

How to Prime a Pool Pump

- 1. Make sure that all power to the pump is turned off.
 - a. This might be through a plug, timer, switch or automation system.
- 2. Open the air-relief valve on the filter if one is present.
 - a. This will relieve the pressure in the system
 - b. Generally located on the top of the filter
- 3. Make sure the pool is full to normal operating level, typically half way up the skimmer opening.
- 4. Make sure that all of the return inlets (Jets) in the pool are open, that there are no plugs in them and that there are no valves on the return pipes at the equipment that are closed.
- 5. Locate all the skimmer, main drain and suction valves going towards the pump and close them all.
- 6. Open up the lid of the pump
- 7. With the lid off the pump, you can clean out the pump basket if needed.
 - a. Once the pump basket is cleaned, put the basket back in.
 - i. Pay attention that if your basket has a "hole" in it, that this hole is facing the front of the pump
 - 1. The basket typically only fits in the pump 1 way.
 - ii. Make sure to check that there aren't any breaks or cracks in the basket.
 - 1. Breaks, cracks, holes in the grids of the basket will allow debris to get through and may damage or clog the pump impeller.
- 8. Lubricate the O-Ring for the pump lid
 - a. Check the O-Ring for the lid for cracks, breaks or debris
 - i. Cracks, breaks or debris in the O-Ring can cause your pump to not prime as it will not be air tight and will pull outside air into the pump.
 - b. Use only silicone-based lubricants on orings. Do not use petroleum-based lubricants.
- 9. Fill the pump pot/basket area to the top with water
 - a. This can be done with a garden hose or a bucket of water.
 - i. If you use a bucket of water, you will need roughly 3 gallons of water.
- 10. Put the pump lid back on and hand tighten.
 - a. DON'T overtighten as it will be much harder to get off the next time.
- 11. Turn the power back on to the pump.
- 12. If your pump is a two speed or variable speed pump, you should prime it on its highest speed.
- 13. Slowly open one of the suction valves, preferably the valve to the closest fixture (The closest skimmer or main drain will have the shortest pipe and should be the easiest to bleed the air from during the priming process).
- 14. As long as water continues coming into the pump basket through the line you are opening, you can continue to open that valve until it is fully open.
 - a. If the water stops entering the basket for more than 1 minute, close the suction valve you are opening, then turn off the pump. Remove the pump lid and go back to step #7 until water continues coming into the basket and that valve is completely open.



- 15. If you have more suction valves, with the pump still running with water from the first valve, slowly open a second valve, preferably the next closest fixture to the equipment. As long as water continues filling the basket, you can keep opening the second valve until it is fully open.
 - a. If it seems that the water coming into the pump is slowing too much, close the second valve completely and allow the pump to regain the volume of water from the first valve you started with.
- 16. Repeat step 13 for all remaining suction valves.
 - a. If at any time, water stops coming into the basket, close down all suction valves, then shut off the pump. Remove the pump lid and go back to step #7.
- 17. Once you have all of the valves open, systematically close down all of the suction valves but one, forcing the pump to draw only from that one line. This will help to ensure that all of the air is out of each line individually. Sequence through each line, closing all the others, so the pump is allowed to pull from each line alone.
- 18. Water will sputter out of the air relief valve during the priming process. You can close it if needed during the process, but if you do, you should re-open it periodically to bleed off more air that will enter the filter during the process. Once you have all the suction valves open and the air is completely bled off, close the air relief valve completely.

If your pump will not prime, the reason may be one or more of the following items

- Not enough water in the pump basket to start the priming process
- Air Leak
 - o Broken suction pipe underground
 - Cracked or non-sealed intake valve
 - Loose pump lid
 - Bad gasket on the pump lid
 - Cracked
 - Debris on the gasket/oring
- Clogged pump impeller
- Blocked suction line
 - Object in the pipe
- Return valves closed
- Filter valve closed
- Water level low in pool
 - Skimmer intakes pull air and water
 - Weir door stuck in the "closed" or "up" position
- Intake valves (Skimmer/Main Drain) are closed
- Filter dirty or clogged
- Clogged skimmer or pump basket