

Daily Espresso Machine Maintenance

These procedures cover the basic daily cleaning routine for a pump-driven semi-automatic espresso machine. Because espresso machines vary widely, these procedures may need tweaking for your particular setup. But no matter what kind of machine you use, cleanliness is your first line of defense against machine malfunction and drink disaster. No matter how perfect your barista routine, your drinks will be sub-par unless the machine is clean and seasoned. As you pull shots, coffee oils build up on the working surfaces of the espresso machine. A certain amount of oil is necessary to “season” the machine and prevent metallic tastes in the shot. However, because of the heat, these oils go rancid quickly and must be cleaned off a few times per day. Rancid coffee oils will affect your espresso shots, turning them sour.

In addition, coffee grounds build up in the grouphead gasket and dispersion screen as the day goes on. This gums up the whole extraction process and taints the espresso with stale, burned coffee. Portafilters and groupheads need to be cleaned carefully each night, and they should also be cleaned periodically throughout the day. An excellent daily cleaning routine also protects your espresso machine. Stray grounds and coffee deposits can shred rubber gaskets, block dispersion screens, obstruct drain pipes, and ruin the heat stability of your machine. Drains should be purged with hot water every night. Every reflective surface of the machine should sparkle. Steamwands need special attention; if they’re not purged and cleaned religiously, the steam tips can clog or (in the worst-case scenario) they can become Petri dishes for milk bacteria that can eventually infect the boiler and put the entire machine out of commission. When you’re working as a barista, the espresso machine is your first mate, your right hand, your partner. Get to know it; pay attention to it; treat it with care and respect.

Machine Opening Procedures

1. If portafilters have soaked overnight, take the portafilters and baskets out of espresso detergent solution and rinse thoroughly. Replace baskets in portafilters.
2. Rinse under stream from the groupheads for ten seconds on each head.
3. Insert assembled basket/portafilter into grouphead so they will begin coming up to temperature.
4. Grind both grinders for two seconds each and throw away resulting grounds.
5. Prepare one dry rag for portafilter only, one wet rag for steamwand only, and one damp rag for wet clean-up on counter area only (not for use in wiping grounds).
6. Prepare a minimum of five shots of espresso for each grouphead and portafilter.
7. Only begin grind adjustment after the third shot.
8. Make sure the shots are running within the proper parameters.
 - The streams should be the consistency of warm honey, deep red-brown, and only turning lighter brown at the very end of the pull.
 - The resulting espresso color in cup contains deep red-brown and dark golden all at once, with a mirror-like crema.
 - The taste should be deep and robust with some smokiness and fruity notes in the smell and the tip of the tongue.
 - The shot should last 30 seconds and end up at around 1.5 to 2 oz with no blonde over-extraction.
9. Clean up the bar area, using a brush to sweep dry grounds off the counter.
10. Make sure all cups are clean and hot.
11. You are ready for drink prep.

Throughout the Day

- At least three times during the day, the machine needs to be backflushed with just water, and the gaskets need cleaning with the grouphead brush.

- Get into the habit of running an ounce of water through the grouphead after (or before!) every shot, and scrubbing the groupheads and backflushing (without espresso detergent it's called clear-water backflushing) after every rush. Remember that excess backflushing can cool the machine.
- Scrub the inside of portafilters at least twice between openings and closings with a green scrubbing pad and water. Be thorough, but quick to prevent the portafilter from cooling off too much while you're on bar. Cut your green scrubbing pads into two-inch squares for easy use. Rinse the portafilter quickly under the hot water spout before returning it to the grouphead.
- After backflushing, using espresso detergent, or scrubbing portafilters, always pull one or two primer shots to re-season the portafilter.
- Make sure to purge and completely wipe the steamwand after every use.
- If you're pulling shots ten minutes or more apart, producing good shots will be difficult. If they aren't used often enough, the portafilters cool off too much and accumulated oils tend to become rancid more quickly. To improve your shot quality on a slow bar:
 - Run about two ounces of water through the grouphead before each shot.
 - After the customer is served, purge the dirty water as usual.
 - If you do not expect to make another shot right away, clearwater backflush the grouphead so that it stays clean.

Machine Closing Procedures

Dispersion Screens

1. Take a grouphead brush and scrub screen and gaskets in a circular motion while you run water through the grouphead to remove coffee build-up from the screens.
2. If your dispersion screens cannot be easily removed, skip to the next section. If they can be removed, start by taking a demitasse and place it on the counter next to espresso machine.
3. Unscrew the dispersion screens.
4. Put screws in demitasse.
5. Wipe coffee gunk off each screen; soak in espresso detergent if needed.
6. Clean grouphead with a clean rag.
7. Use small, stiff brush to get into grooves.
8. Replace screens. Replace screws.

Backflushing the Groupheads

1. Backflushing removes all coffee residues from the screen and grouphead. Start by measuring out 1/4 teaspoon espresso detergent and put into blind portafilter. The amount of espresso detergent should be smaller in diameter and thinner than a dime.

Do not use excess detergent.

2. First, place blind portafilter into grouphead and start the brew cycle. Backflush for thirty seconds. Never walk away from the machine while backflushing; letting it run for too long can cause pump damage.

3. Stop water. Do not take out the portafilter. This time allows the soap to foam up inside the grouphead.
4. Activate pump and run for another thirty seconds.
5. Stop pump, take out blind portafilter, dump water and soap into drip tray.
6. Replace blind portafilter, run for 30 seconds, and dump the water. This should be all it needs, but continue clearwater backflushing until water runs clear.

Portafilters

1. Once the machine is no longer in use, remove the portafilters from the groupheads and remove the baskets from the portafilters.
2. Mix a solution of espresso detergent and water (1/2 tsp to 20 oz of hot water).
3. Put the portafilters and baskets into the cleaning solution. The portafilter handles should never be soaked—it degrades the plastic handles. Soak them for 5-10 minutes.
4. Remove the basket from the portafilter and scrub inside of the portafilter and basket with green scrubbing pad.
5. We recommend that you leave portafilters to soak overnight. Otherwise, rinse them well and replace them in the machine.
6. To clean off a dirty portafilter fast:
 - Mix up an espresso detergent solution in a pitcher (use a scant 1/4 tsp detergent to 10 oz hot water).
 - Pop the basket out of the portafilter and place both in the pitcher, making sure that the water level is high enough to cover the basket without touching the plastic handle.
 - Heat the solution to a boil with the steamwand to dislodge any coffee oils, grounds, and deposits.
 - A quick wipe with a dry rag should finish the job.
 - Purge the steamwand and wipe it down well, and rinse the portafilters thoroughly. Make sure that no espresso detergent is left on the portafilter or basket to taint your next shot.

Steamwands

1. Clean steamwands by first clearing holes of obstructions with a paper clip or with thorn on brush.
2. Soak wand in hot water for five minutes, then steam water to remove gunk. Wipe down with wand rag.

Drip Tray

1. Remove the drip tray and immediately cover the drain hole with your finger. Carefully bring it to the sink to be thoroughly washed.
2. Use a half-gallon of hot water from the espresso machine tap to flush grinds out of the drainage tube. Failure to flush the drain nightly will lead to sludge buildup and drain malfunctions like overflows.
3. Reassemble and replace the drip tray, being sure that the drain hole lines up correctly with the drainage box underneath.

Polish Machine

1. Wipe down and polish outside of machine. Never, never use cleaning products— use a clean rag dampened with steam from the steamwand (be careful to avoid burns). Never use a green scrubbing pad or any other abrasive cleaner to polish the machine—it will scratch the surface irreparably.