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## SECTION 0 - INTRODUCTION

These Operating Instructions are a guide to using and maintaining the MINIGRIMAC machine manufactured by Grimalco srl.

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 coffee machine that are required to ensure long term reliability and optimum operating efficiency.

The MINIGRIMAC single unit coffee machine has been designed in such a way that it incorporates all the features of a traditional coffee machine for bars:

component parts designed for professional use, reliability and operating autonomy, a copper lined water heater but above all it provides coffee of superlative quality. The MINIGRIMAC series machines have been designed for people who really know about coffee.





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 onto another user or owner the Operating Instructions must go with it.*

### 0.2 - 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 the coffee machine	<b>WARNING!</b> Source of danger to persons or the machine	<b>WARNING!</b> Danger of electric shock to persons or electrical damage to the coffee machine.

### 0.3 - GENERAL SAFETY NOTICES

- Any use of the MINIGRIMAC machine that is not specified in this manual or any use of products other than those approved at the time of purchase exonerates GRIMAC srl 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 (see Section 4, Paragraph 4.2).
- 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**.

### 0.4 - GUARDS

The MINIGRIMAC 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.



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

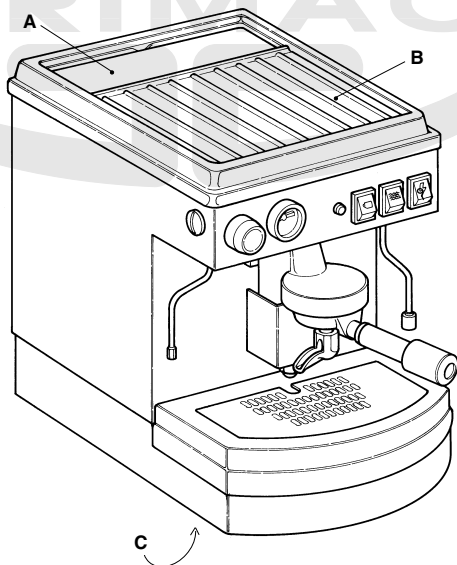
In the **MINIGRIMAC - Mains Supply** model there is no tank under the guard but a pressure adjuster that has been calibrated by GRIMAC s.r.l. during testing.



**B - Fixed top guard:** must be removed **ONLY** by competent and authorised service staff. It contains the machine's vital working parts. This guard can be used as a flat service on which to place cups and saucers.



**C - Bottom guard:** must never be removed (**ONLY** by competent and authorised service staff).



### 0.5 - POSITION OF STICKERS

Stickers and plates displaying 'Notices' and 'Warnings' are located on the machine. Replace them if they become illegible.

### 0.6 - SAFETY PRECAUTIONS TO BE TAKEN WHEN WORKING ON THE MACHINE

- Switch off the machine and disconnect it from the 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, any component parts should be replaced with original GRIMAC parts by competent Grimaç 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.

### 0.7 - PRACTICAL TIPS ON MAKING A CUP OF COFFEE

The MINIGRIMAC series coffee machine guarantees you a perfect cup of coffee because it uses the same professional standard component parts as those found in coffee machines in bars. Nevertheless, the user must ensure that the steps prescribed in Section 3 Paragraph 3.2 are strictly adhered to and in particular the user must ensure that the filter is filled with the correct amounts of coffee.

**The dose inserted in the filter holder (1 or 2 cups) is sufficient for just one or two cups.**

### 1.1 - 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 MINIGRIMAC 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.

### 1.2 - TAKING DELIVERY AND UNPACKING

The MINIGRIMAC 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.

Also check that underneath the coffee dispenser unit there is the box containing the accessories that come supplied with the machine.

The box contains:

- a filter holder and a filter for one after dinner cup of coffee (fig. 1 ref. 13)
- a filter holder and a filter for two after dinner cups of coffee (fig. 1 ref. 14)
- a measuring spoon (fig. 1 ref. 16)
- an instrument for pressing down the coffee (fig. 1 ref. 15)

The MINIGRIMAC 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, advise GRIMAC s.r.l. of 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.**

### 1.3 - 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 (fitting the filter holder, obtaining hot water and steam)

*The machine is delivered ready assembled and does not require any mechanical adjustment.*

*The plug just needs to be inserted into the socket provided.*

#### MINIGRIMAC - T

For the **tank** version, leave enough space to allow the tank to be topped up.

#### MINIGRIMAC - M

Remember that the supply pipe to the **mains supply** version is 1.5 m long.

When the pipe has been connected to the mains supply, first dispense the normal supply of coffee and then clean the pipe by running the water through the coffee dispenser nozzle (fig. 2).

When the MINIGRIMAC (T/M) has gone through the above steps, the plug merely needs to be inserted into the appropriate socket.



E' bene inoltre collocare la macchina su un piano sufficientemente alto per evitare che sia alla portata dei bambini.

Non collocarla in luoghi di passaggio o corridoi stretti per evitare che venga urtata.

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

### 1.4 - TECHNICAL SPECIFICATIONS

Supply voltage and absorbed power

- 230 V, 900 W (Europe)
- 110 V, 900 W (North America)

Dimensions and space required

H = height = 420 mm

D = depth = 420 mm

W = width = 270 mm

- Weight: 24 kg
- Tank capacity: 5 litres (MINIGRIMAC - T)

### 1.5 - GUARANTEE

The machine is guaranteed for 12 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. Parts that are acknowledged to be faulty will be replaced free of charge. Transport costs shall be borne by the purchaser.

Grimac srl 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.

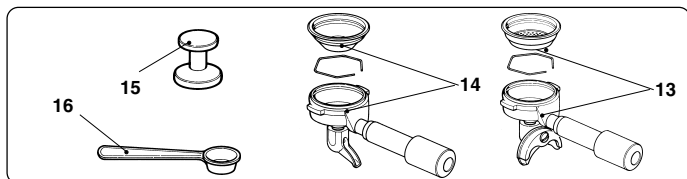
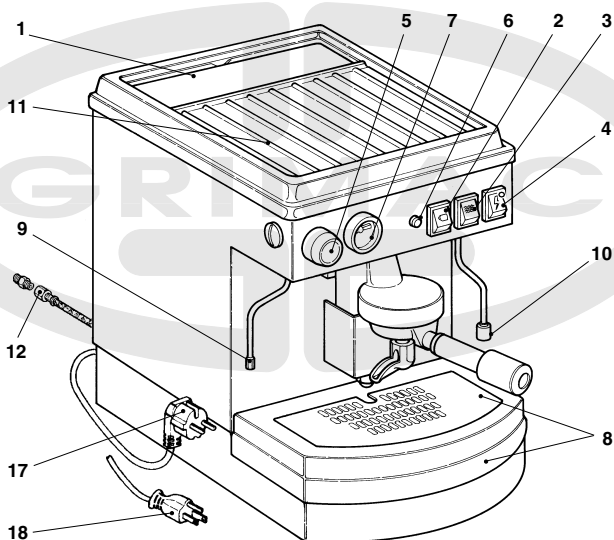


## SECTION 2 - GENERAL DESCRIPTION

### 2 - GENERAL DESCRIPTION

The MINIGRIMAC machine comprises the following external component parts:

- |                               |                                       |
|-------------------------------|---------------------------------------|
| 1) removable cover            | 10) hot water nozzle                  |
| 2) coffee dispenser switch    | 11) flat surface for cups and saucers |
| 3) hot water dispenser switch | 12) power cable                       |
| 4) main switch                | 13) filter holder plus 1 cup filter   |
| 5) steam dispenser tap        | 14) filter holder plus 2 cup filter   |
| 6) warning light              | 15) coffee press                      |
| 7) gauge                      | 16) measuring spoon                   |
| 8) drip tray and grid         | 17) European plug                     |
| 9) steam nozzle               | 18) American plug                     |



### 2.2 OPERATING PRINCIPLES

Coffee dispenser: the machine has been designed to dispense coffee from the nozzle of a filter holder filled with ground coffee.

The operating principles are the same as that for traditional espresso coffee machines. It has an internal water heater and can in fact also dispense hot water and steam from separate nozzles in order to make tea, cappuccini, etc...



## SECTION 3 - USING THE MACHINE

### 3.1 - SWITCHES AND SWITCH FUNCTIONS

- **0/1 Main switch.** Set at **1** to switch on and set at **0** to switch off completely.
- **Coffee dispenser switch:** when the warning light is off, press the dispenser switch to obtain a supply of coffee and press again to interrupt the supply.
- **Warning light:** if the light is off, the machine is ready to dispense coffee; if the light is on, the temperature is not ideal. Wait for a few seconds until the light goes out.
- **Hot water dispenser switch:** use this switch to obtain a supply of almost boiling water from the nozzle on the right.
- **Steam dispenser tap:** turn clockwise to obtain steam from the nozzle on the left. Turn anticlockwise to close (as indicated by direction of arrow).

### 3.2 - MACHINE OPERATING PRINCIPLES AND OPERATING INSTRUCTIONS

#### DISPENSING COFFEE

Switch on the main switch and wait approximately 8-10 minutes for the warning light to go off (fig. 3).

Choose the filter holder supplied for one or two cups (fig. 1, ref. 13 or 14) and use the measuring spoon (fig. 4) to fill the coffee filter. One spoonful corresponds to the necessary dose for one coffee. Next, press down the coffee (fig. 5) and refill the filter holder.

Place the cup(s) in position and press the switch to dispense the coffee (fig. 6).

When the required amount of coffee has been dispensed, press the switch again.

Remove the filter holder and throw away the coffee grounds.

Turn off the machine if it is used only occasionally.

#### DISPENSING HOT WATER

To obtain a supply of hot water, just keep the relative switch (fig. 7) pressed until the required amount has been obtained.

No more than the amount required for a cup of tea (about 200 c.c.) should be dispensed at any one time and you should wait for the warning light to go out.

**Warning! Exercise great caution in order to avoid scalding!**

#### DISPENSING STEAM

To obtain a supply of steam, turn the knob anticlockwise (fig. 8). The jet of steam that is dispensed is sufficient to boil a considerable quantity of liquids.

**Warning! Exercise great caution in order to avoid scalding!**



*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.*

### 3.3 - ACCESSORIES AND OPTIONAL EXTRAS

The GRIMAC series of accessories includes the indispensable MIGNON coffee grinder and measurer for instant grinding and spot on measuring of the quantity. It is compact and is the perfect companion for your coffee machine.

For the MINIGRIMAC - M the water filter GRIMAC 5LT should be fitted. This is part of our range of accessories and should be fitted between the mains pipe and the fitting on the machine.

GRIMAC RICAMBI also supplies special adapters for the filter support if you should wish to use pods containing pre-measured quantities of coffee (pod system).



### 4.1 - 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;
- the filters are blocked;
- there is no water in the tank (MINIGRIMAC -T);
- there is an obstruction to the mains water supply (MINIGRIMAC -M).

If the above operations have been carried out and the filters are clean (see 5.1) 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.

### 4.2 - GENERAL SERVICING



#### POWER CABLE

Check the power cable regularly and replace if it is worn or damaged.



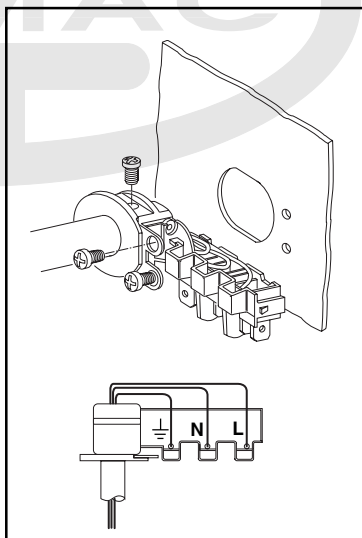
Remove the plug from the mains socket. Remove the wires from the terminal (located inside the machine).

Loosen the 3 screws that fix the terminal to the machine.

Remove the worn cable, reconnect the wires in the manner indicated in the drawing. Reconnect the wires to the terminal.

Refit the terminal and tighten the 3 terminal screws.

**This operation should be carried out by an authorised person.**





### **WATER TANK**

Check the water level occasionally and top up as necessary. To top up, lift the cover and unscrew the plug as indicated in fig. 10.

A device has nevertheless been fitted that stops the machine if the water level drops below a preset limit.

Add water to reset this safety device.

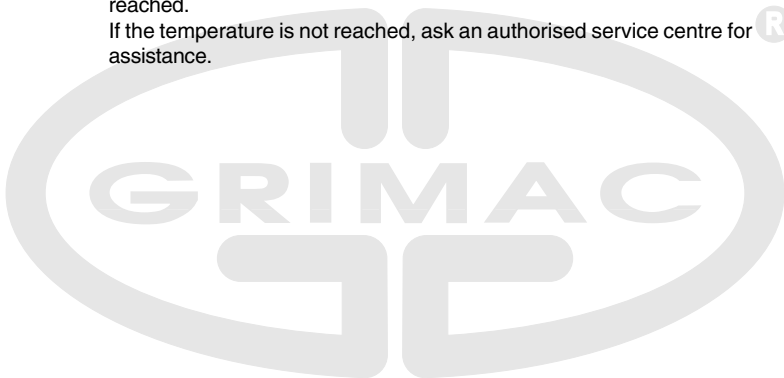


### **PRESSURE GAUGE**

A pressure gauge has been supplied to check pressure inside the heat exchanger, see fig. 1, ref. 7.

Ensure that machine operating pressure is between 1 and 1.3 bar; if it is lower, wait for a few seconds for the required water temperature to be reached.

If the temperature is not reached, ask an authorised service centre for assistance.



## SECTION 5 - MAINTENANCE

### 5.1 - CLEANING

**FILTER:** If the machine is used only occasionally, after making the last cup of coffee, wash the filter. If the filter appears to be worn out, replace it with an original GRIMAC spare part.



**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. Use a screwdriver to prise open (fig. 6). If the filter is worn, replace it.

**TRAY AND GRID:** remove the tray and grid from their seat at regular intervals to remove traces of spilt liquid. R

Use only boiling water to disinfect (fig. 1, ref. 8).

**WATER TANK FILTER** (MINIGRIMAC - T): 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.

- Clean every 2 months by placing it in a salt and water solution.
- After 3 washes, (6 to 8 months' use) 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).



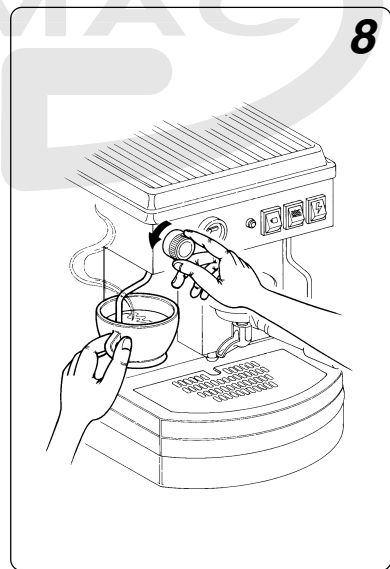
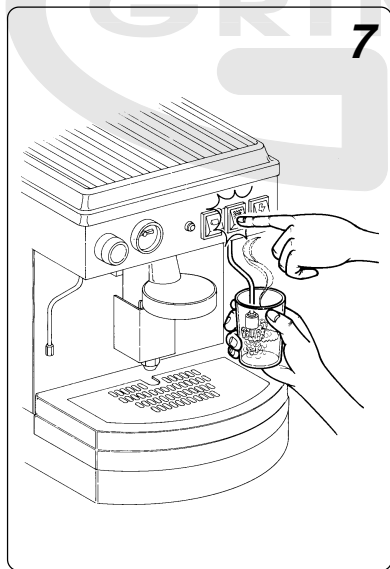
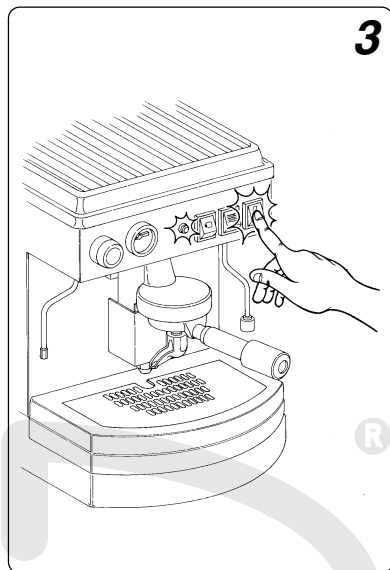
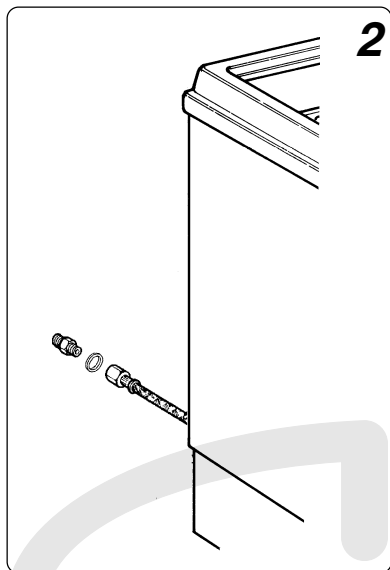
*Do not use solvents, abrasive powders, or steel wool.*

## SECTION 6 - SPARE PARTS

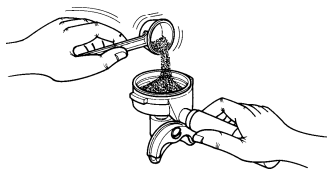
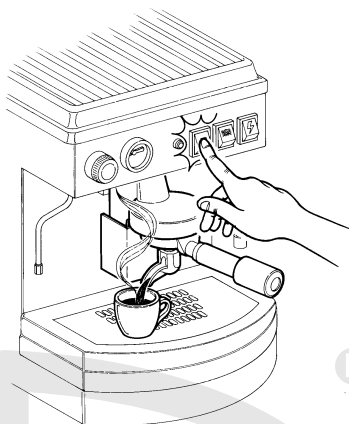
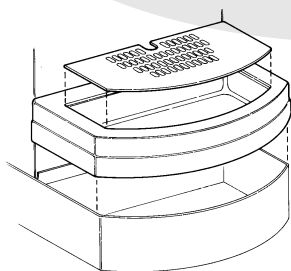
Replace component parts only with ORIGINAL GRIMAC SPARE PARTS. These can be obtained from our service centres.

GRIMAC accepts no liability for MINIGRIMAC operating faults that develop because non original spare parts have been used.

Any repairs must be carried out by one of our service centres.





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