

## My Pump is Sucking in Air



### What to do when your pump produces no water movement or pressure.

If you have an air leak in your system that allows air to get sucked into the lines, it makes it nearly impossible for your system to operate. The air will cause the pump to lose prime and stop moving water. If you have an air leak, you will notice air bubbles in the pump pot as well as air coming out the returns into the pool water.

An air leak is caused by a problem on the intake side of the pump. In other words, the pool pump has suction (negative pressure) on the intake side of the pump and pressure on the outlet side of the pump. The pump sucks water in the front of the pump and pushes it out the top of the pump.

### There are several possible ways that air can be introduced into your pool system, all on the suction side of the pump as we have discussed.

- **Low water level** - this is very basic, but if the water level is not maintained at the center of the skimmer opening, then the skimmers can suck in air. Typically there will be a surge of air into the system, and then the pump will lose prime, and then the pump will slowly regain prime. Once the pump is fully primed, it will once again suck a bunch of air into the system and lose prime, and so on. The answer is to keep the water at the proper level.
- **Stuck skimmer weir** - the weir is that small "flapper" on the skimmer opening. If leaves or sticks get stuck in the weir, it can leave the weir stuck in the vertical position and it will act like a dam, keeping water from entering the skimmer. It will produce the exact same effects as low water level, with the pool continually gaining and losing prime and then gaining it back again. It is a good idea to check the operation of the skimmer weir every time you empty the skimmer baskets.
- **Pump lid o-ring** - the pump lid should be tightened enough so that it seals properly, and should have a clean and pliant o-ring. Over time, these o-rings get hardened and brittle and no longer seal properly. Sometimes a pool owner will take the pump lid off and not realize that the o-ring just fell on the ground, or they will put the lid back on the pump and have a leaf

stuck in it. If the pump will not prime, take the lid off and inspect the o-ring. Make sure it is lubed and that the sealing surfaces are clean.

- **Pump lid** - sometimes the pump lid can get brittle and crack. You have to inspect this closely because a pump lid can suck a lot of air through a hairline crack.
- **Intake manifold and valves** - the fittings and valves on the intake side of the pump are often a source of an air leak. If you suspect that this is a problem, turn the pump off and look to see if there are any spurts of water that appear right after turning the water off. Any leaks at the valves need to be repaired with new o-rings. If this is not possible, the valves will need to be replaced. If the air leak is in the plumbing, it will need to be cut and repaired. Pool putty or silicone sealant is not a professional repair and will only last a short while, if at all.
- **Underground air leak** - most often this is not the case, but it does happen from time to time. If there are no obvious leaks above ground in the pump or its plumbing, you may have an underground leak. Before you call for leak detection, contact our service department and have a trained Pool Stop professional come out and evaluate the problem. Chances are that we will find an issue above ground that can be repaired fairly quickly.

Air leaks can be tricky to track down. Many times, by the time the air leak is noticed, there is actually more than one source of air getting into the system.

If you have an air leak on your pool, give PoolStop a call. We will send out a qualified technician to evaluate the situation and make recommendations. Our repair technicians are company employees with decades of experience.