



GRIMAC s.r.l. - Via Morozzo, 2 - 40069 Zola Predosa (Bologna) Italia
 Tel. +39 051 755668 (8 linee r.a.) - fax +39 051 755948
 E-mail: info@grimac.net - Web site: www.grimac.it

OPERATING INSTRUCTIONS

These OPERATING INSTRUCTIONS are a guide to using and maintaining the NUVOLA machine manufactured by Grimac s.r.l.
 Before USING OR WORKING ON THE MACHINE in any way, read the whole of this MANUAL carefully.

The manual contains all the information, advice and warnings about using the NUVOLA machine to ensure long term reliability and optimum operating efficiency. The machine is extremely easy to use and produces high quality coffee amazingly quickly. The operating principle consists of using pre-packed pods containing ready ground coffee that has been expertly measured and pressed. The pods have in fact been packed in a controlled atmosphere that ensures that there is no moisture inside the bags and excellent coffee is obtained in just a few seconds. Carefully follow all the advice contained in the manual in order to ensure optimum machine efficiency and in order to ensure that it has a long working life. Remember that the Operating Instructions are an integral part of the product and must be kept carefully throughout the whole working life of the machine.

If the machine is passed into another user or owner the OPERATING INSTRUCTIONS must go with it.

GRIMAC SRL RESERVES THE RIGHT TO MAKE ANY TECHNICAL CHANGES AS IT DEEMS FIT AND OPPORTUNE.

SYMBOLS

The symbols below are used to draw the reader's attention to important points regarding personal safety, machine safety and to certain operating conditions.

	General operating notice.
	General warning. Damage may be caused to things or to persons or the coffee machine.
	WARNING! Source of danger to persons or the machine.
	WARNING! Danger of electric shock to persons or electrical damage to the coffee machine.

GENERAL SAFETY NOTICES

- Any use of the NUVOLA machine that is not specified in this manual or any use of products other than those approved at the time of purchase exonerates GRIMAC s.r.l. from any liability for any harm or injury to persons or damage to things or the machine.

THE ELECTRICAL SYSTEM MUST BE EARTHED.

- Never place hands or metal or other objects inside the machine when it is connected to the electric power supply.
- Always contact one of our service centres for any repair or maintenance task that is not described in this manual.
- Before working on the machine in any way, ALWAYS take out the plug from the mains power supply socket.
- Check the power cable regularly. A worn cable is a potential source of electrocution.
- Before using the machine to make coffee, make sure that you are perfectly familiar with the location and function of all the controls and the machine specifications contained in the OPERATING INSTRUCTIONS.

GUARDS

The NUVOLA coffee machine component parts are housed inside a series of covers or guards that isolate them from any contact with the outside and the person using the machine.



- 1 - Removable top guard (fig. 1):** protects the housing containing the water tank. It is not fixed by screws and is removed in order to supply the machine with water.



- 12 - Fixed top guard (fig. 1):** must be removed ONLY by competent and authorised persons. It contains the machine's vital working parts.

SAFETY PRECAUTIONS TO BE TAKEN WHEN WORKING ON THE MACHINE

- Switch off the machine and disconnect it from the mains electric power supply before carrying out routine maintenance, special maintenance and general cleaning operations.
- In order to ensure that the machine has a long working life, component parts should be replaced with original GRIMAC parts by competent, Grimac approved staff.
- After carrying out any kind of maintenance, ensure that all parts of the machine are in proper working order.
- Repairs to the electrical system must be carried out by properly qualified service staff and only after the electric power supply has been disconnected and the plug has been removed from the mains power supply socket.
- Never use running water on the machine whilst it is switched on or being cleaned.
- Never wash the machine with solvents, paint thinners, alcohol, etc. We recommend the use of warm water and neutral detergent in order not to damage the internal and external parts of the machine.

PRACTICAL TIPS ON MAKING A CUP OF COFFEE AND/OR CAPPUCCINO

The NUVOLA coffee machine guarantees you an excellent cup of coffee and/or cappuccino thanks to the simple "pod" system it uses (these are bags of coffee that have been ready packed and expertly weighed) and to the fact that a strong jet of steam is always used for preparing the cappuccino (with no wait times). Nevertheless, the user must ensure that the steps prescribed in Point "Machine operating principles and operating instructions" are strictly adhered to and in particular the user must ensure that the pod is properly centred on the pod holder. Keep the packed pods in a dry place away from sources of heat and light.

The one portion pod is sufficient for just one cup.

BACKGROUND INFORMATION

This machine has been manufactured from component parts and materials that conform to the new standards now in force. Each part of the NUVOLA machine has therefore been carefully designed with particular attention being paid to the electrical system components and the elements that come into direct contact with the coffee being dispensed and the steam being produced.

TAKING DELIVERY AND UNPACKING

The NUVOLA coffee machine is housed in a box that protects it from jolts and breakage. Open the box and remove the moveable cardboard protection in order to be able to take hold of the bottom of the machine with both hands. Lift out slowly and carefully. Rest the machine on a flat surface or table for the preliminary operations.

First, check that the machine is complete and undamaged. If you have any doubts, contact one of our service centres. The NUVOLA coffee machine is tested, packed and dispatched ready assembled by GRIMAC s.r.l.

Any breakage or other matter is the direct responsibility of the shipper. Check the machine carefully when taking delivery.

In the event of damage, please contact the dealer and advise the damage ascertained.

Before connecting the coffee machine to the mains electric power supply, check that the mains voltage is compatible with the technical specifications.

The electrical system must be earthed.

POSITIONING AND INSTALLATION

After checking that the machine is complete, locate it in the position in which it will be used. Ensure that the position is stable and safe and allows enough space for carrying out the different operations (pulling the lever, topping up the water and fitting the pod).



Ensure that the machine is placed out of the reach of children. Do not position the machine in a place where a lot of people walk to and from or in a narrow passage way so that people do not knock into it.

The machine is delivered ready assembled and does not require any mechanical adjustment. The plug just needs to be inserted into the socket provided.

The water tank should be rinsed. To do so, remove the two pipes and remove the pipes into their holes (fig. 2).

Installation and final adjustments should nevertheless be carried out by competent and properly qualified service staff.

TECHNICAL SPECIFICATIONS

Supply voltage and absorbed power:
 - 230 V, 1400 W (Europe)
 - 110 V, 1400 W (North America/Japan)
 - Weight: 10 Kg
 - Tank capacity: 3 litres

COFFEE SECTION

- 1 Manually reset thermostat: 145 °C
- 2 Fixed, maximum temperature safety thermostats: 90 °C, 96 °C or 100 °C.

STEAM SECTION

- 1 Thermostat: 155 °C
- 1 Safety thermostat: 215 °C.

GUARANTEE

The machine is guaranteed for 24 months from the date of purchase and the guarantee extends to all electrical and mechanical components.

Guarantee rights are voided if the machine is used in an improper manner or if unauthorised persons tamper with it. Also excluded are parts that are damaged due to failure to clean the machine (see Section "Cleaning").

Parts that are acknowledged to be faulty will be replaced free of charge.

Transport costs shall be borne by the purchaser.

Grimac s.r.l. reserves the right to make modifications to any of its models at any moment. It also declines all liability for harm or injury to persons or damage to things arising from failure to observe the regulations contained in this manual.

GENERAL DESCRIPTION

The NUVOLA coffee machine comprises the following external component parts (fig. 1).

- 1) removable cover
- 2) main switch
- 3) coffee dispenser switch
- 4) steam switch
- 5) machine-powered warning light
- 6) "coffee" warning light
- 7) top and bottom pod holder and adjusting ring nut
- 8) lever for opening/closing the pod holder
- 9) drip tray and grid
- 10) power supply cable
- 11) cappuccino-maker
- 12) fixed cover

OPERATING PRINCIPLES

The pod is fitted (follow the instructions set out in Point "Machine operating principles and operating instructions" very carefully), the lever 8 is turned to the right and the coffee is dispensed: the boiling water flows from the top to the bottom through the pod holder and therefore through the pod positioned in the centre so that the coffee flows through the nozzle into the coffee cup.

SWITCHES AND SWITCH FUNCTIONS

- **Main switch:** press the button to turn on the machine, press it again and to turn off the machine.
- **Main warning light:** when this light is on the machine is powered, when this light is off the machine is not powered.
- **Coffee dispenser switch:** when this switch is pressed coffee is dispensed. Press it again to stop coffee dispensing.
- **"Coffee" warning light:** when this light is on the heating element for heating the machine is working.
- **Steam dispenser switch:** when this switch is pressed steam is dispensed. Press it again to stop steam dispensing.
- **Lever:** turn from left to right to bring the bottom pod holder tight up against the top one.

MACHINE OPERATING PRINCIPLES AND OPERATING INSTRUCTIONS

- Switch on the main switch and wait approximately 3-5 minutes for the machine "coffee" warning light to go off (fig. 3).
- Turn the lever to the left to lower the pod holder (fig. 4).
- Fit a pod inside the pod holder, making sure that it is centred (fig. 4).
- Turn the lever to the right to tighten the pod holder (fig. 5).
- Place the cup in position and press the switch to dispense the coffee (fig. 5).
- When the required amount of coffee has been dispensed, press the dispenser switch again to stop the flow of coffee.
- Turn the lever to the left and throw away the used pod (fig. 4) then close the pod holder by turning the lever to the right.

USING THE STEAM SYSTEM

How to warm up a beverage

Fill a vessel with the liquid to be warmed up, insert the steam pipe and press the switch. When the liquid is well heated, press the switch again to stop steam dispensing.

Preparing a cappuccino

Pour some milk into a vessel until it is half full (not more), insert the steam pipe into the milk and press the switch. When the milk is warm bring the pipe toward the milk's surface and move it up and down to form the typical cappuccino foam. Make sure the steam ceases before removing the steam pipe all the way. Do not forget to clean the pipe every time it is used.

Using the cappuccino-maker

After having inserted the rubber pipe of the cappuccino-maker inside the milk vessel, place the cup underneath the cappuccino-maker. Press the switch with the steam symbol to make your cappuccino. To obtain an excellent cappuccino adjust the needle vertically until the milk that comes out of the spout looks uniformly thick and foamy. In order to clean the cappuccino-maker carry out the aforesaid operation and also remove some water from the silicone pipe. It is advisable to carry out this operation after every dispensing.

Warning: Always watch out for gushes of hot water or milk.

- Turn off the machine if it is used only occasionally.

Before using the machine to dispense coffee in the normal manner, it is advisable to clean the internal elements (heat exchanger, pipes and pod holders) by "throwing away" the first coffee that is made. The machine will then be ready to serve excellent espresso coffee.

CHECKS AND SERVICING

OPERATING FAULTS

- The machine may not work because:
 - the plug has not been inserted into the mains socket;
 - the mains switch has not been pressed;
 - there is no water in the tank;
 - the filters are "blocked".

If the above operations have been carried out and the filters have been cleaned (see Point "Cleaning"), the machine must be faulty and should therefore be checked by one of our service centres.

WARNING! Before removing the guards, ALWAYS remove the plug from the mains socket. Never place hand or objects in the machine when it is still connected to the power supply.

GENERAL SERVICING



Water tank

Check the water level occasionally through the inspection glass on the right side and top up as necessary. To top up, lift the metal cover and unscrew the plug as indicated in fig. 7.

Do not use the machine if there is no water in the tank.



Adjusting the pod holder

GRIMAC s.r.l. calibrates the pod holder unit during testing before it leaves the factory. If, after the pod holder has been in use for some time, liquid is seen to seep through at the place where the two pod holders meet during coffee dispensing, the play must be eliminated by following this procedure:

- Use a 2 mm Allen key to loosen the locking pin (fig. 8);
- Turn the adjusting ring nut slightly in the direction indicated by the arrow and use the lever to try to close the pod holder, repeat this operation until the ideal adjustment has been found and then tighten the locking pin again (fig. 8).

If the leaking is not due to an increase in play, the upper pod holder seal must be inspected and if necessary replaced (fig. 9). The seal should be replaced with original GRIMAC parts by competent, Grimac approved staff.

CLEANING

FILTER: if the machine is used only occasionally, after making the last cup of coffee, wash the filter. To do this, move the lever to the right, without inserting the pod and press the dispenser switch for 2-3 seconds (fig. 5).



WARNING! The water is dispensed at an extremely high temperature.
Danger of scalding!

This ensures that the filter remains cleaner for longer.

More thorough cleaning should nevertheless be carried out at regular intervals and the filter should be removed. Use a screwdriver to prise open (fig. 6). If the filter is worn, replace it. Use only boiling water to disinfect.

BOX AND GRID: remove the box and grid from their seat at regular intervals to remove traces of spilt liquid. Used only water to clean (fig. 1, ref. 9).

WATER TANK FILTER: the water tank is fitted with a filter that is connected to the mains supply pipe and softens the water. On no account tamper with the filter.

- Approx. every 300 coffees, clean the filter in a water and salt solution (regeneration). The life of the filter mainly depends on the water hardness.

- After approx. 10-12 months replace the filter with a new one.

OUTER CASING: to keep the outer casing clean, use a sponge or cloth soaked in a specific cleaning liquid (a neutral detergent).



Do not use solvents, abrasive powders, or steel wool.

DECALCIFICATION INSTRUCTIONS

Proceed as follows to decalcify the NUVOLA coffee machine:

- Remove the purifiers from the silicone pipes.
- Remove the silicone pipes from the tank.
- Fit the pipes into a vessel inside which a bag of **Detercal** has been diluted in a half liter of water.
- Run a few cycles as if you were dispensing coffee and steam.
- After having used up the detergent solution, fill the vessel with clean water.
- Run a few more cycles to remove all traces of detergent.
- Make sure there are no traces of detergent inside the machine.
- Reinsert the pipes into the tank.
- Reassemble the purifiers onto the pipes.



It is advisable to repeat the aforesaid operation on a regular basis depending on the use of the machine and the hardness of the water.

It is possible to regenerate the water softener located inside the tank by plac-

ing it in a salt and water solution for 8-10 hours. Do not forget to rinse the softener with running water before using it.

SPARE PARTS

Replace component parts only with ORIGINAL GRIMAC SPARE PARTS. These can be obtained from our service centres.

GRIMAC accepts no liability for NUVOLA machine operating faults that develop because non original spare parts have been used. Any repairs must be carried out only by one of our service centres.

