



TECHNICAL INSTRUCTIONS



BUBBLE



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TABLE OF CONTENTS

| | |
|------------------------------------------------|----|
| INTRODUCTION AND GENERAL NOTES..... | 3 |
| INSTALLATION NOTES | 3 |
| USE AND MAINTENANCE NOTES | 4 |
| HACCP SCHEDULE | 4 |
| MAIN FEATURES | 5 |
| ELECTRIC CONNECTION..... | 6 |
| HYDRAULIC CONNECTION..... | 6 |
| MACHINE KEYPAD | 7 |
| STARTING UP | 7 |
| DISPENSING..... | 9 |
| HOW TO MAKE A GOOD CUP OF COFFEE | 9 |
| DOSE PROGRAMMING..... | 10 |
| DEFAULT DELIVERY SETTING..... | 10 |
| PARAMETERS PROGRAMMING..... | 11 |
| INFO RESET | 13 |
| GROUP CLEANING | 14 |
| MANUAL CLEANING OF STEAM WAND | 15 |
| SPECIAL FUNCTIONS FOR MACHINE CALIBRATION..... | 16 |
| SECURITY - ALARMS | 19 |
| SUGGESTED ORDINARY MAINTENANCE | 20 |

INTRODUCTION AND GENERAL NOTES

Thoroughly read the instructions contained in this booklet because it gives important information regarding safety for installation, use and maintenance.

Keep this booklet in a safe and accessible place for further consultation.

This machine must be used only for the purpose it was designed:

dispensing coffee, cappuccino, pouring hot water.

Any other use is to be considered inappropriate and therefore dangerous.

The manufacturer declines all responsibility for damage caused by any improper, incorrect and unreasonable use of the machine.

The use of any electric appliance implies the observance of some fundamental rules.

More specifically:

- The appliance should be placed on a stable flat surface with the bodywork at a minimum distance of 20mm from the back wall, furthermore, it must be installed taking into account that the highest shelf must sit at a height that is at least 1.5 mt. During installation, fit a device (having a contact separation in all poles that provide full disconnection under overvoltage category III) that guarantees disconnection from the mains, duly sized according to the power of the equipment (see rating plate), as well as protection against leakage current with a value equal to 30mA. This cut-off device must be assembled on the power supply line in compliance with installation rules.
- do not touch the appliance with your hands or feet wet or damp
- do not use the appliance with bare feet
- do not pull the power cord to disconnect the plug from the power socket
- do not leave the appliance exposed to the weather (rain, sun, frost)
- do not let children or untrained persons use the appliance.

Before carrying out any cleaning and maintenance, disconnect the appliance from the power supply, pulling the plug from the power socket and turning off the main switch.

In case of failure or malfunction turn the machine off and do not attempt to carry out any repairs or direct operations on the machine.

All repairs must be carried out in an authorized service centre, using original spare parts only.

Failure to comply with the above recommendations will compromise the safety of the machine and the warranty conditions.

If this machine is no longer used we recommend that it is made inoperative by disconnecting the cable from the power supply, and all potentially dangerous parts are made harmless, especially to protect children who might use the machine for their games.

INSTALLATION NOTES

Installation must be carried out according to the manufacturer's instructions.

An incorrect installation can cause damage to persons, animals or things; the manufacturer declines all responsibility for such situation.

Place the machine on a table having minimum height of 1,0mt. Furthermore the surface has to be flat, having a maximum inclination of 5°, in order to secure a perfect stability. Check also that the table can bear the weight of the machine.

This is a commercial machine and is not designed for home use and must be operated by duly qualified persons.

The appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children being supervised not to play with the appliance.

After unpacking check that the machine is not damaged.

If in doubt, do not use the machine and contact an Carimali Authorized Service Centre.

All packing materials (plastic wrapping, polystyrene, nails, etc.) are potentially dangerous and must be kept out of children's reach and disposed of in a safe manner for the environment.

Before connecting the machine to the power supply make sure that the rating information of the machine correspond to that of the power supply, and that the power supply is adequate to additional power absorption of the machine.

The machine is supplied with power cord and without plug, connect the machine to the main switch with knife switch and protection fuses. In case of maintenance, open the knife switch.



The machine with single phase voltage, having a rated current more than 16A, must be connected to power supply with a dedicated impedance.

The electrical safety of this machine can be guaranteed only if correctly connected to an efficient earth circuit as indicated by current electrical safety regulations.

It is necessary to check this fundamental safety prerequisite, and in case of doubt, ask a professionally qualified technician to check the circuit.

The manufacturer declines all responsibility for any damage caused by failure to earth the equipment.

In order to avoid any dangerous overheating, we recommend that the power cord be fully unwound.

In case of damage to the cord, contact exclusively an authorized service centre to have it replaced.

The power cord of this machine must not be replaced by the customer.

Do not leave the machine connected unnecessarily.

Turn off the main switch of the machine when not in use.

Do not cover the ventilation openings of the machine.

Place the machine at an adequate distance from walls, objects, area where a water jet could be used, etc.

The machine must be connected to a system with a water pressure which is not greater than 0.6 MPa. New hose-sets supplied with the appliance are to be used while old hose-sets should not be reused.

Do not use pipes and coupling gaskets already used for previous installations.

If the pressure is greater, a pressure reducer must be installed.

The machine must be connected to a softener.

ENVIRONMENTAL CONDITIONS TO USE THE MACHINE

Environmental temperature: 5 – 30 °C (empty the hydraulic system in case of freezing)
Maximum humidity: 80% relative humidity
Water hardness: 5° eh, 7° dH, 13° Fh

1. Essential operational requirements

1.1 The machine shall be supplied with water for human consumption, in compliance with the laws in force where the installation is performed. The installer shall check with the owner or manager of the machine if the water complies with the requirements above.

1.2 The components and materials to be used during the installation are those supplied with the machine. In case other components are needed, the installer shall check if they are suitable to be used in contact with water for human consumption.

1.3 The installer shall set up hydraulic connections in compliance with the rules about hygiene, water safety and environment in force where the installation is performed.

1.4 At the end of the installation the machine is activated, brought to nominal operating conditions and left in the “ready for operation” mode.

Then it is turned off and the whole water circuit is drained from the initial water to eliminate any impurities.

Then the machine is once again loaded and brought to nominal operating conditions.

When the machine is in the “ready for operation” mode, the following deliveries are performed:

- 2 liters from the hot water outlet (in case there are more outlets, the 2 liters shall be equally divided)
- 1 liter of water from each coffee outlet
- each steam outlet is kept open for 1 minute

At the end of the installation, it is recommended to write a report of the operations that were performed.

USE AND MAINTENANCE NOTES

Cleaning and user maintenance shall not be made by children without supervision. (See the GROUP CLEANING and SUGGESTED ORDINARY MAINTENANCE chapters).

For a correct functioning of the machine it is fundamental to comply with the manufacturer's instructions, having qualified personnel to carry out special maintenance and to check all safety devices.

Do not use the machine without water.

Avoid to expose hands or other parts of the body to the coffee dispensing spouts or to the steam or hot water nozzles.

The water and steam from the nozzles is very hot and can cause severe burns.

The water and steam nozzles and the filter holders are very hot and therefore must be handled with care, holding them in the appropriate points.

Do not leave the machine in rooms where the temperature is below 0°C or 32°F without having first drained the boiler and the hydraulic circuit.

Cups and coffee cups must be placed on the cup-warmer tray (if fitted) only after having been fully drained.

Only the crockery related to the machine should be placed on the cup-warmer tray.

Placing any other object on the tray is to be considered incorrect.

The machine is not waterproof and therefore should not be cleaned with water jet.

1. Use of the machine

1.1 At the beginning of operations, and in any case at least once a day, all the water inside the machine shall be changed, following the instructions:

- for fully automatic machines, carry out a group washing and a power cleaner washing.
- for traditional machines, see the paragraph about draining the boiler.

1.2 Before the steam wand is used, it shall always be purged from the condensation water for at least 2 seconds or according to the instructions by the manufacturer.

2. Maintenance and repair

2.1 The components used during the maintenance or repair shall be guaranteed to meet the same hygiene and safety requirements as the machine. Genuine spare parts offer this guarantee.

2.2 After components related to parts that come into contact with water or food are repaired or changed, a washing procedure shall be carried out as indicated in the paragraph about the rules for the installation.

HACCP SCHEDULE

We hereby declare that our HORECA machines have been designed and constructed to comply the European Community Sanitary law and that their sales are authorized by the Health Authorities.

A HACCP schedule (Hazard Analysis Critical Control Points) for risk identification and assessment is required. You should carry out a risk analysis on your premises.

With correct installation, care, maintenance and cleaning with approved detergent, Carimali meet the requirement above mentioned.

Carry out cleaning instruction, provided with machine, every day or at 8 hours shift intervals, to ensure that your system contains a minimum bacteria.

MAIN FEATURES

| MACHINE | E1 | | E2 | E3 |
|-----------------------------------------------|----------------------|--------------------------------------------------|-----------------------|----------------------------------------------------|
| Maximum quantity of coffee dispensed per hour | 480 | | 480 | 720 |
| Width (mm.) | 356 | | 722 | 942 |
| Height (mm.) | 497 | | 497 | 497 |
| Depth (mm.) | 514 | | 514 | 514 |
| Net weight (Kg.) | 30 | | 47 | 61 |
| Boiler capacity (lt.) | 4 | | 11 | 14 |
| Hot water nozzle | 1 | | 1 | 1 |
| Steam nozzle | 1 | | 2 | 2 |
| Display | 1 | | 1 | 1 |
| Boiler resistor (W) Standard version | 1200W | 1600 W | 2800 W | 4000 W |
| Voltage | 120V 1+N 50/60Hz | 200V 1+N 50/60Hz 220-240 V 1+N 50/60 Hz | 220-240 V 1N 50/60 Hz | 220 – 240 V 1N 50/60 Hz 380 – 415 V 3N 50/60 Hz |
| Measured noise | Value less then 70dB | | | |

Materials used: Reinforced silicone for the articulated feed tube

- Reinforced silicone for the articulated pump tube
- Brass chromed for the brewing group
- Brass for taps and connections
- Stainless bodywork.

Machine Equipment:

- 1 Filter holder 1 outlet (with 7g - 0,2469 oz filter)
- 1 Filter holder 2 outlet (with 14g - 0,4938 oz filter)
- 1 Filter 6 g - 0,2116 oz
- 1 Coffee outlet 1 way (high)
- 1 Rubber blind filter
- 1 Hose clamp (Ø 16 / 27)
- 1 Drain armoured hose (Internal Ø 16 - 1,5 m / 4,92 feet)
- 1 Inlet armoured pipe (Ø 3/8 G - 1,5 m / 4,92 feet)
- 1 Brush
- 1 Group Gasket
- 1 Drain "L" brass pipe
- Spoon

Peripheral applications:

Serial output RS 232 C for:

- I/O interface 26 relay
- Mini counter 1 key
- Mini counter with 15 keys.

NOTE: The registration and technical data plate of the machine is on the side of the machine behind the drip tray.

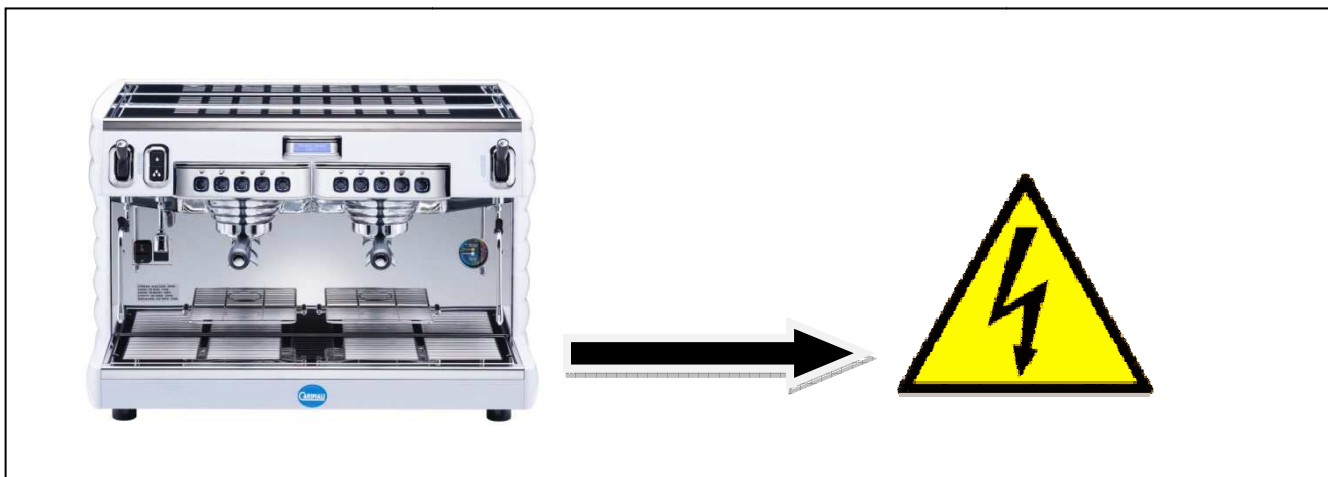


ELECTRIC CONNECTION

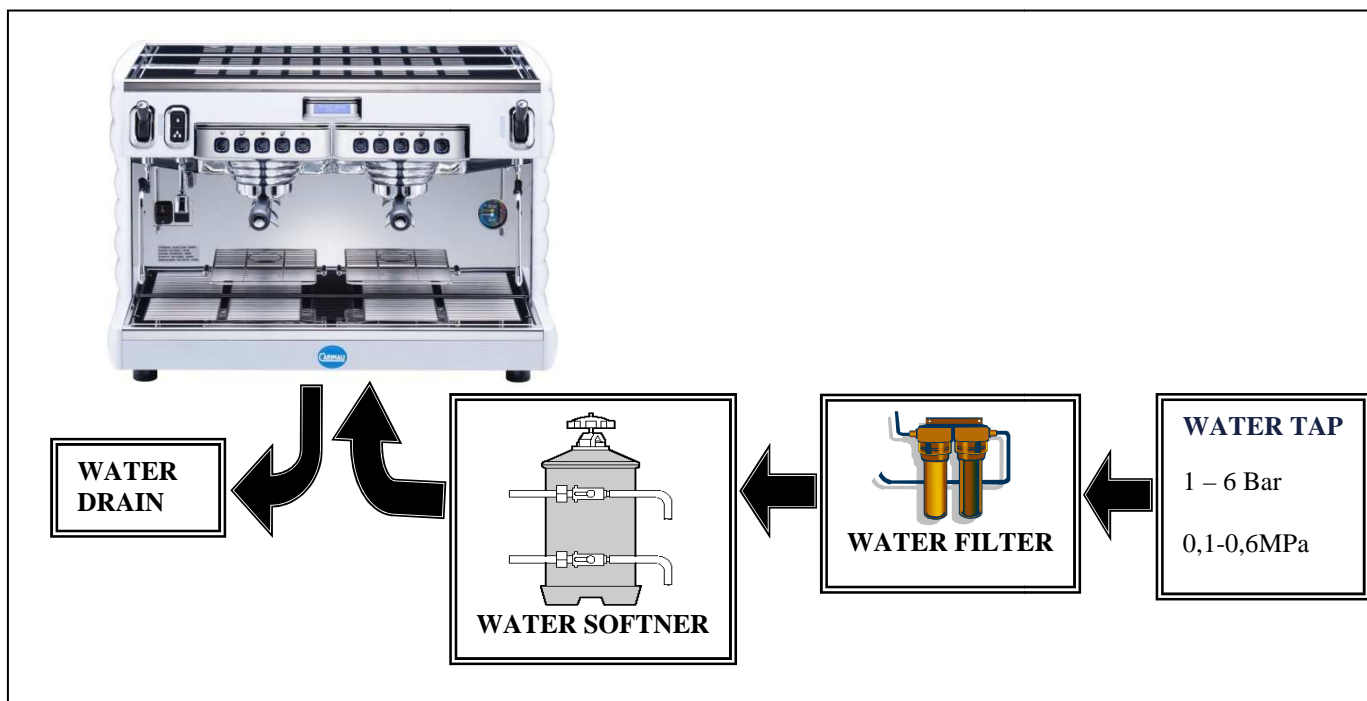
Before making the connection, verify that the electric wiring prepared by the customer follows the current regulations and that it has been earthed properly .

Remember that Carimali is not responsible for damages due to incorrect electrical connections, and furthermore, that the installer is responsible in case of damage.

Check that the voltage corresponds to that indicated on the registration and technical data plate of the machine.



HYDRAULIC CONNECTION



MACHINE KEYPAD

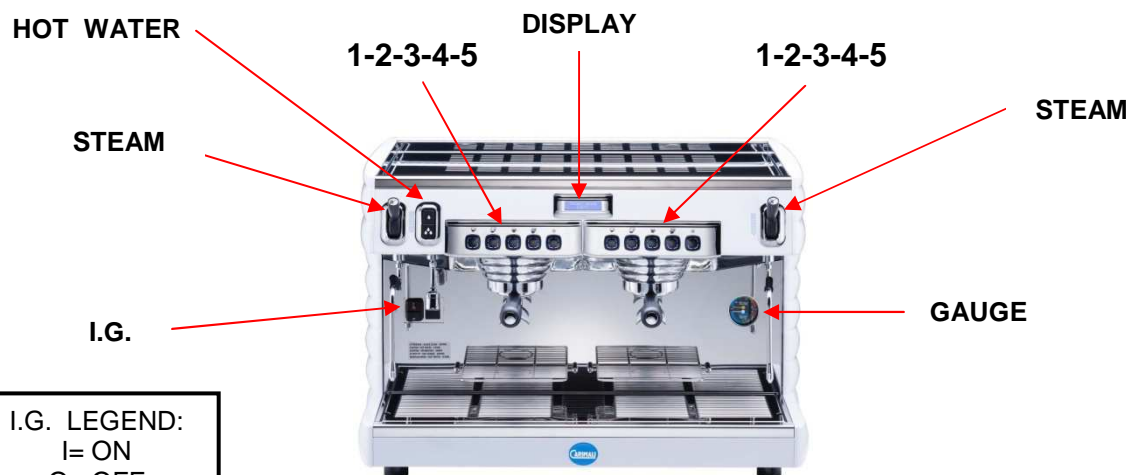


| Group | keypad |
|-------|----------------|
| Key 1 | 1 Espresso |
| Key 2 | 2 Espressos |
| Key 3 | 1 Coffee |
| Key 4 | 2 Coffee |
| Key 5 | Continue/Prog. |

STARTING UP

Turn on the tap from the water mains and switch the power ON by pressing the "I.G." main switch.
The display will show for few seconds the software version: Example (VER 4.10) (E2 model)

CARIMALI
BUBBLE VX.XX



I.G. LEGEND:
I= ON
O= OFF

Re-filling the boiler.

This operation will automatically stop when the level of the probe is reached.

FILLING UP

During this phase all the keypad LEDs slowly flash simultaneously.

Heating the boiler.

During the heating up phase the display shows the boiler temperature and all the keypad LEDs light on in sequence from right to left.

HEATING BOILER
XXX °C

During this phase heating of the boiler starts, wait about 20 minutes to reach the set temperature. This operation will automatically stop when the boiler temperature is reached, the display shows:

SELECT DRINK
XXX °C

PLEASE NOTE:

ALL VERSIONS DURING THIS STAGE, KEEP THE STEAM LEVER OPEN FOR A FEW SECONDS, THIS OPERATION WILL RELEASE THE AIR FROM THE BOILER



Check the delivery pressure in the pump gauge by fitting the filter holder filled with properly ground, pressed coffee dose in order to deliver at 8/9 bars.

DISPENSING

1) Coffee Dispensing

Place a cup under the dispenser and press one of the coffee dose keys (N° 1-2-3-4). The dose will automatically stop once the pre-programmed dose has been delivered.

The system can be used for the simultaneous dispensing of coffee from all the groups on the machine.

The "5" button is designed for a continuous delivery and for a delivery stop.

Please note: If you press any dose key of the same keypad during dispensing, the dose will be stop.

2) Hot water dispensing

Place a container under the hot water nozzle, and press on of the hot water dose keys. The dose will automatically stop once the pre-programmed dose has been delivered.

3) Dispensing steam

Warm up drinks (milk, cognac, etc) as follows:

Before you heat any drink, carefully let a small amount of steam out of the steam arm, by rotating the steam tap knob anticlockwise, to eliminate any condensation inside the pipe, then close the steam nozzle by rotating the steam tap knob clockwise .

Dip the steam nozzle in the drink and then open the steam tap knob.

Close the steam tap knob then remove the container with the heated drink,

Open again the steam tap knob for a moment to purge the nozzle from any liquid trapped inside.

This operation is very important as it prevents milk or other liquids from being drawn into the boiler.

HOW TO MAKE A GOOD CUP OF COFFEE

The physical state of the ground coffee is fundamental for a good beverage.

| Condition of the coffee | It comes out slowly | It comes out rapidly |
|---------------------------|-----------------------|------------------------|
| Dose of ground coffee | Excessive | Insufficient |
| Pressure on ground coffee | Insufficient | Excessive |
| Atmospheric humidity | Too damp | Too dry |
| Degree of grinder | Too fine | Too coarse |
| Filter condition | Partly clogged, dirty | Holes enlarged by wear |

Proceed with preparation of the first cups of coffee: Fill the filter with the correct quantity of ground coffee and press it lightly with the special presser.

The machine is equipped with following components:

6-grams basket filter for single cup

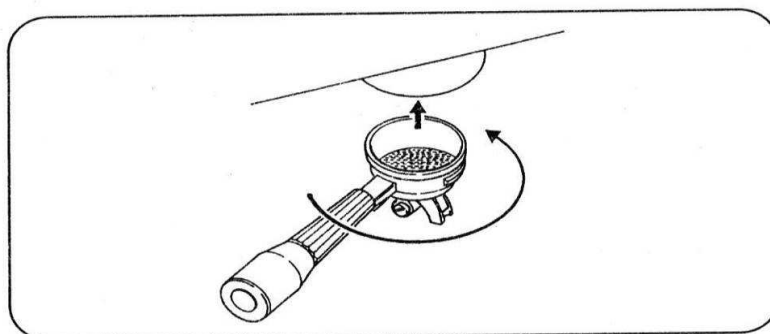
7-grams basket filter for single cup

14-grams basket filter for double cup

Dosage and grinding must be set according to the machine and strength of coffee desired. If too much coffee is used, the filter holder cannot be inserted in to the unit; if too little coffee is used, the coffee grounds get too wet.

For a perfect cup of coffee, it is advisable to have a self-dosing coffee grinder beside the machine. This will give improved quality of the coffee, and ensure it is kept constant because it is freshly ground.

Fit the filter holder into the unit with the knob facing to the left, then turn in to the right until it locks.



When the coffee grounds have to be emptied out, knock the filters against a wooden surface and not a metal one as this could damage the edge of the filter and jeopardize its tightness.

DOSE PROGRAMMING

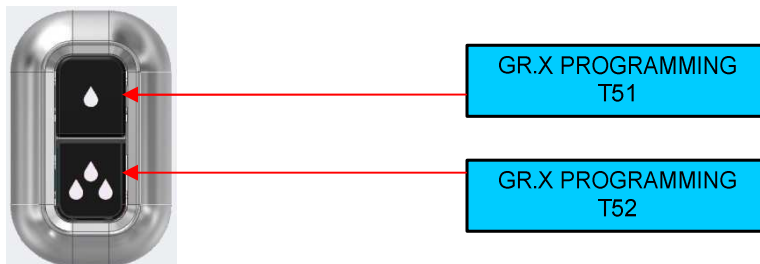
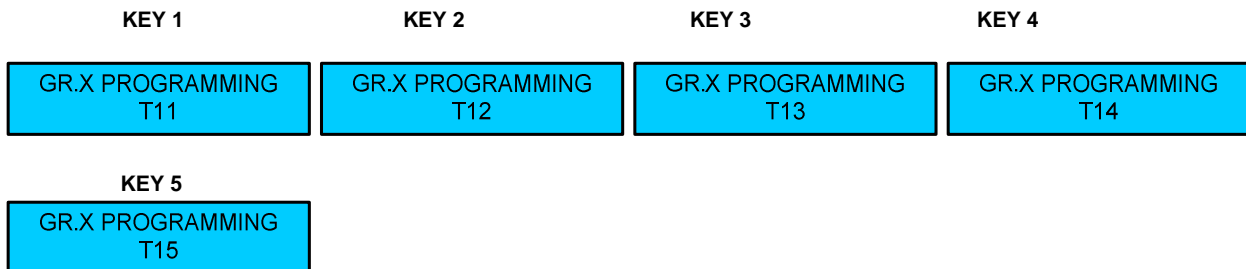
1) Programming the volumetric coffee dose

The following procedure is valid for all coffee keys.

- Press key N°5 (contin./progr.) of the first keypad and keep it pressed for ten seconds. The programming level is shown by the flashing LED for all keys.



- Press the coffee or hot water dose keys to be programmed and the beverage will start being dispensed; The display shows:



- Press the selected dose key again when the required dose has been delivered. The dose will be stored in memory automatically.

The planning effected on the left group will be brought on all the machine keypads.

In the case is required to diversify the doses from the remainders keypad, repeat the procedure on the right keypad.

Please Note:

- The pre infusion is enabled only for Tx1 e Tx2 of each group
- To go out of the programming phase without modifying the parameters, is necessary to attend the time - out of thirty seconds without pressing any key.

DEFAULT DELIVERY SETTING

| Drink name key | Tea 1 Tea 2 | 1 ESPRESSO | 2 ESPRESSO | 1 COFFEE | 2 COFFEE | CONTINUOS KEY |
|-----------------|-------------------------------|---------------|---------------|-------------|-------------|------------------|
| Water volume | Tea 1 =10sec Tea 2 =20 sec | 40 cc | 40 cc | 80 cc | 130 cc | 500 cc |
| Preinfusion cc | | 3 cc | 3 cc | 0 cc | 0 cc | N.A |
| Preinfusion sec | | 2 sec | 2 sec | OFF | OFF | N.A |

PARAMETERS PROGRAMMING

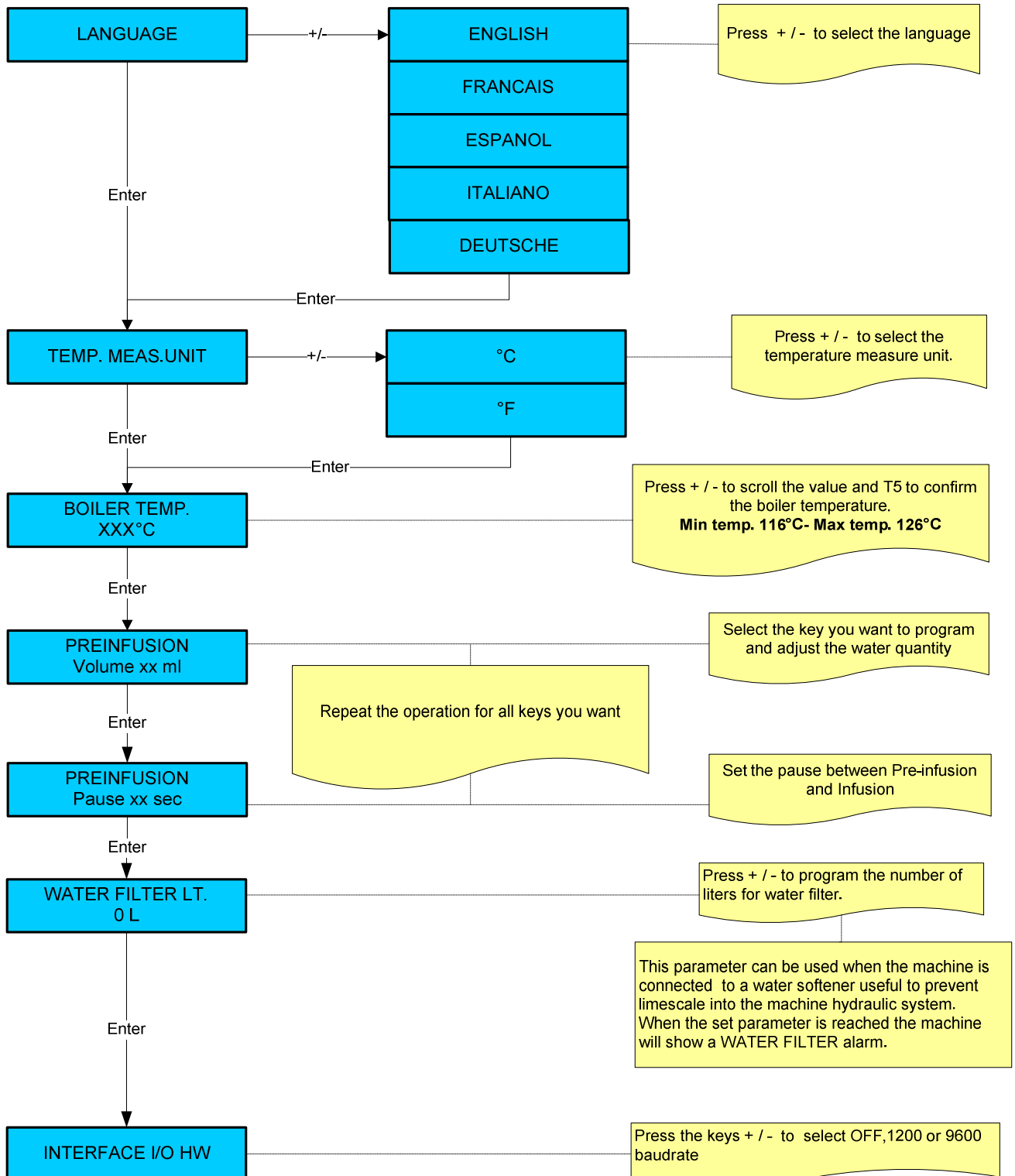
Proceed as follows to access the machine parameters field:

- Power OFF the machine
- Power ON the machine keeping keys N° 5 (continuous/program) pressed for 10 seconds until the display unit shows:



| Key | Function | Special Function | Description |
|-----|------------|------------------|--------------------|
| T1 | 1 espresso | + | Scroll menu |
| T2 | 2 espresso | - | Scroll menu |
| T3 | 1 caffè | | |
| T4 | 2 caffè | | |
| T5 | continue | Enter/Program | Confirm |

Use + (T1) / - (T2) to change parameter
Use Enter (T5) to confirm the parameter modification.



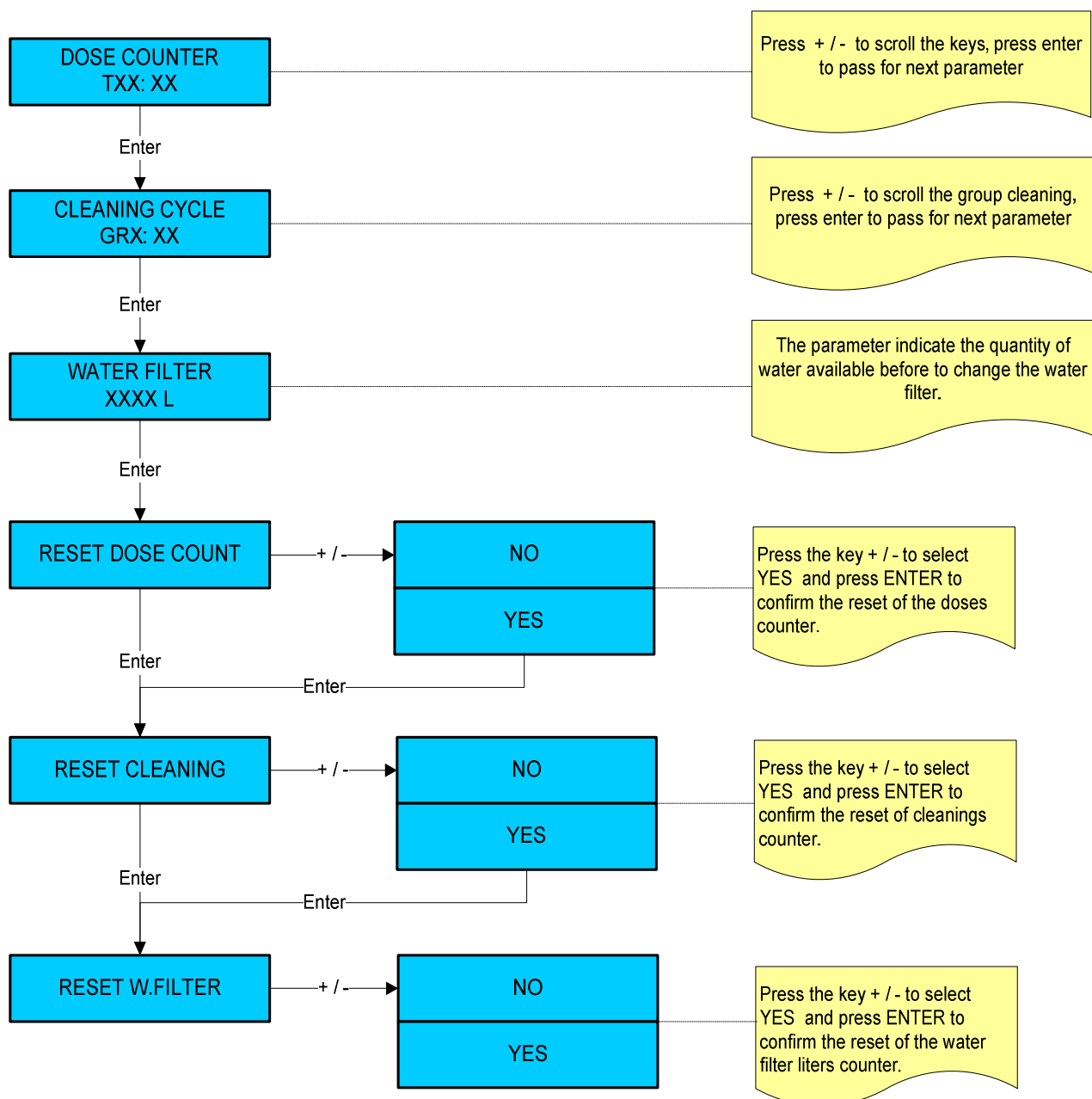
Please note:
To exit from the technical program menu press key n°5 (Enter)

INFO RESET

Proceed as follows to access the info reset field:

- Machine in "Select drink"
- keep press N° 5 key (continuous/program) for 5 seconds until the display shows:

Use + (T1) / - (T2) to change parameter
Use Enter (T5) to confirm the parameter modification.



| |
|-----------------------|
| GROUP CLEANING |
|-----------------------|

PLEASE NOTE: We recommend to carry out following cleaning operations at the end of each working day

1) **Cleaning the third duct of the group and gasket cleaning**

A) Cleaning the third duct of the group

- Insert the supplied blind filter diaphragm and cleaning tablet in the filter holder and fit it into the group.
- Switch off the machine through the main switch (I.G.).
- Switch on the machine through the main switch, keeping pressed at the same time the key n° 1 and 4 (of the group you want to clean) till the key LEDs light on, the display shows:

GR.X CLEANING



Where X indicates the group.

The group will dispense by impulses ten times for a total duration of 100 seconds.

B) Gasket cleaning

Repeat the above described operation and during the dispensing slightly open and close the filter holder a few times, letting the water flow out. Be careful not to let hands and other parts of the body come into contact with water, in order to avoid danger of burns; If necessary repeat this operation several times, and remove the remaining coffee from the group gasket by using a cloth.

1) Cleaning the filter holders

Carry out the following operations:

Remove the filters from the filter holders and wash both parts under running water.

Remove the remaining coffee by using a cloth.

PLEASE NOTE: We have received a letter from the Copyright Clearance Center (CCC) regarding the use of the text in this book. CCC has advised that the text in this book is not in the public domain and that it is not clear if the text is in the public domain. Therefore, we have decided to remove the text from this book. We apologize for any inconvenience this may cause.

We also recommend to use the special brush (code N° 95.01773) supplied with the machine, to eliminate coffee residues from the filters and showers



FOR CLEANING OPERATIONS, WE STRONGLY RECOMMEND TO USE OUR CLEANING PRODUCTS:



CLEANING TABLETS

120 Tablets (1.0gr.) Code N° 06.00133

MANUAL CLEANING OF STEAM WAND

PLEASE NOTE: IT IS ADVISABLE TO CARRY OUT THESE TYPES OF CLEANING AT THE END OF EACH WORKING DAY

- 1 ► Leave the steam wand into hot water for 5 minutes.**



- 2 ► Clean the steam wand by means of a cloth.**



- 3 ► Do not leave the steam wand into any liquid at any time.**

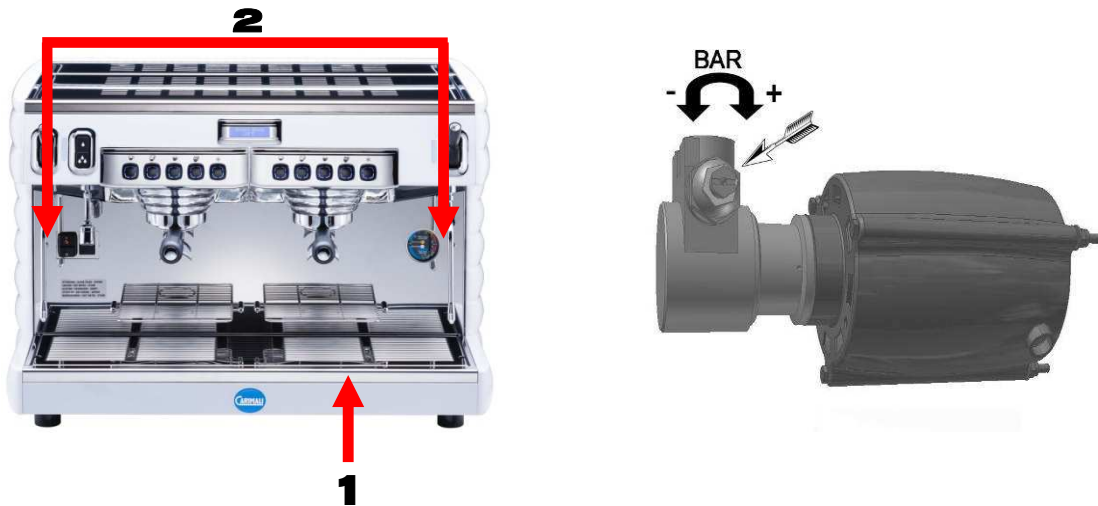


SPECIAL FUNCTIONS FOR MACHINE CALIBRATION

ONLY ASSISTANCE SERVICE PERSONNEL AUTHORIZED BY CARIMALI ARE PERMITTED TO ENABLE THE USE OF THESE FUNCTIONS

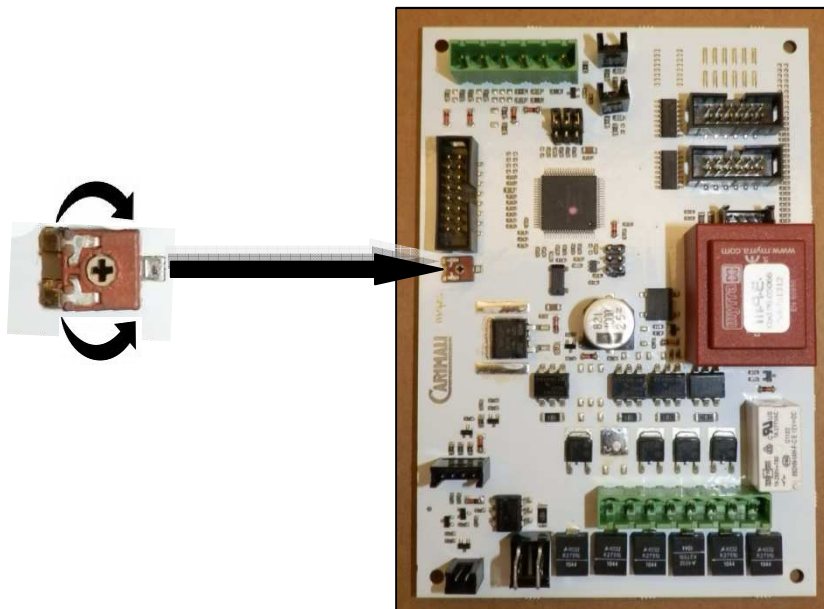
1) Calibrating the coffee dispensing pressure (pump pressure)

To calibrate the water pump, remove the drip tray (1) then the front panel (2) and calibrate the pump by turning the adjustment, clockwise to increase the pump pressure or anticlockwise to reduce pressure.
N.B. The correct pressure is 8/9 bars.



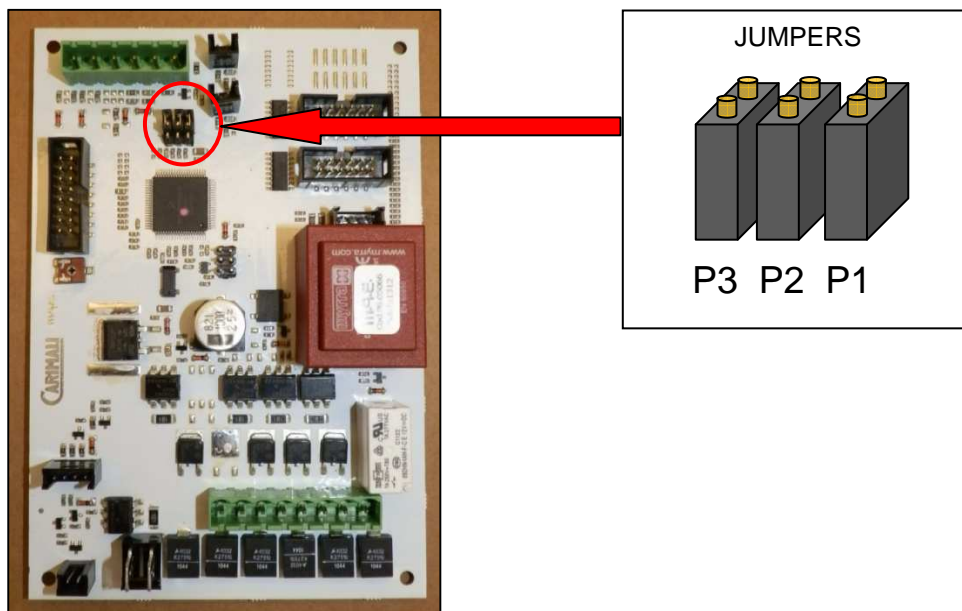
2) Display contrast adjusting

To adjust the display contrast turn the trimmer present on the master board.



3) Jumpers configuration on the p.c. board

| Jumper | Function | Jumper open | Jumper close |
|--------|-------------------------|-------------------|--------------------|
| P1 | Level probe sensitivity | Lower sensitivity | Higher sensitivity |
| P2 | Display | Enabled | Disabled |
| P3 | Machine version | Bubble E version | - |



4) Preset machine configuration - group n° and factory setting

With this function, all the set up values, machine counters, dose setting take the default values set up by factory.

Before starting the procedure, disconnect the boiler temperature probe. To do that disconnect either the connector CN6 on master pcb (remove the left hand side panel of the machine), or the temperature probe placed on top of the boiler (remove the cover of the machine).

To preset the machine switch it OFF by pressing I.G. main switch, then, according to the machine model, keep pressed the keys by following the schedule and switch the machine ON by pressing the main switch (I.G.):

KEY 1 KEY 2 KEY 3 KEY 4 KEY 5



| MACHINE E VERSIONS | KEY 1 | KEY 2 | KEY 3 | KEY 4 | KEY 5 |
|--------------------|-------|-------|-------|-------|-------|
| BUBBLE E2 GR | | X | | | X |
| BUBBLE E3 GR | | | X | | X |

The keypads LEDs light on, and the display shows:



PRESET
GRX

Where: "GRX" indicates the number of groups 2 or 3 groups.

For E1 version, the LED lighting of the N°1 and N°5 keys, indicates the preset has been done.

Power OFF the machine, connect again the temperature probe and power ON the machine by pressing the I.G. main switch.

5) Preset machine factory settings

With this function, all the set up values, machine counters, dose setting and machine parameters take the default values set up by factory. The number of coffee group/s will not change.

To preset the machine follow this procedure:

1. Switch off the machine through the main switch (I.G.)
2. Switch on the machine through the main switch, keeping pressed at the same time the key N°1 and n°5, the LEDs of these keys light on for 5 seconds, and the display shows:



PRESET

SECURITY - ALARMS

1. Boiler filling alarm

FILLING UP T.O.

Causes:

- After PRESET CONFIGURATION PROCEDURE: the stage of boiler fillings has exceeded the maximum time of 120 seconds
 - In NORMAL CONDITION: the stage of boiler fillings has exceeded the maximum time of 30 seconds
- In both cases the level of the probe (SLC) has not been reached.

Result: the machine is OFF, and all the keypad LEDs flash simultaneously:

Solution: carry out the following controls.

- Level probe (SLC) is dirty, so isolated from the water (the complete filling of the boiler is checked)
- No water from mains
- Low water pressure
- Faulty motor pump
- Faulty filler solenoid valve
- Incorrect electrical connections (level probe SLC) cord stopped.

2. Heating time out

HEATING T.O.

Cause: the programmed temperature has not been reached in the maximum limit of 30 minutes.

Result: the heating is stopped. The LEDs of the keys scroll from left to right and from right to left.

Solution:

- Check the electrical connections to the heating element
- Faulty heating element

3. Turbine alarm

FLOW METER GR.X

Cause: the volume meter is not sending signals to the control unit within a time-out of 5 seconds.

Result: delivery continues up to a time-out of 120 seconds or until the selected key is pressed, the LEDs of the key pressed flash and the display shows:

INFUSION T.O.

Solution: carry out the following controls

- No water from mains (coffee is not dispensed)
- Clogged group piston filters (coffee is not dispensed)
- Faulty group solenoid valve (coffee is not dispensed)
- Clogged entrance filters (coffee is not dispensed)
- Blocked or faulty volume meter (coffee dispensed continuously)
- Faulty electrical connection (coffee dispensed continuously).

Note:

If the coffee is dispensed continuously, use the machine as if it were manual: press the required key to start up the dose, then press the same key to stop the dose being dispensed, after checking the amount in the cup.

The machine will stop automatically the delivery if the turbine will have counted 500 ml (function anti-flood).

4. Safety thermoswitch operation

Cause:

The temperature of the boiler has reached the limit of 160°C on a 1 or 2 groups machine

The temperature of the boiler has reached the limit of 169°C on a 3 groups machine

Result: the heating is interrupted

Solution: carry out the following controls

- Level probe (SLC) earthed
- Faulty temperature probe
- Faulty Triac
- Defective inlet solenoid valve



WARNING:

To activate the safety Klicson, it is necessary to press the button placed at the centre of the thermostat itself.

5. Safety valve operation

Cause: overpressure in steam boiler

Result: the 1.7-1.9 bar safety valve opens and releases steam in the upper part of the machine.

Solution: carry out the following controls:

- Triac earthed
- Faulty temperature probe

6. Anti-vacuum valve

The "10" anti-vacuum valve (see hydraulic diagram) is installed on the boiler and prevents any air remaining during the loading phase and a depression being created during the heating phase.

7. Non-return valve

The non-return valve (see hydraulic diagram) is installed between the loading solenoid valve and the boiler, and has the following function:

- During the loading phase it opens by means of the water pressure, letting the water enter into the boiler.
- Once the loading phase is over, it closes preventing the water in the steam boiler from returning to the water supply network.

8. Temperature probe alarm

The LEDs of the keys n°1, 2 and 4, 5 alternative flashing for each group, and the display shows:

TEMPER. PROBE

First case: the temperature inside the boiler has reached the maximum value of 131°C

Effect: boiler heating is interrupted and drink keys are disabled.

Solution: switch off the machine (OFF), check and if needed replace the " triac".

Second case: the temperature probe is defective and send a 0 Ohm (short circuit) signal to the pc board.

Effect: boiler heating is interrupted and drink keys are disabled.

Solution: switch off the machine (OFF), replace the temperature probe and switch on the machine.

Third case: the temperature probe is defective and send a 154 Ohm (open circuit) signal to the pc board.

Effect: boiler heating is interrupted and drink keys are disabled.

Solution: switch off the machine (OFF), replace the temperature probe and switch on the machine.



Attention: Periodically check the electric wiring of the TRIAC. A wrong or incomplete wiring may cause a pc board breakage.

9. Water filter alarm

WATER FILTER

Cause: the flow meter has reached the maximum value of XXXX litres of previously programmed water, which may be dispensed.

Result: this alarm does not block dispensing, the LED of the N° 1, 2 and 3 keys will flash during the delivery.

Solution: renew the softener salts. To reset the alarm see the procedure in Info-Reset paragraph.

SUGGESTED ORDINARY MAINTENANCE

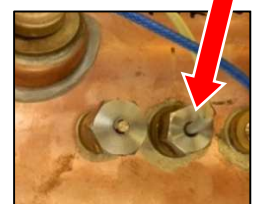
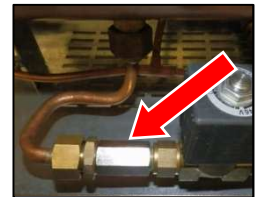
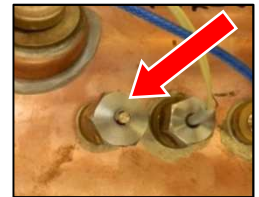
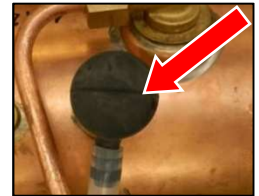
Routine maintenance must be carried out daily by authorized staff as specified in the specific chapters of instructions machine.

Cleaning of the coffee outlet by means of the provided special brush is part of the daily maintenance.

Special maintenance must be carried out periodically by the Carimali authorized service centre in the following way:

- Replace filter holder gasket every 3-6 months
- Replace the steam-water valve gasket every 6 months
- Replace the steam nozzle joint gasket every 6-12 months

Please Note: Replace the water inlet hose only with a new one.



The Carimali product you have purchased is subject to Directive 2002/96/EC of the European Parliament and the Council of the European Union on waste electrical and electronic equipment (WEEE) and, in jurisdictions adopting that Directive, is marked as being put on the market after August 13, 2005, and should not be disposed of as unsorted municipal waste. For further information please contact Carimali.



The manufacturer reserves the right to change, without prior notice, the specifications of the equipment illustrated in this publication; the manufacturer declines all responsibility for any mistakes due to printing and/or typing errors contained in this publication.

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| REVISION TABLE | DATE | NOTE | REVISED BY |
|----------------|------------|-------------|-----------------------|
| LB.05096.00.EN | 05-03-2015 | First issue | <i>Alberto Conti</i> |
| LB.05096.01.EN | 26-11-2015 | | <i>Giuliano Viola</i> |
| LB.05096.02.EN | 19-01-2016 | | <i>Riccardo Rossi</i> |

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