the Barista Express™

Instruction Book - BES870







Contents

- 2 Breville Recommends Safety First
- 7 The Barista Express™ Features
- 8 Components
- 10 Functions
- 23 Care & Cleaning
- 30 Troubleshooting
- 34 Coffees to try

BREVILLE RECOMMENDS SAFETY FIRST

At Breville we are very safety conscious. We design and manufacture consumer products with the safety of you, our valued customer, foremost in mind. In addition we ask that you exercise a degree of care when using any electrical appliance and adhere to the following precautions.

IMPORTANT SAFEGUARDS

READ ALL INSTRUCTIONS BEFORE USE AND SAVE FOR FUTURE REFERENCE

- Carefully read all instructions before operating and save for future reference.
- Remove safely discard any packaging material and promotional labels or stickers before using the Barista Express[™] for the first time.
- To eliminate a choking hazard for young children, remove and safely discard the protective cover fitted to the power plug of this appliance.
- Do not place the Barista Express[™] near the edge of a bench or table during operation. Ensure the surface is level, clean and free of water and other substances.

- Do not use the Barista Express™ on a sink drain board.
- Do not place the Barista Express[™] on or near a hot gas or electric burner, or where it could touch a heated oven.
- Do not use the Barista Express™ inside a cabinet.
- Always ensure the Barista Express[™] is properly assembled before connecting to power outlet and operating. Follow the instructions provided in this book.
- The appliance is not intended to be operated by means of an external timer or separate remote control system.
- Do not use attachments other than those provided with the Barista Express™.
- Do not attempt to operate the Barista Express[™] by any method other than those described in this book.

- Do not operate the grinder without the hopper lid in position. Keep fingers, hands, hair, clothing and utensils away from the hopper during operation.
- Use only cold, tap water in the water tank. Do no use any other liquid.
- Never use the Barista Express[™] without water in the water tank.
- Ensure the portafilter is firmly inserted and secured into the brewing head before using the machine.
- Never remove the portafilter during the brewing operation as the machine is under pressure.
- •Cleaning and user maintenance must not be performed by children without supervision.
- Do not move the Barista Express[™] whilst in operation.

- Do not leave the Barista Express[™] unattended when in use.
- Do not touch hot surfaces. Allow the Barista Express™ to cool down before moving or cleaning any parts.
- Do not place anything, other than cups for warming, on top of the Barista Express™.
- Always switch off the Barista Express[™] by pressing the POWER button to 'Off', switch off at the power outlet and unplug if appliance is to be left unattended, if not in use, before cleaning, before attempting to move the appliance, disassembling, assembling and when storing the appliance.
- Keep the appliance and accessories clean. Follow the cleaning instructions provided in this book.

SPECIFIC INSTRUCTIONS FOR WATER FILTER

- Filter cartridge should be kept out of reach of children.
- Store filter cartridges in a dry place in the original packaging.
- Protect cartridges from heat and direct sunlight.
- •Do not use damaged filter cartridges.
- •Do not open filter cartridges.
- If you are absent for a prolonged period of time, empty the water tank and replace the cartridge.

IMPORTANT SAFEGUARDS FOR ALL ELECTRICAL APPLIANCES

- Unwind the power cord fully before use.
- Do not let the power cord hang over the edge of a bench or table, touch hot surfaces, or become knotted.
- To protect against electric shock do not immerse power cord, power plug or appliance in water or any other substance.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

- Children should be supervised to ensure they do not play with the appliance.
- It is recommended to regularly inspect the appliance. Do not use the appliance if power cord, power plug or appliance becomes damaged in anyway. Return the entire appliance to the nearest authorised Breville Service Centre for examination and/or repair.
- Any maintenance other than cleaning should be performed at an authorised Breville Service Centre.
- This appliance is recommended for household use only. Do not use this appliance for anything other than its intended use. Do not use in moving vehicles or boats. Do not use outdoors. Misuse may cause injury.

 The installation of a residual current device (safety switch) is recommended to provide additional safety protection when using electrical appliances. It is advisable that a safety switch with a rated residual operating current not exceeding 30mA be installed in the electrical circuit supplying the appliance. See your electrician for professional advice.

\land WARNING

Fully unwind the cord before use.

FOR HOUSEHOLD USE ONLY SAVE THESE INSTRUCTIONS



INTEGRATED CONICAL BURR GRINDER

Precision conical burrs maximise ground coffee surface area for a full espresso flavour.

ADJUSTABLE GRIND SIZE

18 grind settings (fine, 1–16, coarse) from coarse to fine for optimal espresso extraction.

HANDS FREE DIRECT GRINDING INTO PORTAFILTER

Auto stop for hands free grinding direct into portafilter.

AUTOMATIC DOSING

Dispenses the required amount of coffee for a single or double cup dose.

GRIND AMOUNT DIAL

Adjusts dose to suit fineness or coarseness of grind.

DOSE TRIMMING TOOL

For precise dose control.

ELECTRONIC PID TEMPERATURE CONTROL

For increased temperature stability.

AUTO PURGE

Automatically adjusts water temperature after steam for optimal coffee extraction.

ADJUSTABLE TEMPERATURE CONTROL

For optimum coffee flavour.

THERMOCOIL HEATING SYSTEM

Integrated stainless steel water coil accurately controls water temperature.

LOW PRESSURE PRE-INFUSION

Gradually increases pressure at the start for an even extraction.

ESPRESSO PRESSURE GAUGE

Measures the water pressure through the ground coffee in the portafilter during extraction.

DRY PUCK FEATURE

Releases water pressure from the ground coffee in the filter basket for easy disposal of the coffee puck.

1850W HIGH POWER

For faster heat up and high pressure steam.

INSTANT HOT WATER

Dedicated hot water outlet for making long blacks and pre-heating cups.



- A. Automatic Dosing. Select between single or double filter basket.
- B. Mechanical Clutch Protection.
- C. Grind Size Selector.
- D. POWER Button. Surround illuminates when machine is switched on.
- E. Grind Amount Dial. Controls the amount of fresh ground coffee dosed into the filter basket.
- F. Integrated Removable Tamper. For consistent tamping control.
- G. Grinding Cradle. For directly dosing into portafilter.
- H. Cup Warming Tray.
- I. CLEAN / DESCALE Light. Indicates when a cleaning cycle or descaling is required.
- J. Steam Light /Hot Water. Illuminates to indicate that the steam or hot water function is selected.

- K. Group Head.
- L. Extra-Tall Cup Height For Coffee Mugs.
- M. Removable Wet And Dry Coffee. Separator Drip Tray.
- N. Drip Tray Full Indicator.
- O. 250g Bean Hopper Capacity.
- P. Integrated Conical Burr Grinder. Precision conical burrs maximise ground coffee surface area for full espresso flavour.
- Q. Pressure Gauge. Monitors espresso extraction pressure.
- R. PROGRAM Button. Personalise your espresso shot volumes & also accesses Advanced Temperature functions.
- S. STEAM Dial /Hot Water Dial. Selector control for steam and hot water.
- T. Programmable. 1 CUP and 2 CUP button.



- U. Instant Hot Water. Dedicated hot water outlet for making long blacks and pre-heating cups.
- V. Stainless Steel Portafilter. With commercial style spouts.
- W. 360° Swivel Action Steam Wand Easily adjusts to perfect position for texturing.

Custom designed accessories.

- 1. Dose trimming tool.
- 2. Single wall filter baskets for freshly ground coffee.
- 3. Dual Wall filter baskets. (1 cup & 2 cup) for pre-ground coffee.
- 4. 480ml stainless steel jug.

Cleaning accessories.

Cleaning tool/brush Cleaning tablets Cleaning cycle disc Allen key Descaling powder

NOT SHOWN

PID Temperature Control. For increased temperature stability.

Adjustable Temperature Control. For optimum coffee flavour.

Low Pressure Pre-infusion.

Gradually increases pressure at the start for an even extraction.

1850W High Power. For fast heat up and high pressure steam.

Water Filter Holder and Water Filter.

Removable 2 Litre Water Tank. Filled from the top with integrated water filtration.

Storage Tray. Located behind the drip tray for storage of accessories.

Cord Storage. Located under the water tank.



BEFORE FIRST USE

Machine Preparation

Remove and discard all labelling and packaging materials attached to your espresso machine. Ensure you have removed all parts and accessories before discarding the packaging.

Clean parts and accessories (water tank, portafilter, filter baskets and jug) using warm water and a gentle dish washing liquid and rinse well. Wipe the outer housing, bean hopper and drip tray with a soft damp cloth and dry thoroughly. Do not immerse the outer housing, power cord or power plug in water or any other liquid.

The water filter located inside the water tank will need to be removed before washing the water tank.

CONDITIONING THE WATER FILTER

- Remove filter from the plastic bag and soak in a cup of water for 5 minutes.
- Rinse filter under cold running water.
- Insert the filter into the filter holder.
- Set the dial date 2 months ahead.
- To install filter, push down to lock into place.
- Slide the water tank into position and lock into place.

NOTE

To purchase water filters contact Breville Customer Service Centre on 1300 139 798 (Australia) or 0800 273 845 (New Zealand).

FIRST USE

Initial Start Up

- Fill tank with water
- Press POWER button
- A pumping sound will be heard. The machine will reach operating temperature and go into STANDBY mode.

FLUSHING THE MACHINE

It is recommended to complete a water flushing operation, without ground coffee, to ensure the machine has been conditioned. When the machine has reached STANDBY mode, run the following 2 steps.

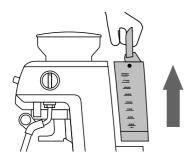
- Press the 2 CUP button to run hot water through the group head for 30 seconds.
- Activate steam for 10 seconds.
- Repeat this cycle until the water tank is empty.



Do not clean any of the parts or accessories in the dishwasher.

FILLING THE WATER TANK

- Ensure the water filter is securely fitted inside the tank.
- Fill the water tank with cold tap water to the maximum mark on the side of the tank and slide the water tank back into position at the back of the machine.
- Plug the power cord into power outlet and switch On at power point.
- Press the POWER button. The POWER button surround will flash while the machine is heating. When the correct temperature has been reached, all the button surrounds on the control panel will illuminate.

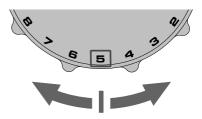


Check the water level before use and replace the water daily. The water tank should be filled with fresh, cold tap water before each use.

Do not use de-mineralised or distilled water or any other liquid.

SETTING THE GRIND SIZE

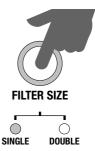
The grind size will affect the rate of water flow through the coffee in the filter basket and the flavour of the espresso. When setting the grind size, it should be fine but not too fine and powdery. There are 18 settings on the GRIND SIZE select dial - The smaller the number, the finer the grind size. The larger the number, the coarser the grind size. We recommend you start at the No. 5 setting and adjust as required.



GRINDING THE COFFEE

- Fill the hopper with fresh coffee beans.
- Place the portafilter into the grinding cradle.
- Insert filter basket required into the porta-filter.

Press the FILTER SIZE button to select your filter size (single or double).

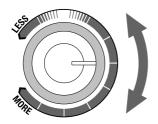


AUTOMATIC DOSING

- Push and release the portafilter to activate the grinding switch, then allow the portafilter to be dosed with fresh ground coffee.
- To stop the grinding function during single or double dose, simply press the filter size button.

ADJUSTING THE GRIND AMOUNT

Set the GRIND AMOUNT dial to the 3 o'clock position as a starting point for dose amount. Adjust towards LESS or MORE as required to adjust the dose amount so the cap on the supplied tamper is level with the top edge of the filter basket rim, AFTER tamping.





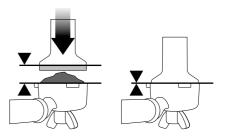
You may need to adjust the GRIND AMOUNT dial a few times to achieve the correct grind amount.

MANUAL DOSING

- With the portafilter inserted, push and hold the micro switch down until the desired amount of ground coffee has been dosed.
- To stop the function during a manual grind function, simply release the portafilter. This will release the activation switch to stop the grind function.

TAMPING THE GROUND COFFEE

Once the grind function has been completed, carefully withdraw the portafilter from the grinding cradle, being careful not to spill any ground coffee, tap down to collapse and using the integrated tamper, tamp down firmly (approx. 15–20 kg of pressure).



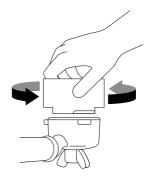
TRIMMING THE DOSE

The Razor™ precision dose trimming tool allows you to trim the puck to the right level for a consistent extraction.



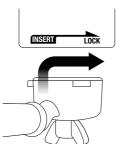
Insert the Razor[™] into the coffee basket until the shoulders of the tool rest on the rim of the filter basket. The blade of the dosing tool should penetrate the surface of the tamped coffee.

Rotate the Razor[™] dosing tool back and forth while holding the portafilter on an angle over the knock box to trim off excess coffee.



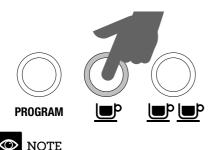
Your coffee filter basket is now dosed with the correct amount of coffee.

Insert portafilter into group head to extract coffee.



PRE-PROGRAMMED SHOT VOLUME – 1 CUP

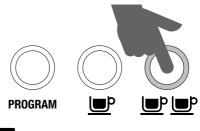
Press the 1 CUP once. A preset single espresso volume of approximately 30ml will be extracted. The machine will automatically stop once the preset volume has been extracted.



The amount of espresso extracted in the cup will vary depending on your grind size and grind amount.

PRE-PROGRAMMED SHOT VOLUME – 2 CUP

Press the 2 CUP button once. A preset double espresso volume of approx. 60ml will be extracted. The machine will automatically stop once the preset volume has been extracted.



NOTE

Pressing the 1 CUP or 2 CUP buttons during a programmed espresso will immediately stop the extraction.

PROGRAMMING SINGLE ESPRESSO

- To begin programming, press the PROGRAM button once. The machine will beep once and the program button will begin to flash. This indicates the machine is in programming mode.
- 2. Press 1 CUP button to start espresso extraction. Press 1 CUP again once desired volume of espresso has been extracted. The machine will beep twice to indicate the new 1 CUP volume has been set.

PROGRAMMING DOUBLE ESPRESSO

- To begin programming, press the PROGRAM button once. The machine will beep once and the program button will begin to flash. This indicates the machine is in programming mode.
- Press 2 CUP button to start espresso extraction. Press 2 CUP again once desired volume of espresso has been extracted. The machine will beep twice to indicate the new 2 CUP volume has been set.

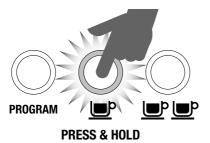
RESETTING DEFAULT VOLUMES

To reset the machine to the default 1 CUP and 2 CUP shot volumes and espresso water temperature press and hold the PROGRAM button until the machine beeps three times. Release the PROGRAM button. The machine will return to its original default setting.



Default settings: 1 CUP shot volume is approx. 30ml. 2 CUP is approx. 60ml.

MANUAL ESPRESSO VOLUME



Press and hold the 1 CUP or 2 CUP button. Release the button once sufficient pre-infusion time has elapsed & full pump pressure will be applied. Press either the 1 CUP or 2 CUP button when sufficient espresso volume has been extracted

NOTE

For optimal flavour when using a 1 CUP filter basket, you should extract approx. 30ml. When using a 2 cup filter basket, you should extract



WARNING

The metal parts of the portafilter will be very hot.

ESPRESSO PRESSURE GAUGE

IDEAL ESPRESSO ZONE

The gauge needle, when positioned in the middle zone during extraction, indicates the espresso will be extracted at the ideal pressure.



UNDER EXTRACTED ZONE

The gauge needle, when positioned in the lower zone during extraction, indicates the espresso has been extracted with insufficient pressure. This occurs when the water flow through the ground coffee is too fast and results in an under extracted espresso that is watery and lacks crema and flavour.

Causes for under extraction include the grind being too coarse and/or insufficient coffee in filter basket and/or under tamping.



OVER EXTRACTED ZONE

The gauge needle, when positioned in the upper zone during extraction, indicates the espresso has been extracted with too much pressure. This occurs when the water flow through the ground coffee is too slow and results in an over extracted espresso that is very dark and bitter with a mottled and uneven crema.

Causes for over extraction include the grind being too fine and/or too much ground coffee in filter basket



TEXTURING MILK

The Breville Barista Express™ comes complete with a commercial style 360° stainless steel steam wand.

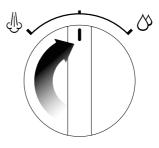


WARNING

Ensure the STEAM DIAL is in the STANDBY position before removing the steam wand from the frothing jug.

USING THE STEAM DIAL

- Position the steam tip over the drip tray. Turn the STEAM selector dial to the steam position. The white steam light will flash to indicate the machine is heating to create steam.
- When the steam light stops flashing the steam wand is ready for use.
- Before inserting the wand into the milk, pause the steam by returning the dial back to the STANDBY position. This will avoid the milk splashing out of the jug (this pause function lasts for approx 8 seconds before exiting steam mode).
- Insert the wand into the milk and turn the steam dial from Standby to the Steam position to begin texturing.
- To stop, return the STEAM dial to the STANDBY position and remove the jug.



NOTE

When the espresso machine creates steam, a pumping noise can be heard. This is the normal operation of the 15 bar Italian pump.



After 5 minutes of continuous steaming, the machine will automatically disable the steam function. The steam light will flash. When this occurs return the steam dial to the STANDBY position.

USING HOT WATER OUTLET

Turn the STEAM/HOT WATER selector dial to the hot water position. The white steam light will flash to indicate the machine is heating to create hot water.

When the steam light stops flashing, the hot water is up to temperature.

To stop the flow of hot water, return the steam dial back to the STANDBY position.

AUTO PURGE

For extracting espresso immediately after using the steam function, this machine features an auto-purge function.

The auto purge function ensures the ground coffee will not be burnt by the initial water flow from the thermocoil being too hot. The water is automatically released internally into the drip tray ensuring that the thermocoil is at optimal temperature for extracting espresso.

Your espresso will always be extracted at the optimal temperature ensuring only the best flavours are extracted.

ADVANCED MODE

Adjusting Water Temperature

Different beans require a different water temperature to extract their optimum flavour.

The Barista Express[™] allows you to adjust water temperature ±2°C in 1°C increments from the default temperature. To enter Advanced Temperature setting mode:

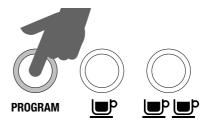
- 1. Turn the machine OFF
- 2. Press & hold the PROGRAM button, then press the POWER button. The machine will beep once. The illuminated button will indicate current temperature selected. If no buttons are pressed within 5 seconds after entering Advanced Mode, no change will be made & machine will return to heat-up/ stand-by operation.



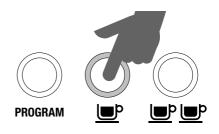
3. To select a temperature change, within 5 seconds of entering Advanced Mode, press the button to select desired temperature. You will hear 2 beeps to confirm the change. If no buttons are pressed the temperature will remain unchanged & machine will revert to STANDBY.

4. Default Temperature setting:

In Advanced Mode, press the PROGRAM button.

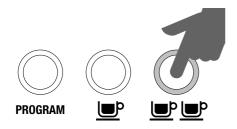


 Increase Water Temperature +1°C: In Advanced Mode, press the 1 CUP button.

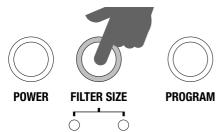


6. Increase Water Temperature +2°C:

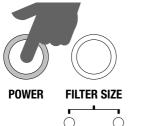
In Advanced Mode, press the 2 CUP button.



7. Decrease Water Temperature -1°C: In Advanced Mode, press the FILTER button.



8. Decrease Water Temperature -2°C: In Advanced Mode, press the POWER button.



SINGLE

PROGRAM

DOUBLE

PRE-HEATING

Heating your cup or glass

A warm cup will help maintain the coffee's optimal temperature. Pre-heat your cup by rinsing with hot water and place on the cup warming tray.

Using the hot water outlet

Turn the Steam/Hot Water dial to the Hot Water position. The Steam/Hot Water LED on the front panel will begin to flash indicating the Hot Water function has been selected & the Thermo-coil is increasing in temperature. Hot Water will be dispensed from the Hot Water spout. Turn the dial back to STANDBY to stop the flow of Hot Water

Heating the portafilter and filter basket

A cold portafilter and filter basket can reduce the extraction temperature enough to significantly affect the quality of your espresso. Ensure the portafilter and filter basket are preheated with hot water before initial use.

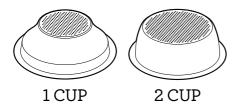


Wipe the filter and filter holder dry before dosing with ground coffee as moisture can encourage 'channelling' where water by-passes the ground coffee during extraction.

SELECTING A FILTER BASKET

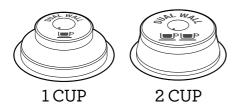
Single Wall Filter Baskets

Use Single Wall filter baskets if grinding fresh whole coffee beans. Single Wall filter baskets allow you to experiment with grind, dose and tamp to create a more balanced espresso.



Dual Wall Filter Baskets

Use Dual Wall filter baskets if using pre-ground coffee. Dual Wall filter baskets regulate the pressure and help to optimise the extraction regardless of the grind, dose, tamp pressure or freshness.





Regardless of whether you use Single Wall or Dual Wall filter baskets, use the 1 CUP basket when brewing a single cup and the 2 CUP basket when brewing two cups or a stronger single cup or mug.

The provided filter baskets are designed for:

1 CUP basket = approx. 8-11g. If using pre-ground coffee, this is approx. 2 level tablespoons.

2 CUP basket = approx. 16-19g. If using pre-ground coffee, this is approx. 3 level tablespoons.

If using freshly ground coffee, this is approx. 4 level tablespoons.

The reason for this difference is that preground coffee is often coarser and hence occupies more volume than coffee that is more finely ground.



You will need to adjust the grind amount and size if switching from a single basket to a double basket, or vice versa.



You may need to experiment with how much coffee is inserted into the filter basket or how long the grinder needs to run to achieve the correct dose. For example, when using a finer espresso grind with the Single Wall

filter baskets, you may need to increase the grind amount to ensure the filter basket is correctly dosed.

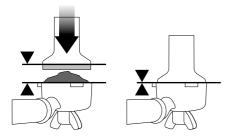
THE GRIND

When grinding coffee beans, the grind size should be fine but not too fine. The grind size will affect the rate at which the water flows through the ground coffee in the filter basket and the taste of the espresso.

If the grind is too fine (looks like powder and feels like flour when rubbed between fingers), the water will not flow through the coffee when under pressure. The resulting espresso will be OVER EXTRACTED, dark in colour and bitter in flavour. If the grind is too coarse the water will flow through the ground coffee in the filter basket too quickly. The resulting espresso will be UNDER EXTRACTED lacking in colour and flavour.

COFFEE DOSE AND TAMPING

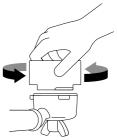
- Wipe coffee basket with a dry cloth.
- Using Single Wall filter baskets, grind enough coffee to fill the coffee basket. You may need to experiment with the GRIND AMOUNT dial to achieve the correct dose.
- Tap the portafilter several times to collapse and distribute the coffee evenly in the filter basket.
- Tamp down firmly (using approx. 15–20kgs) of pressure). The amount of pressure is not as important as consistent pressure every time.



• As a guide to dose, the top edge of the metal cap on the tamper should be level with the top of the filter basket AFTER the coffee has been tamped.

TRIMMING THE DOSE

- Insert the Razor[™] dosing tool into the coffee basket until the shoulders of the tool rest on the rim of the basket. The blade of the dosing tool should penetrate the surface of the tamped coffee.
- Rotate the Razor[™] dosing tool back and forth while holding the portafilter on an angle over the knock box to trim off excess coffee grinds. Your coffee filter basket is now dosed with the correct amount of coffee.



• Wipe excess coffee from the rim of the filter basket to ensure a proper seal is achieved in the group head.



If the extraction is too fast, make the grind finer & repeat above steps. If the extraction is too slow, make the grind coarser and repeat above steps.

ADJUSTING CONICAL BURRS

Some types of coffee may require a wider grind range to achieve an ideal extraction or brew. A feature of your Barista Express™ is the ability to extend this range with an adjustable upper burr. We recommend making only one adjustment at a time.











Unlock hopper

Hold hopper over container & turn dial to release beans into container

Align hopper into position

Run grinder until empty

Remove hopper

Remove upper burr



FINE O COARSE

8







13

into position

Remove wire sides of the burr

Move adjustable Align the number Insert wire handle from both top burr, 1 number, with the handle coarser or finer

opening

handle from both firmly into sides of the burr

Push upper burr position

Lock upper burr Align hopper



Lock hopper

20



Check your extraction



EXTRACTION GUIDE

	GRIND	GRIND DOSE	TAMP	SHOT TIME
OVER EXTRACTED BITTER • ASTRINGENT	TOO FINE	TOO MUCH	TOO HEAVY	OVER 35 SEC
BALANCED	OPTIMUM	8-11g (1 CUP) 16-19g (2 CUP)	15-20kg	25-30 SEC
UNDER EXTRACTED UNDERDEVELOPED • SOUR	TOO COARSE	TOO LITTLE	TOO LIGHT	UNDER 20 SEC

PURGING THE GROUP HEAD

Before placing the portafilter into the group head, run a short flow of water through the group head by pressing the 1 CUP button. This will purge any ground coffee residue from the group head and stabilise the temperature prior to extraction.

INSERTING THE PORTAFILTER

Place the portafilter underneath the group head so that the handle is aligned with the INSERT position. Insert the portafilter into the group head and rotate the handle towards the centre until resistance is felt.

EXTRACTING ESPRESSO

- Place pre-warmed cup(s) beneath the portafilter and press the 1 CUP or 2 CUP button for the required volume.
- As a guide, the espresso will start to flow after 8-12 seconds (infusion time) and should be the consistency of dripping honey.
- If the espresso starts to flow after less than 7 seconds you have either under dosed the filter basket and/or the grind is too coarse. This is an UNDER-EXTRACTED shot.
- If the espresso starts to drip but doesn't flow after 12 seconds, then you have either over dosed the filter basket and/or the grind is too fine. This is an OVER-EXTRACTED shot.

A great espresso is about achieving the perfect balance between sweetness, acidity and bitterness.

The flavour of your coffee will depend on many factors, such as the type of coffee beans, degree of roast, freshness, coarseness or fineness of the grind, dose of ground coffee, and tamping pressure. Experiment by adjusting these factors just one at a time to achieve the taste of your preference.

TEXTURING MILK

There are two phases to texturing milk, stretching & heating. These two operations should blend into one with the goal being silky smooth textured milk at the correct temperature.

- Always start with fresh cold milk.
- Fill the jug just below the 'V' at the bottom of the spout.
- Position the steam tip over the drip tray and turn the STEAM/HOT WATER dial from STANDBY to steam and wait until the steam is flowing strongly.
- Turn the steam dial to the STANDBY position to pause the steam, then within 8 seconds, insert steam wand tip into milk and turn dial back to STEAM position.
- Insert the steam tip 1-2cm below the surface of the milk close to the right hand side of the jug at the 3 o'clock position.

 Keep the tip just under the surface of the milk until the milk is spinning clockwise, producing a vortex (whirlpool effect).



- With the milk spinning, slowly lower the jug. This will bring the steam tip to the surface of the milk & start to introduce air into the milk. You may have to gently break the surface of the milk with the tip to get the milk spinning fast enough.
- Keep the tip at or slightly below the surface, continuing to maintain the vortex. Texture the milk until sufficient volume is obtained.
- Lower the tip beneath the surface, but keep the vortex of milk spinning. The milk is at the correct temperature (60–65°C) when the jug is hot to touch.
- Move the steam dial to the STANDBY position before taking the tip out of the milk.
- Set the jug to one side, turn steam on to purge out any residual milk from the steam wand and wipe steam wand with a damp cloth.
- Tap the jug on the bench to collapse any bubbles.
- Swirl the jug to polish and re-integrate the texture.
- Pour milk directly into the espresso.
- The key is to work quickly, before the milk begins to separate.

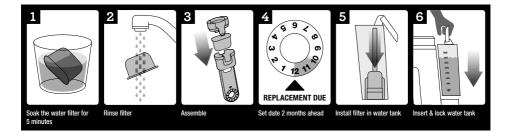


HINTS & TIPS

- Always use freshly ground coffee for a superior flavour and body.
- Use freshly roasted coffee beans, with a 'roasted on' date and use within 2 weeks of 'roasted on' date.
- Store coffee beans in a cool, dark and dry container. Vacuum sealed if possible.
- Buy coffee beans in small batches to reduce the storage time and store no more than one weeks supply at any time.
- Grind beans immediately before brewing as ground coffee quickly loses its flavour and aroma.



INSTALLING/REPLACING THE FILTER IN THE WATER TANK



The water filter provided helps to prevent scale build up which over time can affect the performance of your machine, potentially causing blockages and heating, problems

Replacing the water filter every two months will reduce the need to de-scale the machine.

If you live in a hard water area, we recommend you change the water filter more frequently.

Replacing The Water Filter

- Remove the filter from the plastic bag, and soak in a cup of water for 5 minutes.
- Rinse the filter under cold running water for 5 seconds.
- Insert the filter into the filter holder.
- Set the date dial 2 months ahead.
- To install, push down to lock into place.

The water filter can be removed from the water tank during operation if not required.



For replacement water filters contact Breville Customer Service Centre on 1300 139 798 (Australia) or 0800 273 845 (New Zealand).

PORTAFILTER CLEANING

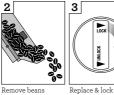
Periodically run water through the machine with the portafilter in place, but without any ground coffee, to rinse out any residual coffee particles.

CLEANING CONICAL BURRS

Regular cleaning helps the burrs achieve consistent grinding results.













hopper

11



Remove upper burr

7 8



Clean lower burr with

until empty



Lock upper burr Insert hopper

12 LOCK UNLOCK

Lock hopper

burr brush



Push upper burr firmly into

hopper

9

position

CLEANING CYCLE

The espresso machine features an in-built cleaning cycle which should be carried out periodically. The 'CLEAN / DESCALE' light will automatically illuminate (flashing) to indicate when a cleaning cycle is required.





fill water tank



Insert cleaning disc Place tablet on top & filter basket into

9



10

Group Head

5

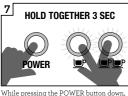




Call Service Centre

for cleaning tablets

Cleaning required



press & hold the 1 CUP & 2 CUP buttons



Wait 5 minutes to finish

Rinse the filter before use

No espresso basket & portafilter extraction?

See Trouble Shooting Guide

CLEANING CYCLE PROCESS GUIDE

If cleaning is required, simply follow the steps below and refer to the Machine Cleaning Cycle guide.

- 1. Insert the cleaning disk into the one or two cup filter disc.
- 2. Place the filter basket into the portafilter.
- 3. Put 1 cleaning tablet into the filter.
- 4. Lock the portafilter into the group head.
- 5. Turn the machine OFF.
- 6. Simultaneously press and hold the 1 CUP. 2 CUP and POWER button for 3 seconds.
- 7. The cleaning cycle will commence and last for approximately 5 minutes. Once complete, 2 beeps will sound. Remove the portafilter and ensure the tablet has completely dissolved.

If the tablet has not dissolved, repeat steps 5 to 7 until tablet has dissolved.

DESCALING



Ensure that the water filter is removed from the water tank before adding the descaling powder when descaling the machine.

After regular use, hard water can cause mineral build up in and on many of the inner functioning components, reducing the brewing flow, brewing temperature, power of the machine, and taste of the espresso.

We advise you to undertake the descaling processes outlined below when the 'CLEAN / DESCALE' indicator is illuminated (solid on).

Refer to CLEANING CYCLE on page 24 when the 'CLEAN / DESCALE' indicator is flashing.

Check if descaling is required

1. Check if the 'CLEAN / DESCALE' light is illuminated (solid on), descaling is required.



WARNING

Do not immerse power cord, power plug or appliance in water or any other liquid. The water tank should never be removed or completely emptied during descaling.

Priming machine for descaling function

- 2. Dissolve one Breville Descaling powder sachet into one litre of water then fill the water tank.
- 3. Press and hold the 2-CUP button and then press and hold the POWER button simultaneously to enter the Descale mode. The unit will heat up as part of commencing the descaling action, during the heating processes the POWER button should flash continuously. The machine will indicate it is ready for descaling when the POWER button, 1 CUP button, CLEAN/DESCALE indicator and HOT WATER/ STEAM indicator are all illuminated (solid on).

Descaling the coffee component

4. Press the 1-CUP button to start the descaling for the coffee component of the machine. Descaling coffee component takes approximately 25 seconds. The 1 CUP button should flash continuously and remain constant once the descaling process has finished. To terminate the descaling within 25 seconds, press the 1 CUP button again.

Descale the Steam and hot water components

Descaling steam and hot water takes approximately 13 seconds and 8 seconds respectively. Descaling can be terminated prematurely by turning the steam dial to STANDBY.

- 5. Descale Steam component by turning the steam dial RIGHT towards the h icon.
- Descale Hot water component by turning the steam dial to the LEFT towards the X icon.

Repeat processes to complete descaling

After the above processes about half (0.5 litre) of the descale solution should be left in the water tank.

7. Repeat steps 4-6 above to complete the descaling process to empty the solution in the tank.

Descaling Solution Rinse

- 8. After descaling, remove the water tank and rinse thoroughly then refill with fresh cold water to the maximum capacity (2 litres) and repeat steps 4-6 to further cleanse the machine of any residue of the cleaning solution thoroughly.
- 9. Press 'POWER' to quit the descaling process. This will be indicated by the LED lights switching off.

NOTE

The machine turns off automatically if there is no action for 5 minutes in descaling mode. To resume descaling, please start from step 3.

CLEANING THE CONICAL BURR GRINDER

This grinder cleaning cycle removes oil build-up on the burrs which can impede performance.







10









Remove hopper

Unlock hopper

Empty hopper

Replace hopper

Lock hopper

Run grinder empty

12

Unlock hopper



8 q

Unlock top burr





11

Clean lower

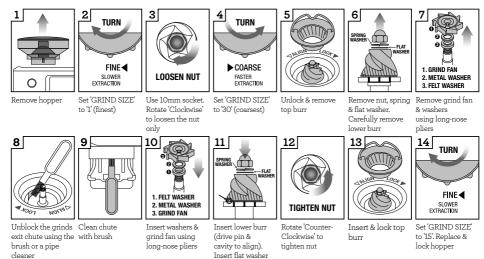
burr with brush

Clean chute with brush

ADVANCED CLEANING FOR THE CONICAL BURR GRINDER

with brush

This step is only required if there is a blockage between the grinding burrs and the grinder outlet.



& spring washer

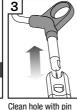
WARNING

Care should be taken as the grinder burrs are extremely sharp.

CLEANING THE STEAM WAND















Wipe steam wand after each use

Remove tip

The steam wand should always be cleaned after texturing milk.

- Wipe the steam wand with a damp cloth, and then with the steam wand directed back into the drip tray, briefly set the steam dial to the STEAM position. This will clear any remaining milk from inside the steam wand.
- Ensure the steam dial is in the STANDBY position. Press the POWER button to Off and allow the machine to cool.
- If the steam wand remains blocked, use the pin on the cleaning tool to clear the opening.

- If the steam wand continues to be blocked, the tip of the steam wand can be removed by using the spanner in the middle of the cleaning tool.
- · Unscrew the tip with the cleaning tool.
- Soak the tip in hot water before using the pin on the cleaning tool to unblock. Replace the tip back onto the steam wand and secure with the cleaning tool.

CLEANING / UNBLOCKING THE FILTERS, PORTAFILTER AND GROUP HEAD

Periodically run water through the machine with the portafilter in place, but without any ground coffee, to rinse out any residual coffee particles.

4





Knock grinds out

Clean filter basket

Place filter basket into portafilter

3



portafilter

into Group Head





Use cleaning tool to unblock

- 3. To clean the Single Wall filters simply run water through the portafilter using the manual pour function by holding down the 1 CUP button.
- 4. For a thorough clean of the filters, run a cleaning cycle of the machine with the portafilter and filter in place.

Should the fine holes in the filters become

blocked follow the following steps:

- 1. Place the filter into the portafilter. Run water through the machine with the filter and portafilter, without any ground coffee, in place.
- 2. The fine pin on the cleaning tool can be used to clear the filter basket holes.

CLEANING THE OUTER HOUSING / CUP WARMING PLATE

The outer housing and tray warming plate can be cleaned with a soft, damp cloth. Then polish with a soft, dry cloth.

Do not use abrasive cleansers, pads or cloths which can scratch the surface.

CLEANING THE DRIP TRAY

The drip tray should be removed, emptied and cleaned at regular intervals, particularly when the drip tray full indicator is showing EMPTY ME!.

Remove grid, compartments and EMPTY ME! indicator from the drip tray. Dispose of the grounds from the dry compartment into the bin. Wash the drip tray with warm soapy water, using a non-abrasive washing liquid, rinse and dry thoroughly. The EMPTY ME! indicator can be removed from the drip tray by pulling upwards to release the side latches.

The drip tray base and cover are dishwasher safe.

CLEANING THE STORAGE TRAY

The storage tray is located behind the drip tray and is pulled forward when you slide the drip tray out. Clean the tray with a soft, damp cloth (do not use abrasive cleansers, pads or cloths which can scratch the surface).

STORING YOUR MACHINE

Before storing, press the POWER button to off, turn the steam dial to STANDBY switch Off at the power outlet and unplug.

Remove unused beans from the hopper, clean the grinder (see page 29), empty the water tank and the drip tray.

Ensure the machine is cool, clean and dry. Insert all accessories into position or into the storage tray.

Store upright. Do not place anything on top.



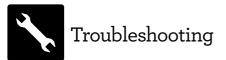
WARNING

Do not immerse power cord, power plug or appliance in water or any other liquid. The water tank should never be removed or completely emptied during decalcifying.



WARNING

To prevent damage, do not use alkaline cleaning agents when cleaning. Use a soft cloth and a mild detergent.



PROBLEM	POSSIBLE CAUSES	EASY SOLUTION
When the machine is switched On, the steam lights is flashing.	• Steam dial is not in STANDBY position.	• Turn the Steam dial to 'STANDBY' position. Machine will commence normal heat up procedure.
Coffee does not run through.	• Machine is not turned On or plugged in.	• Ensure the machine is plugged in, switched On at the power outlet and the POWER button is pressed On.
	• Water tank is empty.	• Refer to 'Filling The Water Tank', page 10.
	Coffee grind is too fine.	• Ensure you use a suitable espresso grind. Refer to 'Setting the Grind Size' on page 10 and 11.
	• Too much coffee in the filter.	• Refer to 'Adjusting the Grind Amount', page 10 and 11.
	• Coffee tamped too firmly.	 Refer to 'Coffee Dose and Tamping' on page 11 and 17.
	• The filter is blocked.	• Clean the filters. Refer to 'Cleaning The Filters', page 25.
Coffee runs out too quickly.	• The coffee grind is too coarse.	• Ensure you use a suitable espresso grind. Refer to 'Setting the Grind Size' on page 10 and 11.
	• Not enough ground coffee in the filter.	• Refer to 'Adjusting the Grind Amount', page 10 and 11.
	• Ground coffee not tamped firmly enough.	• Refer to 'Coffee Dose and Tamping', page 11 and 17.

PROBLEM	POSSIBLE CAUSES	EASY SOLUTION	
Coffee is too cold.	• Cups not preheated.	 Preheat cups. Refer to 'Pre-Warming The Cups', page 21. 	
	 Milk not heated enough (if making a cappuccino or latté). 	• When the base of the jug becomes too hot to touch this is when the milk is heated at the correct temperature. Refer to 'Texturing Milk', page 14.	
No crema.	• Coffee is not tamped firmly enough.	• Refer to 'Coffee Dose and Tamping', page 11 and 17.	
	• Coffee grind is too coarse.	• Ensure you use a suitable espresso grind. Refer to 'Setting The Grind Size' on page 10 and 11.	
	• Ground coffee is not fresh.	 Change old beans with fresh roasted or pre-ground. Ground coffee should not be kept for longer than a week. 	
	• Filter holes are blocked.	• Use the fine pin on the cleaning tool to clear the holes. Refer to 'Cleaning The Filters', page 25.	
Machine is making pulsing/pumping sound while extracting coffee or steaming milk.	• The machine is carrying out the normal operation of the 15 bar pump.	• No action require as this is the normal operation of the machine.	
Coffee runs out around the edge of the filter holder.	• Filter holder is not inserted in the group head properly.	• Refer to 'Inserting The Portafilter', page 12.	
	• There are coffee grounds around the filter rim.	• Clean any excess ground coffee from the rim of the filter holder to ensure a proper fit into the brew head.	
	• Too much ground coffee in the filter.	• Refer to 'Adjusting the Grind Amount', page 10 and 11.	
	• Ground coffee has been tamped too firmly.	Refer to 'Coffee Dose and Tampering', page 17 and 11.	
	• Incorrect filter for amount of ground coffee used.	• Ensure you use the small filter for 1 cup of coffee and the larger filter for 2 cups of coffee.	

PROBLEM	POSSIBLE CAUSES	EASY SOLUTION
Coffee extracts as drops from the portafilter.	• The water tank is empty or low.	• Refer to 'Filling The Water Tank', page 10.
	Coffee grind is too fine.	• Ensure you use a suitable espresso grind. Refer to 'Setting The Grind Size' on page 10 and 11.
	Machine is blocked by mineral deposits.	• Decalcify the machine. Refer to 'Decalcifying', page 22.
Grinder safety clutch has activated.	• Overfilled filter basket causing the chute to backfill.	• Clean and clear grinder and chamber.
Machine is making a loud and continuous pumping noise.	• Water tank is empty.	• Refer to 'Filling The Water Tank', page 10.
	• Water tank is not securely in place	• Refer to 'Filling The Water Tank', page 10.
No steam is generated.	• Machine is not turned On.	• Ensure the machine is plugged in, switched On at the power outlet and the POWER button is pressed On.
	• Water tank is empty.	• Refer to 'Filling The Water Tank', page 10.
	Steam Dial is not in STEAM position.	• Turn the steam dial to the STEAM position.
	• Steam Wand is blocked.	• Use the pin on the cleaning tool to clear the opening. If the steam wand continues to be blocked remove the tip of the steam wand using the spanner in the middle of the cleaning tool. Refer to 'Care and Cleaning', page 25.
Milk is not creamy after texturing.	• Not enough steam.	 Steam wand may be blocked. Refer to 'Care and Cleaning', page 25. Use cold fresh milk. Refer to 'Texturing Milk', page 14.

POSSIBLE CAUSES

EASY SOLUTION

POSSIBLE CAUSES

EASY SOLUTION

Machine is not working.		 The safety thermal-cut may have activated due to the pump or grinder overheating. Turn the machine off and allow to cool for about 30–60 minutes.
No ground coffee coming	• No coffee beans in hopper.	• Fill hopper.
from grinder.	Blocked grinder chute.	• Clean and clear grinder chamber and chute. Refer to 'Advanced Grinder Cleaning', page 24.
	Water / moisture in grinder chamber and chute.	• Clean and clear grinder chamber and chute. Refer to 'Advanced Grinder Cleaning', page 24.
Grinder does not start when micro switch is pressed.	• Bean Hopper safety interlock is open FILTER SIZE LEDs are both flashing (hopper is not correctly in place).	• Remove hopper, check for debris and then replace the hopper into the correct location.
Too much/too little ground coffee is being delivered to the filter basket.	• Grind amount settings are incorrect for particular grind size.	• Use the grind amount dial to increase or decrease the grind amount.
Too much/too little espresso is being delivered to the cup.	• Grind amount settings and or grind size require changing.	• Reset the machine to defaults or re-program new coffee dose settings.
Grinder is making a loud 'ratchet' noise.	 Blockage or foreign object in grinder. 	• Switch the grinder Off immediately. Remove hopper & clear blockage in the chute. Remove Upper Burr and clear Lower Burr. Refer to 'Cleaning of Conical Burrs' on page 24.
Pressure Gauge is not working	• Incorrect dose or not enough coffee in the filter basket.	• Use the supplied 'Razor' to ensure the correct dose of coffee in the portafilter.
	• Using old roasted coffee beans beyond expiry date.	• Use freshly roasted coffee within four weeks of roasted date.
	• The coffee grind is too coarse.	 Adjust the grind to a finer setting. Use a rubber disc and place inside the one cup filter basket (no coffee) and run a shot; when the needle moves, then pressure gauge dial is working.



CAPPUCCINO

A single shot of espresso with textured milk, garnished with drinking chocolate. Cup size 150–220ml.



ESPRESSO

Intense and aromatic, it is also known as an espresso or short black and is served in a small cup or glass.



LATTÉ

A latté consists of a single espresso with textured milk and approximately 10mm of foam. Glass size 200–220ml.



массніато

Traditionally served short, the macchiato is also poured as a long black with a dash of milk or a dollop of textured milk.



LONG BLACK

Traditionally served short, the macchiato is also poured as a long black with a dash of milk or a dollop of textured milk.



RISTRETTO

A ristretto is an extremely short espresso of approximately 15ml, distinguished by its intense flavour and aftertaste.





Breville Customer Service Centre

Australian Customers

Phone: 1300 139 798

Web: www.breville.com

New Zealand Customers

Phone: 0800 273 845

Web: www.breville.com



Master Every Moment™

Breville, the Breville logo, Barista Express and Master Every Moment are trademarks of Breville Pty. Ltd. A.B.N. 98 000 092 928. Copyright Breville Pty. Ltd. 2021.

Due to continued product improvement, the products illustrated/photographed in this booklet may vary slightly from the actual product.

BES870 ANZ - M21