

Back flushing home espresso machines (Models with solenoid valve)

Back flushing is done only in models that have a solenoid valve in the above the group or attached to the boiler valve body (as in Classic Coffee and Baby Gaggia semiautomatic models).

Back flushing is done to clean the shower (diffusion) screen, and the decompression solenoid valve. The solenoid valve closes as the hot water button is turned on and the pump pressure allows the water to pass through the coffee. When the hot water button is turned off, the solenoid valve opens and allows the pressure from the portafilter escape and the steam and some water will drain into the drip tray.

In Gaggia semiautomatic models the solenoid valve acts as a decompression valve. It opens and closes as needed when using hot water for espresso or for dispensing steam.

If the diffusion screen and the solenoid valve is not clean, it interferes in the extraction pressure and decompression of pressure from the portafilter. This can affect the quality of espresso.

Back flushing is done using a blind cup (filter cup without holes in it). A Viton rubber disc is also used to block the holes in the filter basket. This eliminates the need for removing the filter basket and inserting the blind cup in the filter holder. This procedure can be cumbersome and discourage back flushing process.

Step 1 - Replace blind cup in the filter holder.

Step 2 - Place a tablet or ½ teaspoonful Coffee cleaning liquid in the blind cup.

Step 3 – Insert the filter holder in the group (like when making an espresso).

Step 4 - Turn the hot water switch for 8 to 10 seconds and turn switch off.

As water cannot pass through the blind filter, it will build pressure as high as 10 Bars.

As soon as the hot water switch is turned off, the solenoid valve opens and allows the high pressure from the filter holder to

pass through the diffusion screen, then through the solenoid valve and be released through drain outlet pipe (left of the group head). The pressure is released with a distinct "Whoosh" into the drip tray.

The back flushing process is done daily followed by a repeat back flushing process without coffee cleaner to remove (flush out) the coffee cleaner.

If back flushing is not done every day, one may do it every two or three days. In such a case it is recommended that back flushing with coffee cleaner is done twice to ensure removal of coffee deposits in the diffusion screen holes and the passage through the solenoid valve. Final flushing is done without coffee cleaner. to flush the valve clean.

We recommend the back flushing be done with descaling solution three or four times during or at the end of descaling the machine. This will ensure removal of any Calcium sediment in the diffusion screen and the solenoid valve.

Descal espresso machine every two months will provide optimum temperature for espresso and full pressure of steam for steaming and frothing milk.

Cleancaf, Cafiza, Purocaff, Brew Rite, Brita are not descaling chemicals. Order Best descaler DSC-6 and liquid Coffee cleaner from Internet store www.shop.partsguru.com

The liquid coffee cleaner mixes easily as it does not take time to dissolve. Cleaning tablets do not dissolve easily and not as effective.

Have questions or need to order parts, e-mail inquiries to sales@partsguru.com

Espresso DOs and DONTs

Espresso machine itself is just a tool. The tool is as good as its operator

Spend a reasonable time to learn how to use, how to adjust the variables and how to maintain the espresso machine. Making bad coffee from a good espresso maker is not the fault of the machine.

Learning how best to operate the machine has its rewards.

Do not leave espresso maker “ON” when it is not in use

Energy saving mode is mentioned in the operating manual as a safety feature. When the operator forgets to turn the machine off, the machine will switch to energy saving mode. This is a protective feature and not for routine application. Sales staff mentions this as a selling feature. This approach is misleading as it takes operator’s attention away from the machine. How careless one can be to not even bother, to turn the machine off?

Leaving the espresso maker 'On' reduces the life of seals & electrical components on the electronic control board.

I suggest every owner of home espresso machine to place the following message on a sticker in front of the machine:

“You got your best coffee made. Clean me before you move away.

Do not leave me “on”. It hurts me. This may even start a fire”.

The next date to Descale me is --/--/----.

Turn the machine off, using the power switch. This is a home espresso model and takes less than 3 minutes to warm up.

All espresso machines must be descaled regularly

Filter system like Brita or other similar product remove chemical taste and odor from water. Bottled or spring water has more minerals in it. Using water softener system is far better option than reverse Osmosis or use of distilled water. If water softener is not installed, then the machine should be Descaled every 2-months.

I have noticed 70% of owners use wrong products. Please note Cafiza, CleanCaf, Purocaffe, PulyCaf, Brew Rite are not Descaling products. When used, these products add additional sediment and make it worse.

Order our Best Descaler can be ordered online using the following link:

<http://www.shop.partsguru.com/DSC6-Best-Descaler-6-Pack-for-espresso-machines-DSC-6.htm>

Do not wait for the machine to remind you for Descaling

A reminder red warning light or Digital message is programmed in the machine based on the number of espresso served. It does not account for water used for other drinks like tea or water used to flush the frother etc. Also, the machine cannot sense the variable hardness of water from one place to another. It makes

more sense to schedule Descaling every two months. This will eliminate any unknown factors that can lead to blocked arteries in the machine.

DO NOT USE Automatic programmed Descaling

This is another misleading feature promoted by manufacturers and re-sellers. Automatic method does half the job by flushing the Descaling chemical from the steam pipe only. It does not flush the espresso side of passage.

Some automatic machines do not have a grinder bypass. In such cases it is OK to waste coffee for making three espressos using Descaling solution to clean the passage of water for espresso.

Prime the machine after several days of non-use. Priming is simply flushing of 3 to 5 oz. of water through the steam/hot water wand. This will ensure that

- a- the pump is working
- b- The water is filling the boiler without any back pressure or blockage and
- c- There is enough water in the boiler, before the heating element is turned on.

Leaving the machine in storage for extended periods

Descal the machine before leaving it in storage for extended periods. During extended storage the water inside the boiler and tubes dries out completely and leaves Calcium sediment more than normal. When taken out for re-use a working machine left in storage may not function. If descaled before leaving in storage, the re-start will be much easier as there will be least sediment of minerals to interfere in flow of water.

Do not use oily or dark-roast beans in fully automatic machines

This is very important for fully automatic models.

The coffee oil is the essence and nectar of coffee, rich in essential ingredients and aroma. The external coating of oil encourages caking of the ground coffee. Oil and fine particles of coffee stick together and accumulate in the crevices in the grinding chamber, the exit from the grinding chamber and in the doser. If not cleaned frequently & regularly, the accumulated fine coffee becomes hard. It reduces the space in the grinding chamber and influence the function of doser switch and over a period of time even cause grinder block. Such hardened deposits of coffee will affect the taste and quality of espresso. The caked grounds will prevent fresh grind as the grinder cannot shovel stagnant coffee grounds to move forward out of the grinding chamber. This will cause the grinder to time out with a warning light indicating the bean hopper is empty.

Espresso roast whether Vienna roast, City roasts, medium roast or dark roast should not be with oil on the surface. It is very difficult to preserve freshness. The roasted beans are very dry and moisture and Oxygen from air will quickly change the oil into rancid ingredients. **The concept that the “darker the roast and the oilier the roast, the stronger will espresso be” is completely without merit.**

Those who promote this view are ignorant have no experience about its quality and should not promote the espresso as they know it.

Do not store espresso beans in refrigerator

Roasted coffee beans are not perishable seafood or Dairy product and do not need refrigeration. Roasted beans are highly hygroscopic, absorb moisture and or Oxygen from air and need protection from moisture.

Moisture and air oxidize the aromatic ingredients causing chemical changes. Beans with absorbed moisture will cake easily and cause rusting of the burrs. The moisture content is much higher when beans are refrigerated.

** Oxygen oxidizes the oil readily if it is outside on the bean. Air tight sealed containers protect beans from coming in contact with air and Oxygen.

** The best way to store and keep espresso beans fresh is to **use zip lock bags**. Immediately after opening a new bag of espresso, divide its contents in four, six or eight portions and seal them in zip lock bags. Squeeze air out of zip lock bags before sealing. The beans will remain fresh for several weeks if they do not come in contact with air or moisture. Open one zip lock bag at a time to be used in one day. Air tight canisters or sealed large jars have to be opened several times to take beans out. That is not the best option.

Do not use bean hopper as storage container. It is not a sealed container. Fill just enough beans in the Bean hopper at a time for one or two days use.

While making espresso, have a wet rag handy for wiping/cleaning purpose.

** **Do not leave the machine without daily (simple) cleaning.** The machine is not capable of cleaning after itself. Here are a few steps that must be taken as a routine:

** Make one last espresso without coffee in the filter basket for semi-automatic machines or

Make a last espresso using the pre-ground cycle in machines with a pre-ground cycle option.

Cleaning the Frother

Remove the frother sleeve to wipe the internal nozzle and wash the outer sleeve. (When pulling to remove or pushing the sleeve back on the frother, hold the steam pipe to with other hand to prevent the pull going to the top of the pipe joint). When pump stops to pump steam, some vacuum is created and milk is sucked up. This procedure will prevent build up of milk stone.

Unscrew the nut and tighten it again to loosen the accumulation of dried milk in the threads of the nut.

Once every week dismantle the parts of frother to clean and sanitize the parts using mild chlorine based sanitizer. <http://www.partsguru.com/MilkFrothers.html>

In the fully automatic machines, use right amount of coffee

In the semi automatic filter cup, more coffee can be used with heavier tamping. A single cup can use 7 to 9g. and a double cup uses 12 to 14g. The fineness and tamping pressure can be used to adjust the quantity of coffee grounds used.

In fully automatic machines, the coffee is only gently compacted and the automatic compacting can be damaged if coffee is stuffed too much. Unless

mentioned in the manual, the quantity of coffee per shot can be between 7 g to maximum 9 g. When adjusting this quantity attention should be paid to the fineness so that the compacting cup is not over loaded. **Quantity of coffee grounds must have a balance between the fineness and weight to make sure that the compacting cup is filled with just the right amount of coffee. This balance will make a well formed used coffee puck. In case the compacting cup has less coffee, there will be some water left back from extraction and the puck will be sticky, wet and watery. The quality of espresso will not be good.** Stronger espresso can be made by reducing the water instead of increasing the coffee.

Two shots of 2 oz. espresso are more flavorful & sweeter than one shot of 4-oz. espresso.

**Have you descaled your espresso machine lately?
Use our Best Descaler DSC-6.**

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