

**BOLDT**  
*Pools & Spas* Since 1975

**50**  
YEARS  
*a Summer  
State of Mind*  
Since 1975

ABOVE GROUND  
**OPERATING GUIDE**  
FOR NEW POOL OWNERS



# THANKS FOR CHOOSING BOLDT POOLS & SPAS

Congratulations and welcome to the wonderful world of owning your very own backyard pool. Your new pool will be a safe source of family fun and togetherness, an accessible place for exercise and therapy or just a place to escape to.

Boldt Pools & Spas is equipped with the most advanced pool equipment available today. Each piece has been carefully chosen with one important goal in mind: to provide you with as close to a maintenance-free pool as possible.

This manual provides easy to follow step-by-step instructions for your basic pool maintenance tasks. If there are any points that you require to be clarified, your Boldt Pools & Spas is always there to help make your pool ownership a safe and enjoyable experience.



**We're Always Here To Help!**  
**Your Boldt Pools & Spas Staff**

# TABLE OF CONTENTS

## SECTION 1 - OPERATING YOUR EQUIPMENT

Water Circulation & How It Works	3
<b>Pump &amp; Motor</b>	
How To Start The Prime In Your Pump	4
Valves In Front Of Your Pump	4
<b>Types of Filters</b>	
Cartridge Pool Filters	4
Sand Filters	5
<b>Heater</b>	
Common Sense Tips About Your Heater	6
<b>Filtration</b>	
Nature 2 Mineral Purifier	7
Chemical Feeder	7
Hayward Salt & Swim Unit	8
Salt	8
Spring Start-Up & Winterizing	9

## SECTION 2 - WATER CARE & CHEMISTRY

What Good Pool Water Is	10
How to Adjust Chemicals	11
pH	11
Total Alkalinity	11
Calcium Hardness	12
Chlorine	12
Stabilizer	12
Specialty Chemicals	12
Testing Your Water	13

## SECTION 3 - WATER SAFETY & TROUBLESHOOTING

Water Safety Tips	14
Common Problems & Troubleshooting	15

# SECTION 1 OPERATING YOUR EQUIPMENT

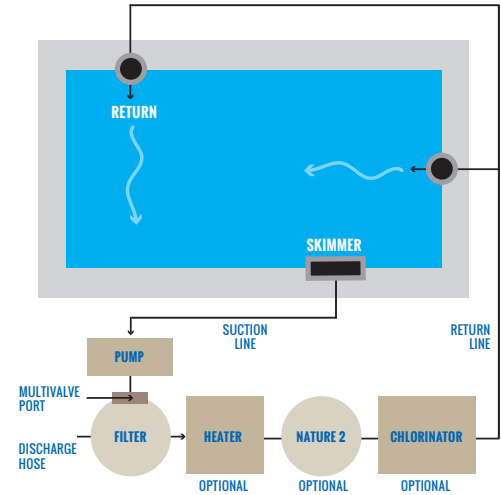


The following section deals with the important aspects of your pool which will assist you, the new pool owner, in acquiring an in-depth appreciation for your pool, its equipment and its correct operation.

### Your Pool's Basic Elements:

- Pool shell
- Pool equipment
- Plumbing

### WATER CIRCULATION & HOW IT WORKS



#### Suction Lines

These lines draw water from the pool through the skimmer to the pump.

#### Discharge Hose

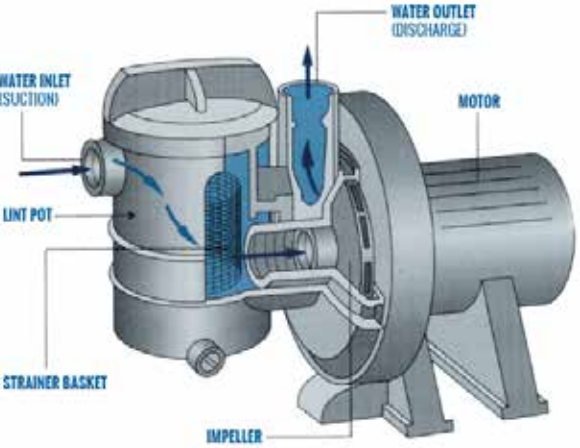
This is used to expel water from the system during either backwashing or draining water from the pool.

#### Return Lines

As the water has passed through the pump, filter, heater, Nature2 and chemical feeder, it is returned to the pool through the return lines, which are always under

pressure when the filter system is operating in either the **FILTER** or **RE-CIRCULATE** position.

### PUMP & MOTOR



### Your Pool's Equipment Has 3 Functions:

- Clean & Clarify
- Heat
- Sanitize

A pump and motor is used to draw water from the pool. The pump is generally the only active or powered component of your pool equipment. In essence, it is the 'heart' of your system, drawing the water from an opening in the pool wall called the skimmer, and then directing it under pressure to the filter tank where it is cleaned and returned to the pool.

There is a strainer basket inside the skimmer which must be checked daily to remove any accumulated debris. As well, there is a second strainer basket located in the lint pot which, while it does not have to be checked daily, should be cleaned regularly to ensure a free-flow of water to the filter at all times.

How Do I Prime My Pump?

- Check that the water level in your pool is at least 3/4 filled at the skimmer
- Set the multiport valve on your filter to the **FILTER** position
- Tum your pump and motor switch **ON**

What Do The Valves In Front Of My Equipment Pad Do?

These valves are used to control where water is drawn from and how it is returned to the pool.

Water can be drawn from one source, the skimmer. There are three possible destinations through which the water is returned to your pool:

- Through the return fittings in the poolwall
- Through the waterfall or water feature

By setting each of these valves to its **ON** or **OFF** position you can control the flow of water to and from the pool.

Remember

**ALWAYS** turn the power to your pump **OFF** when adjusting these valves.

TYPE OF FILTERS



CARTRIDGE

SAND

After the water leaves the pump it passes to the filter. The purpose of the filter is to remove any fine particles from the water before returning it back to the pool.

There are 2 types of filters, Cartridge or Sand.

Cartridge Pool Filters - CC150 Series Filters

Cartridge filters do not require sand or diatomaceous earth as the filter medium. Instead, the filter contains Cartridge filter elements which are easily removed for cleaning or replacement.

As debris collects in the filter, the pressure will rise and water flow to the pool will diminish. The filter will eventually become so plugged with debris that it will be necessary to remove the filter cartridges and clean them with water.

The Hayward CC150 filters include a unique pressure gauge with a **CLEAN/DIRTY** indicator that can be customized for each pool, making it easy to assess filter condition.

As the filter cleans the water and the cartridges begin to clog, the pressure begins to increase. When the needle of the pressure gauge aligns with the arrow next to the word **DIRTY** on the **CLEAN/DIRTY** indicator ring, this indicates an increased pressure and it is time to clean the filter. To determine where to set the **CLEAN/DIRTY** indicator begin with a clean cartridge and start the pump. After the pressure gauge has stabilized, turn the indicator ring so that the arrow next to the word **CLEAN** aligns with the needle of the gauge

**Note:** Check the pressure during operation at least once a week. Never operate the filter system at more than 25 psi of pressure.

Remember

A filter removes dirt and other suspended particles but does not sanitize the pool. Pool water must be sanitized and chemically balanced for clear water.

Cleaning The Filter Cartridge

1. Turn off the pump. Switch off the circuit breaker to the pump motor.
2. **IMPORTANT:** Completely open air release valve on top of the filter tank to release all pressure from inside the tank and system.
3. Close pump valve on the system to prevent flooding
4. Remove the drain plug located at the bottom of the filter tank and allow the tank to drain
5. Replace the drain plug
6. Use the tabs to spin off retainer ring

7. Remove top of the filter tank by lifting it straight up until it clears the cartridges on the inside of the tank
8. Pull the cartridges out of the filter tank, place them upright and clean them using a garden hose and nozzle to wash each pleat of each element
9. Inspect each cartridge for holes, tears or excessively worn pleats and replace them if necessary
10. Reassemble the filter with new or clean cartridges
11. Close the air release valve on the top of the filter tank

**Note:** Algae, suntan oil, calcium and body oils can form coatings on the filter element which may not be removed by normal hosing. To remove such materials, soak the element in a pool cartridge cleaner.

Remember

- Maintain your pressure gauge in good working order. The pressure gauge is the primary indicator of how the filter is operating
- During operation of the filtration system, check the pressure gauge/air release assembly for air or water leaks at least once a week
- **NEVER** operate the filter system at more than 25 psi of pressure
- **NEVER** attempt to assemble, disassemble or adjust the filter when there is pressurized air in the system. This can cause the filter lid to blow off causing death, serious personal injury, or property damage

High-Rate Sand Filter (Pools Without Cartridge Filters)

A sand filter is fitted with a multiport valve which provides the means for changing the direction and routing of water through the filter system, allowing it to perform different functions.

The first place the water reaches in the sand filter is the multiport (or dial) valve on the head of the unit. This valve has 6 operating positions or functions:

- Filter, Rinse, Recirculate, Backwash, Waste, Close/ Winterize

When the valve is set to the **FILTER** position, the water is directed into the filter tank where it passes through a bed of sand to remove any solid debris which was too small to be removed by the skimmer or pump strainer baskets. The water then flows back to the pool via your heater and feeders. This is the normal setting used for your pool.

The **BACKWASH** position is used to clean the filter after debris has built up in the sand bed to the point where it is restricting the flow of water back to the pool. Usually taking between 3-5 minutes, the dirty water flows out of the backwash port and is directed to a waste area through a backwash hose. Remember not to direct your discharge water towards your plants or flowers.

There are two methods to determine when backwashing is required:

1. When the pressure indicator shows a 7 psi increase
2. If there is less-than robust flow of water through the return fitting in the wall of the pool

The **RINSE** position is used for approximately 30 seconds immediately following backwashing to clear the lines of any turbidity before returning to the normal circulation of the pool water.

The **WASTE** position is used to either drain the pool or vacuum debris without having it pass through the sand bed in the filter. This application is common when removing dead algae from your water or lowering your water level when closing.

The **RECIRCULATE** position is intended for use when you do not want to filter the pool water but still wish to maintain overall circulation. In this setting, **NO** filtration occurs and the water by-passes the filter tank completely.

There is also a setting called **CLOSED/WINTERIZE** which should only be used by professional service technicians.

**Remember** - To change from one of these positions to another it is very important that the electric power to the pump and motor is **ALWAYS TURNED OFF** first or you will damage the dial valve and/or the plumbing to the pool.

How To Clean Your Sand Filter

One of the more commonly asked questions customers have is 'When do I change my sand'? The short answer is **NEVER**, provided that you clean your filter sand annually with a filter cleansing product.



Follow these 12 steps on a yearly basis for more effective filtration:

- Making sure that the multiport valve handle is still in the backwash position, turn the pump **ON** and slowly pour the solution from your pail into the lint pot.

Once you have added your 4 pails of water, shut the pump **OFF** at once, replace the lint pot cover on your pump and allow the filter to sit for at least 12 hours.

When you have finished backwashing, shut off the pump, set the multiport valve handle to the **FILTER** position, restart the pump and start normal filtration again with a clean filter!

Located after the pump and filter, your heater allows you to control the temperature of your pool water, regardless of the weather. It can also extend your swimming season into the cooler months in the Spring and Fall.

## 6 BOLDT POOLS & SPAS WHERE SUMMER HAS BEEN A STATE OF MIND FOR 50 YEARS!



Because of the need to purge the gas lines of air and moisture the first time your heater is turned on after building your pool, the initial set up should always be left to a licensed gas technician.

Chemically balance your water! To avoid costly repairs to the internal part of your heater, make sure your pH, Total Alkalinity and Sanitizer levels are always in their proper ranges. The lighting of your heater should always be left to a licensed gas technician.

To maximize your heater's efficiency, consider a Solar Blanket or Liquid Blanket at night to retain the heat generated by the heater.

**Remember - ALWAYS** shut your heater **OFF AT LEAST 20 MINUTES BEFORE** you turn off your pump and motor. Failure to do so can result in serious damage to the plumbing.



The 'Nature 2' is an amazing addition to any pool system. It allows you to have better quality swimming water while reducing your other chemical needs (and therefore costs) at the same time.

Water is passed through a cartridge that contains a patented, coated mineral bed. The minerals assist in killing bacteria, algae and viruses on contact. Next, the Nature 2 releases trace amounts of minerals into the pool water to prevent the growth of new bacteria and algae. They provide an environmentally friendly, almost 'fool-proof' way of maintaining a truly "algae-free" pool.

Balance your water **BEFORE** installing your Nature 2 cartridge, and always maintain water balance.

- 
- A vertical Hayward pump unit, model 5000, with a tan body and black top and base. It features a label with technical specifications and two side ports.

The final piece of equipment on your return line heading back to the pool is your chemical feeder. If you are using chlorine it is referred to as a Chlorinator; if you are using bromine, it is referred to as a Brominator. These feeders add Sanitizer to your pool on a continuous basis, saving you the hassle of having to do it manually.

**Warning!** Never use a chemical feeder to feed anything except the chemical for which it was intended. For example, never put unstabilized chlorine into a stabilized chlorine or bromine feeder or an explosion will occur!





**How Does The Hayward Salt & Swim Unit Work?**

The Salt & Swim is an automatic chlorine generation system for pool sanitization. The Salt & Swim requires a low concentration of salt (sodium chloride) in the pool water. It automatically sanitizes your pool by converting the salt into free chlorine which kills bacteria and algae in the water. Chlorine will revert back to sodium chloride after killing bacteria. These reactions will continuously recycle virtually eliminating the need to add sanitizing chemicals to your pool.

This unique low cost chlorine generator uses a replaceable electrolytic Cell that is designed to produce 155 lbs of 100% available chlorine over its lifetime. Note that the actual amount of chlorination required to properly sanitize a pool varies due to bather load, rainfall, temperature, and the pool's cleanliness.

**Remember** - This unit does need to be calibrated upon first use per season. This can easily be done by following the calibration procedures provided with the unit.



**Salt Cell Life/Care System**

The replaceable Cell uses the same electronic self cleaning technology as the popular Hayward Turbo Cell. 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. This can be done through an acid wash procedure, which can be purchased at Boldt Pools & Spas.

Salt Cell life varies due to pool size, bather load, rainfall, temperature, and the pool's cleanliness. The Hayward Salt & Swim unit will illuminate the **CELL LIFE LOW** indicator when the cell is reaching the end of its lifespan.

**How To Clean Your Cell**

The cell of the Hayward Salt & Swim is self-cleaning. Every 5 hours, the electrolytic plates reverse their polarity to prevent calcium build up.

In unusual situations, the self cleaning electrodes may benefit from occasional manual cleaning to remove scale build-up as the result of having very “hard” water of continuous high pH conditions.

**Remember** - Maintain the proper water chemistry readings to maximize the efficiency and life of your Salt & Swim unit.

**How Much Salt Will Be In The Pool?**

Optimum chlorine production occurs between 3200 and 3600 parts per million of salt. We recommend a salt level of 3500 ppm so that the addition of salt is not as frequently required. Allowing the salt level to fall below 2800 ppm may reduce the life of the cell.

**How Much Salt Will I Need?**

4.0 kg of salt per 1000 litres of water. Therefore, 280 kg of salt will raise a 70,000 litre pool from 0 ppm to 4000 ppm. Quite often, less than this is required as there may already be some salt in the water.

**When To Add Salt**

Salt is not lost in the process of making chlorine or through evaporation. Salt is only lost through backwashing and splash-out. So, you'll only have to top up to maintain optimal range each year.

**What Type Of Salt Should I Use?**

High purity, pool-grade salt. It is important that the salt does not contain additives. Any common salt (like table salt) usually has an additive that may have staining properties. Avoid salt with additives like iodine and yellow prussiate. Pool-grade salt is available at Boldt Pools & Spas.

**Testing Salt**

Salt levels can be tested with test strips just like chlorine levels can.



**SPRING START-UP**

The output of the cell is determined by water temperature, salt level and mains voltage. In the springtime when the water temperature of the pool may be below 18°C (65°F) the **ADD SALT** light may light up. The **ADD SALT** light is only reliable at temperatures above 18°C because the temperature affects the conductivity of the water.

There is no need to add salt if the level is already at 3500 ppm. In cold water there is very low chlorine demand because of low bather load, therefore the chlorine output should be set to minimum or you may not need the chlorinator on at all.

**WINTERIZING**

When closing the pool for the winter, perform the following additional steps to winterize your salt system.

1. Turn off power to the salt system at the circuit breaker
2. Remove the cell by unthreading the quick disconnect unions and removing the three wires from cell. Inspect the cell and clean if necessary with a solution of 1 part Muriatic acid and 10 parts water. (See further directions in Owner's Manual)
3. Coil the wires and wrap them in a plastic bag to prevent corrosion over the winter. Tape the bag to the power pack
4. Insert expandable plugs into upright plumbing lines where the cell was connected
5. Store the cell indoors for the duration of the winter



# SECTION 2

## WATER CARE & CHEMISTRY



### CHEMISTRY

The purpose of this section of the manual is to familiarize you with the proper chemical care of your pool water.

Simply put, good pool water should always be:

- Sanitized
- Non-corrosive and non-scaling
- Algae-free
- Clear, colourless and odourless
- Stable against chemical changes

#### Why?

Your water must be sanitized because, more than just looking nice, a safe and healthy pool must be free of dangerous bacteria and viruses which are the source of many common ailments such as respiratory infections, skin diseases, upset stomach, diarrhea, and other intestinal tract infections.

Your water should be algae-free because in addition to looking unsightly, algae makes pool surfaces slippery and increases the demand for chlorine. In larger outbreaks, the toxins it releases can cause **GASTROENTERITIS** and pose other health risks.

Your water should be odourless, colourless and non-irritating to bathers for the obvious reason.

Your water should be non-corrosive and non-scaling as it is important to avoid the expensive repairs and maintenance costs to your heater and other pool

equipment that will result if left in such a state.

Your water should be stable against chemical changes as you will want to avoid the nuisance and associated costs involved in continuously having to re-balance it.

#### How Do I Achieve This?

There are 6 parameters that you must be familiar with in order to maintain good pool water.

- pH
- Total Alkalinity
- Calcium Hardness
- Chlorine Residuals
- Stabilizer
- Salt Concentration (salt/chlorine generator if applicable)

pH is the most dynamic factor at play in your pool water. Everything that is added to your water has an effect on it, and in turn, it affects the performance of the major chemicals required to maintain your pool.

It is the measurement of how acidic or basic the water is on a scale of 0 - 14, where 0 is completely acidic, 14 completely basic and 7 being neutral. The optimum range for your pool is between 7.2 - 7.8, with 7.4 being ideal which is the pH of your eyes. If you pH is too low, heavy chlorine usage, eye irritation and corrosion of your pool equipment will occur; if it is too high, you will experience low chlorine efficiency, scaling and skin and

eye irritation.

#### Total Alkalinity

Total Alkalinity is closely related to pH. It is an indication of the ability of your pool water to resist pH change. It is measured in Parts Per Million (ppm) and has an optimum range between 80 and 120 ppm. If the TA is too low, it will cause the pH to fluctuate wildly and you will have staining and corrosion; if it is too high, it makes your pool water more susceptible to scaling and pH drift (upwards of 8.4) and you will have cloudy water. If you are on a bromine system, it is recommended that you keep the reading slightly higher, between 120 and 130 ppm.

#### Calcium Hardness

Is the measurement of the amount of calcium or magnesium present in your pool water. It affects the efficiency of your chlorine and can adversely affect the general cost of maintaining your pool. Like Total Alkalinity, it is read in ppm and has an optimum range between 200 and 300 ppm. If your reading is low, it can also pit metal surfaces. If it is too high, it will have a tendency to form scale deposits on the surface of the pool, decrease circulation and increase heating and chlorine costs.

#### Chlorine

Acts as an inhibitor to the growth of bacteria, viruses and algae. It is measured in two forms: **FREE AVAILABLE** or **ACTIVE** chlorine (the desirable form), which is the chlorine present in your water ready to destroy contaminants and bacteria; and **COMBINED** chlorine (the undesirable form), which has been combined with ammonia compounds and is essentially useless, as it has only about 1/6 the oxidizing power of free chlorine.

Both types of chlorine are measured in ppm with the optimum range for **FREE** chlorine being between 1 - 3 ppm and **COMBINED** chlorine being 0 ppm. Another measurement, TOTAL chlorine, is the sum of both the **FREE** and **COMBINED** chlorine and it's optimum range is the same as the **FREE** chlorine.

If your **FREE** chlorine level is too low, you will have an unsafe swimming environment and risk an algae infestation. If it is too high, you will produce an uncomfortable swimming environment and possibly have a health risk.

If your **COMBINED** chlorine level is too high, you will have a less than acceptable sanitizing effect and will produce a strong chloramine level.

#### Stabilizer

Cyanuric Acid acts like a shield which prevents the sun from dissipating the chlorine from your pool. It too is measured in ppm and it's optimum range is between 30 - 50 ppm. If your reading is too low, your chlorine stands to burn off prematurely; if your reading is too high, you risk getting 'chlorine lock', where the chlorine in your water is rendered ineffective.

### HOW TO ADJUST CHEMICALS

Although your pool chemicals provide your pool with healthy, great looking water, you should not forget that you are still dealing with chemicals and as such you should respect how you handle them. **ALWAYS** pour the chemical into the water, **NEVER** pour water into a pail of the dry chemical.

**Remember** - you should always wear protective eye and hand wear when applying pool chemicals!

#### pH Products

If your pH is too LOW

It can be raised by adding "pH UP" (soda ash). Pre-dissolve the product in a plastic pail before adding it to the pool.

If your pH is too HIGH

It can be lowered by either (a) adding pH DOWN (sodium bisulfate) or (b) Muriatic Acid. If you choose (a), pre-dissolve the product in a plastic pail before adding it to the pool. If you choose (b), pour the product carefully around the pool and avoid splashing or contact with your skin.

Only adjust the pH when no one is swimming.

#### Total Alkalinity

If your Total Alkalinity is too LOW:

It can be raised by adding baking soda (sodium bicarbonate) which is marketed as **TROL**, to the pool water. Simply broadcast the product over the surface of the pool water.

If your Total Alkalinity is too HIGH:

Although your Total Alkalinity can be adjusted by applying small amounts of Muriatic Acid over a period of days, the most expedient method is to simply empty and replace a portion of your pool water.

You can use your pool immediately after applying **TROL**.

**Calcium Hardness**

If your Calcium Hardness level is too LOW: it can be raised by adding hydrated calcium chloride, marketed as **CAL**, directly to the pool water. Pre-dissolve the product in a plastic pail of **COLD** water before adding to the pool.

You can use your pool immediately after applying **CAL**.

If your Calcium Hardness level is too HIGH:

The only convenient method of lowering it is to replace a portion of your pool water.

**Chlorine**

If the **FREE** chlorine level is allowed to drop below the recommended level, it should be raised by **SUPERCHLORINATING** the water with an unstabilized granular or liquid chlorine product. Both types cost about the same but the granular pouches are easier to carry and provide far less chance of bleaching your clothes when applying the product to the pool than the heavier and messier liquid form.

Unstabilized Granular:

Read the label! Newer forms (such as HTH Extra) allow you to broadcast over the surface. With the more common forms, you must add the dosage to a pail of water, stir and wait 30 minutes. Pour the **LIQUID** portion **ONLY** into the pool water. **DO NOT** let the sludge from the bottom of the pail fall into the water.

Unstabilized Liquid:

Pour carefully around the perimeter of the pool.

It is best to apply either of these forms of unstabilized chlorine at night, so the sun cannot burn it off and you must allow 12 hours before you can swim again.

If your **FREE** chlorine is too **HIGH**, you are best advised just to wait until the level drops below 5 ppm before swimming.

**Maintaining Your Daily Chlorine Residual**

This is best handled by applying slow-acting stabilized chlorine in a puck form fed through an automatic chlorinator which should be refilled weekly. Be careful not to breathe in the dust from the chlorine puck package or handle the pucks with bare hands. They form a health hazard when not handled properly. An alternative method is to use a stabilized granular

chlorine. In this case, broadcast according to the manufacturer's instructions, downwind and evenly over the pool surface.

It is **VERY IMPORTANT** that you store your stabilized chlorine well away from the unstabilized product and any other oxidizers or an expulsion and fire can result.

**Stabilizer**

If your stabilizer level is too LOW:

Put no more than 2 tablets at a time into the skimmer basket at the side of the pool. The free flow of water over the tablets will expedite the dissolving process.

It is safe to use your pool while the stabilizer is being absorbed into the pool water.

**SPECIALTY CHEMICALS**

There are a number of **SPECIALTY** chemicals that you should also be familiar with:

- Vinyl Cleaners
- Stain and Scale Control
- Oxidizers
- Algaecides

**Vinyl Tile And Liner Cleaner**

When cleaning the liner, coping, ladder, stairs or other pool surfaces, it is **IMPERATIVE** that you use cleaners specifically formulated not to adversely affect the efficiency of the other chemicals regularly used to maintain your pool. As good as they are in your kitchen and bathroom, household and industrial cleaners containing phosphates and ammonia should **NEVER** be used to clean your pool.

**Oxidizers**

Generically known as Potassium Monopersulfate, oxidizer provides a non-chlorine method of oxidizing your pool water. Safer and less messy than using an unstabilized chlorine, it is just as effective in burning off organic contaminants and converting combined chlorine into free chlorine. It has relatively little effect on the other parameters of your pool water and you can also swim immediately after its application. It is recommended as part of your regular weekly chemical treatment. The trade-off with unstabilized chlorine is that you cannot raise your chlorine residual with oxidizer as you can with unstabilized chlorine.

**Stain & Scale Control**

Prevents the build-up of scale on the pool, equipment and staining of the pool surfaces from the precipitation of oxidized copper or iron from the pool water onto the liner of your pool. By following the regular maintenance dosage instructions on the label you can prevent these problems. You can swim after it is applied.

**Algaecides**

Are intended for the prevention of killing of algae. Boldt Pools & Spas algaecide is formulated to be compatible

with your other pool chemicals and is one of the most effective ways of preventing or removing algae infestations. It can be applied directly to the pool water or pre-diluted in a pail of water before application.

When included as part of your regular pool maintenance program, it provides a form of insurance against the occurrence of algae and its associated cost remedies.

You can swim immediately after its application, however swimming is **NOT** recommended when algae is present.



**TESTING YOUR POOL WATER**

By testing your pool water on a regular basis, you can care for your pool in a proactive manner - rather than reacting to problem water:

**Basic Parameters Which Must Be Tested:**

By The Owner	Professionally
→ Free Available Chlorine	→ Stabilizer
→ TA - Total Alkalinity	→ Calcium Hardness
→ pH	→ Copper Content
→ Salt (Specialty Strip)	→ Phosphate Level

**How Do I Test My Water?**

There are 2 basic types of home kits available:

The traditional “Drop” Kit, which uses OTO drops (for sanitizer readings) and phenol drops (for pH readings) that are mixed into small vials with samples of your pool water. You then match the colour of your mixed sample with the colour levels on the sides of the vials.

The “Strip” Kit, uses litmus strips which you simply dip directly into your pool water for a few seconds and then match the colours on the strip with the appropriate colour levels on the container that they came in. As well as being simpler to use, the “Strip” Kit measures your FAC - Free Available Chlorine (drop kit does not) and you can get up to 3 parameter readings from 1 strip.

**Professional Testing**

Your Boldt Pools & Spas Water Lab can provide you with professional readings for the following:

- Stabilizer
- Calcium Hardness
- Copper
- Phosphates
- Salt

These levels should be checked at least once per month by trained staff who can advise you when corrective action is needed.

**Remember** - Use a sterilized plastic sample bottle provided to you by your dealer (household bottles run the risk of contamination). Also, take your sample directly to Boldt Pools & Spas, as samples left overnight or in extreme heat will provide inaccurate readings.



# SECTION 2

## WATER SAFETY & TROUBLESHOOTING



### SAFETY FIRST

At Boldt Pools & Spas, our first priority is to make sure you enjoy your swimming pool in a fun and **SAFE** manner. Please read the following safety tips to help ensure your pool area is a **SAFE** pool area:

- Always close and lock pool gates when the pool is not in use
- Keep all chemicals out of the reach of children & pets
- Store and handle all chemicals as per manufacturer instructions
- Learn CPR and other emergency techniques
- Keep a list of emergency telephone numbers in a prominent location
- **DO NOT** allow horse play or running in a pool area
- Keep a complete first aid kit in a clearly marked and easy to reach location
- Keep a safety rope float kit installed at all times
- **NEVER** leave children unsupervised
- **NEVER** leave non swimmers unsupervised
- Keep a rescue apparatus handy poolside at all times
- Demand that all children pass your proficiency exam before being allowed to use your pool

- Carefully explain your pool rules to all visitors
- NEVER allow any diving or head first entry into any pool unless you are certain the pool is designed for diving and the proper depths have been provided. Results could be catastrophic.
- **NEVER** dive or slide head first into a pool after drinking alcohol or while under the influence of any drugs. Results could be catastrophic. We recommend you **DO NOT SWIM** at all
- **NO DIVING** signs should be placed at all areas around your pool where diving is not appropriate
- Keep all glass away from pool areas including decks and patios
- Keep electrical cords or appliances at least 3 meters (10') away from the pool
- Keep the cover to the automatic vacuum line in the **CLOSED** position at **ALL** times when not in use. The suction on this line is capable of holding even an adult underwater if their hair or bathing suit were to get sucked into the opening. This could result in serious injury or even death
- **DO NOT** swim with your solar cover on the pool

### YOUR POOL'S INFORMATION

Pool Size & Model:

Salesperson:

Location: Tel:

Year Installed:

### YOUR EQUIPMENT

Motor Make & Serial #:

Filter Make & Serial #:

Heater Make & Serial #:

### COMMON PROBLEMS & TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Cloudy or Turbid Water	pH too high Water not in balance Improper filtration Excessive use of pool Excessive wind blowing in dirt and other contaminants	Adjust pH Balance your water Check filter for backwashing Use a Clarifier liquid Use an Oxidizer
Eye/Skin Irritation	pH out of range High chlorine residual	Adjust pH Shock with a non-chlorine Oxidizer using twice normal weekly dosage
Scale Formation	High pH Water imbalance	Adjust pH Balance water (bring a sample to Boldt Pools & Spas Water Lab) Add a sequestering agent
High Chlorine Consumption	Low or no stabilizer pH out of acceptable range High combined Chlorine residual Heavy bather load or rainfall Windborne contaminants High water temperature	Add stabilizer Adjust pH Treat for Chloramines Superchlorinate Oxidize Turn off heater
Algae Infestation	Sanitizer level too low and/or water out of balance	See Boldt Pools & Spas for Algae treatment
Green Coloured Water	Metal oxidized in water due to low pH and corrosion	Test water for iron or copper content Adjust pH and balance water Add sequestering agents as per Boldt Pools & Spas Water Lab instructions
Filter (weak pressure)	Slow flow/low pressure	Clogged baskets/dirty filter Backwash and/or empty baskets
Pump	Motor doesn't start Motor noisy	Clogged/damaged impeller Blown fuse or tripped circuit breaker/loose electrical connection Worn bearing in motor
Heater	Won't start	Check to be sure Gas valve is in 'ON' position Check to be sure Heater switch is in 'ON' position Call Boldt Pools & Spas Service Dept.



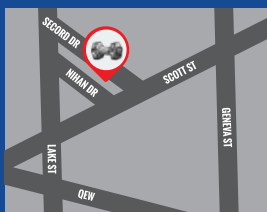
# BOLDT

*Pools & Spas* Since 1975



VISIT US ONLINE AT [BOLDTPOOLS.CA](http://BOLDTPOOLS.CA)

**OurReputation**  
**HoldsWater**



**BOLDT POOLS & SPAS**  
20 NIHAN DRIVE  
ST-CATHARINES, ON  
905-934-0937



**BOLDT POOLS & SPAS**  
41021 FORKS RD  
WAINFLEET, ON  
905-899-6512