

# **POOL & SPA MAINTENANCE**

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Congratulations on the purchase of your new swimming pool! We highly recommend hiring a qualified and reputable service pool profession – do your homework, and find a good company. However, although some of our clients may opt to hire a pool service company to perform their pool maintenance, we are firm believers in understanding your investment. By learning more about your pool and pool service, you can better set expectations for your pool service company and manage it properly – as untimately the investment is yours! This packet includes information to help keep your pool water healthy and clear year round.

#### DID YOU KNOW?

Almost 70% of pool warranty & repair issues are related to improper maintenance and/or water chemistry. Failure to understand and follow these weekly tasks results in the most damage to your equipment, pool interior, and even patios! Educate yourself so that you can ensure your new investment stays looking its best!

#### **POOL MAINTENANCE CHEAT SHEET**

#### Twice A Week

- ❖ Use a water testing kit to check and maintain pH levels at 7.2 − 7.8
- ❖ Monitor and maintain chlorine levels at 1.0 3.0 ppm.
- **the Empty skimmer baskets, skim leaves, insects and other debris from pool surface.**
- Empty debris canister (if applicable). This will contain large debris from main drain circulation.
- Check schedules (make sure all schedules & settings are as desired)
- If applicable Check salt cell lights (4 green lights) and Ozone light (1 green light)
- ❖ Use the ORENDA APP to ensure your LSI is balanced

#### Once a Month

- ❖ Take a water sample to your local pool retailer, for a complete water analysis. Be sure to test these levels:
  - Alkalinity
  - Calcium hardness
  - Stabilizer
  - FULL LSI REPORT (is your water scaling or etching?)
- ❖ Look for larger issues like leaks, standing water, wet spots, etc.
- ❖ Listen for unusual noices or sounds that may indicate a problem.
- Ensure your overall pool looks good!
- Check settings & flow

## Quarterly

Clean your cartridge filter with a cleaner to remove any oils and grease that may have accumulated in your filter. (NOTE: During monsoon season, you will need to

- clean your filter more frequently)
- ❖ Adjusts schedules for pump / circulation / \*\*\* times appropriately for the season.
- ❖ Clean salt cell (if applicable) \*may need more often during summer & use
- Always seek the advice of a pool professional, your local pool retailer, regarding any special or unusual problems.

#### **Monsoon Season**

Please see page 6

## **Avoiding Common Swimming Pool Maintenance Mistakes**

Swimming pool maintenance does not have to be difficult, but knowing how to properly maintain your pool by avoiding common mistakes will make it a much more rewarding experience as well as a safer place for family fun. Follow these tips for easy pool maintenance:

- Check pool chemistry often You should check the pool's chemistry at least twice a week in the summer and once a week in the winter. By doing this you can make minor adjustments to your water chemistry.
- ❖ Don't allow the pH level to get above 8.0 At 8.5, chlorine is only about 10% active. At 7.0, chlorine is about 73% active. If you maintain pH around 7.5, the chlorine will be 50-60% active. Keeping the pH in check will allow you to use the full potential of the chlorine that is already in the pool and save money on chemicals.
- ❖ Keep the alkalinity between 80-120 PPM − Low or high alkalinity can affect water balance and ultimately a sanitizer's ability to perform.
- Check TDS (Total Dissolved Solids) on a regular basis Check the TDS every 6 months and calcium hardness once a month.
- Clean the cells in salt water systems If you don't clean the cells in chlorine generators, those calcified and corroded cells will produce little chlorine.
- Don't backwash sand or DE filters too often If you backwash sand or DE filters too often, the filter cannot reach its cleaning potential and you are wasting water. Most filters require backwashing when the pressure gauge rises 8-10 psi from clean.
- Clean the skimmer basket in the pool pump often If these are full of debris, you will get little flow resulting in poor circulation.
- ❖ Don't add chemicals during the day You will get more out of chemicals if you add them after the sun has set. As the sun evaporates water, the chemicals evaporate as well.
- Brush the walls and tile often If your circulation system is suspect, brushing down the walls will help eliminate algae problems. Keeping your tile clean will save you money. If the tile gets calcified, it will require a specialist to clean it off.
- Run your pumps adequately A good rule of thumb is to run your pump about 1 hour for every 10⁰ of temperature. Circulation is the key to a low maintenance swimming pool!

#### **Salt Water Pool Maintenance**

Properly controlling a salt water chlorinator - There are four things that are important when using salt water chlorination:

## 1. The Salt Water Pool Misconception "NO MAINTENANCE"

MOST IMPORTANT – The number one problem with a salt water pool is the common misconception by homeowners that these pools don't need any daily/weekly/yearly maintenance. This "thought process" leads us in to the #1 important rule about owning a salt water pool – MONITOR the pH level, and keep it balanced LSI – usually between 7.2 & 7.6. Your salt water pool, as it produces chlorine, has the tendency to naturally increase pH levels that will easily get to above 8.0 in less than a few days. This pH level is bad for your pool, and can even void your pool warranty (because of it's corrosive damage to your pool interior).

You will find that adding acid is a task that is required at least twice a week. (Did you know we have automatic acid feeders to help you with this task?)

## 2. Keep the proper level of salt and stabilizer in the pool

Our Pentair Intellichlor chlorinator requires 3200- 3400 parts per million salt concentration in the water. This can barely be tasted in the water, but provides enough salt for the salt cell to produce the chlorine needed to maintain the pool.

If the salt level drops too low, the system will not be able to produce chlorine. Our Pentair salt cell has a green light that will turn red when the salt levels in the pool are low. The answer to low salt levels is to add pool salt to the skimmer and let it dissolve into the water, always making sure your filtration pump is on until the salt dissolves.

NOTE: If the system indicates a low salt level, be sure to test it with a salt test kit before adding salt. If a salt cell is failing or is scaled it may give a false low salt indicator. It is also important to have a good stabilizer level (40 - 60 ppm) in the pool or the sunlight will burn up the chlorine and the saltwater system will not be able to keep up with the demand.

#### 3. Adjust the output settings on the salt system (via the automation system)

The salt system has a setting that controls the amount of chlorine that is generated. This can be adjusted to keep the production of chlorine in line with the demand. This can be adjusted within the Intellichlor settings of your automation system.

#### 4. Make sure the pool is running long enough to produce adequate chlorine

The timers on the pool should be set to run during the hottest daylight hours, preferably from at least 10 am to 6 pm during the summer. This is when your chlorine usage is highest. The system will only produce chlorine while the pump is running so it is important to run the pool long enough.

## **Shocking a Pool (Super chlorination)**

If the chlorine reading gets too low then it is important to super chlorinate the pool in

order to quickly raise up the chlorine level to avoid unsanitary water. The salt system should be sized to provide sufficient chlorine output, but in the event of very heavy chlorine demand (swim party, heavy rains, etc.) it might be necessary to supplement the chlorine feed with a manual shock (this is a rare occurrence).

It is important to use only as much granular chlorine as is needed. Many salt system owners are sensitive to heavy amounts of packaged chlorine with all its byproducts.

Simply adding more salt to the system WILL NOT be enough to solve the problem if you have a low chlorine level. That will enable the salt system to begin making chlorine, but will not immediately raise the chlorine level.

## **Troubleshooting Salt Water Pools**

## "System does not seem to be producing enough chlorine"

1. Check the salt level in the pool.

Check salt level with a saltwater test kit (even if the system does not indicate low salt). The salt level indicators on salt systems can fail, especially if there are problems with the cell. If the salt level is low, add the proper amount of salt and retest a day or so later.

NOTE: If the system indicates a low salt level, be sure to test it with a salt test kit before adding salt. If a salt cell is failing or is scaled it may give a false low salt indicator.

#### 2. Check the stabilizer level in the pool.

The purpose of stabilizer in the water is to help keep the chlorine from being so quickly dissipated by UV rays. If there is not enough stabilizer in the water, then the pool will use chlorine at a rapid pace and the salt system will not be able to keep up. Salt water pools should have 40-60 ppm stabilizer (cyanuric acid).

#### 3. Check the settings on the automation system

Make sure the system settings are correct. Most systems can be set to run anywhere from 0 to 100% of the time. If the pool is not using a lot of chlorine (such as in the off season), the system setting should be lower. If the pool is using more chlorine, the system setting should be higher.

NOTE: Do not set settings any higher than necessary. Salt cells have a limited lifespan and if you constantly run the system at 100% you will end up with premature cell failure. This may require monthly adjustments.

## 3. Check the timer settings on the pool.

The system will only produce chlorine while the pump is running. If you have the system set at 100% and it is still not producing enough chlorine, then it might be necessary for you to run the pump longer.

#### "I added salt, but the low salt indicator is still on"

Check the salt level in the pool using a salt test kit (as described above).

If the salt reading is OK according to the salt test kit, then inspect the cell. If there is scale on the plates of the cell, then soak the cell in an acid solution according to manufacturer's instructions. Remember, it can take up to 24hours for salt to dissolve & register in your pool. Don't add too much salt at a time – as the only way to lower the salt level in a pool is to do a partial drain.

## "The pH level seems to be going up out of control"

Make sure you stay on top of the pH level on a daily basis if you find the pH to be getting out of control. Remember, the pH increase is a by-product of chlorine production. High pH levels can cause havoc on pool interiors, equipment, and overall pool longevity. Acid should be added daily and never too much at a time (only a few ounces). Look into our acid feeders that feed small amounts throughout the day – these guys can save you lots of time and effort in handling dangerous acid.

## **Monsoon Season Pool Care**

In Arizona, we experience what is known as Monsoon, a season that is characterized by high temperatures, high winds, and high moisture, resulting in potentially deadly weather. Serious damage can occur from these high winds, or from debris being tossed by those high winds.

Monsoon season typically starts around June 15 and lasts until September 30th. Here are some tips to help keep your pool properly maintained during this season.

It is essential to check your pool after a Monsoon storm. The following preventative measure should be performed even if you have your pool regularly maintained by a pool service company.

- ❖ Reset your filter timer Reset your timer for longer hours in the early afternoon and evenings. Monsoons tend to be more active during these times of the day. The Monsoon season places stress on your pool due to high temperatures, high winds, and additional debris that is kicked up by these winds. Longer filter run times will help reduce problems.
- ❖ Look for Debris and Leaves After a storm with heavy wind and rain you are likely to have a lot of debris in your pool. Remove any large floating debris from the pool and check both the skimmer and the skimmer baskets for leaves and other debris. If your baskets become clogged it will limit the flow and amount of water that is being sucked into the pump. This will cause the pump to run dry, overheat and eventually burn out leading to a costly repair bill.
- ❖ Backwash and Disassemble Filters Monsoon season brings with it heavy dust storms. Because of this you may need to backwash your filter or disassemble them entirely to ensure all manner of debris is removed and the filter clean.
- ❖ Super Chlorinate After a Monsoon Storm If you have a chlorine or Ozone pool, super chlorinating after a dust storm can help to prevent the start of algae. Use a

shock that has the highest available chlorine content. To help control algae growth both before and after Monsoon Season in any pool type, we recommend a preventative algaecide and a stain preventer on a weekly basis to help prevent problems. Algae feeds on phosphates – take away the algae's food by using a phosphate remover (Zero Phos) to help lower and/or eliminate the phosphates in your water.

#### **POOL VIDEOS**

Instructional video links on how to use some of your new pool features & equipment.

## **INDIVIDUAL VIDEOS**

Pool Orientation Overview (Duration 1:36)

Pool Equipment Overview (Duration 19:23)

Automation - Pentair Controls (Duration 3:55)

Automation – Pentair APP (Duration 6:08)

Maintenance – Pool Startup & Brushing (Duration 2:30)

Maintenance - Maintenance Timeline (Duration 7:13)

Maintenance – How to Vacuum (Duration 1:21)

Maintenance – Water Chemistry 101 Complete (Duration 17:06)

Maintenance – Complete Water Chemistry Video (Duration 23:52)

Maintenance – Pool Chlorination 101 (3:07)

Maintenance – Find a Pool Service Company (Duration 1:08)

Equipment – Gas Heater (Duration 3:16)

Equipment – Ozone & UV (Duration 2:01)

Equipment – Automated Valves (2:44)

Equipment – Ultra UV (Duration 1:49)

Equipment – Skimmer & Autofill (Duration 3:21)

Equipment – Pool Lights & GFCI (Duration 1:37)

Warranty – Pool & Equipment Info (Duration 3:36)

Warranty – Overall Process (Duration 1:42)

Warranty – Process & Procedures (Duration 1:42)

Spa – Getting to know (Duration 4:57)

Spa – Waterway Jet Operation (Duration 1:04)

Spa & Pool – Heating Efficiently (Duration 2:27)

Spa & Pool – Heating Costs (Duration 2:04)

Infloor Cleaning – Water Valve (Duration 3:36)

<u>Infloor Cleaning – Operation & Maintenance (Duration 7:55)</u>