



De'Longhi Appliances
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BEAN TO CUP ESPRESSO AND CAPPUCCINO MACHINE

Instructions for use

A silver and black DeLonghi Perfecta plus bean-to-cup espresso machine. The machine features a digital display at the top center showing "BETRIEBSBEREIT" and "Normales Aroma". Below the display is a control panel with a central rotary dial and several buttons. The machine has a stainless steel body and a black base. Two clear glass cups filled with espresso are placed on the drip tray in front of the machine. The DeLonghi logo and "PERFECTA plus" branding are visible on the front panel.

ESAM5450

ELECTRICAL REQUIREMENTS

Before using this appliance ensure that the voltage indicated on the product corresponds with the main voltage in your home, if you are in any doubt about your supply contact your local electricity company.

The flexible mains lead is supplied connected to a B.S. 1363 fused plug having a fuse of 13 amp capacity.

Should this plug not fit the socket outlets in your home, it should be cut off and replaced with a suitable plug, following the procedure outlined below.

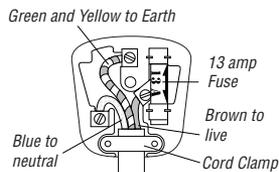
Note: Such a plug cannot be used for any other appliance and should therefore be properly disposed of and not left where children might find it and plug it into a supply socket - with the obvious consequent danger.

N.B. We recommend the use of good quality plugs and wall sockets that can be switched off when the machine is not in use.

IMPORTANT: the wires in the mains lead fitted to this appliance are coloured in accordance with the following code:

GREEN AND YELLOW
BLUE
BROWN

EARTH
NEUTRAL
LIVE



As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- The wire which is coloured green and yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol \perp or coloured green or green and yellow.
- The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
- The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

When wiring the plug, ensure that all strands of wire are securely retained in each terminal. Do not forget to tighten the mains lead clamp on the plug. If your electricity supply point has only two pin socket outlets, or if you are in doubt, consult a qualified electrician.

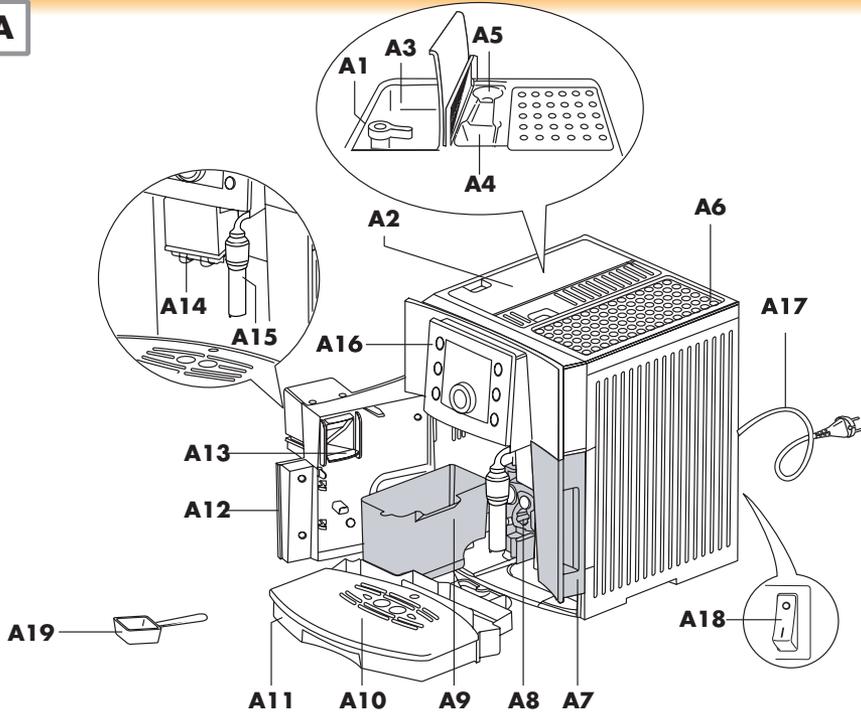
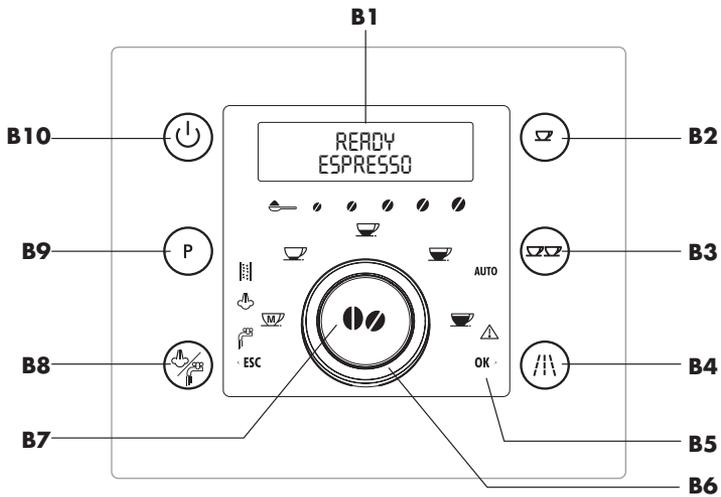
Should the mains lead ever require replacement, it is essential that this operation be carried out by a qualified electrician and should only be replaced with a flexible cord of the same size.

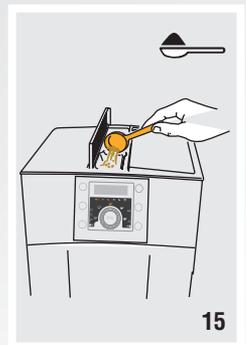
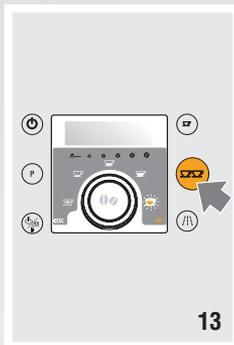
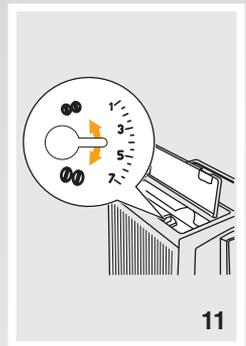
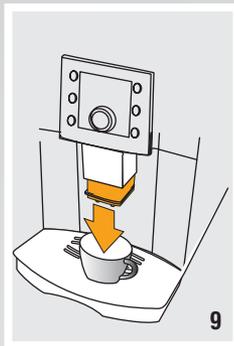
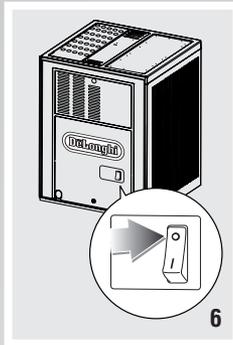
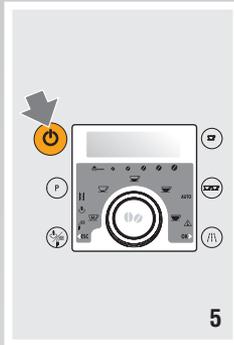
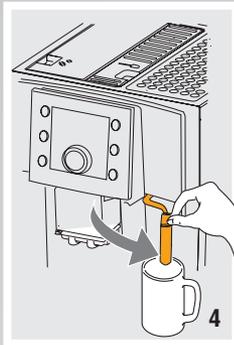
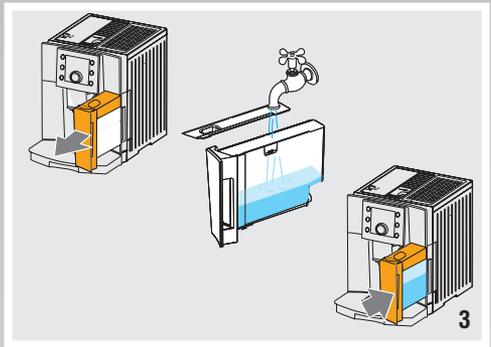
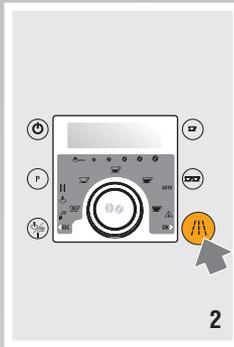
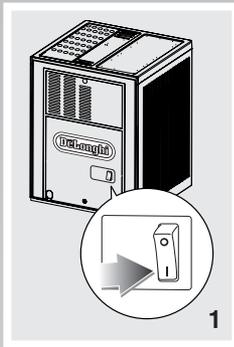
After replacement of a fuse in the plug, the fuse cover must be refitted. If the fuse cover is lost, the plug must not be used until a replacement cover is obtained. The colour of the correct replacement fuse cover is that of the coloured insert in the base of the fuse recess or elsewhere on the plug. Always state this colour when ordering a replacement fuse cover.

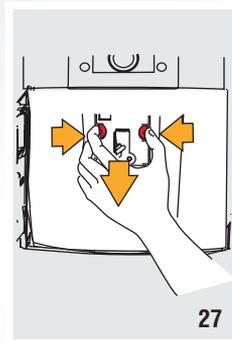
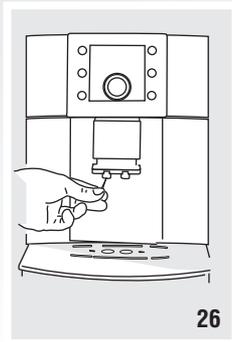
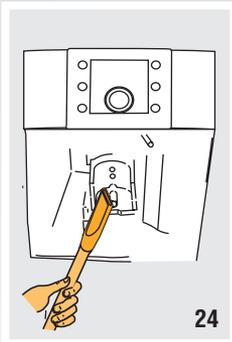
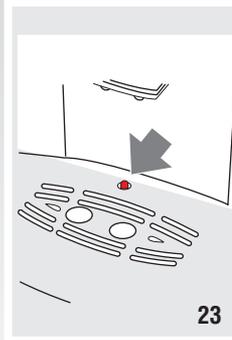
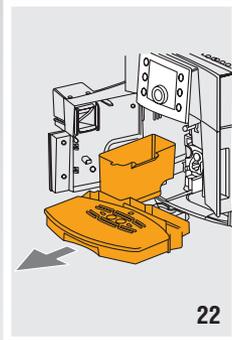
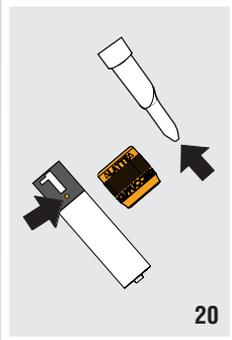
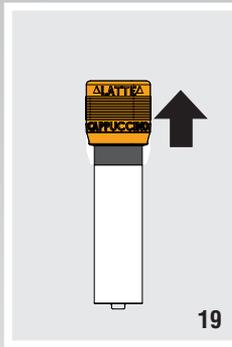
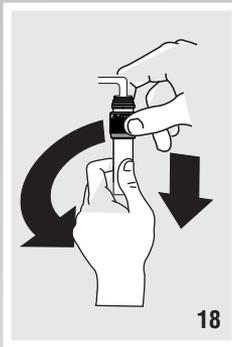
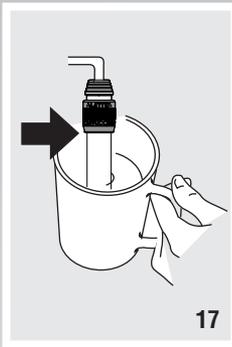
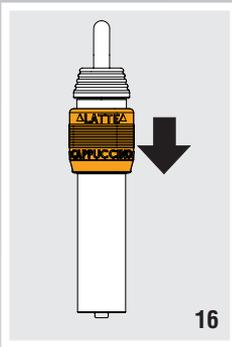
Only 13amp replacement fuses which are asta approved to B.S. 1362 should be fitted.

This appliance conforms to the Norms EN 55014 regarding the suppression of radio interference.

Warning - this appliance must be earthed

A**B**





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INTRODUCTION

Thank you for choosing the ESAM5450 bean to cup espresso and cappuccino maker.

We hope you enjoy using your new appliance.

Take a few minutes to read these instructions.

This will avoid all risks and damage to the machine.

Symbols used in these instructions

Important warnings are identified by these symbols.

These warnings must absolutely be respected.



Failure to observe the warning could result in possibly life threatening injury from electric shock.



Failure to observe the warning could result in injury or damage to the appliance.



Failure to observe the warning could result in scalds or burns.



This symbol identifies important advice or information for the user.

Letters in brackets

The letters in brackets refer to the diagrams in the Description of the appliance on page 3.

Troubleshooting and repairs

In the event of problems, first try and resolve them following the information given in the sections “Displayed messages” on page 20 and “Troubleshooting” on page 21.

If this does not resolve the problem or you require further information, you should consult Customer Services by calling the number given on the annexed “Customer Service” sheet.

If your country is not among those listed on the sheet, call the number given in the guarantee.

If repairs are required, contact De’Longhi Customer Services only.

The addresses are given in the guarantee certificate provided with the machine.

SAFETY

Fundamental safety warnings



This is an electrical appliance and may therefore cause electric shock.

You should therefore follow the following safety warnings:

- Never touch the appliance with damp hands or feet.
- Never touch the plug with damp hands.
- Make sure the socket used is freely accessible at all times, enabling the appliance to be unplugged when necessary.
- Unplug directly from the plug only. Never pull the power cable as you could damage it.
- To disconnect the appliance completely, place the main switch at the back of the appliance in the 0 position (fig. 6).
- If the appliance is faulty, do not attempt to repair. Turn it off, unplug from the mains socket and contact Customer Services Department.
- If the plug or power cable is damaged, it must be replaced by De’Longhi customer services only to avoid all risk.



Keep all packaging (plastic bags, polystyrene foam) away from children.



The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children must be supervised to ensure they do not play with the appliance.



This appliance produces hot water and steam may form while it is in operation. Avoid contact with splashes of water or hot steam.

DESIGNATED USE

This appliance is designed and made to prepare coffee and heat drinks.

All other use is considered improper.

This appliance is not suitable for commercial use. The manufacturer is not liable for damage deriving from improper use of the appliance.

This is a household appliance only. It is not intended to be used in:

- staff kitchen areas in shops, offices and other working environments;
- farm houses
- by clients in hotels, motels and other residential type environments
- bed and breakfast type environments.

INSTRUCTIONS

Read these instructions carefully before using the appliance.

- Failure to respect these instructions may result in burns or damage to the appliance. The manufacturer is not liable for damage deriving from failure to follow these instructions.



Please note:

Keep these instructions

If the appliance is passed to other persons, they must also be provided with these instructions.

DESCRIPTION

Description of the appliance

(page 3 - **A**)

- A1. Grinding adjustment knob
- A2. Beans container lid
- A3. Beans container
- A4. Pre-ground coffee funnel
- A5. Measure compartment
- A6. Cup shelf (cup warmer enabled from menu)
- A7. Water tank
- A8. Infuser
- A9. Grounds tray
- A10. Cup tray
- A11. Drip tray
- A12. Service door
- A13. Coffee guide
- A14. Coffee spout (adjustable height)
- A15. Cappuccino maker
- A16. Control panel
- A17. Power cable
- A18. Main switch
- A19. Measure

Description of control panel

(page 3 - **B**)

A number of buttons on the panel have a double function. This is indicated in brackets in the description.

- B1. Display: guides the user in using the appliance.
- B2.  button: to make 1 cup of coffee B3.  button: to make 2 cups of coffee
- B4.  button: to deliver steam to make hot drinks with milk. *(When you access the MENU: "OK" button to confirm the selection made)*
- B5. Indicator lights: indicate the current settings, alarm messages or need for maintenance
- B6. Selection knob: turn to select the required quantity of coffee. *(When in the settings MENU, turn to select the required function).*
- B7.  aroma selection button: to select the coffee taste
- B8.  steam or hot water selection button. *(When you access the MENU: press the "ESC" button to exit from the selected function and go back to the main menu).*

- B9. **P** button: to access the Programming menu.
- B10.  button: turns the appliance on and off.

Explanation of lights

-  Indicates the need to descale the appliance.
-  The Steam function is selected.
-  The Hot Water function is selected.
- <ESC**  Indicates the button to press to exit the menu or cancel the selected function.
- AUTO**  The Auto-Start function is active.
-  An alarm is displayed (see “Explanation of lights”).
- OK>**  Indicates the button to press to exit the menu or cancel the selected function.

PRELIMINARY CHECKS

Checking the appliance

After removing the packaging, make sure the product is complete and undamaged and that all accessories are present. Do not use the appliance if it is visibly damaged. Contact De'Longhi Customer Services.

Installing the appliance

Important!

When installing the appliance, respect the following safety warnings:

- The appliance gives off heat. After positioning the appliance on the worktop, leave a space of at least 3 cm between the surfaces of the appliance and the side and rear walls and at least 15 cm above the coffee maker.
- Water penetrating the coffee maker could cause damage. Do not place the appliance near taps or sinks.
- The appliance could be damaged if the water it contains freezes.
Do not install the appliance in a room where the temperature could drop below freezing point.
- Arrange the power cable in such a way that it cannot be damaged by sharp edges or contact with hot surfaces (e.g. electric hot plates).

Connecting the appliance

Important!

Check that the mains power supply voltage corresponds to the value indicated on the rating plate on the bottom of the appliance.

Connect the appliance to an efficiently earthed and correctly installed socket with a minimum current rating of 10A only.

If the power socket does not match the plug on the appliance, have the socket replaced with a suitable type by a qualified professional.

Using the coffee maker for the first time

Please note :

- Coffee has been used to factory test the appliance and it is therefore completely normal for there to be traces of coffee in the mill.
The machine is, however, guaranteed to be new.
- You should customise water hardness as soon as possible following the instructions in the section “Setting water hardness” on page 18.

1. Plug the appliance into the mains socket and place the main switch on the back of the appliance in the I position (fig. 1).

You must first choose the language (the languages scroll through at intervals of about 2 seconds).

2. When English appears, press and hold the **OK>**  button for a few seconds (fig. 2). Once the language has been saved, the message “English installed” is displayed.

Follow the instructions indicated by the appliance:

3. “FILL TANK!”: remove the water tank, fill to the MAX line with fresh water then replace in the appliance (fig. 3).
4. Turn the cappuccino maker outwards and place a container underneath (fig. 4) with a minimum capacity of 100 ml.
5. “Hot water... confirm?”: press the **OK>**  button to confirm.(fig. 2). “Please Wait...” is displayed and the appliance begins to deliver hot water.

The appliance ends the first start up procedure, then the message “Turning Off, Please Wait...” is displayed and the appliance goes off. The coffee maker is now ready for normal use.

 *Please note:*

- When using the appliance for the first time, you need to make 4/5 cups of coffee or 4/5 cappuccinos before the appliance starts to give satisfactory results.

TURNING THE APPLIANCE ON

 *Please note:*

Before turning the appliance on, make sure the main switch on the back of the appliance is in the I position (fig. 1).

Each time the appliance is turned on, it performs an automatic preheat and rinse cycle which cannot be interrupted.

The appliance is ready for use only after completion of this cycle.

 *Danger of burns!*

During rinsing, a little hot water comes out of the coffee spouts and is collected in the drip tray underneath.

Avoid contact with splashes of water.

- To turn the appliance on, press the  button (fig. 5). The message “Heating up... Please wait” is displayed.

After heating, the message “Rinsing...” is displayed. As well as heating the boiler, the appliance also heats the internal circuits by circulating hot water.

The appliance is at temperature when the message “Normal COFFEE Standard taste” is displayed.

TURNING THE APPLIANCE OFF

Each time the appliance is turned off, it performs an automatic rinse cycle which cannot be interrupted.

 *Important!*

To avoid damaging the appliance, always press the  button to turn off.

 *Danger of burns!*

During rinsing, a little hot water is delivered from the coffee spouts.

Avoid contact with splashes of water.

To turn the appliance off, press the  button (fig. 4). The appliance performs the rinse cycle then goes off.

 *Please note:*

If the appliance is not used for an extended period, place the main switch in the 0 position (fig. 6).

Never place the main switch in the 0 position while the appliance is on.

MENU SETTINGS

When you access the programming menu by pressing the **P** button, the following menu items are available: Rinsing, Descale, Set language, Energy Saving, Cup Warmer, Adjust time, Auto-start, Auto-off, Coffee temperature, Water hardness, Statistics, Default values.

Rinsing

Con questa funzione è possibile avviare un risciacquo “manuale” per riscaldare l’infusore e il gruppo erogatore caffè.

1. Press the **P** button to enter the menu;
2. Turn the selection knob until “Rinsing...” is displayed;
3. Press the **OK** >  button;
4. The message “Confirm?” is displayed;
5. Press the **OK** >  button to confirm: The rinse function begins and “Rinsing...” is displayed;
6. After rinsing, the appliance automatically exits the menu and is ready to make coffee.

 *Please note:*

Unlike automatic rinsing, manual rinsing can be interrupted at any moment by pressing the  **ESC** button.

Descaling

For instructions on descaling, see page 17.

Setting the language

To change the language on the display, proceed as follows:

1. Press the **P** button to enter the menu programmazione;
2. Turn the selection knob until “Set Language” is displayed;

3. Press the **OK** > button;
4. Turn the selection knob until the required language is displayed;
5. Press the **OK** > button to confirm;
6. Press the < **ESC** button to exit the menu.

Energy Saving

Use this function to activate or deactivate energy saving mode. This mode is active by default, reducing energy consumption in compliance with current European regulations.

When energy saving mode is active, an asterisk appears below “Energy Saving” in the menu.

1. Press the **P** button to enter the menu;
2. Turn the selection knob until “Energy Saving” is displayed;
3. Press the **OK** > button: “Disable?” is displayed, or “Enable?” if the function has already been disabled.
4. Press the **OK** > button to disable or enable the function or < **ESC** button to exit the menu.

When the function is enabled, if the appliance is not used for about 1 minute, “Energy Saving” is displayed.

Please note!

A few seconds may elapse between energy saving mode and delivery of the first coffee.

Cup warmer

This function enables the cup warmer to be enabled or disabled. Proceed as follows:

1. Press the **P** button to enter the menu;
2. Turn the selection knob until “Cup warmer” is displayed;
3. Press the **OK** > button; “Enable?” is displayed, or “Disable?” if the function has already been enabled.
4. Press the **OK** > button to enable or disable the function or < **ESC** button to exit the menu.

Warming the cups keeps the coffee hot.

Adjust time

To adjust the time on the display, proceed as follows:

1. Press the **P** button to enter the menu;
2. Turn the selection knob until “Adjust time” is

displayed;

3. Press the **OK** > button: the hours flash on the display;
4. Turn the selection knob to change the hours;
5. Press the **OK** > button to confirm. The minutes flash on the display;
6. Turn the selection knob to change the minutes;
7. Press the **OK** > button to confirm;
8. Press the < **ESC** button to exit the menu.

Auto-start

You can set the auto-start time in order to have the appliance ready at a certain time (for example in the morning) so you can make coffee immediately.

Please note!

To activate this function, the time must already have been set correctly.

1. Press the **P** button to enter the menu;
2. Turn the selection knob until “Auto-start Disabled” is displayed;
3. Press the **OK** > button: “Enable?” is displayed;
4. Press the **OK** > button: the hours flash on the display;
5. Turn the selection knob to change the hours;
6. Press the **OK** > button to confirm. The minutes flash on the display;
7. Turn the selection knob to change the minutes;
8. Press the **OK** > button to confirm: “Auto-start Enabled” and the symbol are displayed.
9. Press the < **ESC** button to exit the menu. The symbol appears next to the clock to indicate that auto-start has been programmed.

To disable the function:

1. Press the **P** button to enter the menu;
2. Turn the selection knob until “Auto-start Enabled” and the symbol are displayed;
3. Press the **OK** > button: “Deactivate?” is displayed;
4. Press the **OK** > button to confirm.

- Press the  button to exit the menu: the  symbol is no longer displayed.

Auto-off (Stand by)

The appliance is set to turn off automatically if not used for 2 hours.

The time can be changed so that the appliance switches off after 15 or 30 minutes, or after 1, 2 or 3 hours.

- Press the **P** button to enter the menu;
- Turn the selection knob until “Auto-Off” is displayed;
- Press the **OK** >  button to confirm;
- Turn the selection knob until the desired operation time is displayed (15 or 30 minutes, or 1, 2 or 3 hours);
- Press the **OK** >  button to confirm;
- Press the  button to exit the menu. Auto-off is programmed.

Setting the temperature

To modify the temperature (low, medium, high) of the water used to make the coffee, proceed as follows:

- Press the **P** button to enter the menu;
- Turn the selection knob until “Set Temperature” is displayed;
- Press the **OK** >  button;
- Turn the selection knob until the required temperature (high, medium, low) is displayed;
- Press the **OK** >  button to confirm;
- Press the  button to exit the menu.

Setting water hardness

For instructions on setting water hardness, see page 18.

Statistics function

This displays statistics relating to the machine.

To display, proceed as follows:

- Press the **P** button to enter the menu;
- Turn the selection knob until “Statistica”;
- Press the **OK** >  button;
- Turn the selection knob to verify:
 - how many coffees have been made;
 - how many times the machine has been descaled;
 - the total number of litres of water delivered;
- Press the  button twice to exit the menu.

Default values (reset)

This resets all menu settings and programmed quantities back to the default values (with the exception of the language which remains as set previously).

- Press the **P** button to enter the menu;
- Turn the selection knob until until “DEFAULT VALUES” is displayed;
- Press the **OK** >  button;
- The message “Confirm?” is displayed;
- Press the **OK** >  button to confirm and exit.

MAKING COFFEE

Selecting the coffee taste

The appliance is set by default to make coffee with a standard taste.

You can also choose one of these tastes:

-  Extra-mild taste
-  Mild taste
-  Standard taste
-  Strong taste
-  Extra-strong taste

To change the taste, press the  button (fig. 7) repeatedly until the required taste is displayed.

Selecting the quantity of coffee in the cup

The appliance is set by default to make a standard quantity of coffee.

To select the quantity of coffee, turn the selection knob until the light corresponding to the required quantity of coffee comes on (fig. 8):

Selected coffee	Quantity in cup (ml)
MY COFFEE 	program. da 20 a 180
ESPRESSO 	≈40
NORMAL 	≈60
LONG 	≈90
EXTRA LONG 	≈120

Customising the “MY COFFEE” quantity

The appliance is set by default to automatically deliver 30 ml of “my coffee”.

To modify these settings, proceed as follows:

1. Place a cup under the coffee spouts (fig. 13).
2. Turn the selection knob(B6) until the pilot lamp  switches on.
3. Keep the  button (fig. 10) pressed until the message “1 MY COFFEE PROGRAM QUANTITY” is displayed and coffee delivery begins. Release the button.
4. As soon as the coffee in the cup reaches the required level, press the 1 cup button  again.

The quantity of coffee in the cup has now been programmed.

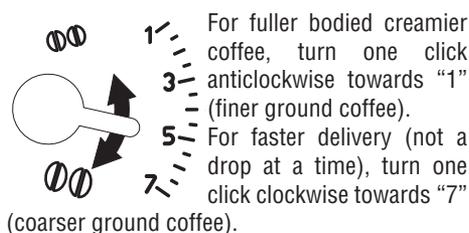
Regolazione del macinacaffè

The coffee mill is preset in the factory to make coffee correctly and should not require adjusting initially.

However, if after making the first few coffees you find that the coffee is too thin and not creamy enough or that delivery is too slow (a drop at a time), this can be corrected by adjusting the grinding adjustment knob (fig. 11).

 *Please note!*

The grinding adjustment knob must only be turned when the coffee mill is in operation.



These adjustments will only be evident after at least 2 cups of coffee have been delivered. If delivery is still too fast or too slow, repeat the correction, turning the knob another click.

Tips for a hotter coffee:

For a hotter coffee, you are recommended to:

- perform a rinse cycle before delivering the coffee: press the  button to select the “Rinsing...” function: hot water is delivered

from the spout, heating the internal circuits and making the coffee delivered hotter;

- enable the cup warmer and leave the cups to warm;
- warm the cups by rinsing them with hot water (using the hot water function);
- set the “high” coffee temperature in the menu.

 *Danger of burns!*

During rinsing, a little hot water comes out of the coffee spouts and is collected in the drip tray underneath.

Avoid contact with splashes of water.

Preparing coffee using coffee beans

 *Important!*

Do not use caramelised or candied coffee beans as they could stick to the coffee mill and make it unusable.

1. Fill the container with coffee beans (fig. 12).
2. Place under the coffee spouts:
 - 1 cup, if you want 1 coffee (fig. 9);
 - 2 cups, if you want 2 coffees.
3. Lower the spouts as near as possible to the cup. This makes a creamier coffee (fig. 9).
4. Press the button corresponding to the number of coffees required (1 cup  or 2 cups  (fig. 10 e 13)).
5. Preparation begins. The amount of coffee selected is displayed together with a progress bar which gradually fills as preparation progresses (fig. 14).

Once the coffee has been made, the appliance prepares for use again.

 *Please note:*

- While the machine is making coffee, delivery can be interrupted at any moment by pressing one of the coffee buttons ( or ).
- At the end of delivery, to increase the quantity of coffee in the cup, just press (within 3 seconds) one of the coffee buttons ( or ).

Once the coffee has been made, the appliance is ready to use again.

 *Important!*

If the coffee is delivered a drop at a time, too thin

and not creamy enough or too cold, read the tips in the “Troubleshooting” section on page 21.

Various messages (fill tank, empty grounds container, etc.) could be displayed while using the machine. Their meaning is explained in the section “Displayed messages”.

Making coffee using pre-ground coffee

Important!

- Never add pre-ground coffee when the machine is off or it could spread through the inside of the machine and dirty it. This could damage the appliance.



Never use more than 1 level measure or it could dirty the inside of the coffee maker or block the funnel.

Please note!

If you use pre-ground coffee, you can only make one cup of coffee at a time.

1. Press the  button repeatedly (fig. 7) until “READY Pre-Ground” is displayed and the  light flashes.
2. Put one level measure of pre-ground coffee into the funnel (fig. 15).
3. Place a cup under the coffee spouts.
4. Press the 1 cup coffee  button (fig. 10).
5. Preparation begins. The amount of coffee selected is displayed together with a progress bar which gradually fills as preparation progresses.

FROTHING THE MILK (FOR CAPPUCCINO) AND REHEAT MILK (FOR LATTE)

Important! Danger of burns

During preparation, steam is given off. Take care to avoid scalds.

Frothing milk for cappuccino

Please note!

To make cappuccino, prepare the coffee in a large cup then add the frothed milk.

1. Turn the cappuccino maker outwards and

place a container underneath (fig. 4).

2. Press the  button until the  light comes on.

Please note!

To avoid residual water being mixed with the milk during frothing, you should deliver the water first. To do this, allow the water mixed with the steam to flow for a few seconds until only steam comes out.

3. Press the  button (fig. 2); the appliance heats up and “Steam” is displayed. When the appliance reaches the ideal temperature, it begins producing steam. Interrupt by pressing the same button again.
4. Empty the container and fill with about 100 grams of milk for each cappuccino to be prepared. In choosing the size of the container, bear in mind that the milk doubles or triples in volume.

Please note!

For a richer denser froth, use skimmed or partially skimmed milk at refrigerator temperature (about 5°C). To avoid milk with poor froth or large bubbles, always clean the cappuccino maker as described in the section “Cleaning the cappuccino maker after use” on page 15.

5. Make sure the ring on the cappuccino maker is positioned in the CAPPUCCINO position (Fig. 16).
6. Turn the cappuccino maker outwards, immersing it in the milk container (fig. 17). Take care never to immerse the black ring.
7. Press the  button. Steam is delivered from the cappuccino maker, giving the milk a creamy frothy appearance and making it more voluminous.
8. To obtain a creamier froth, rotate the container with slow upward movements. You should not deliver steam for more than 3 minutes at a time.
9. When you have obtained the required froth, stop steam delivery by pushing the  button again.



Important! Danger of burns

Stop steam delivery before removing the container with the frothed milk to avoid burns caused by splashes of boiling milk.

10. Add the frothed milk to the cup of coffee prepared previously.
The cappuccino is ready. Sweeten to taste and, if desired, sprinkle the froth with a little cocoa powder.

Making hot milk (without froth)

To make hot milk without froth, proceed as described in the above section, making sure the ring on the cappuccino maker is positioned upwards in the “LATTE” position.

Cleaning the cappuccino maker after use.

Clean the cappuccino maker each time you use it to avoid the build-up of milk residues or blockages.



Important! Danger of burns

When cleaning the cappuccino maker, a little hot water comes out. Avoid contact with splashes of water.

1. Discharge a little water for a few seconds by pushing the  button. Then push the same button to stop the flow of hot water.
2. Wait a few minute for the cappuccino maker to cool down. Turn the cappuccino maker outwards and remove it by pulling it downwards (fig. 18).
3. Remove the ring upwards (fig. 19).
4. Wash all parts of the cappuccino maker thoroughly with warm water.
5. Make sure the two holes shown by the arrow in fig. 20 are not blocked. If necessary, clean with a pin.
6. Replace the inner section by inserting it carefully onto the adjustable tube, then insert the steam nozzle and turn anticlockwise to lock it in place.

HEATING WATER

Preparation



Important! Danger of burns.

Never leave the machine unsupervised while delivering hot water. Stop delivery of hot water as described below when the cup is full. The hot water spout becomes hot while water is being delivered and must be held by the handle only.

1. Place a container under the spout (as close as possible to avoid splashes) (fig. 4).
2. Press the  button until the  light comes on.
3. Press the  button (fig. 1); “Hot water” is displayed;
4. Water flows out of the spout. Delivery stops automatically after 250ml.
6. To interrupt delivery of hot water manually, press the  button again.



Please note!

- If energy saving has been enabled, delivery could be delayed a few seconds.
- You should not deliver hot water for more than 3 minutes at a time.

Changing the quantity

The appliance is set by default to automatically deliver 250ml of hot water. To modify these quantities, proceed as follows:

1. Position a container under the spouts.
2. Press the  button until the  light comes on.
3. Press and hold the  button down for at least 8 seconds (fig. 1); the message “Hot Water Programme Quantity” is displayed;
3. When the hot water in the cup reaches the required level, press the  button again.

The machine is now reprogrammed with the new quantity.

CLEANING

Cleaning the coffee maker

The following parts of the machine must be cleaned regularly:

- coffee grounds container (A9),
- drip tray (A11),
- inside the machine, accessible after opening the service door (A12),
- water tank (A7),
- coffee spouts (A14) and hot water nozzle (A15),
- pre-ground coffee funnel (A4),
- infuser (A8).



Important!

- Do not use solvents, abrasive detergents or alcohol to clean the coffee maker. With De'Longhi superautomatic coffee makers, you need not use chemical products to clean the machine.
- None of the components of the appliance can be washed in a dishwasher with the exception of the milk container.
- Do not use metal objects to remove encrustations or coffee deposits as they could scratch metal or plastic surfaces.

Cleaning the coffee grounds container

When "EMPTY GROUNDS CONTAINER" is displayed, the grounds container must be emptied and cleaned.

Until the grounds container has been cleaned, the appliance continues to display the message and coffee cannot be made.

To clean (with the machine on):

- Open the service door on the front of the appliance (fig. 21), extract the drip tray (fig. 22), empty and clean.
- Empty the grounds container and clean thoroughly to remove all residues left on the bottom. This can be done with the spatula on the brush provided.



Important!

When removing the drip tray, the grounds container **must** be emptied, even if it contains few grounds.

If this is not done, when you make the next coffees, the grounds container may fill up more than expected and clog the machine.

Cleaning the drip tray



Important!

If the drip tray is not emptied regularly, the water could overflow from the edge and seep inside or around the machine.

This could damage the machine, the surface it rests on or the surrounding area.

The drip tray is fitted with a level indicator (red) showing the level of water it contains (fig. 23). Before the indicator protrudes from the cup tray, the drip tray must be emptied and cleaned.

To remove the drip tray:

1. Open the service door (fig. 21);
2. Remove the drip tray and the grounds container (fig. 22);
3. Empty the drip tray and grounds container and wash them;
4. Replace the drip tray complete with grounds container;
5. Close the service door.

Cleaning the inside of the machine



Danger of electric shock!

Before cleaning internal parts, the machine must be turned off (see "Turning off") and unplugged from the mains power supply.

Never immerse the coffee maker in water.

1. Check regularly (about every 100 coffees) that the inside of the appliance (accessible after removing the drip tray) is not dirty. If necessary, remove coffee deposits with the brush or a sponge.
2. Remove the residues with a vacuum cleaner (fig. 24).

Cleaning the water tank

1. Clean the water tank (A7) regularly (about once a month) with a damp cloth and a little mild washing up liquid.
2. After cleaning the water tank rinse it thoroughly to remove all washing up liquid residues.

Cleaning the coffee spouts

1. Clean the coffee spouts with a sponge or cloth (fig. 25).
2. Check the holes in the coffee spout are not

blocked. If necessary, remove coffee deposits with a toothpick (fig. 26).

Cleaning the pre-ground coffee funnel

Check regularly (about once a month) that the pre-ground coffee funnel is not blocked. If necessary, remove coffee deposits with the brush.

Cleaning the infuser

The infuser (A8) must be cleaned at least once a month.

Important!

The infuser must not be extracted when the machine is on.

1. Make sure the machine is correctly turned off (see Turning off).
2. Open the service door (fig. 21).
3. Remove the drip tray and grounds container (fig. 22).
4. Press the two red release buttons inwards and at the same time pull the infuser outwards (fig. 27).

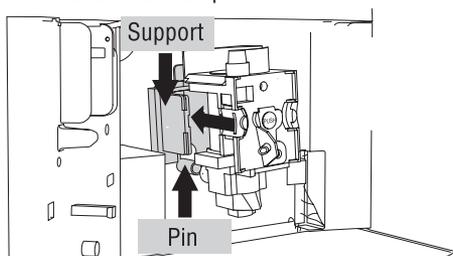
Important!

RINSE WITH WATER ONLY

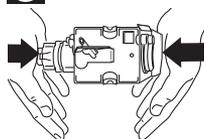
NO WASHING UP LIQUID - NO DISH WASHER

Do not use washing up liquid to clean the infuser as it could cause damage.

5. Soak the infuser in water for about 5 minutes, then rinse under the tap.
6. After cleaning, replace the infuser by sliding it onto the internal support and pin at the bottom, then push the PUSH symbol fully in until it clicks into place.



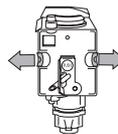
Please note!



If you encounter difficulty inserting the infuser, before inserting it you must adapt it to the right dimension by pressing it

forcefully from the bottom and top as shown in the figure.

7. Once inserted, make sure the two red buttons have snapped out.
8. Replace the drip tray and grounds container.
9. Close the service door.



DESCALING

Descal the machine when the message “DESCALE!” flashes on the display.

Important!

Descaler contains acids which may irritate the skin and eyes.

It is vital to respect the manufacturer’s safety warnings given on the descaler pack and the warnings relating to the procedure to follow in the event of contact with the skin and eyes.

Please note!

Under no circumstances should you use sulphamic or acetic based descalers. Their use invalidates the guarantee.

Failure to descale the appliance as described also invalidates the guarantee.

1. Turn the machine on.
2. Enter the programming menu by pressing the **P** button.
3. Turn the selection knob until “Descaling” is displayed. “DESCALING CONFIRM?” is displayed: press the **OK** / **!** button to activate the function.
4. The message “EMPTY DRIP TRAY Insert descaler Confirm?” is displayed.
5. Completely empty the water tank (A7); the empty the drip tray (A11) and the grounds container, then reinsert them.
Pour the descaler diluted with water (respecting the proportions indicated on the descaler pack) into the water tank.

Place an empty container with a minimum capacity of 1.5 litres under the hot water spout.



Important! Danger of burns

Hot water containing descaling solution flows out of the hot water spout.

Avoid contact with splashes of water.

6. Confirm by pressing the **OK** / **↵** button.
7. The message “Descaling...” is displayed. The descaling programme starts and the descaler liquid comes out of the water spout. The descale programme automatically performs a series of rinses and pauses to remove limescale deposits from inside the machine.

After about 30 minutes, the message “Rinsing FILL TANK!” is displayed.

8. The appliance is now ready for rinsing through with clean water. Remove the water tank, empty, rinse under running water, fill with clean water and replace. “Rinsing... Press OK” is displayed.
9. Empty the container used to collect the descaler solution and replace it under the hot water spout.
10. Press the **OK** / **↵** button to start rinsing. Hot water flows out of the spout and the message “Rinsing...” is displayed.
11. When the water tank is completely empty, the message “Rinsing Complete... Confirm?” is displayed.
12. Press the **OK** / **↵** button: the appliance goes off.

To use it again, turn the appliance on by pressing the **⏻** button.

Before switching on the appliance by pushing the **⏻** button, remember to empty the drip tray.

SETTING WATER HARDNESS

The DESCALE message is displayed after a period of time established according to water hardness.

The machine is set by default for a hardness value of 4.

The machine can also be programmed according to the actual hardness of the mains water in the various regions, varying the frequency with which the message is displayed.

Measuring water hardness

1. Remove the “TOTAL HARDNESS TEST” indicator paper attached to this manual from its pack.
2. Immerse the paper completely in a glass of water for one second.
3. Remove the paper from the water and shake lightly. After about a minute, 1, 2, 3, or 4 red squares form, depending on the hardness of the water. Each square corresponds to one level.

Level 1 

Level 2 

Level 3 

Level 4 

Set water hardness

1. Press the **P** button to enter the menu.
2. Turn the selection knob to select “Water Hardness”.
3. Confirm the selection by pressing the **OK** / **↵** button.
4. Turn the selection knob and set the level shown by the indicator paper (see previous paragraph).
5. Press the **OK** / **↵** button to confirm the setting.
6. Press the **⏻** / **ESC** button to exit the menu. The machine is now reprogrammed with the new water hardness setting.

TECHNICAL SPECIFICATION

Voltage:	220-240 V~ 50/60 Hz max. 10A
Absorbed power:	1450W
Pressure:	15 bar
Water tank capacity:	1,7 l
Size LxHxD:	284x380x440 mm
Cable length:	1,5 m
Weight:	11,4 Kg
Beans container capacity:	250 g

CE The appliance complies with the following EC directives:

- Stand-by Directive no. 1275/2008;
- Low Voltage Directive 2006/95/EC and subsequent amendments;
- EMC Directive 2004/108/EC and subsequent amendments
- Materials and accessories coming into contact with food conform to EEC regulation 1935/2004.

DISPOSAL



Important information for correct disposal of the product in accordance with EC Directive 2002/96/EC.

At the end of its working life, the product must not be disposed of as urban waste.

It must be taken to a special local authority differentiated waste collection centre or to a dealer providing this service.

Disposing of a household appliance separately avoids possible negative consequences for the environment and health deriving from inappropriate disposal and enables the constituent materials to be recovered to obtain significant savings in energy and resources.

As a reminder of the need to dispose of household appliances separately, the product is marked with a rubbish bin bearing a cross.

DISPLAYED MESSAGES

DISPLAYED MESSAGE	POSSIBLE CAUSE	REMEDY
FILL TANK !	<ul style="list-style-type: none"> Insufficient water in the tank. 	<ul style="list-style-type: none"> Fill the tank with water and/or insert it correctly, pushing it as far as it will go until it clicks into place.
GROUND TOO FINE ADJUST MILL! <i>alternating with...</i> HOT WATER... CONFIRM? △	<ul style="list-style-type: none"> The grinding is too fine and the coffee is delivered too slowly. 	<ul style="list-style-type: none"> Repeat coffee delivery and turn the grinding adjustment knob one click clockwise towards "7" while the coffee mill is in operation. If after making at least 2 coffees delivery is still too slow, repeat the correction procedure, turning the grinding adjustment knob another click until delivery is correct.
EMPTY GROUNDS CONTAINER!	<ul style="list-style-type: none"> The grounds container is too full or more than 3 days have passed since you last made coffee (this guarantees correct hygiene of the machine). 	<ul style="list-style-type: none"> Empty the grounds container and clean, then replace. Important: when removing the drip tray, the grounds container must be emptied, even if it contains few grounds. If this is not done, when you make the next coffees, the grounds container may fill up more than expected and clog the machine.
INSERT GROUNDS CONTAINER	<ul style="list-style-type: none"> After cleaning, the grounds container has not been replaced. 	<ul style="list-style-type: none"> Open the service door, remove the drip tray and insert the grounds container.
ADD PRE-GROUND COFFEE	<ul style="list-style-type: none"> The "pre-ground coffee" function has been selected without placing any pre-ground coffee in the funnel. 	<ul style="list-style-type: none"> Place pre-ground coffee in the funnel or deselect the "pre-ground" function.
DESCALE! flashing	<ul style="list-style-type: none"> The machine must be descaled. 	<ul style="list-style-type: none"> The descaling procedure described in the "Descaling" section needs to be performed as soon as possible.
LESS COFFEE!	<ul style="list-style-type: none"> Too much coffee has been used. 	<ul style="list-style-type: none"> Select a milder taste or reduce the quantity of pre-ground coffee.
FILL BEANS CONTAINER!	<ul style="list-style-type: none"> The coffee beans have run out. 	<ul style="list-style-type: none"> Fill the beans container
	<ul style="list-style-type: none"> The pre-ground coffee funnel is clogged. 	<ul style="list-style-type: none"> Empty the funnel with the help of a brush as described in the section "Cleaning the pre-ground coffee funnel".
INSERT INFUSER ASSEMBLY! △	<ul style="list-style-type: none"> The infuser has not been replaced after cleaning. 	<ul style="list-style-type: none"> Insert the infuser as described in the paragraph "Cleaning the infuser".
CLOSE DOOR! △	<ul style="list-style-type: none"> The service door is open 	<ul style="list-style-type: none"> Close the service door.
Energy Saving	<ul style="list-style-type: none"> The function is active and reduces electricity consumption. 	<ul style="list-style-type: none"> Disable the function in the menu.
GENERAL ALARM! △	<ul style="list-style-type: none"> The inside of the appliance is very dirty. 	<ul style="list-style-type: none"> Clean the inside of the appliance thoroughly, as described in the section "Cleaning and maintenance". If the message is still displayed after cleaning, contact a Customer Service.

TROUBLESHOOTING

Below is a list of some of the possible problems.

If the problem cannot be resolved as described, contact a Customer Service.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The coffee is not hot	<ul style="list-style-type: none"> The cups were not preheated. 	<ul style="list-style-type: none"> Enable the cup warmer, leave the cups at least 20 minutes to warm up. Warm the cups by rinsing them with hot water (using the hot water function).
	<ul style="list-style-type: none"> The infuser has cooled down because 2/3 minutes have elapsed since the last coffee was made. 	<ul style="list-style-type: none"> Before making the coffee, heat the infuser by using the "rinsing" function.
	<ul style="list-style-type: none"> A low coffee temperature is set. 	<ul style="list-style-type: none"> Set a high coffee temperature in the menu.
The coffee is not creamy enough.	<ul style="list-style-type: none"> The coffee is ground too coarsely. 	<ul style="list-style-type: none"> Turn the grinding adjustment knob one click anticlockwise towards "1" while the coffee mill is in operation (fig. 11). Continue one click at a time until coffee delivery is satisfactory. The effect is only visible after delivering 2 coffees.
	<ul style="list-style-type: none"> Wrong type of coffee 	<ul style="list-style-type: none"> Use a type of coffee for espresso coffee makers.
The coffee is delivered too slowly or a drop at a time.	<ul style="list-style-type: none"> The coffee is ground too finely. 	<ul style="list-style-type: none"> Turn the grinding adjustment knob one click clockwise towards "7" while the coffee mill is in operation (fig. 11). Continue one click at a time until coffee delivery is satisfactory. The effect is only visible after delivering 2 coffees.
The coffee does not come out of the spouts, but from around the service door.	<ul style="list-style-type: none"> The holes in the spouts are clogged with dry coffee deposits. 	<ul style="list-style-type: none"> Clean the spouts with a toothpick, sponge or hard bristled kitchen brush.
	<ul style="list-style-type: none"> The coffee guide inside the service door is blocked and cannot swing. 	<ul style="list-style-type: none"> Thoroughly clean the coffee guide, particularly near the hinges.
The coffee is delivered too quickly.	<ul style="list-style-type: none"> The coffee is ground too coarsely. 	<ul style="list-style-type: none"> Turn the grinding adjustment knob one click anticlockwise towards "1" while the coffee mill is in operation (fig. 11). Avoid turning the grinding adjustment knob excessively otherwise when you select two cups, the coffee may be delivered a drop at a time.
Coffee does not come out of one of the spouts.	<ul style="list-style-type: none"> The spouts are blocked. 	<ul style="list-style-type: none"> Clean the spouts with a toothpick (fig. 26).
Water comes out of the spouts instead of coffee.	<ul style="list-style-type: none"> The pre-ground coffee may be blocked in the funnel (A4). 	<ul style="list-style-type: none"> Empty the funnel with the help of a knife, as described in the section "Cleaning the pre-ground coffee funnel".
The frothed milk has large bubbles	<ul style="list-style-type: none"> The milk is not cold enough or is not semi-skimmed. 	<ul style="list-style-type: none"> You should ideally use skimmed or semi-skimmed milk at refrigerator temperature (about 5°C). If the result is still disappointing, try another brand of milk.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The milk is not frothed	<ul style="list-style-type: none"> • Cappuccino maker dirty. 	<ul style="list-style-type: none"> • Clean as described in the section "Cleaning the cappuccino maker after use" on page 14.
The appliance does not come on.	<ul style="list-style-type: none"> • It is not plugged into the mains socket. 	<ul style="list-style-type: none"> • Plug into the mains socket.
	<ul style="list-style-type: none"> • The main switch (A8) is not turned on. 	<ul style="list-style-type: none"> • Place the main switch in the I position (fig. 1).