

## DIY Pool Equipment Repair Tips

### **Loud motor**

This typically means the bearings are going out and the motor needs to be replaced.

### **Leaking key handle**

This is usually a result of the wagon wheel gasket becoming unseated or damaged. Remove the screws around the key handle and look for the gasket that looks like a wagon wheel or spider web. If it is damaged, it needs replaced if not just put it back into position. It helps to coat the gasket with a Teflon based lubricant before putting everything back together.

### **Air in pump or blowing into pool**

If you have a UV/ozone system this is the ozone, there is no problem. If not, this means air is being sucked into the equipment from a leak. The most common position is the clear lidded basket area in front of the pump. There is a gasket here that sometimes becomes unseated allowing air to be sucked in. If repositioning the gasket doesn't fix the issue, contact a pool professional.

### **Sand in pool**

Unless there is a large amount of sand around the pool this is likely from the sand filter. There are thin plastic fingers called laterals at the bottom of the sand filter that allow water through but not sand. If these delicate parts are damaged sand will begin leaking into the pool. The lateral assembly will need to be replaced to stop this. After this is fixed it may still take several days for sand in the plumbing to work its way out. If after 10 days, there is still a large amount of sand leaking into the pool contact a pool professional as the new laterals might have cracked while refilling the filter with sand.

### **Bubble/Wrinkle in liner**

Bubbles or wrinkles can occur in liners for several reasons.

(1) High ground water. Living in a river valley the Evansville area has high ground water.

This can cause concrete and fiberglass pools to crack or pop out of the ground causing major structural damage. Liner pools however allow some of the water to pass through.

This can cause a bubble which turns into a wrinkle once the water recedes. This is cosmetic damage instead of structural damage and these wrinkles can usually be removed by pulling the liner in front of the wrinkle to move it to a corner where it will go away.

(2) Leak. If you have a leak in your pool the leaked water can build up behind the liner causing a bubble. For more information look in the leaks section.

(3) Chemical damage. Very high chlorine or low pH can cause damage to liners. This can result in fading and wrinkles in the liner. Damage from chemicals is usually too widespread to effectively patch and will require the liner to be replaced sooner than it would need with properly balanced chemicals.

### **Liner pulled out of coping channel**

Liners are held up by thicker section placed in a channel around the pool. Sometimes the liner can slip out of this channel usually after a new liner installation or in areas with metal fatigue in older pools. This is very simple to fix by pulling the liner up and pushing the thicker section back into the channel with a large flat head screwdriver or plastic paint scraper, or by the installer if you feel uncomfortable doing this. If it continues to fall out in the same place wedging or liner lock may be used to keep it from coming out.

### **Auto cover crooked**

Auto covers are very expensive and can be costly to repair. Under no circumstances is it recommended to attempt to fix the cover on your own. It is common for covers to become a little crooked after repeated use, if this occurs call a professional to get it fixed. A professional can easily readjust the ropes to get this fixed whereas someone who doesn't know what they are doing may cause thousands of dollars of damage to their equipment attempting to fix it.

## Salt generator not producing chlorine

Most salt generator requires a concentration of salt between 2800-3400ppm and a suitable water flow to generate efficiently. It will alert you if it is out of this range.

Variable speed pumps will not move water fast enough on low setting for the generator to operate, this can be compensated for by having the generator at a higher setting so it will produce more when the pump is in high-speed mode.

The salt cell itself will need cleaned typically once a year to work at peak efficiency, or more frequently if you have hard water (high calcium). This can be done by removing it from the plumbing and placing it in a 5-gallon bucket with 1-gallon of muriatic (hydrochloric) acid and 4 gallons of water letting each end soak in the solution for 15 minutes and then rinsing it with a hose. Gloves are recommended to avoid acid burns and the acid solution can be disposed of by dumping it out while running a hose over it to further dilute it or by neutralizing it with baking soda before disposing of it, however it should be noted that this is essentially the science fair volcano experiment so it will put off heat and bubbles, do this slowly outside to avoid a big mess. When it stops bubbling when more baking soda is added the solution is neutralized and can be safely poured out.

Salt generators have 3 major components that will eventually need replaced.

- 1) The salt cell. Your generator will read inspect cell or clean cell if there is an issue with this. If this continues to happen after the cell is cleaned the cell has probably gone bad and will need replaced.
- 2) The flow meter. This detects the water flow and shuts of the generator if it reads the flow as too low. If your display shows low flow check to make sure the pump is running or if you have a variable speed pump, make sure it is in high speed mode. If the pump is not the source of the issue, try backwashing the filter. If the display still shows low flow the flow meter can be taken off and cleaned. If you are still getting a low flow reading the flow switch likely needs replaced.
- 3) The final component is the PCB or printed circuit board. This is located in your wall mounted control box. If this is getting power but the display isn't working the PCB needs replaced.

## Leak

- 1) Losing 1-3 inches of water a week from evaporation or splashing out of the pool is normal, but if you are experiencing more loss than this you likely have a leak. While it is usually a good idea to have a professional fix your leak gathering a little information first can save you time and money in diagnosing the issue.
- 2) Identifying leak location. The first step is to see if you can see a visible leak or wet area around the pump and filter system or wet ground between the pool and the filter if the area between isn't covered.
- 3) If there is no discernable leak location outside of the pool mark the water level, then turn the pump off for 24 hours. If the leaking stopped the leak is likely in the pump and filter system or the plumbing, if it continued leaking it is likely in the pool itself. At this point you have determined the location may contact a professional to get it fixed or if the leak is inside the pool, you can see if you can find the leaks location in the pool.
- 4) Finding leak inside pool structure. When looking for a leak inside of the pool a good trick is to put drops of food coloring in the water near problem areas such as lights, skimmers, return jets and steps or places where you suspect damage such as a place where a child was dragging a toy over the liner or where a piece of lawn furniture fell into the pool. If there is a leak nearby you will see the food coloring being drawn through the hole. You can then try and apply a vinyl patch or have a professional come and patch it. If you are unable to find a leak using this method, contact a professional leak detector or plumber.