

Automatic Bromine Generator

For Spa Sanitizing

Installation/Operation Manual (Canada) DOMESTIC

Retain this manual for future reference

All statements, technical information and recommendations in this manual and in any guides or related documents are believed reliable, but the accuracy and completeness therefore are not guaranteed or warranted and they are not intended to be nor should they be understood to be representations or warranties concerning the products described.

This **GENESIS** Automatic Bromine Generator has been designed to be used exclusively on residential spas under 1900 liters in noncommercial applications. Pioneer H2O Technologies will not be responsible for any liabilities, product warranties and/or claims that arise as a result of this system being used for a commercial application.

Genesis Automatic Bromine Generator For Spa Sanitizing

DOMESTIC

READ THE LABEL AND OPERATION/INSTALLATION MANUAL BEFORE USING.

A MINIMUM OF 3 PPM BROMINE MUST BE MAINTAINED.

Maximum output of Hypobromus Acid equivalent to 20 g of bromine per day

AUTOMATIC BROMINE GENERATOR MODEL GENESIS

Controls Bacteria and Algae in Spa Water

One Genesis Automatic Bromine Generator unit can treat a maximum of 1900 Litres of spa water.

WARNING: Operating the Genesis Automatic Bromine Generator without water flow through the cell can cause a build up of flammable gases which can result in FIRE or EXPLOSION.

TESTED AND LISTED TO ANSI/UL - STD. 1081 5TH ED. AND CAN/CSA STD. C22.2 NO .0

REGISTRATION NO. 27890 PEST CONTROL PRODUCTS ACT

Pioneer H2O Technologies Inc, 3265 S. Wadsworth Blvd, Unit "I" Lakewood, Colorado 80227 USA CUSTOMER HELP DESK 1-877-569-4377

KEEP OUT OF REACH OF CHILDREN

RECORD THE FOLLOWING INFORMATION!

Do Not Lose These Doc	cuments - They may be required in the future	
Installer:		
Date of Installation:		
	Factory Direct Customer Assistance:	
	Toll Free 1-877-569-4377	
	You can register your warranty on-line at: http://www.spapurification.com	

IMPORTANT NOTICE!

This shipment was inspected during packaging and was sent...

IN GOOD ORDER

INSPECT ALL COMPONENTS WHEN RECEIVED

Any visible damage must be noted on the freight bill at the time of delivery. In case of concealed damage, call the carrier at once and request inspection of the damage. It is important to note that transportation companies have time limits within which damage must be reported.

In the event that your Genesis is received in damaged condition, please call the Pioneer H20 Technologies, Inc. customer service line at 1-877-569-4377 for guidance in the handling of your claim.

IT IS ESSENTIAL TO PRESENT DAMAGE CLAIMS PROMTLY!

MANUFACTURED BY:
Pioneer H2O Technologies
3265 South Wadsworth Blvd
Unit I
Lakewood, Colorado 80227 USA
1-877-569-4377

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1. PRECAUTIONS

WHEN INSTALLING AND USING THIS ELECTRICAL APPLIANCE, BASIC SAFETY PRECAUTIONS MUST ALWAYS BE ADHERED TO. IT IS STRONGLY ADVISED THAT A QUALIFIED ELECTRICAL TECHNICIAN PERFORM INSTALLATION OF THIS DEVICE.

- READ AND FOLLOW ALL INSTRUCTIONS CONTAINED IN THIS MANUAL AND ON THE EQUIPMENT ITSELF.
- TO REDUCE THE RISK OF INJURY, DO NOT PERMIT CHILDREN TO USE THE APPLIANCE.
- WARNING...RISK OF ELECTRICAL SHOCK. CONNECT ONLY TO A GROUNDING TYPE RECEPTACLE
 PROTECTED BY A GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) OR A DEDICATED CIRCUIT. CONTACT A
 CERTIFIED ELECTRICIAN IF YOU CANNOT VERIFY THAT THE RECEPTACLE IS PROTECTED BY A CFCI.
- REPLACE ANY DAMAGED ELECTRICAL CORD IMMEDIATELY.
- SHOULD THIS APPLIANCE BECOME INOPERATIVE, DO NOT TRY TO CORRECT THE PROBLEM BY YOURSELF. THERE ARE NO USER-SERVICEABLE PARTS INSIDE. TURN OFF, UNPLUG THE POWER CORD, AND CONTACT YOUR DEALER.

2. THE TECHNOLOGY

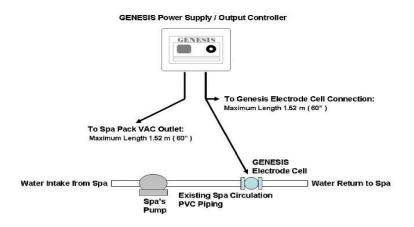
First sodium bromide (sodium bromide – "NaBr" - is the kissing cousin of sodium chloride – "NaCl" – otherwise known as table salt) is added to your spa's water. Then the dissolved bromide ions are circulated through a bromine generating contact cell located in your spa's filtration system. This converts the bromide ions into free bromine (bromine is the recommended sanitizer for hot tubs and spas) before reverting back to sodium bromide --- thus completing the perpetual cycle. Additional sodium bromide is only added when your water level declines due to splash out, or when you drain and refill the tub.

Synthetic graphite is utilized in our revolutionary electrode cell, providing a surface area far greater than available with metal electrodes. The **GENESIS** electrode is made up of 2 of these unique and powerful plates. The plates measure 1 inch wide by 8 inches long and 1/2 inch in thickness. And they fit neatly in a standard 2-inch Tee fitting.

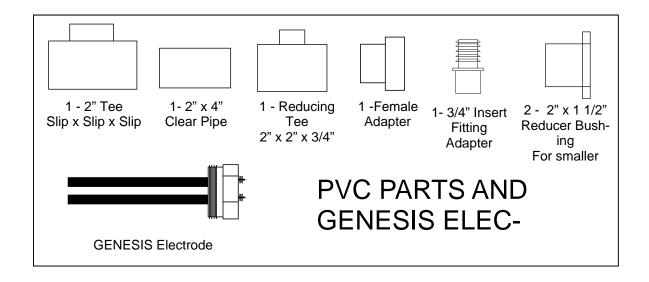
The electrodes are resistant to harsh chemicals and the oxidation process; still over time, the flow of water will erode the cell. We warranty the cell for 5 full years

The system fits neatly inside of any spa skirt and it takes a qualified technician just minutes to install! The electrode cell is mated to a simple (2") slip X slip X threaded Tee fitting and is then connected to the DC-out wires of the controller. Less than 30 watts total of DC power is then digitally pulsed across the electrode cell producing bromine from bromide salt (NaBr). Electrical cost of operation at just pennies per day.

3. SYSTEM DIAGRAM



PLUMBING AND PLACEMENT INSTALLATION DIAGRAM



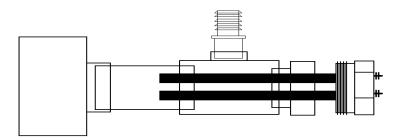
ELECTRICAL CONNECTIONS / LOAD SIDE PLUG-INS

"WARNING: Operating the Genesis Automatic Bromine Generator without water flow through the cell can cause a buildup of flammable gases which can result in FIRE or EXPLOSION."

- *Never attempt to make wired electrical connections yourself. Always have a licensed professional provide this service. (see "PRECAUTIONS" above)*
- 1. Determine input voltage: 120 or 240 V AC. Set switch located on back of circuit board to proper input position (note all units are shipped with a factory preset of 240 VAC). *Improper voltage will damage the controller!*
- 2. Securely mount the controller to a vertical surface. Make sure there is sufficient cable to accommodate wire connections between the controller, the bromine production cell and the AC power source.
- 3. The controller must be wired to the load side of the pump or pump timer. This is extremely IMPORTANT: the **GENESIS** was designed to operate and produce bromine only while your pump is circulating water. *Failure to observe usage directions may result in equipment damage.*
- 4. Use liquid tight flexible conduit between the AC power source and the controller.

NOTE: ASSEMBLE THE <u>"T" FITTING PARTS</u> PRIOR TO INSTALLATION TO AVOID LEAKAGE. USE ONLY ONE WRAP OF TEFLON TAPE ON THE THREADS OF THE ELECTRODE CAP. CAUTION: DO NOT OVERTIGHTEN CAP!

GENESIS ELECTRODE ASSEMBLY



Order of Assembly

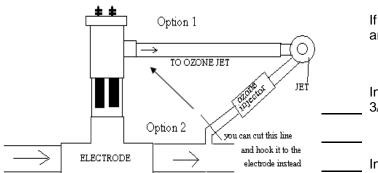
- 1. Glue 2" Tee into plumbing
- 2. Glue clear pipe into the branch of the Tee
- 3. Glue Reducer Tee with 3/4" branch positioned vertical to the ground.
- 4. Glue threaded female adapter to reducer Tee
- 5. Glue 3/4" insert fitting into the Reducing Tee
- 6. Use one turn of Teflon tape cap threads and screw in electrode with minimal torque.

IMPORTANT: MOUNT ELECTRODE HORIZONTAL TO THE GROUND

CRITICAL: AS PICTURED ABOVE THE ELECTRODE CHAMBER MUST BE POSITIONED SLIGHTLY BELOW HORIZONTAL TO THE GROUND OR AT THE THREE O'CLOCK POSITION. THE REDUCER TEE WITH THE INSERT FITTING MUST BE VERTICAL TO THE GROUND OR AT THE TWELVE O'CLOCK POSITION. THESE TWO POSITIONS ARE CRITICAL FACTORS IN ALLOWING 100% OF THE BROMINE TO FLOW BACK INTO YOUR SPA.

Electrode assembly must be properly glued with PVC glue. Electrode assembly must be installed after Pump and heater.

3/4" fitting must have PVC, flex pipe or hose connected to one of the return lines delivering water back into the spa. See below, option 1, 2, or 3. It might be necessary to install a tee in the line.



Option 1

If there an ozone unit; install a Tee before the venturi valve and attach your 3/4" hose from that Tee to the electrode Tee.

Option 2

Install a 3/4" Tee on any of the spa jets lines and attach the 3/4" hose from that Tee to the electrode Tee.

Option 3

Install a 3/4" tee in the drain line before the drain valve and attach the 3/4" line from that Tee to the electrode Tee.

FOR ILLUSTRATION ONLY: DO NOT MOUNT ELECTRODE IN A VERTICAL POSITION

CAUTION: THE BROMINE PRODUCTION CELL PRODUCES CONCENTRATED BROMINE. TO AVOID DAMAGE, **THE CELL SHOULD ALWAYS BE INSTALLED AFTER THE HEATER! DANGER:** THE GENESIS DEVICE SHOULD NEVER RUN OR PROVIDE POWER TO THE PRODUCTION CELL UNLESS THE PUMP IS RUNNING. THIS CAN CREATE A BUILD UP OF DANGEROUS GASES AND MAY CAUSE DAMAGE TO HEATERS.

6. WATER CHEMISTRY FOR START-UP

ATTENTION INSTALLER: PRIOR TO ACTIVATION OF THE **GENESIS** DEVICE ON A HOT TUB, IT IS ESSENTIAL THAT THE FOLLOWING WATER CHEMISTRY PARAMETERS HAVE BEEN ESTABLISHED AND VERIFIED!

TDS (TOTAL DISOLVED SOLIDS): must be less than 500 PPM (ideal range 50-300 ppm) prior to adding the sodium bromide bank to the tub's water. NOTE: After addition of sodium bromide at a rate of 1 litre for every 100 US gallons (80 lmp). "TDS" will be approximately 1600—1900 ppm.

pH: must be between 7.2 and 7.8 with 7.4 to 7.6 being optimum.

Total Alkalinity: should be between 80 and 120 PPM.

Calcium Hardness: 150 -250 ppm

7. START-UP/OPERATING INSTRUCTIONS

- 1. Make sure the "DECREASE/INCREASE" dial on the faceplate of the Controller is turned to the "OFF" position.
- 2. Fill your tub with water to the level recommended by the hot tub manufacturer.
- 3. Test water for its "TDS" (Total Dissolved Solid- various organic and inorganic matter present in your water) content. This can be done by your spa dealer or with purchased test strips. The ideal range for your start-up TDS is between 50 and 300 ppm. If your starting TDS is above 500 (or water is from a well or non-municipal source) a metal remover or Carbon block spa pre-filter should be used to reduce TDS. DO NOT FILL SPA WITH WATER FROM A "WATER SOFTENER".
- 4. Balance the spa water to the recommended levels:

pH: 7.2 - 7.8
 Total alkalinity: 100 - 120 ppm
 Calcium hardness: 150 - 250 ppm

Phosphate level less than 125 ppb (see note*)

*NOTE: Test that the **phosphate** level in your spa water is within acceptable parameters using a paper test strip or by taking a water sample to your spa product supplier.

- **Allow water to stabilize for at least 12 hours after treatment with metal and/or phosphate removers before proceeding to step "5".
- 5. Oxidize any pre-existing contaminants with 125g Tru Ox Make sure that the hot tub's pump is set to high speed.
- 6. Ensure the spa filters are clean after the above treatments.
- 7. Determine if your spa is equipped with a 24 hour circulating pump or a 2 speed pump. For spas that have a 24 hour circulating pump, with the jets running on high speed, add **one litre of Tru Blu sodium bromide per 80 Imperial gallons** (190 Litres or 100 US gal) of spa water. Example: If your spa has a volume of 360 Imperial gallons, at start-up you will require 4.5 litres of Tru Blu (360 divided by 80 = 4.5). Pour the contents of the bottles evenly over the surface.

For Spas that have a 2 speed pump, add 1.25 liters of TRU BLU for every 80 Imperial Gallons of Spa water. 2 speed pump systems require a minimum of 6 hours of circulation per day.

It is important to note that sodium bromide is only one contributor to the TDS count in your water. Over time, the TDS count in your water will rise (from such things as residuals from other chemicals, minerals, and unfilterable material). Test the TDS every few months to make certain it stays in check. NOTE: If using a TDS meter total TDS should equal start-up TDS plus approximately 1,300 to 1600 ppm sodium bromide. For example, if your start-up TDS was 300 and you added 4.5 litres of sodium bromide to your 360 gallon spa, your TDS count will now be 1,600 (1,300 plus 300). You can verify this with a sodium bromide test strip if desired, but it is NOT required.

Regardless of what water testing facilities might suggest, a spa with The Genesis System does not require draining unless the total TDS exceeds 3,000 ppm.

8. Turn the "DECREASE/INCREASE" dial to the right until the LED display (to the left of the dial) reads "6". If using a two-speed pump system, set the daily circulation time to a minimum of 6 hours per day. (NOTE: GENESIS will only produce Bromine during low speed circulation on a two-speed system. The lights or power on the GENESIS Controller will only appear during these times. If using a 24 hour circulation pump, the unit will produce bromine 24 hours/day).

NOTE: The Controller will have a "+" or "-"sign to the right of the power setting (1-10) and will reverse every 4-6 minutes. This is normal and indicates that the electrode is reversing polarity during its self-cleaning process.

9. Keep the dial set at 6 unless your bromine level rises above 5 ppm. Your bromine demand will determine what power setting is required to maintain your spa. If your bromine level exceeds 5 ppm turn the dial down **one setting**, then test the bromine

level after 24 hrs. Repeat this process, (adjusting the power setting up or down as required) until your maintenance setting is attained. *Only adjust the dial one setting at a time to prevent a dramatic change in the bromine level.*

- 10. Oxidize with 125g Tru Ox daily, weekly, or as required based on water quality and bather load (*If you find that your desired bromine residual is not being maintained, this is a good indication that more frequent shocking is required*).
 - * It can take several days for the bromine level to stabilize
 - * With monitoring of your spa use, and adjustment of the output level of your *GENESIS*, you will be able to determine your maintenance setting. You will have arrived at your maintenance setting when, after a period of normal use of your spa; you no longer have to adjust the output level on your *GENESIS* to keep your bromine level between 3 and 5 ppm.
 - * The appropriate setting for your Genesis unit will depend on how often you use your spa. A spa with a higherthan-average bather load will require a higher setting on the Genesis unit. This simply means that the Genesis needs to produce more bromine to maintain the level between 3 and 5 ppm."
 - * It is good spa management to test the bromine level in spa water daily and always before spa use.

8. DETERMINING SODIUM BROMIDE LEVEL

It is important to be able to maintain the appropriate amount of sodium bromide in your spa's water. By following the step-by-step instructions found earlier in this manual, you will be off to a good start. There are several other factors to consider, though. You will normally find that over the weeks and months that you are enjoying the use of your tub, the water level will decrease for several reasons. One is evaporation. The other is a result of water "removal" (splashing, exiting bathers, etc). The first cause of water loss – evaporation – will not reduce the sodium bromide concentration because it does not evaporate. The second cause – water removal – will, however, result in loss of some sodium bromide.

Since it is impossible to know how much water loss results from evaporation, and how much from removal, it is necessary to determine your sodium bromide level when adding water to the tub. There are available, through your dealer, sodium bromide test strips. Use of these strips will help you determine how much sodium bromide to add. Consult with your dealer, or call the Pioneer H2O customer service line (1-877-569-4377) for instructions on their use.

9. TROUBLE-SHOOTING GUIDE

Low or No Bromine Reading:

- 1. **Power On and Unit Connected?** Double Check the GENESIS Device to make sure that the digital display lights up when the spa is circulating. **Keep the GENESIS at a power setting of "6"** unless the bromine residual exceeds desired level. Also, check the connection to the electrode to ensure that the lead wires are secured to the electrode posts (hand tighten only). Verify that the electrode assembly is positioned horizontally ONLY (3:00 or 9:00 o'clock).
- 2. **Sufficient Circulation Time?** Two Speed Systems: Ensure the spa is circulating on low speed a minimum 6 hours per day. Above average bather load or adverse water conditions will require increased circulation time.
- 3. **Appropriate Amount of Tru Blu?** Using the GENESIS "Sodium Bromide Test Strips", make sure your Tru Blu reading is between 1,300 to 1500 ppm for 24 hour circulation and 1600 to 1900 ppm for the 2 speed circulation pump. If the Salt reading is greater than 2200ppm, adjust by a <u>partial drain</u> of the spa; drain 4 to 8 inches and then refilling back to the Spa's water line should be adequate in most circumstances.
- 4. **Proper Water Balance?** Ensure that your water chemistry is correct. The pH needs to be between 7.2 7.8. The Alkalinity needs to be 80 120. Calcium Hardness needs to be 150 250 ppm. Check with your spa dealer for corrective measures.
- 5. Clean Filter? Make sure that you are cleaning your filter or back washing weekly if needed.
- 6. **Shocking?** Oxidizing or "shocking" with Tru Ox could be required weekly, and in some cases daily, to oxidize waste, reduce demand on bromine and restore spa water's sparkle and clarity.

- 7. **Flashing dots on the Controller?** Check the TDS (Total Dissolved Solids). Flashing dots indicate that TDS is becoming too high. A partial drain & fill will typically correct this problem.
- 8. **Solid dots on the Controller**? This indicates TDS is at a level above that in which GENESIS can function. The power to the electrodes has been disabled and the system is not producing bromine. The TDS must be lowered. A complete drain and refill will typically solve the problem.

NOTES ABOUT TDS: TDS (Total Dissolved Solids) is a combination of metals, minerals and other organic material. GENESIS requires that the TDS from the fill water be in the low range of 0-500 ppm. Municipal water sources in most cases are typically in the acceptable range. Well water is typically high in TDS (500 – 1200 ppm). Before filling from a high-TDS source, a carbon block pre-filter is highly recommended. A metal remover can sometimes reduce TDS sufficiently. NOTE: Do not fill spa with water from a salt water softener!

- 9. Phosphate level high? Phosphates are a contaminant that promotes algae growth and inhibits Bromine production by adhering to the GENESIS's conductive graphite electrodes. Phosphates can be introduced to your spa in many ways (via domestic water sources, fertilizers, hygiene products such as soaps shampoos and lotions). Some spa chemicals (including some spa filter cleaners and some metal sequestering agents) contain phosphates and should not be used. Phosphate test strips are available that can determine if level exceeds the maximum acceptable level of 100 ppb. Treatment with a phosphate remover (Phos Out, Phos Free etc) for 4-5 days with a follow-up filter cleaning is recommended to remedy this problem.
- **10. Broken/Cracked Electrode?** If GENESIS is not producing desired bromine level and a black coloring is visible in the filter or at the water line, there could be a cracked or broken electrode. Call the Manufacturer's Helpline at 1-877-569-4377 for assistance.

NON-USE of Spa: If spa will not be in use for an extended period of time, turn down the power setting to ½ the normal maintenance setting to prevent elevated bromine residual.

GENESIS only creates bromine when the water is circulating past the electrodes.

GENESIS Controller's display numbers are only "ON" during low speed circulation on a two-speed system but they will be on continually with a circulation system

GENESIS is only capable of creating bromine not chlorine.

GENESIS will deliver 4 to 9 volts to the electrodes when numbers are displayed. The amp draw will be less than .5 amps

STILL EXPERIENCING PROBLEMS? MANUFACTURER'S HELPLINE 1-877-569-4377

10. MANUFACTURER CONTACT INFORMATION

Pioneer H2O Technologies, Inc.

3265 South Wadsworth Blvd. Unit "I" Lakewood, Colorado 80227 USA Customer Help Desk 1-877-569-4377 http://www.spapurification.com



C 3045191 US

The GENESIS Device is Tested and Listed to:

ANSI/UL - Std. 1081 5th e. CAN/CSA Std. C22.2 No .0

Health Canada – PMRA Registered Spa Sanitation System. Registration Number 27890

11. COMMONLY ASKED QUESTIONS

- Q: Why do pool and spa professionals warn consumers against using chlorine in hot tubs and spas?
- A: Chlorine is an extremely corrosive chemical and may cause damage to equipment; moreover, most spas maintain temperatures over 100 degrees and chlorine readily evaporates at about 97 degrees, potentially leaving the spa's water untreated.
- Q: My pool man looked at some damage to my hot tub cover and told me it was caused by the ozone system. Is this possible?
- A: Yes and it's highly likely! Ozone is a corrosive gas and, as a gas, lighter than water. It is injected into your tub, gases off the water's surface and gets trapped between the surface of the spa's water and the underside of the spa's cover, where the damage takes place. The problem, known as "off- gassing" may also damage entertainment devices that are available on newer spas; such as CD player's, speakers, LCD screens, etc.
- Q: Sometimes my spa has a fishy or musty smell. What causes this?
- **A:** Low bromine or no bromine, which is usually caused by the spa owner forgetting to fill up the floating bromine feeder or forgetting to put it back into the spa after bathing...or BOTH!
- **Q**: Now that I have a **GENESIS**, my dealer told me that I don't have to drain my spa every three months like I've done in the past. Why is that possible?
- A: Because there is no more buildup of tablet by-products (like the glues and binders used to hold bromine tablets together). **GENESIS** converts salt into bromine and then back into salt again, leaving your spa free of the cloudy, flat water usually attributed to the build-up of the these chemical byproducts. With the **GENESIS**, your water change interval can be extended up to a full year.
- Q: How many hours per day will I have to operate my spa's pump once I install a GENESIS?
- **A:** *GENESIS* -equipped spas need to operate at a minimum of 6 hours of water circulation per day. If you find that your INCREASE/DECREASE" dial is at a high setting, but your bromine level is lower than desired; you should increase pump circulation time until your desired bromine level is achieved. Remember that all spas are unique (different bather loads, etc). Within a short time, you will be able to determine the right circulation cycle for your particular spa. (Also note that in the event of a power outage, the filtration cycle will revert back to the factory default setting, requiring you to reset filtration.)
- Q: After my GENESIS is installed, do I still have to check my hot tub's chemistry?
- A: You bet! When it comes to water quality, chemistry is KEY! Maintain proper pH and total alkalinity at all times (pH has a direct relationship to the effectiveness of bromine to sanitize water.
- **Q**: How can I be absolutely sure that my **GENESIS** is working?
- **A:** A simple bromine test strip or a standard liquid reagent (both available at your dealer) will show the actual bromine level in your spa's water, assuring you of a safe, clean and inviting recreational environment. Bromine and chlorine are recognized by industry professionals and government regulators as chemical sanitation agents. **GENESIS** produces bromine through a bromide salt conversion process, and you can be assured that the bromine created by the **GENESIS** is just as effective as the bromine introduced via tablets *and* it is free of the impurities found in the tablets!!
- Q: Why do spa professionals say that there is less or no bromine odor with the GENESIS?
- **A:** This is due to the unique electrolytic bromine generation process. The electronic field around the bromine-generating cell destroys "bromamines". Bromamines are the culprits when it comes to the strong objectionable odor, not the bromine itself. The **GENESIS**, in fact, manufacturers 100% bromine, while tablets have fillers, etc.
- Q: Why does the display go to a minus (-) every few minutes?
- **A**: This indicator informs you that the polarity of the electrodes is changing every two minutes. This process is for the cleaning of the electrode cell to prevent any "scale" buildup.
- Q: My Genesis lights up but I can't get a bromine reading...
- **A:** There are several reasons why you might not get a reading:
- As discussed in the "Starting Up the **GENESIS**" section earlier in this manual, it can take several days for the bromine level to stabilize because the water you put into your spa contains impurities that need to be neutralized, thereby using up the initial bromine that is generated. Refer to that section for how to handle this situation.
- If the "TDS" (Total Dissolved Solids) is greater than 3000 ppm, bromine production will be impaired and partial or total drain is required.

The phosphate level might be too high - bromine production can be impaired when the when the phosphate level exceeds 125 ppb. Talk to your dealer about products that reduce phosphates.

Q: My GENESIS is wired in but it does not light up...

A: Ensure that the voltage you have wired the unit to matches the setting on the internal switch. **Turn off the breaker to the spa**, and then open the **GENESIS** power supply and adjust the internal switch to match the required voltage. NOTE: YOU MUST BE SURE OF VOLTAGE BEFORE CHANGING THIS SETTING BECAUSE INCORRECT VOLTAGE WILL SHORT OUT THE GENESIS AND VOID YOUR WARRANTY. WHEN IN DOUBT, CALL GENESIS CUSTOMER SERVICE AT 1-877-569-4377.

12. WARRANTY INFORMATION

LIMITED WARRANTY

PIONEER H2O TECHNOLOGY, Inc. Believing its GENESIS Automatic Bromine Generator

To be of exceptional quality, hereby warranties said equipment to the original purchaser only against defective parts and workmanship for a period as stated:

5-year warranty – electronic controller

5-year warranty - electrodes

This warranty begins at the time the equipment is installed and is contingent upon the return of signed owner registration card(s) to the manufacturer.

This warranty does not require replacement of the entire unit. Manufacturer will replace any part that proves to be defective in material and/or workmanship during the warranty period under normal use and service. If the equipment does not perform properly, refer to your owners manual and water chemistry before requesting service from the dealer that sold you the system. If you are not satisfied, you should notify the Manufacturer's Customer Service Manager for return authorization.

This warranty does not cover labor charges and does not cover installation, removal, reinstallation, transportation, or any other claims or torts including but not limited to damage caused by abuse, neglect, freezing, fire, lightening, staining, vandalism, failure to maintain proper water chemistry or other abnormal conditions beyond the company's control.

This warranty gives you specific legal rights and you may have other rights that vary from state to state or province to province. You also have implied warranty rights. This warranty is void if equipment is not installed and operated according to the owner's manual including, but not limited to, maintaining proper water chemistry level at installation and thereafter. Service provided by technicians other than **PIONEER H20 TECHNOLOGY, Inc.** or other authorized agents may void this warranty.

CORPORATE OFFICE:

Pioneer H20 Technologies, Inc. 3265 South Wadsworth Blvd, Unit I Lakewood, Co 80227. Phone: 1-877-569-4377

Warranty Registration Card

Or register your warranty on-line at: http://www.spapurification.com

(Return card, or register on-line within 30 days of purchase)

Owners Name:		
Street Address:		
City:	_ State/Prov: _	Zip/Postal:
Phone:		
Date of Purchase:		Supplier:
Spa Make:		