

CM280-2 Espresso Machine

User Manual



Expert of coffee equipment

Jiangsu Estremo Coffee Machine Tech CO.,LTD

Content

Revision History	1
Dangerous Classes	2
General	3
Technical Specifications	6
Installation and set up	8
Machine Operation	13
Machine Setup	14
Cleaning and maintenance	19
TROUBLESHOOTING	21
BOM	22
Maintenance records	24

◆ **Revision History**

Rev.	Date	Revised Context
01	10th,May, 2023	Release initial version
02	22th,May, 2025	Revision
03		
04		
05		
06		
07		

◆ Dangerous Classes

There are 4 different levels of notification intensity in this manual, identified by the signal words **WARNING**, **IMPORTANT**, **NOTE**, and **PRO TIP**. The risk level and importance of notifications are determined by the following definitions. Always follow warnings to ensure safety and prevent potential injury and product damage.



Important: Warn about unsafe practices. Follow important notices to ensure food safety and prevent possible minor personal injury or machine damage.



WARNING: Indicates a potentially hazardous situation which, if ignored, could result in serious injury or death.



NOTE: Provides additional information that may be helpful during machine operation, routine maintenance and cleaning.



PRO TIP: Take the guesswork out of choosing settings and service intervals with helpful tips and advice from the manufacturer.

◆ General

Applications

This semi-automatic coffee machine is suitable for similar purposes, such as:

- Stores, cafe, offices and other working place.
- Farms, inns, motels and other residential.
- Bed and breakfast environments .

Coffee machines are designed and built to make espresso and other hot beverages (for example, to steam milk). Do not use it for any other purpose.

- The A-weighted sound pressure level of this machine is lower than 70dB.
- The manufacturer is not responsible for damage to persons or property caused by incorrect, improper or negligent use by non-professionals.
- Please read this user manual carefully before using the machine.
- This manual contains important instructions for the safe use of the machine.
- Do not discard this manual for future reference.
- If damaged or lost, ask the manufacturer/distributor for a new copy.

General Notes



- Check whether the voltage you use is consistent with the rated voltage of the product.
- This unit has a grounding plug. Make sure the socket you are using is properly grounded.
- In order to prevent electric shock and fire, do not immerse the power cord and plug in water or other liquids.
- When using the coffee machine, someone should monitor it, and do not allow children and people who are unable to take care of themselves to approach the coffee machine.
- Unplug the coffee machine when not in use or cleaning.
- Allow the machine to cool before installing or removing internal parts or cleaning.
- If the power cord is damaged, in order to avoid danger, it must be replaced by professionals from the manufacturer or distributor.
- If the coffee machine doesn't work due to other reasons, please take the coffee machine to the manufacturer or distributor to test and repair.
- Please do not use components from non-designated manufacturers. Doing so could be hazardous or potentially dangerous to the user.
- Do not allow the power cord to hang over the edge of the table or touch a hot surface.
- Do not place the machine on or near gas tanks or ovens.
- The machine is for use by trained personnel only for food preparation.
- Do not use the coffee machine for other purposes and use it in a dry environment.
- Fill the water tank with clean cold water, do not add mineral water, milk or other liquid beverages to the water tank.

- When brewing coffee, some parts of the coffee machine are very hot, so do not touch them directly. ONLY touch the handle or knob.
- To ensure optimum performance, install the machine in a location that does not exceed the following parameters:
 - Maximum allowable water inlet pressure: 600 KPa(6 Bar) / 87 psi.
 - Minimum allowable inlet water pressure: 200 KPa(2 Bar) / 29 psi.
 - Maximum inlet water temperature: 40°C / 104°F
 - Ambient temperature is between +10°C / 50°F (minimum) and +40°C / 104°F (maximum).
- Do not use the coffee machine in an environment with high temperature, strong magnetic field and humid air.
- Do not use the appliance when the water tank is empty.
- Turn off the power switch and disconnect the power before replacing accessories or touching moving parts.

WARNING



- ✓ **Do not immerse this product in any liquid.**
- ✓ **Fire and electric shock hazard.**
- ✓ **Replace only with the manufacturer's original cordset.**
- ✓ **Disconnect power before servicing.**

Pressure In order to prevent hot steam and hot water from scalding the body or causing other personal injury, and to prevent damage to the product:

- When you use this coffee machine to brew coffee or froth milk, do not remove the water tank or funnel assembly;
- When you Before removing the funnel assembly to make another cup of coffee, please make sure the coffee machine is in standby;
- If you want to add more water to the water tank, please press the power switch button and an indicator light will turn off to ensure that the power of this product is Disabled.
- When unplugging, pull out the power cord by grasping the plug, not the cord.

High Temperature:

- When the machine is working, do not put your hands or other parts of your body into the bottom of the funnel or steam pipe to prevent burns;
- Do not touch the steam pipe with your hands or other parts of your body at any time, and only touch the steam when you turn the steam pipe. The silicone sleeve on the tube is turned to prevent burns.

Packaging

- This machine is shipped in a custom designed wooden box with cardboard and foam boxes to protect the machine from damage.
- The carton of the machine has standardized handling symbols to explain the correct shipping and storage methods.
- The machine must be kept in a horizontal position during transportation.
- Protects cartons and machines from shock drops, crushing, shocks, moisture and exposure to extreme temperatures during shipping.

Delivery Inspection

- When receiving and delivering, please ensure that the machine is in the exact condition described in the accompanying documentation and that all accessories are included.
- Missing items should be reported to the manufacturer or dealer immediately.
- Damage caused during transportation should be reported to the transportation agent and machine dealer immediately.
- Packaging materials are potentially dangerous and should be kept away from children.
- The carton and all packaging materials are recyclable and should be returned to a recycling center for disposal.

Long-term storage requirements

Before storage or for a month or more, be sure to:

- Perform all weekly and periodic cleaning procedures described in this manual.
- Disconnect and wind up the power cord (should be performed by professionals).
- Disconnect the machine's water inlet hose from the domestic water supply and drain the boiler (this should be performed by a professional).
- Clean the drip tray and exterior of the coffee maker to remove any coffee or other residue.

Machine disposal requirements

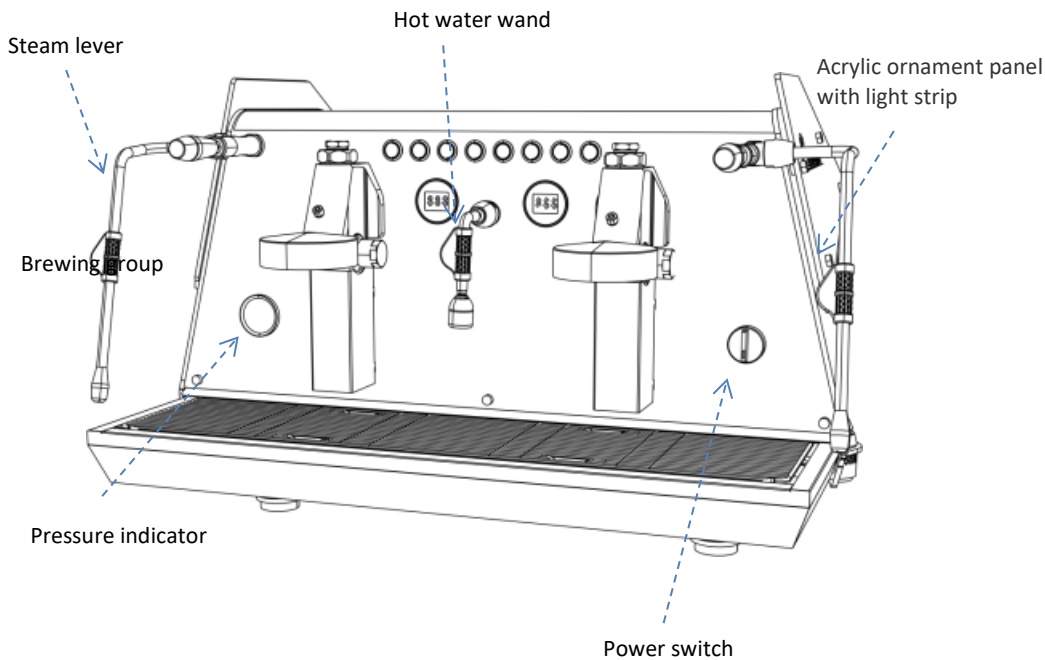
- Cover/repack the machine in the original carton and store it in a dry place where it will not be exposed to extreme temperatures or humidity.
- When returning the machine to service after long-term storage, perform all weekly and periodic cleaning procedures and reconnect water and power before use (this should be done by a professional).

If the machine needs to be scrapped, be sure to:

- Disconnect and wind up the power cord (should be performed by a professional).
- Disconnect the machine's water inlet hose from the domestic water supply and drain the boiler (should be performed by a professional).
- Pack and ship the machine to a certified recycling center.

◆ **Technical Specifications**

Machine Structure



Model	CM280-2	Boiler	11L SS boiler
Voltage	220-240V	Frequency	50/60HZ
Power	4500W	Pump	350W Fluid rotary pump
Machine size	720*620*480mm	Package	800x710x725mm
G.W	73KGS	N.W	61KGS

Accessories List



①



②



③



④



⑤



⑥



⑦

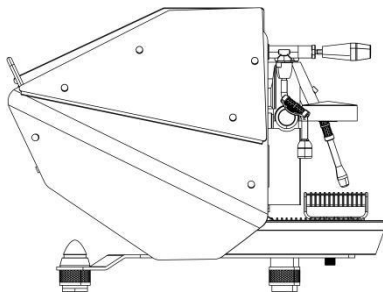


⑧

① 2x double spout portafilter	④ 1x powder distributor	⑦ 1x braided water hose
② 1x single spout portafilter	⑤ 2x cup stand	⑧ 1x drain hose
③ 1x tamper	⑥ 2x blind filter	

◆ Installation and set up

Machine positioning



Installation should be avoided when the machine is wet or very wet until it is certain that the machine is dry. In any case, a service technician is required to check the electronics for damage beforehand. Wiring work should be carried out by professionals and in compliance with current regulations.

- The location where the machine is installed should be a very flat surface, dry, firm and stable, with a height of about 85cm from the ground.
- The machine is equipped with rubber standoffs.
- The machine is running normally, no need to fix it on the plane where it is placed, and no need to do technical treatment to avoid vibration.
- It is recommended to reserve space around the machine for easy use and maintenance.
- Please reserve the location of the coffee grinder near the machine (see related instructions).
- The machine is equipped with a water softening device.
- To install a water softening unit connected to the mains water line, please refer to the selected product data sheet.
- Ask the installer to fit a small box to knock out coffee residues.

Machine Installation

Preparing

- Before connecting, please carefully clean the water pipe.
- Open the faucet completely and let the water flow for a few minutes;
- Connect the water pipe;
- Connect the machine to the power supply;
- Clean the entire water pipe of the machine carefully.

Hydraulic supply types

The machine offers two water inlet connection options: the machine is equipped with a water tank and mains water supply.

■ Water Tank



WARNING: To avoid overflow inside the machine, be sure to turn off the machine when filling the water tank. In the event of a spill, turn off the machine and unplug it until the machine is completely dry to avoid risk of electric shock.



NOTE: The machine has a capacitance sensor that detects when the tank is empty. Therefore, the tank should only be removed and refilled when not brewing espresso.

■ Mains water connection

1. The machine must be connected to the domestic water supply by a professional. If you are not confident in performing the steps below, please contact a service technician to perform this task.
2. Connect the supplied 3/8' water inlet hose to the underside of the rear of the machine (elbow to the machine,) and tighten both fittings with a wrench.
3. Before connecting the machine to the machine, remove at least 20 liters of water from the domestic water supply to flush out any debris in the plumbing system that may have accumulated inside the boiler. The domestic plumbing system should be equipped with a brass 3/8" male BSPP threaded fitting and an in-line shutoff valve. Connect the 180 cm inlet hose supplied with the machine to the domestic water system and use a wrench to tighten the fitting to 15 ft lbs/ 20 Nm.

 IMPORTANT:

- ✓ Use the water inlet hose supplied with the machine to connect it to the water mains according to the applicable national regulations in the country where the machine is installed. Never reuse damaged hoses.
- ✓ To prevent scale build-up in boilers and other components, a water softener system must be installed before the machine is installed.
- ✓ Read more in the section on water filter requirements.
- ✓ Follow the instructions below to connect the machine to the water line.

Water filter requirements

- Use only safe drinking water with a hardness rating between 5°fH and 8°fH (French hardness).
- If the hardness value is below this limit, the hydraulic components may corrode.
- If the value is high, scale will appear in the boiler.
- In both cases, the normal functioning of the machine and the quality and taste of the coffee are negatively affected.
- If drinking water is not within the above ratings, a water filter must be installed before installing the espresso machine.
- Failure to install a water filter will void the warranty, and any damage caused by scale buildup will be the responsibility of the owner.

External filtration unit (mains water supply)

1. Before the machine is used, make sure that the water filtration device or system is installed in the domestic water supply system to prevent the inside of the machine water supply system from being polluted. If you are not confident in performing the steps below, contact a service technician to perform this task. Turn on the faucet and fill the filter to full (if new/previously unused).
2. The machine's steam boiler will then start filling with water. Check the surroundings carefully for leaks or dripping water. If leaks/drips are detected, turn off the faucet immediately and check/tighten any leaking fittings.

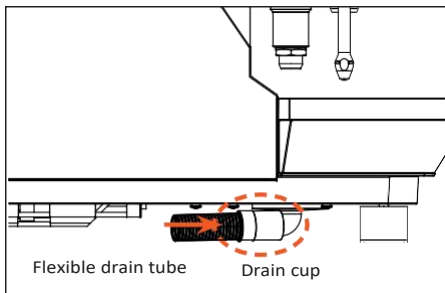
 IMPORTANT:

- ✓ Always maintain a water filtration unit or system in accordance with the manufacturer's

specifications.

- ✓ Failure to regularly maintain the filter unit or system will result in a build-up of scale in the hydraulic system of the machine, which will eventually lead to machine failure. Read more in the Cleaning and Maintenance section.

Drain connection checklist



1. Connect one end of the drain hose to the drain outlet located under the machine.
(Contact a service technician to perform this task if you are not sure how to proceed.)
2. Connect the other end of the drain hose to the domestic plumbing drainage system.
3. Remove the screw from the drain hole at the

bottom of the drip tray and reinstall it.

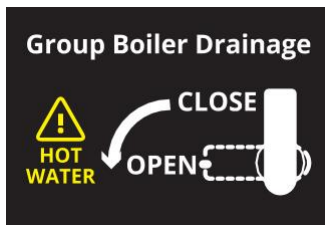
✓ PRO TIP: Make sure the drain hose is not twisted and below the level of the drain to prevent water and other residues from getting trapped in the hose, causing mold or odors.

Adjust the height of the machine with the feet if needed.



WARNING!

The boiler must be emptied by a qualified personnel.

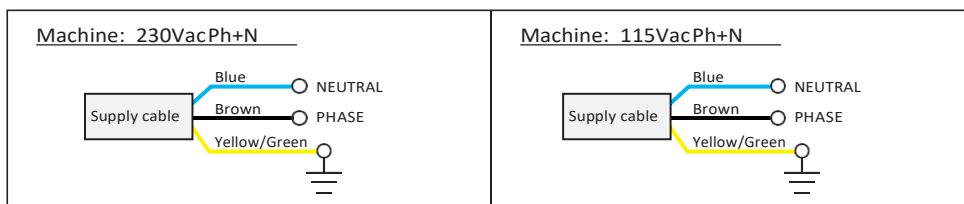


Electrical connection checklist



IMPORTANT: THE MANUFACTURER IS NOT RESPONSIBLE FOR PERSONAL, ANIMAL OR PROPERTY DAMAGE RESULTING FROM INCORRECT INSTALLATION OF THE MACHINE.

1. The machine can only be connected to the power supply by professionals. The following safety instructions should always be followed.
2. Make sure the technical specifications and the electrical requirements specified on the nameplate below the drip tray inside the machine match the power supply specifications.
3. Make sure the household power supply where the machine is installed is rated and capable of supplying the power required by the machine. Insufficient power, wiring, grounding, or insulation can cause overheating and fire.
4. The coffee machine must be connected to a grounded electrical outlet that complies with the regulations in force in the country of installation.
5. Ensure that a circuit breaker designed for machine power consumption is installed to protect the power supply as specified on the nameplate below the drip tray. Do not connect the machine to a power source through an extension cord, plug adapter, or shared outlet.

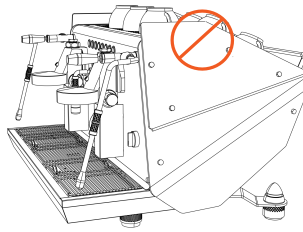


Initial starting procedure

After completing the installation of the machine, please follow the steps below for the first start:

1. Check if the tap and softened water unit are turned on.
2. Turn on the power switch (at the right side bottom of the machine), the water pump will start to fill the boiler with water, and the power indicator  will be lightened.
3. When filling water and heating for the first time, please open the steam valve (close after the steam is discharged from the pipe).
4. After the boiler reaches the water injection volume, the boiler will automatically heat up.
5. Operate the water outlet until water flows out of the water outlet.
6. Wait until the working pressure is reached and the machine reaches the correct thermal balance.

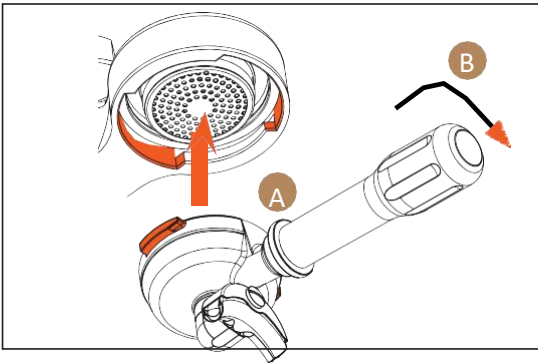
◆ Machine Operation



WARNING!

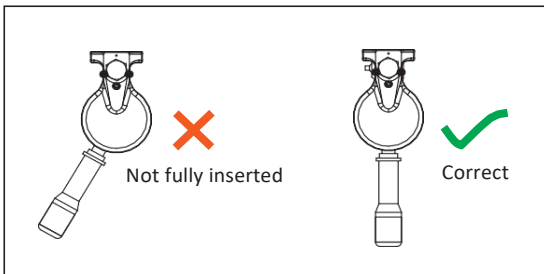
- ✓ Allowing water to drip into the machine can cause mechanical and electrical damage.
- ✓ Do not place wet cups directly on the cup shelf. Always thoroughly dry any cups before storing them on the warming shelf.

Insert portafilter into group



A: Align the portafilter's two flanges with the two slots in the group housing.

B: Insert the portafilter and rotate it counterclockwise until the handle is approximately perpendicular to the face of the coffee machine.



◆ Machine Setup

Control Panel and Display



Power button



Single



Double



Set up



Hot water



Display



Boiler temperature



Pre-infusion volume



Standby time



Water addition switch

Set up temperature/time:

1. Long press set-up button.
2. Screen display 120°C and flashing for steam boiler temperature setting; press single to decrease °C, double to increase 1°C.
3. Click set-up button and display 020 for pre-infusion volume setting; press single button to decrease 5ML, double to increase 5ML.
4. Click set-up button and display 001s for standby time setting; press single button to decrease 1s, double button to increase 1s.
5. Click set-up button and display on, this is water addition function, off is close.
6. Click set-up button and display 207, this is version number.
7. Click set-up button, then it ends.
8. Long press single and set up button for 3s, that's cleaning function, it shows CL.

Brewing espresso



1. Grind&Tamp coffee powder



2. Insert the portafilter



3. Press the single or double button to start brewing, the machine will stop automatically when reaching the setting volume.

1. Remove the portafilter from the brewing group.
2. Fill the basket with ground coffee (about 7g for a single dose, about 14g for a double dose).
3. Compact and flatten the powder with the tamper.
4. Insert the portafilter into the group and lock it into the correct position.
5. Place the cup under the portafilter spout.
6. Press the single or double button to start brewing, the machine will stop automatically when reaching the setting volume.

WARNING!

- ✓ Never try to open the portafilter while the machine is running!
- ✓ Pressurized hot water can cause burns or serious injury. During the water production process, pay attention to the hot parts of the machine, especially the water outlet, steam pipes and hot water. Never put your hands under working water outlets and steam pipes.
- ✓ After dispensing, wait at least 3 seconds before removing the mobile filter.



PRO TIP:

- ✓ When not in use, store the filter handle inserted in the set to keep it warm. This is important for maintaining the optimal brew temperature when dispensing espresso.
- ✓ The coffee powder left on the edge of the filter handle is not conducive to the complete attachment of the gasket to the filter handle, which will cause hot water and coffee residues to overflow.
- ✓ To get a great coffee, it is important to adjust the grind of the coffee to match the 25-30

seconds of water brewing to make the coffee.

- If the grinding is too coarse, the brown color is light and there is little foam.
- If the grind is too fine, the brown color will be heavy and there will be no foam.
- Also, it is important that the coffee grounds should be fresh, consistent in thickness (if the grinder grinds well, this can be done) and in the right amount (about 30ml per cup of coffee).
- It is recommended to grind according to the amount required for immediate use, because the ground coffee will lose its aroma quickly and the oil component will become stale.

RGB light



Scan the barcode and download the app, then can use phone to control the light.

Steaming and frothing milk



1. Dip the steam wand into the milk, making sure the tip of the steam wand is submerged.



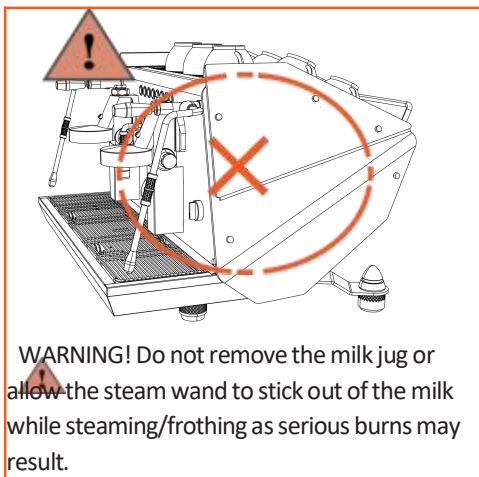
2. Push the lever up or down to froth the milk.



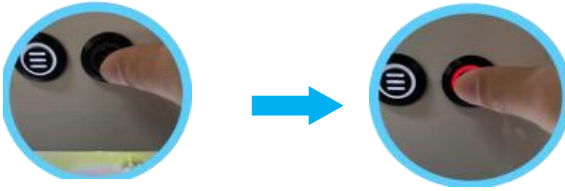
3. When the milk has reached the desired temperature, push the lever back to level to stop steaming.



4. Push the lever down again for a few seconds to clear any remaining milk from the stick. Then wipe the outside of the steam wand with a damp cloth to prevent nozzle clogging and keep it clean.



Dispensing water



1. Put the water cup under the hot water nozzle, and push the hot water lever down to catch hot water.

2. When the water reach the desired volume, push the lever back to level to stop.

1. Put the water cup under the hot water nozzle, and push the hot water lever down to catch hot water.
2. When the water reach the desired volume, push the lever back to level to stop.
3. Machine automatically refill the coffee boiler water.
4. Left & right side button both can control the hot water



Warning: Do not put your finger or hand under the hot water to avoid burns or severe hurt.

◆ Cleaning and maintenance

Cleaning tips

- To keep the machine looking and working like new, always follow all cleaning and maintenance instructions provided in this manual.
- For safety, be sure to turn off the machine by the main power switch when cleaning the outer surface.
- All exterior surfaces should be cleaned with a damp, lint-free cloth that will not scratch the machine, and glass surfaces can be cleaned with a streak-free glass cleaner and a dry cloth.
- Do not use aggressive cleaners, solvents or degreasers. These can damage plastic and rubber parts and leave unwanted residues.

Daily cleaning

At the end of each working day, be sure to:

Steam and hot water

1. Position the steam wand over the drip tray and open the steam tap for one minute to fully flush the wand.
2. Clean the steam wand and the water tap. Be sure that the nozzles are not clogged or partially blocked with milk or other residue. If it's necessary to remove them for cleaning, be careful not to deform or damage any of the components during removal.

Group head and portafilters

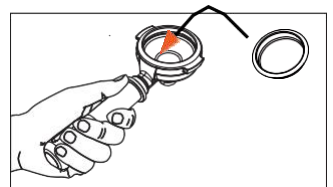
1. Clean the shower plate and the group gasket with a soft brush to remove any coffee residue.
2. Run the flushing cycle for each group at the end of each day to prevent coffee residue drying and building up inside the brewing group.

Drip tray & bodyworks

1. Clean the external surfaces of the machine, paying special attention to the glass and stainless steel parts to remove any coffee residue and smudges and fingerprints.
2. Clean the drip tray and the stainless steel insert grid under running water.

• Daily flushing

1. Place the blind filter in the emptied portafilter, then lock the portafilter into the brewing group.
2. Pull up the group lever and keep the pump working for 10 sec and stop 5 sec. Repeat at least 5 times.



3. After cleaning, remember to remove the blind filter and store it in a safe place for the next usage.
4. Clean the internal side of the portafilter before replacing the espresso filter. If needed, let the portafilter soak into warm water or use cleaning detergent for espresso machines.



WARNING!

Do not open the group or remove the portafilter until the cleaning has finished! This will release steam and hot water which could result in burns.

Weekly cleaning

Weekly cleaning or Periodical cleaning and care – Once per week be sure to:

Group head

Run the cleaning cycle for each group at the end of each week to thoroughly clean the group head, shower plate and portafilter to ensure great coffee taste. See Weekly cleaning with espresso machine detergent section for details.

Drain hose

If the drain hose is installed, clean the drain cup by slowly pouring one liter of warm water into it to dissolve and remove any build-up of coffee residue that often accumulates inside the drain cup and tube.

Tank

Remove and clean the water tank with detergent and a soft brush if needed.

Water tank filter

The water tank filter must be replaced when the expiration date is reached (2 months since installation).

Use the following steps to recharge your water softener.

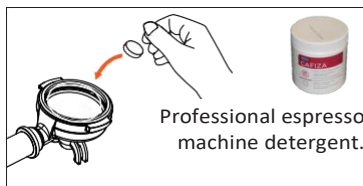
1. Switch the machine off and remove the top panel/cup warming tray.
2. Remove the filter from the tank and install the new one.
3. Replace the top panel/cup warming tray and switch the machine on.

Water mains filter

If an external softener is installed, follow and perform the maintenance instructions and respect the replacing or recharging periods described by the manufacturer.

Weekly cleaning with espresso machine detergent

1. Once a week, add espresso detergent in the blind filter when running the daily flushing.
2. After cleaning, with detergent, the group needs to be flushed. So repeat the process 2 more times to flush out any remaining detergent. Then remove the blind filter and store it in a safe place for the next usage.



◆ TROUBLESHOOTING

Problem	Possible cause	Solution
The machine is cold and cannot dispense water to make coffee	The main switch is turned off.	Turn on the main switch.
	No electricity	Please check.
	Power failure protection device trips	Please check.
The machine is hot, but cannot make coffee with water (the machine has connected to the tap already.)	The faucet or purify water valve is closed up.	Please open.
	No water in the water tank.	Please check and fill with the tank.
The green light keep flashing.	The faucet or purify water valve is closed up.	Please open if connect to mains water already.
	The water level of the tank is lower than the minimum warning line.	Fill with pure water exceed the minimum line
No pressure in the boiler	Safety thermostat activated	Request Technical Service
Portafilter overflowing	Drain cup gasket with coffee residue	Please clean
	Portafilter edge damaged.	Replace the filter mesh.
The coffee dripped down not flow smoothly.	The filter mesh is blocked or the water outlet of the filter handle is dirty.	Please clean
	Coffee powder is too fine.	Adjust coarser powder.
Coffee flows out too fast	Coffee powder is too coarse.	Adjust finer powder.
	Coffee beans are not fresh.	Please change to fresh beans.
Irregular steam	Steam nozzle clogged	Please clean the nozzle.

◆ Error code

No.	Error Code	Error Name	Error description
1	E01	Water addition issue/water probe issue	Pump keep adding water, over 1min, but cannot detect the signal of having water
2	E02	Steam high temperature alarm	In any state, when any boiler detected temperature> set +8°C
3	E03	Abnormal heating	After turning on the machine, the machine temperature cannot heat to certain one
4	E04	Communication error	Display panel cannot receive power panel data or error, not recoverable at certain time
5	E05	Steain boiler temperature sensor issue	Inspect that temperature of sensor is over the range, AD value less than 300; more than 3300; For below 10°, heat 1min, temperature goes higher, AD value less than 40
6	E06	Coffee machine boiler temperature sensor	When boiler has water and brew head water flows out, the volumetric cannot detect the signal for 15s
7	E07	Volumetric issue	When boiler has water, volumetric cannot get the signal for 15s

◆ Error code

Error handle	Recover	Note
Screen display E01, close all loadings; all buttons have no effect	Re-power on	
Screen display E02, close all loadings; all buttons have no effect	Re-power on	CM280 single group two boilers has not this alarm
Screen display E03, close all loadings; all buttons have no effect	Re-power on	Need a alarm system
Screen display E04, close all loadings; all buttons have no effect	Re-power on	
Screen display E05, close all loadings; all buttons have no effect	Re-power on	
Screen display E06, close all loadings; all buttons have no effect	Re-power on	
Screen display E07, close all loadings; all buttons have no effect		



Maintenance records

Date		Product name&Model	
Serial Number			
Username		Phone/Mobile	
Address			
Problem			
Repair result			
Repair person: Date:			
The warranty period of this machine is one year (calculated from the day it leaves the factory). During the warranty period, if the fault is caused by the quality of the product itself, please contact our customer service staff for free accessories or replacement services. The range of accessories provided for compensation in the following cases: 1. Without warranty proof. 2. Failures caused by operating the machine not in accordance with the requirements of the manual. 3. Failure, scratches or damage caused by moving or falling. 4. Damage caused by inappropriate preservation, maintain or usage. 5. Easy damaged pieces and present accessories are not concerned. 6. Failure or damage caused by force majeure.			

