



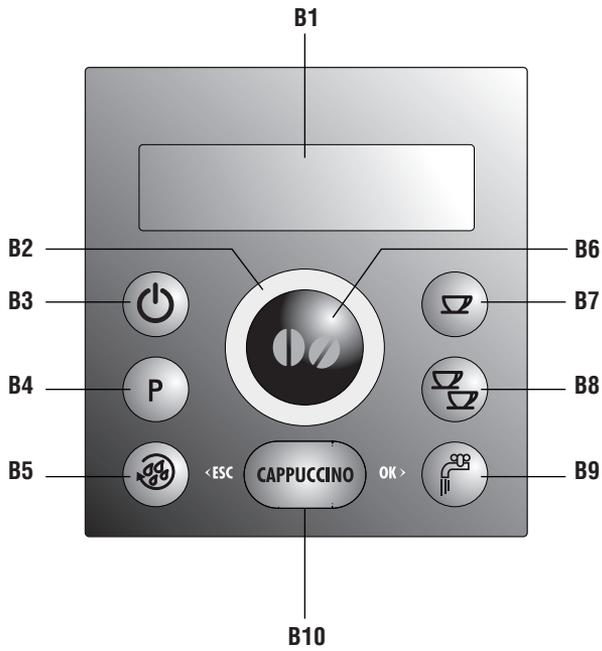
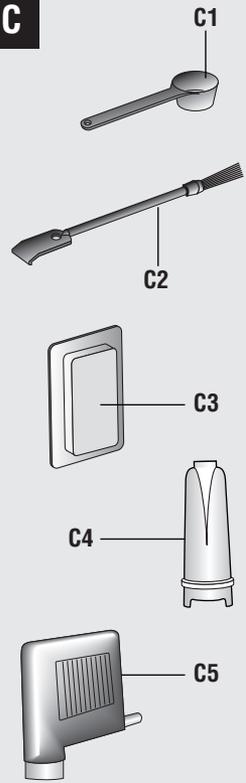
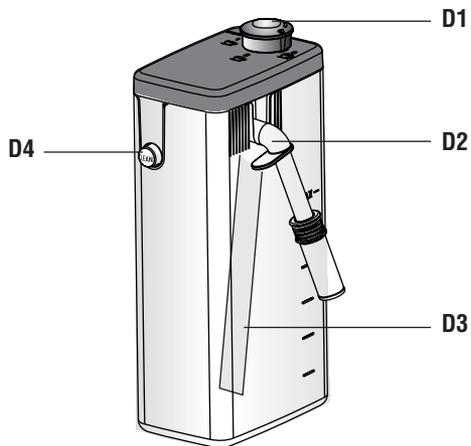
De'Longhi Appliances
via Seitz, 47
31100 Treviso Italia

BEAN TO CUP ESPRESSO AND CAPPUCCINO MACHINE

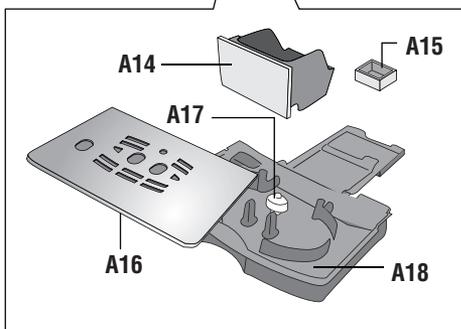
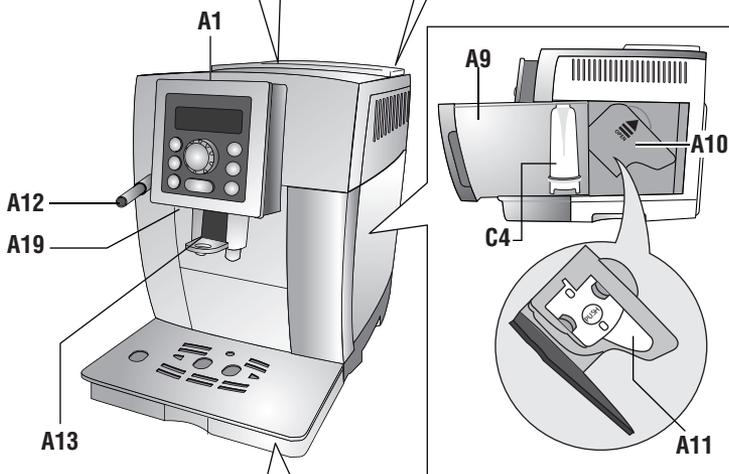
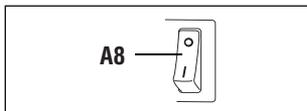
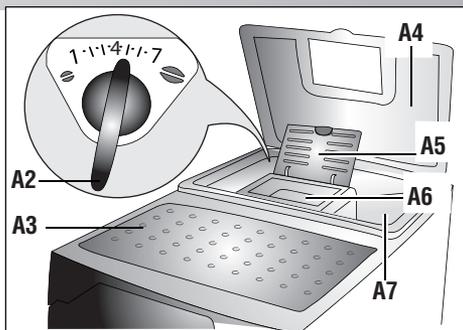
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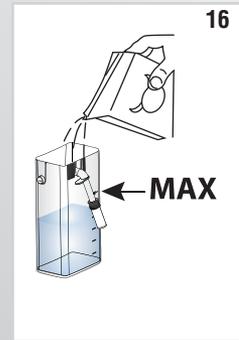
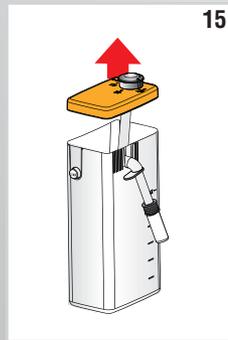
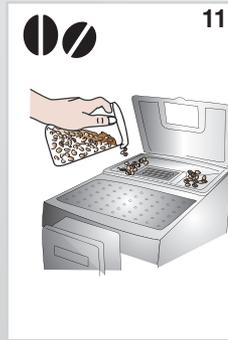
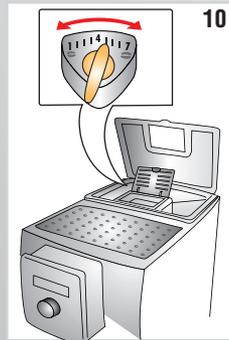
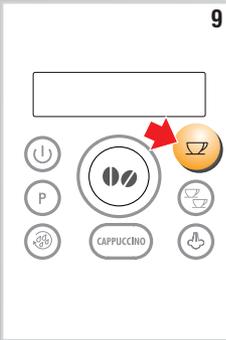
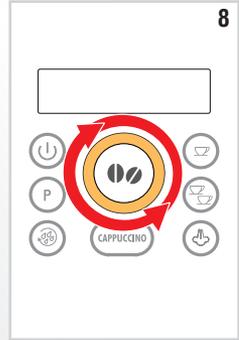
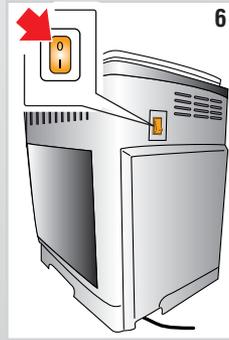
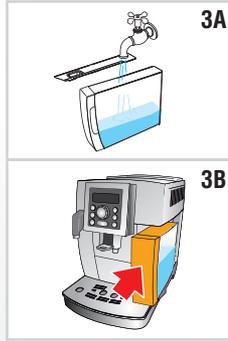
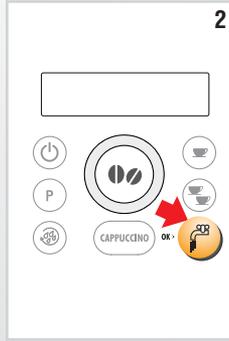
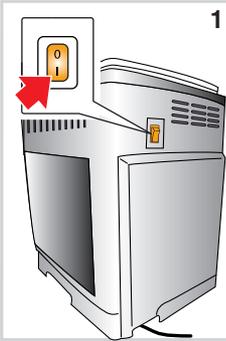


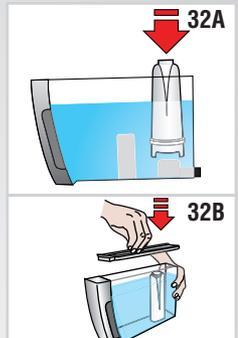
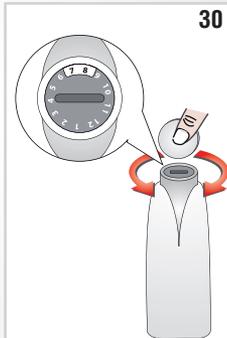
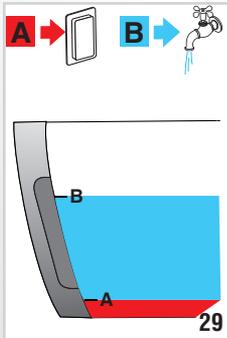
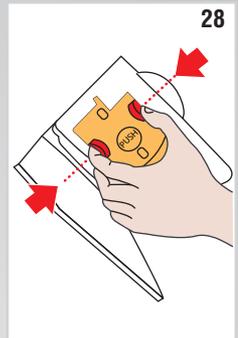
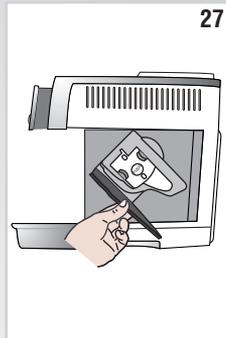
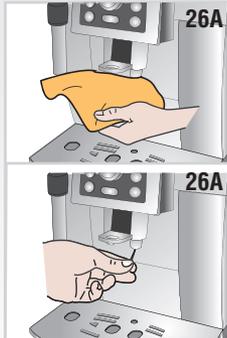
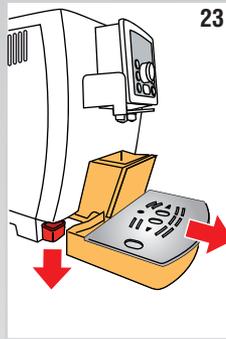
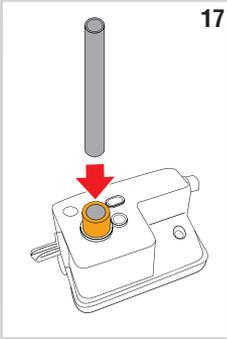
ECAM23.450

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CONTENTS

INTRODUCTION	7
Symbols used in these instructions	7
Letters in brackets	7
Troubleshooting and repairs	7
SAFETY	7
Fundamental safety warnings	7
DESIGNATED USE	8
INSTRUCTIONS	8
DESCRIPTION	8
Description of the appliance	8
Description of the control panel	8
Description of the accessories	9
Description of milk container	9
PRELIMINARY CHECKS	9
Checking the appliance	9
Installing the appliance	9
Connecting the appliance	9
Using the appliance for the first time	9
TURNING THE APPLIANCE ON	10
TURNING THE APPLIANCE OFF	10
MENU SETTINGS	10
Descale	10
Adjust time	10
Auto-off	10
Auto-start	11
Setting the temperature	11
Energy Saving	11
Setting water hardness	11
Setting the language	11
Install filter	11
Replacing the filter	11
Activate/deactivate the beep	12
Cup lighting	12
Default values (reset)	12
Statistics function	12
MAKING COFFEE	12
Selecting the coffee taste	12
Selecting the quantity of coffee in the cup	12
Customising the “my coffee” quantity	13
Adjusting the coffee mill	13
Tips for a hotter coffee	13
Making coffee using coffee beans	13
Making coffee using pre-ground coffee	14
SMAKING DRINKS WITH MILK	14
Filling and attaching the milk container	14
Making cappuccino or macchiato	14
Making frothed milk (without coffee)	15
Preparing milk (unfrothed and without coffee)	15
Cleaning the milk frother with the CLEAN button	15
Programming the quantity of coffee and milk in the cup for cappuccino or milk	15
HEATING WATER	15
Change the quantity of water delivered automatically.	16
CLEANING	16
Cleaning the coffee grounds container	16
Cleaning the drip tray and condensate tray	16
Cleaning the inside of the coffee maker	16
Cleaning the water tank	17
Cleaning the coffee spouts	17
Cleaning the pre-ground coffee funnel	17
Cleaning the infuser	17
Cleaning the milk container	17
Cleaning the hot water/steam nozzle	18
DESCALE	18
SETTING WATER HARDNESS	19
Measuring water hardness	19
Set water hardness	19
WATER SOFTENER FILTER	19
Installing the filter	19
Replacing the filter	20
Removing the filter	20
TECHNICAL SPECIFICATION	20
DISPOSAL	20
ELECTRICAL REQUIREMENTS	21
DISPLAYED MESSAGES	22
TROUBLESHOOTING	23

INTRODUCTION

Thank you for choosing the ECAM 23.450 automatic coffee 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.



This symbol identifies important advice or information for the user.

Letters in brackets

The letters in brackets refer to the legend 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 section “Displayed messages” on page 22 and “Troubleshooting” on page 23.

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 appliance.

SAFETY

Fundamental safety warnings



This is an electrical appliance and may cause electric shock.

You should therefore respect 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.
- 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 an 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 follow these instructions may result in burns or damage to the appliance.

The manufacturer is not liable for damage deriving from failure to respect 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 - )

- A1. Control panel
- A2. Grinding adjustment knob
- A3. Cup shelf
- A4. Beans container lid
- A5. Pre-ground coffee funnel lid
- A6. Pre-ground coffee funnel
- A7. Beans container
- A8. Main switch
- A9. Water tank
- A10. Infuser door
- A11. Infuser
- A12. Hot water/steam nozzle
- A13. Coffee spout (adjustable height)
- A14. Coffee grounds container
- A15. Condensate tray
- A16. Cup tray
- A17. Drip tray water level indicator
- A18. Drip tray
- A19. Cup lighting

Description of the control panel

(page 2 - )

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. Selection knob: turn to select the required quantity of coffee. *(When in the settings MENU, turn to select the required function).*
- B3.  button: turns the appliance on and off.
- B4. **P** button to access the menu
- B5.  button: to perform a rinse cycle. *(When in the settings MENU, it acts as the "ESC" button to exit from the selected function and go back to the main menu).*
- B6.  aroma selection button: to select the coffee taste.
- B7.  button: to make 1 cup of coffee with the settings displayed.
- B8.  button: to make 2 cups of coffee with the settings displayed.
- B9.  button: to deliver hot water. *(When you access the MENU: "OK" button to confirm the selection made)*
- B10. CAPPUCCINO button: to prepare cappuccino or frothed milk.

Description of the accessories

(page 2 - )

- C1. Measure
- C2. Cleaning brush
- C3. Descaler bottle
- C4. Water softener filter (certain models only)
- C5. Hot water spout

Description of milk container

(page 2 - )

- D1. Froth adjustment knob
- D2. Frothed milk spout (adjustable)
- D3. Milk intake tube
- D4. CLEAN button

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 appliance 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 19.

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

You must first choose the language (the languages scroll through at intervals of about 3 seconds).

2. When “English” appears, press the  button (fig. 2) for a few seconds until “ENGLISH installed” is displayed.

Follow the instructions displayed by the appliance:

3. “FILL TANK!”: remove the water tank, fill to the MAX line with fresh water (fig. 3A) then replace in the appliance (fig. 3B).
4. “INSERT WATER SPOUT!”: Check that the hot water spout is inserted on the nozzle and place a container with a minimum capacity of 100 ml underneath (fig. 4).
5. “Hot water... Confirm?” is displayed;
6. Press the  button to confirm. The appliance delivers water from the spout then goes off automatically.

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.
- When making the first 5-6 cappuccinos, it is normal to hear the noise of boiling water. After this, the noise diminishes.

- To enjoy your coffee even more and improve the performance of your appliance, we recommend installing a water softener filter as described in the section “WATER SOFTENER FILTER”. If your model is not provided with a filter, you can request one from De’Longhi Customer Services.

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 a message indicating the coffee taste and quantity is displayed.

TURNING THE APPLIANCE OFF

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

 *Danger of burns!*

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

Avoid contact with splashes of water.

To turn the appliance off, press the  button (fig. 5). The appliance performs a rinse cycle, then the message “Turning Off Please wait...” is displayed and the appliance goes off.

 *Please note!*

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

 *Important!*

To avoid damaging the appliance, never place the main switch (fig. 6) 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:

Descalc

For instructions on descaling, see page 18.

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 (fig. 8) until “Adjust time” is displayed;
3. Press the  button (fig. 2);
4. Turn the selection knob (fig. 8) to change the hours;
5. Press the  button to confirm;
6. Turn the selection knob (fig. 8) to change the minutes;
7. Press the  button to confirm.

This sets the time. Press the  button to exit the menu.

Auto-off

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.

To re-programme Auto-off, proceed as follows:

1. Press the **P** button to enter the menu;
2. Turn the selection knob (fig. 8) until “Auto-off” is displayed;
3. Press the  button;
4. Turn the selection knob (fig. 8) until the desired operation time is displayed (15 or 30 minutes, or 1, 2 or 3 hours);
5. Press the  button to confirm;
6. Press the  button to exit the menu.

Auto-off is programmed.

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.

To activate Auto-on, proceed as follows:

1. Press the **P** button to enter the menu;
2. Turn the selection knob (fig. 8) until “Auto-start” is displayed;
3. Press the  button. “Activate?” is displayed;
4. Press the  button to confirm;
5. Turn the selection knob to choose the hours;
6. Press the  button to confirm;
7. Turn the selection knob (fig. 8) to change the minutes;
8. Press the  button to confirm;
9. Press the  button to exit the menu.

Once the time has been confirmed, activation of auto-start is indicated by the  symbol displayed alongside the time and under the Auto-start item in the menu.

To deactivate the function:

1. Select auto-start from the menu;
 2. Press the  button. “Deactivate?” is displayed;
 3. Press the  button to confirm.
- The  symbol is no longer displayed.

Setting the temperature

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

1. Press the **P** button to enter the menu;
2. Turn the selection knob (fig. 8) until “Set temperature” is displayed;
3. Press the  button;
4. Turn the selection knob until the required temperature (high, medium, low) is displayed;
5. Press the  button to confirm;
6. Press the  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.

To deactivate “energy saving” mode, proceed as follows:

1. Press the **P** button to enter the menu;
2. Turn the selection knob (fig. 8) until “Energy Saving” is displayed;
3. Press the  button. “Deactivate?” is displayed;
4. Press the  button to deactivate energy saving mode;
5. Then press the  button to exit the menu.

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

 *Please note!*

When in energy saving mode, a few seconds may elapse before the first coffee is delivered as the appliance must heat up again.

Setting water hardness

For instructions on setting water hardness, see page 19.

Setting the language

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

1. Press the **P** button to enter the menu;
2. Turn the selection knob (fig. 8) until “Set language” is displayed;
3. Press the  button;
4. Turn the selection knob until the required language is displayed;
5. Press the  button to confirm;
6. Press the  button to exit the menu.

Install filter

For instructions on how to install the filter, see the section “Installing the filter” on page 19.

Replacing the filter

For instructions on how to replace the filter, see the section “Replacing the filter” on page 20.

Activate/deactivate the beep

This activates or deactivates the beep emitted by the machine each time the buttons are pressed or an accessory is inserted/removed. The beep is active by default.

To deactivate or reactivate the beep, proceed as follows:

1. Press the **P** button to enter the menu;
2. Turn the selection knob (fig. 8) until “Beep” is displayed;
3. Press the  button. “Deactivate?” or “Activate?” is displayed;
4. Press the  button to activate or deactivate the beep (or the  button to exit);
5. Activation of the beep is indicated by an asterisk after the “Beep” item in the menu. Press the  button to exit the menu.

Cup lighting

This function activates or deactivates the cup lighting. The lighting is activated by default.

The lights come on each time coffee or cappuccino is made and during each rinse cycle.

To deactivate or reactivate this function, proceed as follows:

1. Press the **P** button to enter the menu;
2. Turn the selection knob (fig. 8) until “Cup lighting” is displayed.
3. Press the  button. “Deactivate?” or “Activate?” is displayed;
4. Press the  button to activate or deactivate the cup lighting (or the  button to exit);
5. When the function is active, an asterisk appears after “Cup lighting” in the menu. Press the  button 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).

To reset the default values, proceed as follows:

1. Press the **P** button to enter the menu;
2. Turn the selection knob (fig. 8) until “Default values” is displayed;
3. Press the  button;
4. The message “Confirm?” is displayed.
5. Press the  button to confirm and exit.

Statistics function

This displays statistics relating to the machine.

To display, proceed as follows:

1. Press the **P** button to enter the menu;
2. Turn the selection knob (fig. 8) until “Statistics” is displayed;
3. Press the  button;
4. Turn the selection knob (fig. 8) to verify:
 - how many coffees have been made;
 - how many times the machine has been de-scaled;
 - the total number of litres of water delivered;
 - how many cappuccinos have been made;
 - how many times the water softener filter has been replaced.
5. Press the  button twice to exit the menu.

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 (fig. 8) until the message corresponding to the required quantity of coffee is displayed:

Coffee selected	Quantity in cup (ml)
MY COFFEE	Programmable: from ≈20 to ≈180
ESPRESSO	≈40
STANDARD	≈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 this quantity, proceed as follows:

1. Place a cup under the coffee spouts (fig. 9).
2. Turn the selection knob until “MY COFFEE” is displayed.
3. Keep the  button (fig. 12) 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 button  (fig. 12) again.

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

Adjusting the coffee mill

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. 10).



Please note!

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



If the coffee is delivered too slowly or not at all, turn one click clockwise towards “7”.

For fuller bodied creamier coffee on the other hand, turn one click anticlockwise towards “1” (do not turn more than one click at a time

otherwise the coffee could be delivered a drop at a time).

These adjustments will only be evident after at least 2 cups of coffee have been delivered.

If this adjustment does not obtain the desired result, turn the knob another click.

Tips for a hotter coffee

For a hotter coffee, before delivery you are recommended to:

- rinse the appliance through by pressing the  button. Hot water flows out of the coffee

spouts and heats the internal circuit of the machine so that the coffee delivered will be hotter.

- warm the cups with hot water (using the hot water function);
- select the “high” coffee temperature in the menu.

Making 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. 11).
2. Place under the coffee spouts:
 - 1 cup if you want one 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. 12).
4. Press the button corresponding to the number of coffees required (1 cup  or 2 cups , figs. 9 and 13).
5. Preparation begins. The amount of coffee selected is displayed together with a progress bar which gradually fills as preparation progresses.



Please note:

- While the coffee maker is making coffee, delivery can be interrupted at any moment by pressing one of the two 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.



Please note!

For hotter coffee, see the section “Tips for a hotter coffee” (page 13).



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 23.
- Various messages (fill tank, empty grounds

container, etc.) will be displayed while using the machine. Their meaning is explained in the section “Displayed messages” (page 22).

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 (fig. 7) until “Pre-ground” is displayed.
2. Make sure the funnel is not blocked, then add one level measure of pre-ground coffee (fig. 14).
3. Place a cup under the coffee spouts.
4. Press the 1 cup coffee button  (fig. 9).
5. Preparation begins. The amount of coffee selected is displayed together with a progress bar which gradually fills as preparation progresses.

Please note!

If “Energy Saving” mode is active, you may have to wait a few seconds before the first coffee is delivered.

MAKING DRINKS WITH MILK

Filling and attaching the milk container

1. Remove the lid (fig. 15);
2. Fill the milk container with a sufficient quantity of milk, not exceeding the MAX level marked on the container (fig. 16). Each mark on the side of the container corresponds to 100 ml of milk.

Please note!

- For a denser more even froth, you should use skimmed or partially skimmed milk at refrigerator temperature (about 5°C).
 - To avoid producing milk with poor froth or large bubbles, always clean the milk lid and hot water nozzle as described in the section “Cleaning the milk container” on pages 15 and 17.
3. Make sure the milk intake tube is correctly inserted in the bottom of the milk container lid (fig. 17).
 4. Place the lid back on the milk container.
 5. Remove the hot water spout from the nozzle (fig. 18).
 6. Attach the container to the nozzle and push as far as it will go (fig. 19). The machine emits a beep.
 7. Place a sufficiently large cup under the coffee and frothed milk spouts. Adjust the length of the milk spout. To move it nearer the cup, simply pull it downwards (fig. 20).
 8. Follow the instructions below for each function.

Making cappuccino or macchiato

1. After attaching the milk container, turn the froth adjustment knob on the milk container lid between position 2  and 3  (fig. 21).
2. Press the CAPPUCCINO button. “CAPPUCCINO” is displayed, together with a progress bar which fills gradually as preparation proceeds. If the froth is not satisfactory, turn the froth adjustment knob towards 2  (= less froth) or towards 3  (= more froth).
3. After delivering the frothed milk, the machine automatically makes the coffee.

i Please note!

- If during delivery you want to stop making milk or coffee, press the CAPPUCCINO button twice.
- Do not leave the milk container out of the refrigerator for longer than strictly necessary. The warmer the milk (5°C ideal), the poorer the froth will be.
- It is normal for steam to be given off from the metal cup tray at the end of milk delivery.

Making frothed milk (without coffee)

Proceed as described in the previous paragraph (Making cappuccino or macchiato), pressing the CAPPUCCINO button twice instead of once.

i Please note!

If during delivery you want to stop making milk or coffee, press the CAPPUCCINO button once.

Preparing milk (unfrothed and without coffee)

Proceed as described in the previous paragraph (Making frothed milk), turning the froth adjustment knob to position 1 , instead of position 2 .

Cleaning the milk frother with the CLEAN button

“Press CLEAN button” flashes on the display each time you use a milk function.

To eliminate all milk residues, proceed as follows:

1. Leave the milk container in the machine (you do not need to empty it);
2. Place a cup or other recipient under the frothed milk spout.
3. Press the CLEAN button (fig. 33) and keep pressing until the progress bar which appears on the display together with the message “Cleaning...” is complete.

i Please note!

- If you are making a number of cappuccinos one after the other, you do not need to clean by pressing the CLEAN button each time you make a cappuccino. Just press it once after making the last cappuccino (the appliance can continue making cappuccino or coffee even if the CLEAN button is not pressed).
- After use, always clean the hot water/steam nozzle and the milk container as described

on page 15.

Programming the quantity of coffee and milk in the cup for cappuccino or milk

The appliance is set by default to automatically deliver standard quantities.

To change these quantities, proceed as follows:

1. Place a cup under the coffee and milk spouts.
2. Hold the CAPPUCCINO button until the message “Milk for Cappuccino Program Quantity” is displayed.
3. Release the button. The appliance starts delivering milk.
4. Once the required quantity of milk has been delivered into the cup, press the CAPPUCCINO button again.
5. The appliance stops delivering milk and after a few seconds the coffee is delivered into the cup. “Coffee for Cappucc. Program Quantity” is displayed.
6. Once the required quantity of coffee has been delivered into the cup, press the CAPPUCCINO button. Coffee delivery stops.

The machine is now reprogrammed with the new quantities.

HEATING WATER



Important! Danger of burns.

Never leave the machine unsupervised while delivering hot water.

The spout becomes hot during delivery. Hold by the handle only.

1. Make sure the hot water spout is attached correctly (fig. 4).
2. Place a container under the spout (as close as possible to avoid splashes).
3. Press the  button (fig. 2). “Hot water...” is displayed, together with a progress bar which fills gradually as preparation proceeds.
4. The machine delivers 250 ml of hot water, then delivery stops automatically. To interrupt delivery of hot water manually, press the  button again.

i Please note!

If “Energy Saving” mode is active, you may have

to wait a few seconds before the hot water is delivered.

Change the quantity of water delivered automatically.

The machine is set by default to automatically deliver 250 ml of hot water.

To modify these quantities, proceed as follows:

1. Position a container under the spout.
2. Press the  button again until “Hot Water Program Quantity” is displayed, then release the  button.
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

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 can be washed in a dishwasher apart from the milk container (D).
- 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.

Important! Danger of burns

If you make a number of cappuccinos one after the other, the metal cup tray becomes hot.

Wait for it to cool down before touching it and handle it from the front only.

To clean (with the machine on):

- Remove the drip tray (fig. 23), 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.

- Check the condensate tray (red) and empty if necessary.

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 and condensate tray

Important!

The drip tray is fitted with a level indicator (red) showing the level of water it contains (fig. 24).

Before the indicator protrudes from the cup tray, the drip tray must be emptied and cleaned, otherwise the water may overflow the edge and damage the appliance, the surface it rests on or the surrounding area.

To remove the drip tray:

1. Remove the drip tray and the grounds container (fig. 23);
2. Empty the drip tray and grounds container and wash them;
3. Check the red condensate tray and empty if necessary.
4. Replace the drip tray and grounds container.

Cleaning the inside of the coffee maker

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 once a month) that the inside of the appliance (accessible after removing the drip tray) is not dirty. If necessary, remove coffee deposits with the brush provided or a sponge.
2. Remove the residues with a vacuum cleaner (fig. 25).

Cleaning the water tank

1. Clean the water tank (A9) regularly (about

once a month and whenever you replace the water softener filter (if provided) with a damp cloth and a little mild washing up liquid.

2. Remove the filter (if present) and rinse with running water.
3. Replace the filter (if provided), fill the tank with fresh water and replace the tank.

Cleaning the coffee spouts

1. Regularly clean the coffee spouts with a sponge or cloth (fig. 26A).
2. Check the holes in the coffee spout are not blocked. If necessary, remove coffee deposits with a toothpick (fig. 26B).

Cleaning the pre-ground coffee funnel

Check regularly (about once a month) that the pre-ground coffee funnel (A6) is not blocked. If necessary, remove coffee deposits with the brush (C2) supplied.

Cleaning the infuser

The infuser (A11) must be cleaned at least once a month.

Important!

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

1. Make sure the machine is correctly turned off (see "Turning the appliance off" on page 10).
2. Remove the water tank.
3. Open the infuser door (fig. 27) on the right side.
4. Press the two red release buttons inwards and at the same time pull the infuser outwards (fig. 28).

Important!

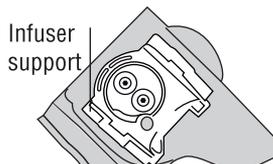
**RINSE WITH WATER ONLY
NO WASHING UP LIQUID - NO DISH WASHER**

Clean the infuser without using washing up liquid as it could be damaged.

5. Soak the infuser in water for about 5 minutes, then rinse under the tap.
6. Use the brush (C2) to remove any coffee residues left in the infuser housing, visible through the infuser door.
7. After cleaning, replace the infuser by sliding it onto the internal support; then push the

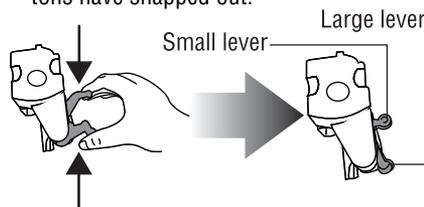
PUSH symbol fully in until it clicks into place.

Please note!



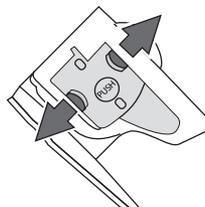
If the infuser is difficult to insert, before insertion, adapt it to the right size by pressing the two levers shown in the figure.

7. Once inserted, make sure the two red buttons have snapped out.



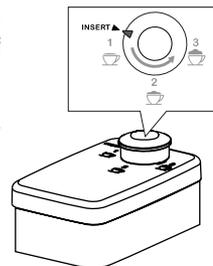
8. Close the infuser door.
9. Replace the water tank.

Cleaning the milk container



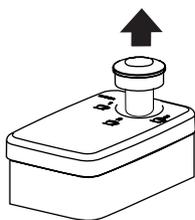
Clean the milk container as described below each time you prepare milk:

1. Remove the lid.
2. Remove the milk spout and intake tube.
3. Turn the froth adjustment knob to the "INSERT" position (see figure) and pull it off upwards.
4. Wash all the components thoroughly with hot water and mild washing-up liquid. All components are dishwasher safe,



placing them in the top basket of the dishwasher.

Make sure there are no milk residues in the hollow and groove under the knob (see figure alongside). If necessary, scrape the groove with a toothpick.



5. Rinse the inside of the froth adjustment knob under running water (see figure alongside).



6. Check that the intake tube and spout are not clogged with milk residues.

7. Replace the knob (lining up the arrow with the word "INSERT") the spout and the milk intake tube.

8. Place the lid back on the milk container.



Cleaning the hot water/steam nozzle

Each time you prepare milk, clean the nozzle with a sponge to remove milk residues from the gaskets (see figure).

DESCALE

Descale 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!

Use De'Longhi descaler only.

Under no circumstances should you use sulphamic or acetic based descalers. Their use invalidates the guarantee. Failure to descale the applian-

ce as described also invalidates the guarantee.

1. Turn the machine on.
2. Press the **P** button to enter the menu.
3. Turn the selection knob until "Descaling" is displayed.
4. Select by pressing the  button: "Descaling Confirm?" is displayed. Press  again to activate the function.
5. The message "Add descaler Confirm?" alternating to "EMPTY GROUNDS CONTAINER"
6. Completely empty the water tank (A9) and remove the water softener filter (if present); then empty the drip tray and the empty grounds container and re-insert them.
7. Pour the descaler into the tank up to the level A (corresponding to a 100 ml pack) marked on the back of the tank (fig. 29A), then add water (one litre) up to level B (fig. 29B); reinsert the water tank.
8. Place an empty container with a minimum capacity of 1.5 litres under the hot water spout (fig. 4).

Important! Danger of burns

Hot water containing acid flows from the cappuccino maker.

Avoid contact with splashes of water.

9. Press the  button to confirm introduction of the solution.

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 "FILL TANK!" is displayed.

7. 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" is displayed. "Rinsing... Confirm?" is displayed.
8. Empty the container used to collect the descaler solution and replace it empty under the cappuccino maker.
9. Press the  button to start rinsing. Hot water flows out of the spout and the message "Rinsing..." is displayed.

10. When the water tank is completely empty, “Rinsing complete Confirm?” is displayed.
11. Press the  button.
12. Insert the filter (if it was present) in the tank, fill the water tank again and the appliance is ready for use.

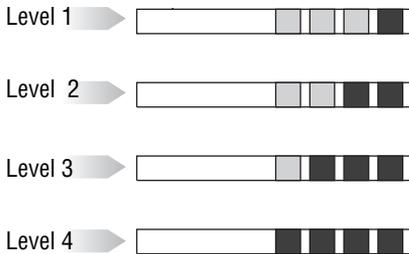
SETTING WATER HARDNESS

The DESCAL! message is displayed after a period of time established according to water hardness. The machine is factory set for a hardness value of 4. The machine can also be programmed according to the hardness of the mains water in the various regions so that the machine needs to be descaled less often.

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.



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  button.
4. Turn the selection knob and set the level shown by the indicator paper (see previous paragraph).
5. Press the  button to confirm the setting.
6. Press the  button to exit the menu.

The machine is now reprogrammed with the new water hardness setting.

WATER SOFTENER FILTER

Certain models are fitted with a water softener filter. If this is not the case with your model, you are recommended to purchase one from De’Longhi Customer Services.

To use the filter correctly, follow the instructions below.

Installing the filter

1. Remove the filter from the packaging.
2. Turn the date indicator disk (see fig. 30) until the next 2 months of use are displayed.

Please note

The filter lasts about two months if the appliance is used normally. If the coffee maker is left unused with the filter installed, it will last a maximum of three weeks.

3. Remove the tank from the appliance and fill with water.
4. Insert the filter in the water tank and immerse it completely for ten or so seconds, sloping it to enable the air bubbles to escape (fig. 31).
5. Insert the filter in the filter housing (fig. 32A) and press as far as it will go.
6. Close the tank with the lid (fig. 32B), then replace the tank in the machine.

When you install the filter, you must notify the appliance of its presence.

7. Press the **P** button to enter the menu;
 8. Turn the selection knob (fig. 8) until “Install filter” is displayed;
 9. Press the  button;
 10. The message “Activate?” is displayed.
 11. Press the  button to confirm the selection. “Hot Water Confirm?” is displayed.
 12. Position a container with a minimum capacity of 100 ml under the hot water spout.
 13. Press the  button to confirm the selection. The appliance begins delivering hot water and the message “Please wait...” is displayed.
 14. After delivery, the appliance returns automatically to the “Ready for coffee” position.
- The new filter is active and indicated by an asterisk displayed under “Install filter” in the menu. You can now use the coffee maker.

Replacing the filter

When "REPLACE FILTER!" is displayed, after two months (see date indicator) or when the appliance has not been used for 3 weeks, you should replace the filter:

1. Remove the exhausted filter;
2. Remove the new filter from the packaging;
3. Turn the date indicator disk (see fig. 30) until the next 2 months of use are displayed (the filter lasts about two months);
4. Refill the tank;
5. Insert the filter in the water tank and immerse it completely, sloping it to enable the air bubbles to escape (fig. 31);
6. Place the filter in the filter housing (fig. 32A) and press as far as it will go. Close the tank with the lid (fig. 32B), then replace the tank in the machine;
7. Position a container with a minimum capacity of 100 ml under the hot water spout;
8. Press the **P** button to enter the menu;
9. Turn the selection knob until "Replace " is displayed;
10. Press the  button;
11. The message "Confirm?" is displayed;
12. Press the  button to confirm the selection;
13. "Hot Water... Confirm?" is displayed.
14. Press the  button to confirm the selection. The appliance begins delivering hot water and the message "Please Wait... " is displayed.
15. After delivery, the appliance returns automatically to the "Ready for coffee" position.

The new filter is now active and you can use the coffee maker.

Removing the filter

If you want to continue using the appliance without a filter, you must remove it and notify the appliance of its removal as follows:

1. Extract the tank and exhausted filter;
2. Press the **P** button to enter the menu;
3. Turn the selection knob (fig. 8) until "Install filter*" is displayed;
4. Press the  button;
5. "Deactivate?" is displayed;
6. Press the  button to confirm and the  button to exit the menu.

TECHNICAL SPECIFICATION

Voltage:	220-240 V~ 50/60 Hz max. 10A
Absorbed power:	1450W
Pressure:	15 bars
Water tank capacity:	1,8 l max.
Size LxHxD:	238x340x430 mm
Cable length:	1,15 m
Weight:	9,1 kg
Beans container capacity:	150 g

 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.

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.

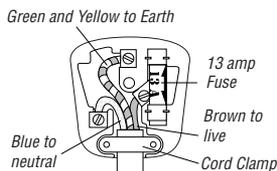
Note: Such a plug cannot be used for any other appliance and should therefore be properly disposed of and not left where children might find it and plug it into a supply socket - with the obvious consequent danger.

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 \equiv 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

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 (fig. 3).
EMPTY GROUNDS CONTAINER!	<ul style="list-style-type: none"> The grounds container (A13) is full. 	<ul style="list-style-type: none"> Empty the grounds container and drip tray, clean and replace (fig. 23). Important: When removing the drip tray, the grounds container must be emptied, even if it is not completely full. If this is not done, when you make the next coffees, the grounds container may fill up more than expected and clog the machine.
GROUND TOO FINE ADJUST MILL! <i>alternating with...</i> insert water spout and press OK	<ul style="list-style-type: none"> The grinding is too fine and the coffee is delivered too slowly or not at all. 	<ul style="list-style-type: none"> Repeat coffee delivery and turn the grinding adjustment knob (fig. 10) 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 (see the section "Adjusting the coffee mill" on page 13). If the problem persists, press the  button and deliver a little water from the spout.
INSERT GROUNDS CONTAINER!	<ul style="list-style-type: none"> After cleaning, the grounds container has not been replaced. 	<ul style="list-style-type: none"> 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!	<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 (page 16) 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 section "Cleaning the infuser".
INSERT TANK	<ul style="list-style-type: none"> The tank is not correctly in place. 	<ul style="list-style-type: none"> Insert the tank correctly and press as far as it will go.
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 services.
REPLACE FILTER	<ul style="list-style-type: none"> The water softener filter is exhausted. 	<ul style="list-style-type: none"> Replace the filter or remove it as described in the section "Water softener filter".

DISPLAYED MESSAGE	POSSIBLE CAUSE	REMEDY
Press CLEAN button	<ul style="list-style-type: none"> Milk has been delivered recently and the tubes inside the milk container must be cleaned. 	<ul style="list-style-type: none"> Press the CLEAN button and keep it pressed until the progress bar which appears on the display together with the message "Cleaning..." is complete.
INSERT WATER SPOUT	<ul style="list-style-type: none"> The hot water spout is not inserted or is inserted incorrectly. 	<ul style="list-style-type: none"> Insert water spout as far as it will go.
INSERT MILK CONTAINER!	<ul style="list-style-type: none"> The milk container is not inserted correctly. 	<ul style="list-style-type: none"> Insert the milk container as far as it will go.

TROUBLESHOOTING

Below is a list of some of the possible malfunctions.

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

PROBLEM	POSSIBLE CAUSE	REMEDY
The coffee is not hot	<ul style="list-style-type: none"> The cups were not preheated. 	<ul style="list-style-type: none"> Warm the cups by rinsing them with hot water (N.B. you can use 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, warm the infuser by pressing the  button .
	<ul style="list-style-type: none"> Low coffee temperature is set. 	<ul style="list-style-type: none"> In the menu, set a high coffee temperature.
The coffee is thin or 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. 10). Continue one click at a time until coffee delivery is satisfactory. The effect is only visible after delivering 2 coffees (see the section: "Adjusting the coffee mill" on page 13).
	<ul style="list-style-type: none"> The coffee is unsuitable. 	<ul style="list-style-type: none"> Use pre-ground 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. 10). Continue one click at a time until coffee delivery is satisfactory. The effect is only visible after delivering two coffees. (see the section "Adjusting the coffee mill" on page 13).
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.
The milk does not come out of the milk spout.	<ul style="list-style-type: none"> The milk container lid is dirty. 	<ul style="list-style-type: none"> Clean the milk container lid as described in the section "Cleaning the milk container".

PROBLEM	POSSIBLE CAUSE	REMEDY
The milk contains large bubbles and squirts out of the milk spout or there is little froth .	<ul style="list-style-type: none"> The milk is not cold enough or is not semi-skimmed. 	<ul style="list-style-type: none"> Use skimmed or semi-skimmed milk at refrigerator temperature (about 5° C). If the result is not as you wished, try changing brand of milk.
	<ul style="list-style-type: none"> The froth adjustment knob is incorrectly adjusted. 	<ul style="list-style-type: none"> Adjust following the instructions in the section on preparing drinks with milk.
	<ul style="list-style-type: none"> The milk container lid or froth adjustment knob is dirty 	<ul style="list-style-type: none"> Clean the milk container lid and knob as described in the section “Cleaning the milk container”.
	<ul style="list-style-type: none"> The hot water/steam nozzle is dirty 	<ul style="list-style-type: none"> Clean the nozzle as described in the section “Cleaning the hot water/steam nozzle”.
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).