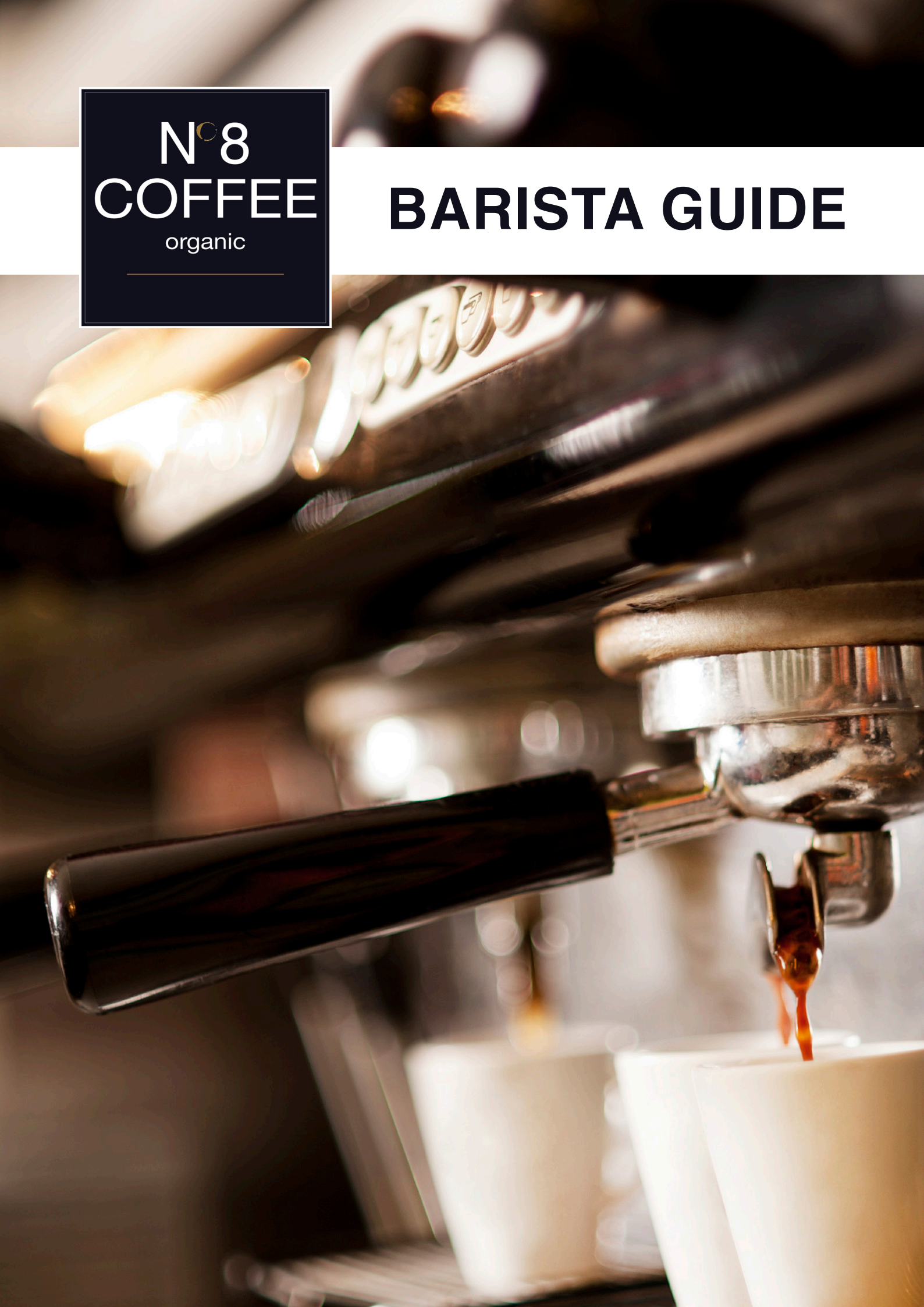


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COFFEE
organic

BARISTA GUIDE





BARISTA MANUAL

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1. INTRODUCTION

Coffee drinks should taste great and be made by those that committed to preparing and serving it. In Italy, the person making your coffee is called a barista.

A traditional barista understands how to operate the espresso machine and the steps required to prepare great tasting coffee drinks.

The purpose of this manual is to help you understand the steps which are important to the final outcome of the drink.

People love a good coffee experience. Every customer will judge you on the way you make their coffee drink. You need to be making them one that tastes good enough for the customer to want a second cup?

Take the time to learn the steps, practice the techniques detailed in the manual and how to make each coffee drink taste great.

Great espresso is an art form learned by a barista. The aim is to consistently produce a coffee drink that instigates positive feedback from your customers.

2.0 COFFEE ORIGINS

Coffee grows between the Tropics of Cancer and Capricorn. It is produced as far as 25° North and 30° South and can grow up to an altitude of 2,000 metres above sea level, but it only flowers when the temperature rises above 150.

The two main types are:

- Coffea Arabica; and
- Coffea Canephora (otherwise known as Robusta).

2.1 arabica

Coffea Arabica is a species of coffea originally indigenous to the mountains of Yemen in the Arabian Peninsula, hence its name, and also from the southwestern highlands of Ethiopia and southeastern Sudan.

It is also known as the “coffee shrub of Arabia”, “mountain coffee” or “arabica coffee”. Coffea arabica is believed to be the first species of coffee to be cultivated, being grown in southwest Arabia for well over 1,000 years.



It is considered to produce better coffee than the other major commercially grown coffee species, *Coffea canephora* (robusta). Arabica contains less caffeine than any other commercially cultivated species of coffee.

2.2 Robusta

Coffea canephora (Robusta Coffee) is a species of coffee which has its origins in central and western sub-Saharan Africa.

It is grown mostly in Africa and Brazil, where it is often called Conillon. It is also grown in Southeast Asia where French colonists introduced it in the late 19th century.

In recent years Vietnam, which only produces robusta, has surpassed Brazil, India, and Indonesia to become the world's single largest exporter. Approximately one-third of the coffee produced in the world is robusta.

Canephora is easier to care for than the other major species of coffee, *Coffea arabica*, and, because of this, is cheaper to produce.

Since arabica beans are often considered superior, robusta is usually limited to use as a filler in lower-grade coffee blends. It is also often included in instant coffee, and in espresso blends to promote the formation of "crema".

Robusta has about twice as much caffeine as arabica.



3.0 ESPRESSO BASICS

The cleanliness of the machine will directly affect the taste of your coffee.

3.1 four factors

The four factors that affect your ability to prepare properly made espresso are:

The **blend** you choose and the freshness of the coffee

The **grind**:

Is it correctly adjusted for a 20-25 second brewing time

The **machine**:

Is the brewing hand clean

Is the temperature set at 90 °C (194 °F)

Is the pump pressure set at 9 BAR

The **operator** ie. Barista

3.2 heat

Espresso should be served hot! It is important to keep the handles in the group heads at all times. Handles should never be left on the drip tray when not in use.

3.3 warm cups

One of the great pleasures of coffee is the feel of a warm cup in your hand. Cups may be stacked on top of the espresso machine to warm the base. Do not cover the top of the machine with a cloth as this stops air circulation.



3.4 speed

Speed is of the essence...

Don't dose a shot and leave it in the brewing head without starting the brewing process. In less than 5 seconds the coffee will begin to burn, leaving your shot thin, flat, with serious damage to the crema and a sharp bitter taste. Pull the dose and brew within 2 seconds.

3.4 the recipe

The International Standard for espresso extraction is:

- 7 grams of ground coffee dosed into the correct handle
- Tamped
- Brewed - using water at 90 °C (194 °F)
- Under pressure of 9 BAR per square inch (131 pounds)
- With an extraction time of 20-25 seconds
- Producing 28ml of espresso

4.0 THE PERFECT ESPRESSO

4.1 taste

The taste of your coffee will be directly affected by the amount of coffee you dispense into the handle.

Single handle:	One complete pull 7g	No more - no less
Double handle:	Two complete pulls 14g	No more - no less

4.2 tamp the coffee

Hold the handle in your left hand, tamp with your right hand. As you tamp give the handle a good hard twist left-to-right to ensure a solid pack.



4.3 wipe off the excess

Wipe the excess grounds from the rim of the handle.

Note: This will ensure that you don't have coffee grounds build up on the rubber seal in the brewing head. Over time this build up will cause grounds to leak into the coffee drink you are preparing.

4.4 brew

Brew the espresso into a demi tasse.

Note: the correct brewing time for an espresso is 20 - 25 seconds.

Less than 20 seconds.

The coffee will be thin and sour from lack of time spent in contact with the ground coffee.

More than 30 seconds.

The coffee will be watery, burnt and bitter from too much time spent in contact with the ground coffee.

4.5 coffee definitions

We define an extraction "perfect" when the coffee has got the features we want in an espresso. It a beautiful brown with cream stripes, intense aroma and a rich and balanced flavour.

We define coffee as "under extracted" when it has a very light cream and inconsistent, poor aroma, flavour and aqueous body with the presence of unpleasant tastes.

When a coffee is defined as "over extracted" it will feature cream with a very dark black line at the edges and a possible white spot at the centre. Aromas and flavours are burnt.

5.0 HOW TO FOAM MILK

1. For best results... always use cold, fresh milk!
2. Fill the jug slightly more than 1/3 full, however never exceed more than half full as you are going to double the volume of the milk.
3. Insert the tip of the nozzle just under the surface of the milk.
4. Rapidly open the steam valve to the left to the fully opened position.
5. As the milk takes in air you will hear an intermittent sound. Continue lowering the jug so that the tip of the nozzle stays just under the surface of the milk. This movement will stretch the milk and create a dense foam.
6. When the temperature gauge reaches 600C (1400C), turn the valve off and remove the milk from the steam wand.
7. Wipe off and purge the steam wand.

NOTE: Do not exceed 700c (1600F) or the milk will scorch and the drink will burn your customer's tongue.



6.0 HOW TO STEAM MILK

Caffe latte, caffe mocha and flavoured lattes don't require the dense foam of a cappuccino. These drinks are made with hot milk and not foam.

1. For best results... always use cold, fresh milk!
2. Fill the jug slightly more than 1/3 full, however never exceed more than half full as you are going to double the volume of the milk.
3. Insert the tip of the nozzle just under the surface of the milk.
4. Rapidly open the steam valve to the left to the fully opened position.
5. As the milk takes in air you will hear an intermittent sound. Don't lower the jug, leave the steam wand positioned just under the surface of the milk. Don't move the jug.
6. When the temperature gauge reaches 650C (1500C), turn the valve off and remove the milk from the steam wand.
7. Serve at 700C (1600F).
8. Wipe off and purge the steam wand.

NOTE: Do not exceed 700c (1600F) or the milk will scorch and the drink will burn your customer's tongue.

7.0 THE COFFEE MENU

7.1 espresso

A single shot of espresso is the basis for all drinks on the espresso menu. Get this right and you will have the great flavour people look for in a cappuccino or caffe latte.

1. Place the empty handle under the doser and make one complete pull.
2. Tamp the coffee. Hold the handle in your left hand, tamp with your right and, as you tamp, give the handle a good hard twist left-to-right to ensure a solid pack.
3. Wipe the excess grounds from the rim of the filter.
4. Brew the espresso into an espresso cup.

NOTE:

The correct brewing time for an espresso is 25 seconds.

The correct fill level on an espresso cup is ½ to ¾ full.

The espresso should have the all-important creamy hazelnut coloured cap called crema. This cap will only last two minutes so getting espresso to the customer quickly is crucial.



7.2 espresso ristretto

1. Place the empty handle under the doser and make one complete pull.
2. Tamp the coffee. Hold the handle in your left hand, tamp with your right and, as you tamp, give the handle a good hard twist left-to-right to ensure a solid pack.
3. Wipe the excess grounds from the rim of the filter.
4. Brew the espresso into an espresso cup.

NOTE: The correct brewing time for an espresso is 25 seconds.

The correct fill level on an espresso cup is approximately ¼ full.

The espresso should have the all-important creamy hazelnut coloured cap called crema. This cap will only last two minutes so getting espresso to the customer quickly is crucial.

7.3 cappuccino

1. Cappuccino is a shot of espresso served with equal parts steamed milk and foam served in a medium sized cup.
3. Place the empty handle under the doser and make: one complete pull
4. Tamp the coffee. Hold the handle in your left hand, tamp with your right hand. As you tamp give the handle a good hard twist left - to - right to ensure a solid pack.
5. Wipe the excess grounds from the rim of the handle.
6. Brew the espresso into a medium sized cappuccino cup. Remember: the correct brewing time for an espresso is 20-25 seconds.
7. While the espresso is brewing, begin foaming the milk following the how to foam milk guide on page 10.
8. Wipe off and purge the steam wand!
9. Using a milk spatula, hold the foam back whilst pouring the correct amount of milk into the cup, then with the spatula scoop the foam on top of the milk for the presentation of the drink.
10. Dust with chocolate powder (optional) and serve.

7.4 caffe latte

1. A Caffe Latte is one shot of espresso topped with steamed milk, served in a latte glass.
2. Place the empty handle under the doser and make one complete pull.
3. Tamp the coffee. Hold the handle in your left hand, tamp with your right. As you tamp give the handle a good hard twist left-to-right to ensure a solid pack.
4. Wipe the excess grounds from the rim of the handle.
5. Brew the espresso into a small cup or 3oz espresso jug. The correct brewing time for an espresso is 25 seconds.
6. While the espresso is brewing, begin steaming the milk following the Milk steaming guide on page 10.
7. Always wipe off and purge the steam wand.
8. Pour the espresso in to the latté glass.
9. Using a milk spatula hold back the foamed milk letting only steamed milk into the glass. Finish the drink with a scoop of creamy foam.

7.5 espresso macchiato

In Italian macchiato means “stained with” or “marked with”.

As opposed to a specific drink, macchiato is more how you finish an espresso. You simply pour in a very small amount of hot milk and top with a small head of foam.

Macchiato can be a single or double espresso.

You might be asked for a ristretto macchiato or possibly a latte macchiato (foamed milk in a tall glass “stained with” a shot of espresso).



Pull your espresso, then using your milk spatula, pour a small amount of hot milk and scoop a small head of foam onto the top.

7.6 caffe mocha

Caffe mocha is hot chocolate with a shot of espresso added.

1. In a caffe latte glass, pour one sachet (or 3 teaspoons) of chocolate powder.
2. Using the top button on the water into the chocolate powder and stir with a small wire whisk until smooth and creamy.
3. Place the empty handle under the doser and make one complete Pull, no more and no less.
4. Tamp the coffee. Hold the handle in your left hand tamp with your right hand. As you tamp give the handle a good hard twist left-to-right to ensure a solid pack.
5. Wipe the excess grounds from the rim.
6. Brew a single shot of espresso into a shot glass. Remember that the correct brewing time for an espresso is 25 seconds.
7. Steam the milk following the Milk steaming guidelines (page 11).
8. Always wipe off and purge the steam wand.
9. Using a small wire whisk, stir the foamed milk into the glass, ensuring that the chocolate, espresso and milk are well mixed.
10. Finish with whipped cream and dust with chocolate powder (optional).

7.7 iced coffee

The traditional preparation for iced coffee includes milk however, water may be substituted in its place.

1. Brew a double espresso into 2 shot glasses.
2. Fill a cocktail shaker 1/2 full with ice.
3. Pour the double shot of Espresso into an ice shaker.
4. Add one espresso cup full of fresh, cold milk to the shaker.
5. Add a measure of syrup (if required).
6. Shake with enthusiasm to ensure the coffee and milk mixture has a nice creamy taste.
7. Pour mixture into a caffe latte glass.

7.8 hot chocolate

1. In a small cup pour ½ sachet of chocolate powder.
2. Using the hot water tap on the espresso machine, pour a small amount of water onto the chocolate powder and stir until smooth and creamy.
3. Steam the milk following the milk steaming guidelines on page 10. Please note that people who enjoy hot chocolate want a hot drink. Therefore you need to steam the milk to a temperature of 70 °C (160 °F).
4. Using a wire whisk pour and stir the steamed milk until they are well mixed. Finish with a swirl of whipped cream (optional).
5. Dust with chocolate powder and serve.



7.9 americano (black coffee)

1. Fill the cup with hot water from the machine to the level shown in training.
2. Place the empty handle under the doser and make one complete pull.
3. Tamp the coffee. Hold the handle in your left hand, tamp with your right hand. As you tamp, give the handle a good hard twist left-to-right to ensure a solid pack.
4. Wipe the excess grounds from the rim of the filter.
5. Brew the espresso into the cup containing hot water.



8.0 HOW TO CLEAN YOUR ESPRESSO MACHINE

8.1 daily cleaning procedure

1. Place the rubber disc in the group handle (nipple upwards).
2. Place the handle in the group head.
3. Press the on/off button to allow water to pass through for about 20-25 seconds.
4. After this time empty out any loose coffee ground that have accumulated on the top of the disc.
5. Repeat this process as many times required on each brewing head, until the brewing head is clean. This should be done at least twice per day.
6. Shower plates to be taken out using the alan key. Rinse any build back up onto the brewing head. This should be done every day at the end of business hours, ready for the next day's trading.



8.2 weekly cleaning procedure

1. This is the same process as before however, when you put the black disc into the handle, put a teaspoon of detergent on the top of the disc and repeat the cycle as before but pass water through for 30 seconds to 1 minute instead of 25 seconds.
2. Again, repeat the process until the water runs clear. Rinse the handles after this procedure.
3. Removal of the shower plates (as shown during training) needs to be done on a daily basis. This involves removing the plates using the alan key and washing thoroughly.

note: regular back flushing with detergent loosens these coffee tars and flushes them away.

8.3 shower plates

Using your alan key, drop the shower plate set and build back up in this order:

- Brass block
- Large shower plate
- Small shower plate

Build up on the screw and place back into the brewing head on the machine.

9.0 FREQUENTLY ASKED QUESTIONS

9.1 about the grinder

- Q. *How long can coffee beans be left in the hopper?*
 A. No more than one day. After that they will be stale and should be discarded.
- Q. *How long can ground coffee be left in the doser?*
 A. No more than one hour is recommended.
- Q. *How often should the grinder blades be changed?*
 A. After grinding approximately 500 kilos of coffee or every 6 to 9 months.
- Q. *If I change the type of coffee beans I use, does the grinder need adjusting?*
 A. Yes. The grinder needs resetting every time the bean is changed to ensure the correct grind for that particular bean.
- Q. *Does the grinder need adjusting during the day?*
 A. Several factors can affect the grind of the coffee during the day therefore, the extraction time should be checked several times per day and if it is too long or too short, the grinder may need adjusting to suit.

9.2 about the espresso machine

- Q. *Can the single and double group handles be used in either group head?*
 A. Yes. You can use any group handle in any group head.
- Q. *Can I use the double group handle with only one shot of coffee in it?*
 A. No, definitely not. Only ever use the double group handle with two coffee shots.
- Q. *Can I leave the Espresso machine switched on overnight?*
 A. Yes you can if you wish. If you leave it switched on it uses some power. Overnight however, the machine does not have to warm up from cold the following morning, which can take about 30 minutes.
- Q. *I sometimes have difficulty foaming the milk, is all milk the same?*
 A. No, definitely not. There is much inconsistency in milk. You need to use full fat milk however, even then, there can be a great difference between brands. Also, the same brand can exhibit different characteristics at different times. It is advisable to find a brand that you are happy with and stick to that.

10.0 TROUBLESHOOTING

10.1 grinder

No power to grinder:

- Check that the plug socket is working by trying a different device in it.

Beans not dropping down from hopper when grinding:

- Check there are loose beans in the hopper.
- Check that the black plastic slide at the base of the hopper is pulled out to allow beans to fall.

Incorrect coffee portion being dispensed in to the group handle:

- Ensure that the ground coffee is covering each of the portion segments.
- Ensure that the handle is being pulled quickly and firmly all the way forward and then released.
- Make sure that you only use the single group handle basket in the single group handle and the double basket in the double handle. They will each fit in the wrong group handle if tried but, this will lead to incorrect coffee dosing.
- Ensure that you are dosing one shot into the single group handle or two shots into the double group handle.

10.2 espresso machine

No power to espresso machine:

- Check that the machine is switched on
- Check that the plug socket is working by trying a different device in it.

No water or steam coming from machine:

- Has the machine had time to warm up after being switched on (approximately 30 minutes)?
- Ensure that the isolation tap on the water feed pipe to the machine is in the 'open'

position. If hot water or steam has been run off continuously to the extent that the boiler is empty, it may take a few minutes to 'recharge' ready for use again (particularly applicable to machines with smaller boilers).

Drips appearing under the machine:

- Remove the drip tray and check if the black plastic waste box is full of water and overflowing. If it is, the waste pipe is either folded or trapped restricting the flow or blocked with debris and you need to clear it. The water will then flow away.
- Visually check other pipes and joints for signs of leakage. If found report to your engineer.

Dripping group head:

- Group head seals need replacing. You can either order the parts and fit them yourself or, ask for an engineer to call and fit them for you (chargeable).

Dripping hot water spout:

- Most likely cause is a leaking water valve that needs replacing.

Low pressure steam on steam wand:

- Thoroughly clean steam wand especially all four exit holes on the end ensuring that no debris or dried milk is blocking the nozzle.

Extraction time is less than 20 seconds:

- Check coffee grind, it is probably too coarse and needs to be ground finer.

Extraction time exceeds 30 seconds:

- Check coffee grind, it is probably too fine and needs to be coarser.

