



Owning and operating a swimming pool or spa is a snap!

Just spend a little time each week in the backyard and get a good grasp on some basic information.



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The tips and ideas in this Pool Owners Manual will help get you going.

“The key to a clean clear swimming pool is the pump, filter and water chemistry.”

## The Pump



This piece of equipment is what drives the pool water through your system.

Fortunately, it doesn't require much maintenance by the pool owner. Just make sure the pump's strainer basket is free of debris and that the lid is tightly secured. A leaky pump lid can allow air into your system.

Check the O-ring periodically and make sure it is properly lubricated so that it makes a tight seal.

Also, look for leaks around the pump just to make sure it's working properly.

## Filters

Keep your water moving! Good circulation and filtration is the second key to clear water. To remove dirt and other particles from the water, your pool uses a filter system to trap it as the water passes through. Keep your filter clean so that it has a better chance to catch more particles.

Run your filter long enough each day to allow all the water to pass through the filter at least once. Most swimming pools are engineered to completely circulate the water in 8 hours. Run it a little more in the summer to compensate for the additional use of your pool.

Your pool has one of three different types of filters.

### Sand Filters



Sand filters are the easiest and least costly to maintain. They use sand to filter the pool water. Water passes through the sand but dirt and other particles are trapped. Backwash your sand filter once per week to remove the trapped debris.

Chemically treat the sand once per year to maintain its filtration capacity.

The sand lasts for 5 years in chlorine pools. Have a pool technician change it at 5-year intervals.

### Cartridge Filters

Most newer pools are equipped with cartridge filters. As the pool water passes through, mesh material in the cartridges traps the waste material. You don't back wash a cartridge filter. You remove the cartridges and hose them off to remove the waste.

Clean the cartridges every 6 months. Just remove the cartridges, spray with a filter cleaner, hose them off and replace them.

Cartridges normally last about 2 years.



## DE Filters



DE filters use Diatomaceous Earth to trap waste particles in the filter. DE is a white powder added to your filter through the skimmer while the pump is running. Backwash your DE filter and add Diatomaceous Earth once per month.

The DE filter should be cleaned once per year and the filter grids replaced every 3 years.

## The Pressure Gauge

Keep an eye on your filter's pressure gauge. It monitors the pressure in your filter measured in pounds per square inch. When your filter is new or has just been cleaned, note the pressure reading. This is your normal pressure. If the pressure is 7 to 10 pounds higher than normal, it may be time to backwash or clean the filter.

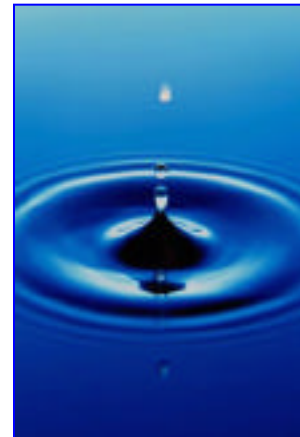


Higher than normal pressure may also mean an obstruction in the line after the filter.

Lower than normal pressure could indicate an obstruction before the water reaches the filter or, perhaps an air leak.

## Water Chemistry

Don't be confused or intimidated! Water chemistry is easy. The term "balance" refers to keeping a few key vital signs in a particular range. The "vitals" to look at weekly are alkalinity, pH and chlorine levels. Just test your water once a week with a reliable test kit and keep those key readings in the proper range.



Let's get started!



How many gallons of water do you have in your pool? That's an important question because the amount of chemicals you add to keep your readings in balance depends on the amount of water in your pool. Just multiply the length of the pool (in feet) times the width of the pool times the average depth times 7.5.

**Length X Width  
X Average  
Depth X 7.5 =  
Gallons Of Pool  
Water.**

**Start with alkalinity.** This is the heart of your pool chemistry and anchors all the chemicals. Test for alkalinity first. It's measured in "parts per million" and your goal is to keep it between 80 and 120 ppm.

To raise it: Use sodium bicarbonate  
To lower it: Use sodium bisulfate (dry acid) or muriatic acid

**Next, check your pH.** This is the power of hydrogen and determines how comfortable swimmers are in the water. PH is measured on a scale of 0-14. A reading of 7.0 is neutral. Your target range is 7.2 to 7.8. Ideal is 7.4 to 7.6.

To raise it: Use sodium carbonate  
To lower it: Use sodium bisulfate (dry acid) or muriatic acid

**Finally, check your sanitizer.** Sanitizers control the growth of bacteria and algae. Keep enough in the pool water and you'll have fewer problems. The most common sanitizer is chlorine. It's also measured in "parts per million" and your target is 1.0 to 3.0 ppm.

To raise it: Add more chlorine  
To lower it: Let it fall on its own

Keep chlorine, pH and alkalinity in their proper range and you'll avoid most water problems. Experts recommend testing other chemicals at least once per quarter. Take a water sample to a Backyard Bay Referral Network retail store and let them test it for stabilization, calcium (hardness) and total dissolved solids. A professional retailer can help you keep these areas in balance as well.

**Expert tip: Don't chase the bounce!**

Make adjustments slowly and give them a few days to take effect. Chemicals have an impact on each other and you need to give them some time to "settle".

### Heater

Is the water a little chilly? Fire up the heater! Heaters are part of most swimming pool equipment pads. Water at the normal temperature enters the unit and is heated by flames fueled by propane or natural gas. Warmer water exits the unit and enters the swimming pool.



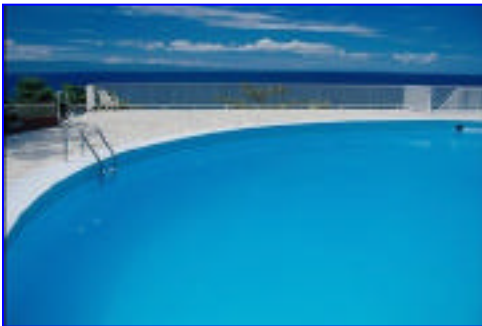
Most heaters operate with a pilot or electronic ignition.

Pilot lights are lit continuously and may require re-lighting from time to time. Lighting the pilot is similar to a hot water heater. Just open the door on the front of the heater. Turn the gas valve to the pilot position. Push down the knob and the igniter button. Hold the gas valve down for a few seconds to make sure it stays lit.

Electronic ignition heaters use electricity to start the heater. When you turn the heater on, a spark lights the pilot.

Proper water balance helps extend the life of your heater. Corrosive water will cause problems for the copper heat exchanger. Make sure your water is always balanced!

## **Cleaning The Pool**



Head out to the back yard at least once per week for some routine pool cleaning. It can be a time to get a few minutes by yourself or make it a family project. A clean pool makes everything work better. The equipment doesn't have to work as hard and your chemicals will last longer. It really doesn't take very long and it's easy to do!

Tools of the trade include a good nylon brush, stainless steel wire brush, leaf master, leaf rake with scoop, surface skimmer, vacuum hose, vacuum head and a leaf canister.

First, clean up around the pool. Chances are, dirt and other debris AROUND the pool wind up IN the pool.

### **Skim The Surface**

Use your surface skimmer net to get the leaves and twigs off the surface of the pool. Toss the collected debris into a trash basket or far enough away from the pool that it doesn't wind up blowing back in it.

**A few minutes a week is all it takes to keep the pool clean!**

### **Brush The Tile, Walls and Bottom**

Go around the tile with the nylon brush to loosen all the material from the tile's surface. Brush the sides of your pool and the bottom area. Brushing loosens foreign material and keeps algae and other particles suspended so the filter can remove them.

### Empty The Baskets

Turn off the pump. Simply remove and empty the baskets in the skimmers and pump. Replace the baskets, make sure the pump lid is secured tightly and turn on the pump.



### Vacuum The Pool

A vacuum head attached to the filter system will lift dirt and leaves off the bottom of the pool and send them to the filter.

#### Expert tip: Use a leaf canister.

The leaf canister fits in line with the vacuum hose. Debris is then trapped by the leaf canister and is kept from going into the filter.

Simply attach the vacuum head to a long pole and one end of the hose and lower it into the pool slowly allowing the hose to fill with water. Once the vacuum head is on the bottom of the pool and the hose is full of water, connect it to the suction hole in your skimmer.

Move the vacuum head slowly over the bottom of the pool allowing the settled dirt and leaves to be sucked into the hose and trapped by the leaf canister or the filter. Don't go too fast! The vacuum head will stir up the debris keeping it from entering the vacuum head.

### Leaks

Callers to the Poolside Radio Show frequently ask about leaks. The water in your swimming pool is dropping all the time. How much is too much?

Normally, your swimming pool will lose about one inch of water per week to evaporation, wind, sun and normal splashing from people getting in and out of the pool.

Don't be concerned unless you lose more than an inch or find yourself adding water to the pool more than once per week.

#### If you think you have a leak, try the bucket test first.

The bucket test is a quick and easy way to determine if you are losing water. Place a bucket full of water on the first step of your pool and mark the level on the side. If the bucket and the pool lose the same amount of water, it's normal evaporation. If the pool loses more water than the bucket, you may have a leak.



Make a visual inspection of the equipment looking for water. Check the backwash line for escaping water. Also, look for wet spots in the grass even though it's rare for a leak to show up there.

If your leak is equipment related, call a service technician on the Backyard Bay Referral Network for a repair.

If your leak is structure related, call American Leak Detection. The Leakbusters at American Leak Detection can locate structural leaks quickly and can repair many of them on the spot or advise on how to correct whatever problems may exist. In Houston, American Leak Detection phone number is 281-440-4400.

### **Let's Talk Pools!**

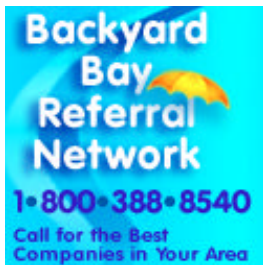
Join Michael Miller for the Backyard Bay Radio Show...every Saturday afternoon at 3:00 p.m. We're broadcast on The Voice, 700 AM, KSEV.



Each week, we talk about swimming pools, spas, water features, landscaping and everything it takes to help you turn that space behind your house into your own beautiful resort-style Backyard Bay!

See you Saturday afternoon!

### **Help Is On The Way!**



If you need more help or someone to teach you the ABC's of swimming pool operation, call one of the members of the Backyard Bay Referral Network. These companies represent decades of experience, superior skills and a commitment to excellence. They can help you with anything from simple repairs to a complete backyard renovation. Call 800-388-8540 and we'll refer you to a great company in your neighborhood.