

Cleaning / Replacing your Gaggia Classic Solenoid Valve

The solenoid valve is a piece off of the back of your boiler that either directs water to the steam valve, or to the group of your machine. When it gets clogged or blocked up, it generally results in a trickle, or no flow from the group ; but all wand functions (steam/hot water) still working fine . In most circumstances, you can go in and physically clean it, and this will resolve the problem. This write up will cover cleaning it, which can also double as an installation guide if you're looking to just replace it in general.

Note(s):

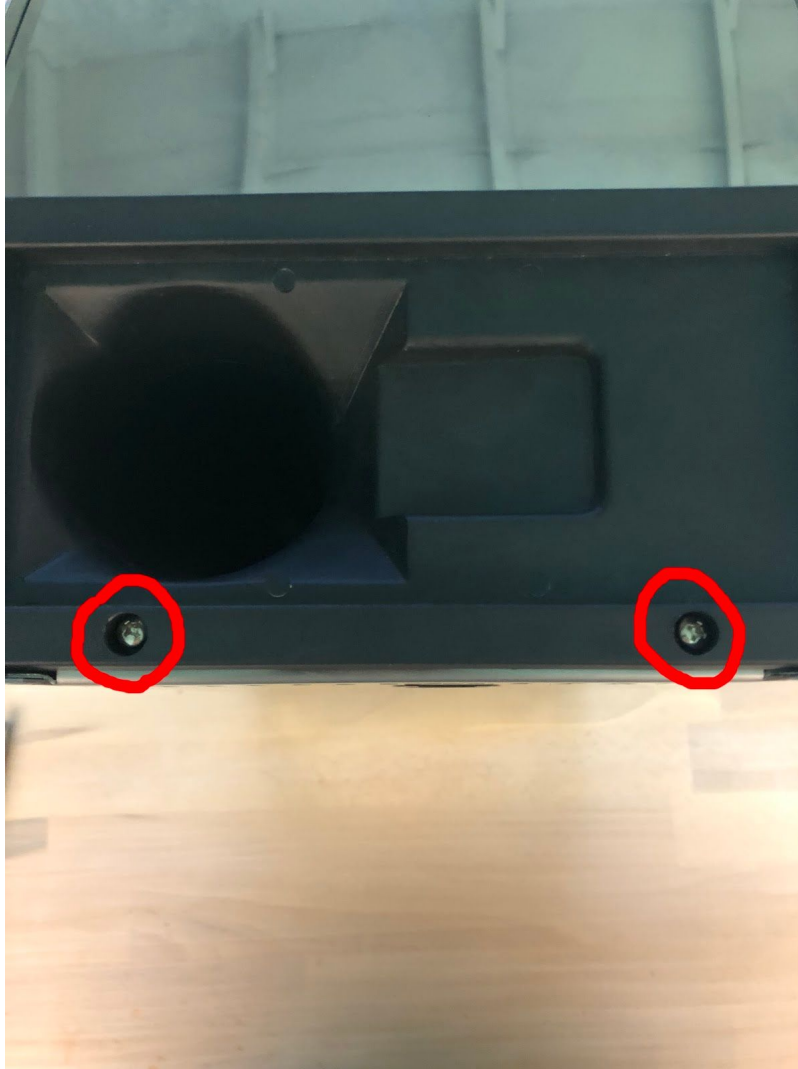
If you've cleaned it, and it resolves the issue for a period of time, but then the issue reoccurs, there's a good chance this is scale passing through from the boiler, and you would want to try cleaning your boiler: [Gaggia Classic Boiler Tear Down](#)

At the 10 minute mark in the video mentioned in the note above, he briefly touches on the solenoid, and takes it apart. This can help if you need a visual: [Solenoid Disassembly](#)

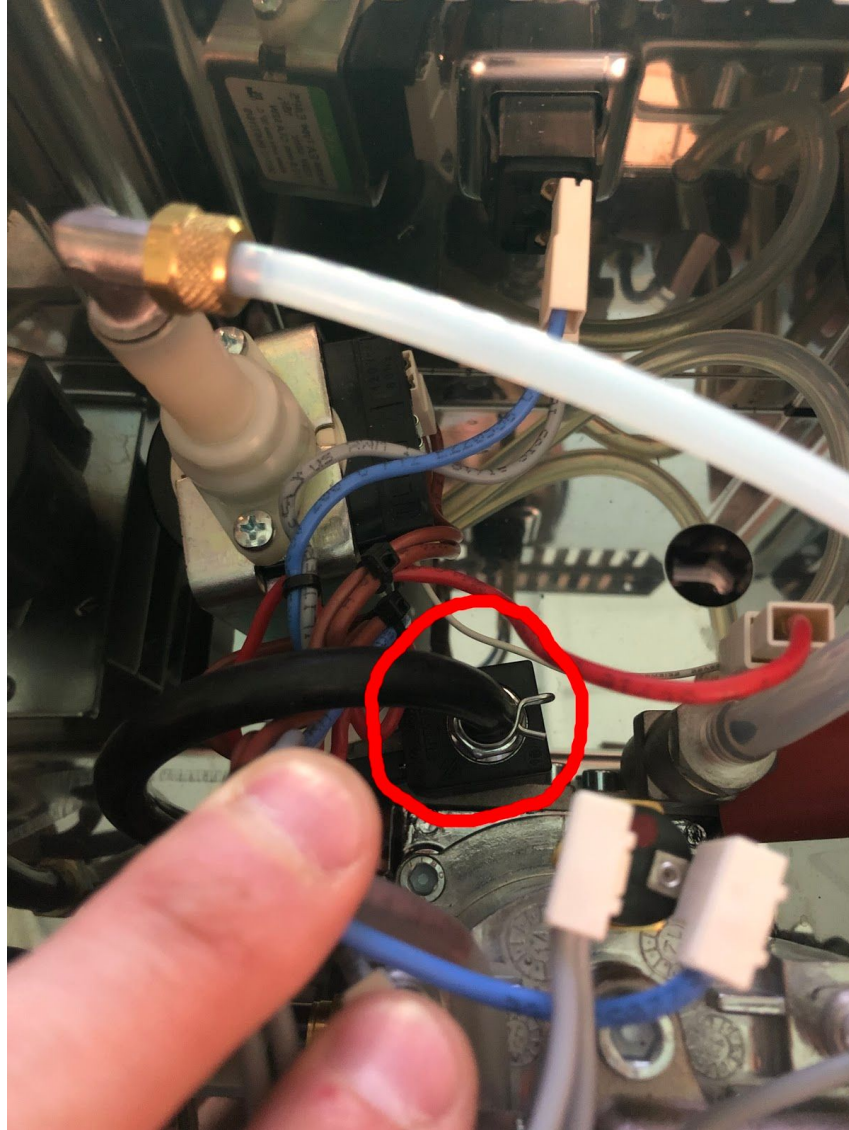
Tools:

Phillips head screwdriver
13mm wrench
14mm wrench
4mm allen wrench

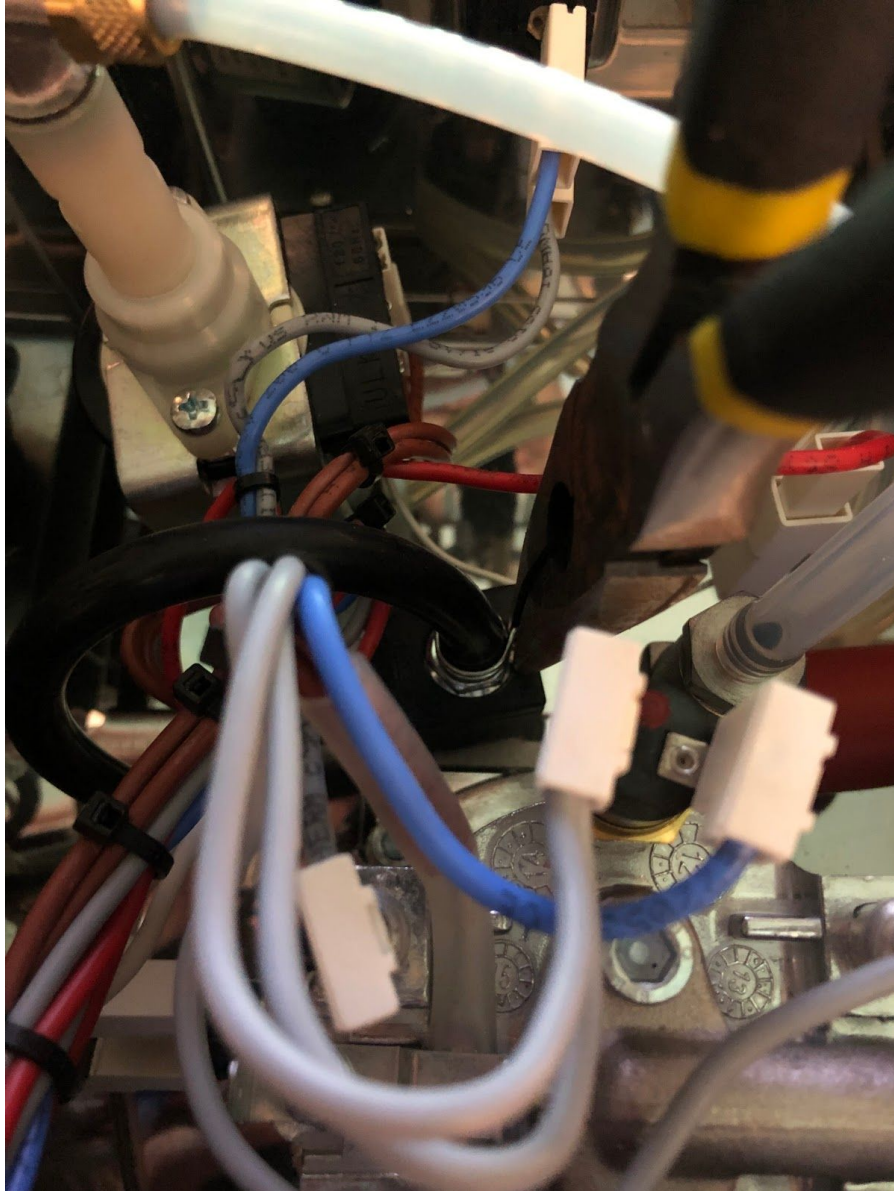
Start by removing the lid from your Classic, which is just the two screws in the back by where the reservoir is filled:



Once these have been removed, the lid from the Classic should be able to be lifted off. The black reservoir portion and the metal portion are 1 piece. Next, locate the solenoid valve. It is the assembly with the black box that is bolted to the back of your boiler:



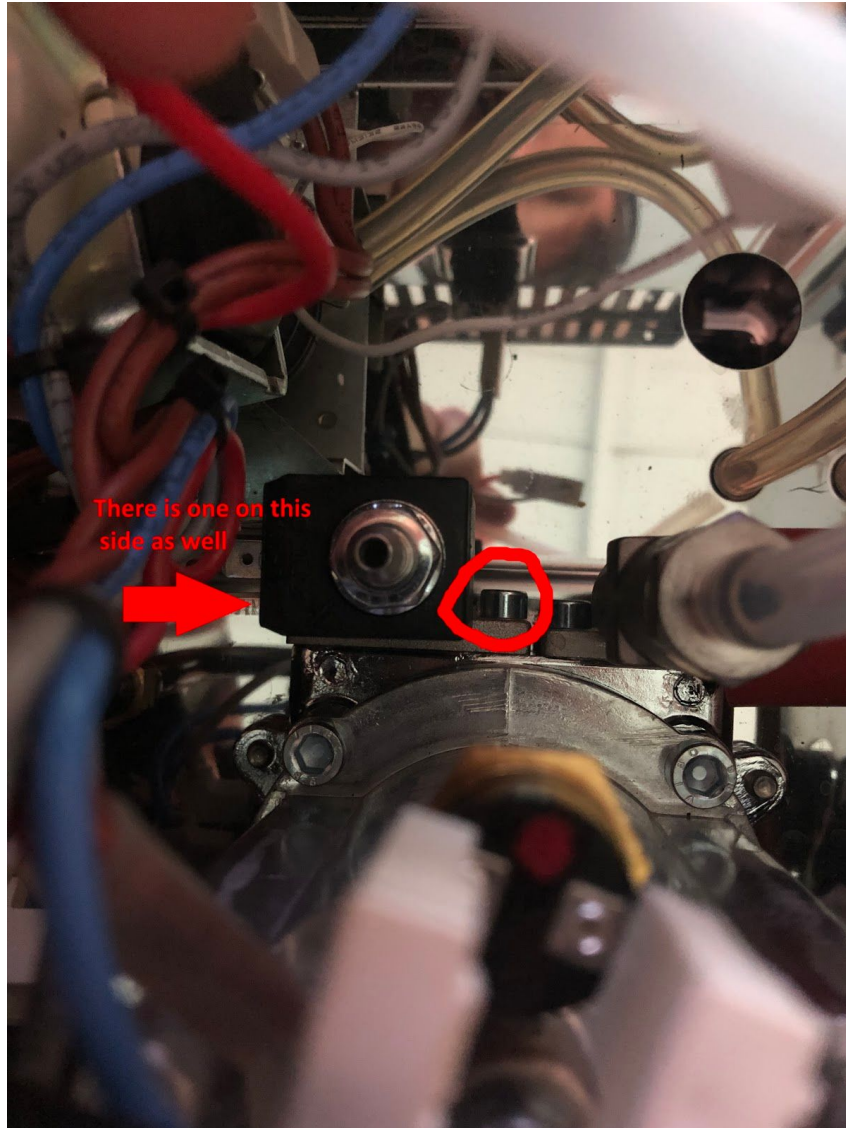
Start by getting a pair of pliers in there, and using them to pinch the clip holding on to the black tubing. Pinch the clamp arms, and just slide it up the tube a little so it is no longer clamped to the solenoid:



Once you've released the clamp, the black tubing pulls off from where it's pushed on to. It requires a bit of force to remove, so you may need to pull fairly hard. From there, you need to remove the electrical leads that are on the side of the solenoid. They just pull off as well. Make sure to label them or take a picture so you know where to reattach them:



Once the black tube, as well as the leads have been removed, you can begin removing the solenoid assembly from the machine. You will need your 4mm allen wrench to remove it. There are x2 hex screws on either side of the solenoid that bolt it to the boiler:



Once those x2 hex screws have been removed, the whole solenoid assembly can be removed from the machine. **If you're just replacing it, you can stop here and now install your new one. If you're cleaning the valve, please continue reading.** Once it's out, start disassembling it by removing the nut on top of the black box with your 13mm wrench:



The black box will then slide off from the shaft it was attached to:



From here, you will use your 14mm wrench to undo the nut at the bottom of the shaft in the picture above. **Do not force this piece off if you can't get it off. It does/can require some force to break free, but scale can line the inside of it and solidify, which can cause the threading to crack if too much force is applied.** Inside the shaft is a valve piece covered by a spring. You should now have it completely disassembled, and all the pieces apart:



For cleaning the solenoid, check over the shaft portion and make sure there's no build up inside of it:



Check over the internal valve piece and make sure there is no build up on that either. There's two little black caps at either end of the valve piece. You can get a paper clip or a pen cap and push on these. Make sure they have some movement to them ; they don't move much.



The most important piece is the lower assembly. This piece is where the clogging and blocking typically occurs. You will want to remove the o-rings, and soak this piece for 30 min - 1 hour in hot water or descaler and water, and then have compressed air blown through the various holes on it. **The compressed air is an important part, make sure that you are able to do this. If you don't have an air compressor, a tire filler at a gas station will work.**



Once you've completed those steps, relubricate the o-rings with vaseline/petroleum jelly, reassemble and you should be good to go.