



## epoca

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## **USE AND MAINTENANCE**

## **EPOCA**Use & Maintenance

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Rancilio macchine per caffè, S.p.A. Rancilio North America, Inc.



The operations marked by this symbol are to be undertaken exclusively by an authorized technician.



The operations marked by this symbol are to be undertaken by the user.

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NAME: **EPOCA** series espresso machine

MODEL: **DE - S - CD** 

VERSIONS: 2 GROUPS

The label illustrated below corresponds to the identification label placed on the machine (Fig. 2 - pos. A).

Label identification:

1				
2		3		
5		6		
7		8	9	
10	11		12	
13			14	

- Manufacturer
   Model and version
- 3 Voltage
- 4 EC conformity mark(if required)
- 5 Serial number6 Boiler data7 Wattage
- 7 Wattage8 Protection level9 Motor power
- 9 Motor power10 Heating element power
- 11 Frequency
- 12 Conformity marks
- 13 Year of manufacture

Fig. 1

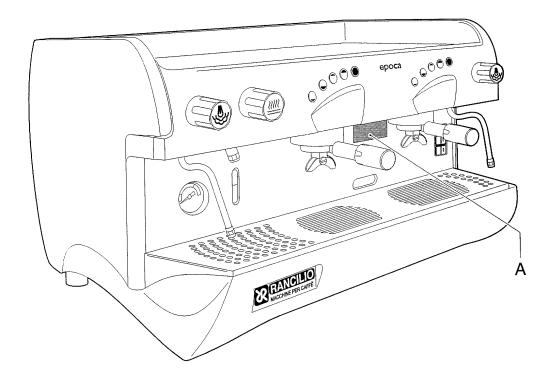


Fig. 2

#### **Symbols**



Warning symbol. The instructions marked by this symbol must be followed with great care in order to avoid accidents or damage to the machine.

#### 1. GENERAL SAFETY RULES

Do not leave the packing materials(plastic bags, expanded polystyrene, nails, cardboard, etc.) within reach of children, as these items are potential sources of danger.

Verify that the data on the machine corresponds to that of the electrical supply network before connecting the equipment.

Electrical adaptors, multiple sockets, and/or extensions must not be used.

Request an accurate update of the available power by an electrician. The electrical outlet must have the following safety features:

- efficient grounding connection
- wiring suitable for wattage capacity
- efficient grounding protection circuit breaker

Install the machine on a water repellent surface (laminate, steel, ceramic, etc.) away from heat sources(oven, stove, fireplace, etc.) and where the temperature will not fall below 41° F. KEEP WARM.

Do not leave the machine exposed to harmful atmospheric agents or place it in damp rooms, such as bathrooms.

Do not obstruct the suction or dispersion grilles and do not cover with cloths, etc.

Store the packed machine in a dry place. Do not expose to harmful atmospheric agents. Do not store where temperatures may fall below 41° F. Do not stack more than three items of the same kind. Do not place heavy items on the packaging.

In an emergency - such as the machine catching on fire, unusual noises coming from the machine, overheating, etc.---IMMEDIATELY disconnect the power and close water taps(and gas taps, if applicable).

Use only authorized spare parts in order to avoid compromising the safety and proper functioning of the machine.



Equipment installed incorrectly can cause damage to people and items for which the manufacturer cannot be considered responsible.

#### 2. DESCRIPTION

The machines in the EPOCA series have been designed to prepare espresso coffee and hot beverages.

A positive-displacement pump inside the machine powers the heater in which the water is heated. By pressing the appropriate buttons, water is supplied to the spouts in the form of hot water or steam, according to choice.

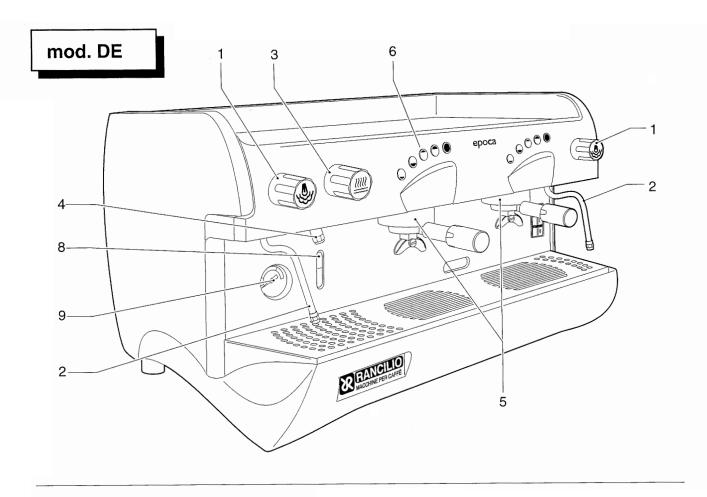
The water to be used for beverages is supplied directly from the water supply, pressurized by the pump, and immediately heated by the steam produced in the boiler.

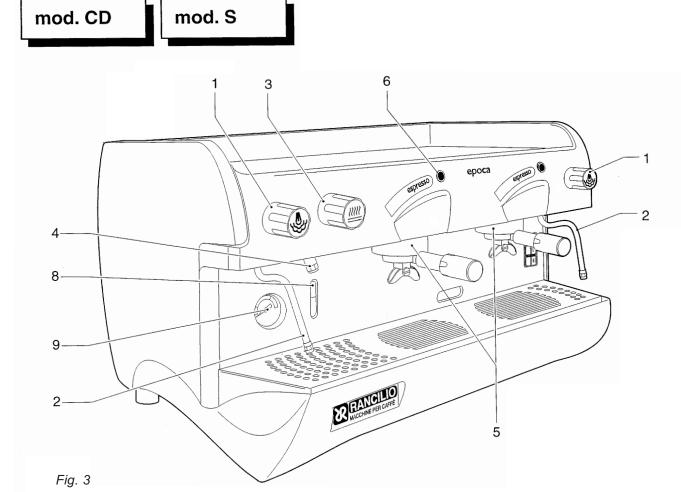
The machine is composed of a steel structure onto which the mechanical and electrical components are fitted. These are completely covered with panels made of painted polyurethane and stainless steel.

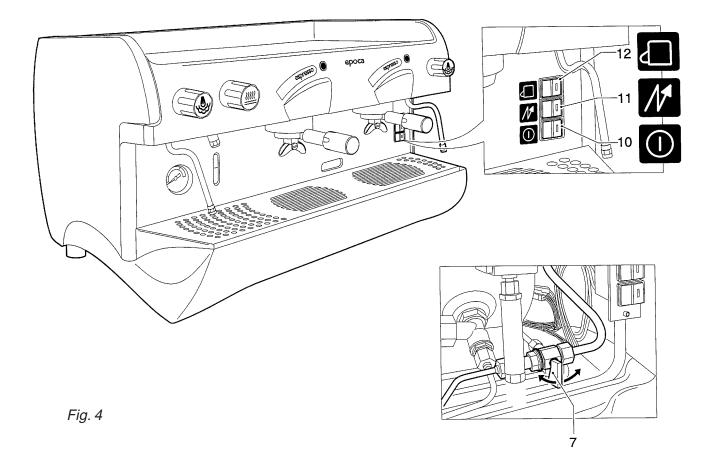
The beverages are dispensed at the front of the machine, where all the buttons, control devices, and dispensers are located.

There is a cup-warming plate on top of the machine.

#### 2.1 Specifications and composition







Model	Α	В	С	D	E
DE	no	yes	2	2	1
CD/S	yes	no	2	2	1

#### Legend:

- A Semiautomatic system; manual dispensing start and stop.
- **B** Automatic system; electronic control of coffee and hot water doses dispensed.
- C Number of coffee dispensing units(groups).
- **D** Number of steam spouts.
- **E** Number of hot water spouts.

Cup warmer available upon request.

- 1 Steam knob
- 2 Steam spout
- 3 Hot water knob
- 4 Hot water spout
- 5 Coffee dispensing unit(group)
- 6 Coffee dispensing touchpad
- 7 Manual water fill valve
- 8 Level indicator
- 9 Gauge(boiler pressure)
- 10 Power on-off switch and LED
- 11 Element switch and LED
- 12 Cup warmer switch and LED

#### 2.2. Machine equipment

	2 GROUP
1 dose filter holder	1
2 dose filter holder	2
Filters	3
Blind filter for backflushing	1
1 mt. supply pipe	1
1,5 mt. supply pipe	1
1,5 mt. drainage pipe	1
Supply pipe adapters	1
Blind disks for cleaning	2
Doser and tamper	1
Instruction manual	1
Wiring diagram	1

#### 2.3. Mechanical protective devices

The machine is equipped with the following protective devices:

- Complete paneling protection of all the parts subject to heat; and of the steam and hot water supplier.
- · Cup-warmer plate supplied with a tray to collect drips of water from freshly washed cups.
- · Work surface with grill and tray to collect spilled liquids.
- · Expansion valve in the hydraulic system and valve on to boiler to avoid overpressure.
- · Anti-siphon valve on the hydraulic system to avoid backflow to the main supply.

#### 3. TECHNICAL DATA

#### 3.1. Dimensions and weights

	2 GROUP
A	31"
В	30"
С	22"
D	16"
Н	19"
Boiler capacity in liters	11
Machine weight lbs	121
Water inlet (BSPT)	3/8"
Ømm drainage	14
Packaging	
Volume	13
Dimensions W x D x H	35x27x28
Gross weight lbs	148

#### 2.4. Power safety devices

The safety devices provided are:

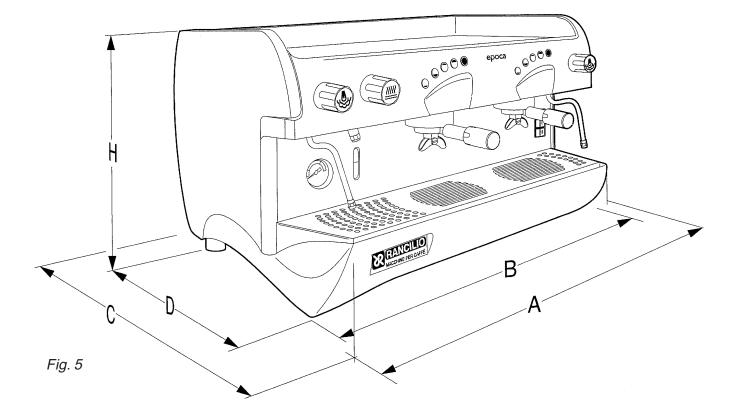
- · 5V low tension push buttons on the DE control key panel.
- · Thermal protection on the pump motor.
- · High limit for element protection.

#### 2.5. Aerial noise

Noise level in the working place does not usually exceed 70dB(A).

#### 2.6. Vibrations

The machine is supplied with rubber vibration dampening feet. In normal working conditions, the machine does not produce vibrations harmful to the operator or the equipment.





You will find all the technical data for power usage on the machine ID label (See Fig.1)

Machines provided with gas heating have a standard connection kit to carry out the following connections with:

- direct solid pipe
- copper and double cone pipe
- rubber support



Gas connections must be made in compliance with local safety regulations.

#### 4. USE

The machine has been designed, manufactured, and protected to be used to make espresso coffee and hot beverages(tea, cappuccino, etc.). Any other use is considered unsuitable and therefore dangerous.



The manufacturer cannot be held responsible for any damages caused to people or things due to unsuitable, incorrect, or irriational use of the machine.

The operator must always follow the instructions contained in this manual. In the case of a failure or if the machine is not working properly, switch it off and do not attempt any direct repair. Call an authorized service center.

#### The user must NOT:

- touch the hot surfaces and dispensing areas;
- · pour or spill liquids on the cup warmer shelf;
- · put his hands under the spouts during use;
- transport the machine or perform maintainence operations while the plug is connected or while the machine is hot;
- · wash the machine with water or steam jet;
- · completely or partially immerse the machine in water;
- · use the machine if the power cord is damaged;
- touch the machine while hands or feet are are wet or damp;
- use the machine when there are children in close proximity;
- allow the machine to be used by children or untrained persons;
- obstruct the suction or dispersal grilles with cloth or any other thing;
- · use the machine if it is wet or very damp.

#### 4.1. Precautionary measures

This machine may only be used with foodstuffs. It cannot be used for heating liquids or cooking any other kind of product that could damage and or pollute it.



The manufacturer cannot be held responsible for damage to people or things caused by unsuitable, incorrect, or irrational use.

#### 5. TRANSPORT

#### 5.1 Packaging

The machine is delivered in a strong cardboard box with internal protection.

The packaging bears symbols which must be observed during handling and stocking of the item.



Always keep the package in a vertical position during transport. Do not turn it over or lay it on vits side. Avoid bumping and exposure to harmful atmospheric agents.

#### 5.2. Inspection on receipt

Verify that the machine received corresponds to the one indicated on the delivery receipt, including any accessories.

Examine it for any damage during transport. If damaged, inform the forwarder and our customer service office immediately.



The packing elements(plastic bags, expanded polystyrene, nails, cardboard, etc.) must not be left within reach of children, as they are potential sources of danger. Dispose of the packing elements properly in accord with local ordinances and regulations.



#### 6. INSTALLATION

The machine is fitted with height adjustable rear feet.

The surface must be level, dry, smooth, strong, and stable; and at a height of approximately 44" from the floor.

It does not need to be anchored to the surface and it does not require and technical operations to dampen vibrations in order to operate properly.

It is recommended to leave enough free space around the machine to facilitate its use and to perform any necessary maintenance.

If the machine is wet or very damp, wait until it is completely dry before installing or using it. Before performing such work, the qualified service technician should examine the unit for any possible damage to the electrical components.

Reserve an area near the machine for the installation of the coffee grinders and dosing machines(see relevant instructions).

The machine is usually equipped with a water softener, which must be connected by the user in compliance with local laws. When installing the softener, refer to its user manual for instructions. A knock box or dreg drawer should be obtained and conveniently placed for use.



#### 6.1 Connections to be made by the user

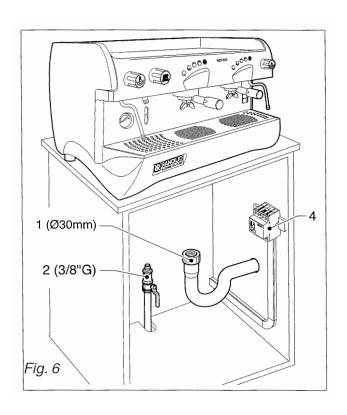


Hook-up must be carried out by qualified personnel in full accordance with federal, state, and local regulations.

#### **6.1.1 Water supply** (Fig. 6)

Connections must be installed close to the machine.

- Water drainage pipe 1, having a minimun internal diameter of 2", equipped with a water-trap accessible for inspection.
- · Water supply pipe 2, with a 3/8"G cut-off trap.





#### 6.1.2. Electrical supply

The machine is supplied ready for connection according to the required electrical specifications. Before connecting the machine, make sure that the plate details(Fig.1) comply with the electrical distribution network.

The electrical power cord must be directly plugged into the outlet in compliance with local regulations. Verify that the grounding system is efficient and in compliance with current legal requirements and codes. Also, the surge protection system and circuit breakers must be in accordance with the current, local regulations.

Use a power cable that complies with local standards with a grounding wire.

For three-phase power use a cable with:

5 conductors(3 phases + neutral + ground)

For single-phase power use a cable with:

3 conductors(phase + neutral + ground)

In both cases it is necessary to provide an automatic differential switch (Fig.6) at the start of the power cable, complete with the magnetic release elements in accordance with the ID plate details(Fig.1). The contacts must have an opening of at least 3mm, and a dispersed current protection of 30 mA.

Remember that each machine must be fitted with its own safety elements.



#### WARNING:

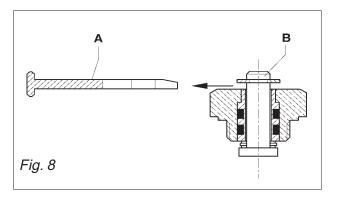
If the supply cable is damaged, it must be replaced by the manufacturer or by an authorized technician /electrician to prevent any risks to the user.



## 6.2. Preliminary operations ANTI-SIPHON VALVE CLIP REMOVAL

On top of the boiler there is an anti-siphon valve. When installing the machine, make sure to remove the plastic fork (Fig.8 - A) and check that the pin (Fig.8 - B) is not blocked.

This operation is **VERY** important to ensure the proper performance of the machine.





#### 6.3. CONNECTIONS

 Place the machine on the horizontal surface previously prepared.

Before connecting, thoroughly flush the main water pipes:

- Leave the water supply taps running at full pressure for several minutes.
- · Connect to the main water supply.
- · Connect the machine to the socket.
- · Connect the gas pipe(SYSTEM model).

Thoroughly flush all the water pipes of the machine:

- ·Leave the water supply taps running at full pressure for several minutes.
- •Switch on main switch 1: wait until the boiler fills up to the set level.
- •Switch on main switch 2 to begin heating the water in the boiler.
- Operate each group in order to allow the water to flow for about one minute; repeat the operation twice.
- •Dispense steam from the steam jets for about one minute.
- Dispense hot water for about one minute; repeat the operation twice.
- ·Switch off switches 1 and 2.
- ·Empty the water from the boiler(see point 10.3).

#### **IMPORTANT**



If water is not dispensed from the machine for over 24 hours, flush the internal components before beginning work, repeating the operations as described above.

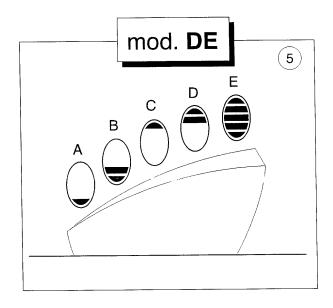
#### **ATTENTION**

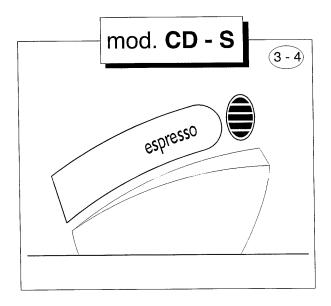


If, during the installation, the machine goes into security mode(the on/off selection on the touch pad is flashing), reset the machine using the main power switch.

#### 7. OPERATION

#### 7.1 Controls Fig.8





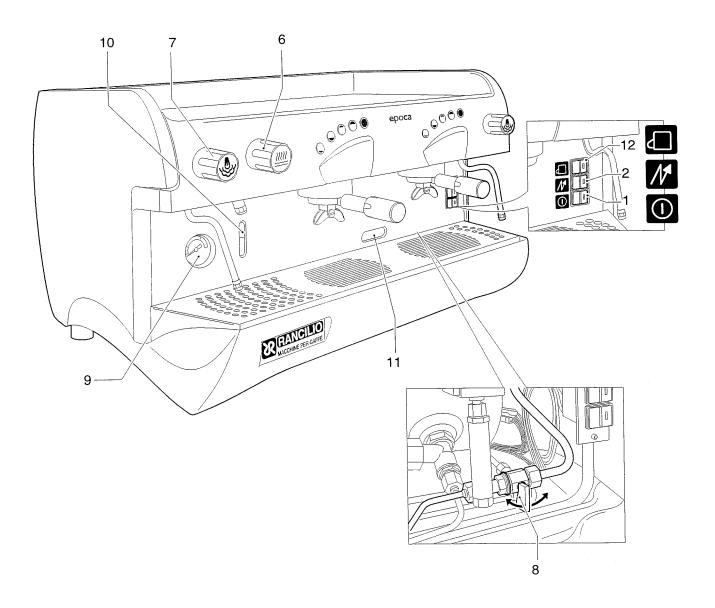


Fig. 8

#### 1. Main switch

Two-position switch with LED.

Push the switch(LED on), the machine is powered(except for the element), and the pump is turned on to fill the boiler.

#### 2. Boiler resistance switch

Two-position switch with LED. Push the switch(LED on), and power is supplied to the element for heating the boiler water.

#### 3-4. Coffee dispensing switch (mod. CD)

Press and release the button(LED on), coffee is continuously dispensed. Press and release the button again and coffee stops.

#### 5. Coffee dispensing electronic panel (mod. DE)

This panel features 5 buttons for each dispenser:

Four buttons for dispensing the programmed coffee dose.

One button for:

- Stopping coffee dispensing
- Starting continuous coffee dispensing
- Initializing dose programming(hold button for 8-10 seconds)

Each time coffee is dispensed, the LED of the relative button lights up.

During dose programming, the LED of the 5th button flashes rapidly

#### 6. Hot water supply knob

Turn in a counter-clockwise direction to open; and clockwise to close the tap.

#### 7. Steam supply knob

Turn in a counter-clockwise direction to open; and clockwise to close the tap.

#### 8. Supplemental manual water supply valve

Positioned under the drip-tray. Press down to fill the boiler manually.

#### **Safety Devices**

Dispensing cannot begin until the machine has reached the operating pressure or temperature. Dispensing will stop each time the boiler pressure drops too low.

#### 7.2. Control Instruments (Fig. 8)

- 9 Gauge with mobile needle on a fixed dial with a scale and color indicators.
  Visual control of the boiler pressure.
- **10** Minimum and maximum water **level indicator**. Visual control of water level in boiler(green LED).
- 12 Cup warmer switch (optional).





#### 7.3. Starting up

Turn on the water supply tap 2 (Fig. 6).

Push the main switch 1; the pump is activated to fill the boiler.

When the water reaches the correct level, the pump stops. Then push the main switch 2 to begin heating the water in the boiler.

Wait for the machine to reach its working pressure, (gauge needle 9 in green area), and for the machine to reach its correct thermal balance.



The machine's top shelf is a cup warming plate on which cups are kept heated and ready for use. This feature is very important to obtain good coffee as the pre-warmed cups prevent the coffee from cooling too quickly.

#### 8.1. Preparing coffee

- Unclamp the filter-holder from the dispensing unit and knock out any grounds into the receptacle provided for purpose, making sure not to damage rim of the filter.
- · Use the filter for 1 or 2 coffees, according to need.
- Fill the filter with coffee, level it off, and press down gently with the tamper.
- Remove any ground coffee that clings to the rim of the filter after tamping.



If ground coffee is left on the rim of the filter, a leak tight seal is not ensured, and water or coffee grounds may leak out of the filter.

Lock the filter-holder into the dispensing group firmly to obtain a leak tight seal.

Place the cups under the spouts; begin dispensing using control 3 or button panel 4 according to model (Fig. 8).

When the coffee has been poured, leave the filter holder attached to the dispensing group until the next coffee is required.

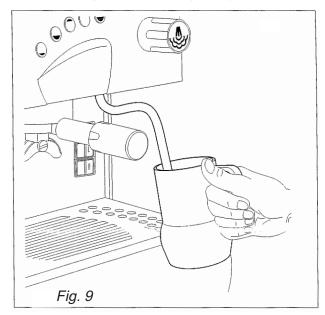


When pouring, beware of the hot parts of the machine, especially the coffee dispensing units and the steam and hot water spouts. Do not put your hands under the spouts or the groups while they are operating.

Proper grinding of coffee beans is of fundamental importance to producing good coffee. The granular texture of the fresh grounds should be such that it takes 25-30 seconds to produce the beverage. If the coffee grounds are too coarse, the coffee will be pale in color and weak in flavor, with only a very small amount of white crema. If the grounds are too fine, the coffee will be dark with no crema. Good coffee can only be made if the beans are freshly and uniformly ground by sharp grinding burrs. Then the coffee must be measured out into uniform doses of approximately 6 grams each.

Freshly ground coffee beans are very important because they quickly lose their aromatic qualities once they've been ground, and the fats present in the beans become rancid.

#### 8.2. Preparing cappuccino (Fig. 9)



- · Make a cup of cappuccino with the espresso coffee.
- · Use a tall, narrow frothing pitcher, half-filled with milk.
- Place the pitcher under the spout so that the nozzle touches the bottom.
- Turn the steam knob and lower the pitcher so that the nozzle is just under the surface of the milk.
- Now slowly lower the pitcher as the foam rises, always keeping the nozzle slightly immersed in the milk until you have sufficient froth.
- Turn off the steam knob and pour the frothed milk into the waiting cappuccino cup.



Immediately after carrying out this operation, clean the spout with a sponge or a clean cloth so that the milk does not dry on it. Be careful - the spout is hot and may burn your hand.

#### 8.3. Heating a beverage

Immerse the steam spout into the liquid to be heated.

Gradually turn the steam knob(Fig.8 - 7); the steam that disperses into the liquid heats it to the desired temperature.

Turn off the steam knob when the desired temperature has been reached.



Immediately after carrying out this operation, clean the spout with a sponge or a clean cloth so that the milk does not dry on it. Be careful - the spout is hot and may burn your hand.

#### 8.4 Preparing tea, camomile, etc.

Place the receptacle under the hot water spout and use the dispensing control according to the model (Fig.9). When the desired quantity has been obtained turn off the switch.

Add the beverage desired.

When purified water is used, these beverages often assume a darker color.

If you would prefer a lighter colored drink, draw fresh water from an ordinary tap and proceed with the heating phase as described in point 8.3.

## 9. ADJUSTMENT AND SETTING OF THE DOSE (DE model)

It is possible to adjust the dose of coffee and hot water dispensed by electronically controlled models.

#### 9.1. Adjusting the dose

The quantity of coffee and hot water dispensed can be adjusted using the button panel or the hot water controls.

- 1. Press the E button on any button panel and hold it down for 8-10 seconds until water stops flowing from the dispensing unit and the LED of the continuous flow button on the first button panel on the left begins flashing.
- 2. It is necessary to make 1 or 2 trial cups in order to make adjustments to dispense the correct amount of coffee in the cup.
- 3. Put the filter-holder(with ground coffee) on the left unit and the cup under the spout.
- 4. Operate the selected button(i.e. button A for one small cup).
- 5. Once the required coffee amount in the cup has been reached, press the stop button A. Coffee will stop pouring and the microprocessor will store the dose.
- 6. Press the continuous button E again. The LED will go out and the machine will store the new quantity.
- 7. Make the coffee and check the cup amount in order to check that programming is correct.

If some doses have to be changed(A-B-C-D), once at point 5 repeat the instructions in points 3-4-5 for each dose, remembering to use the filter-holder with the appropriate dose filter and freshly ground coffee. Then carry out point 6 and repeat point 7 to check all changed doses.

If all units are to be programmed with the same doses, you are finished. If the dosage of another group is to be changed, proceed as indicated in the above mentioned points 1-7, using only the button panel of the selected group.

#### 10. MAINTENANCE



Maintenance operations have to be carried out when the machine is off and cold and the plug is disconnected. Some weekly cleaning operations must be performed while the machine is operating.

Do not clean the machine by using metal or abrasive devices, such as steel wool, metal brushes, needles, etc., or general detergents (alcohol, solvents, etc.).

When necessary, use special detergents for coffee machines that can be bought in specialized service centers.

#### 10.1. Daily

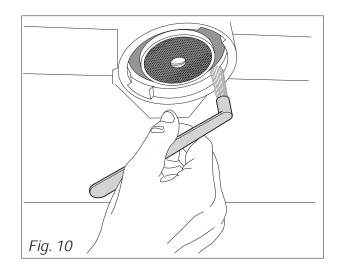
Use a clean sponge or cloth that does not leave lint or fluff(preferably cotton or linen).

Carefully clean the outside surface, following the grain of the satin finish on the parts in stainless steel.

Clean the steam and hot waterspouts. Check that the nozzles are not encrusted. If they become encrusted, be careful not to scratch or damage them by scraping too hard while cleaning.

Clean the spray units and the seals under the casing of the group heads using the special brush supplied.

Remove the filter-holders of the machine and remove the filters and the clamp which secures the filter. Use a brush to remove any coffee deposits and rinse with hot water in order to dissolve any oily deposits.



#### 10.2. Weekly



Operations to be carried out with the machine operating and under pressure.

Place the supplied blind filter in the filter-holder, put a spoonfill of powder detergent specifically manufactured for coffee machines, and fit the filter-holder in the group to be cleaned.

Press the coffee dispensing button and draw water for approximately 30 seconds.

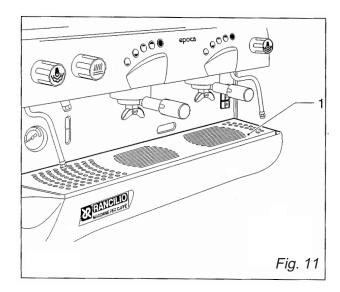
Stop and start dispensing several times until clean water comes out of the discharge unit tube.

Remove the filter-holder, take out the blind filter, and insert a normal filter. Replace the filter-holder on the group and rinse by dispensing water several times.

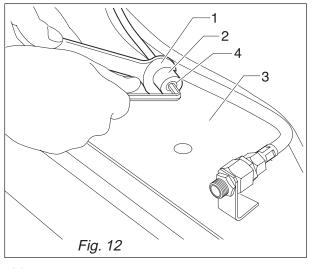
Make a coffee to eliminate any unpleasant taste.

CLEANING THE AIR FILTER AND DELIVERY HEADS This operation must be carried out when the machine is off and cold:

- Prepare a solution of 4 sachets of detergent powder, Code 69000124, dissolved in a liter of boiling water in a stainless steel, plastic, or glass container(NOT ALUMINUM OR IRON).
- Remove the filters and immerse them with the filter holders in the prepared solution, leaving them for at least 10-20 minutes(all night is recommended).
- Remove them from the container and rinse them thoroughly in running water.
- Remove the cup rack(Fig.11 1), slide out the drip tray and clean them both.



 Check and clean the drainage sump of Fig.12 - 3, removing any sludge with a spoon.



#### 10.3. Periodic maintainance



Operation to be carried out with machine under pressure.

- ·Discharge the water from the boiler (about 4 litres) with hot water delivery switch 6.
- ·Wait until the machine has re-heated before use.



## 10.3.1. Replenishing water in the boiler (To be carried out by qualified personnel)

- Turn off the machine and wait for the pressure in the boiler to diminish(gauge needle on "0").
- Using a wrench(Fig.12 -1), firmly hold the outlet pipe (Fig.12 -2) situated near the drainage sump while loosening the hexagonal sealing screw(Fig.12 - 4) by three turns at the most.
- · Drain off the water and tighten the screw.
- Refill the boiler(see paragraph 7.3.)

#### 10.3.2. Softener Regeneration

#### For Rancilio Softener Model DP-2 & DP-4

Regenerate the water softener within the time limits specified for the softener as follows:

#### DP2

- 1 regeneration per month for 500 coffees/day:
- 2 regenerations per month(once a fortnight) for 1000 coffees/day.

#### DP4

- 1 regeneration per month for 1000 coffees/day;
- 2 regenerations per month(once a fortnight) for 2000 coffees/day.

This table has been drawn up according to a water hardness of 25 degrees calculated on the French scale.

See the documentation included with the softener for instructions on how to use your softener.

#### 11. STORAGE OF THE MACHINE

#### A - Temporary storage

- · Perform cleaning and maintenance operations.
- · Wind up the cable and fasten it to the machine with duct tape.
- Cover the machine and place it in a dry room.
   Do not leave it exposed to harmful atmospheric agents. Do not allow it to be touched by children or any other untrained persons.

To disconnect from the main power supply, consult qualified personnel.

#### **B** - Permanent disposal

 In addition to carrying out the above steps for temporary storage; cut off the cord, pack the machine in cardboard, polystyrene, or other packing material, and consign it to a firm authorized for its disposal or to a second-hand goods dealer.

#### 12. PROBLEMS AND REMEDIES



Check operations to be carried out by the user with the plug disconnected.

For any type of problem or inconvenience not specifically indicated, disconnect the plug and contact our service center without attempting any direct repairs.

#### A) The machine does not start:

- Check that the plug is connected.
- In case of power failure, wait for the power to return. Then check to see if the fuse is blown; if the circuit breaker need to be reset; and if the main power is on.
- Check the condition of the plug and the power cord. If damaged, have them replaced by qualified personnel.

#### B) There is water under the machine:

- Check that the drainage tray is not obstructed.

#### C) Slow dispensing:

- Check that the filters and group heads are clean.
- Check that the coffee is not too finely ground.

#### D) Irregular steam delivery:

- Check that the nozzles are not obstructed.





# epoca

- ·CD
- DE

## PARTS BREAKDOWN







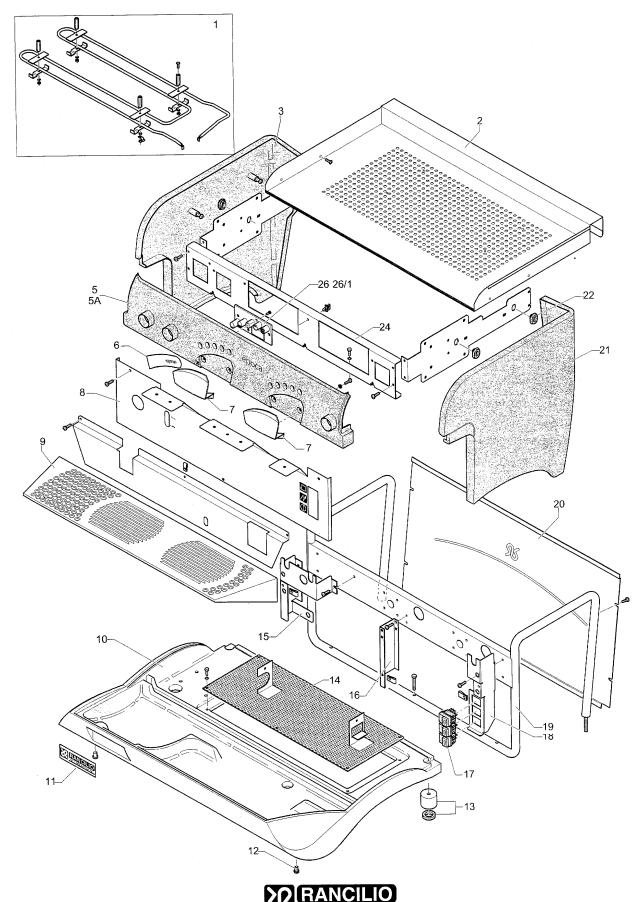






TAV.	02200	CARROZZERIA	CARROSSERIE	BODY	CARROCERIA	KARROSSERIE
01 02 03 05 06 07 08 09 110 111 12 14 15 16 17 18 19 20 21 22 24 26 26	10705265 32330953 38123754 10705501 37900908 21300741 32330957 32330957 32330957 3310011 10781304 10880313 32550757 32550758 34030970 32550756 10880311 32330951 3230951 3230951 3230951 3230951 3230951 3230951 3230951 3230951	KIT SCALDATAZZE EPOCA 2GR. TETTOIA EPOCA 2GRAI- FIANCHETTO SX EPOCA-PI- PANNELLO EPOCA/DE 2 COMPLETO GRIFFA TONDA ART.41910-33 COPRIGRUPPO EPOCA 2GRAI- GRIGILA POSAT.EPOCA 2GRAI- GRIGILA POSAT.EPOCA 2GRAI- BASAMENTO EPOCA 2GRPI- TARGH.ADESTVA RANCILIO EPOCA PIEDINO ANTISCIVOLAM. EPOCA ASSIEME PIEDINO REGOLA. EPOCA PIASTRA SOSTCALDATA EPOCA 2GR. +E- SQUADRETTA SX EPOCA-FE.ZN SQUADRETTA SX EPOCA-FE.ZN INTERR.BIPLLUM.VERDE EPOCA SQUADRETTA YMSZ. EPOCA-FE.ZN TELAIO EPOCA 2GRFE- FRONTALE SATINATO EPOCA 2GRAI- FIANCHETTO DX EPOCA-PL- GOMMINO FIANCHETTO EPOCA FASCIA SUPERICRE EPOCA 2GR. +E- SCHEDA-TTASTIERA CAFFE'EPOCA/CD SCHEDA-TTASTIERA CAFFE'EPOCA/CD	AGRAFE CARTER GROUPE EPOCA -ZM- PLAQUETTE EPOCA 2GRAI- GRILLE POSE-TASSE EPOCA 2GRA BASE EPOCA 2 GR -PL- PLAQUETTE RANCILLIO EPOCA PIED EPOCA GROUPE PIED EPOCA PLAQUETTE EPOCA 2GRFE- ETRIER SX. EPOCA-FE.ZN INTERRUPTEUR VERT EPOCA ETRIER DX EPOCA-FE.ZN CHÂSSIS EPOCA 2GRFE-	KIT HEAT-CUP EPOCA 2GR. EPOCA 2GRAI-TOP SX EPOCA-PL- PANEL EPOCA/DE 2 PANEL FIXER ASSEMBLY HOUSING ESPOCA -ZM- EPOCA 2GRAI-PANNEL GRATE EPOCA 2GRAI- EPOCA 2 GRPL-BASE RANCILIO EPOCAPLATE EPOCA SUPPORT EPOCA SUPPORT EPOCA SUPPORT ASSEMBLY PLATE EPOCA 2GRFE- SUPPORT SX EPOCA-FE.ZN SUPPORT PANEL EPOCA-FE.ZN GREEN SWITCH EPOCA SUPPORT DA EPOCA-FE.ZN EPOCA 2GRFE-CHASSIS POCA 2G	KIT CALIENTA TAZAS EPOCA 2GR  CUBLERTAEPOCA 2GRAI- LATERAL SX EPOCA-PL- PANELEPOCA/DE 2 GANCHO CARTER GRUPO EPOCA-ZM- REJA EPOCA 2GRAI- PARRILLA EPOCA 2GRAI- BASE EPOCA 2 GRPL- TARJETA RANCILIO EPOCA PIE EPOCA GRUPOPIE EPOCA PLACA EPOCA 2GRFE- ANGULAR SX EPOCA-FE.ZN ANGULAR SX EPOCA-FE.ZN INTERRUPTOR VERDE EPOCA ANGULAR DX EPOCA-FE.ZN CHASIS EPOCA 2GRFE- FRONTAL POCA 2GRAI- LATERAL DX EPOCA-PL- GOMA LATERAL EPOCA ABRAZADERA SUP.EPOCA 2GRFE- CEDULA+TECLADO CAFE EPOCA/CC CEDULA+TECLADO CAFE EPOCA/CC	DACHEPOCA 2GRAI- SEITENTEIL SX EPOCA-PL- TAFEL EPOCA/OF 2 SPANNKLAMMER GEHAUSE GRUPE EPOCA-ZM- MASKE EPOCA 2GRAI- TASSENABSTELLGITT.EPOCA 2GR BASISEPOCA 2 GRPL- SCHILD RANCILIO EPOCA STUTZFUSS GRUPPE EPOCA PLATTE EPOCA 2GRFE- WINKEL SX EPOCA-FE.ZN WINKEL DK. EPOCA-FE.ZN SCHALTER GRÜN EPOCA WINKEL DX. EPOCA-FE.ZN FAHRGESTELL EPOCA 2GRFE- FRONTPLAT.POCA 2GRAI- SEITENTEIL DX EPOCA-PL- GUMMI SEITENTEIL DPOCA GR. 2-F GUMMI SEITENTEIL EPOCA KARTEH-TASTATUR KAFFEE EPOCA/CI
	1.					
		보는 물론 발표 전 경기 및 경기 등 경기 및 경기 및 경기 및 경기 및 경기 및 경기 및				
	H.					









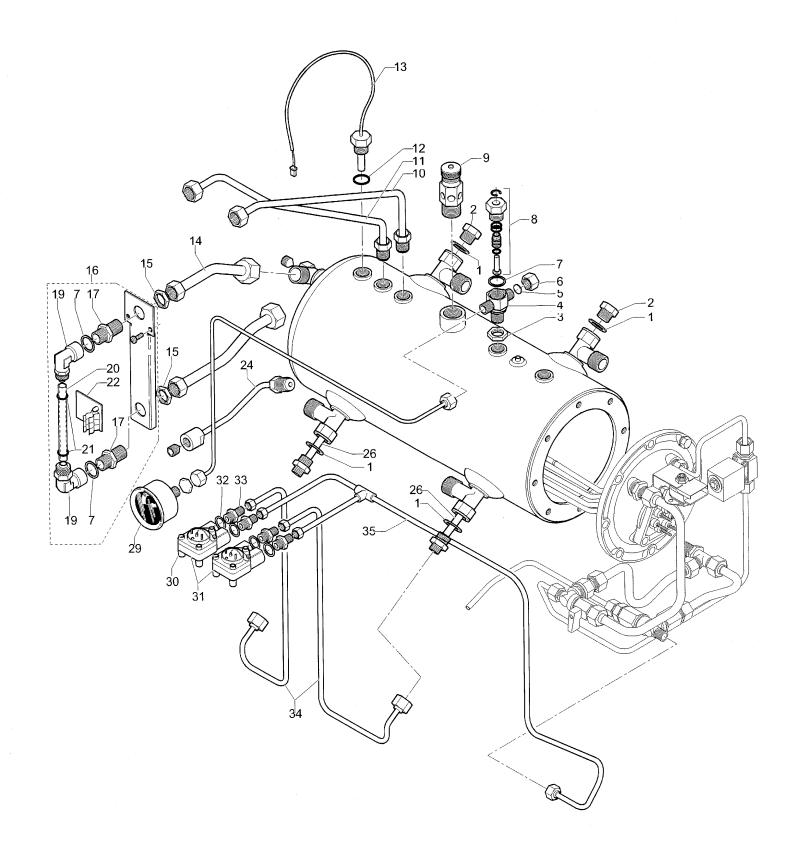






TAV.	02205	CALDAIA	CHAUDIERE	BOYLER	CALDERA	KESSEL
11	27350001	GUARNIZIONE 3/8 GAS -CU- SP.1	JOINT 3/8 GAS	GASKET 3/8 GAS	JUNTA 3/8 GAS	DICHTUNG 3/8 GAS
2	23220017	TAPPO 3/8 X GR.RE/E -OT-	BOUCHON 3/8	3/8 CAP LOW NUT 3/8	TAPON 3/8 TUERCA BAJA 3/8	VERSCHLUSS 3/8 NIEDR.SCHRAUBENMUTTER 3/8
}  -	23222002 20122202	DADO BASSO 3/8 -OT- SOST.20900101	ECROU BAS 3/8 RACCORD SOUPAPE V.A.	VALVE JUNCTION V.A.	UNION VALVULA V.A.	ANSCHLUSS VENTIL V.A.
;	31530001	GUARNIZIONE RAME D.11	JOINT D.11	GASKET DIAM. 11	JUNTA D.11	DICHTUNG D.11
5	23217012	DADO CIECO 1/4 GAS -OT-	ECROU BOUCHE 1/4	BLIND NUT 1/4	TUERCA CIEGA 1/4 JUNTA 3/8 GAS	HUTMUTTER 1/4 DICHTUNG 3/8 GAS
7 B	27350002 10060050	GUARNIZIONE RAME 3/8 SP.1,5 VALVOLA ANTIRISUCCHIO	JOINT 3/8 GAS SOUPAPE V.A.	GASKET 3/8 GAS V.A. VALVE	VALVULA V.A.	VENTIL V.A.
9	10060511	VALVOLA SICUR.ISPESL MR10E/B 1/2"	SOUPAPE SURETE ISPESL MR10EB	SAFETY VALVE ISPESL MR10EB	VALVULA SEGURIDAD ISPESL MR10E	SICHERHEITSVENTIL ISPESL MR10
0	10043044		TUBE 8X6X320 F3/8-M3/8 TUBE ROBINET VAPEUR SX	PIPE 8X6X320 F3/8-M3/8	TUBO 8X6X320 F3/8-M3/8 TUBO GRIFO VAPOR SX	ROHR 8X6X320 F3/8-M3/8 ROHR DAMPFHAHN SX
1 2	81330111 36401002	T. RUBIN. VAPORE SINISTRA GUARNIZ. OR 2043 GOMMA DUTRAL	OR 2043	PIPE STEAM COCK SX OR 2043	OR 2043	OR 2043
3	34070174	SONDA TEMP. 3/8 GAS EPOCA	SONDE 3/8 GAS EPOCA	3/8 GAS EPOCA BORE	SONDA 3/8 GAS EPOCA	SONDE 3/8 GAS EPOCA
4	10044091	TUBO 10X8X90 F3/8-F1/2 -CU- DADO BASSO 3/8 GAS -FE-DB 17	TUBE 10X8X90 F3/8-F1/2 -CU-	PIPE 10X8X90 F3/8-F1/2 -CU- LOW NUT 3/8	TUBO 10X8X90 F3/8-F1/2 -CU- TUERCA BAJA 3/8	ROHR10X8X90 F3/8-F1/2 -CU- NIEDR. MUTTER 3/8
.5 .6	26220005 10060380	INDICATORE LIVELLO EPOCA	INDICATEUR NIVEAU EPOCA	EPOCA LEVEL INDICATOR	INDICADOR NIVEL EPOCA	PEGELANZEIGER EPOCA
7	23222035	RACCORDO 3/8 LUNGO -OT-	RACCORD 3/8 LONG	LONG JUNCTION 3/8	UNION 3/8 LARGO	ANSCHLUSS 3/8 LANG KNIE EPOCA GF10838
.9 !0	69200016 38228066	GOMITO LIVELLO EPOCA GF10838 TUBO TEFLON FEP140 D.10X8X107,5	COURBE EPOCA GF10838	EPOCA GF10838 KNEE BEND TEFLON PIPE FEP140 D.10X8X107,	CODO EPOCA GF10838 TUBO TEFLON FEP140 D.10X8X107	
1	36402003	GUARN.OR 2037 -GM-VIT.P.T	JOINT OR 2037	OR 2037 GASKET	JUNTA OR 2037	OR 2037 DICHTUNG
2	34070171	SCHEDA AUTOLIV.CAPACITIVO EPOCA TUBO 8X6X300 M3/8-RACCCU-		CARD EPOCA PIPE 8X6X300 M3/8-RACCCU	CEDULA EPOCA TUBO 8X6X300 M3/8-RACCCU	ROHR 8X6X300 M3/8-RACC -CI
4 6	10043002 10042171	TUBO INIEZIONE RE/T MLN -OT-		MLN INJECTION PIPE	TUBO INYECCION MLN	INJEKTORROHR MLN
9	35002504	MANOMETRO 0-2,5 D.52 S10	MANOMETRE 0-2,5	MANOMETER 0-2,5	MANOMETRO 0-2,5	DRUKMESSER 0-2,5
30	34070050	VENTOLINO CONTATORE X DE ASSIEME 2 VENTOLINI EPOCA	HELICE VENT DE GROUPE 2 HELICE VENT EPOCA	FAN DE 2 EPOCA FAN ASSEMBLY	GRUPO 2 CONTADOR EPOCA	NOCKENWINKEL DE GRUPPE 2 NOCKENWINKEL EPOCA
1	10705238 27270001	GUARNIZIONE 1/4 GAS RAME ATA		COPPER GASKET 1/4	JUNTA 1/4 COBRE	KUPFERDICHTUNG 1/4
3	23214025	RACCORDO M1/4-M1/8 GAS -OT-		JUNCTION	UNION TUBO 6X4X450 F1/4-F1/4	ANSCHLUSSTUECK ROHR 6X4X450 F1/4-F1/4
4 5	10042081 10046002	TUBO 6X4X450 F1/4-F1/4 -CU- TUBO COLLETT-VENTOL, MLN/SDE		PIPE 6X4X450 F1/4-F1/4 PIPE CONNECTION MLN/SDE 2	TUBO ENCHUFAR MLN/SDE 2	ANSCHLIESSEN ROHR MLN/SDE 2
		- 기계등하다리다리다리다				
						그리다를 만들다 당하는 시계 없는
		그 일본다면 한 동생은 통기 없다.				













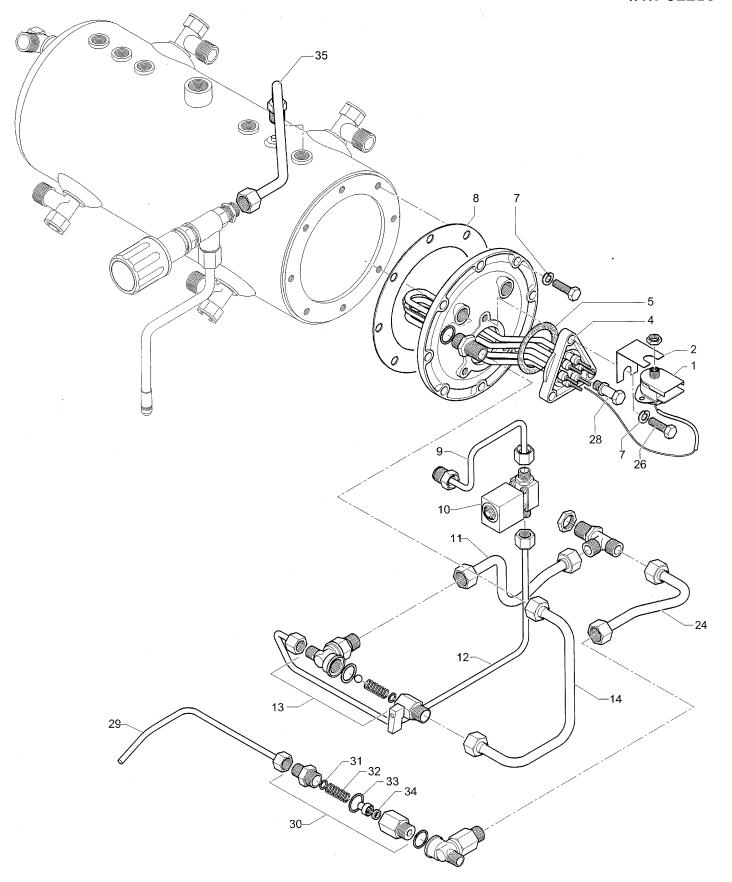






ΓAV. 02210	ALIMENTAZIONE	ALIMENTATION	FEED	ALIMENTACION	SPEISUNG
34200093 2 32330605 4 33323430 5 36930012 7 37420800 8 36930011 9 10042022 0 10060466 1 10044083 2 10042047 3 10706082 4 1004307 4 10043102 6 37040821 8 23210004 10 10060473 11 36407001 12 39110040 13 27350001 14 36302001	SALVAR.LM8P1041000 VDE SQUADR.SALVARES.MIDI ULAI- RESISTH-CAPILL/V230W4300 EPOCA GUARNIZ.RESISTENZA IN TEFLON ROND.EL.D.8 GROWER INOX U1751 GUARNIZ.COP.CALDAIA IN TEFLON TUBO 6X4X200 F1/4-M3/8 - CU- ELETTR.CON RACCORDI 24V EPOCA TUBO 10X8X190 F3/8-F3/8 - CU- TUBO 6X4X570 F1/4-F1/4 - CU- ASSIEME CARICO+RITEGNO EPOCA TUBO 10X8X270 F3/8-F3/8 - CU- TUBO 8X6X130 F3/8-F3/8 - CU- TUBO 8X6X130 F3/8-F3/8 - CU- VITE INOX M 8 X 22 TE U5739 TAPPO FORO RESIST.EPOCA TUBO SC.V.E. 6X4X250 VALVOLA RITLESP. IGR. OMICRON GUARN.OR 2031 KW 75-GOMMA MOLLA REGOLATORE GAS RG GUARNIZZIONE 3/8 GAS - CU- SP.1 GUARN.PASTVALV.DZ-GOMMA DZ 47	PALIER SAUVERESISTMIDI-A RESISTANCE V230/W4300 EPOCA JOINT RESIST. RONDELLE ELASTIQUE D.8 JOINT COUVERCLE CHAUDIERE TUBE 6X4X200 F1/4-M3/8 ELECTROVANNE 24V EPOCA TUBE 10X8X190 F3/8-F3/8 TUBE 10X8X190 F3/8-F3/8 TUBE 6X4X570 F1/4-F1/4 ENSEMBLE CHARGEMENT + RETENUE TUBE ALIMENT.CHAUDIERE TUBE ALIMENT.CHAUDIERE TUBE SX6X130 F3/8-F3/8 VIS M 8 X 22 INOX BOUCHON TROU RESIST.EPOCA TUBE 6X4X260 SOUPAPE RET-EXP.SYST. DE3 OR 2031 SOUPAPE RETENUE RESSORT	SAVE-RESISTANCES LMBP1041000 V SUPPORT SAFE-RESISTANCES HEATING ELEM.V230/W4300 EPOCA RESISTIC GASKET BOILER COVER PIPE 6X4X200 F1/4-M3/8 ELECTROVALVE 24V EPOCA PIPE 10X8X190 F3/8-F3/8 PIPE 6X4X570 F1/4-F1/4 EPOCA LOAD + CHECK UNIT FEED BOILER PIPE PIPE 8X6X130 F3/8-F3/8 SCREW M 8 X 22 INOX HEATING HOLE CAP EPOCA PIPE 6X4X260 SYST. DE3 CHECK-EXPAN.VAL OR 2031 FOR CHECK VALVE SPRING GASKET 3/8 GAS GASKET	SOPORTE SALVARESIST, MIDI	HALT.BERG.WIDERSTAND MIDI- WIDERSTANDV230/W4300 EPOC DICHTUNG WIDERSTAND FEDERSCHEIBE D.8 KESSELDECKEL DICHTUNG ROHR 6X4X200 F1/4-M3/8 ELEKTROVENTIL 24V EPOCA ROHR 10X8X190 F3/8-F3/8 ROHR 6X4X570 F1/4-F1/4
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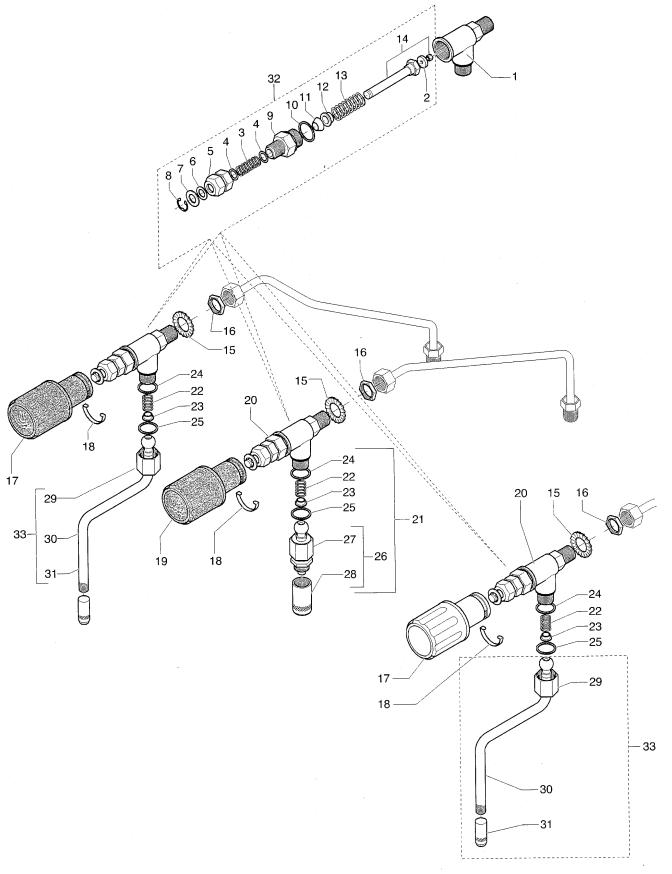






ΓAV.	02215	VAPORE-ACQUA	EAU-VAPEUR	WATER-STEAM	VAPOR-AGUA	WASSER-DAMPF
AV.	20200101 36301008 39110030 23123003 26220015 36230001 32239002 37510700 25224001 27400001 36130001 231233010 39110010 10706073 37431600 26220005 10060175 32210001 10060176 10060114 10705152 39110025 25119005 25119005 3620009 10705079 23135014 23135014	CORPO RUBIN.VAPORE NSF -OTN GUARN.PAST.RUB.VZ -GOMMA-MOLLA TAPPO RONDELLINA RUBIN.VAP-OT-BUSSOLA REGOLATR.VZ -FE.ZINC. RONDELLA TEFLON X VZ RONDELLA TEFLON X VZ RONDELLA TUBINET-VAP-AI-ANEL.EL.D.7 D6799 AC.BR BENZIN BUSSOLA GUIDA ASTA NSF -AI-GUARN.BUSSOLA GR.RE RAME RE116 GUARN.CONO TEFLON D.9 GUIDAMOLLA RUBIN.VAP-OT-MOLLA VALVOLA RE RE 20 STELO RUB.VAPORE COMPLETO ROS.DENT.EST.D.16ACC.BR.D6798A DADO BASSO 3/8 GAS -FE-DB 17 VOLANTINO VAPORE EPOCA COMP. MOLLA MANOPOLA VAPORE-FE-VZ 13 VOLANTINO ACQUA EPOCA COMP. RUBINETTO VAPORE MIN RUBINETTO VAPORE MIN RUBINETTO SNODO ACQUA EPOCA MOLLA X SNODO VAPORE VZ VZ 15 GUIDAMOLLA SNODO VAPORE INOX-GUARN.OR 115 SNODO GM-VITON9O GUARN.DADO SNODO TEFLON ROMPISPRUZZO +SPRUZZATORE CROM. SPRUZZATORE ACQUA -OT-ROMPISPRUZZO ACQUA -OT-	CORPS ROBINET VAPEUR NSF JOINT ROBINET RESSORT BOUCHON RONDELLE ECROU RONDELLE TEFLON RONDELLE ROBINET RONDELLE ROBINET RONDELLE ELASTIQUE D.7 GUIDE TIGE ROBINET JOINT CUIVRE CONE TEFLON D.9 GUIDE-RESSORT ROBINET RESSORT SOUPAPE TIGE COMPLETTE RONDELLE DENTELEE D.16 ECROU BAS 3/8 VOLANT VAPEUR EPOCA RESSORT POIGNEE VOLANT EAU EPOCA ROBINET VAPEUR MLN ROBINET VAPEUR MLN ROBINET VAPEUR SOUCH GUIDE-RESSORT NSF OR 115 JOINT JOINT FLEXIBLE BRISE+VAPORISATEUR VAPORISATEUR EAU BRISE+VAPORISATEUR EXISERIA ROBINES VAPORISATEUR VAPORISATEUR EAU BRISES-VAPORISATEUR EAU	NSF STEAM COCK BODY COCK GASKET CAP SPRING WASHER NUT TEFLON WASHER COCK WASKER ELASTIC RING DIAM.7 COCK ROD SOCKET COPPER GASKET CONE TEFLON DIAM. 9 COCK SPRING-GUIDE SPRING ROD COMPLETE THUMB WASHER DIAM.16 LOW NUT 3/8 EPOCA STEAM STEEERING WHEEL HANDLE SPRING EPOCA WATER STEEERING WHEEL MLN STEAM COCK COCK+WATER FLEXID EPOCA STEAM PIPE SPRING NSF COCK SPRING-GUIDE OR 115 GASKET GASKET BREAKER+SPRAYER WATER SPRAY WATER SPRAY	CUERPO GRIFO VAPOR NSF JUNTA GRIFO RESORTE TAPON ARANDELA GRIFO BUJE ARANDELA GRIFO ANILLO ELASTICO D.7 BUIE VARILLA GRIFO JUNTA COBRE CONO TEFLON D.9 GUIA MUELLE GRIFO RESORTE VARILLA COMPLETA ARANDELA DENTADA D.16 TUERCA BAJA 3/8 VOLANTE VAPOR EPOCA RESORTE MANECILLA VOLANTE VAPOR MIN GRIFO VAPOR MI	WASSER-DAMPF  DAMPFROHRKOERPER NSF HAHNDICHTUNG VESCHLUSSFEDER HAHNSCHEIBE REGLERHUELSE SCHEIBE TELLON SCHEIBE DAMPFHAHN SPRENGRING D. 7 HAHNBUCHSENSTAB KUPFERDICHTUNG TEFLONKEGEL D. 9 HAHNFEDERFUEHRUNG TEDER STANGE KOMPLETT ZAHNSCHEIBE D.16 NIEDR. MUTTER 3/8 STEUERRAD DAMPF EPOCA GRIFFEDER STEUERRAD DAMPF EPOCA GRIFFEDER STEUERRAD WASSER EPOCA DAMPFHAGELENK WASSER EPOCA GELENKFEDER DAMPF FEDERFUEHRUNG NSF OR 115 DICHTUNG GELENKOICHTUNG BRECHER -SPRITZDUESE WASSERSPRITZDUESE WASSERSTRAHLBRECHER GELENKMUTTER DAMPFROHR
	23222025 10049047 23119028 10706002 10706003	DADO SNODO TUBO VAPOT-CROM. TUBO VAPORE EPOCA SPRUZZ.VAPORE CROMATO -OT- MOVIMENTO RUBIN.VAP.COMPL. TUBO VAPORE + SNODO COMPL.	ECROU FLEX. VAPEUR TUBE VAPEUR EPOCA VAPORISATEUR MOUVEM.ROBINET VAPEUR TUBE VAPEUR + FLEX.COMP.	STEAM PIPE NUT EPOCA STEAM PIPE SPRAY STEAM COCK MOVEMENT STEAM PIPE + WHOLE FLEXIB	TUBO VAPOR EPOCA CHORRO MOVIMIENTO GRIFO VAPOR TUBO VAPOR+ARTICUL.COMPL.	DAMPFROM EPOCA STRAHL BEWEGUNG DAMPFROHR DAMPFROHR + GELENK KOMPL.













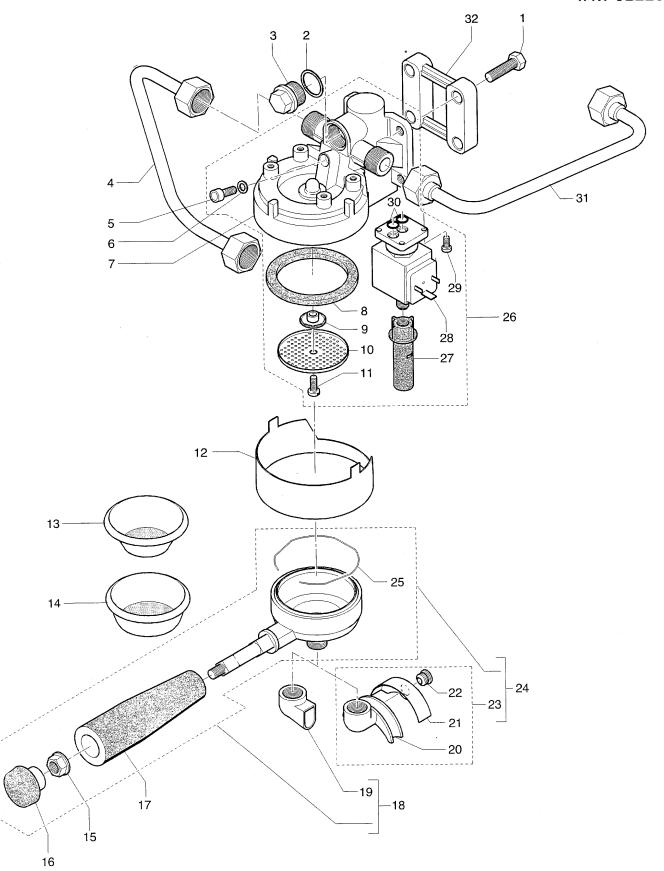






TAV.	02220	GRUPPO	GROUP	GROUP	GRUPO	GRUPPE
AV.  1 2 2 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 4 5 7 7 8 8 9 9 0 0 1 1 1 2 2 3 3 3 4 5 7 7 8 8 9 9 0 0 1 1 1 1 2 2 3 3 3 4 5 7 7 8 8 9 9 0 0 1 1 1 1 2 2 3 3 3 4 5 7 7 8 8 9 9 0 0 1 1 1 1 2 2 3 3 3 4 5 7 7 8 8 9 9 0 0 1 1 1 1 2 2 3 3 3 4 5 7 7 8 8 9 9 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	37040830 27400001 20122651 10044073 37060608 36240001 20101804 36301001 23139004 40200005 37030513 32339004 40100001 40100010 38121032 38121032 38121032 38121031 21102511 21100701 21103301 23123015 10071120 25105005 38123077 34040024 37030412 36402001 10044068 21300700	VITE M 8 X 30 TE FE.ZN. U5739 GUARN.BUSSOLA GR.RE RAME RE116 TAPPO GIGLEUR GR.NE -CT- TUBO 10X8X270 F1/2-F1/2 CU- VITE M 6 X 8 TCEI INOX -BRUG- GUARN.X VITE 6 Ma -CU- CORPO GRUPPO DE-CD Z11-OT- GUARN.SOTTOCOP.LE -GOMMA LE 7 SOST.Z5139001 DOCCETTA RETE -INOX RE 25 VITE INOX M5X12 T 1/2T T.CACC. FASCETTA COPRIGRUPO -AFBRILANI FILTRO 1 DOSE BASSO-INOX FILTRO 1 DOSE BASSO-INOX FILTRO LE 2 DOSI -INOX LE6/2 DADO FLAN.DENT.M8 FE.ZN. D6923 TAPPO MANOPOLA PORTAF.Z11 -PL- MANOPOLA X PORTAFILTRO-PL- PORTAF.LE X Z9 1 DOSE MONTATO BECCUCCIO 1 DOSE LATOT-CROM- DECCUCCIO 2 DOSI COMPLETO PORTAF.LE X Z9 2 DOSI MONTATO MOLLA FISS.FILTRO -AI- GRUPPO EPOCA 24V ROMPIGETTO+COPRIR.GR.MISS -PL- ELV 3 VIE 244VDC= X EPOCA VITE M 4 X 12 TC INOX U6107 GUARN.OR 105 ELETTR.GM-VIT.P.T TUBO 10X8X350 F1/2-F1/2 -CU- DISTANZIALE X GR.NE -ZM-	VIS M 8 X 30 JOINT CUIVRE BOUCHON GIGLEUR TUBE 10X8X270 F1/2-F1/2 VIS M 6 X 8 JOINT CORPS GROUPE DE-CD Z11 SOUS-COUPE BRISE-JET GROUPE DOUCHE VIS M5X12 T 1/2T T. FAISCEAU POUR GROUPE RE FILTRE 1 TASSE FILTRE 2 DOSES ECROU M 8 BOUCHON POIGNEE Z11 POIGNEE X PORTE-FILTRE PORTE-FILTRE 1 DOSE BEC 1 DOSE BEC 1 DOSE BEC CALIBRE COUVRE-BEC VIS POUR BEC ESC 2 DOSES COMPLET PORTE-FILTRE 2 DOSES RESSORT FILTRE GROUPE EPOCA 24V BRISE-JET GR. MISS ELECTROVANNE 24V EPOCA VIS M 4 X 12	SCREW M 8 X 30 COPPER GASKET JET CAP PIPE 10X8X270 F1/2-F1/2 SCREW M 6 X 8 GASKET Z11 DE-CD GROUP BODY FILTER HOLDER GASKET WATER JETBREAKER GROUP SHOWER SCREW M5X12 T 1/2T T. RE GROUP COVER BAND 1 CUP FILTER 2 DOSE FILTER NUT M 8 CAP HANDLE Z11 FILTER-HOLDER HANDLE 1 DOSE FILTER-HOLDER 1 DOSE BEAK SCREW FOR BEAK WHOLE Z DOSE BEAK 2 DOSE FILTER-HOLDER FILTER SPRING EPOCA 24V ASSEMBLY JETBREAKER GR. MISS ELECTROVALVE 24V EPOCA SCREW M 4 X 12 OR 105 GASKET PIPE 10X8X340 F1/2-F1/2 SPACE SLEEVE	TORNILLO M 8 X 30 JUNTA COBRE TAPON SURTIDOR TUBO 10X8X270 F1/2-F1/2 TORNILLO M 6 X 8 ALEN JUNTA CUERPO DE-CD Z11 JUNTA PORTAFILITRO ROMPECHORRO GRUPO DUCHA TORNILLO M5X12 T 1/2T T. ABRAZADERA GRUPO RE FILITRO 1 DOSIS FILITRO 2 DOSIS TUERCA M 8 TAPON MANECILLA Z11 MANECILLA PORTAFILITRO PORTAFILITRO 1 DOSIS PICO 1 DOSIS PICO 1 DOSIS PICO 1 DOSIS PICO OBLANCEADO CUBREPICO TORNILLO PICO PORTAFILITRO 2 DOSIS RESORTE FILITRO GRUPO EPOCA 24V ROMPECHORRO GR. MISS ELECTROVALVU.24V EPOCA TORNILLO M 4 X 12 JUNTA OR 105 TUBO 10X8X340 F1/2-F1/2 SEPARADOR	SCHRAUBE M 8 X 30 KUPFERDICHTUNG DUESENVERSCHLUSS ROHR 10X8X270XF1/2-F1/2 SCHRAUBE M 6 X 8 DICHTUNG KOERPER DE-CD Z11 FILTERTR. DICHTUNG STRAHLBRECHERGRUPPE FILTER DISCHES SCHRAUBE M 5X 12 T 1/2T T. GRUPPENSCHELLE RE FILTER FUER 1 TASSE FILTER 2 PORTION MUTTER M 8 GRIFFVERSCHLUSS Z11 FILTERHALTER I PORTION AUSGIESSER 1PORTION AUSGIESSER AUSGEGL. AUSGIESSER AUSGEGL. AUSGIESSER AUSGESSER AUSGIESSER AUSGEGL. FILTERHALTER 2 PORTION FILTERHALTER 3 PORTION FILT
2	21300700	DISTANZIALE X GR.NE -ZM-	ENTRETOISE	SPACE SLEEVE	JEFARADUR	



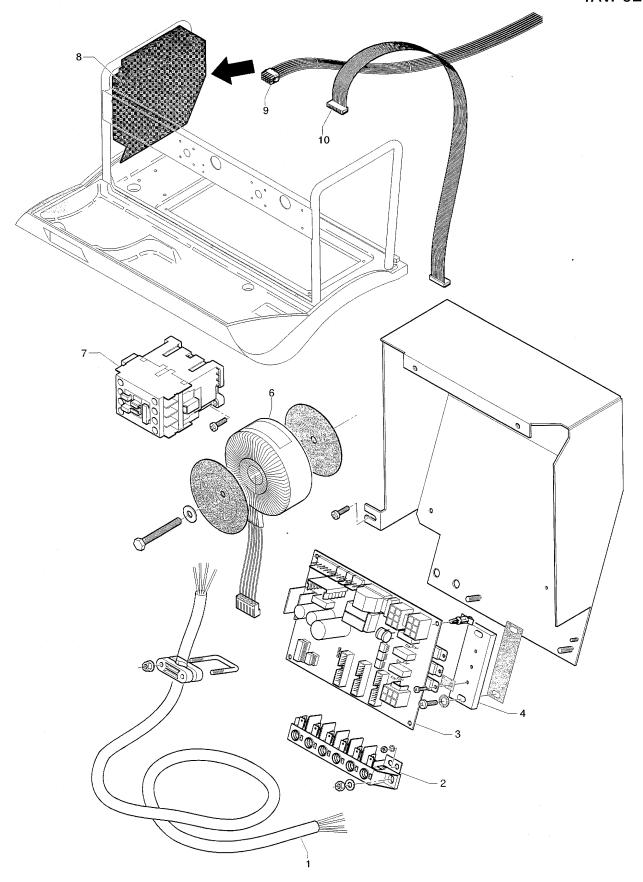






FAV. 02225	PARTI ELETTR.	ELECTRONIQUE	ELECTRONIC	ELECTRONICA	ELEKTRONISCE
34300078	CAVO H07RN-F 5C.SEZ.2,5 L=2300		CABLE H07RN-F 5C.WIRES.2,5 L=2	CABLE H07RN-F 5C.SEZ.2,5 L=230	KABEL H07RN-F 5C.SEZ.2,5 L=230
34150024	MORSETTIERA 6 POLI TIP. FV122/874 MLN	BORNE CARTE B.T. CD-DE EPOCA	CLAMP CARD B.T. CD-DE EPOCA	BORNE CEDULA B.T. CD-DE EPOCA	KLEMME KARTE B.T. CD-DE EPOCA
34070173 34209085	SCHEDA B.T. CD-DE EPOCA ISOLAT, IN GOMMA SIL TO-220 23X18 EP.	ISOLAT. EN CAOUTCHOUC SIL. TO-	INSULANT MADE OF SILIC. RUBBER	AISLA. EN GOMA SIL. TO-220 23X	ISOLIERUNG AUS SILIKONGUMMI.
34200258	TRINSE TOR 75VA230V/20/12 FPOCA	TRANSF. TOR. 75VA230V/20/12 EP CONTACTEUR 4P 230/50/60 EPOCA	EPOCA TRANSFORMER 75VA230V/20/	TRANSF.TOR.75VA230V/20/12 EPOC CONTACTOR 4P 230/50/60 EPOCA	TRANSFORMATOR 75VA230V/20/12 KONTACTGEBER 4P 230/50/60 EPOC
34200260 10110312	SCATOLA CABLATA EPOCA 230V ALIM 400V	BOÎTE EPOCA	EPOCA BOX	CAJA EPOCA	SCHACHTEL EPOCA
10700966	KIT CABLAGGI B/TENSIONE EPOCA	KIT CABLAGE TIMER	KIT WIRING TIMER WIRING TIMER	KIT CABLE TIMER CABLE TIMER	KIT KABELVERBINDUNG TIMER KABELVERBINDUNG TIMER
10110400	CABLAGGIO AT.EPOCA 2/3GR	CABLAGE TIMER	WIKING TIMES	CADLE TITLER	
	도 한 사람들이 많은 사람들이 보고 하시다면 하시다. 사용하는 사용하는 사용하는 사용하는 것이 되었다.				
				#) 24	



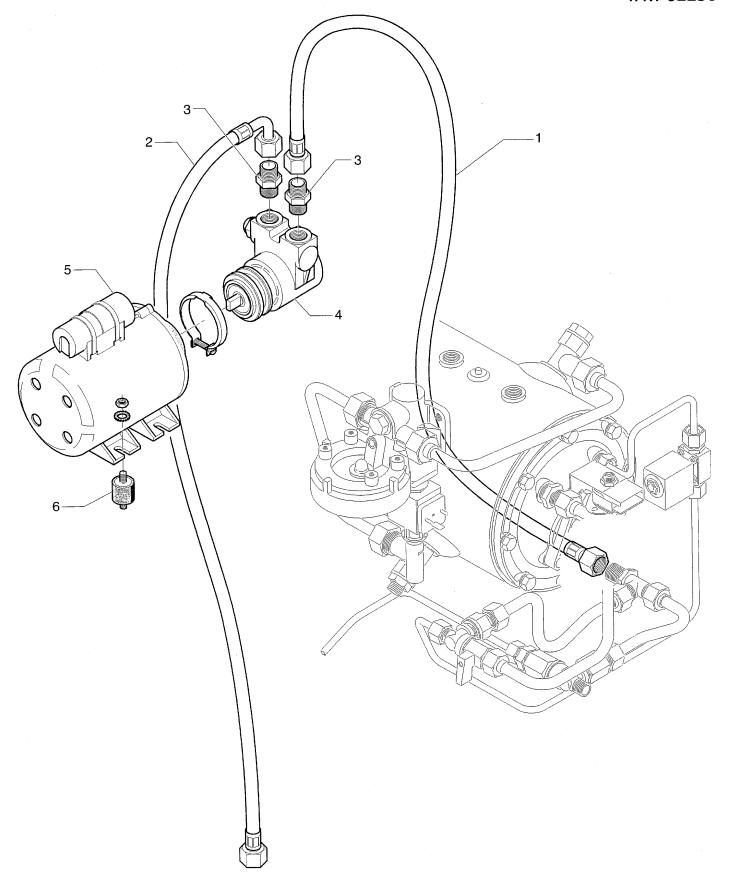






ΓAV.	02230	POMPA	POMPES	PUMP	BOMBA	PUMPE
1  2  3	69000707 69000718 23217019 69000039	TUBO FLEX MM. 800 F3/8-F3/8 TUBO FLEX MM.1500 CON CURVA RACC.3/8 NPT-3/8 GAS -0T- X VM POMPANTE VM A COLLARE S20 NSF	TUBE FLEX MM.800 TUBE FLEX MM.1500/CUR RACCORD POUR VM	PIPE FLEX MM.800 PIPE FLEX MM.1500/CUR JUNCTION FOR VM PUMP VM S20 NSF	TUBO FLEX MM.800 TUBO FLEX MM.1500/CUR UNION BOMBEADOR VM S20 NSF MOTOR VM EPOCA 230-50/60 HZ.	ROHR FLEX MM.800 ROHR FLEX MM.1500/CUR VERBINDUNGSSTUECK PUMPE VM S20 NSF MOTOR VM EPOCA 230-50/60 HZ.
5 5	34011006 36322003	ANTIVIB.EPOCA 20X20E-M6X10-SH45	ANTIVIB. EPOCA 20X20E-M6X10-SH	I EPOCA ANTI-VIBR. 20X20E-M6X10-		VIBRATIONSSCHUTZ EPOCA 20X20E











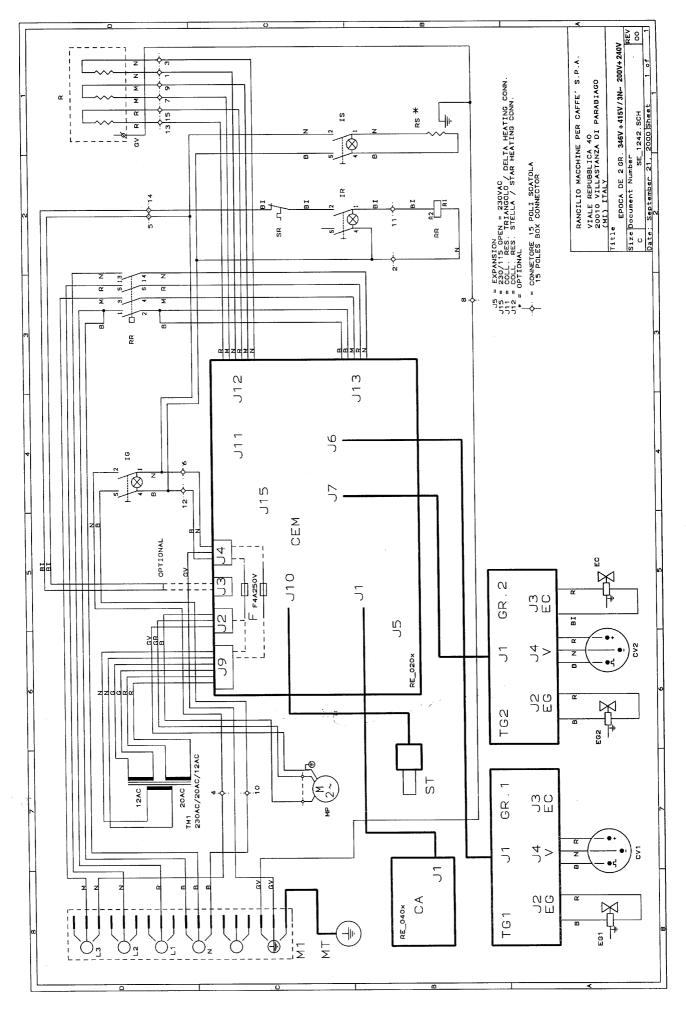
## epoca

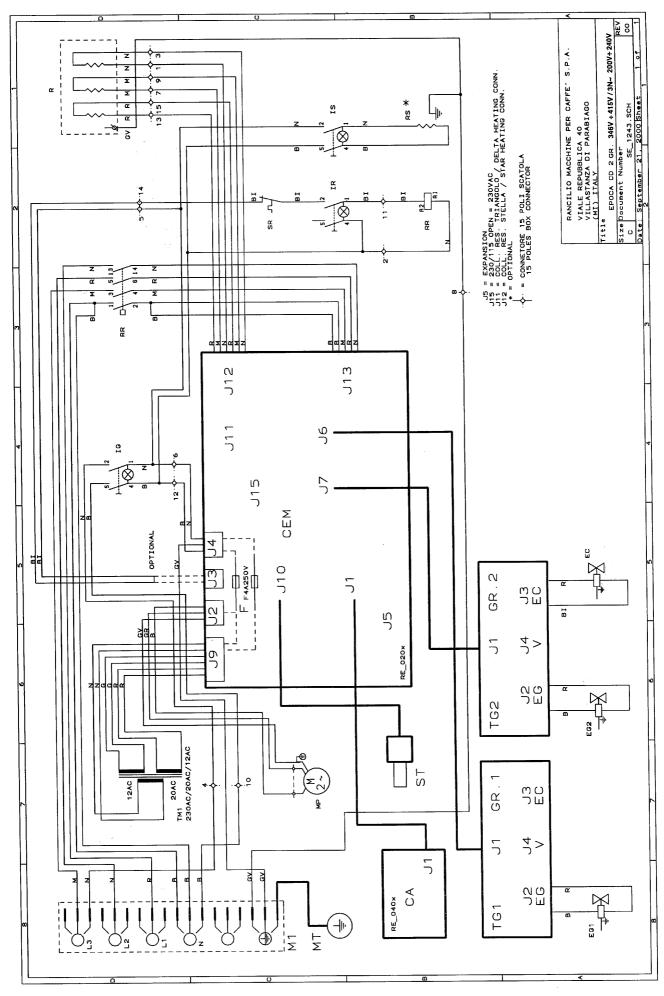
- · S
- ·CD
- DE

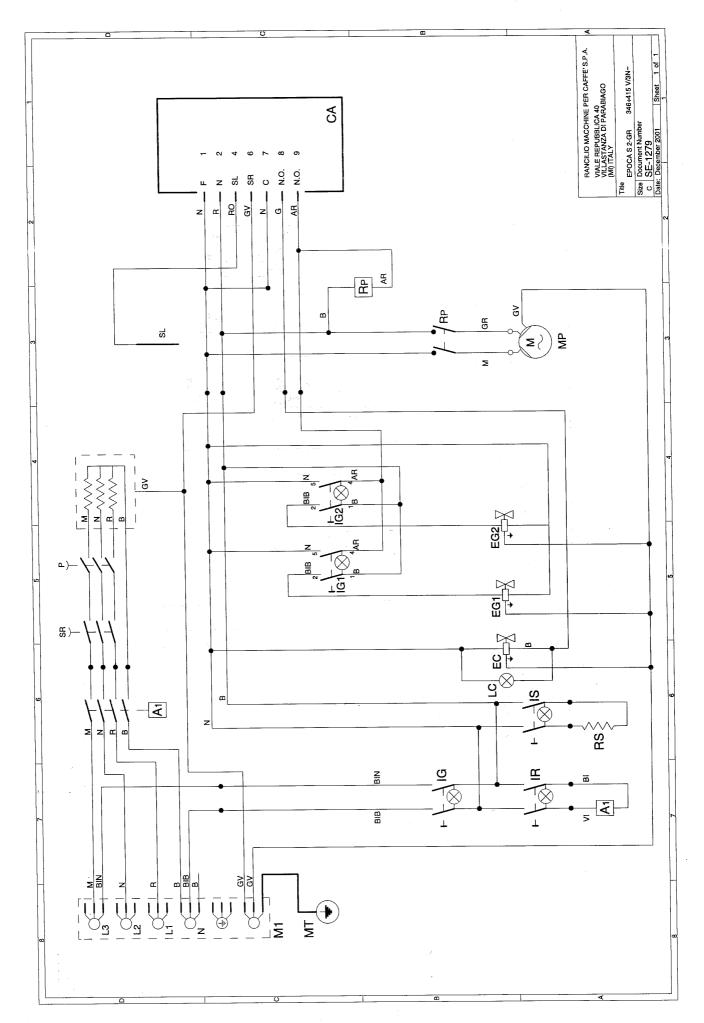
## **DIAGRAMS**

### SCHEMI ELETTRICI SCHEMAS ELECTRIQUES SCHALTPLANE WIRING DIAGRAMS ESQUEMAS ELECTRICOS

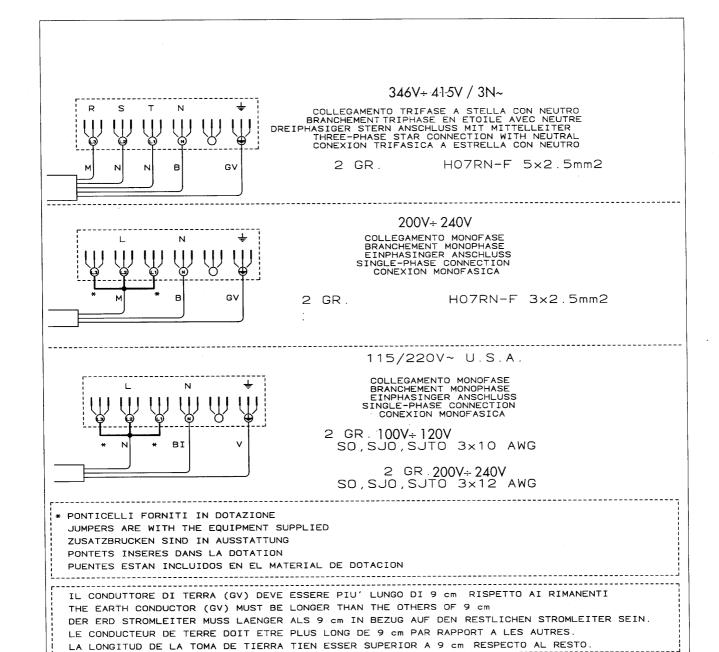
	1	F	D	GB	E
CA	= Centralina autolivello	Controle de niveau de l'eau	Wasserniveaukontrolle	Water level control	Transductor autonivel
CEM	= Centralina microprocessore	Boite electr. du microprocesseur	Elektronische schactel des mikroprozessor	Microprocessor Card	Cedula electronica microprocessor
cv	= Contatore volumetrico	Compteur volumetrique	Volumenzaehler	Flow Meter	Contador volumetrico
EC	= Elettrovalvola carico	Electr. de chargement	Speisungselektroventil	Feeding electrovalve	Electrovalvula carga
EG	= Elettrovalvola gruppo	Electr. du groupe	Gruppeelektroventil	Group Electrovalve	Electrovalvula grupo
TG	= Tastiera gruppo	Clavier groupe	Gruppedruckknoepfe	Group Keyboard	Botonera grupo
IG	= Interruttore generale	Interrupteur general	Hauptschalter	Main switch	Interruptor general
IR	= Interruttore Resistenza	Interrupteur resistance	Heizelementschalter	Heating Switch	Interruptor resistencia
IS	= Interruttore Scaldatazze	Interrupt. chaffe tasse	Tassenwaermerschalter	Cups heater switch	Interruptor calienta tazas
MP	= Motore pompa	Moteurpompe	Pumpen motor	Motor Pump	Motor bomba
тм	= Trasformatore	transformateur	Transformator	Transformer	Transformador
M1	= Morsettiera allacciamento	Boit a bornes pour branchement	Anschhlussklemmleiste	Mains Power Connection	Bloque de terminales
R	= Resistenza caldaia	Resistance chaudiere	Kesselheizung	Boiler Heating Resistance	Resistencia caldera
RS	= Resistenza scaldatazze	Resistance chauffe tasse	Tassen warmerheizung	Cups Heating Resistance	Resistencia calienta taza:
RR	= Rele' di Potenza	Relais pouissance	leistungsrelais	Power Conctactor	Contactor de potencia
SR	= Salvaresistenza	Sauve resistance	Widerstandsicherung	Heating Cut-off Device	Salvaresistencias
F	= Fusibile	Fusible	Sicherung	Fuse	Fusible
ST	= Sonda temperatura	Sonde Temperature	Temperatur Sonde	Temperature Probe	Sonda de temperatura
MT	= Morsetto di terra	Borne du sol	Erdklammer	Earth connection	Conexion de tierra
Р	= Pressostato	Pressostat	Pressostat	Pressure	Presostato
LC	= Lampada carico	Lampe chargement	Lnadunglampe	Cargo lamp	Làmpara carga
N	= Nero	Noir	Schwarz	Black	Negro
М	= Marrone	Marron	Braun	Brown	Marron
R	= Rosso	Rouge	Rot	Red	Rojo
AR	= Arancio	Orange	Orange-farbig	Orange	naranja
G	= Giallo	Jaune	Gelb	Yellow	Amarillo
٧	= Verde	Vert	Gruen	Green	Verde
В	= Blu	Bleu	Blau	Blue	Azul
GR	= Grigio	Gris	Grau	Gray	gris
ВІ	= Bianco	Blanc	Weiss	White	Blanco
BIB	B = Bianco-Blu	Blanc-Bleu	Weiss-Blau	White-Blue	Blanco-Azul
BIN	I = Bianco-Nero	Blanc-Noir	Weiss-Schwarz	White-Black	Blanco-Negro
RO	= Rosa	Rose	Rose	Pink	Rosado







#### COLLEGAMENTO ELETTRICO BRANCHEMENT ELECTRIQUE **STROMANSCHLUSS ELECTRONIC CONNECTION** CONEXION ELECTRICA



- = MARRONE, MARRON, BRAUN, BROWN, MARRON = NERO, NOIR, SCHWARZ, BLACK, NEGRO

- GV
- = NERO, NOIR, SCHWARZ, BLACK, NEGRO

  = BLU, BLEU, BLAU, BLUE, AZUL

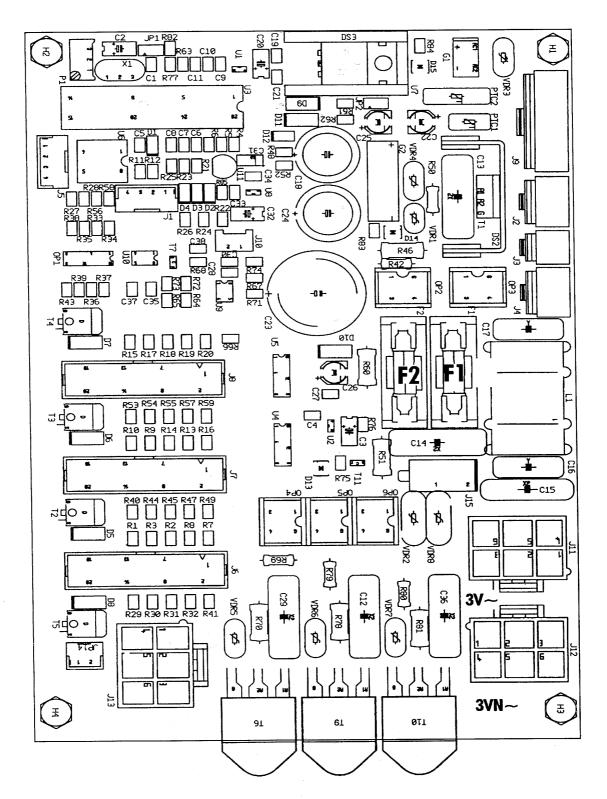
  = BIANCO, BLANC, WEISS, WHITE, BLANCO

  = VERDE, VERT, GRUEN, GREEN, VERDE

  = GIALLO-VERDE, JAUNE-VERT, GELB-GRUEN, YELLOW-GREEN, AMARILLO-VERDE

  = BIANCO-NERO, BLANC-NOIR, WEISS-SCHWARZ, WHITE-BLACK, BLANCO-NEGRO BN
- = BIANCO-BLU, BIANC-BIEU, WEISS-BIAU, WHITE-BLUE, BLANCO-AZUL = VIOLA, VIOLET , VIOLET , VIOLETT, VIOLETA = ROSSO, ROUGE, ROT, RED, ROJO

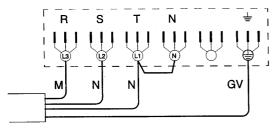
## SCHEDA ELETTRONICA - CARTE ÉLECTRONIQUE - ELEKTRONIKKARTE - ELECTRIC BOARD - TARJETA ELECTRÓNICA (DE - CD)



F1 = 4 A

F2 = 4 A

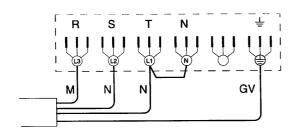
## 200-240 3V~ mod. DE - CD COLLEGAMENTO - RACCORDEMENT - VERBINDUNG - CONNECTION - CONEXIÓN



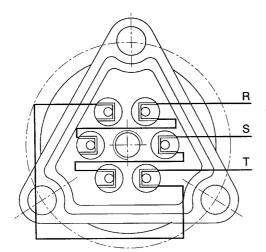
- Collegare il cavo alimentazione come indicato in figura.
- Spostare il collegamento delle resistenze dal connettore siglato 3VN~ in quello 3V~ sulla scheda di potenza
- 1) Raccorder le câble d'alimentation comme indiqué dans la figure.
- 2) Déplacer le raccordement des résistances du connecteur avec sigle 3VN~ dans celui 3V~ sur la carte de puissance

- 1) Das Versorgungskabel anbringen, wie es auf der Abbildung angegeben ist.
- 2) Die Verbindung der Widerstände von Verbinder 3VNauf Verbinder 3V- auf der Leistungskarte umstecken.
- 1)Connect cable as shown in the picture.
- 2) On the power board, move resistance connection from connector marked 3VN~ to connector marked 3V~
- 1) Conectar el cable de alimentación como se ilustra en la figura.
- 2) Cambiar la conexión de las resistencias del conector con la sigla 3VN~ a 3V~ en la tarjeta de potencia.

#### 200-240 3V~ mod. S COLLEGAMENTO - RACCORDEMENT - VERBINDUNG - CONNECTION - CONEXIÓN



- 1) Collegare il cavo alimentazione come indicato in figura.
- 1) Raccorder le câble d'alimentation comme indiqué dans la figure.
- 1) Das Versorgungskabel anbringen, wie es auf der Abbildung angegeben ist.
- 1)Connect cable as shown in the picture.
- 1) Conectar el cable de alimentación como se ilustra en la figura.

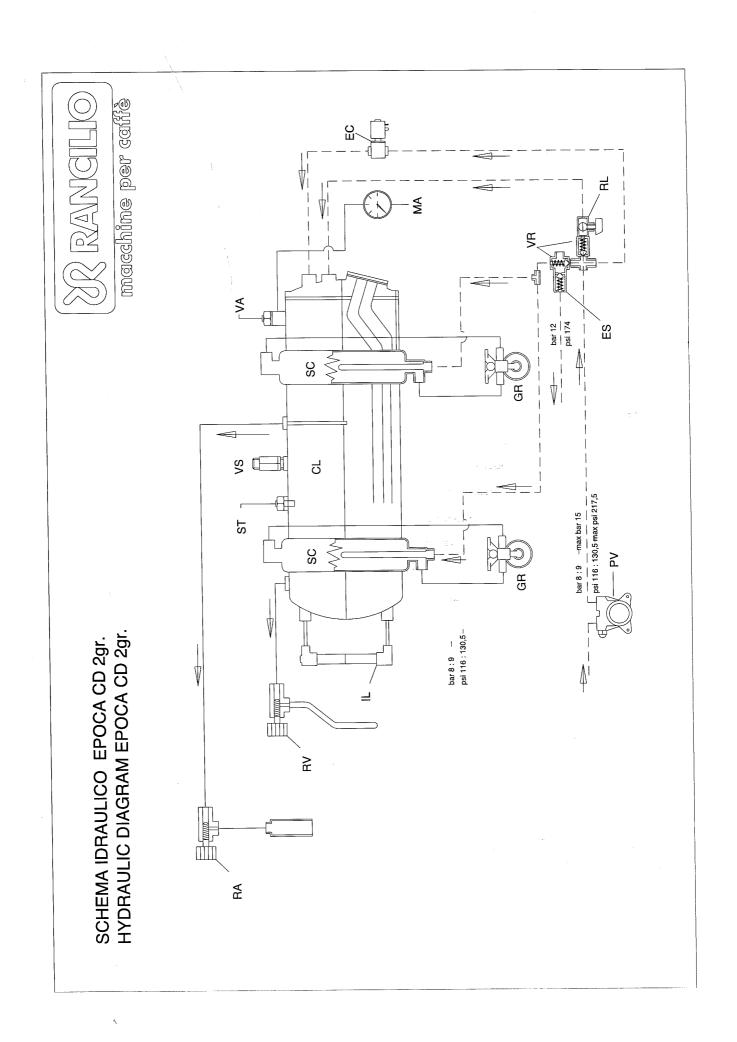


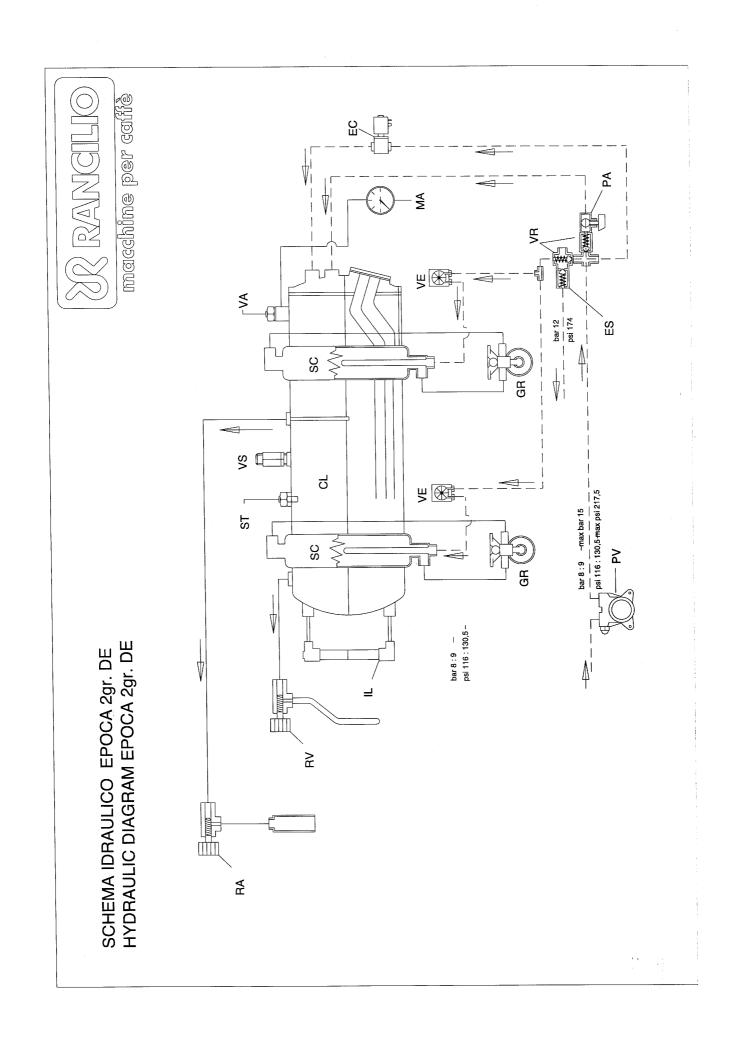
- 2)Den elektrischen Widerstand des Kessels anschließen, wie es weiter oben abgebildet ist.
- 2) Connect boiler electric resistance according to the diagram below.
- 2) Conectar la resistencia eléctrica de la caldera según el esquema que se ilustra arriba.

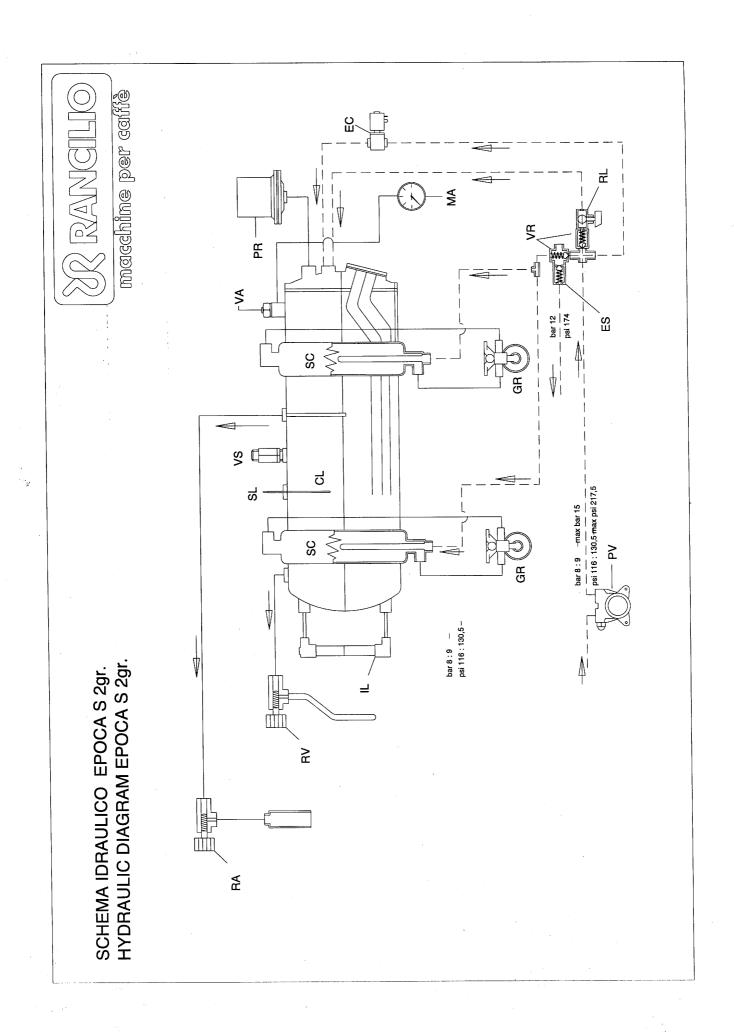
- 2) Collegare la resistenza elettrica della caldaia secondo lo schema sopra riportato.
- 2) Raccorder la résistance électrique de la chaudière selon le schéma reporté ci-dessus.

#### SCHEMI IDRAULICI SCHÉMAS HYDRAULIQUES HYDRAULIKPLÄNE HYDRAULIC DIAGRAMS ESQUEMAS HIDRÁULICOS

	1	F	D	GB	E
CA	= sonda livello	sonde niveau	Wasserstandsonde	water level control	sonda de nivel
CL	= caldaia	chaudière	Kessel	boiler	caldera
cv	= contatore volumetrico	, compteur volumétrique	volumetrischer Zähler	flow meter	contador volumétrico
EA	= elettrovalvola acqua	électrovanne eau	Elektroventil Wasser	water electrovalve	electroválvula de agua
EC	= elettrovalvola carico	électrovanne d'arrivée	Elektroventil Aufladen	inlet water valve	electroválvula de carga
EE	= miscelatore	mélangeur	Mixer	mixer	mezclador
ES	= valvola di espansione	valve d'expansion	Expansionsventil	exspansion valve	válvula de expansión
EGx	= elettrovalvola gruppo	électrovanne groupe	Elektroventil Gruppe	solenoid group valve	electroválvula grupo
GR	= gruppo erogatore	groupe de distribution	Brühgruppe	group	grupo erogador
IL	= indicatore di livello	indicateur de niveau	Pegelanzeiger	level indicator	indicador de nivel
МА	= manometro	manomètre	Manometer	manometer	manómetro
MA1	= manometro pompa	manomètre pompe	Manometer Pumpe	manometer pump	manómetro bomba
MA2	? = manometro caldaia	manomètre chaudière	Manometer Kessel	manometer boiler	manómetro caldera
PA	= pulsante alimentazione	touche d'alimentation	Versorgungsknopf	rals feedingpusch button	pulsador alimentación
PR	= pressostato	pressostat	Druckwächter	mechanic pressure switch	presostato
PV	= pompa volumetrica	pompe volumétrique	volumetrische Pumpe	volumetric pump	bomba volumétrica
RA	= rubinetto acqua	robinet eau	Wasserhahn	watertap	grifo de agua
RL	= rubinetto carico	robinet d'arrivée	Auffüllhahn	inlet water tap	grifo de carga
RV	= rubinetto vapore	robinet vapeur	Dampfhahn	steam tap	grifo de vapor
sc	= scambiatore di calore	échangeur de chaleur	Wärmaustauscher	heat-exchanger	intercambiador de calor
SL	= sonda livello	sonde niveau	Pegelsonde	rals bore	sonda de nivel·
ST	= sonda di temperatura	sonde de température	Temperatursonde	temperature probe	sonda de temperatura
VA	= valvola antirisucchio	valve anti-remous	Gegensogventil	antivacuum valve	válvula antivacío
VR	= valvola di ritegno	valve de retenue	Rückschlagventil	check-valve	válvula de retención
vs	= valvola di sicurezza	clapet de sûreté	Sicherheitsventil	safety valve	válvula de seguridad







Uso e manutenzione Emploi et entretien Gebrauch und Instandhaltung Use and maintenance Uso y manutención

# epoca

Macchina per caffè Machine à café Kaffeemaschinen Coffee machine Máquina para café

- E1
- **S**1
- S1 TANK







#### Gentile cliente.

#### grazie per averci accordato la Sua fiducia.

Siamo sicuri che il prodotto che Lei ha acquistato risponderà in pieno alle Sue aspettative, come tutti gli altri articoli della produzione RANCILIO. Il prodotto che Lei si accinge ad usare è il risultato di approfonditi studi e meticolose sperimentazioni fatte dalla RANCILIO per offrirLe quanto di più funzionale, sicuro ed apprezzabile, anche sotto il profilo del design, si possa trovare sul mercato. Il libretto di istruzioni per il corretto uso e manutenzione della macchina La aiuterà a sfruttare al meglio le sue elevatissime possibilità e prestazioni.

Con l'augurio di poterLa sempre annoverare tra i nostri clienti, Le auguriamo una buona lettura.



#### Cher Client.

#### Nous Vous remercions pour Votre confiance.

Nous sommes certains que le produit que Vous avez acheté correspondra entièrement à Vos désirs, comme du reste tous les articles de la production RANCILIO. Le produit que Vous allez employer est le résultat d'études approfondies et de méticuleux essais effectués par RANCILIO afin de pouvoir Vous offrir le produit le plus fonctionnel, le plus sûr et le plus remarquable, également du point de vue design, que l'on puisse trouver sur le marché. Le petit livre d'instructions pour l'emploi correct et l'entretien de la machine Vous aidera à tirer le maximum de ses grandes possibilités et performances. Nous sommes certains que nos explications sont claires et espérons, cher client, mériter Votre fidélité.



#### Sehr geehrte Kundin/sehr geehrter Kunde,

#### Zuerst möchten wir Innen für das uns entgegengebrachte Vertrauen danken.

Wir hoffen, dass das von Ihnen gekaufte Produkt Ihren Erwartungen in jeder Hinsicht entsprechen wird-wie übrigens auch all unsere anderen Erzeugnisse. Das Produkt das Sie in Gebrauch nehmen werden, ist das Resultat von sorgfältigen von RANCILIO Untersuchungen und Tests, um Ihnen in Bezug auf Funktionalität, Sicherheit, Leitungsfähigkeit sowie Design ein Produkt anbieten zu können, das das Beste auf Markt befindliche ist. Das Büchlein mit den Anwiesungen für eine korrekte Bedienung und Wartung der Maschine wird Ihnen behilflich sein, das Beste aus Ihnem Gerät zu machen. Wir hoffen, dass unsere Erklärungen verständlich sind und dass Sie auch in Zukunft zu unseren Kunden zählen dürfen.

Mit freundlichen Grüssen.



#### Dear Customer.

#### First of all, thank you choosing RANCILIO.

We are confident that the product you have purchased will come up to all your expectations-just as all our other products are designed to do. The product that you are about to use is the outcome of painstaking research and tests. The Rancilio's consistency assures quite sure that the equipment we have supplied you with, is the most functional, safe and satisfactory of its kind to be found on the market, as regards both its design and its efficiency. The booklet of instructions for its correct use and maintenance will help you to get the best possible service out of your machine. We trust you will find our explanations clear and we may continue, in the future, to count you among our esteemed customers.



#### Muy estimado cliente:

#### muchas gracias por habernos acordado Su confianza.

Estamos seguros que el producto que Ud. ha adquirido responderà seguramente a Sus esperanzas, asi como és por todos los demás articulos RANCILIO fabrica. El producto que Ud. se apresta a utilzar és el resultado de particulares estudios y pruebas meticulosas hechas por la firma RANCILIO para ofrecerle un producto funcional, seguro y apreciable, tambien por lo que se refiere al design, seguramente uno de los mejores que Ud. pueda encontrar en comercio. El manual de instrucciones para utilizar correctamente y efectuar la manutención de la máquina, la ayudará a disfrutar a lo máximo las elevadas posibilidades y prestaciones de la misma. Mientras confiamos que Ud. siga siendo siempre Cliente nuetro, le deseamo una provechosa lectura.





20010 Villastanza di Parabiago (MI) Viale della Repubblica 40

#### DICHIARAZIONE DI CONFORMITA' CE - DECLARATION DE CONFORMITE CE EG-KONFORMITÄTSERKLÄRUNG - EC DECLARATION OF CONFORMITY DECLARACIÓN DE CONFORMIDAD CE

Noi RANCILIO Macchine per caffè S.p.A.

Dichiariamo sotto la nostra responsabilità che il prodotto: Macchina per caffè per uso professionale Déclarons, sous notre responsabilité, que le produit : Machine à café d'utilisation professionnel Wir erklären auf unsere Verantwortung, daß das Produkt: Kaffeemaschine für Beruflichgebrauch Declare under our responsibility that the product: Espresso coffee makers for commercial use Declaramos bajo nuestra responsabilidad que el producto: Máquina para café de uso profesional

al quale è riferita questa Dichiarazione, secondo quanto prescritto dalle direttive specifiche:
à laquelle se réfère cette déclaration, selon les prescriptions des directives spécifiques.

auf das sich diese Erklärung bezieht, Entsprechend der Vorschriften der spezifischen Richtlinien.
to which this declaration relates is, according to the provisions of the specific directives:
al cual se refiere esta Declaración, de acuerdo con lo prescrito por las específicas directivas:

#### 98/37/CE

Direttiva macchina - Direttiva machine - Richtlinie Maschine - Makers directive - Directiva máquina 73/23/CEE, 93/68/CEE

Direttiva Bassa Tensione - Direttiva Basse Tension - Niederspannungsrichtline - Low Voltage Directive - Directiva Baja Tension

#### 89/336/CEE, 93/68/CEE, 92/31/CEE

Direttiva EMC - Direttiva EMC - Richtlinie EMC - EMC Directive - Directiva EMC

#### 97/23/CE

Direttiva attrezzatura a pressione (PED)-Directive sur les appareillages sous pression (PED)-Richtlinie für unter Druck stehende Geräte (PED)

Pressure device directive (PED) - Directiva equipos de presión (PED)

è conforme alle seguenti norme:

conforme aux normes suivantes :

In Übereinstimmung mit den folgenden Normen:

it complies with the following norms:

es conforme a las siguientes normas:

#### EN 292-1, EN 292-2, EN 60335-1, EN 60335-2-15, EN 55014, EN 61000-3, EN 61000-4, ENV 50141, EN 55104

Norme EN armonizzate - Normes EN harmonisées - Harmonisierte EN-Norme - Harmonized EN norms - Normas EN armonizadas VSR, S, M ed. '78 e '95

Norme applicate - Normes appliquées - Angewandte Vorschriften - Applied standards - Normas aplicadas

Descrizione attrezzatura a pressione-Description de l'appareillage sous pression-Beschreibung der unter Druck stehenden Geräte-Pressure device description-Descripción de los equipos de presión

Caldaia Chaudière - Kessel         0,165/1,65         129         Acqua/Vapore Eau/Vapeur - Wasser/Dampf         3,9	Pression - Druck Température - Temperatur		Fluido Fluide - Flüssig	Capacità It-Capacité It-Fähigkeit It-Capacity It Potencia It	
Chaudière - Kessel 0,165/1,65 129 EauVapeur - Wasser/Dampf 3,9	Pressure - Presión	remperature - remperatura	Fluid - Fluido	1 gr.	
Polici Galacia 14gaa vapor	0,165/1,65	129		3,9	

	Pressione Max.Mpa/bar Pression - Druck Pressure - Presión	Temp.max C° Température - Temperatur Temperature - Temperatura		Capacità It Capacité - Fähigkeit Capacity - Potencia	Numero scambiatore -Numéro de l'échangeur Nummer des Austauschers-Exehanger number Número intercambiador 1 gr.
Scambiatore Echangeur - Austauscher Exchanger -Intercambiador	0,12/12	129	Acqua Eau - Wasser Water - Agua	0,35	1

Le macchine a leva non sono dotate di scambiatore- Les machines à levier ne sont pas équipées d'un échangeur-Die mit einem Hebel versehenen Maschinen verfügen nicht über einen Austauscher.- The machines with lever are not fitted with exchanger-Las máquinas de palanca no están dotadas de intercambiador

Villastanza di Parabiago

Data: date: 10-09-2003

II presidente - The president

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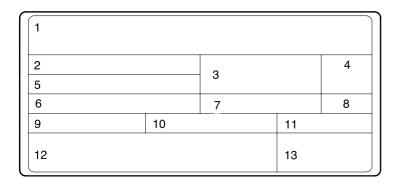
NAME: Coffee machine, EPOCA series

MODEL: E1 - S1 - S1 TANK

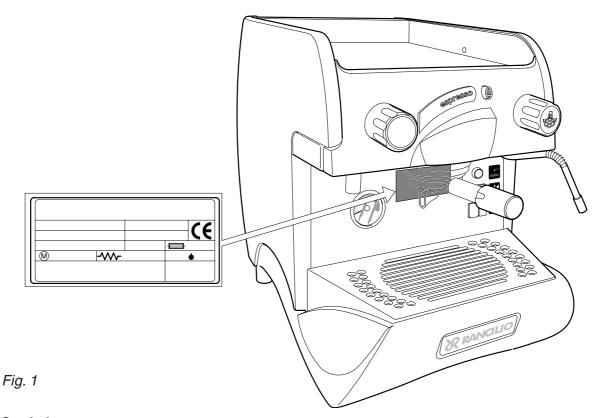
VERSIONS: 1 GROUP

The label illustrated on the EC Declaration of Conformity of this instruction manual corresponds to the identification label placed on the machine.

#### Label identification:



- Manufacturer
   Model and version
- 3 Voltage
- 4 EC conformity mark (if required)
- 5 Serial number
- 6 Boiler data
- 7 Machine total absorption
- 8 Protection level
- 9 Motor power
- 10 Heating element power
- 11 Frequency
- 12 Conformity marks
- 13 Year of manufacture



#### **Symbols**



Warning signal. The instructions which refer to this signal must be followed with great care in order to avoid accidents or damage to the machine.

This manual is an integral and essential part of the product and must be delivered to the user. The warnings contained in it must be read carefully, as they supply important indications relating to the safety of installation, use and maintenance. Keep this manual for future reference.

#### 1. GENERAL SAFETY RULES

- Don't leave the packing elements (plastic bags, expanded polystyrene, nails, cardboard, etc.) within the reach of children, as these elements are potential sources or danger.
- Check that the data on the machine corresponds to that of the electrical supply network, before connecting the equipment.
- Adaptors, multiple sockets and /or extensions must not be used.
- In doubt, request an accurate control of the plant by qualified personnel. The electric plant must be provided with the following safety devices:
  - efficient earth connection;
  - section of conductors suitable for absorption capacity
  - efficient earth leakage protection circuit breaker.
- Install the machine on a water repellent surface (laminate, steel, ceramic, etc.) away from heat sources (oven, cooking stove, fireplace, etc.) and in conditions in which the temperature may not go below 5°C. KEEP WARM.
- Do not leave the machine exposed to atmospheric agents or place them in damp rooms such as bathrooms.
- Do not obstruct the suction or dispersion grilles and do not cover with cloths, etc.
- Keep the packed machine in a dry place, not exposed to atmospheric agents and in conditions in which the temperature does not go below 5°C.
   Do not stack more than three items of the same kind. Do not place heavy items on the packaging.
- In an emergency, such as the breaking out of a fire, unusual noise, overheating, etc., take immediate action, disconnecting the power and closing gas and water taps.
- Only use original spare parts in order to avoid compromising the safety and proper functioning of the machine.



Erroneous installation can cause damage to people, animals and things for which the manufacturer cannot be considered responsible

#### 2. DESCRIPTION

The machines in the EPOCA series have been designed to prepare express coffee and hot beverages.

A positive-displacement pump inside the machine powers the heater in which the water is heated. By pressing the appropriate buttons, water is supplied to the spouts in the form of hot water or steam, according to needs.

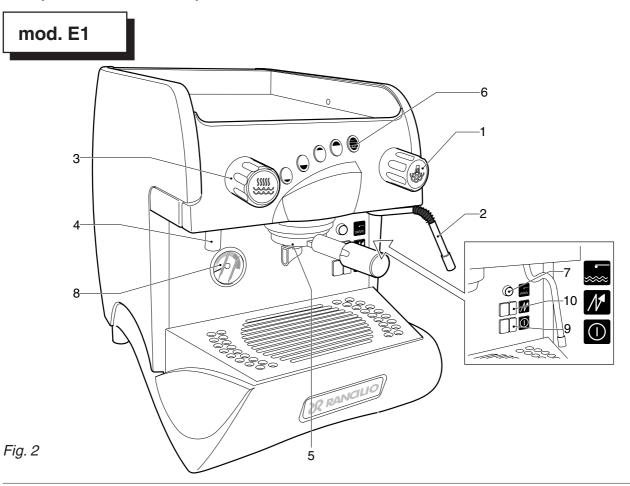
The water to be used for the beverages is supplied directly by the water supply, pressurized by the pump and immediately heated by the steam produced by the boiler or from an incorporated tank containing a softener for softening the water by trapping calcium salts

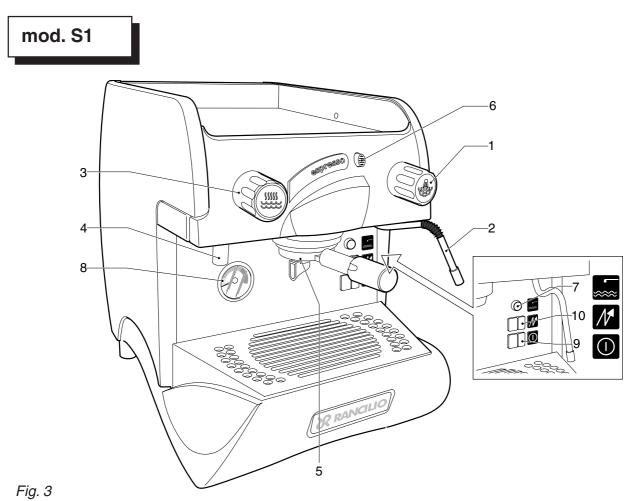
The machine is composed of a steel carrying structure on which the mechanical and electrical components are fitted. These are completely covered with panels made of painted polyurethane and stainless steel.

The beverages are dispensed at the front of the machine, where all the buttons, control devices and dispensers are to be found.

There is a cup-warming plate on the top of the machine.

#### 2.1. Specifications and composition





#### mod. S1 TANK

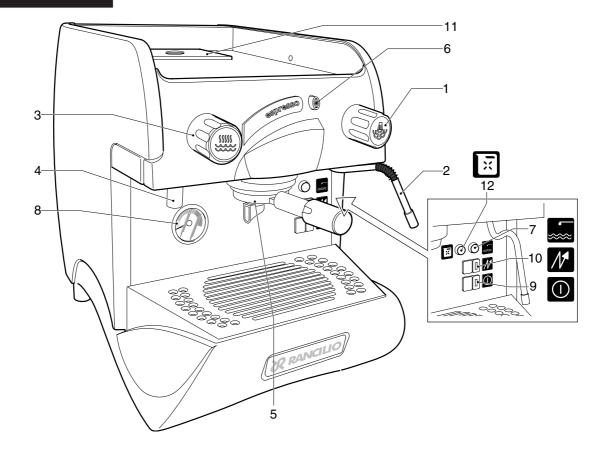


Fig. 4

	Α	В	С	D	E
E1	-	ok	1	1	1
S1	ok	-	1	1	1
S1 TANK	ok	-	1	1	1

#### Legend:

- A Semiautomatic system; manual dispensing start and stop.
- **B** Automatic system; electronic control of coffee doses dispensed.
- **C** N. of coffee dispensing units.
- **D** N. of steam spouts.
- **E** N. of hot water spouts.

- 1 Steam tap
- 2 Steam spout
- 3 Hot water tap
- 4 Hot water spout
- 5 Coffee dispensing unit
- 6 Coffee dispensing button
- 7 Boiler water level indicator
- 8 Gauge
- 9 Power on-off switch and led
- 10 Switch and boiler resistance engagement light.
- 11 Water-tank
- 12 Water shortage pilot light

#### 2.2. Machine equipment

	MOD. E1-S1	MOD. S1 TANK
1 dose filter holder	1	1
2 dose filter holder	1	1
Filters	2	2
Disk for cleaning	1	1
1 mt. supply pipe	1	-
1,5 mt. supply pipe	1	-
1,5 mt. drainage pipe	1	-
Pipe connections	1	1
Doser and presser	1	1
Instruction manual	1	1
Brush	1	1

#### 2.3. Mechanical protective devices

The machine is equipped with the following protective devices:

- complete panelling protection of all the parts subject to heat and of the steam and hot water supplier;
- work surface provided with grill and tray to collect spilt liquids;
- expansion valve in the hydraulic system and valve on the boiler to avoid overpressure;
- nonreturn valve on the hydraulic system to avoid flowing back to the main supply.

#### 2.4. Electric safety devices

The safety devices provided are:

- 5V low tension push buttons and the E1 control key panel;
- thermal protection on the pump motor;
- safe resistance thermal.

#### 2.5. Aerial noise

Noise level in the working place does not usually exceed 70dB(A).

#### 2.6. Vibrations

The machine is supplied with rubber vibration damping feet. In normal working conditions, the machine does not produce vibrations harmful to the operator and the environment.

#### 3. TECHNICAL DATA

#### 3.1. Dimensions and weights

	MOD. E1-S1	MOD. S1 TANK
A mm	385	385
B mm	355	355
C mm	565	565
D mm	400	400
H mm	485	485
Boiler capacity in litr.	3,9	3,9
Litres water in tankt	-	2
Machine weight kg	35	28
Water inlet	3/8"	-
Ømm drainage	30	-
Packaging		
Volume m³	0,196	0,196
Dimension LxPxH mm	495x690x575	495x690x575
Gross weight kg	40	33

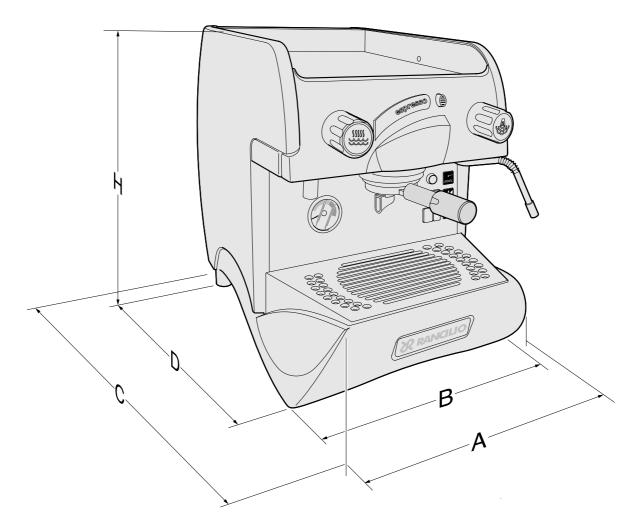


Fig. 5



You'll find all the technical data on electric connection, on the machine identification label Fig. 1.

#### 4. USE

The machine have been designed, manufactured and protected to be used to make express coffee and hot beverages (tea, cappuccino, etc.). Any other use is to be considered unsuitable and therefore dangerous.



The manufacturer cannot be held responsible for any damage caused to people or things due to unsuitable, erroneous or irrational use of the machine.

The operator must always follow the indications contained in this manual. In the case of a failure or if the machine is not working properly, switch it off and do not attempt any direct repair. Refer exclusively to a service centre.

#### The user must not:

- touch the hot surfaces and dispensing areas;
- place liquids containers on the machine;
- put his hands under the spouts during use;
- transport the machine or carry out maintenance operations when the plug is connected or when the machine is hot;
- wash the machine with water or steam jet;
- dip completely or partially the machine in water;
- use the machine if the cable is damaged;
- touch the machine when his hands or feet are wet or damp;
- use the machine when there are children in its proximity:
- allow the machine to be used by children or unfit people;
- obstruct the suction or dispersal grilles with cloth or any other thing;
- do not use the machine when wet or very damp.

#### 4.1. precautionary measures

This machine may only be used with foodstuffs. It cannot be used for heating liquids or grinding any other kind of product that could damage and pollute it.

The manufacturer cannot be held responsible for damage to people or things caused by unsuitable, erroneous or irrational use.

#### 5. TRANSPORT

#### 5.1. Packaging

The machine is delivered in a strong cardboard box with internal protection.

The packaging bears symbols which must be observed during handling and stocking of the item.

Always keep the package in a vertical position during transport. Do not turn it over or lay it on its side and avoid bumping and exposure to atmospheric agents.

#### 5.2. Inspection on receipt

Check that the machine received corresponds to the one indicated on the delivery note, including any accessories.

Check that it has not been damaged during transport and, if so, inform the forwarder and our customer service office immediately.

The packing elements (plastic bags, expanded polystyrene, nails, cardboard, etc.) must not be left within reach of children as they are potential sources of danger. Do not dispose of the packing elements in the environment; consign them to firms authorized for their disposal.

X

The machines are fitted with height adjustable feet (only rear).

The support surface shall be levelled, dry, smooth, steady and stable and at such a height that the cupwarming surface is at over 150 cm from ground. Do not use water jets or install where water jets are used.

In order to guarantee normal operation, the machine must be installed in areas that the environmental temperature is between a minimum of -1°C and a maximum of +32°C end humidity of not over 70%.

It does not need to be anchored to the surface and it does not require any technical operations to dampen vibrations in order to operate properly.

It is recommended to leave the area around the machine free to facilitate its use and the performance of any maintenance operations.

If the machine is wet or very damp, wait until it is completely dry before installing or using it. It is always necessary to request an accurate control to qualified service people in order to find any possible damage to the electric components.

Reserve an area near the machine for the installation of the coffee grinding and dosage machine (see relevant documentation).

The machine is usually equipped with a water softener, type DP2 or DP4, which must be connected by the user in compliance with the laws in force. Should a different softener be installed, refer to the documentation of the relevant product.

A dreg drawer should be fitted by the installer.



### 6.1. Connections to be made by the

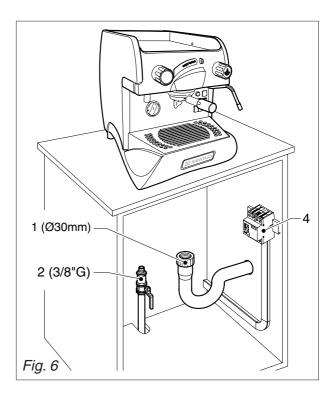


Hook-up must be carried out by qualified personnel in full accordance with federal, state and local regulations.

#### **6.1.1. Water supply** (Mod.E1 - S1) (*Fig.6*)

Connections must be installed close to the machine.

- Water drainage pipe 1, having a minimum internal diameter of 30 mm, equipped with a water-trap accessible for inspection.
- Water supply pipe 2, with a 3/8"G cut-off tap.





#### 6.1.2. Electric supply

The machine is supplied ready for connection according to the required electrical specifications.

Before connecting the machine ensure that the plate details (*fig. 1*) comply with those of the electric distribution network.

The electrical connection cable must be directly connected to the connection provided according to current legislation. Ensure that the earthing system is efficient and in compliance with current legal requirements.

The earthing system and the lightening protection system must be realized in accordance with the provisions of current legislation.

For the supply network use a cable in compliance with standards with protective conductor (earthing wire).

For three-phase power use a cable with 5 conductors (3 phases + neutral + earth).

For single phase power supply use a cable with 3 conductors (phase + neutral + earth).

In both cases it is necessary to provide an automatic differential switch (*Fig. 6*) at the start of the power cable, complete with magnetic release elements in accordance with the identification plate details (*Fig. 1*). The contacts must have an opening of equal or over 3 mm and with dispersed current protection of 30 mA

Remember that each machine must be fitted with its own safety elements.

#### **WARNING:**



Should the power supply cable be damaged it is to be replaced by the manufacturer or by its technical assistance service or by person with equivalent qualification, in order to prevent any risks.

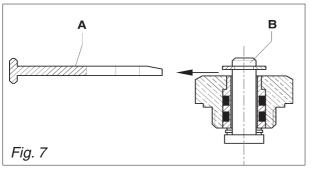


## 6.2. Preliminary operations ANTISUCTION VALVE INSTALLATION

#### NOTE TO THE INSTALLER

On the top of the boiler there is the antisuction valve. When installing the machine make sure to remove the plastic fork "A" and check that the pin "B" is not blocked.

This operation is very important for the correct working of the machine.





#### 6.3. Connections

 Place the machine on the horizontal surface previously prepared.

Before connecting, thoroughly wash the mains water pipes:

- Leave the water supply taps running at full pressure for several minutes.
- Connect to the mains water supply.
- Connect the machine to the socket.

Thoroughly wash all the water pipes of the machine:

- Leave the water supply taps running at full pressure.
- Switch on main switch 1: wait until the boiler fills up to the level set.
- Switch on main switch 2 to begin heating the water in the boiler.
- Operate each unit in order to allow the water to escape for about one minute; repeat the operation twice
- Deliver steam from the steam jets for about one minute.
- Deliver hot water for about one minute; repeat the operation twice.
- Switch off switches 1 and 2.
- Empty the water from the boiler: see point 10.3



#### **IMPORTANT**

Should the machine not deliver water for over 24 hours, wash the internal components before beginning work, repeating the operations as described above



#### ATTENTION

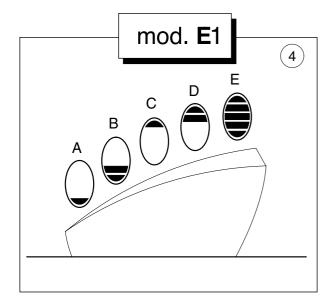
Please be informed that in order to avoid pressure falls during the boiler filling we fitted into the filling solenoid valve a restription  $\emptyset$  1.25 mm.

If, during the installation, the machino get in security mode (the on/off selection on the touch pad will flash) reset the machine using in switch

the main switch.

#### 7. OPERATION

#### 7.1. Controls Fig.8





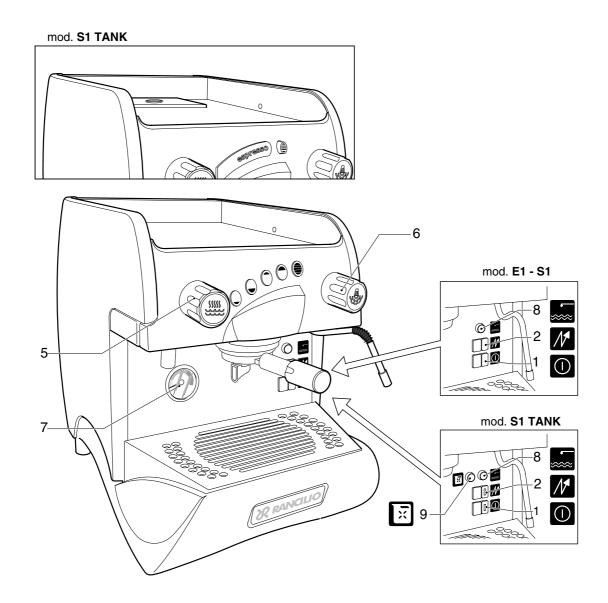


Fig. 8

#### 1 Main switch.

Two-position switch with led.

Turn on the switch, led on, the machine is turned (apart from the boiler) and the pump is turned on to fill the boiler:

#### 2 Boiler resistance switch.

Two-position switch with led.

On activating the switch, the led comes on, and power is supplied to the resistance for the boiler water.

- 3 Coffee dispenser switch (mod. S1 S1 TANK)
  On pressing the button, continuous coffee dispensing begins and the led comes on.
  On re-pressing the switch, the coffee delivery stops and the led goes out.
- 4 Electronic coffee delivery button panel. (mod. E1). Five buttons with relative led:
  - A Press the button for a second, led on, release button; a small coffee is dispensed.
    The led turns off and dispensing ceases.
  - B Press the button for a second, led on, release the button; a big cup of coffee is dispensed. The led turns off and dispensing ceases.
  - C Press the button for a second, led on, release the button; two small coffees ar dispensed from the same unit.

The led turns off and dispensing ceases.

D Press the button for a second, led on, release the button; two big cups of coffee are dispensed from the same unit.

The led turns off and dispensing ceases.

E Press the button for a second, led on, release the button; coffee is continuously dispensed. Press the button for a second, led off, release button; continuous dispensing of coffee ceases.

To interrupt dispensing taking place by pressing A-B-C-D, hold button E down until the relative led turns off.

#### 5 Hot water supply tap

Tap: turn in an anticlockwise direction to open and clockwise to close.

#### 6 Steam supply handwheel.

Tap: turn in an anticlockwise direction to open and clockwise to close.

#### 7.2. Control instruments (Fig.8)

- 7 Gauge with mobile needle on a fixed dial with a scale and colour indicator areas. Visual control of the boiler pressure.
- 8 Boiler water level indicator
- 9 Tank water level indicator (Mod.S1 TANK)





7.3. Starting up

#### Model S1

- Turn on the water supply tap 2 Fig.6.
- Turn on main switch 1.
   The pump for boiler filling will activate .
   Orange LED (8) ON
- When the level is reached, the pump stops, the LED switches OFF, turn the esistance switch 2; water is heated in the boiler; then, operate the unit until the water is dispensed.
- Wait for the machine to reach its working pressure, gauge needle 7 on green area, and to reach the correct thermal balance.

#### Model E1

- Turn on the water supply tap 2 Fig.6.
- Turn on main switch 1 and resistance switch 2.
   The pump for boiler filling will activate
   Orange LED (8) ON
- Only after reaching the level (orange LED (8) ON) the resistances for water heating in the boiler are powered, then activate the group until water comes out.
- During the heating phase the leds of the keys switch on in sequence from left to right until the working pressure is reached.

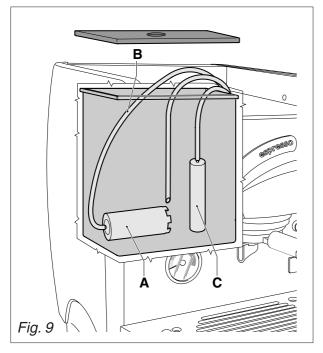
Only when the rated pressure is reached it is possible to adjust the dosesl.

#### Model S1 TANK with autonomous tan

- Open the lid on the water-tank and check that the softener A has been inserted in the dip pipe B;
- Ensure that the air trap C has been inserted in the appropriate housing;



If the air trap is not properly positioned, the machine may not heat or properly indicate the lack of water in the tank.



- Fill the tank with 2 litres of water and close the lid;
   Check the LED (9 Fig.8)
- Turn on main switch 1; the boiler is filled and is activated.

Once the boiler is filled,turn resistance switch 2; the water is heated; then, operate the unit until the water is dispensed.

 Wait for the machine to reach its working pressure, gauge needle 7 Fig.8 on green area, and to reach the correct thermal balance.



#### **8. USE**

The machine has a top shelf on which the cups are kept and heated, ready for use.

This is very important to obtain good coffee as the pre-warmed cup stops the coffee from growing cold too quickly.

#### 8.1. Preparing coffee

- Unclamp the filter-holder from the dispensing unit and knock any grouts out into the drawer especially provided for this purpose, taking care not to damage the rim of the filter.
- Use the filter for 1 or 2 coffees, according to need.
- Fill the filter with the measure of coffee, level it off and press it down gently with the presser.
- Remove any ground coffee that has stuck to the rim of the filter while pressing.



If ground coffee is left on the rim of the filter, a leaktight seal is not ensured, with consequent leaking of water and coffee grounds.

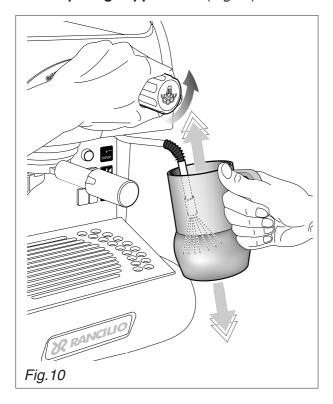
- Lock the filter-holder into the dispensing unit firmly to obtain a leaktight seal.
- Place the cups under the spouts and start pouring using control 3 or button panel 4 according to model (Fig.8).
- When the coffee has been poured, leave the filterholder attached to the dispensing unit until the next coffee is required.

When pouring, beware of the hot parts of the machine, especially the coffee dispensing units, the steam and hot water spouts. Do not put your hands for any reason under the units and the spouts when they are operating.

The grinding of the coffee beans is of fundamental importance to the making of good coffee, and the granular texture of the resulting grounds should be such that it takes 25-30 seconds to produce the beverage. If the coffee is ground too coardsely the coffee will be pale in colour and weak in flavour, with only a very small amount of white cream, and if the grounds are too fine, the coffee will be dark with no cream. Good coffee can only be made if the beans are freshly and uniformly ground (only possible when the blades of the coffee grinder are sharp) and are then measured out into the correct quantities (roughly 6 grams per measure).

The importance of freshly ground coffee beans is due to the fact that once ground, they rapidly lose their aromatic qualities, and fats present in the beans go rancid.

#### 8.2. Preparing cappuccino (Fig. 10)



- Make cup of cappuccino with the express coffee.
- Use a high and narrow jug, half-filled with milk.
- Place the jug under the spout so that the nozzle touches the bottom.
- Turn on the steam tap (6 Fig.8) and lower the jug so that the nozzle is almost at the surface of the milk.
- Continuously move the jug up and down so that the nozzle moves in and out of the milk, causing it to froth.
- Turn off the steam tap and pour the milk into the cup.



Immediately after carrying out this operation, clean the spout with a sponge or a clean cloth so that the milk does not dry on it. Be careful as the spout is hot and may burn your hand.

#### 8.3. Heating a beverage

- Immerse the steam spout into the liquid to be heated.
- Gradually turn on the steam tap 6 Fig.8; the steam that bursts in the liquid heats it to the desired temperature.
- Turn off the steam tap when the desired temperature has been reached.



Immediately after carrying out this operation, clean the spout with a sponge or clean cloth. Be careful as the spout is hot and may burn your hand.

#### 8.4. Preparing tea, camomile, etc.

- Place the jug under the hot water spout and turn the water tap 5. When the desired quantity has been obtained, turn off the tap.
- Add the beverage desired.

When purified water is used, these beverages often assume a darker colour.

Should the user prefer a lighter coloured drink, draw fresh water from an ordinary tap and proceed with the heating phase as described in point 8.3.

## 9. ADJUSTMENT AND SETTING OF THE DOSE (where available)

#### 9.1. Models E1

It is possible to adjust the dose of coffee dispensed E1 models.

#### 9.1.1. Adjusting the dose

The coffee dose adjustments are made by acting on the group keyboads with machine at rated pressure.

- 1 Press the button E on the panel and hold it down for 8-10 seconds until water stops flowing from the dispensing unit and the led of the continuons button begins flashing.
- 2 It is necessary to act as to make 1 or 2 cups in order to reach the correct coffee amount adjustment in the cup.
- 3 Put the filter-holder (with ground coffee) on the left unit and the cup under the spout.
- 4 Operate the selected button (i.e. button A for one small cup).
- 5 One the required coffee amount in the cup has been reached, press the stop button E. Coffe will stop pouring and the microprocessor will store the dose.
- 6 Press the continuous button E again; the led will go out and the machine will store the new quantity.
- 7 Make the coffee and check the cup amount in order to check that programming is correct.

If some doses have to be changed (B-C-D), once at point 5 repeat the instructions in points 3-4-5 for each dose, remembering to use the filter-holder with relevant filter and freshly ground coffee.

Then carry out point 6 and repeat point 7 to check all changed doses.

If all units are to be programmed with the same doses, the selection of coffee doses is finished. If the dosage of another unit is to be changed (1-2-3-4 doses), proceed as indicated in the above-mentioned point 1-7, using only the button panel of the selected unit.

#### 10. MAINTENANCE



Maintenance operations have to be carried out when the machine is off and cold and the plug is disconnected. Some particular operations have to be effected when the machine is operating.

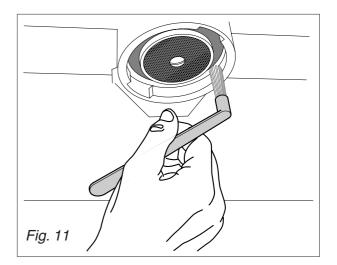
Do not clean the machine by using metal or abrasive devices, such as steel wool, metal brushes, needles, etc. or general detergents (alcohol, solvents, etc.)

When necessary, use special detergents for coffee machines that can be bought in specialized service centres.

#### 10.1. Daily

Use a clean cloth or sponge that does not leave hairs or fluff (preferably cotton or linen).

- Carefully clean the outside surface, following the grain of the satin finish on the parts in stainless steel.
- Clean the steam and hot water spouts, check that the nozzles are not encrusted (if they become encrusted, be careful not to deform or damage them).
- Clean the spray units and the seals under the casing of the delivery units using the special brush supplied
- Remove the filter-holders of the machine and remove the filters and the clamp which secures the filter, use a brush to remove any coffee deposits and rinse with hot water in order to dissolve any grease deposits.



#### **Model S1 TANK**



Operation to be carried out when the machine is off and cold and the plug is disconnected.

- Remove the lid on the water-tank;
- Remove the air trap C and softener A (Fig.9);
- Take out the water-tank, empty and clean it;
- Thoroughly rinse the water-tank and replace it in the machine;
- Place the air trap in its guide and the softener horizontally on the bottom of the water-tank;
- Fill the tank with clean water and close the lid.



If the air trap is not in the correct position, the machine cannot heat or indicate a lack of water in the tank.

#### 10.2. Weekly



Operations to be carried out with the machine operative and under pressure.

- Place the supplied blind filter in the filter-holder, put in a spoonful of detergent in powder for coffee machines and fit the filter-holder in the unit to be cleaned.
- Press the coffee dispensing button and draw water for approx. 30 seconds.
- Stop and start dispensing several times until clean water comes out of the discharge unit tube.
- Remove the filter-holder, take out the blind filter and insert a normal one. Replace the filter-holder on the unit and rinse by drawing water several times.
- Make a coffee to eliminate any unpleasant taste.

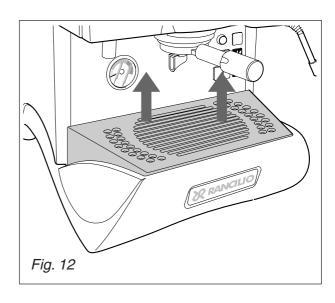
#### Cleaning the filters and delivery heads

Operation to be carried out when the machine is off and cold.

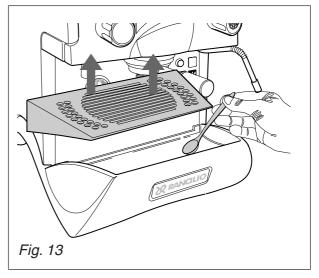
- Prepare a solution of 4 sachets of detergent powder Code 69000124 dissolved in a litre of boiling water in a stainless steel, plastic or glass recipient (NOT ALUMINIUM OR IRON).
- Remove the filters and immerse them with the filter holders in the prepared solution, leaving them for at least 10/20 minutes (all night is better).
- Remove them from the container and rinse them thoroughly in running water.

#### Tank cleaning

• Remove the cup-stand grille 1 (Fig. 12) and clean.



 Check and clean the drainage sump (Fig.13), removing any sludge with the help of a spoon.



#### 10.3. Periodical maintenance



Operation to be carried out with the machine under pressure.

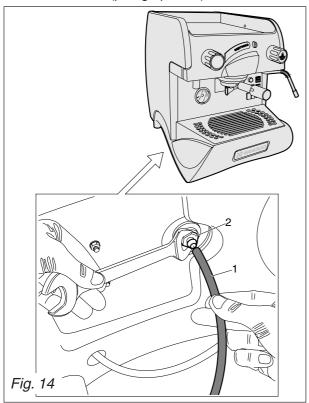
- Discharge the water from the boiler (about four litres) with hot water delivery switch 5
- Wait until the machine has returned to heat equilibrium before reuse.



#### 10.3.1. Renewal of water in the boiler

To be carried out only by qualified personnel.

- Turn off the machine and wait for the pressure in the boiler to diminish (gauge needl on "0").
- Insert a rubber hose (1) into the hose-end fitting (2) (Fig.14)
- Loosen the hose-end fitting (2).
- Allow the water to flow out completely; then, close the fitting (2) and remove the rubber hose (1).
- Refill the boiler (paragraph 7.3.).



#### 10.3.2. Regeneration

#### Softener DP2 - DP4

Regenerate the water softener within the time-limits specified for the softener as follows:

#### DP2

nr.1 regeneration per month for 500 coffees/day; nr.2 regenerations per month (once a fortnight) for 1000 coffees/day.

#### DP4

nr.1 regeneration per month for 1000 coffees/day;

nr.2 regenerations per month (once a fortnight) for 2000 coffees/day.

This table has been drawn up according to a water hardness of 25 degress calculated on the French scale

See the documentation included with the softener for the instructions for use.

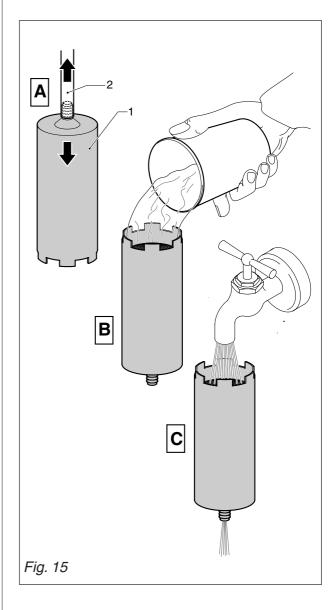
#### **Model S1 TANK**



Operation to be carried out when the machine is off and cold and with the plug disconnected.

To be effected after the consumption of approx.15 litres of water (average hardness calculated as 35 degress on the French scale) or at least once a month.

- Prepare a solution in a glass of water adding three teaspoons of fine salt (the salt must be properly dissolved).
- Drain the water-tank, see point 10.2.
- Slide the softener 1 Fig.15 off the rubber tubing 2 and turn it over.



- Pour the solution through the filter and the resin, letting it flow down freely.
- Wait about 5 minutes, then hold the softener under a tap and rinse it with water. When the water coming out of the softener is no longer salty, the resins are regenerated and the softener is ready for use once again.
- Put the softener back on the rubber tube and replace it horizontally on the bottom of the tank.
- On completion of this operation, the machine can be started up again by repeating the procedure described in paragraph 7.3.

#### 11. STOPPING THE MACHINE

#### A - Temporary stop

- Carry out cleaning and maintenance operations.
- Wind up the cable and fasten it to the machine with sticky tape.
- Cover the machine and place it in a dry room. Do not leave it exposed to atmospheric agents and do not allow it to be touched by children or unift persons.

To disconnect from the main power supply, consult qualified personnel.

#### **B** - Definitive stop

 Besides carrying out the operations necessary for a temporary stop, cut off the cable, pack the machine in cardboard, polystyrene or other packing material and consign it to firms authorized for its disposal or to second-hand goods dealers.

#### 12. PROBLEMS AND REMEDIES



Check operations to be carried out by the user with the plug disconnected.

For any type of problem or inconvenience not specifically indicated, disconnect the plug and contact our service centre without attempting any direct repairs.

#### A) The machine does not start:

- check that the plug is connected;
- In case of power failure wait for the power to return and check if the earth leakage protection circuit breaker or the main switch is on;
- check the condition of the plug and the supply cable; if damaged have them replaced by qualified personnel.
- B) There is water under the machine:
- check that the drainage tray is not obstructed.

#### C) Slow dispensing:

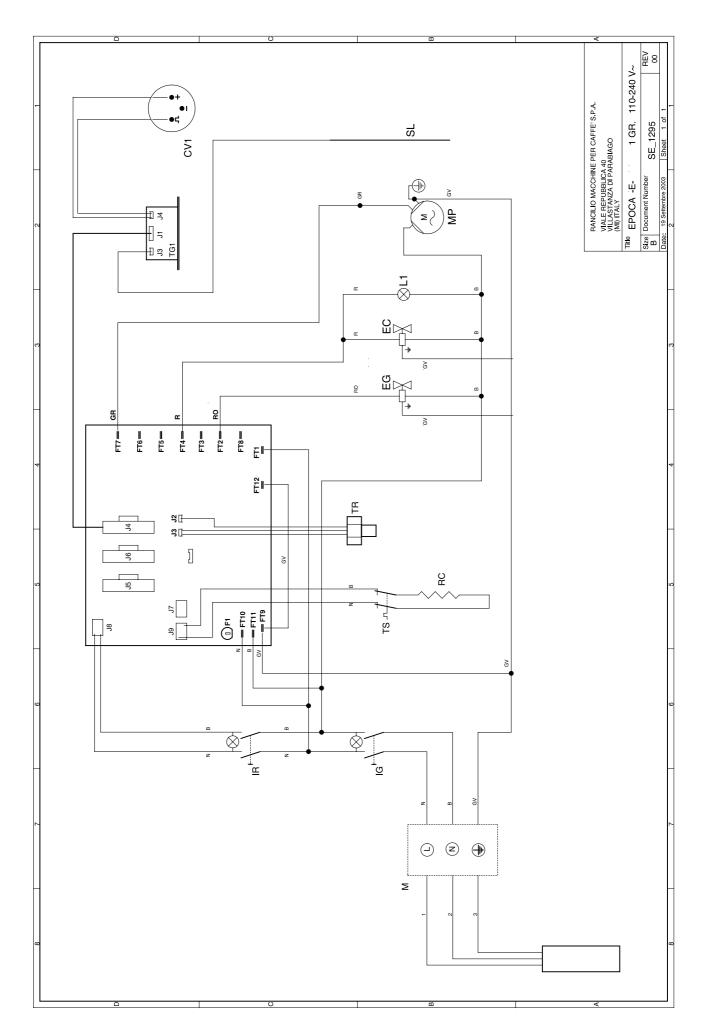
- check that the filters and delivery heads are clean;
- check that the coffee is not too finely ground.

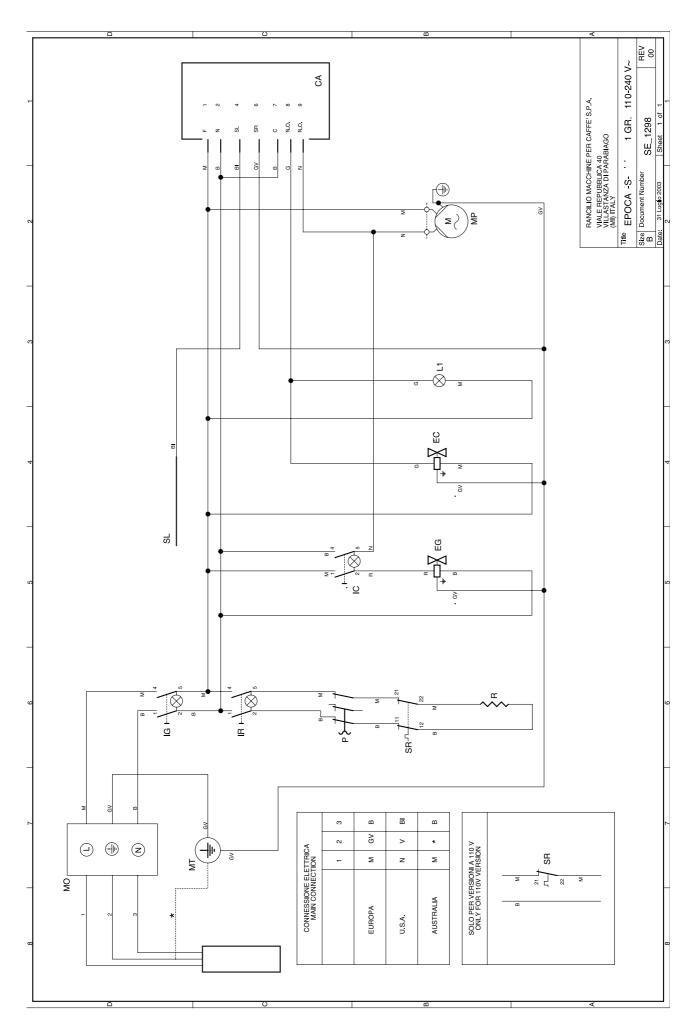
#### D) Irregular steam delivery:

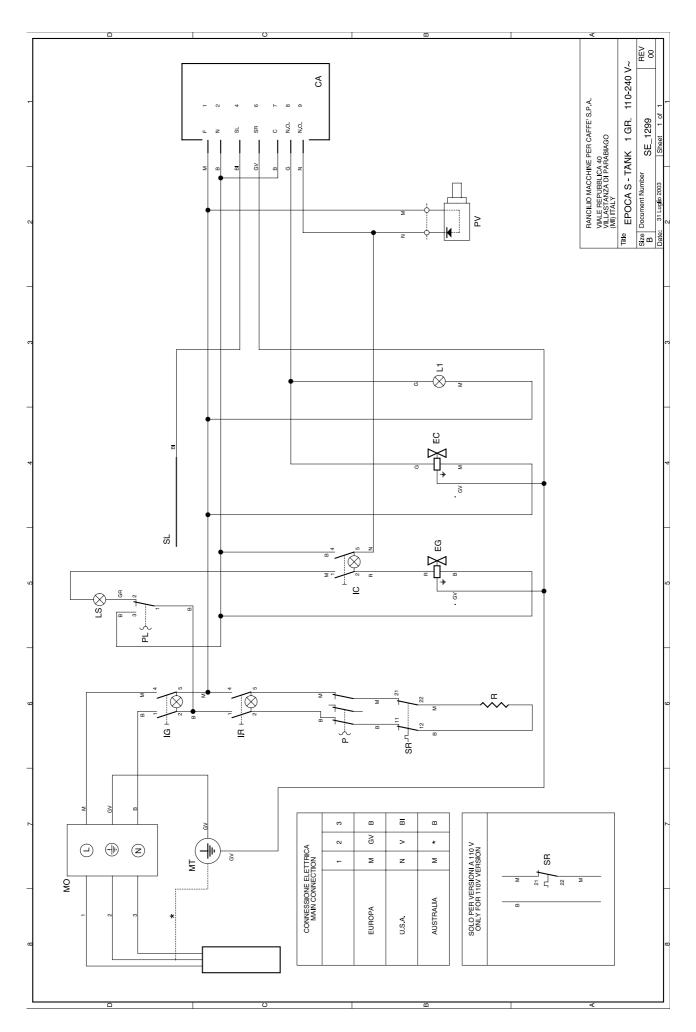
- check that the nozzles are not obstructed.

#### SCHEMI ELETTRICI SCHEMAS ELECTRIQUES SCHALTPLANE WIRING DIAGRAMS ESQUEMAS ELECTRICOS

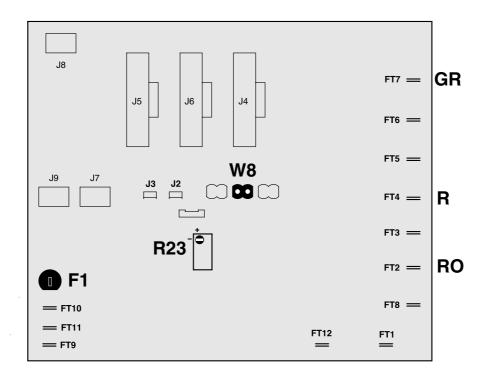
	1	F	D	GB	E
CA	= Centralina autolivello	Controle de niveau de l'eau	Wasserniveaukontrolle	Water level control	Transductor autonivel
CEM	= Centralina microprocessore	Boite electr. du microprocesseur	Elektronische schactel des mikroprozessor	Microprocessor Card	Cedula electronica microprocessor
CV	= Contatore volumetrico	Compteur volumetrique	Volumenzaehler	Flow Meter	Contador volumetrico
EA	= Elettrovalvola acqua	Electrovanne eau	Wasserelektroventil	Water electrovalve	Electrovalvula agua
EC	= Elettrovalvola carico	Electr. de chargement	Speisungselektroventil	Feeding electrovalve	Electrovalvula carga
EG	= Elettrovalvola gruppo	Electr. du groupe	Gruppeelektroventil	Group Electrovalve	Electrovalvula grupo
F1	= Fusibile F2A	Fusible F2A	F2A Sicherung	F2A fuse	Fusible F2A
IG	= Interruttore generale	Interrupteur general	Hauptschalter	Main switch	Interruptor general
IR	= Interruttore Resistenza	Interrupteur resistance	Heizelemenschalter	Heating Switch	Interruptor resistencia
L1	= Arancio - carico acqua autolivello	Orange - remplissage eau autoniveau	Orange - wasserfullung automatisches standes	Orange - automatic level water filling	Naranja - rellenamiento agua nivel automatico
LS	= Spia mancanza acqua	Voyant de manque d'eau	Wassermangelanzeiger	Water lack indicator	Indicador por falta agua
МО	= Morsettiera	Bornes	Klemme	Clamp	Borne
MP	= Motore pompa	Moteur pompe	Pumpen motor	Motor Pump	Motor bomba
MT	= Morsetto di terra	Borne du sol	Erdklammer	Earth connection	Conexion de tierra
Р	= Pressostato	Pressostat	Pressostat	Pressure	Presostato
PL	= Pressostato livello	Pressostat niveau	Niveau pressostat	Pressure level	Presostato nivel
PU	= Pulsantiera	Tableau des boutons	Kontrollschalter	Push-button panel	Botonera
PV	= Pulsante vapore	Poussoir pour vapeur	Dampschalter	Steam push-button	Pulsante vapor
R	= Resistenza caldaia	Resistance chaudiere	Kesselheizung	Boiler Heating Resistance	Resistencia caldera
SL	= Sonda livello	Sonde niveau	Standfühler	Level feeler	Sonda nivel
SR	= Salvaresistenza	Sauve resistance	Widerstandsicherung	Heating Cut-off Device	Salvaresistencias
TR	= Trasduttore di pressione	Transducteur de pression	Druckgeber	Pressure transducer	Transductor de presión
VP	= Pompa a vibrazione	Pompe à vibration	Vibrationspumpe	Vibration pump	Bomba de vibrac
N	= Nero	Noir	Schwarz	Black	Negro
M	= Marrone	Marron	Braun	Brown	Marron
R	= Rosso	Rouge	Rot	Red	Rojo
AR	= Arancio	Orange	Orange-farbig	Orange	Naranja
G	= Giallo	Jaune	Gelb	Yellow	Amarillo
В	= Blu	Bleu	Blau	Blue	Azul
GR	= Grigio	Gris	Grau	Gray	Gris
ВІ	= Bianco	Blanc	Weiss	White	Blanco
G۷	= Gialloverde	Jaune-vert	Gelb-gruen	Yellow-green	Amarillo-verde







## SCHEDA ELETTRONICA - CARTE ÉLECTRONIQUE - ELEKTRONIKKARTE - ELECTRIC BOARD - TARJETA ELECTRÓNICA (E 1)



F1 = 2A

R23= Regolazione pressione - Pressure setting - Réglage pression - Duck einstellung - Regulación presión

W8= Abilitazione programmazione dosi Dose setting mode Habilitation réglage des doses Dosierungs einsetzung betähigung Habilitación programación dosis





#### SCHEMI IDRAULICI SCHÉMAS HYDRAULIQUES HYDRAULIKPLÄNE HYDRAULIC DIAGRAMS ESQUEMAS HIDRÁULICOS

	1	F	D	GB	E
••			11 '2 . W		
AC	= acqua calda	eau chaude	Heißes Wasser	hot water	agua caliente
AF	= acqua fredda	eau froide	Kaltes Wasser	cold water	agua fría
CA	= caldaia	chaudière	Kessel	boiler	caldera
EC	= elettrovalvola carico	électrovanne d'arrivée	Elektroventil Aufladen	inlet water valve	electroválvula de carga
EG	= elettrovalvola gruppo	électrovanne groupe	Elektroventil Gruppe	solenoid group valve	electroválvula grupo
ES	= valvola di espansione	valve d'expansion	Expansionsventil	exspansion valve	válvula de expansión
GR	= gruppo erogatore	groupe de distribution	Brühgruppe	group	grupo erogador
MA	= manometro	manomètre	Manometer	manometer	manómetro
vo	= pompa a vibrazione	pompe à vibration	Vibrationspumpe	vibration pump	bomba de vibrac
PR	= pressostato	pressostat	Druckwächter	mechanic pressure switch	presostato
PV	= pompa volumetrica	pompe volumétrique	volumetrische Pumpe	volumetric pump	bomba volumétrica
RA	= rubinetto acqua	robinet eau	Wasserhahn	water tap	grifo de agua
RL	= rubinetto carico	robinet d'arrivée	Auffüllhahn	inlet water tap	grifo de carga
RV	= rubinetto vapore	robinet vapeur	Dampfhahn	steam tap	grifo de vapor
sc	= scambiatore di calore	échangeur de chaleur	Wärmaustauscher	heat-exchanger	intercambiador de calor
SL	= sonda livello	sonde niveau	Standfühler	level feeler	sonda nivel
TR	= trasduttore di pressione	transducteur de pression	Druckgeber	pressure transducer	transductor de presión
٧	= vapore	vapeur	Dampf	steam	vapor
VA	= valvola antirisucchio	valve anti-remous	Gegensogventil	antivacuum valve	válvula antivacío
VB	= valvola by-pass	valve by-pass	By-pass ventil	By-pass valve	válvula By pass
VE	= ventolino	helice	Lüfterrad	fan	helice
VR	= valvola di ritegno	valve de retenue	Rückschlagventil	check-valve	válvula de retención
vs	= valvola di sicurezza	clapet de sûreté	Sicherheitsventil	safety valve	válvula de seguridad

