

# TROUBLESHOOTING & FAQ

The following list describes problems that may occur and questions that may arise when you make espresso commercially. We have divided them into categories to help you diagnose issues as they arise.

## Troubleshooting: Grinders

*Question* ***My grinder is blocked - the motor sounds as though it is turning, but nothing is coming out.***

*Diagnosis* Check that the hopper gate is open. If the gate is open but the grinder is not dispensing any coffee, then you have probably either ground the coffee much too finely or you are using an extremely oily dark roast. It takes only a couple of seconds of grinding too finely to choke up your grinder. Some designs are more prone to this issue than others.

*Treatment* Close the hopper gate, remove the hopper, grab the hoover, and vacuum out all the retained grinds from the throat of the grinder and above the burrs.

*Question* ***My grinder is blocked – the motor is not turning and nothing is coming out.***

*Diagnosis* As above

*Treatment* Don't attempt to get the motor turning again until you've removed all the grinds that you can, lest you blow the capacitor (the part that kick-starts the motor). Capacitors burn out easily when grinders jam.

The blades should begin to spin after you clear the grinds from the throat and above the burrs. If the blades still won't spin, then a full-scale cleaning involving opening up the burr carrier will be necessary. In this case, get help from a person who is trained to do the job safely.

*Question* ***My grinder just doesn't seem to be accurate enough. When my shot times are too short, I adjust the grind coarser. Nothing happens for a couple of shots, and then the shots go way too fast.***

*Diagnosis* This is a grind-retention issue.

*Treatment* Purging the proper quantity of grinds from the grinder will alleviate this issue. Refer to the grind-retention chart in Lesson 2.4.

*Question* ***I have a stepped grinder, and when I adjust the grind setting, the difference between each grinder setting seems to be too big. When I change the setting by just one step, the shot times change by as much as 10 seconds.***

*Diagnosis* Some grinders are classed as 'stepped', meaning the grind setting changes in steps instead of by a variable amount. The change of one step may adjust the grind more than you want it too. You will encounter this issue with older designs but also with many digital interfaces that change the grind setting by means of a motor inside the grinder.

*Treatment* When you use a stepped grinder and you want to use a grind setting in-between two steps (but your grinder won't allow it), you can attempt to alter your beverage weight slightly to increase or decrease extraction as you require.

If you are using a machine with preset shot sizes, we recommend you use the finer grind setting and reduce your dose of coffee slightly to allow for an increased flow rate.

*Question* ***My grinder is not switching on, but everything appears to be normal.***

*Diagnosis* Certain grinder designs have a hopper safety switch, which may be as simple as a plastic pin that lodges into a housing when the hopper is tightly screwed onto the grinder.

On other models, a circuit breaker located on the side or bottom of the grinder cuts off the current when the machine experiences a considerable load.

*Treatment* Ensure that the hopper is seated correctly in the grinder. Try tightening the screw that fastens the hopper onto the grinder.

If the external circuit breaker button is pushed out on your Mahlkoenig EK43 model grinder, follow this advice, from the manufacturer's user manual.

## **Troubleshooting: Espresso Machines**

*Question* ***My machine is making a whirring noise.***

*Diagnosis* It sounds as though the machine's pump is 'pressure hunting'. That means there's not enough incoming water pressure. Maybe the water supply to the machine has been cut off.

*Treatment* Don't attempt to run the pump at all until this situation is resolved. Pumps that get air in them burn out very quickly.

*Question* ***When I flush the group, the group head makes a hissing noise.***

*Diagnosis* This usually means the water coming out of the machine has boiled. Some machines, after they have been sitting idle, can overheat and require longer flushes of water to reduce the water temperature. Other machines can overheat if you have been running more water out of the group head than is appropriate for your machine.

The same issue can occur when the water supply has been cut off to the machine because the boiler has filled up with air. If your cafe is located at a high altitude, where the boiling point is lower than usual, you may experience this issue.

*Treatment* Try to reduce the amount of water coming out of your machine when rinsing. Don't use the group head as a font to clean equipment; just use it for espresso making.

*Question* ***I can't get the portafilter into the group head.***

*Diagnosis* This usually means you aren't holding the filter basket perfectly horizontal. If the portafilter still won't go in, check for a buildup of coffee residue on the shower screen or around the gasket.

Check that the filter basket is housed correctly.

Perhaps the filter basket is too big for the portafilter. This is often the case with vintage machines and large basket sizes.

You may have dosed much too much coffee.

*Treatment* Focus on leveling the basket, not the handle of the portafilter. (Handles usually angle slightly downwards.)

Give the group seals a good scrub.

Try pushing the basket in deeper.

Be sure you have zeroed the portafilter correctly on the scale, and ensure you aren't overdosing the basket.

*Question* ***Pucks of coffee are getting stuck to the shower screen when I remove the portafilter.***

*Diagnosis* This usually signifies that you are running at quite high pressure on your pump.

*Treatment* Check the pump pressure and mention this issue to a qualified person. If a puck does get stuck, you can sometimes catch it in the portafilter by holding the portafilter under the group head as you flush a small amount of water through. If a puck falls onto the drip tray, do not try to flush it down the drain. Instead push it to the side, allow it to dry a little, and then remove it to a bin.

*Question* ***My group head is leaking during the shot.***

*Diagnosis* The rubber gasket may be wearing out. It may be cracked.

It could be that you have a buildup of coffee residue around the gasket, sometimes caused by baristas forgetting to wipe the top of the filter basket.

Possibly, you just aren't pushing the handle far enough. Over time, as the seals wear down, the handle will be rotate farther around to the right side.

*Treatment* Give the gasket a cleaning. Gaskets should be changed at least twice a year. Over time, they get hard and will crack.

Be sure to remove any grinds from the top of the filter basket before insertion.

*Question* **My portafilters are not locking into place properly. Sometimes during brewing they slip back and fall out onto the drip tray, making a big mess.**

*Diagnosis* This sounds like a cleaning issue. The gaskets can be lubricated by a buildup of coffee oils. This can sometimes allow portafilters to slowly ease their way out when they are under load.

This can occur after several (e.g., six) months of using the same gaskets. Over time, the rubber they are made from hardens.

*Treatment* Clean the gasket with coffee soap and a small scrubbing brush.

### **Troubleshooting: Drinks**

*Question* **I see coffee grinds in the bottom of customers' cups.**

*Diagnosis* This is probably the result of coffee grinds being pushed through the holes in the filter basket. If the particles are very small this is normal. If they are numerous and larger in size, then you got the spouts or the base of a naked portafilter covered in coffee grinds during dosing.

This can also be caused by grinder burrs becoming more blunt with use.

*Treatment* It is best for the spouts of a portafilter not to touch anything on the work surface. Try tamping with the spouts leaning off the bench. Have a paintbrush near the grinder to regularly clean excess grinds from your grinder and work surface.

If the grinder blades have done more work than the manufacturer recommends (usually around 1,000 kg of beans), then it may be time to order replacement burrs.

*Question* **Why is my beverage weight smaller (or larger) this time than it was the last time I made a shot?**

*Diagnosis* Coffee grinds absorb water. In espresso making, 1.4 grams of water is usually absorbed per 1 gram of coffee. If your beverage is unexpectedly small, you probably overdosed the coffee.

If your beverage is unexpectedly large, you probably underdosed your coffee.

*Treatment* Check, using a scale, to ensure the grinder timer is correctly calibrated.