



Fixing dripping from coffee machine output valve

Shows how to clean and /or replace the outlet valve on De'Longhi Icona coffee makers. These machines look different, but they are very similar inside.

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INTRODUCTION

The De'Longhi Icona range of home espresso machines have many variants, but most of the differences are merely cosmetic, the internal workings are almost identical.

The one pictured is an ECOV310.GR

There are several common faults which are easily fixed.

This Fixit is concerned with dripping from the water outlet, which can be caused by scale build up or by wear to the valve.

Water comes through as soon as you turn the machine on, before enough pressure is built up in the boiler.

TOOLS:

- Phillips #2 Screwdriver (1)
- Torx T20 S2 screwdriver (1)
- Flathead 4 mm Screwdriver (1)
- 2.5 mm Flathead Screwdriver (1)

PARTS:

- Delonghi silicon rubber "mushroom" valve head (1)
- Delonghi Valve spring (1)
Conical spring
- Delonghi valve collar (1)

Step 1 — Before you start



- My Icône coffee machine.
- These machines use a solenoid pump and a pressurised boiler.
- **WARNING!!! BEFORE STARTING, MAKE SURE THAT THE MACHINE IS TURNED OFF AND FULLY COOLED DOWN. RELEASE ANY PRESSURE BY OPENING THE STEAM VALVE. THESE MACHINES HAVE A LOT OF PRESSURE STORED UP IN THE BOILER.**

Step 2 — Valve parts



- One common problem with these machines is dripping from the outlet.
- Before attempting this repair, it is worth de-scaling the machine first, as that can often cure it. De-scaling solutions are available on-line or in hardware stores, and are easy to use. You can also just use a vinegar and water mixture.
- The parts involved are a conical valve spring, a brass collar and a silicon rubber valve head. The valve stops water coming through before there is sufficient pressure. Sometimes the collar is missing, they can corrode away over time.
- The second picture shows the 3 parts assembled correctly.

Step 3 — Removing the base(optional)



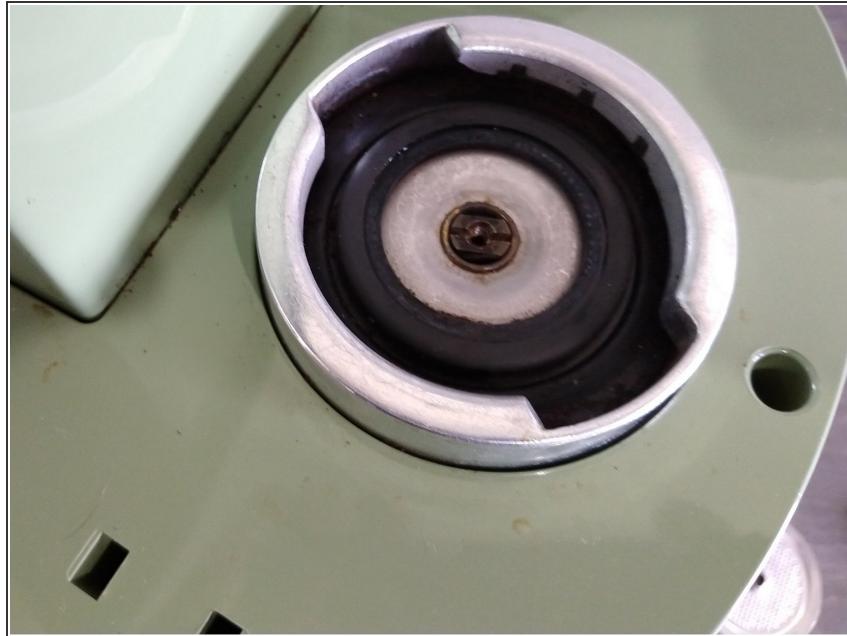
- You may be able to do this without removing the coffee maker's base, but it is a lot easier with it out of the way, and the pictures are clearer.
- There are 8 screws, indicated by arrows in the pictures 4 Phillips No2 in the central area, and 4 Torx T20S2 security screws in recesses around the sides.
- To remove the Torx screws, you can use a Torx Screwdriver as pictured. If you do not have one, it is possible to remove the screws by using a 2.5mm flat bladed screwdriver which is just the right size to fit between 2 lobes and the pin of the screw head.

Step 4 — Removing the Diffuser



- Next, undo the Phillips No2 screw in the centre of the diffuser plate and remove the plate.

Step 5 — Removing the brass dowel screw



- Now we can see the brass dowel screw. (you may have to clean the area first). Remove it using a wide flat bladed screwdriver.

Step 6 — valve removal



- We can now see the base of the valve spring. Remove it, but be careful not to lose the valve head or collar

Step 7 — Clean and reassemble



- Cleaning all the parts, and perhaps just stretching the spring a little before reassembling, may be sufficient if the mushroom shows no sign of wear.

To reassemble your device, follow these instructions in reverse order, be sure to replace the valve with the silicon mushroom facing into the opening, and be careful screwing in the brass dowel screw, as it is easy to cross thread it.