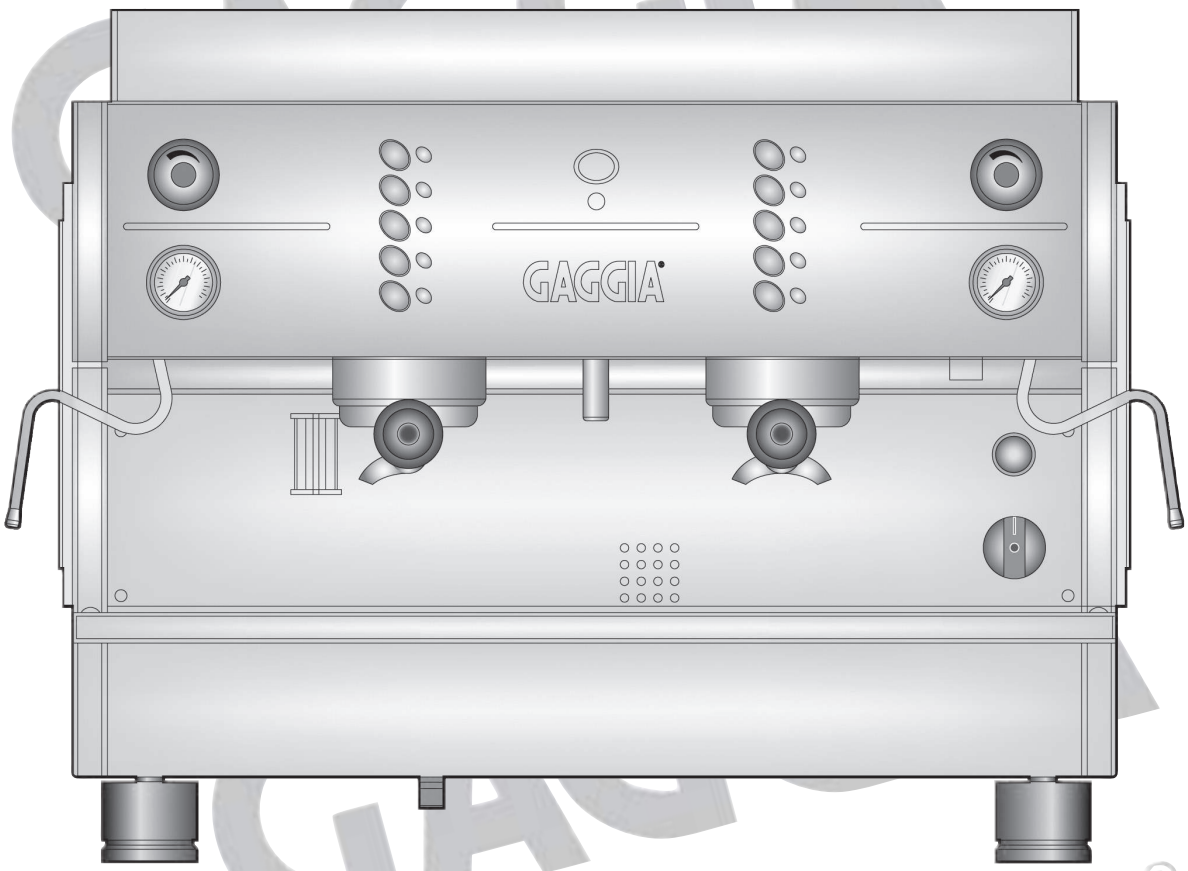
XE - XD
EVOLUTION



GAGGIA®

ISTRUZIONI PER L'USO

OPERATING INSTRUCTIONS

GEBRAUCHSANWEISUNG

MODE D'EMPLOI

INSTRUCCIONES DE USO

GAGGIA®

DICHIARAZIONE DI CONFORMITA' CE / *EC DECLARATION OF CONFORMITY*

Noi / We

GAGGIA
Robecco s/Naviglio MILANO

dichiariamo sotto la nostra responsabilità che i prodotti / *declare under our responsibility that the products :*

MACCHINA PER CAFFE' PROFESSIONALE / *PROFESSIONAL COFFEE MACHINE*

Type***: LC/E LC/D – DECO D 2, 3, 4 gr. / DECO E 2, 3, 4 gr. – GE/GD 2, 3, 4 gr – GE/GD compact 1, 2 gr. – GE/GD One – E90/D90 Evolution 2, 3 gr. – EX/XD Evolution 2, 3 gr. – EX/XD Compact 1, 2 gr. – TS – CAP002 BG***

sono conformi alle seguenti norme : *are in conformity with the following standards*

- Sicurezza di elettrodomestici e apparecchi elettrici - Requisiti generali: EN 60335-1 1 (2002) +A1(2004) + A11 (2004) + A12 (2006) + A2 (2006)
- Sicurezza di elettrodomestici e apparecchi elettrici - Parte 2^ Requisiti specifici per apparecchi per riscaldare liquidi: EN 60335-2-15
- Apparecchi per uso domestico e similare – Campi elettromagnetici metodo per la valutazione e le misure. : EN 62233
- Limiti e metodi di misurazione dei disturbi radio caratteristici di apparecchi con motore elettrico e termici per uso domestico e simili scopi, strumenti elettrici e simili apparecchiature elettriche - EN 55014
- Compatibilità elettromagnetica (EMC) Parte 3^ Limiti - Sezione 2 : Limiti emissioni di corrente armonica (corrente in ingresso dell'app. < 16A per fase) - EN 61000-3-2
- Compatibilità elettromagnetica (EMC) Parte 3^ Limiti - Sezione 3: Limitazione delle fluttuazioni e dei picchi di tensione nei sistemi di alimentazione a bassa tensione con corrente < 16 A. : EN 61000-3-3
- Requisiti di immunità per elettrodomestici, strumenti e apparecchi similari. Norma per famiglia di prodotti EN 55104
- Compatibilità elettromagnetica (EMC) Parte 4^ Tecniche di prova e misura - Sezione 2 : Prova di immunità alle scariche elettrostatiche. Pubblicazione di base EMC - EN61000-4-2
- Compatibilità elettromagnetica (EMC). Parte 4^ Tecniche di prova e misura - Sezione 4 : Prova di immunità ai transitori veloci/burst. Pubblicazione di base EMC - EN61000-4-4
- Compatibilità elettromagnetica (EMC). Parte 4^ Tecniche di prova e misura - Sezione 5 : Prova di immunità a tensioni/correnti impulsive. EN61000-4-5
- Compatibilità elettromagnetica (EMC) Parte 4^ Tecniche di prova e misura - Sezione 6 : Immunità ai disturbi condotti, indotti da campi a radiofrequenza. EN61000-4-6
- Compatibilità elettromagnetica (EMC) Parte 4^ Tecniche di prova e misura - Sezione 11:Prove di immunità a cadute di tensione, microint. e variazioni di tensione. EN61000-4-11

- Safety of household and electrical appliances - General requirements : EN 60335-1 1 (2002) +A1(2004) + A11 (2004) + A12 (2006) + A2 (2006)
- Safety of household and electrical appliances - Part 2^ Particular requirements for appliances for heating liquids: EN 60335-2-15
- Household and similar electrical appliances – Electromagnetic fields – Methods for evaluation and measurements. : EN 62233
- Limits and methods of measurements of radio disturbance characteristics of electrical motor-operated and thermal appliances for households and similar purposes, electric tools and similar electric apparatus - EN 55014
- Electromagnetic compatibility (EMC) Part. 3^ Limits - Section 2 : Limits for harmonic current emissions (equipment input current < 16A per phase) - EN 61000-3-2
- Electromagnetic compatibility (EMC) Part 3^ : Limits - Section 3 : Limitation of voltage fluttuations and flicker in low-voltage supply systems for equipment with rated current <16 A. : EN 61000-3-3
- Immunity requirements for household appliances, tools and similar apparatus. Product family standard EN 55104
- Electromagnetic compatibility (EMC). Part 4^ : Testing and measurement technique.- Section 2 : Elelctrostatic discharge immunity test Basic EMC publication - EN 61000-4-2
- Electromagnetic compatibility (EMC). Part 4^ : Testing and measurement.- Section 4 : Elelctrical fast transient/burst immunity test. Basic EMC publication - EN 61000-4-4.
- Electromagnetic compatibility (EMC). Part 4^ : Testing and measurement technique.- Section 5 : Surge immunity test. EN 61000-4-5.
- Electromagnetic compatibility (EMC) Part 4^ : Testing and measurement.- Section 6 : Immunity to conduced disturbance, inducted by radio-frequency fields. EN 61000-4-6
- Electromagnetic compatibility (EMC) Part 4^ : Testing and measurement - Section 11 : Voltage dips, short interrupt. and voltage variations immunity tests. EN 61000-4-11

secondo le disposizioni delle direttive / *following the provisions of the Directives :*
CE 2006/95, CE 2004/108, CE 93/68.

Robecco s/Naviglio MILANO
01/02/2010

CEO GAGGIA
Stefano FOLLI

IMPORTANTE

Egregio Cliente, La informiamo che tutte le nostre macchine prodotte sono commercializzate in conformità alla Direttiva 97/23/CE, recepita con Decreto Legislativo n. 93 del 25 febbraio 2000.

Le disposizioni del Decreto sopra menzionato si applicano alla progettazione, alla fabbricazione, alla valutazione di conformità della attrezzature a pressione degli insiemi sottoposti ad una pressione massima ammissibile PS superiore a 0,5 bar.

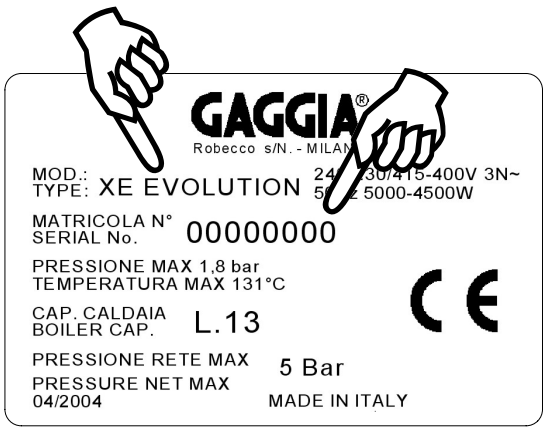
Come specificato nell'articolo 19, comma 3 del suddetto Decreto Legislativo, è previsto che l'utilizzatore deve comunicare la messa in servizio delle attrezzature a pressione e degli insiemi all'ISPESL e all'azienda unità sanitaria locale competenti per il territorio.

LA INVITIAMO DI CONSEGUENZA A COMPILARE IL MODELLO ALLEGATO 1 (VEDI ULTIME PAGINE DI QUESTO MANUALE), IN DUPLICE COPIA E A SPEDIRLO ALLE SEDI DI COMPETENZA TERRITORIALE ASL E ISPESL.

N.B. La mancata comunicazione può comportare l'applicazione dell'Art. 650 del codice penale.

Per l'indirizzo dei Dipartimenti e competenze territoriali ISPESL, può utilizzare l'allegato 2 (vedi uItime pagine di questo manuale).

Per quanto riguarda il modello, ed il numero di fabbrica della macchina per caffè da installare, li può rilevare dalla targhetta dati posta sull'apparecchiatura stessa.
Esempio:



Ci congratuliamo con lei per l'acquisto di questa macchina per caffè espresso e La ringraziamo per la fiducia e disponibilità che ci ha dimostrato.
Prima di mettere in funzione la macchina, Le consigliamo di leggere attentamente le istruzioni per l'uso che Le spiegano come utilizzarla, pulirla e mantenerla in perfetta efficienza.

Rimaniamo a Sua disposizione per qualsiasi informazione.

ONLY FOR ITALY

INDEX

1 - INSTRUCTIONS BOOKLET CONSERVATION AND USE

The present instructions booklet has been prepared for the machine user, the owner and the installation technician and must be always available for reference purposes.

The manual is destined for the user, the maintenance technician and machine installation technician.

The purpose of the instructions booklet is to indicate the envisaged uses of the machine for which it has been designed, its technical features and in order to provide advice on correct use, cleaning and regulation. It also provides important maintenance information, and details on any residual risks, and all those operations which require particular care.

The present manual is to be considered as an integral part of the machine and must be CONSERVED FOR FUTURE REFERENCE until the final dismantling of the machine.

This instructions booklet must always be available for consultation and must be kept in a protected and dry place.

In the event of loss or damage to the same, the user may ask the manufacturer or local dealer for a new manual, indicating the machine model and serial number of the same as indicated on the identification plate.

The present manual reflects the state of the art, at the time of its preparation, the manufacturer however reserves the right to revise production and subsequent manuals without being obliged to update previous versions.

The manufacturer declines all responsibility in the event of :

- the improper or incorrect use of the coffee machine
- use that fails to comply with that specifically stated in the present booklet
- serious lack of maintenance as envisaged or recommended
- machine modifications or any non-authorized intervention
- use of either non-original or non-specific spares
- total or partial failure to observe the instructions

2 - ENVISAGED MACHINE USE

The machine must be operated by a single operator only.

The authorized operator must have firstly read and fully understood all the instructions contained in the present booklet to ensure correct machine function.

This machine is specifically intended for the professional preparation of espresso coffee using blended coffee, as well as the drawing and delivery of water and/or steam.

Its components are made of resilient non toxic materials, and they are easily accessible for cleaning or maintenance operations.

This machine is intended for internal use only.

Ambient temperature for the correct operation of the machine 5°C ÷ 25°C.

3 - SAFETY ADVICE

The machine is to be used solely by adults who have carefully read and fully understood this manual and all the safety advice contained in the same.

The appliance is not to be used by persons (including children) with reduced physical, mental or sensory abilities or with limited experience and/or expertise, unless they are supervised by a person responsible for their safety, or they are instructed by this person on how to properly use the appliance.
- Children must be supervised to ensure they do not play with the appliance.
- This appliance is to be used for household applications or in similar areas like:
. for staff only cooking areas in shops, offices and other professional environments;
. farms;
. for clients use in hotels, motels and other residential type areas;
. environments like bed and breakfasts.

The user is responsible in relation to third parties in the working area.

The installer, user and maintenance technician are obliged to notify the constructor of any defects or faults which may effect the original safety of the system.

Installation must be effected solely by authorized and qualified personnel.

Do not install the appliance in a location where water jets may be used.

The appliance must only be installed in places where it can be used and maintained only by qualified staff.

The machine is to be used solely in the presence of suitable lighting.

For safety reasons, all worn or damaged parts must be promptly replaced.

Regularly check that the power supply cable is in good conditions. Damaged cables must never be repaired using insulating tape or clamps.

If the power supply cable is damaged, it must be replaced by the manufacturer or by its technical assistance dept. or anyway by a similarly qualified person so to prevent any possible hazard.

Do not expose the machine to the elements (sun, rain , etc).

Prolonged machine standstill at temperatures of under 0°C (zero degrees centigrade), may cause serious damage or breakage to the boiler piping: it is therefore necessary to completely empty the water circuit before every prolonged standstill.

The removal of guard and/or safety elements fitted on the machine is forbidden.

The packaging components must be consigned to special disposal centres and must in any event never be left unguarded or within reach of children, animals or non-authorized persons.

The constructor declines responsibility for any damage to things, persons or animals caused by eventual interventions on the machine by personnel not specifically authorized to undertake such operations.

In the event of any non-authorized interventions or repairs on the machine, or in the event of the use of non-original spares all guarantee terms become void, and the company reserves the right to reject validity.

The user must comply with the current safety laws in force in the country of installation, as well as common sense and ensure that all maintenance operations are regularly carried out.

Never clean the inside of the machine with power supply on and plug connected and in any event avoid the use of water sprays or detergents.

The user must not touch the machine if his hands or feet are wet or damp, neither must be use the machine in bare feet. Although the machine is earthed it is advisable to use wooden platforms or a cut-out box complying with local laws in order to prevent the risk of electrocution.

Do not touch the coffee spouts and the hot water and steam nozzles with your hands or any other parts of the body as the liquids or steam issuing from them are very hot and may cause burns.

Avoid operating the machine without water.

Clogging may cause the generation of sudden liquid or steam jets with serious consequences. Therefore keep the water as clean as possible using filters and water softeners.

The cups and small coffee cups must be thoroughly dried before placed on the relative surface.

4 - TECHNICAL FEATURES

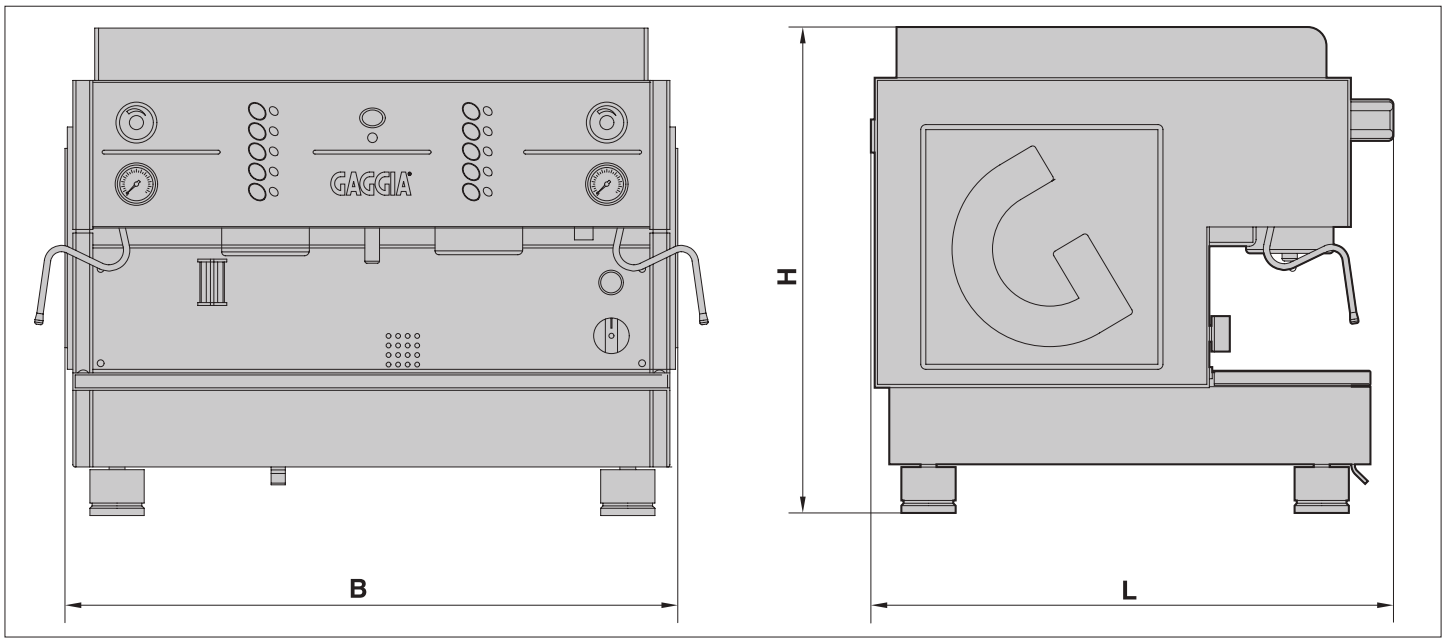


Fig.4.01

		2 groups	3 groups
Dimensions	**B**	625	845
	H	530	530
	L	510	510
Weight	**kg**	55	70
Boiler capacity	**L**	13	21
Boiler resistance absorbed power			
230-240/400-415 V 3 N ~	**W**	4760	5950
ECO Max boiler resistance absorbed power			
230-240/400-415 V 3 N ~	**W**	3170	3950
Pump motor	**W**	165	165
Overall absorbed power			
230-240/400-415 V 3 N ~	**W**	5200	6200

A-weighted sound pressur level is below 70 dB

5 - INSTALLATION

A - MAINS SUPPLY
B - DISCHARGE DUCTS
C - GAS DUCTS
D - PROTECTION SWITCH
E - PURIFIER
F - BOILER SUPPLY TAP
G - DRIP BOWL
H - GAS VALVE "Only for Machine with Gas"
I - POWER CABLE

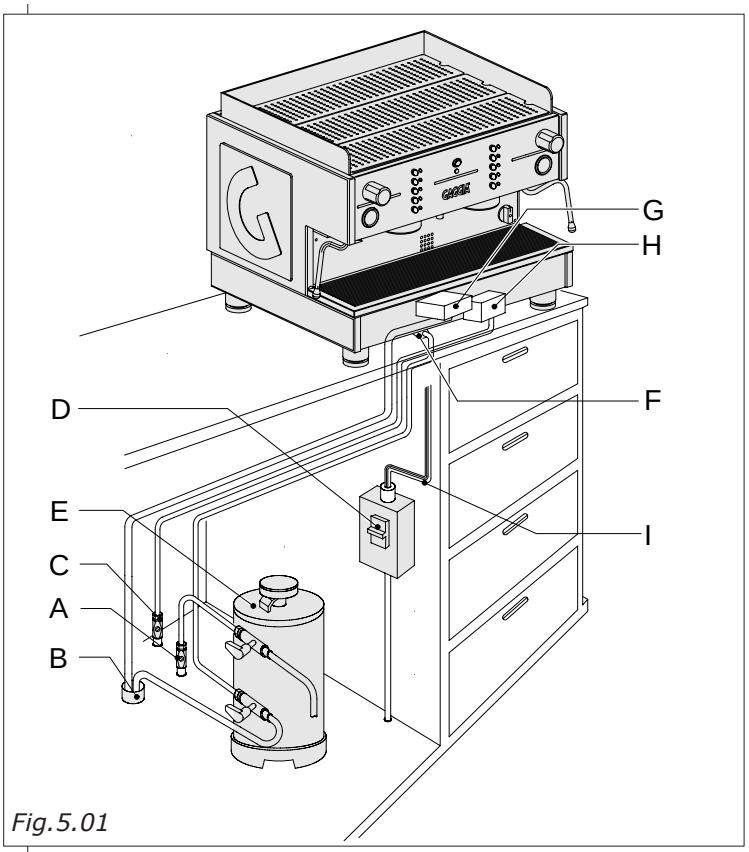


Fig.5.01

Before proceeding with installation check that:
1 there are no bumps, signs of knocks or deformities.
2 there are no damp patches or marks which could lead one to assume that the packaging has been exposed to the elements
3 there are no signs of tampering

Once one is satisfied that transportation has been correctly effected proceed with installation.

N.B. *It is advisable to use the machine at a room temperature of 5°C - 25°C.*
N.B. *It is advisable that the higher surface of the equipment is at least at 1,5 m from the ground level.*

Proceed with installation following the instructions according to the sequence as described below.

5.1 WATER CONNECTION

Important: *The machine must be supplied with water of over 8°F hardness.*

The installation of a water softener is recommended for the machine water supply.
Check that the water mains to which connection is to be made supplies drinking water.

- Connect purifier (E) to the water mains (A).

NB: *before connecting the purifier to the machine, wash out thoroughly until the water becomes clear, then proceed to connect the purifier to the machine.*

- Connect the drain cup (G) to the drainage pipe (B)
- Should the mains pressure be higher than 0,5 MPa a pressure reducer balanced for high pressure should be installed (device in which any mains pressure increase does not effect the output pressure).

Should the machine be moved to a different place, the fitting unit must be replaced with a new one.

5.2 ELECTRICAL CONNECTION

Important ! *Before proceeding with electrical connection it is necessary to check to ensure that the voltage rating corresponds with that indicated on the CE plate and on the connection plate on the power supply cable.*

Check to ensure that the electrical supply line is able to support the machine load (see chap. 4 – technical features table).

Connect to an earthing socket which complies with current legislation.
Check that the power supply cable is efficient and that it complies with national and European safety standards.

The user must undertake to power the machine protecting the power line using a suitable safety switch (cut-out) that complies with the legislation in force in the actual country itself.

Connect the power cable (1) to the electric line using a plug, or in the case of fixed installation, using a multi-polar switch (D) for mains separation, with a contact distance of at least 3 mm.

For voltage change refer to the diagram shown on the general mains switch box.
The yellow-green coloured cable MUST be connected to the room's earthing system.

5.3 GAS CONNECTION "Only for Machine with GAS"

Connect valve (H) to duct (C) using a rubber hose (in compliance with current standards) and suitable hose clamps or use the connection supplied for stainless steel hose (as indicated in figure in section 8 "Gas adjustment".

6 - START UP

1. Tap
2. Hot Water Outlet Button XD
3. Hot Water Outlet Switch XE
4. Machine on/off indicator
5. Gas on/off valve
6. Main switch
7. Right Vaporiser Tap
8. Left Vaporiser Tap
9. Cup-warmer switch
10. Boiler pressure gauge
11. Pump pressure gauge
12. Boiler level indicator
13. Right Vaporiser Pipe
14. Left Vaporiser Pipe
15. Hot Water Outlet Pipe
16. Unit XD Control Keyboard
17. Unit XE Control Keyboard
18. Hot Water Outlet Indicator
19. XD Delivery Led
20. XE Delivery Led

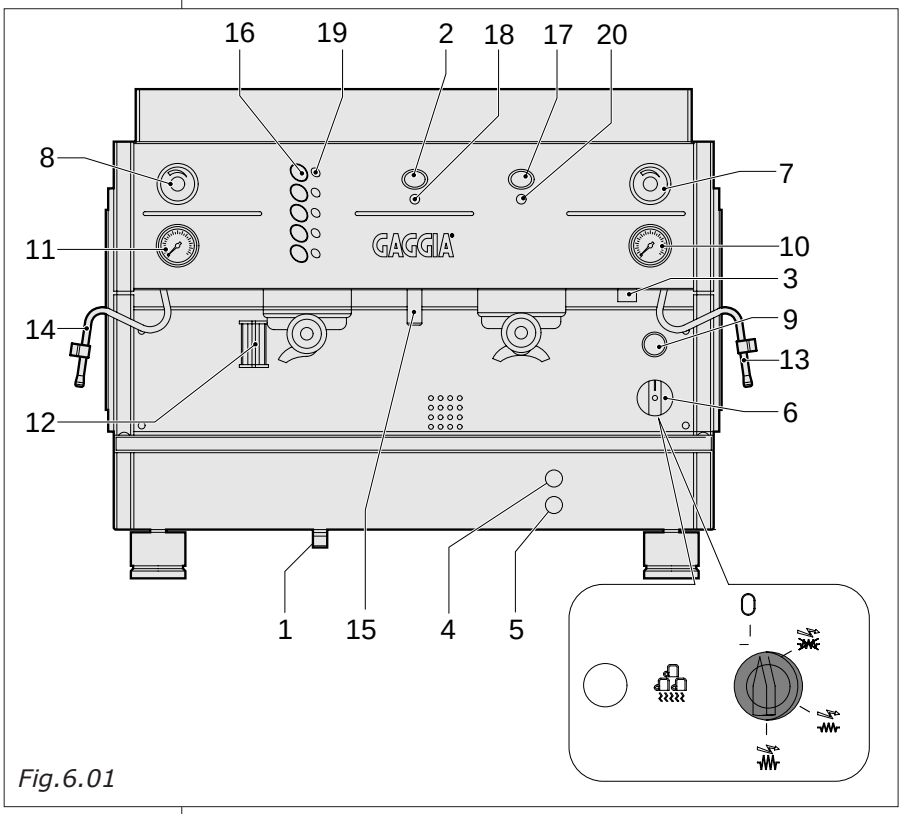


Fig.6.01

Once the water, gas and electrical connections have been made, proceed to start up the machine.

Open the mains water supply tap (A).
Close the protection switch (D)

Position the machine main switch (8) to position the machine on indicator will come on (3).

The auto-levelling device will come into operation so that the water reaches a normal level in the boiler (12).

Position the main switch (6) to position for operation at normal power or to position for operation at full power, thereby powering the resistances.

Wait for the pressure to reach its operational pressure 1.1÷1.3 atm checking the boiler pressure on the gauge (10).

Should the machine fail to stabilize on the indicated values it is necessary to calibrate the pressure switch as described in paragraph 6.2.

In the event of a machine featuring a gas heating system, it is necessary to switch on the gas by operating the gas valve (4) after operating the main switch (6), keeping the piezoelectric switch pressed (5) until the gas remains on.

Then check the pressure on the pump gauge (11) putting a unit into operation with filter holder engaged filled with ground, dosed and pressed coffee in order to achieve an effective working pressure of 8/9 atm.
Should re-calibration of the pump pressure be necessary this operation should be undertaken as indicated in paragraph 6.3.

The machine is now ready for use.

IMPORTANT

Do not press the hot water delivery switch or button (2) before the correct working temperature of 1.1 atm is reached, as indicated on the boiler gauge (10).

6.1 LONG COFFEE GIGLEUR

The machine is fitted with a gigleur (1 per unit) with a clearance of 0.6 mm (Cod.26G0074/01).

For greater coffee delivery speed, in the case of long coffees, no.2 gigleurs are also included with the machine (complete with seals) with a clearance of 0.8 mm (Cod.26G0073/01).

The gigleur is located in the exchanger supply fitting (1 per group).

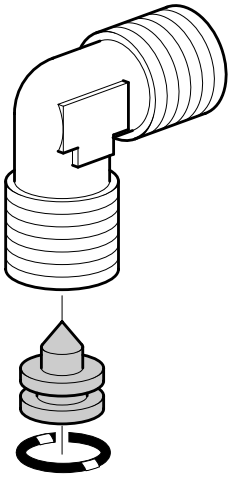


Fig.6.02

6.2 PRESSURE SWITCH ADJUSTMENT

The pressure switch shown in the figure acts to keep the boiler pressure constant by engaging or de-activating the electrical heating resistance.

This pressure switch is already calibrated to 1.1-1.3 bar during the initial machine testing stage, but should a different working pressure be required, it is possible to vary the operational field of the pressure switch using the regulation screw (U); pressure reduction results in a reduction in temperature, whilst increasing the pressure will also increase the water temperature.

The regulation direction is shown in the figure and on the pressure switch itself.

The pressure varies by 0.1 atm for every complete screw turn,

Warning: *Disconnect the electricity supply before undertaking this operation.*

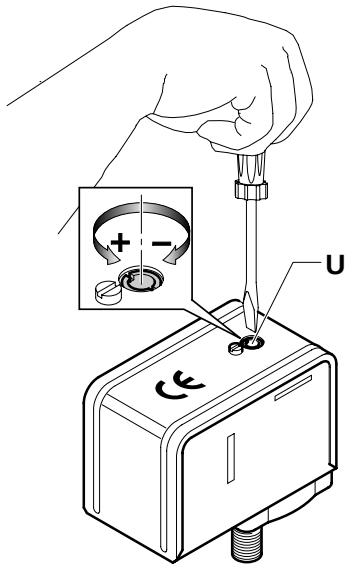


Fig.6.03

6.3 PUMP PRESSURE CALIBRATION

Insert the filter holder into the unit filled with regularly ground, dosed and pressed coffee.
Switch on the unit switch (XE) (17) or the unit control keyboard (XD) (16) and read the pressure on the pump pressure gauge (11).
NB: The correct pressure is of 8-9 atm.
Should the pressure indicated on the pressure gauge be incorrect, turn it clockwise to increase the pump pressure and anti-clockwise to reduce the pressure.
Once adjustment is complete check pump calibration by delivering one or more coffees.

Z= Pump pressure adjustment screw.

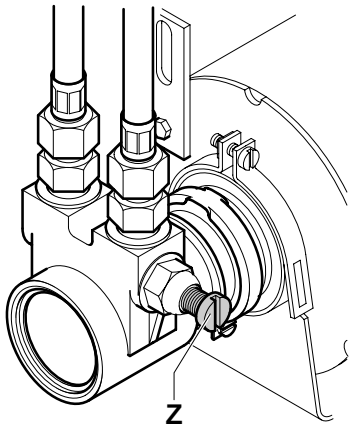


Fig.6.04

Warning !!
When the machine is new the filter-holder sump may not be aligned (perpendicular to the machine itself) as shown in the figure at the side, however this does not effect the efficient function of the same.
After a short period of use the sump will gradually settle into a correct position.

A = Position of closed filter-holder with new machine.

B = Position of closed filter holder with machine after a short period of use.

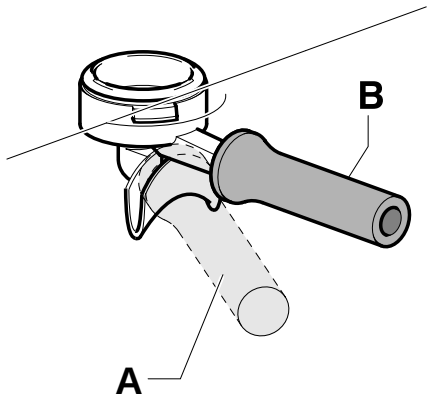
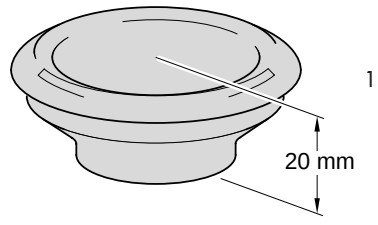


Fig.6.05

Note: Options include shower head gaskets that are thinner (8.1 mm, part no. NG01/005) or thicker (9.0 mm, part no. NG01/002) than the standard shower head gasket (8.5 mm, part no. NG01/001/B).

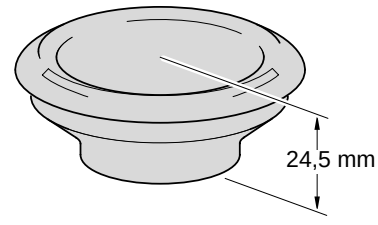
6.4 FILTERS FOR COFFEE MACHINE

Depending on the quantity of coffee ground, the appropriate filter must be as shown below to avoid that, once the coffee has dripped out, the leftover powder remains attached to the nozzle.



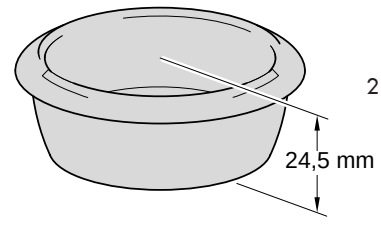
NF08/002/B

1 coffee cup of 5,5 gr. ÷ 6,5 gr.
pod for 1 coffee
barley pod for 1 dose



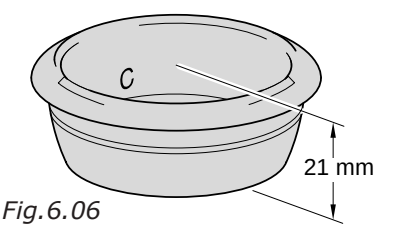
NF08/004/B

1 coffee cup of 6 gr. ÷ 7 gr.



NF08/005/B

2 coffee cups of 12 gr. ÷ 14 gr.



NF08/009/B

Double pod for 2 coffees
The filter may be recognised by the letter "C" printed inside

Fig.6.06

6.5 REPLACEMENT OF THE THERMOSTAT TO REDUCE THE COFFEE DISPENSING GROUP TEMPERATURE (OPTIONAL).

Remove cup heating bowl (1). Disconnect group thermostat (2) (Code DM1561 – T 103°C) and replace it with the lower temperature thermostat (Code DM1736 – T 98°C), included in the machine equipment.

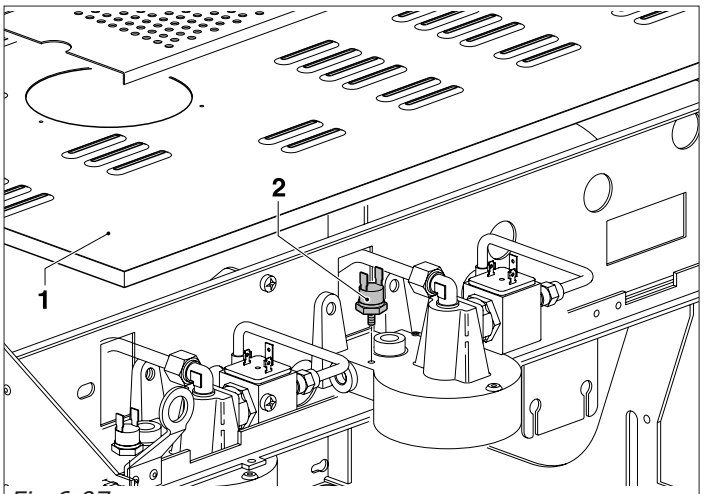
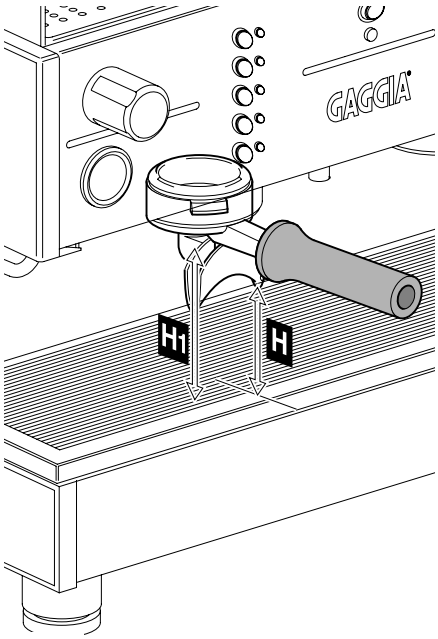


Fig.6.07

6.6 SPOUTS INCLUDED IN THE SUPPLY.

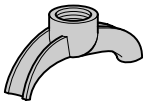
No. 4 spouts are supplied with the machine to dispense one or two coffees.

The figure (beside) shows the different distances from the cup-holding tray (H), depending on the different types of spouts fitted on the filter holder.

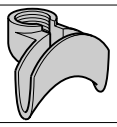


Cod. AS0146/CL
H = 65 mm

Cod. 26G0112
H = 77 mm



Cod. 6301004010
H = 78 mm



Cod. 6001023000
H = 73 mm

WITHOUT SPOUT
H1 = 95 mm

Fig.6.08

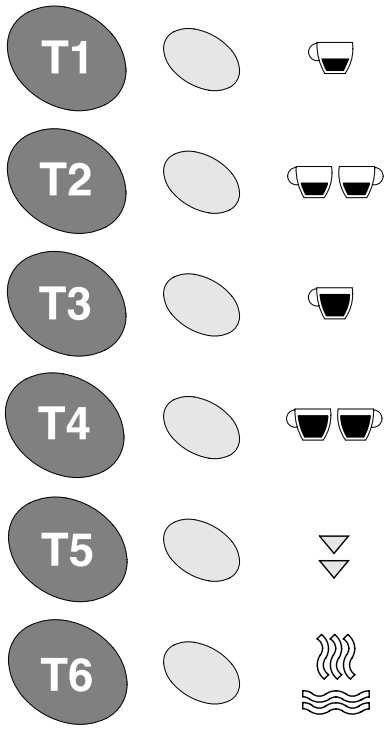
7 - FUNCTION / USE AND PROGRAMMING

INTRODUCTION

The programming software permits the checking of the following operations:

- handling of 2-3 coffee units
- simultaneous function of both coffee and tea units
- volumetric check on coffee measures
- timed tea measure check
- simulated measure programming
- filling level check and control
- system supervision through alarms
- continuos, delivery time-out and further functions
- serial connection with accounting devices

Keyboard symbols:



T1
Single espresso coffee

T2
Double espresso coffee

T3
Single long coffee

T4
Double long coffee

T5
Programming/continuos

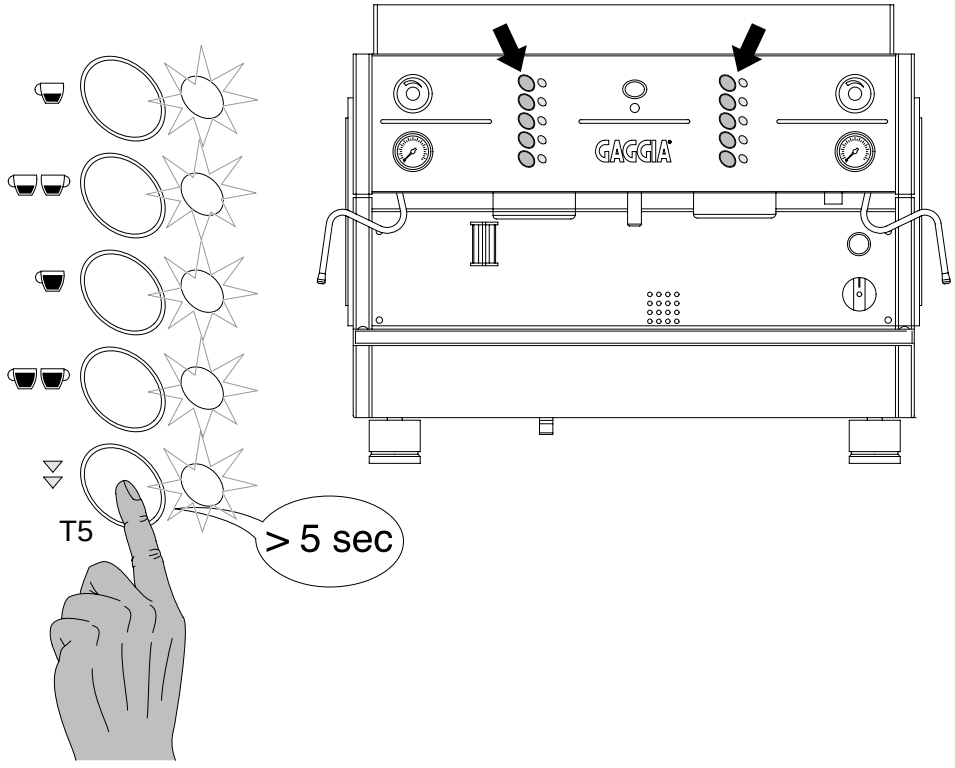
T6
Tea (hot water)

7.1 COFFEE MEASURE PROGRAMMING

The measured amounts of coffee may be modified (by means of volumetric checking) and memorized as follows:

- press key T5 (of keyboard relative to group 1) and keep pressed for over 5 seconds and check that all the keyboard leds come on. In which case, (by operating on the keyboard relative to group 1) all the units will be programmed, while by pressing key T5 of another unit, only the programming of the unit on which one is operating is possible.

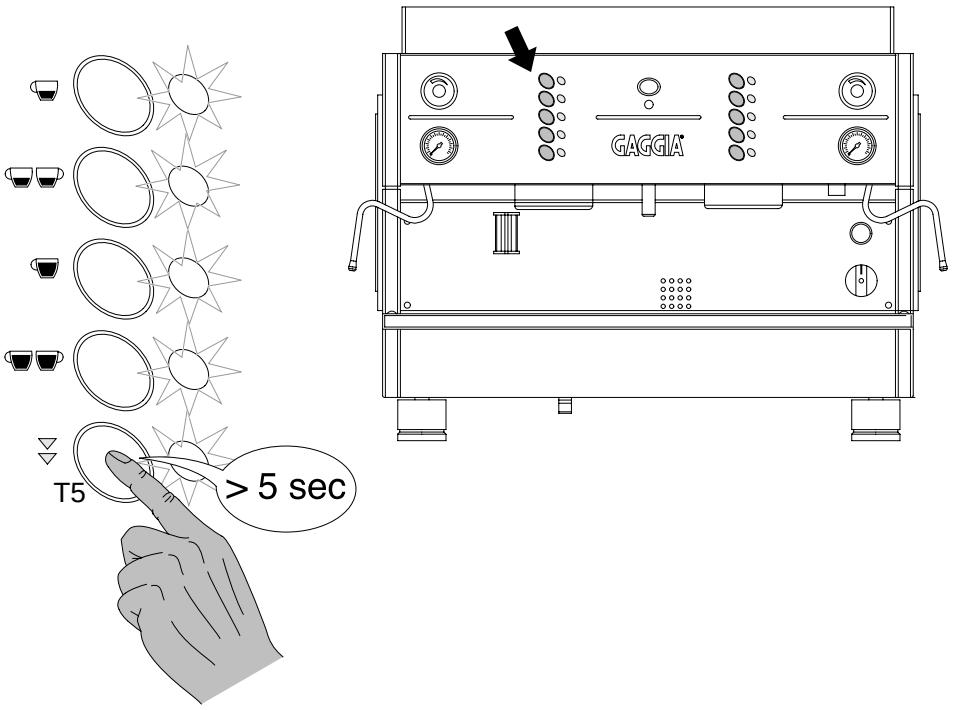
IMPORTANT !! *The settings made on unit 1 (operating on the first keyboard) will be automatically copied on to all the other units.*



Press the key corresponding to the measure to be programmed (key T1 for example) within 30 seconds (programming time-out).

The led relative to T5 will remain on, on all keyboards and the led relative to the measure being programmed will also come on (on all the keyboards). During this state and for the entire coffee measure programming time duration, the solenoid valve and pump are activated.

Note: *If none of the keys are pressed within 30 seconds, it will automatically escape from programming mode.*



On pressing key T1 coffee delivery begins, once the required amount of coffee is obtained press key T1 again or any other of the keys of the unit keyboard in order to suspend coffee delivery. The new impulse value of the measure is thereby memorized on the EPROM.

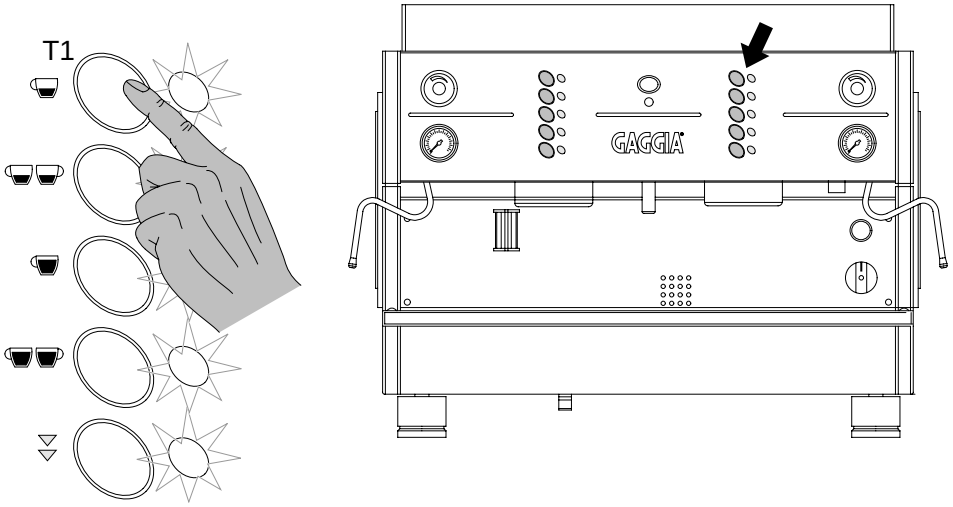
Both the solenoid valve and the pump are deactivated thereby suspending product delivery and all the keyboard leds go out.

To proceed with a new programming operation of other coffee measures T2-T3-T4 (providing that the programming time out time of 30 sec is not exceeded) simply repeat the same operations with the same sequence as undertaken for key T1.

Press key T5 to immediately escape from the programming stage.

IMPORTANT: *Should the "PRE-INFUSION" function be active (see par. 7.5). Wait until the pre-infusion function is complete before stopping delivery in progress.*

NOTE*: During the programming of a unit the function of the other units is deactivated as well as tea dispensing.*



To programme the other units, press the specific programming key of each unit and carry out the same operations as undertaken on unit 1. In this case any variations in the measures are activated only on the unit on which one is actually working.

7.2 TEA MEASURE PROGRAMMING (HOT WATER)

It is possible to modify the timed tea measures according to the following sequence:

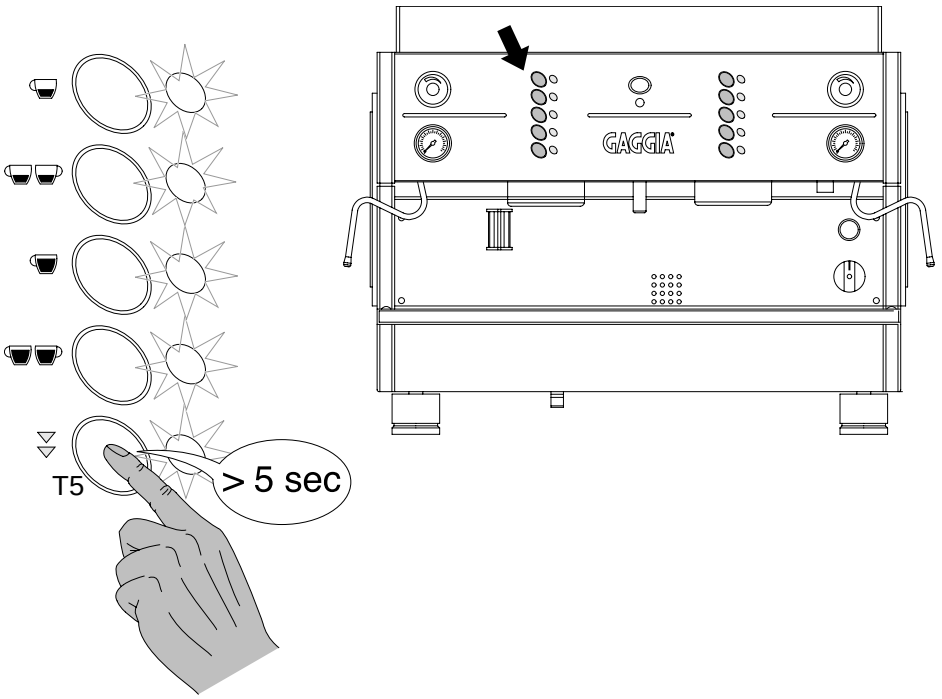
Press key T5 of coffee unit 1 and keep pressed down for over 5 seconds and check that all the keyboard led indicators come on.

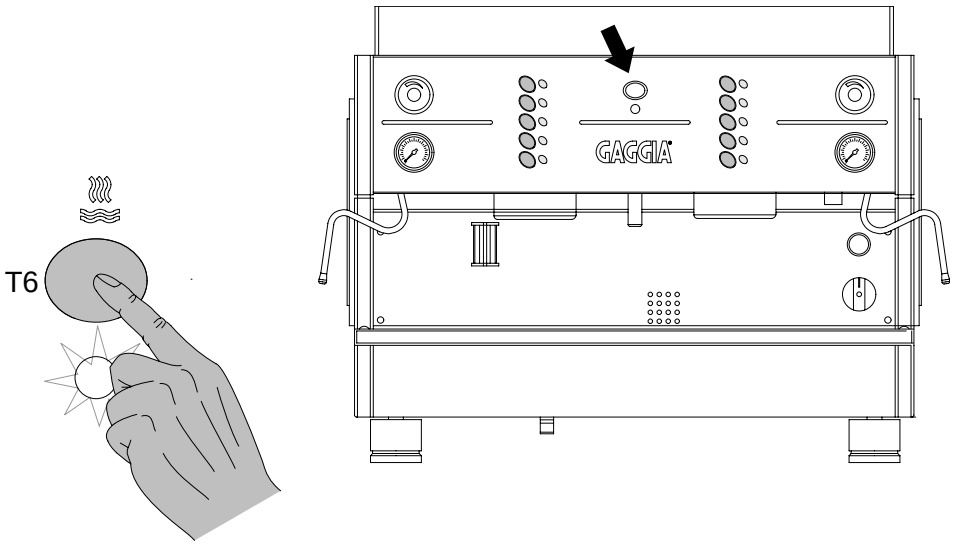
Press the T6 tea key within 30 seconds (programming time-out).

This begins the tea water delivery operation.

Once the required measure is obtained press T6 again to suspend water delivery. In this way the new tea water delivery time is memory and all the keyboard leds go out.

Press key T5 again to immediately escape from the programming phase.



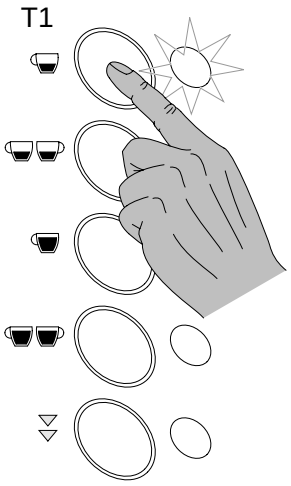


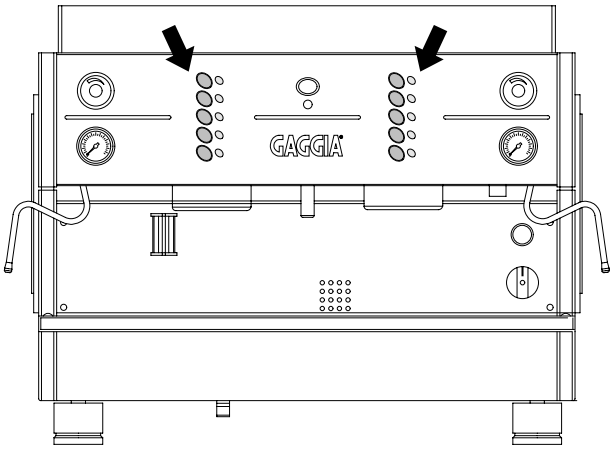
7.3 COFFEE DELIVERY

On pressing the corresponding key T1-T2-T3 or T4, the corresponding delivery solenoid valves are activated for the time necessary to obtain the required amount of product as previously programmed (volumetric check). The LED relative to the selected measure remains on for the entire coffee delivery time.

The delivery in progress may be suspended before actually reaching the desired programmed product quantity by pressing any of the measure keys present on the keyboard of the unit used for product delivery.

It is also possible to obtain simultaneous coffee delivery from all the machine units.





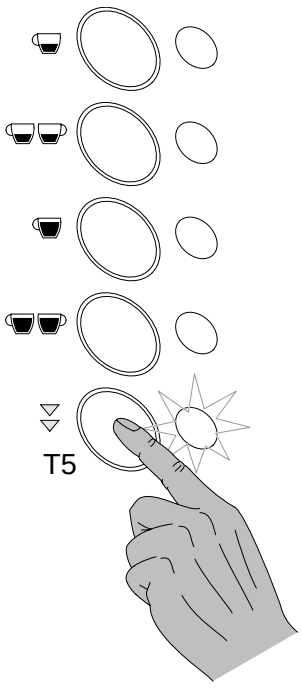
7.4 CONTINUOUS COFFEE MEASURES

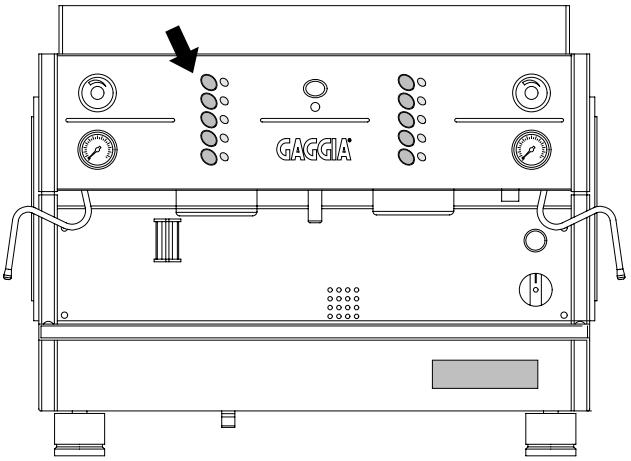
For continuous coffee measure delivery press key T5 from the keyboard corresponding to the unit on which one wishes to operate.
The LED corresponding to key T5 will remain on for the entire delivery operation.

IMPORTANT *! Avoid keeping it pressed for more than 5 seconds or it will enter the programming mode.*

Coffee delivery will continue until measure stop by pressing key T5, or on obtaining the maximum amount of product which can be obtained through volumetric control (6000 impulses) or by means of delivery Time-out function.

IMPORTANT *! The start of the relative "continuous" cycle occurs on the release (within 5 seconds) of key T5 and not on pressing of the same. While the STOP function may be obtained by pressing it a second time.*





7.5 SPECIAL FUNCTIONS

It is possible to engage or deactivate certain special functions such as PRE- INFUSION, MIXED TEA and WASHING ALARM which we shall describe below:

PRE-INFUSION

Our software permits measure configuration so that the relative delivery of the COFFEE measures through volumetric control is preceded by pre-infusion. Delivery of the coffee measure after time 1 (ON) is suspended for a time 2 (OFF) and is then resumed for the completion of selection.
On pressing one of the volumetric control measure keys, the normal delivery cycle is preceded by a short timed water jet in order to dampen the coffee pellets before actual delivery stage.
This function ensures the optimum use of the coffee pellets.

T1 KEY LED ON : PRE INFUSION : ON
T2 KEY LED ON : MIXED TEA: ON

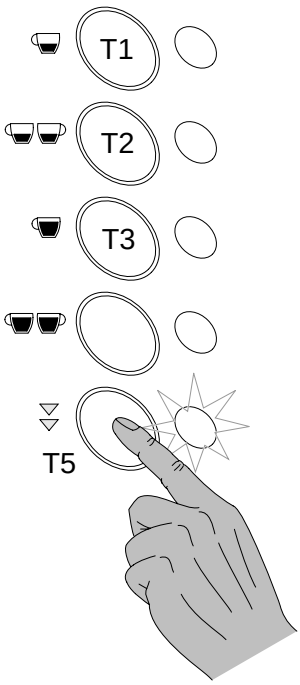
To escape from this condition and return to normal functions press key T5 again.

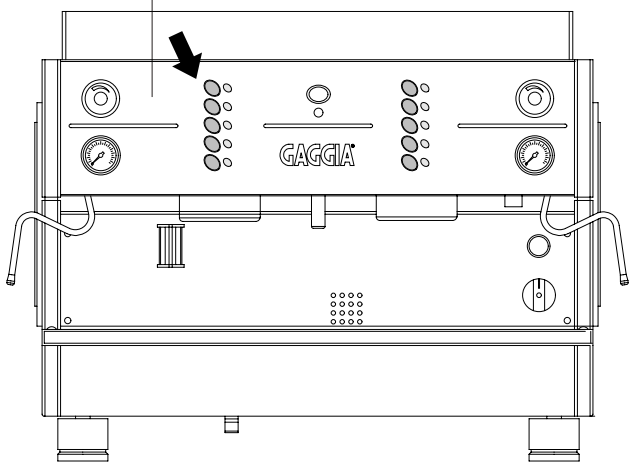
MIXED TEA (HOT WATER)

On the engagement of this function the water delivered is mixed with cold water on entry in the boiler thereby ensuring constant delivery at a temperature of about 96°C.
If this function is not engaged water is delivered at a temperature of about 100°C and is highly vaporized.

ENGAGEMENT/DEACTIVATION

Start the machine by pressing the main switch keeping key T5 of unit 1 pressed and wait for the led relative to key T5 to begin flashing.
Press keys T1-T2 and T3 in order to engage or deactivate the PRE-INFUSION, MIXED TEA functions.



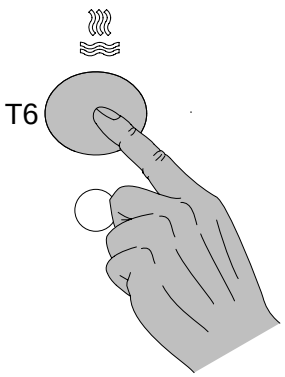


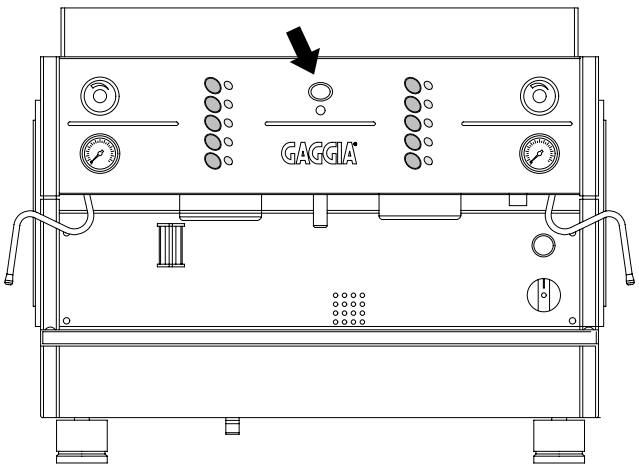
7.6 TEA DELIVERY

On pressing key T6 the corresponding solenoid valve is engaged thereby beginning hot water delivery.

On START a timer is activated which interrupts the water delivery on reaching the time set during the programming stage.
The simultaneous delivery of tea or coffee is possible.

It is possible to interrupt delivery function in progress before the programmed time is reached by pressing key T6 again used for product delivery.



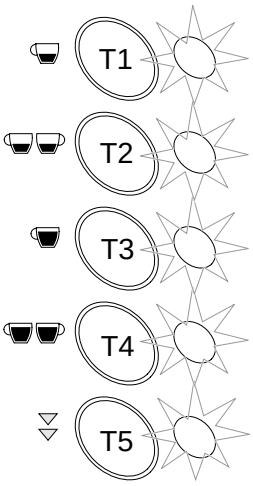


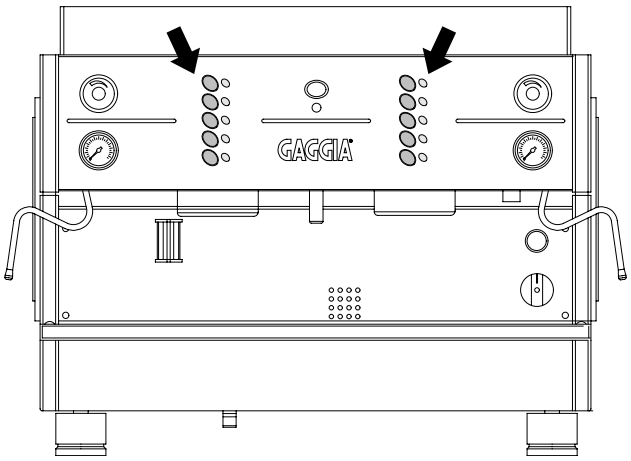
7.7 ALARM CONDITION

BOILER (FILLING) LEVEL TIME OUT

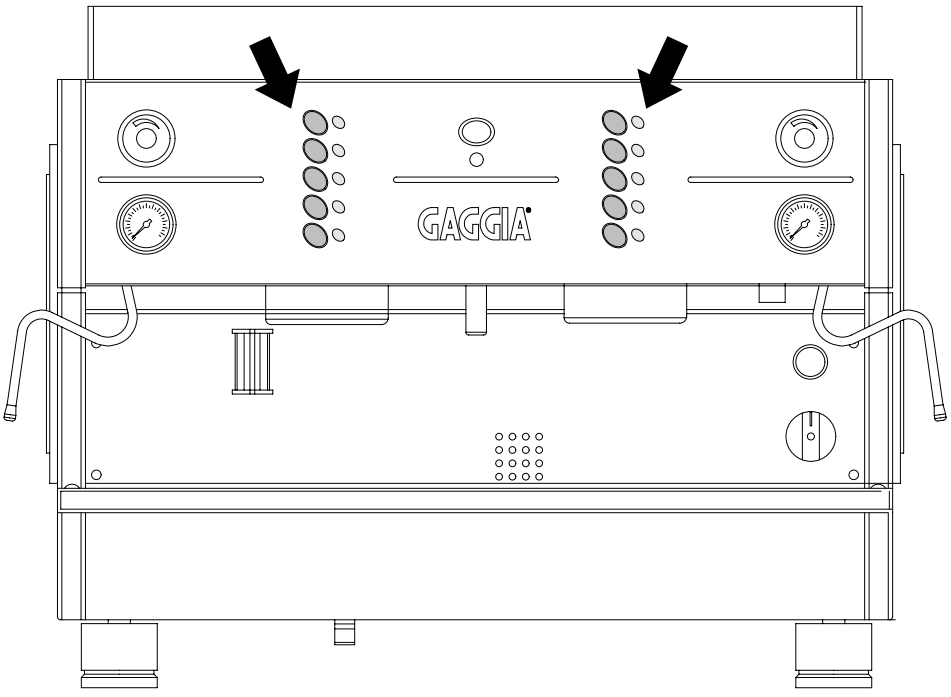
This alarm condition occurs whenever the water level is too low or the level probe remains uncovered. In such a case the keyboard leds flash and an alarm message appears on the display.

The filling stage is automatically engaged and to cancel the alarm conditions switch the machine off and then on again.





Lack of volumetric counter impulses
On starting a volumetric control coffee cycle, the correct function of the volumetric counter is checked by the reading of the number of impulses sent by the same to the micro-controller.
Should no impulses by recorded for a period exceeding 5 seconds the LED relative to the selected measure begins flashing (ie. the led relative to key T4).
After one minute in which no impulses are recorded (volumetric counter time out), the measure underway is automatically stopped.



8 - PURIFIER REGENERATION

Fig. 8.01

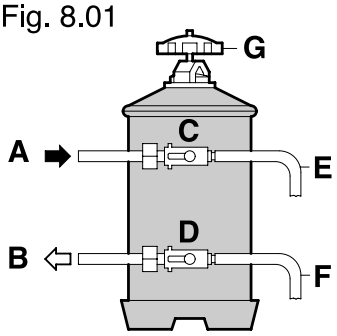


Fig. 8.02

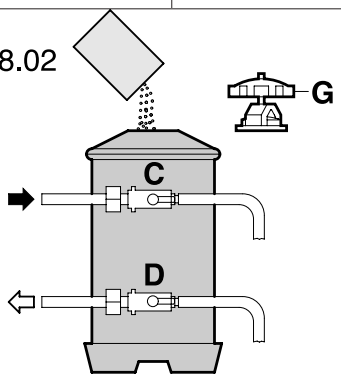


Fig. 8.03

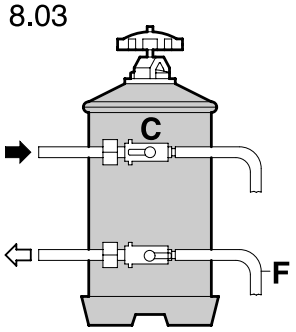
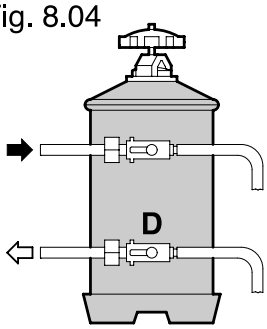


Fig. 8.04



A	WATER INLET
B	WATER OUTPUT
C	INLET TAP LEVER
D	OUTPUT TAP LEVER
E	DEPRESSURIZER PIPE
F	REGENERATION TUBE
G	COVER KNOB

***IMPORTANT** : Regenerate the purifier at the intervals listed below:*

HARDNESS °F	8 LITRE PURIFIER	12 LITRE PURIFIER
From 00 to 20	regeneration after 1100 l.	regeneration after 1600 l.
From 21 to 30	regeneration after 850 l.	regeneration after 1250 l.
From 31 to 40	regeneration after 650 l.	regeneration after 950 l.
From 41 to 60	regeneration after 450 l.	regeneration after 650 l.

- place the empty 2 litre container under pipe E.
- shift levers C and D from left to right as shown in fig.8.2 and remove the cover by loosening knob G, pour in 1.5 kg of sodium chloride (coarse cooking salt) into the 8-litre purifier and 2 kg into the 12-litre type.
- Replace the lid and shift lever from right to left as shown in fig.8.3 and allow the salted water to drain out of pipe F until the water is fresh.
- Shift lever D from right to left as shown in fig.8.4

***NB:** These regeneration instructions are valid only providing the purifier is as that indicated in the figures. Should it fail to correspond proceed as indicated in the instructions attached to the purifier itself.*

9 - GAS ADJUSTMENT

4 GAS- ON-OFF VALVE
5 PIEZOELECTRIC IGNITION
N GAS REGULATOR
O GAS INJECTOR
P RING NUT
Q MINIMUM ADJUSTMENT SCREW
R PRESSURE ADJUSTMENT SCREW

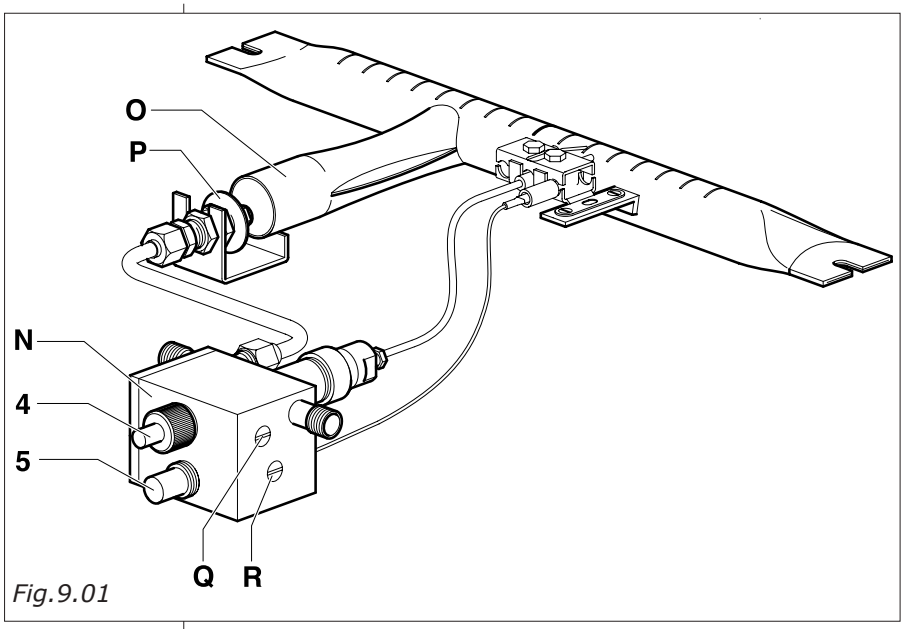


Fig.9.01

GAS INJECTOR (pos.0)

Category III 1a2H3 +	2 GR machine	3 GR machine
G20 (methane)	B	C
G30 (liquid gas)	03	04
G11O (town gas)	1	2

The machine is set up for being supplied with methane gas (G20), this means that the gas injector (O) and the gas regulator (N) are calibrated for methane gas.

For operation with GPL gas (liquid gas G30) or town gas, the gas injector (O) must be replaced with the injector enclosed with the machine (see gas injector table).

To light the gas burner keep the gas n-oiff valve button (4) pressed down in order to allow the gas to flow to the burner, then operate the piezoelectric ignition push-button (5).

***NB**: The on-off valve button must remain pressed down for a few seconds to allow the thermo-couple to operate.*

Adjust the air flow by means of the air adjustment ring nut (P) turning clockwise to reduce the flow and anti-clockwise to increase it, so as to obtain a blue flame (avoid long or excessively oxidising flames to avoid damaging the boiler).

Wait for the boiler to reach an operating pressure of 1.1÷ 1.3 atm and for the flame to be reduced to a minimum. If the gas regulator (N) requires calibration, proceed as follows : turn the minimum adjustment screw (Q) clockwise to reduce the flame and anti-clockwise to increase it.

To increase or reduce maximum pressure in the boiler, turn the pressure adjustment screw ® clockwise to decrease the pressure and anti-clockwise to increase it.

10 - MAINTENANCE AND USEFUL ADVICE

In order to ensure that the spouts (B) are kept clean and free of any coffee deposits which may jeopardize yield, we advise that before starting work in the morning that you put filter holder (D) in with empty filter (while machine is hot) and operate the unit several times.

In this way any coffee dust which may have been deposited between the metal filter (B) and the metal filter holder (A) are removed. This operation must be repeated every day.

Frequently check the filter holes (C) and remove any deposits.

Should the water have been left in the ducts for a long time, it is necessary to allow some water to flow through them in order to remove any deposits.

It is a good idea to rinse the filters (C) and filter holders (D) every day in hot water, or even better, place them in hot water and allow to soak for the whole night in order to dissolve any greasy coffee deposits.

It is advisable to leave the filter-holder cups inserted with the coffee dregs for the entire working day to ensure that the filter-holder is always at optimum temperature.

Do not cover the cup-warmer level with any fabrics or cloths etc.
Do not use any abrasive or corrosive products for cleaning the bodywork.

The steam nozzles must be cleaned immediately after use in order to prevent the risk of the formation of any scale which may block the holes and to ensure that any drinks made subsequently do not absorb any unpleasant odours.

A SPOUT HOLDER
B SPOUT
C FILTER
D FILTER HOLDER
E SEAL
F UNIT COFFEE
G CENTRAL SCREW
H ALLEN SCREWS

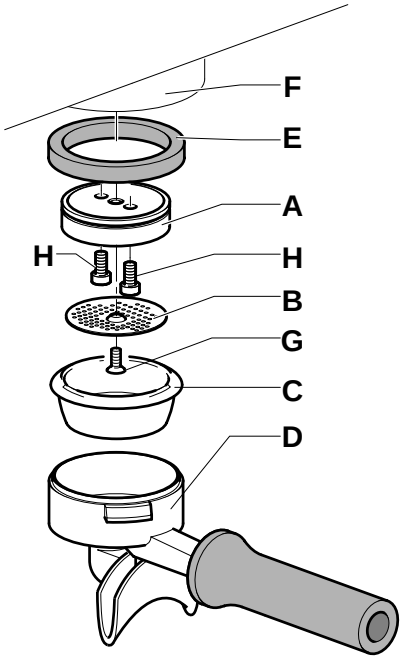


Fig.10.01

Weekly cleaning operations

Cleaning of the unit and spouts: place a teaspoon of specific coffee machine washing powder into the blind filter supplied with the machine and apply to the unit to be cleaned using the filter-holder. Press the unit delivery control button as for a normal coffee dispensing operation. Suspend delivery after 30 seconds and then repeat the operation 3-4 times. Rinse out the unit using a normal filter and then undertake a few dispensing operations using water only. Then prepare a coffee in order to eliminate any unpleasant odours.

Below-cup seal replacement

Seal (E) needs to be replaced in the event that coffee leakage is noted between unit (F) and filter-holder (G), or in the event that on closing filter holder (D) the unit centre is greatly exceeded.

Remove the spout (B) by loosening the central screw (G).
Remove the spout holder (A) by loosening the two Allen screws (H).
Then proceed to remove seal (E) using a screw driver.
After removing the seal undertake to clean the slot and then re-assemble the new seal taking care to insert it with the chamfered part turned upwards towards the unit itself.

11 - TROUBLE SHOOTING

PROBLEM	CAUSE	REMEDY
Machine switch off	*1. Mains switch off*	1. position the machine switch to position ON
	2. Machine switch off	2. position the machine switch to position 1
	3. Incorrect electrical mains connection	3. contact specialized personnel in order to check the connection
No water in boiler	*1. Mains tap closed*	1. open the mains tap
	2. Clogged pump filter	2. replace the filter
	3. Motor driven pump not in operation	3. contact specialized personnel
No unit delivery	*1. mains tap closed*	1. open the mains tap
	2. motor driven pump out of order	2. contact specialized personnel
	3. clogged gigleur	3. contact specialized personnel
	4. burnt control box fuse	4. contact specialized personnel
	5. unit solenoid valve out of order	5. contact specialized personnel
	6. unit switch out of order	6. contact specialized personnel
Steam fails to come out of the nozzle	*1. too much water in boiler*	1. see specific problem
	2. damaged resistance	2. contact specialized personnel
	3. clogged sprayer element	3. clean the sprayer element
	4. resistance saver engaged	4. reinsert the resistance
Too much water in the boiler	*1. the motor driven pump remains engaged*	1. contact specialized personnel
	2. perforated exchanger	2. contact specialized personnel
	3. automatic charge solenoid valve blocked	3. contact specialized personnel
Signs of water leakage on bench	*1. dirty drain tray*	1. clean the try
	2. drainage pipe clogged or detached	2. replace the drainage pipe
	3. other leakage	3. contact specialized personnel
Wet coffee dregs	*1. Grinding regulated too fine*	1. Adjust grinding value
	2. Unit still cold	2. wait for the machine to reach the correct temperature
	3. Solenoid valve fails to discharge	3. contact specialized personnel
Coffee dispensing too slow	*1. grinding element set too fine*	1. Adjust the grinder
	2. dirty filter-holder	2. replace the filter and undertake more frequent filter-holder cleaning
	3. clogged unit	3. contact specialized personnel
	4. gigleur or solenoid valve partially clogged	4. contact specialized personnel
Coffee dispensing too fast	*1. grinder is regulated too large*	1. regulate the grinding
Coffee delivered cold	*1. Lime scale present on the exchangers or the resistances*	1. contact specialized personnel
	2. oxidized pressure switch contacts	2. contact specialized personnel
	3. defective electrical connection	3. contact specialized personnel
	4. partially burnt out resistance	4. replace the resistance element
Coffee delivered too hot	*1. incorrect pressure switch calibration*	1. regulate the pressure switch by means of the relative screw (chap. 6.2)

12 - MACHINE DISMANTLING

For a correct disposal of the machine, please follow the instructions contained on the last pages of the manual.