



How to unclog pump impeller inlet port

How to unclog the pool filter pump impeller inlet port on a typical pool pump.

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INTRODUCTION

If your pump pressure is low this might be your problem. Also symptoms are sluggish circulation is visible in pool water itself. Noise coming from pump is noticeably different as well.

TOOLS:

- Adjustable Wrench (1)
- Safety Glasses (1)

Step 1 — This pump is for a 35,000 gallon in ground pool



- Your pump could be entirely different but the techniques applied here could work for nearly any pool pump assuming it can be opened with simple hand tools. Also assuming that it is a type which uses a centrifugal impeller that is readily accessible after disassembly of pump housing.

Step 2 — Safety First!



- Turn off power at the circuit breaker before proceeding.

Step 3 — Remove pump motor ground strap to earth strap



- The bare (uninsulated) copper wire in lower part of the frame is what we are talking about disconnecting from the exposed pump motor end frame.
- Mine was attached with a single 1/4" hex head machine screw. It was obscured from above by a plastic weather cap on the end of the motor. Removal of the cap is optional if you can reach it easily the power wires and flex conduit can remain attached if it gives adequate working room access without having to actually disconnect all wiring.
- I could have left the cap on in my case but it was removed to facilitate taking this photo.

Step 4 — Disconnect plumbing



- This is typically via unscrewing two PVC union nuts (one inlet side and one outlet side). You will need an adjustable strap wrench to perform this step.

Step 5 — Open pump housing



- There are four 9/16" bolts two upper (visible) and two lower (not visible) in my photo. Also there are two 9/16" nuts with bolts visible in the photo as the middle part that holds the pump housing halves together.

Step 6 — Pull front half of pump housing off



- Remove front half from pump housing leaving just the rear half with the motor remaining. 1st pic is front half. 2nd pic is the motor and actual pump assembly.

Step 7 — Remove impeller chamber cover



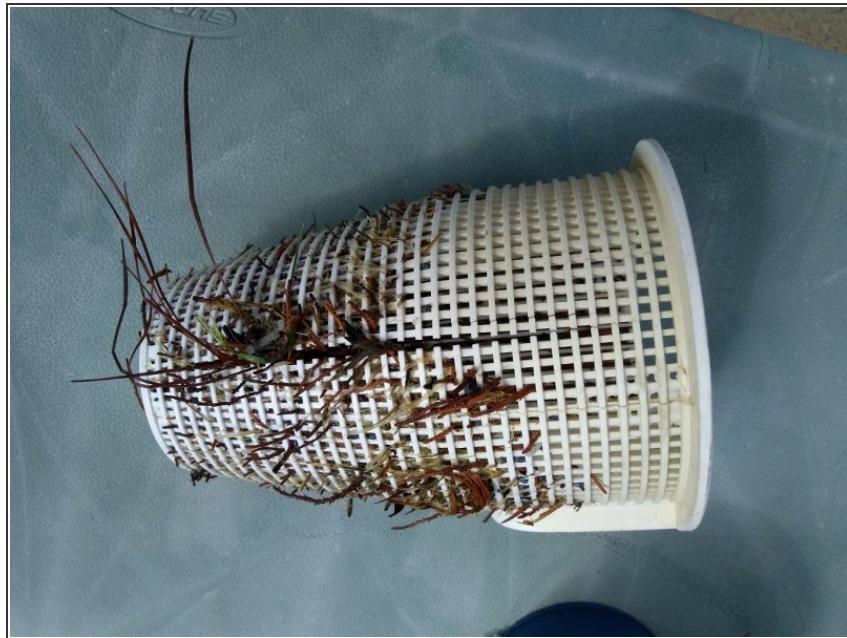
- This is held in place by two tiny allen head machine screws (3/32"). These are visible in the first image here (impellor cover removed). Pull off the cover and set aside for now. 2nd Pic shows the rather obvious problem of the debris in intake chamber of impeller after the cover is removed.

Step 8 — Clear the clog



- Apply compressed air into each impeller outlet vane as shown in the photo. You will want eye protection here!!! Now you are ready to reassemble in reverse order of the above steps. Don't forget to add water into pump chamber before powering up pump!

Step 9 — Bonus - tip for temporary strainer baskets



- This was the cause of my impeller clog. Note pump inlet basket is completely clogged and one side has ruptured vertically along one row.
- This is an old basket I "repaired" last season by cinching up the opening with zip ties. One is still barely visible in the photo.
- Using zip ties in this manner is okay for a temporary weekend fix when the pool store is closed but don't do what I did and try to use it for ordinary service after that point. Duh!

To reassemble your device, follow these instructions in reverse order.