengthened or shortened (doing so will damage the unit and void your warranty).**
3. Note the arrows and the orientation of the cell housing in the above illustration. This indicates the correct water flow direction for your **POOL THING®**.
4. All fittings are 2-inch. You should use Schedule 40 PVC pool pipe with the NSF mark. If your pool equipment uses 1½-inch piping, mount 2-inch to 1½-inch reducers at the cell housing, otherwise use 2-inch PVC pipe (enough to locate the unit above the highest point of filter or heater) and two 2-inch PVC elbows. For gluing, use only Schedule 40 PVC type cement with the NSF mark.
5. Measure and cut the PVC pipe to the correct height and glue into the cell housing. Locate the elbows to fit in your particular return line and fit into the ends of the pipe **WITHOUT GLUING**. Measure and cut the return line. Fit the cell housing assembly to the return line and check for proper fit and level. When satisfied with all connections, glue into place.

⚠ If a shutoff valve is installed after the cell housing, a Pressure Relief Valve (see page 12) **must** be installed as shown. Housing is not designed for the high pressure created by such a valve and could cause the housing to burst resulting in serious injury or death. Damage caused by a shutoff valve located downstream from the cell housing without the installation of a Pressure Relief Valve is not covered by the warranty.

NOTE: Plumbing installations vary. If you have any questions involving installation, please call, toll free, 1-877-NO WORRIES (1-877-669-6774) and speak with a technician.

# POOL THING<sup>®</sup> CONTROL UNIT LAYOUT & OPERATION



Be certain that all salt has been dissolved.

Verify pool water chemistry.

Verify that the system is properly connected and that salt is at proper levels (see page 7).

Turn ON pool pump and set pool timer for desired run time.

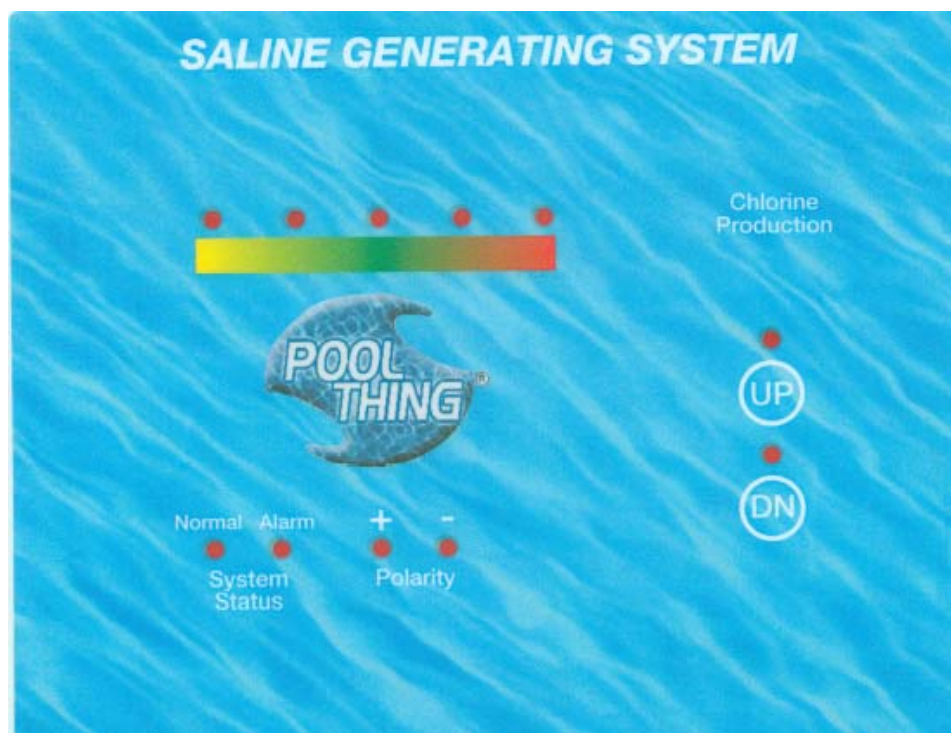
Turn ON control unit by switching the unit ON (switch glows red). Red light will remain on during filter pump operation. If light does not come on, turn off unit and check circuit breaker located below the on-off switch and all connections. The breaker is reset by simply pushing the rocker up.

Using a standard test kit, measure the level of chlorine in the pool. Adjust the output using the “UP” and “DN” buttons (see page 5) and test daily until the desired level of chlorine production is reached and maintained.

Chlorine production is also affected by changes in pump operating time. Shorter run times will produce less chlorine. The desired level of measurable chlorine is 2 – 3ppm for pools and 3 – 5ppm for spas. For Residential use, a good rule of thumb for run times is 4 – 6 hours in winter, 6 – 8 in spring/fall and 8 – 12 hours in summer or at least 1 hour for each 10 degrees of temperature (use the higher of water or air temperature). Commercial pool-and spa-pump and filtration systems must run 24 hours a day.

If you ever need to super-chlorinate your pool (after a power failure or algae bloom, for instance), touch the “UP” button repeatedly until all five lamps are lit and run pump for 24 hours. Check chlorine level.

# THE POOL THING® DISPLAY



The **POOL THING®** Display, located on the front left of your control unit, will give you the most information about the operation of your system. The Display provides information about Chlorine Production, system polarity and status. Output is increased by repeatedly touching the “UP” button. The lamp above the button will flash each time you touch it to indicate that your touch has been recognized and one additional lamp in the Chlorine Production row will illuminate, indicating increased production, until all five are lit. Touching the “DN” button repeatedly will display a correspondingly lower reading. If lamps are illuminated only in the yellow zone, insufficient sanitizer may be produced to satisfy the needs of your pool, spa or water feature. Touch the “UP” or “DN” button repeatedly to reach the desired output level and watch the lamps for proper setting.

**Never** run the system for long periods with all five lamps lit into the red zone.

Note that there is a 2-minute startup period during which the Chlorine Production lamps will flash and **will not** respond to touching the up or down buttons. During this period, the left System Status lamp will flash rapidly. After the startup period, the lamp will blink slowly—about once per second—indicating normal operation. **Please wait at least two-minutes before making an adjustment** until the lamps across the top are no longer flashing. This is a rough estimate that your salt concentration is accurate (the display is temperature sensitive and when water temperature is below 70 degrees Fahrenheit [20 degrees Celsius] the lights may not reach past the green area). Salt test strips are the most convenient way of testing for salt level. If after the startup period some Chlorine Production lamps are still flashing, this is an indication of a problem that may be due to low salinity, low temperature or other condition. The system will continue to produce sanitizer at the level indicated by the steadily burning lights.

The Display reading is crucial to troubleshooting the system if the need arises. If you are unable to troubleshoot the problem call 1-877-NO WORRIES with your question. It is helpful, in troubleshooting, to know the salt content and basic chemistry levels so that our technicians may successfully diagnose any problems.

## MAINTENANCE AND CLEANING

Operate your filtration and sanitizing system at least 4 – 6 hours **per day** in winter, 6 – 8 hours in spring and fall and 8 – 12 hours in summer. Another way to look at this is **at least** 1 hour of run time daily for each 10 degrees of temperature (use the higher of water or air temperature).

Check and clean your cell electrodes regularly. They are comprised of extremely expensive coatings. Failure to do this will cause drastically reduced life and lower chlorine output.

During the first two weeks of operation, check your cell periodically for accumulation on the electrodes. This will enable you to determine the required cleaning period. **POOL THING®**'s cell *must* be cleaned before accumulation builds up to the point where the spaces between the electrodes in the cell are closed up.

To clean, switch off the filter pump and **POOL THING®** power supply. Unscrew the large, round, black, ribbed plastic cap of the cell housing (leaving the O-ring in place) and **carefully** withdraw the electrodes.

Clean the cell as needed by pushing the supplied **POOL THING®** wood tool between the plates and spraying with a water jet from a garden hose to remove most of the calcium. For a "like-new" result, carefully prepare a solution of 3 parts water into which 1 part Muriatic Acid is added. **ALWAYS ADD ACID TO WATER AND NEVER ADD WATER TO ACID.** **Slowly** lower the cell into the solution to reduce foaming and spillover. The solution becomes dilute and less effective with use due to the calcium carbonate left behind by the cleaning action. When it stops working, simply prepare a fresh batch.

**▲Warning**, DO NOT exceed the concentration of Muriatic Acid recommended and under NO circumstances should pure Muriatic (30% HCl) or Hydrochloric Acid be used since higher concentrations will destroy the precious metal coatings used on the anodes. **USE OF CONCENTRATIONS ABOVE 8% HCL WILL VOID YOUR WARRANTY AND MAY BE HAZARDOUS.** DO NOT immerse wire, but ensure that the small electrode tab is clean. Call 1-877-POOLTHING to order a convenient cleaning tube sized for your **POOL THING®** cell.

In the event of a small leak: Thoroughly clean O-ring and Cell base. Carefully wipe the slot into which the O-ring fits. **DO NOT** use lubricants—they attract dirt to the O-ring which increases the likelihood of leaks. Reinstall so electrode assembly is vertical and small metal tab is at the top. The cap is keyed to the housing and should slide in easily. **KEEP O-RING, BASE AND THREADS CLEAN TO AVOID JAMS AND LEAKS. DO NOT OVER TIGHTEN CAP.**

Turn ON pump and **POOL THING®**.

Check and adjust display reading on power supply.

Check for water leaks around cell cap. **Hand tighten** if necessary. If water is still leaking, re-seat electrode cell and O-ring. Be sure cap screws on easily and is not cross-threaded. **DO NOT over-tighten or use any tool.**

## Salt and Stabilizer Chart.

Locate the number of pounds to add at intersection of pool size and current ppm to achieve 5,000ppm of salt and 80ppm of Cyanuric Acid.

Current Salinity	Pool Size in Gallons								
	10,000	12,000	14,000	16,000	18,000	20,000	22,000	24,000	26,000
0ppm	417	500	584	667	751	834	917	1,000	1,084
750ppm	354	425	496	566	637	708	779	850	920
1,000ppm	333	400	466	533	600	666	733	800	866
1,500ppm	292	350	408	466	525	583	641	700	758
2,000ppm	250	300	350	400	450	500	550	600	650
2,500ppm	208	250	292	333	375	417	458	500	541
3,000ppm	167	200	233	267	300	333	367	400	433
3,500ppm	125	150	175	200	225	250	275	300	325
4,000ppm	83	100	117	133	150	167	183	200	217
4,500ppm	42	50	58	67	75	83	92	100	108
Current CYA	10,000	12,000	14,000	16,000	18,000	20,000	22,000	24,000	26,000
0ppm	6.7	8.0	9.4	10.7	12.0	13.4	14.7	16.0	17.4
10ppm	5.8	7.0	8.1	9.4	10.5	11.7	13.0	14.0	15.1
20ppm	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0
30ppm	4.2	5.0	5.9	6.7	7.5	8.4	9.2	10.0	10.9
40ppm	3.3	4.0	4.6	5.4	6.0	6.7	7.3	8.0	8.6
50ppm	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
60ppm	1.7	2.0	2.4	2.7	3.0	3.4	3.7	4.0	4.4
70ppm	0.8	1.0	1.1	1.4	1.5	1.7	1.8	2.0	2.1

## TROUBLESHOOTING GUIDE

### SYMPTOM A — NUMBER OF LIGHTS ILLUMINATED CANNOT BE REDUCED

Check electrode cell for obstruction that may be bridging gap in plates. **BE CAUTIOUS OF SHARP EDGES.**

### SYMPTOM B — LIGHTS WILL NOT STAY ON (some or all lights are flashing), POWER LIGHT IS ON

Salt concentration is too low, water is cold or there is insufficient water flow through the cell causing the water probe to shut off the unit. If some LED's are flashing this means that the system is unable to reach the output level selected. The right-most flashing LED indicates the level set and the right-most LED that is steady-on indicates the level that the system is able to reach. If all illuminated LED's are steady-on the system is producing sanitizer at the desired level.

#### Remedy List

1. Adjust salt concentration to be between 4,000ppm and 5,500ppm (0.40% - 0.55%)
2. Clean cell and check pool chemistry. Make sure all electrodes are clean to base of cell.
3. Make sure the pump and timer are operating.
4. Ensure sufficient water flow through the reaction cell by checking that:
  - a) the pump is on;
  - b) the filter is not in need of backwashing;
  - c) there is not a pocket of air trapped in the top of reaction cell;
  - d) the cell is inserted properly with the tongue shaped sensor at the top.
5. **TURN THE PUMP OFF BEFORE BEGINNING THIS STEP!!!**  
Make sure that all electrical connections from the cell to the control unit are making solid contact.
6. Add one (1) 50lb. bag of salt and run the pump for one hour with the unit off. Now turn **POOL THING®** on. If the lights are still in the yellow zone, add another 50lb. bag of salt and repeat the process. If you have added more than 3 bags of salt and the lights are still in the yellow zone, call 1-877 NO WORRIES toll-free and a technician will help you.

### SYMPTOM C — POOL THING® STOPS WORKING, POWER LIGHT IS OFF

#### Remedy List

1. Check control unit to determine if unit is on. Be sure Time Clock is ON. Press switch, if it is working it will light up "RED".
2. Check cell and clean if necessary
3. Check Circuit Breaker and reset by pressing the top of rocker switch if necessary.
4. Check all circuit breakers at house. If breaker is tripped, turn it off and then on. If it trips again, call a licensed electrician.
5. If unit is still not functioning, call 1-877-NO WORRIES toll-free to speak with a technician. Please note the condition of the System Status lights when the power (and pump) is on. These will provide important information to the technician.

# POOL THING® LIMITED RESIDENTIAL WARRANTY

This limited warranty is applicable to all **POOL THING®** Saltwater Chlorination systems installed for residential use. For purposes hereof, the term "residential use" shall be deemed to mean use of the Unit within any pool installed for personal use at a single family home, but only if the Unit is regularly operated for no more than twelve (12) hours per day. **IF ANY UNIT INSTALLED FOR PERSONAL USE AT A SINGLE FAMILY HOME IS REGULARLY OPERATED FOR MORE THAN TWELVE (12) HOURS PER DAY FOR ANY EXTENDED TIME PERIOD (WHICH SHALL INCLUDE WITHOUT LIMITATION ANY USE OF THE UNIT FOR MORE THAN TWELVE (12) HOURS PER DAY FOR ANY PERIOD IN EXCESS OF 5 CONSECUTIVE DAYS IN ANY 60-DAY PERIOD), SUCH UNIT SHALL BE DEEMED TO HAVE BEEN INSTALLED FOR COMMERCIAL USE, IN WHICH EVENT THE "POOL THING® LIMITED COMMERCIAL WARRANTY" (ATTACHED) SHALL APPLY TO SUCH PURCHASE AND INSTALLATION AND SHALL SUPERSEDE THE TERMS AND CONDITIONS CONTAINED HEREIN.**

This limited warranty is subject to the following terms, conditions and exclusions:

1. This limited warranty shall only apply to the original purchaser (referred to herein as the "Customer") and is not transferable to any subsequent purchaser, assignee, transferee or other recipient of the Unit.
2. For a Unit installed for residential use after 1 January 2008, APJ Corporation (hereinafter referred to as "APJ"), warrants all parts (with the exception of the O-ring, which is a normal replacement item and excluded from this warranty) to be free from manufacturing defects in materials and workmanship for a period of five years from date of purchase from APJ or an authorized Pool Thing dealer, subject to the Customer's satisfaction of its contribution obligation set forth in Paragraph 3, below (which applies only after the first full year of the five-year warranty period). All warranty claims are subject to the Customer's compliance with all applicable requirements set forth in this limited warranty, including the Customer's obligation to ship the unit (with shipping charges prepaid) to an APJ authorized service representative (as described in Paragraph 9, below).
3. In the first year of the five-year warranty period, APJ will repair or replace any parts in the Unit that are confirmed to have been defective at no cost to the Customer. In the years 2-5 of the warranty period, APJ will repair or replace any parts in the Unit that are confirmed to have been defective, provided the Customer shall be required to pay a portion, equal to the Applicable Percentage (as determined below for each applicable month) of the Manufacturer's Suggested Retail Price (MSRP) for the defective part being repaired or replaced, as a condition precedent to APJ's obligation to repair or replace such defective part. The Applicable Percentage shall be determined as follows and adjusted monthly (or portion thereof) by 1.7%:

<b>Months Thirteen through Twenty-Four of the Warranty Period:</b>	<b>Twenty Percent (20%) to Thirty-Eight point Seven Percent (38.7%) of MSRP</b>
<b>Months Twenty-Five through Thirty-Six of the Warranty Period:</b>	<b>Forty Percent (40%) to Fifty-Eight point Seven Percent (58.7%) of MSRP</b>
<b>Months Thirty-Seven through Forty-Eight of the Warranty Period:</b>	<b>Sixty Percent (60%) to Seventy-Eight point Seven Percent (78.7%) of MSRP</b>
<b>Months Forty-Nine through Sixty of the Warranty Period:</b>	<b>Eighty Percent (80%) to Ninety-Eight point Seven Percent (98.7%) of MSRP</b>
4. This limited warranty is solely for the replacement of defective parts as hereafter provided. APJ reserves the right to replace defective parts with new or refurbished parts at its sole discretion. All warranty replacement parts furnished by APJ will carry a warranty against manufacturing defects for the greater of: (i) 30 days from the date of installation, or (ii) the balance of the original five-year warranty period on the part replaced. Failed parts must be returned to APJ for examination and replacement at purchaser's sole cost and expense to determine whether failure is due to manufacturer defect or other cause.
5. This limited warranty is applicable only if the unit is installed, operated and maintained in accordance with the procedures outlined in the Pool Thing User's Manual. Failure to do so will void this limited warranty.
6. Pool water must be tested regularly in order to properly maintain its chemical balance. Problems or equipment failures resulting from the failure to maintain pool water chemistry in accordance with guidelines set forth in the User's Manual will void the warranty. Customer releases APJ and holds APJ harmless from any and all claims attributable in whole or in part to their failure to comply with the foregoing guidelines concerning maintenance of pool chemistry.
7. Without limiting the generality of any of the waivers contained within this limited warranty, this limited warranty applies only to equipment failures due to manufacturing defects and explicitly does not apply to any injury, loss, damage, defect, or malfunction of the unit or failure to function caused by, or attributable to, among other things, any of the following: low salinity, copper chemical damage, improper handling, improper storage, abuse, unauthorized or improper installation, unsuitable application of the unit, lack of reasonable and necessary maintenance, winter freezing, operation not in accordance with the User's Manual, failure to follow all safety instructions or precautions, improper valve locations, excessive pressure, repairs made or attempted by anybody other than APJ or one of its authorized representatives, or Acts of God. The determination of the cause of any failure shall be made solely by APJ.
8. This limited warranty shall be void if Customer modifies the Unit in any respect including, but not limited to the use of parts other than genuine Pool Thing parts.
9. APJ's authorized representative will repair or replace, at its option, a Unit or part proved to be defective within the warranty periods and under the conditions of this limited warranty. This limited warranty is void if the control unit has been tampered with (there are no user serviceable parts inside). The Customer must arrange prepaid shipping for servicing of the warranted items or under APJ's instruction after proper authorization (call 1-877-NO WORRIES). No packages will be accepted without an APJ issued Returned Merchandise Authorization (RMA).
10. APJ is not responsible for (i) the removal of the Unit, (ii) damages due to such removal, (iii) any other expenses incurred in transporting the Unit (or parts of the Unit) to or from an authorized Pool Thing service center, nor (iv) the reinstallation of the repaired or replacement Unit or parts at Customer's location. All such costs shall be the sole responsibility of the Customer.
11. In no event shall APJ be liable for incidental or consequential damages of any nature or kind from damages to persons or property, including any damage resulting from the use of Pool Thing with a substandard or improperly installed pool circulation system.
12. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH OTHER WARRANTIES ARE DISCLAIMED EXCEPT TO THE EXTENT OF ANY IMPLIED WARRANTY IMPOSED BY STATE CONSUMER LAW WHICH MAY NOT BE WAIVED UNDER THE TERMS OF AN EXPRESS LIMITED WARRANTY. TO THE FULLEST EXTENT PERMITTED BY LAW, ANY SUCH IMPLIED WARRANTY IMPOSED BY STATE CONSUMER LAW SHALL BE LIMITED IN DURATION TO ONE (1) YEAR FROM DATE OF PURCHASE.
13. Some states do not allow limitations on how long an implied warranty lasts, prohibit the exclusion or limitation of incidental or consequential damages, or impose limitations on the scope of implied or express warranties (and the waivers therein) that may be inconsistent with the express limitations set forth in this warranty. In such states, the above limitations may not apply to you, or their application to you may be limited. This limited warranty shall be enforceable to the fullest extent permitted by applicable federal, state and local law. This limited warranty is valid only in the United States of America and Canada, and does not apply to Pool Thing units sold or installed in any other country.

# POOL THING® LIMITED COMMERCIAL WARRANTY

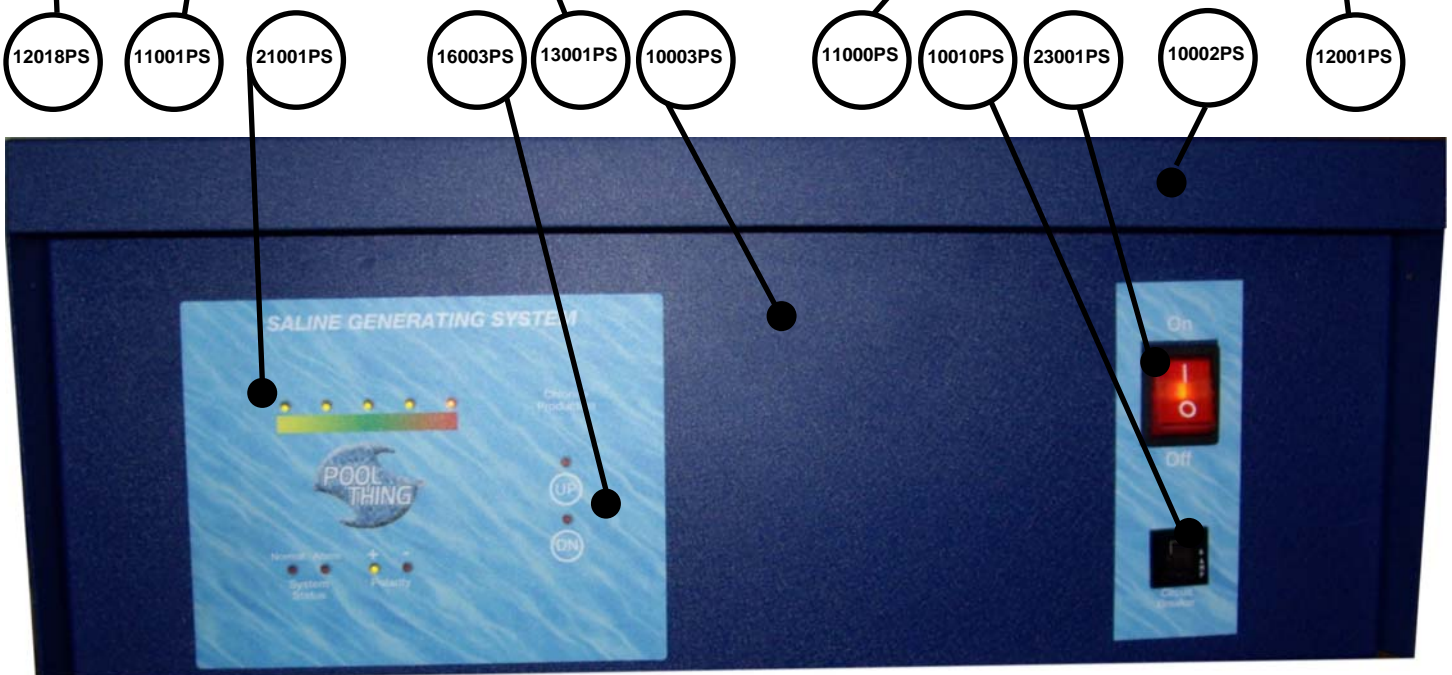
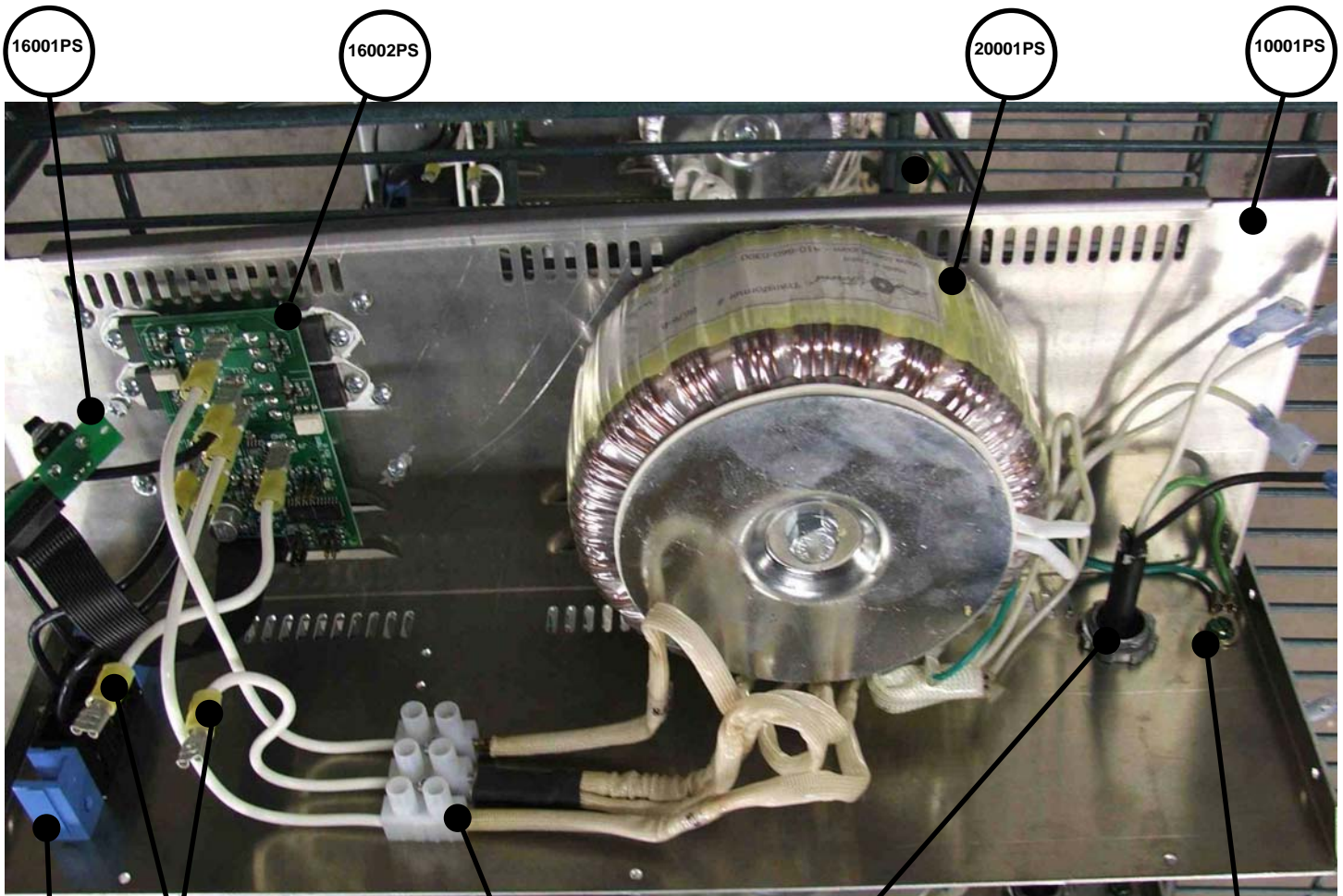
This limited warranty is applicable to all **POOL THING®** Saltwater Chlorination systems installed for commercial use after 1 May 2008. For purposes hereof, the term "commercial use" shall be deemed to include (i) use of the unit within any non-residential pool, including but not limited to commercial, semi-public and public pools, and (ii) use of the unit as part of a residential installation where the unit is regularly operated for more than 12-hours per day for an extended time period. For a commercial use, APJ Corporation (hereinafter referred to as "APJ"), warrants all parts (with the exception of the O-ring, which is a normal replacement item and excluded from this warranty) to be free from manufacturing defects in materials and workmanship for a period of three-years from date of purchase from APJ or an authorized Pool Thing dealer.

This limited warranty is subject to the following conditions and exclusions:

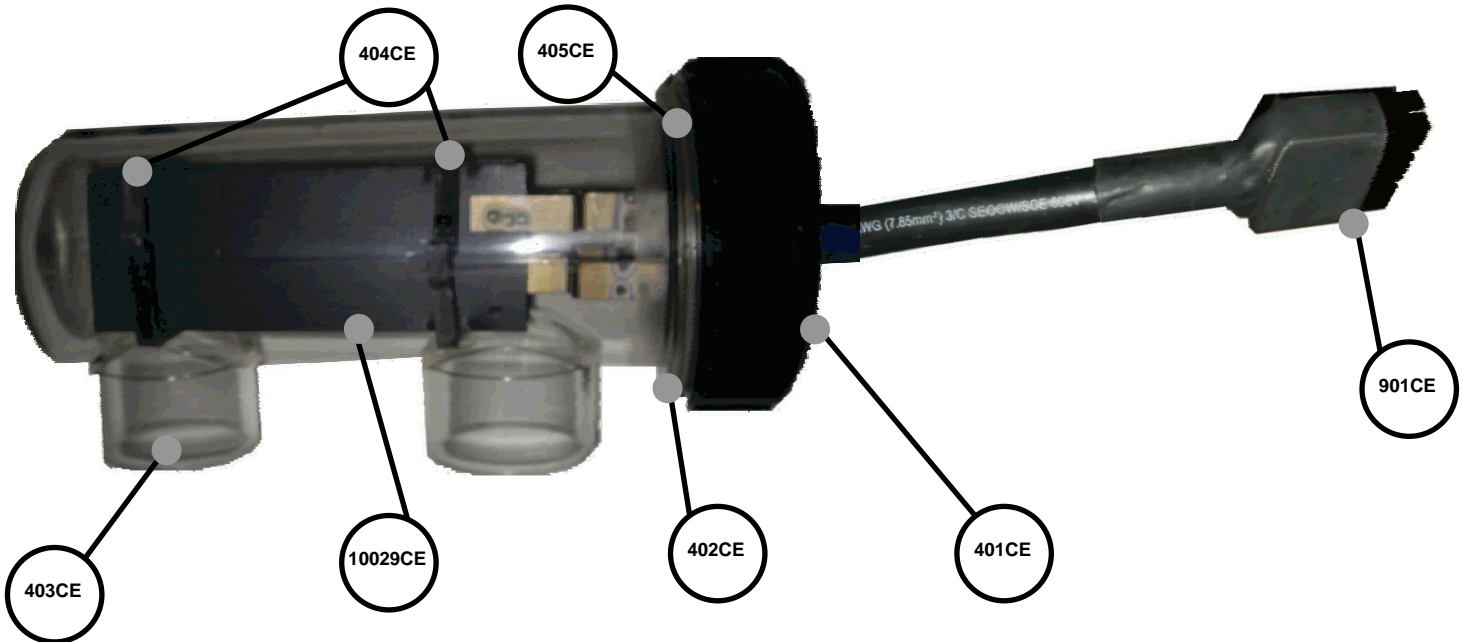
1. This limited warranty shall only apply to the original purchaser and is not transferable to any subsequent purchaser, assignee, transferee or other recipient of the Unit.
2. In the first year of the three-year warranty period, APJ will repair or replace any parts in the Unit that are confirmed to have been defective at no cost to the Customer. In the years 2-3 of the warranty period, APJ will repair or replace any parts in the Unit that are confirmed to have been defective, provided the Customer shall be required to pay a portion, equal to the Applicable Percentage (as determined below for each applicable month) of the Manufacturer's Suggested Retail Price (MSRP) for the defective part being repaired or replaced, as a condition precedent to APJ's obligation to repair or replace such defective part. The Applicable Percentage shall be determined as follows and adjusted monthly (or portion thereof) by 2.8%:  

**Months Thirteen through Twenty-Four of the Warranty Period: Thirty-Three point Three Percent (33.3%) to Sixty-Three point Nine Percent (63.9%) of MSRP**  
**Months Twenty-Five through Thirty-Six of the Warranty Period: Sixty-Six point Seven Percent (66.7%) to Ninety-Seven point Two Percent (97.2%) of MSRP**
3. This limited warranty is solely for the replacement of defective parts. APJ reserves the right to replace defective parts with new or refurbished parts at its sole discretion. All warranty replacement parts furnished by APJ will carry a warranty against manufacturing defects for the greater of: (i) 90 days from the date of installation, or (ii) the balance of the original one-year warranty period on the part replaced. Failed parts must be returned to APJ for examination and replacement at purchaser's sole cost and expense to determine whether failure is due to manufacturer defect or other cause.
4. This limited warranty is applicable only if the unit is installed, operated and maintained in accordance with the procedures outlined in the Pool Thing User's manual. Failure to do so will void this limited warranty.
5. Pool water must be tested regularly in order to properly maintain its chemical balance. Problems or equipment failures resulting from the failure to maintain pool water chemistry in accordance with guidelines set forth in the User's manual will void the warranty. Customer releases APJ and holds APJ harmless from any and all claims attributable in whole or in part to their failure to comply with the foregoing guidelines concerning maintenance of pool chemistry.
6. Without limiting the generality of any of the waivers contained within this limited warranty, this limited warranty applies only to equipment failures due to manufacturing defects and explicitly does not apply to any injury, loss, damage, defect, or malfunction of the unit or failure to function caused by, or attributable to, among other things, any of the following: low salinity, copper chemical damage, improper handling, improper storage, abuse, unauthorized or improper installation, unsuitable application of the unit, lack of reasonable and necessary maintenance, winter freezing, operation not in accordance with the User's Manual, failure to follow all safety instructions or precautions, improper valve locations, excessive pressure, repairs made or attempted by anybody other than APJ or one of its authorized representatives, or Acts of God. The determination of the cause of any failure shall be made solely by APJ.
7. This limited warranty shall be void if Customer modifies the Unit in any respect including, but not limited to the use of parts other than genuine Pool Thing parts.
8. APJ's authorized representative will repair or replace, at its option, a unit or part proved to be defective within the warranty periods and under the conditions of the warranty. Warranty is void if the control unit has been tampered with (there are no user serviceable parts inside). The customer must arrange prepaid shipping for servicing of the warranted items or under APJ's instruction after proper authorization (call 1-877-NO WORRIES). No packages will be accepted without an APJ issued Returned Merchandise Authorization (RMA).
9. APJ is not responsible for (i) the removal of the unit, (ii) damages due to such removal, (iii) any other expenses incurred in transporting the unit (or parts of the unit) to or from an authorized APJ service center, nor (iv) the reinstallation of the repaired or replacement unit or parts at customer's location. All such costs shall be the sole responsibility of the consumer.
10. In no event shall APJ be liable for incidental or consequential damages of any nature or kind from damages to persons or property, including any damage resulting from the use of Pool Thing with a substandard or improperly installed pool circulation system.
11. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH OTHER WARRANTIES ARE DISCLAIMED EXCEPT TO THE EXTENT OF ANY IMPLIED WARRANTY IMPOSED BY STATE CONSUMER LAW WHICH MAY NOT BE WAIVED UNDER THE TERMS OF AN EXPRESS LIMITED WARRANTY. TO THE FULLEST EXTENT PERMITTED BY LAW, ANY SUCH IMPLIED WARRANTY IMPOSED BY STATE CONSUMER LAW SHALL BE LIMITED IN DURATION TO ONE (1) YEAR FROM DATE OF PURCHASE.
12. Some states do not allow limitations on how long an implied warranty lasts, prohibit the exclusion or limitation of incidental or consequential damages, or impose limitations on the scope of implied or express warranties (and the waivers therein) that may be inconsistent with the express limitations set forth in this warranty. In such states, the above limitations may not apply to you, or their application to you may be limited. This limited warranty shall be enforceable to the fullest extent permitted by applicable federal, state and local law. This limited warranty is valid only in the United States of America and Canada, and does not apply to Pool Thing units sold or installed in any other country.

# POWER SUPPLY PARTS



# POOL THING® CELL DIAGRAM C390RS



## PART NUMBERS & DESCRIPTIONS

10001PS	Aluminum Base and Back
10002PS	Steel Top
23001PS	Illuminated Switch
20001PS	Power Transformer 110-120/208-240V Single Phase
11000PS	Power Cord
16002PS	Reversing Control Printed Circuit Board
16001PS	Output Control Circuit Board
11001PS	Display Leads
13001PS	Secondary Terminal Block
12018PS	Output Connector
10010PS	Circuit Breaker
12001PS	Grounding Lug
10003PS	Steel Front Panel
21001PS	Output Display
16003PS	Output Control Buttons
901CE	Cell Connector
401CE	Cell Cap
405CE	Cell Base
403CE	Cell Housing
10028CE	(C260—not shown) 3 cathode plates 2 anode plates C260RS contains 3 dual-function plates and 2 spacers
10029CE	(C390—RS shown) 4 cathode plates 3 anode plates C390RS contains 5 dual-function plates and 2 spacers
10030CE	(C520—not shown) 5 cathode plates 4 anode plates C520RS contains 7 dual-function plates and 2 spacers
404CE	Electrode Spacers (3 on static models, 2 on reversing polarity models)
402CE	O-Ring

## CONTACTING THE POOL THING® HELP LINE

When contacting our technical support department, please have the following information available to discuss:

- ♦ The model number of the unit you have, your serial number (both found on the underside of the control unit), proof of purchase, its application, the number of hours run daily and the size of your pool in gallons.
- ♦ The Total Chlorine, Free Chlorine, pH, Alkalinity, Total Hardness and Stabilizer levels in your pool.
- ♦ The salt concentration.
- ♦ The meter reading with your system switched on and the Control Knob turned all the way to the right (clockwise).

Technical Support is available toll-free at 1-877-NO WORRIES (1-877-669-6774) or by e-mail to [service@poolthing.com](mailto:service@poolthing.com). We are always interested in your questions, comments and suggestions.

## POOL THING® LOW MAINTENANCE SYSTEM NOTES

If you have a Low Maintenance system, denoted by the letters “RS” in the model number, there are some additional notes you should be aware of.

The Low Maintenance system automatically sheds calcium and returns it to the pool. You may see what appears to be white powder or sand on the bottom of the pool. This is normal. The calcium on the pool bottom is harmless and should be swept up by your cleaning system.

Your Low Maintenance system will vastly reduce the number of times you must clean the cell when compared to a standard system. However, though no saltwater chlorinator will completely eliminate cleaning, your Low Maintenance system will require cleaning probably no more than two to six times a year. You need to clean only when the calcium builds up to fill the space between the plates. Accumulation on the legs is normal and is not an indication that your system needs cleaning. To clean, simply follow the instructions on Page 6 of this manual.

## POOL THING® ACCESSORIES & EQUIPMENT

**SALT TEST STRIPS** – The salt levels in your swimming pool are crucial to the efficiency and length of service of your **POOL THING®** system. We recommend Insta-Test® Sodium Chloride (Salt) High Range (Code# 2998) test strips which measure salt levels from 2,000 to 6,000 ppm in just 30 seconds. To purchase the Insta-Test® Salt Strips from a local Insta-Test® Strip Retailer in your area go to [www.lamotte.com/insta](http://www.lamotte.com/insta) then to the Insta-Test Retail locator (<http://lamotte.com/pages/pool/instdeal/index.html>) and just click your state or region on the Retail Locator Map. For commercial pools, monthly testing is recommended.

**POOL THING® ELECTRONIC SALT TESTER** – This electronic device gives an accurate salinity reading in just a few seconds. It may be used regularly for years. It is especially useful for commercial pool operators and pool service companies.

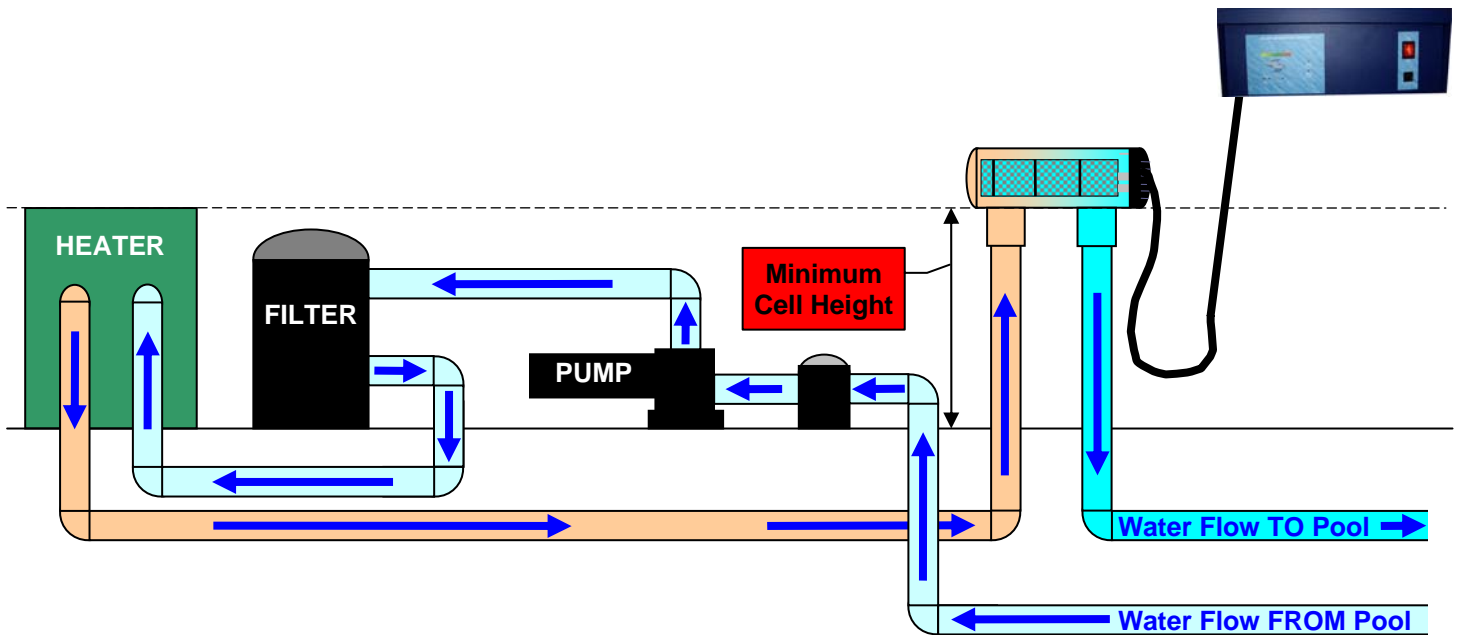
**Pressure Relief/Vacuum Breaker Valve:**



This valve opens automatically at a set point below the rated pressure limit of the cell housing to relieve pressure built up due to a flow restriction of any kind. It is also a vacuum release valve that may be manually opened to relieve pressure and ease in the removal of the cell for cleaning and maintenance. It is installed before the Cell Housing and before any isolation valves. It may be installed in the vertical pipe exiting from the Cell Housing (see page 3).

For information on any of the above items, please call 1-877-POOLTHING (1-877-766-5844) or e-mail to [info@poolthing.com](mailto:info@poolthing.com).

# POOL THING® INSTALLATION LAYOUT SCHEMATIC DRAWING



## POOL THING® LISTING DATA FOR COMMERCIAL UNITS



ANSI/NSF STANDARD 50  
Swimming Pools, Spas, and Hot Tubs  
-Circulation System Components



APJ CORPORATION  
7750 EAST GELDING DRIVE  
SUITE 1  
SCOTTSDALE, AZ 85260-6972  
480-922-0484

Facility: SCOTTSDALE, AZ

### In-Line Electrolytic Chlorinator Process Equipment

Pool Thing®[1]

C260C[2] [5]

C390C[3] [5]

C520C[4] [5]

[1] NSF Listed units have a beginning serial number of 00520, are Certified for Pool & Spa end use, and have a maximum operating pressure of 75 psi.

[2] Maximum output 1.1 lbs/day.

[3] Maximum output 1.6 lbs/day.

[4] Maximum output 2.1 lbs/day.

[5] NSF Listed units meet the requirements of UL 1081.



UL STANDARD 1081  
Swimming Pool Pumps,  
Filters, and Chlorinators



Pool Thing®  
C130CS  
C130RS  
C260CS[1]  
C260RS  
C390CS[1]  
C390RS  
C520CS[1]  
C520RS

[1] NSF Listed units meet the requirements of NSF/ANSI 50.