



# Use and Care Manual for Fiberglass Swimming Pools

Notice: Failure to read and follow specific instructions Contained in this manual will void your pool warranty. Tallman Pools and Custom Fiberglass Pools are brands of Discount Fiberglass Pools, Inc.

# **USE AND CARE MANUAL FOR FIBERGLASS SWIMMING POOLS**

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We ask that you please download, print, and read this entire Use & Care Manual. In order to receive your pool warranty, you must have acknowledged on our registration site that you have received, understand, and agree to this Use & Care Manual in its entirety and will adhere to its instructions and recommendations. After we have received confirmation of such agreement, your pool warranty will be emailed to the email address provided with your registration.

Congratulations on purchasing your new Tallman/Custom Fiberglass swimming pool. Swimming pools have a way of bringing friends and families together, as well as providing a space to relax and ease the stresses of everyday life. We want you to enjoy your pool for decades to come, so we want to make sure you know how to properly maintain it and keep everyone safe while in and around your pool. Contained in this Use & Care Manual you will find the tools and resources needed to properly maintain your fiberglass pool. For the safety of you, your family and guests, it is essential that you read and understand this Handbook.

## WELCOME TO THE WORLD OF SWIMMING

A swimming pool is a source of pleasure and relaxation for the entire family. It provides health-building recreation for everyone in your family, regardless of age or inclination. Once the "getting acquainted" period is over, you will find that keeping your pool in proper condition is just as easy and pleasant as swimming in it. There are certain simple, basic facts of which you must be aware to assure the utmost pleasure and service from your pool.

This guide, along with information received from your authorized fiberglass pool dealer, will instruct you in the care and use of your pool. Owning a fiberglass pool is a most rewarding investment. It is one of the finest pools available and the easiest to maintain.

You now have a pleasant spot for healthful relaxation and family fun, an ideal center for outdoor social gatherings, a natural "spa" for mental and physical therapy, a muscle toning and body building area, and an architectural feature that enhances the attractiveness and value of your property. As with a new baby, you may have a tendency to over-care for your pool when it is new. Our recommendations for maintenance are designed to allow you more time for enjoyment while maintaining sparkling blue water.

# WATER CHEMISTRY

#### FIVE BASIC STEPS OF WATER CHEMISTRY

Your pool was built for pleasure, and you will enjoy swimming much more in pure, sparkling water – water that has been treated to assure comfort and safety to you, your family, and your guests. There are two primary systems involved in maintaining water purity: the water chemistry system and the filtration system. Both of these systems must perform properly; one cannot be substituted for the other. When you fill your pool for the first time, the water may appear cloudy or turbid. Don't be alarmed. Since your pool is filled with drinking water, the same water you use in your home, you assume it is sparkling clear. Appearances can deceive. In small amounts, such as a glassful, most tap water will indeed appear clear. In much larger amounts, such as a full pool, that clarity often disappears. Water which is perfectly acceptable for household use may be totally unacceptable for your pool. This is the reason your pool water must be professionally tested and balanced every six to eight weeks. There are five basic steps of water chemistry to be performed at home. These steps are performed poolside by a professional pool service company. Keep a record of all chemical testing and chemicals used in your pool. They are as follows:

#### STEP 1 - pH CONTROL

pH, which is the measure of acidity or alkalinity of the water, is determined by your test kit. Proper pH maintenance is extremely important as it is responsible for the correct bacterial action of the chlorine, swimmer comfort and prevents deterioration of the equipment and the pool itself. A proper pH reading is 7.4 to 7.6. Ideally, your pool should be maintained at the higher level of 7.6. After testing the water, if the pH is too high (above 7.76), chlorine efficiency is reduced, scaling of the surfaces and equipment may occur, water may become cloudy, and shorter filter runs may occur. To correct this condition, a pH decreaser is added directly to the water.

There are two common forms of pH decreaser: liquid muriatic acid and granular sodium bisulfate (Lo N Slo, pH Down, pH Minus). The granular form is the one recommended for your pool. Never add more than one pound of sodium bisulfate or one pint of muriatic acid per 10,000 gallons of pool water without professional guidance. If the pH is too low (below 7.4), chlorine dissipates more rapidly, water may be irritating to swimmers, and corrosion of equipment and surfaces may occur. To correct this situation pH increaser is added directly to the water. pH increaser (BalancePak 200, pH Plus, pH Up) is commonly called soda ash. Never add more than one pound of pH increaser per 10,000 gallons of pool water without professional guidance.

#### STEP 2 – CONTINUOUS DISINFECTION

Chlorine treatment is to maintain water purity. A good average chlorine residual is 1.0 ppm. The pool may be carried as low as 0.6 ppm or as high as 2.0 ppm. The lower level would be more subject to system failure and the higher level would increase operational costs. Therefore, the recommendation of a 1.0 ppm operating level is a good compromise that will assure water purity and low operating costs.

The use of compressed tri-chloro-s-trazine-trione, (Bio Guard Stingy Sticks, TabGard Tablets, Sun Sticks, Sun Tablets, etc.) insures even levels of continuous chlorination. Usage rates will be approximately one half to one pound of chlorine per 10,000 gallons of pool water per week. As with any pool chemical, follow the use directions on the container. Never mix different types of chlorine.

#### STEP 3 – SUPER CHLORINATION

Super chlorinating or shock the pool is a chemical treatment to eliminate non-filterable wastes from the pool water. A granular chlorine product such as calcium hypochlorite (Burn Out 65, Shock Out), lithium hypochlorite (Burn Out 35, litho-Shock), or sodium-dichlor-s-trazine-trione-dihydrates (Sun Booster) is used to obtain a chlorine reading of 8.0 to 10.0 ppm. Super chlorinating chemicals are available in convenient one-pound packages or in bulk packages of 25 to 75 pounds. Calcium hypochlorite should always be pre-dissolved before adding it to a fiberglass pool to prevent bleaching or staining of the surfaces. Calcium hypochlorite is used at a rate of one pound per 10,000 gallons of pool water.

Lithium hypochlrite is a quicker dissolving chemical which may be added directly to a fiberglass pool. It is used at a rate of one pound per 6,000 gallons of pool water. Sodium di-chloro, like lithium hypochlorite, may be added directly to the pool. It is used at a rate of one pound per 10,000 gallons of pool water.

#### **STEP 4 – PREVENTION OF ALGAE**

Contaminants in the rain and wind can quickly deplete the chlorine supplies in the pool. A high-quality algaecide (Algae Inhibitor, Algaecide Concentrate) acts as a chemical backup system in the event the chlorine becomes exhausted from the pool.

Following a one-time initial treatment (normally one quart per 25,000 gallons of pool water) add a maintenance treatment (normally two ounces per 5,000 gallons of pool water) directly to the pool every other week or every week.

#### **STEP 5 – PREVENTION OF STAINING**

In order to prevent staining of the interior pool walls, a metal chelation product (Pool Magnet, Metal Hold, Metal Magnet) is used. This product aids in the removal of metals introduced to the pool by fill waters, rain, and corrosion of metal equipment. Following an initial treatment (normally one quart per 10,000 gallons of pool water) metal chelation products are added on an every other week basis (normally two ounces per 5,000 gallons of pool water). Never add this product with a shock treatment. In order to prevent staining of the interior pool walls, a metal chelation product is used. This product aids in the removal of metals introduced to the pool by fill water, rain and the corrosion of metal equipment.

Following an initial treatment (normally one quart per 10,000 gallons of pool water) metal chelation products are added on an every other week basis (normally two ounces per 5,000 gallons of pool water). Never add this product with a shock treatment.

NOTE: Failure to use a metal chelation products as mentioned above, in accordance with the manufacturer's instructions, may result in the staining the pool walls, which is not covered by the pool warranty.

#### RECOMMENDED RANGES FOR DESIRED WATER BALANCE

CHLORINE 1.0 ppm

p.H. 7.4 to 7.6

TOTAL ALKALINITY 80 ppm to 100 ppm

CALCIUM HARDNESS 350 ppm

STABILIZER CYANURIC (conditioner) 60 ppm

SHOCK YOUR POOL ONLY AS NEEDED WHEN CHLORINE LEVEL IS LOWER THAN 1.0 ppm

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#### **GENERAL CHEMICAL INFORMATION**

From the very first day you fill your pool, its purity must be guarded (and maintained) by a chemical disinfectant. Enough of it must "reside" there to kill disease carrying bacteria and algae brought into the water by bathers, wind, rain, etc. The amount of chemical "residual" which must be present in pool water is expressed as so many parts of disinfectant per million parts of water, abbreviated "ppm." The same quantitative measure is used to express the amount of any other chemical added or present in the water.

Chlorine is the most widely used and accepted disinfectant for swimming pools. When chlorine is used as a disinfectant, at least 0.6 ppm and preferably 1.0 ppm of "free residual chlorine" MUST at all times be present in pool water to kill bacteria and algae and maintain the water's purity. Critical though this "residual" is for pool purity, it is a very small amount of chemical. Less than one drop of chlorine in every 1,000,000 drops of pool water is enough to disinfect the pool, providing the chemical is 100% active.

#### HANDLING & STORING POOL CHEMICALS

Handling and storing pool chemicals (Most pool chemicals are stable, retaining their effectiveness and strength for a considerable period of time when stored properly).

- 1. Keep ALL chemicals out of reach of children.
- 2. READ all labels and follow instructions BEFORE opening pool chemicals. Some vapors are toxic.
- 3. Date all chemicals on the container. Most pool chemicals are stable, retaining their effectiveness and strength for a considerable period of time when stored properly.
- 4. Keep the original lid on all chemical containers and make sure all lids are tightly sealed, store chemicals in a cool, dry place.
- 5. Chlorine chemicals are concentrated chemicals, which can be dangerous if not handled properly. **DO NOT MIX THEM WITH ANYTHING EXCEPT WATER.**
- 6. Use plastic, glass, china or enamelware scoops, or measuring spoons, and make sure they are clean and dry.
- 7. Measure and add pool chemicals separately, according to directions. Do not mix one with another before adding them to the pool.
- 8. Most pool chemicals are harmful to shrubs, grass and foliage in concentrated form. Keep pool chemicals away from plant life near the pool.
- 9. Hands should be clean and dry when dispensing pool chemicals. Wash hands thoroughly after treating pool.
- 10. Real all labels carefully before using pool chemicals and always follow directions exactly.

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#### COMMON FACTORS AFFECTING IN-POOL LONGEVITY OF CHLORINE

Here is a list of the most common factors affecting the in-pool longevity of chlorine.

- **1. BATHING LOAD** The number of swimmers who use the pool. The greater the number of swimmers, the more disinfectant is used up.
- **2. SUNLIGHT** the greater the sun's intensity, the faster the dissipation "residual" unless the pool is stabilized.
- **3. WATER TEMPERATURE** the warmer the pool's water, the shorter the lift of chlorine. This process is greatly accelerated when the water temperature exceeds 85 degrees.
- **4. WINDS AND RAIN** the carrying of dust, bacteria, algae spores and other debris into the pool, overworking the chemical disinfectants and reducing their ability to sanitize.
- **5. pH BALANCE** as the pH of the pool water rises, disinfectant actions slows down. More disinfectant must be added to maintain the proper "residual".

To maintain your pool's bacteria killing residual, disinfectant chemicals may be added by hand or by chemical feeder. Feeders may be adjusted to increase or decrease the feed rates of disinfectants depending upon the chemical demand of your particular pool.

Granular disinfectants are simply sprinkled into the pool water. Begin at the deep end; move completely around the pool distributing evenly throughout the pool. Some granular disinfectants must be pre-dissolved before adding them to the pool and may cause the water to become cloudy.

# pH BALANCE

The ideal level for pool water pH is 7.4 to 7.6. Water that is neutral – that is neither basic nor acidic – has a pH value of 7.0. This is mid-point on the 1 to 14 pH scale. Above 7.0 pH, pool water is alkaline. The higher up the pH scale the pool water tests, the more alkaline it is. Below 7.0 pH, pool water is acidic. The lower down the pH scale the pool water tests, the more acidic it is. Maintaining your pool slightly on the alkaline side (Note that the recommended 7.4 to 7.6 pH level is above the neutral point, thus alkaline) is important for a number of reasons.

When pool water is too alkaline (above 7.6) disinfecting chemicals work more slowly. They may not do their proper killing job even though tests of the water may indicate proper residual. Also, scale may form on or in pool equipment and piping, and especially pool heater coils. On the other hand, if pool water becomes acidic, it irritates the eyes, corrodes the equipment and piping, and can result in pool interior surface stains. To test for the pH of the pool water, follow the instructions provided in your test kit. Do not add test chemicals directly into the pool and do not put the pool water back into the pool after testing. High chlorine residual in your pool can affect the water's pH reading. If your test kit does not have a chlorine inhibitor, take the pH reading before adding chlorine. Do not hold your finger over the top of the test tube while mixing; body acid can cause a false test reading.

#### **TOTAL ALKALINITY**

Occasionally, pool water should also be tested for "total alkalinity." Total alkalinity is a measurement of the total amount of alkaline chemicals in the water. It refers to the degree of resistance to pH change of the pool water or its "buffering capacity." The proper alkalinity is between 125 ppm and 150 ppm. Low alkalinity waters make pH control difficult because of lack of buffering capacity (or poor resistance to pH change). Alkalinity must be increased in these waters to offset the possibility of the pool water reverting to acid.

Many waters are of high total alkalinity and high pH. To get these waters into the swimming pool "comfort zone" it is necessary to destroy a portion of the alkalinity, so the pH can be lowered. This can be accomplished by the addition of muriatic acid. Other factors of vital importance are metal contents, calcium hardness, cyanuric acid and total dissolved solids. These factors should be checked by your pool professional at least once every six to eight weeks to be sure they are within proper ranges.

Your TALLMAN Dealer may be able to recommend a good local pool store that you can become familiar with. Your local pool store should be able to test your water and supply you with the proper chemicals and instructions.

#### **CALCIUM HARDNESS**

The hardness of your pool water refers to the quantity of calcium and magnesium in the water. When evaporation takes place in your pool, calcium is left behind and increases the harness of the water. High levels may cause cloudy water, scaling of pool surfaces, piping and equipment in the re-circulation system. Low levels may lead to equipment corrosion and pool surface damage. The desired range of calcium hardness in a fiberglass pool 350 ppm. Hardness increaser can help you reach the right hardness in your pool water.

Low alkalinity waters make pH control difficult because of the lack of buffering capacity, or pool resistance to the pH change. Alkalinity must be increased in these waters to offset the possibility of the pool water reverting to acid.

# GENERAL MAINTENANCE

#### MAINTAINING WATER LEVEL IN YOUR POOL

For best operation, keep the water level in your pool near the center of the skimmer. A lower level can cause damage to the pump and filter by allowing air into the system. A higher lever reduces the efficiency of the skimmer.

#### **NEVER DRAIN YOUR POOL**

Your TALLMAN pool is designed to remain full of water at all times. If it is necessary to drain you pool, contact your authorized TALLMAN Pool Dealer for professional assistance.

If the pool is drained without first relieving the hydrostatic pressure on the pool shell, the pool shell will buckle and crack. All damage to the pool shell resulting from draining the pool without professional assistance of your authorized TALLMAN Dealer is the owner's responsibility.

#### **POOL SURFACE CARE**

The surface of your TALLMAN pool is the finest available and the easiest to maintain if you follow these simple directions.

#### **ABOVE THE WATER LINE**

The "bathtub" ring, caused by body oils, suntan lotions and contaminants from the air, is easily removed with warm water and an approved swimming pool surface cleaner for fiberglass, vinyl liner or painted pools. DO NOT use abrasive cleaners, steel wool, metal scrapers, wire brushes, or metal tools as these permanently damage the gel coat finish.

Dulled spots can be restored by first using a body compounds followed by a coat of wax (fiberglass boat wax or similar).

The gel coat finish on your TALLMAN pool can be scratched just like any other glossy surface. This finish is seven to eight times thicker than a normal coat of paint, so it is not likely that scratches will be more than superficial. Generally, you need not concern yourself with them.

Hairline cracks in the gel coat finish of your TALLMAN pool are not uncommon. Patch and repair kits are available from your authorized TALLMAN dealer.

#### **BELOW THE WATERLINE**

More brushing then vacuuming is our recommendation. A large percentage of the dirt, dust, soil, etc. that sinks to the bottom can be brushed down and through the main drain and will be caught in the filter. Heavy excesses after a storm, heavy rain, etc. should be vacuumed out. Use your leaf rake to remove leaves.

Vacuuming your pool removed all debris from the pool. The following steps are the recommended method of vacuuming. If you have questions concerning this, contact your authorized TALLMAN dealer.

- 1. Remove skimmer lid from skimmer.
- 2. Attach vacuum hose to vacuum head on the pole. Sink vacuum head and pole into pool.
- 3. Fill vacuum house with water by holding hose in front of return inlet until bubbles stop coming out of the vacuum head under the water.
- 4. Vacuum hose MUST be full of water before plugging it into the skimmer.
- 5. Insert vacuum house into the suction outlet of the skimmer or into the vacuum plate.
- 6. Vacuum pool. Do not remove head from water until you are finished vacuuming the pool, vacuum from the deep end to the shallow end. Do not vacuum metal caps or large leafs as they may clog the plumbing lines.
- 7. After vacuuming is complete, disconnect the hose from the skimmer. Remove the vacuum head and pole from the pool rinse with fresh water (not from the pool). Do not store vacuum hose in sunlight, as this will shorten the lift of the hose by about 50%. Coil the vacuum hose and store it in the garage or storage room. A large garbage can makes an ideal outdoor storage container for the vacuum and vacuum head.
- 8. Empty skimmer basket and replace lid on top of the skimmer.

# **Testing Swimming Pool Water**

Proper testing procedures insure accurate chemical readings.

- 1.Read and carefully follow testing instructions enclosed with your test kit.
- 2. Rinse test kit tubes with pool water before filling the tubes for testing.
- 3. Take water sample for testing 12 to 13 inches deep in pool. Do not take water sample from the surface water in the pool; this will affect the accuracy of the test.
- 4. Always read the test results against a white background.
- 5. Always test chlorine first, then test the pH.
- 6. Keep your test kit in a cool, dry place.
- 7. Replace test agents each year. The reagents lose their accuracy due to exposure to heat and sunlight.

# When to Test

- 1.Chlorine residual Every day, if no marked change every other day or twice per week.
- 2. pH level Every day, if no marked change every other day or twice per week.
- 3. Total alkalinity Every four to six weeks.
- 4. Calcium hardness Every two to three months.
- 5. Metal content Every two to three months.
- 6. Cyanuric acid, total dissolved solids Every six months. The pool water should be tested for chlorine residual, pH level, total alkalinity, calcium hardness, copper and iron after each rain of consequence or upon addition of more than eight inches of fresh water.

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# CARING FOR YOUR SWIMMING POOL EQUIPMENT

#### **PUMP AND MOTOR**

- 1. Do not run your pump dry. The warranty on your pump and motor is null and void if the pump has run dry. If the strainer cavity is drained of water during the cleaning of the strainer basket, it must be "primed" prior to starting the system again. Filling the pump pot with water and then quickly sealing the lid accomplish this. If your pump does not maintain its prime, call your authorized TALLMAN dealer for instructions.
- 2. Save all instruction tags and warranties on your pump and motor. It is a good idea to copy all information from the motor in the event a replacement motor or parts are needed.
- 3. Prevent the motor from getting wet. When hosing down your deck, keep water away from the motor. Rain and/or water off the eaves of the house can also damage the motor. A cover over the motor will ensure longer lift of the motor. This cover should allow adequate ventilation, so the motor does not run hot.

Your circulation system should run six to eight hours per day in the summer months. You can circulate your pool during the day or night depending on personal preference. During the winter months it is advisable to run your circulation system two to four hours per day. You should circulate the pool at night to help prevent the equipment from freezing during severe weather.

#### **STRAINER (Next to Pump)**

The lint and hair strainer basket collects lint, hair, etc. and prevents it from entering the pump and filter. Clean as required, typically, once per week. Before removing lid to strainer basket, be sure to turn off the motor. After cleaning and re-securing the strainer basket, prime the pump and turn the motor on. Open the air relief valve on top of the filter to remove air, which may be trapped in the filter. Silicone based grease on the O-ring in the lid will assure you of a better seal. Sandy dirt collected in the bottom of the strainer housing can be washed out by removing the plug at the bottom of the strainer housing and flushing with a water house.

#### **FILTERS**

Consult your manufacturer's instructions on operation, maintenance and warranty on your filter. The following suggestions (please verify these instructions with your authorized TALLMAN dealer) are for the operations of the different types of filters.

#### **CARTRIDGE FILTERS**

Cartridge filters are cleaned by removing the cartridge and cleaning it. This is necessary when the water flow through the return inlets is reduced or the pressure indicated on your gauge is more than ten pounds above normal operational pressure.

In most cases you can clean the cartridge by using a pressure nozzle on the end of your garden hose and directing the spray on the cartridge at an angle to remove the dirt. The cartridge can be taken to the car wash and high-pressure spray used. Do not use the detergent on the wax setting, as it will permanently damage the cartridge.

Suntan and body oils will coat the cartridge and cause reduced flow. This material may be removed by using filter degreaser for swimming pool filters. Follow the use directions on the container for this product. Your cartridge filter should be chemically cleaned every three to four months.

Scale will also form on cartridge. This may be removed by soaking the cartridge in a solution of one part Muriatic acid added to four parts water. Soak the cartridge until all the bubbling action stops.

Always rinse the cartridge thoroughly after chemically cleaning them. Reassemble the cartridge and lubricate the sealing O-ring to assure a proper seal.

#### **SAND FILTERS**

Sand filters are cleaned by a procedure called "backwashing". When the water coming through the return inlets reduces, it is time to backwash. If you have a pressure gauge, it will indicate any pressure change. A change of seven to ten pounds above normal is an indication for the need to backwash.

#### **BACKWASH PROCEDURE (for Dial Valve)**

- 1. Turn off the pump motor.
- 2. Set valve on filter to backwash.
- 3. Turn on pump motor. In fifteen to thirty seconds the water flowing out the backwash lines turns dirty. Continue backwashing until this water runs clean again (normally three to four minutes).
- 4. Turn off pump motor and rotate valve to the rinse position. Turn pump motor on for thirty to sixty seconds.
- 5. Turn pump motor off and set valve back to filter position. Turn on pump motor.

#### BACKWASH PROCEDURE (for Pull-Pull Valve)

- 1. Turn off the pump motor.
- 2. Set the T-Valve in the backwash position. Consult your owner's manual for proper position.
- 3. Turn pump motor on. In 15 to 30 seconds the water flowing out the backwash line will turn dirty. Continue to backwash until the water runs clean (normally three to four minutes).
- 4. Turn pump motor off and place valve in filter position. Turn pump motor on.

After the backwashing is complete and the pump motor is running, the grids must be re-coated with D.E. by slowly adding D.E. into the skimmer basket. The following chart is a recommendation as to how much D.E. should be used.

FILTER SIZE	POUNDS OF D.E.	NUMBER OF 1-POUND COFFEE CANS NEEDED
5 sq.ft	1/2	1
10 sq.ft.	1	2
15 sq.ft.	1	3 ½
20 sq.ft.	2	4
30 sq.ft.	3	6
40 sq.ft.	4	8
50 sq.ft.	5	10

<sup>\*</sup>A clean one-pound coffee can is a good measuring device for D.E. You can also purchase measuring devices from your dealer.

At least once each year the grids inside your filter should be taken out and chemically cleaned. This is accomplished by first soaking the grids in an acid solution (1-part muriatic acid to 4 parts water) until all bubbling action stops. The grids are then cleaned with a swimming pool filter cleaner and degreaser. Follow use directions on the container for this product. Rinse grid thoroughly and reassemble filter.

#### D.E. (DIATOMACEOUS EARTH) FILTERS

D.E. filters are special tanks consisting of a series of cloth covered grids. Diatomaceous earth, consisting of tiny prehistoric diatom skeletons, is introduced into the filter by the pump and covers the filter element. The D.E. allows water to pass through but collects the smallest of suspended particles. When cleaning is necessary, the water flow is reversed (backwashing) and the dirt and D.E. are sent through a waste line. Refer to your maintenance manual provided with filter.

#### **SURFACE SKIMMERS**

Read your factory instructions on operation, maintenance, and warranty.

Your surface skimmer is designed to remove all those things that float on the surface of your pool. They are collected in the basket inside the skimmer. This basket should be periodically removed and cleaned.

#### **REPLACING UNDERWATER LIGHT BULBS**

- 1. Turn off the breaker at the electrical panel.
- 2. Shut off power to pump and light system. Be sure light is off.
- 3. There is one screw which holds the light in place. It is located at the top of the light. Remove the screw.
- 4. Pull the light out with the niche.
- 5. Unwrap the cord from around light.
- 6. Place the light on the deck.
- 7. Remove the light bulb and replace it with a new underwater light bulb.
- 8. Place the light back in the pool and re-screw it to the niche.

Do not test the new light bulb until the light is replaced in the pool. The light bulb will explode and cause the whole light fixture to have to be replaced.

# **SALT CHLORINE SYSTEMS**

The swimming pool industry developed a salt to chlorine generator to stabilize the chlorine needs for a typical 40,000-gallon concrete swimming pool. The product has proven itself within the large commercial swimming pools. These products were introduced for use in in-ground residential swimming pools in the late 90's. The manufacturers however; haven't designed smaller units; they are still initially set up for a typical 40,000 swimming pool. The salt systems can work in our TALLMAN Fiberglass Pools, but we need to keep in mind several other issues when using these systems.

The fact that the generator is made for a 40,000-gallon pool, the average TALLMAN Fiberglass Pool has 10,000 gallons, in addition to having a low demand for chlorine then a typical cement surface swimming pool. The unit should need to be set no higher than 20%, if you are operating your swimming pool with a time clock, for those customers that run the pool on a 24/7 schedule, the setting should be the lowest possible. The amount of use, sunlight, water temperature, rainfall, air temperature will affect the amount of chlorine necessary to maintain a clean sparkly pool. When the water and air temperatures drop, and the pool isn't being used most units have a winter mode for limited operation.

Make yourself aware of the proper operating instructions for your salt system. Setting your salt system above 20% will void your surface warranty, and the warranty coverage from your other system components. The pool heater companies require a coated or chemical resistant heat exchanger for salt system pools; these are also known as titanium cores, for warranty coverage on a heat pump or gas heat units. The high sustained levels of chlorine will cause surface damage, pool stains, and eventually surface breakdowns.

If your family has elected to install an electrolytic salt chlorine generator otherwise known as a salt system, careful attention must be paid to the water chemistry settings during the initial startup. Please make sure to obtain, review and follow the installation and operation instructions provided with your system. There is and should be expected a break-in period or calibration time to figure out the proper settings for your pool. A saltwater chlorine system still requires proper water balance with respect to the buffering ability of the water these readings would include the pH, alkalinity, calcium hardness, the saline lever or salt level.

Once again not complying with the proper water balance or improper settings on your salt chlorine generator will cause damage to the pool in a few different ways.

- 1. Too high a setting on the chlorine generator or running the system on a 24/7 basis will cause stains, blotches, and roughness on the pool surface.
- 2. The splash out water from a salt system may damage certain decorative stone, colored concrete, or other deck surfaces.
- 3. Will cause a white residue fallout that'll plaque on the walls and floor of the underwater areas on the shell. This white residue will also deteriorate the chlorine generator cell ability to produce chlorine and will give false readings.
- 4. Corrode any metal within the pool or pool area such as pool ladders, light fixtures, pool heaters. To prevent this a sacrificial grounding anode should be installed in the system.

Remember to review the manufacturer's information on all of your pool system components to familiarize yourself with the dos and don'ts. They also have information on how to register the warranties.

Taking the time to familiarize yourself with the operation of your system, will increase the overall enjoyment of your pool. IMPROPER OPERATING OF SALT SYSTEM WILL CAUSE SURFACE AND COMPONENT DAMAGE. MAKE SURE TO

READ, UNDERSTAND AND FOLLOW PROPER SALT SYSTEM OPERATING AND MANUFACTURER TECHNICAL SPECS. DAMAGE TO YOUR POOL SURFACE AND OPERATING SYSTEM MAY OCCUR IF OPERATING SETTINGS IS TOO HIGH.

#### **POOL COVERS**

The newer type of winter and safety covers, that have anchors into the decking, require that they be stretched across the pool's coping. If you have a standard deck or exposed coping deck, the coping, or top rim of the pool, needs to have protection from the straps on the cover to prevent them from rubbing on the pool's gelcoat during periods of high winds. In addition to high wind, the coping can be damaged by debris and water on the cover, which increases the weight load on the pool's coping. We recommend using pool noodles, or other type of foam that will stay in place, between the pool's coping and the cover. In the event the straps do put wear marks on the coping we can sell you a touch-up kit with simple instructions.

#### **DECKS, WALKWAYS, AND PATIOS**

Keep all areas adjacent to the pool as clean as possible. All dirt, dust, debris, etc., on these areas are blown or tracked into your pool, increasing the chlorine demand. Hosing off these areas with water is the accepted method of cleaning them. Keep wash water out of the pool as much as possible. Pool chemicals in concentrate can etch and/or stain your deck area. Be careful not to spill pool chemicals on these surfaces. If you should spill chemicals on the deck be sure to rinse the area with large quantities of fresh water. Occasionally, in the summer months, you may encounter algae growing on the deck area. Should this occur, wash the area with an algaecide solution (1 part algaecide to 8 parts water). Rinse thoroughly after cleaning.

#### WARNING: NEVER ATTEMPT TO EMPTY YOUR POOL WATER

Notice: Failure to follow specific instructions contained in this manual may void your pool warranty.

#### **OPENING AND CLOSING YOUR POOL**

#### WINTERIZING YOUR POOL

The principal of winterizing your pool is to prevent any frost damage to the plumbing parts. Treating the pool water with the proper winterizing chemicals and covering the pool during the non-swimming or winter months saves time, money and work when it is time to open your pool in the spring. DO NOT disconnect the filtering system before adding the proper winterizing chemicals, as the chemicals will not be able to distribute throughout your pool. **NEVER DRAIN YOUR POOL.** 

- 1. Introduce the proper winterizing chemicals to the pool water. Allow these chemicals to circulate through the pool water before starting the filter.
- 2. Clean the filter.
- 3. Lower the water level of your pool approximately 3" below the bottom of the skimmer opening. This is accomplished with your pool vacuum cleaner, utilizing your filter and pump, and by opening the waste line. Make sure this quantity of water is directed to a place that will not run on any property and cause damage.
- 4. To prevent the plumbing lines from freezing, the water must be removed from the skimmer box and the pipelines, or a chemical agent must be added to prevent the pipelines from freezing. The water may be forced from the lines by compressed air, wet-dry vacuum cleaner/blower compressor, or displaced by pouring POOL ANTIFREEZE into the pipelines. Note: DO NOT USE AUTOMOBILE ANTIFREEZE. Then plug up the lines with rubber winterizing plugs, effectively displacing enough water so that the remaining solution will not freeze. If your filter is lower than the top water level of

your pool, special steps must be taken. Winterizing plugs must be in place before the filter components or lines are dismantled, to avoid uncontrolled draining via gravity flow.

Water in the lines will drain largely on its own in this situation; however, any water remaining will freeze unless treated with pool like antifreeze. The pool owner may choose to do this in the following manner or by merit of his or her own ingenuity.

Use a PVC 1 1/2" threaded by inserting a combination elbow and a section of clear pipe or tubing. Connected in the manner illustrated, you may effectively drain of blow out the line in question, clearing it and adding pool line antifreeze. With the clean flexible tubing, it is possible to punch off the flow of water while removing this apparatus, so that you may insert the winterizing plug with a minimum of water running into the pipeline.

- 5. Skimmers must also be winterized as follows: When this is done, it will expose two holes in the skimmer bottom. The front hole closest to the pool wall leads to the main drain in the pool bottom, or in the case of no bottom drain, this hole leads to the side drain in the wall of your pool. If you had a side drain, put two quarts of antifreeze inside of the pipe. Regardless of what type of drain you have, the other hold in the skimmer leads to the front of the pump at the filter and must have two quarts of antifreeze in this line and plugged in the skimmer. After both plugs are in, pour two quarts of antifreeze in the plugged skimmer bottom. This will stop any freezing in the skimmer-housing box should any water get into the skimmer. If your pool is piped in any other way them explained previously, make sure that all lines and skimmers are winterized with pool line antifreeze.
- 6. Remove all ladders and handrails and store then in a proper place. Place the white rubber ladder bumpers in the anchor socket holes to prevent chafing of the pool cover securing them with tape.
- 7. Underwater lights remain in place as they are below where ice will form.

**CAUTION:** When introducing winterizing chemicals as explained previously, take care not to allow these chemicals to settle on pool bottom by allowing them to circulate and dissolve for a few hours prior to removing the pump. All chemicals should be mixed and thoroughly dissolved in buckets of water prior to being added to your pool in order to avoid the discoloration of the fiberglass surface. Floating chlorine dispensers should be avoided when winterizing a pool. Dispensers are often trapped in one area, allowing the slow dissolving chlorine or chemicals to remain in one place, which may cause damage in a confined area to the pool surface. **THE FILTER TANK MUST BE DRAINED OF ALL WATER** 

- 8. Sand filters have a drain plug at the base of the filter tank. Diatomaceous Earth filters have a similar drain plug or valve at the bottom of the filter tank. This is where the old D.E. is drained before regeneration with a new D.E. powder. Drain the tank completely dry and leave the bottom drain plugs out and/or the valve open for the winter. You can store these plugs and any other small items inside the strainer basket at the pump so you won't forget where you put them over the winter months. THE PUMP AND MOTOR OF YOUR SYSTEM SHOULD BE REMOVED AND STORED INDOORS WHILE NOT IN USE.
- 9. This reduces corrosion of the metal parts and in general prolongs the life of the pump and motor. This can be accomplished by removing the pipe that goes from the top of the pump house to the filter. Next, unscrew the union that joins the pipe coming out of the ground to the front of the pump house. WITH ELECTRICITY OFF AT THE CIRCUIT BOX, remove the wire that leads to the motor.
- 10. It is advisable to install a winter pool cover on your pool. Install this cover according to the manufacturer's directions. If more than two inches of rainwater accumulate on your cover, it is best to remove the water with siphoning device, so as not to have water displace the pool water under the cover, causing an overflow problem. This will supersaturate the area around the pool and cause undue pressure on the pool sidewalls and components, unaware to you. **FLOAT AN INFLATED TIRE INNER TUBE FOR EXPANSION.**

11. If you have a pool heater, make sure that the heater is drained by removing the necessary plugs as required in the heater instructions as supplied with heater by the manufacture. **PLEASE FOLLOW THESE DIRECTIONS AND YOU WILL ENJOY YOUR POOL NEXT SEASON.** 

#### **SPRING START UP**

- 1. Clean and rake the area around poolside.
- 2. Remove the pool cover from your pool and store the cover in a safe, dry place for next year.
- 3. If you don't have a pool cover scoop leaves and any other debris that might have accumulated in the pool over the winter.
- 4. Remove the rubber bumpers that you placed in the anchor sockets for the pool ladder last fall.
- 5. Using a soft brush, (a clean paint brush will do nicely) brush any dirt out of the anchor socket bolt threads.
- 6. Wipe a heavy dab of Vaseline or grease into threads of anchor socket and spread around the inside of the socket. This will help you disassemble the pool ladder at the end of swimming season. Do the same thing to the socket of handrail, if you have one.
- 7. Install the pool ladder (make sure the rubber bumpers are attached to the end of the ladder that rests against the pool wall) and tighten the anchor socket bolts gently but firmly.
- 8. Remove all of your other pool fittings and accessories from storage, clean them off and install them in the pool or at poolside.
- 9. Remove the pump from storage.
- 10. Put Permatex or pipe and joint compound all the plumbing fittings before connecting pipes. DO NOT USE VASELINE.
- 11. Reinstall your pool pump by connecting the pipe to the top of your pump and attaching the union to the pipe coming out of the ground.
- 12. Remove the coverlid from the skimmer. Remove the winterizing plugs from the skimmer.
- 13. Install the strainer basket into your skimmer.
- 14. Install the skimmer lid.
- 15. Install the pump strainer basket in the pump housing.
- 16. Install the pump drain plugs in the pump if they were removed.
- 17. Fill the pump housing with enough water to fill the pump strainer basket. This water will act as a prime for the pump (approximately 1 gallon).
- 18. Place the pump cover gasket or "O" ring in place and put the pump cover lid securely in place.
- 19. Install the drain plug in the bottom of the filter tank.
- 20. WITH THE ELECTRICITY OFF AT THE CIRCUIT BOX reinstall wires to the motor.
- 21. Open the waste line.

- 22. Remove the winterizing plug from the return line and screw in a male adapter connector in the line and put your vacuum cleaner hose onto the male adapter. Put the other end of the vacuum hose out of the pool.
- 23. Fill the pool with enough water to reach the center of the opening.
- 24. Turn pump motor power on and let run until the pool line antifreeze has left the skimmer and the main side drain. You'll be able to tell by seeing the blue or colored antifreeze coming out of the waste line. When this runs clear for 30 seconds, the antifreeze is out of the skimmer and main or side drainpipes.
- 25. Turn off the motor and close the waste line.
- 26. Make sure the vacuum cleaner hose is secured to the adapter that is screwed into the return line fitting and the other end of the vacuum cleaner hose is directed to a convenient drain area. Turn the pump motor on. Water and antifreeze will come out of the return line. When this water runs clear for about 30 seconds you have removed the colored antifreeze from the return line. Remove the adapter and the vacuum cleaner hose from the pool and proceed to filter the pool water.
- 27. Add a triple dose of purifying chemicals to the pool water through the skimmer not directly to the pool (this is super chlorination of the pool water).
- 28. With the filter running, brush the walls of the pool. After the dust and dirt have settled to the bottom of the pool vacuum clean the pool.
- 29. Start and maintain your normal filtration and water purification schedules. It may take as many as 4 to 7 days of this normal filtration to reach the desired clarity of the pool water if pool got very dirty over the winter. Do not be concerned, therefore, if it takes a few extra days to clean your pool. If your water purification schedule is well under way and your pH is in the proper range there is no reason why you cannot go swimming during the interval of cloudy water.

#### **HURRICANE INFORMATION**

The following information is a supplement to the Care & Maintenance Booklet, for additional information on what to do with your swimming pool before and after a major storm. These guidelines will cover some of the issues during a storm like preparations, what to do when the power is out, what to do when storm debris falls into the pool, what to do when the pool is flooded with storm water. When the storm is approaching turn off the pool's electrical at the main breaker panel. The breaker can be turned on after the storm or when it's safe to operate the pool system.

**DO NOT THROW PATIO FURNITURE IN THE POOL!** The news media suggests that people place the patio furniture in the swimming pool. This can damage the pool surface; secure these items inside the garage or shed instead of the swimming pool. The past storms, customers had "finish" service calls where the patio furniture left scratches, chips or stains in the pool; which is NOT COVERED UNDER OUR WARRANTY.

**DO NOT DRAIN THE POOL BELOW THE SKIMMER!** The news media mentions about emptying the pools water before the storm. This should never be done; the pools excess water will drain away from the pool and a slight overflow is not a problem. After the storm, the excess water can be drained from the pool via the pump and filter system.

When the power is out for a period of time, the pool will only require a little chlorine to keep the water clear. When the storm has passed, remove the debris from the pool using your leaf net as soon as possible, remember when trees or branches fall into the water the leaves, and branches carry algae which will start to grow into the pool, remove these quickly, and add a little chlorine to the water. If the power is going to be out for a considerable amount of time; add a little shock to the pool every couple of days to keep the water clear.

CALL A PROFESSIONAL SWIMMING POOL SERVICE COMPANY IF THE SWIMMING POOL HAS BEEN FLOODED WITH STORM OR SEA WATER! DO NOT ATTEMPT TO DRAIN THE POOL OR SERVICE YOUR POOL WITHOUT PROFESSIONAL GUIDANCE! DO NOT OPERATE THE PUMP SYSTEM UNTIL THE SYSTEM HAS BEEN CHECKED BY A POOL PROFESSIONAL!

# **SAFETY TIPS & RULES**

#### IMPORTANT SAFETY INFORMATION

Like anything new, your fiberglass pool will be "shown off" to your family, friends and neighbors. Why not? You are justifiably proud of your pool and you want them to see it. Yes, you may even want them to swim in it. If you want to enjoy your own privacy with your pool and not let it become the community "swimming hole" you need to think about establishing certain pool rules and regulations. Please consider the following safety facts before establishing your pool rules.

- 1) Diving and sliding head first into water causes more paralyzing injuries than all other sports combined.
- 2) Drowning is the second leading cause of accidental death. It is second only to traffic accidents.
- 3) "Jocks" and children of adult size (5' -2" and weighing more than 120 lbs.) are most likely to be injured in a diving accident. Most paralyzing accidents occur in the shallow part of the pool from a "shallow dive" or head first slide.
- 4) The responsibility of the pool owner is to:
  - a) Warn users of the pool about hazards.
  - b) Protect against misuse.
  - c) Correct unsafe conditions.

You should realize that many people will be more careless about your pool than one of their own. This does not mean your guests are "bad" people, but simply that they are human. It is a good idea for you to review your insurance coverage on your house or property where the pool has been installed and decide whether you have sufficient insurance protection against the threat of a lawsuit. Homeowner's insurance is much less expensive than automobile insurance and increasingly greater amounts of insurance can be purchased at minimal rates. Your responsibility is to protect against misuse whether you are at pool side or not.

- 1) Whenever you see anyone doing a dangerous activity, you have a responsibility to warn them and to tell them to stop.
- 2) Never, ever leave a child alone near water, even to answer the phone.
- 3) Tell every person who will use your pool your rules and regulations. Having the owner tell them is more effective than reading it from a sign.
- 4) Prohibit glass of any sort in the pool area.
- 5) Post on your phone the rescue or hospital telephone number. Also display a guide for mouth to mouth resuscitation and CPR.
- 6) Learn proper removal techniques of injured pool users.

Drowning is the second leading cause of accidental death. Drowning usually occurs with one or more of the following "no-no's" of owning a swimming pool.

1) Unsupervised swimming.

When a child drowns, an adult is responsible. Never leave a child alone, even for as long as it takes to answer the telephone. A child whose lungs are filling with water is unable to scream for help. Don't assume that you will be able to hear it if something dangerous happens as there may be no sound.

2) Uncovered pools not in use.

- \*A pool cover serves to conceal the water and discourages a child's curiosity. Also, a pool cover provides some protection to the child or his parent should an unsupervised entry occur, because it offers a place to hold.
- 3) Unprotected pools, not surrounded by fencing.
- \*A good fence not only provides safety and privacy, it also insures against uninvited "guests" when you are away from home. You should also have a "No Trespassing" sign posted on your fence.
- 4) Unlocked safety gates.
- \*Be sure all fenced pools have self-locking gates. If the pool can be entered from the house, be sure those doors are locked whenever a young child is present.
- 5) Unaccompanied Swimming
- \*Good swimmers drown, too. Often it is not the inexperienced or reckless person who is a drowning victim. Rather, it is a person who can swim and is careless about when, how, and where they swim. Never allow anyone (including yourself) to swim alone. It is common that alcoholic beverages are served or consumed in close proximity to your swimming pool. Conduct of all persons must be closely supervised in a "party atmosphere" or in an environment where alcohol is consumed. Horseplay or diving and swimming competitions may result in injury. Alcohol is not a stimulant, but rather, it is a depressant. The reason people act "silly" after a few drinks is that the part of the brain which exercises restraint and control over their activities is being anesthetized and the controls diminish. As the amount of alcohol consumed increases, more of the brain is anesthetized and eventually one can black out or worse. If your guests consume alcohol and then must drive to their own homes, please exercise consideration for their welfare and life as well as the welfare and life of others on the highway. If you or your guests become intoxicated, please do not use your pool or operate an automobile.

#### 6) Drains and Entrapment Avoidance

WARNING! The suction force from an unprotected drain can result in serious injury or death from suction, hair or limb entrapment. All drains must be equipped with proper covers. In the event a cover is broken or missing the pool MUST BE SHUT DOWN until the cover is repaired and/or replaced. Under no circumstances should children or adults be allowed to play with or near a drain or drain cover. A number of additional products or designs may be available to further protect your pool from entrapment related injuries. Please contact your dealer for more information.

Here are some of our suggestions for pool rules. Please feel free to copy these and distribute them to family, friends and neighbors who will be using your pool.

# **Pool Rules**

The following warnings and rules have been established for you, the responsible owner, with a series of guidelines that when adhered to will reduce the likelihood of severe catastrophic or potentially fatal injury. Pool industry research indicates that most injuries involve one or more of the following: head first entry into shallow water (3'-7'), alcohol or drug use, lack of parental supervision and lack of first aid and/or CPR training. In addition, most diving injuries occur to first time guests, usually male, ages 15-21, and at social gatherings. Drowning victims are usually small children who reside at the house, and who are left unattended. Based upon this information the following constitutes good pool safety practices:

- 1) All users should be informed of pool rules prior to entering pool area.
- 2) NO DIVING / ALWAYS ENTER POOL "FEET FIRST".
- 3) Prior to entrance of any body of water, survey pool and pool area.
- 4) Never use a pool when a drain cover is broken or missing. Never allow anyone to play near or with drain covers.
- 5) Running on the deck, and horseplay of any kind are not tolerated in the pool or pool area.
- 6) Persons who appear to be intoxicated or under the influence of Medication, Drugs or Alcohol should not be permitted in your pool.

- 7. Do not presume, always ask the question: "Can you/your child swim?", when you have guests.
- 8) Running and then jumping or diving into the water is not allowed.
- 9) Use the buddy system when using the pool. Do Not Swim Alone.
- 10) Transition/safety rope used to warn swimmers of changing water depth must be in place at all times when pool is being used and should not be used for games or as a method of flotation or support.
- 11) No glass in the pool area.
- 12) No electrical devices/appliances in or around the pool, unless it is protected by a GFCI, GFCI must be checked prior to using.
- 13) Pool should be lighted when swimming after dark.
- 14) Pool games that may result in injury should not be permitted in pool or pool area.
- 15) All social gatherings should be carefully monitored.
- 16) Inspect pool before and after each use.
- 17) Post emergency numbers at pool.
- 18) A First Aid Kit should be kept in the pool vicinity.
- 19) Basic lifesaving equipment, including at least one of the following, must be on hand at all times:
  - a) A light, strong, rigid pole (shepherd's hook) not less than 12 feet in length
- b) A minimum 1/4" (one-quarter inch) [6.35mm] diameter rope as long as 1-1/2 times the maximum width of the pool which has been firmly attached to a Coast Guard-approved ring buoy having an outside diameter of approximately 15 inches.
- 20) Life Preserver must have Coast Guard approved label.
- 21) Pool toys should be kept to a minimum and should be removed from pool after each use.
- 22) No sleeping on pool flotation devices in pool.
- 23) Pool equipment and chemicals are to be handled with appropriate Personal Protective Equipment (PPE) and by adults only.
- 24) There shall be no protrusions or other obstructions in the swimming area, which may cause entrapment or entanglement by the user of the pool.
- 25) Barriers are essentially for preventing unsupervised access to the pool or pool area by children. Examples include fences with self-latching gates, safety covers and alarms on doors and windows. None of these devices, however, is a substitute for constant adult supervision.
- 26) Keep pool fence locked when not in use. When working in and around pool keep gate closed.
- 27) Never allow anyone to sit, stand or play on a solar or safety cover. Infants or small children can drown even in water accumulated on the top of a cover.

Drowning is the second leading cause of accidental death. Drowning usually occurs with one or more of the following "no-no's" of owning a swimming pool.

- 1. Diving and sliding head first into water causes more paralyzing injuries then all other sports combined.
- 2. Drowning is the second leading cause of accidental death. It is the second only to traffic accidents. Your responsibility is to protect against whether you are at pool side or not.
- 3. Whenever you see anyone doing a dangerous activity, you have a responsibility to warn them and to tell them to stop.
- 4. Never, ever leave a child alone near water, even to answer the phone.
- 5. Tell every person who will use your pool your rules and regulations. Having the owner tell them is more effective than reading it from a sign.
- 6. Prohibit glass of any sort in the pool area.
- 7. Post on your phone the rescue or hospital telephone number. Also display a guide for mouth to mouth resuscitation and CPR.
- 8. Learn proper removal techniques of injured pool users.

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# **CONCLUSION**

# **WARNING/DISCLOSURE**

In no event shall the manufacture or any entity affiliated with Tallman Pools/Custom Fiberglass Pools (herein referred to as TALLMAN) be liable for damage to the property, lost profits, injury, injury to goodwill, or any other special incidental or consequential damages resulting from any advice or instructions contained in this manual. ALWAYS REFER TO THE OWNER INSTRUCTIONS provided to you by the supplier for the correct operating procedures of all pool equipment, supplies and the use of chemicals. This manual is provided as "Suggestions" only.

# WE RECOMMEND STORING ALL YOUR DOCUMENTATION WITH THIS USER'S MANUAL