

LB 400 CLASSY PLUS USA 120V

TECHNICAL SUPPORT MAINTENANCE MANUAL

# LAVATIA blue





### LB 400 CLASSY PLUS USA 120V

Machine code **18000339** 

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To request technical support, contact:

TECHNICAL SERVICE LAVAZZA

sending an e-mail to: technicalservice@lavazza.com

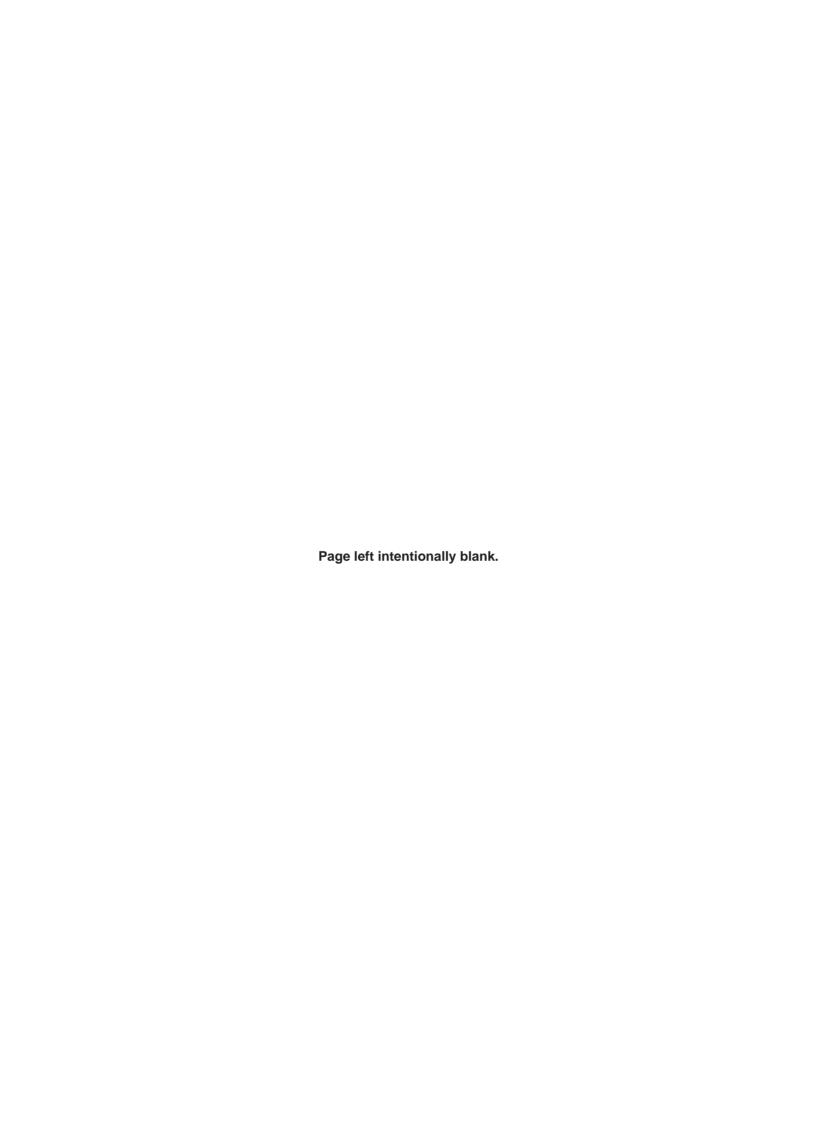
phoning n°: +39 011 2398429,

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#### 1. GENERAL INFORMATION OF MANUAL

#### 1.1. STRUCTURE OF MANUAL

Before performing any operation on the machine, the maintenance technician must carefully read the instructions provided in this publication. No operation must be performed before having read and properly understood the contents of this manual. If in doubt as to how to correctly interpret the instructions, contact Lavazza S.p.A. for clarifications thereof.

#### 1.1.1. SCOPE AND CONTENTS

This manual contains the information required for correct maintenance of the machine, as well as safety instructions, troubleshooting and diagrams. This manual does not replace the Installation Manual supplied with the machine.

All reproduction rights of this manual are reserved to Luigi Lavazza S.p.A. (hereinafter Lavazza).

Any reproduction of the text and illustrations, even partial, is prohibited. The information herein cannot be disclosed to third parties without the written consent of Lavazza which has exclusive property thereof.

Lavazza reserves the right of modifying the features of the appliance dealt with in this manual without prior notice. Furthermore it will not be held liable for any inaccuracies attributable to printing errors and/or the contents in it. Furthermore Lavazza informs that the images or photographs of the machine included in this manual have purely representative purposes and could undergo changes without prior notice.

Check the Lavazza Technical Service website (at https://ts.lavazza.com) to make sure you have the most recent version available of this manual. If not, you may download a more recent copy. We also suggest that you consult further documentation on the machine, such as Software, Quick Guide, Technical News, if provided on the Lavazza Technical Service website.

#### 1.1.2. MESSAGES USED



# Attention \_

ATTENTION messages indicate even high risk danger for the technician. The operations described after this message must be carried out with the utmost attention and in maximum safety, using personal protective equipment.



WARNING messages are displayed before procedures which could cause damage to the machine if not complied with.



### Environment

ENVIRONMENT messages are displayed before procedures which could harm the environment if not complied with.



NOTE messages highlight further indications useful for the maintenance technician.

#### 1.1.3. ADDRESSEES AND QUALIFIED PERSONNEL

This manual is intended for technicians qualified to perform maintenance on the machine. Lavazza will not be held liable for damage resulting from failure to comply with this indication.

The machine can only be serviced by the technician who, having read this manual:

- has specific experience in maintenance of professional coffee machines:
- is capable of repairing the malfunctions of the machine/machines dealt with in this manual;
- has understood the technical contents, can correctly interpret drawings and diagrams and has memorised the safety information provided below;
- knows the main hygienic, accident-prevention, technological and safety standards;
- knows what to do in case of an emergency, where to find the personal protective equipment and how to use it correctly.

### 1.1.4. STORING THE MANUAL

In order to keep this manual intact over time, it is recommended to:

- use it without damaging its contents in whole or in
- refrain from removing, tearing or rewriting parts of the manual for any reason whatsoever;
- keep the manual in a place protected against moisture and heat, to avoid endangering the quality of the publication and legibility of all its parts;
- make the manual accessible for all maintenance personnel.



Should the manual be damaged or lost, you may download a copy of it from the website Lavazza Technical Service at <a href="https://ts.lavazza.com">https://ts.lavazza.com</a>.



#### 2. GENERAL SAFETY STANDARDS



## ⚠ Attention \_\_\_\_\_\_

Failure to comply with the basic safety standards or precautions could lead to accidents during operation and maintenance. All the required accident prevention measures must be taken while repairing the machine. Lavazza will not be held liable for damage caused by failure to comply with the general safety standards provided in this manual.

The following are the main safety precautions to be taken while operating on the machine. Lavazza cannot foresee every possible situation which could entail a potential hazard. Therefore the warnings provided in this manual are not all-comprehensive. When making use of tools, procedures, methods or work techniques which are not specifically recommended, make sure they do place yourself or others in danger.

The adjustments, specifications and illustrations in this publication are based on the information available when drafted and therefore could change at any time, affecting the maintenance to be carried out. Make sure you have the most recent version of this manual.

The machine must be connected to the electric mains in compliance with the safety standards in force in the Country of use.

The machine must be connected to a socket which must be:

- compliant with the type of plug installed on the machine, if included;
- sized according to the data provided on the nameplate at the bottom of the appliance;
- connected to an efficient and up to standard earthing system.

Before performing any operation on the machine, make sure it is unplugged and cooled off.

To avoid the risk of electrical shocks, the electrical parts of the machine and the components around them must not:

- come into contact with any type of liquid;
- be handled with moist or wet hands;
- be tampered with.

It is prohibited to:

- use the machine in the vicinity of flammable and/or explosive substances and/or in a fire risk atmosphere;
- use non-original spare parts;
- make any type of technical modifications of the machine not included in the standard diagnostic and repair procedures.

In case of fire, use carbon dioxide (CO<sub>a</sub>) fire extinguishers. Do not use water or powder extinguishers.

If you must perform an unintended job or intervention, following a procedure other than that indicated in the manual, you must first consult the technical service.

Structural damage, improper modifications, tampering, alterations or repairs can endanger the safety of the machine.

#### 2.1. STOPPING FUNCTIONS

The machine stops when the ON/Stand-by button on the USER INTERFACE is selected.



### 2.2. SAFETY DEVICES

The machine dealt with in this publication has been manufactured in compliance with specific standards in force and therefore all potentially dangerous parts are protected.

The machine is equipped with the following safety devices:

- a thermal protector 120 °C positioned on the PUMP;
- two safety thermal fuses on the THERMOBLOCK.



### ✓!\ Attention \_

Do not tamper with, eliminate or bypass the safety devices to avoid causing serious risks for personal protection and health.

### 2.3. RESIDUAL RISKS

The thorough risk analysis carried out allowed us to eliminate most of the dangers linked to the use and maintenance of the machine. Lavazza reminds you to carefully abide by the instructions, procedures and recommendations provided in this manual, and to comply with the safety standards in use, including the use of the intended protective equipment, both integrated in the machine and personal.

This chapter outlines some risks which the user could encounter if the specific safety standards described in the manual are not complied with.

- Never intervene on the electronic apparatus while the machine is still powered. Deactivate the machine completely by unplugging it before performing any type of operation.
- Do not spray water to clean any part of the appliance



- as running water could seriously damage the electric and electronic components.
- Never act on the hydraulic system and on the boiler before having emptied them and having checked that the system is no longer pressurised.
- This machine is an appliance for making espresso coffee. Any other use must be considered incorrect and therefore dangerous.



### ⚠ Attention \_

Failure to comply with the standards above could cause serious damage to persons, objects or animals.

#### 3. HANDLING AND STORAGE

#### 3.1. HANDLING



### **/!** Attention

The machine must be handled in compliance with standards in force regarding the safeguarding of health and safety at the workplace.

The machine must remain upright during handling and transport according to the indications and symbols printed on the packaging. Lift and position it with care. Do not shake the machine. Use the original packaging for occasional movements, ideal to hold and protect it.

### 3.2. STORAGE

The machine must be stored according to the following conditions:

- minimum temperature: above 39.2 °F (4 °C);
- maximum temperature: below 104 °F (40 °C).

The device is contained in cardboard packages.

#### 4. DEMOLITION AND WASTE DISPOSAL

### 4.1. INSTRUCTIONS FOR END-OF-LIFE DIS-**POSAL TREATMENT**

This product conforms to Directive 2012/19/EU and the relevant national implementations.



The symbol of the crossed-out wheeled bin applied to the appliance and/or packaging indicates that, at the end of its useful life, the product must be collected separately from other

waste. At the end of its life, the user must hand over the appliance to suitable facilities for the separate collection of electric and electronic waste.

Appropriate waste collection of the appliance and handing it over for recycling, treatment and environmentally friendly waste disposal help to prevent potential negative consequences for the environment and human health and favour the reuse and/or recycling of the materials making up the machine.

Illegal disposal of the product by the user entails the implementation of the administrative sanctions stipulated in the applicable environmental regulation.



### Environment

INFORMATION FOR USERS OF PROFESSIONAL APPLIANCES. The separate waste collection of this appliance at the end of its life is organised and managed by the manufacturer. The user who wishes to dispose of this product must contact the manufacturer and follow the procedure applied to allow for the separate waste collection of the appliance at the end of its life.



#### Environment

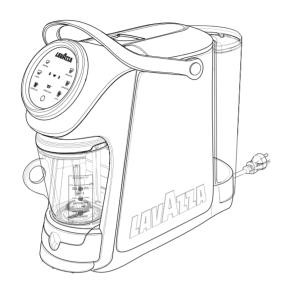
INFORMATION FOR USERS OF HOUSEHOLD AP-PLIANCES. At the end of its life, the user must hand over the appliance to suitable facilities for the separate collection of electric and electronic waste, or hand it over to the retailer when purchasing a new appliance of the same type, on a one to one basis. In both cases, cut the power cable to make the machine unusable.



### 5. OVERVIEW OF THE MACHINE

### **5.1. MODEL**

LB 400 CLASSY PLUS USA 120V



### **5.1.1. MACHINE IDENTIFICATION DATA**

The nameplate bears the following machine identification data:

- manufacturer:
- machine model:
- serial number;
- Lavazza product code;
- electric voltage (V) and frequency (Hz);
- electric power absorbed (W).

### **5.1.2. OVERALL DIMENSIONS AND WEIGHT**

Depth	15 in (380 mm)
Width	5.7 in (145 mm)
Height	11 in (280 mm)
Weight	9.9 lb (4,5 kg)

#### **5.1.3. TECHNICAL FEATURES**

Power supply voltage	120 V
Power supply frequency	60 Hz
Installed power	1250 W
Water tank capacity	37.1 US fl. oz. (1,1 L)
Boiler type	THERMOBLOCK
Water presence check	Via the VOLUMETRIC DOSER
Used capsules container capacity	8
Power saving function	After 4 hours of inactivity
Dosage	Programmable ESPRESSO, LUNGO, COFFEE 8 OZ. dose

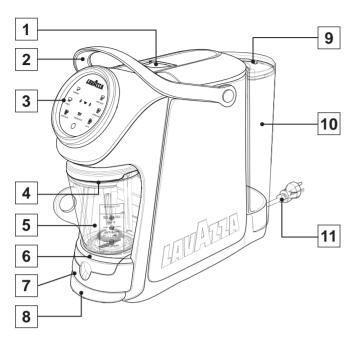
### **5.2. MACHINE COMPOSITION**



When not expressly indicated in the text, the position numbers of the machine parts refer to the figures in chapters "5.2.1. External components" and "5.2.2. Internal components".



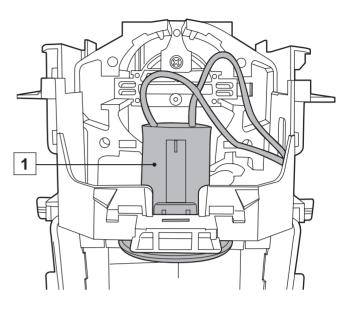
### **5.2.1. EXTERNAL COMPONENTS**



- 1) Capsule insertion slot
- 2) Capsule loading lever
- 3) User interface
- 4) Dispenser spout
- 5) Cappuccino maker Assy (milk frother jug and cover)
- 6) Cup/milk frothing jug rest grid
- 7) Drip tray
- 8) Used capsule tray
- 9) Tank lid
- 10) Water tank
- 11) Power cable

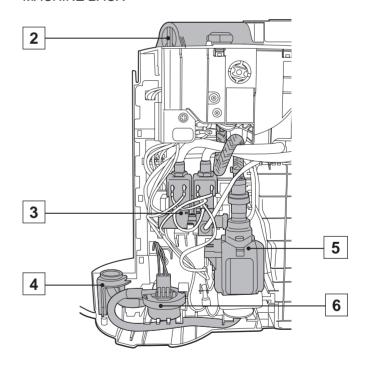
#### **5.2.2. INTERNAL COMPONENTS**

MACHINE FRONT



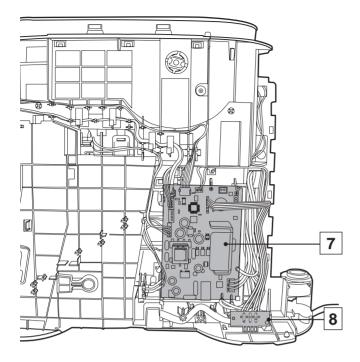
### 1) Milk frother support Assy

### MACHINE BACK



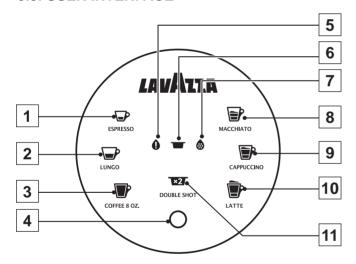
- 2) Dispensing unit with integrated Thermoblock
- 3) 2 and 3-way solenoid valve unit
- 4) Water tank inlet
- 5) Pump
- 6) Volumetric doser





- **CPU** board
- 8) USB port to update Firmware

#### **5.3. USER INTERFACE**



- 1) ESPRESSO selection
- 2) LUNGO selection
- 3) COFFEE 8 OZ. selection
- 4) ON/stand-by key
- 5) Warning water tank empty/missing
- 6) Warning drip tray/capsule drawer full
- 7) Warning descaling required
- 8) MACCHIATO selection
- 9) CAPPUCCINO selection
- 10) LATTE selection
- 11) DOUBLE SHOT function

### 6. INSTALLATION. COMMISSIONING AND **CONFIGURATION**

#### 6.1. UNPACKING

Open the package taking care not to damage it.

Pull the bags out containing the drip tray, the grill grid and the packaging that encloses the cappuccino maker Assy. Then lift the top cardboard protection and remove the machine - removing it from its protective casing.



### **Environment** \_

The components making up the packaging must be separated based on the nature of the materials and disposed of in compliance with laws in force regarding separate waste collection and disposal.

### 6.2. POSITIONING

For correct ergonomic use, it is recommended to install the machine on a flat, horizontal and stable surface, away from water, flames and sources of heat. The chosen area must be sufficiently lit, ventilated, hygienic, non-corrosive and/or non-explosive.

Furthermore, the socket must be easily reached by the power cable.

The following recommendations apply for the appliance to work properly:

- minimum and maximum room temperature: 41 °F (5 °C) ÷ 104 °F (40 °C).



#### Note

For operations regarding positioning of the machine, see the indications provided in the Installation Manual supplied with the machine.



#### Warning

The machine is not fit to be installed outdoors exposed to atmospheric agents. The presence of magnetic fields or adjacent electric machines that generate interference could cause the electronic controller of the appliance to malfunction.



### /!\ Attention \_

There must be free access to the machine and to the plug to allow the user to intervene without any constraint and to be able to immediately leave the area if necessary.



#### 6.3. START-UP PROCEDURES

To start the machine:

- remove the water tank, rinse and fill it using only fresh non-carbonated drinking water;
- reposition the tank:
- plug in the machine;
- press the ON/Stand-by button.

The warm-up cycle begins.

When all the dispensing buttons remain on steady, the machine is ready for use.

- Fill the hydraulic circuit. Place a container under the dispensing spout. Do not insert a capsule, keep the loading lever lowered, and press a dispensing button.
- Once dispensing is complete, empty the container and put it back under the dispensing spout. Open and close the lever and run another full dispensing cycle with water.
- Thoroughly clean the Cappuccino Maker Assy. Remove the cover and fill the milk frothing jug (ref. 5 par. 5.2.1) with water up to the "LATTE" level. Put the cover back on and slide the Assv into the machine.
- Press the LATTE button (ref. 10 par. 5.3) to start the cleaning cycle.
- Once the cycle has finished, remove the Cappuccino Maker Assy and wash all the parts with hot/cold water. After having dried the parts, beverages can then be dispensed.

### Warning

The amount of water in the tank must never exceed the maximum level (MAX) and must always be maintained above the indicated minimum level (MIN).



When the machine switches on, the hydraulic circuit is filled by activating the pump. Upon the first start-up, dispense at least 16.9 US fl. oz. (0,5 L) of water with no capsule.



For operating procedures and functioning logic of the machine, follow the instructions provided in the Installation Manual supplied with the machine.



## 6.3.1. ALARM MESSAGES

MACHINE STATE			
Machine ready without Milk frothing jug			
Delivering ESPRESSO			
Delivering LUNGO			
Delivering COFFEE 8 OZ.			
Delivering DOUBLE SHOT (only ESPRESSO supply)			
Programming ESPRESSO measure After pressing for 3 sec.			
Programming LUNGO measure After pressing for 3 sec.			
Machine ready with Milk frothing jug			



MACHINE STATE				
Delivering MACCHIATO				
Delivering CAPPUCCINO				
Delivering LATTE				
Delivering DOUBLE SHOT Ex: Cappuccino delivery				
No water in circuit or water tank removed	Orange lights ×2			
Full capsule drawer filled	Orange lights ×2			
Descaling required	Orange lights  Orange lights			

ON = ON

= Flashing



#### 6.4. PROGRAMMING

The machine allows the desired amount of dispensed product to be set only for the short ESPRESSO, LUNGO and COFFEE 8 OZ. buttons.



Note

Doses cannot be adjusted for milk-based beverages and the DOUBLE SHOT.

To set the dose:

- insert a BLUE or EXPERT Lavazza capsule in the relevant compartment;
- close the capsule loading lever;
- put a cup under the dispensing spout;
- press and hold the desired button for at least 3 seconds

The selected button will flash quickly while the others switch off, except for the ON/Stand-by button];

- hold down the selected button;
- dispensing begins:
- once the desired amount has been dispensed, let go of the button to stop the flow.



Note

The amount of product dispensed can be changed by repeating the programming.



Note

If the dose setting exceeds the maximum amount allowed, dispensing stops automatically, the selected button flashes and the last set value is saved in memory.

If a power cut should occur during the procedure, the programming process will not be successful and the last set dose remains saved.

#### 6.4.1. RESETTING THE DEFAULT VALUES

Reset the default settings as follows:

- the machine must be connected to the electrical mains and in Stand-by mode;
- the used capsule drawer must NOT be inserted;
- the Cappuccino Maker Assy must NOT be inserted;
- press the ESPRESSO (1), LUNGO (2), and DOUBLE SHOT (11) buttons simultaneously for at least 3 seconds.



The dispensing buttons light up in order and the machine confirms the reset with 3 short beeps.

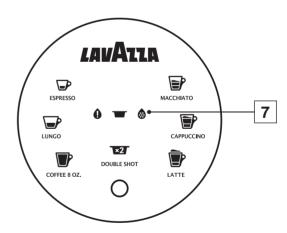
Afterwards, the machine goes back to Stand-by mode.

#### 7. ROUTINE MAINTENANCE

#### 7.1. DESCALING

The formation of limestone is a normal consequence of use of the appliance. As such, descaling must be done every 2-3 months the machine is used and/or when you notice the machine is having trouble dispensing and/or if the machine becomes noisy.

The machine's warning light (7) comes on to request descaling.





The alarm signalling is only active in machine "ready for use" mode.

To perform descaling, you must:

- a) make sure the capsule insertion slot is empty;
- b) empty the tank and fill it with a solution of descaling liquid and water (8.4 US fl. oz. of each);
- remove the Cappuccino Maker Assy;



- place a large container underneath the dispensing
- e) press the LUNGO (2) and CAPPUCCINO (9) buttons simultaneously for 3 seconds.

[the machine beeps]:

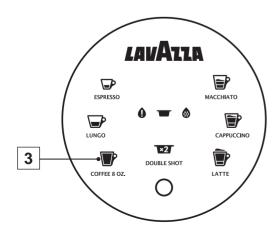
f) press the COFFEE 8 OZ. (3) button to start the descaling cycle:

[the COFFEE 8 OZ. (3) and the ON/STAND-BY (4) buttons flashl.



Descaling consists of the dispensing cycles being repeated with no capsule, at intervals breaks, until the tank is completely emptied.

- g) Once the tank is emptied, the cycle is momentarily stopped and the ON/STAND-BY and COFFEE 8 OZ. buttons and the descaling warning light stay on steady, accompanied by a beep:
- h) remove the tank, rinse it well and fill it with cold drinking water, put it back in place and place a container underneath the dispenser spout;
- press the COFFEE 8 OZ. (3) button to start the rinse cycle (drain the tank again).



Once rinsed, the machine beeps and runs the warm-up cycle to return to the "ready to use" mode.

### Warning Warning

Once started, the cycle must be completed.



Note

We recommend using LAVAZZA DESCALING products to descale the machine.



Attention \_

Do not descale the machine with vinegar.

### 7.2. CLEANING

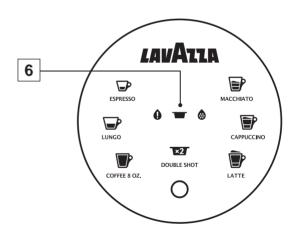


/!\ Attention \_

Before cleaning the machine, make sure it is unplugged and wait for it to cool off.

For correct and long-lasting use of the machine, it is recommended to:

- rinse the tank daily and fill it with cold drinking water;
- empty and clean the drip tray/used capsule drawer every two/three days or when the specific warning light (6) comes on;



- clean the dispenser spout weekly, dispensing water a few times without inserting the capsule;
- unless there are specific indications, clean the external components of the machine (except for the electric components) using non-abrasive cloths/sponges soaked in cold/lukewarm water;
- wash the separated components that make up the CAPPUCCINO MAKER ASSY every day (even in a dishwasher, provided at low temperature).



B	Warning	

When the machine is used intensively, perform the cleaning operations more frequently.



If the machine is not used for more than three days, empty the tank and fill it with fresh water. Then run a dispensing cycle (with no capsule) before dispensing beverages.



#### 7.3. LUBRICATION

Every time maintenance is performed lubricate certain components of the DISPENSING UNIT to preserve their efficacy.

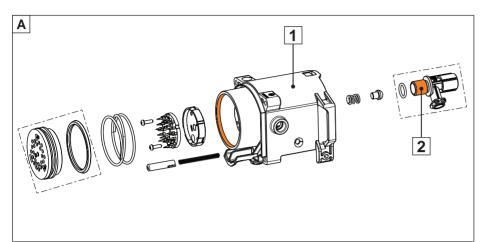
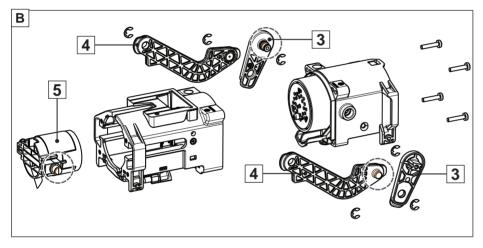


Figure A: apply a layer of grease on the internal surface of the rear body of the DISPENSING UNIT (1) and on the thread of the THER-MOBLOCK CONNECTION (2).

**Recommended product**: BE-SLUX CAPLEX M-2 ATOX (Brugarolas) Grease.



**Figure B**: apply grease in the groove of the cranks (3).

**Recommended product**: GRAS-SO BESLUX CAPLEX M-2 ATOX (Brugarolas) Grease.

Also apply a little grease on the rods (4) and on the infusion chamber (5), in the highlighted points.

**Recommended product**: FOOD SPRAY (Nils).



Note

With regards to the recommended products, you may wish to check availability of updated product data sheets on the Technical Service Lavazza website (<a href="https://ts.lavazza.com">https://ts.lavazza.com</a>).



## 8. TROUBLESHOOTING

### 8.1. INDICATION AND SOLUTION OF MOST COMMON PROBLEMS

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
Machine does not turn on. On/Stand-by warning lamp OFF.	<ul> <li>The machine is not connected to the power source.</li> <li>The machine is connected to a faulty power cord.</li> <li>Power supply not available in the household mains.</li> </ul>	<ul> <li>Connected the machine to the power source.</li> <li>Connected the machine directly to the power source.</li> <li>Connect another device to check the availability of the power supply.</li> </ul>
The machine will not switch on after the "On/Stand-by" button is pressed.	<ul><li>The touch interface fails to respond.</li><li>Wrong simultaneous press of two buttons.</li></ul>	<ul> <li>Verify that the interface surface and the user's hands are clean and dry.</li> <li>Wait a few seconds, then press the "On / Stand-by" O button only.</li> </ul>
Excessive heating time (i.e. more than 40 seconds).	The machine is stored at low tempera- tures (e.g. in a cellar or garage).	Keep the machine in a suitable place over at least 1 hour.  Then, plug the machine into the mains socket and try to switch it on.
Excessive machine noise.	<ul> <li>The machine does not rest on a flat, stable surface.</li> <li>The power supply cable has been positioned incorrectly.</li> <li>Movable parts not fitted properly.</li> <li>No water in the tank.</li> <li>Capsule not present.</li> </ul>	<ul> <li>Check the surface.</li> <li>Check the correct position of the cable in the base of the machine.</li> <li>Fit the movable parts properly.</li> <li>Top up the tank with fresh drinking water.</li> <li>Insert a Lavazza Blue or Expert capsule or a compatible one.</li> </ul>
Unit ready for use but failing to acknowledge the button press.	<ul> <li>Wrong button press/activation.</li> <li>Used capsule collection tray not fitted.</li> </ul>	<ul> <li>Press one of the illuminated buttons with your fingertip, then check for the acoustic signal (if activated) and the proper blinking of the selected icon.</li> <li>Check the correct insertion of the tray, with the resulting alarm warning lamp switch-off. Check for correct supplying.</li> </ul>
The lever remains closed after the supply.	Used capsule tray full.	Empty the tray and try to open the lever.
Failure to supply (the machine is switched on, yet it supplies no coffee or water).	<ul> <li>No water in the tank.</li> <li>Tank not inserted correctly.</li> <li>Capsule loading lever lifted or not lowered correctly.</li> <li>No water flow in the hydraulic circuit (no activation).</li> <li>Capsule not compatible.</li> <li>Presence of limescale.</li> </ul>	<ul> <li>Top the tank up with drinking fresh water, then check for correct supplying.</li> <li>Correctly fit the tank in, then check for correct supplying.</li> <li>Lower the capsule loading lever up to the stop, then check for correct supplying.</li> <li>Disconnect the power cord, wait 10 seconds, then connect the power cord again.</li> <li>Switch the machine on and wait for the heating cycle to be over.</li> <li>Check for correct supplying (the machine will automatically make attempts at filling the hydraulic circuit).</li> <li>Try again by using another capsule from a different package.</li> <li>Carry out the descaling procedure by means of the Lavazza descaling product.</li> </ul>



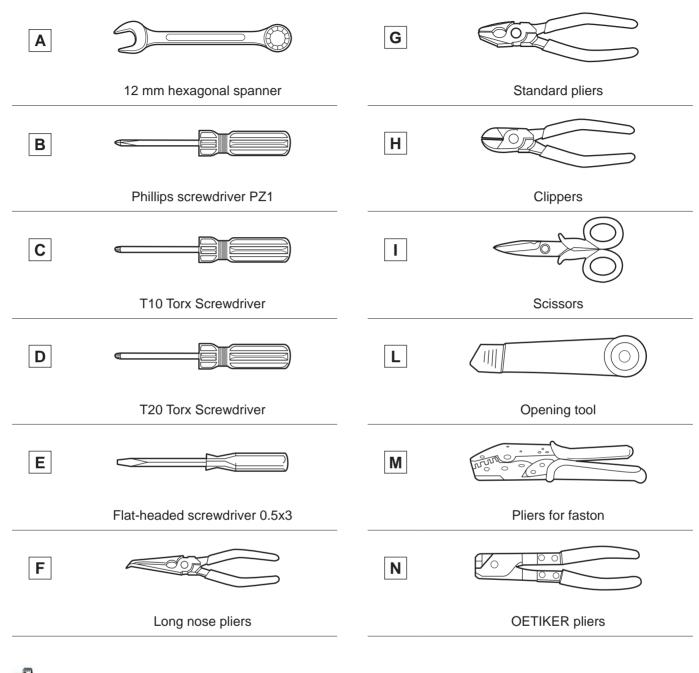
PROBLEM	POSSIBLE CAUSES	SOLUTIONS
Water leaks in the coffee machine.	<ul> <li>Tank damaged.</li> <li>Used capsule drawer filled.</li> <li>Capsule stuck.</li> <li>Capsule not compatible.</li> </ul>	<ul> <li>Check for leaks in the tank, by keeping it separate from the machine.</li> <li>Empty the used capsule drawer.</li> <li>Open and close the lever to drop the capsule. Remove and empty the capsule collection tray.</li> <li>Use suitable capsules (i.e. Lavazza Blue or Expert capsules) or any other compatible capsule.</li> </ul>
On / Stand-by button O blinking in red.	<ul> <li>Inadequate machine storing conditions / Temporary lock.</li> </ul>	Unplug the machine from the power socket and allow it to rest at room temperature enough time (max. 1 hour). Plug the machine in again, then press the switch-on button (make one attempt only).
The loading lever either does not reach the supply position or requires an excessive closing effort.	<ul><li>Spent capsule drawer filled.</li><li>Capsule stuck.</li></ul>	<ul> <li>Empty the tray and make an attempt at closing the lever.</li> <li>Open and close the lever to drop the capsule.</li> </ul>
Coffee is dispensed too fast and, therefore, is not so creamy.	<ul> <li>A previously used capsule is used.</li> <li>Capsule not present.</li> <li>Capsule not compatible.</li> </ul>	<ul><li>Use a new capsule.</li><li>Insert the capsule.</li><li>Try again by using another capsule from a different package.</li></ul>
The coffee is cold.	<ul> <li>Slow supplying – hydraulic circuit clogged with limescale.</li> </ul>	Perform the descaling procedure by means of the Lavazza descaling product.
The machine emits no sound.	Acoustic signal OFF.	• Set the machine to the stand-by mode, then simultaneously keep the "ES-PRESSO → " and "MACCHIATO → " coffee buttons depressed over at least 2 seconds.
Coffee flows out slowly drop by drop.	<ul> <li>Capsule not compatible.</li> <li>An inadequate pod has been used.</li> <li>Supplying device clogged.</li> <li>Hydraulic circuit clogged with limescale.</li> </ul>	<ul> <li>Try again by using another capsule from a different package.</li> <li>Remove the used capsule and use a new one.</li> <li>Clean the coffee dispensing spout (see MAINTENANCE AND CLEANING).</li> <li>Perform the descaling procedure by means of the Lavazza descaling product.</li> </ul>
The milk-based beverage warning lights are OFF and the buttons won't work.	<ul> <li>Milk jug missing or inserted wrongly.</li> <li>Milk cover positioned with the nozzles facing the handle.</li> </ul>	<ul> <li>Insert the milk jug. The milk preparation warning lights will be turned on if the jug is inserted correctly.</li> <li>Turn the milk cover so that the nozzle will face the direction opposite the handle. The milk preparation warning lights will be turned on if the jug is inserted correctly.</li> </ul>
Milk does not foam.	<ul> <li>Milk unsuitable for use.</li> <li>Too hot milk temperature.</li> <li>Beater coil not fitted into place.</li> </ul>	<ul> <li>It is recommended that whole milk (pasteurized or UHT-treated) and / or cold skimmed milk from the fridge of 39.2 to 46.4°F (4 to 8°C) should be used.</li> <li>Use milk at the fridge temperature (i.e. ranging between 39.2 to 46.4°F (4 to 8°C).</li> <li>Make sure that the beater coil has</li> </ul>
	Boater con not fitted into place.	been fitted into place correctly.



PROBLEM	POSSIBLE CAUSES	SOLUTIONS	
The milk-based beverage temperature is too hot.	Insufficient amount of milk fed with respect to the selected / desired amount.     Add more milk by following tions of the icons on the milk		
The milk-based beverage temperature is too cold.	Excessive amount of milk fed with respect to the selected / desired amount.	<ul> <li>Decrease the amount of milk by follow- ing the indications of the icons on the milk jug.</li> </ul>	
Noisy operation of the cappuccino maker during the preparation with milk			
No coffee available for preparing the MACCHIATO, CAPPUCCINO and the LATTE.	<ul> <li>Coffee capsule missing.</li> <li>Previous coffee capsule not discharged.</li> <li>Early removal of the milk jug.</li> </ul>	<ul> <li>Insert a coffee capsule and prepare the new desired beverage by eliminating the previous one.</li> <li>Discharge the used capsule, insert a new one and prepare the new desired beverage by eliminating the previous one.</li> <li>Wait for the acoustic signal at the end</li> </ul>	
Milk spilling out of the jug	<ul> <li>Milk jug broken.</li> <li>Excessive milk jug filling (above the upper notch / icon).</li> <li>Insufficient milk jug filling (below the selected notch / icon).</li> <li>Selection of the same beverage used for the previous preparation.</li> </ul>	<ul> <li>by the icons on the jug.</li> <li>Fill with the correct amount, as shown by the icons on the jug.</li> </ul>	
On / Stand-by button red warning light with acoustic signal emitted when preparing a milk-based beverage.	Products other than milk (e.g. powders) have been used.	Use only milk to prepare the beverages supplied by the machine.	

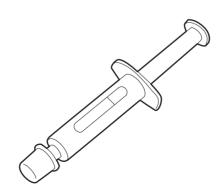


### 9. RECOMMENDED TOOLS FOR DISASSEMBLY AND ASSEMBLY OPERATIONS



Note

Use thermal grease when replacing the THERMOBLOCK PROBE.





#### 10. GENERAL OPERATIONS



### Attention \_\_\_

The machine has electric components and components which generate high temperatures. Disconnect the machine from the electrical mains and wait for the hot parts to cool off before performing disassembly and assembly operations. During disassembly and assembly operations, wear clothing and/or personal protective equipment intended by current legislation regarding safety at work.



### Warning

Before any machine disassembly or assembly it is recommended to carefully read chapter "2. GENERAL SAFETY STANDARDS" in this manual.

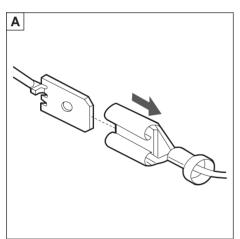
When performing maintenance/repairs/replacing spare parts, the machine must be turned over in order to disassemble the body and to remove the internal components. Therefore place the device in an accessible position to operate with ease.



To reassemble the various components, perform the operations provided in the following paragraphs in the opposite order.

#### 10.1. DISCONNECTING ELECTRIC WIRING

This paragraph describes all the types of disconnection of the electric wiring present on the machine.



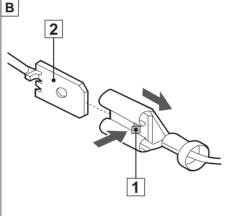


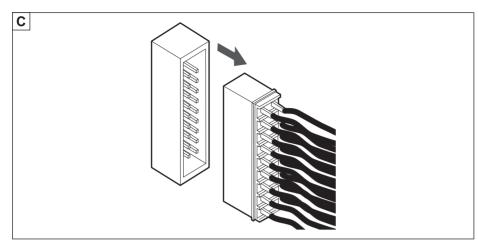
Figure A: disconnect this type of wiring by separating the male faston from the female by pulling them outwards.

Figure B: if the electrical connection shown in the image is disconnected, press the locking tooth (1) on the female faston and extract it from the male faston (2).

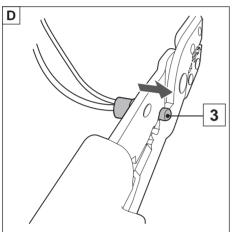


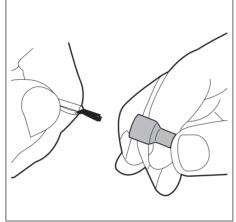
Wiring passages must not undergo changes. Any clamps and/or ties must be removed during disassembly and restored during reassembly operations.





**Figure C**: disconnect this type of wiring by separating the male connector from the female by pulling it outwards.





**Figure D**: remove the clamps (3) by pressing the bottom part of the cap with the pliers and pull them off.

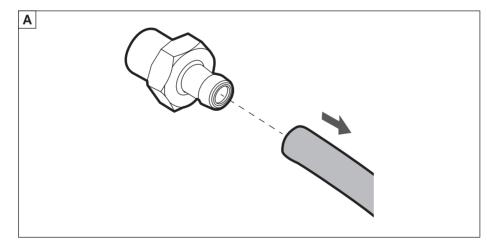


Warning

Use only new terminals during replacement cycles so as to preserve electrical safety of the appliance.

### 10.2. REMOVAL OF HYDRAULIC CONNECTIONS

This paragraph describes all the types of disconnection of the hydraulic pipes on the machine.



**Figure A**: remove the type of hydraulic pipe shown in the figure by pulling the pipe outwards to disconnect it from the fitting.

Warning \_

Do not use screwdrivers or other tools which could damage the pipes and fittings.



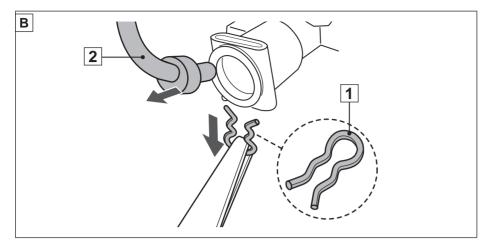
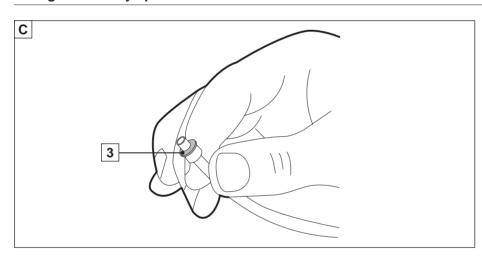


Figure B: disconnect this type of hydraulic pipe by removing the clip (1) using long nose pliers and disconnecting the pipe (2) by pulling it outwards.



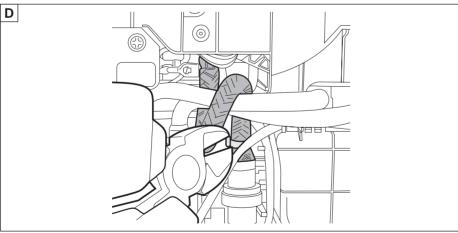


Hydraulic pipe passages must not be altered. Any clamps must be removed during disassembly and restored during reassembly operations.

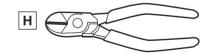


Moto

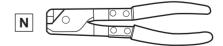
Recover the gaskets (3) and insert them in the pipes as shown in figure C. Replace the gaskets if worn.



**Figure D**: remove the high pressure pipe by cutting the clamps with CLIPPERS.



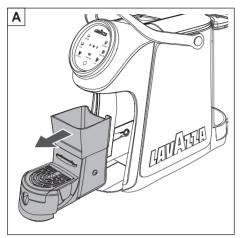
When reassembling, set the pipe of the new clamps in place and tighten them using OETIKER pliers.

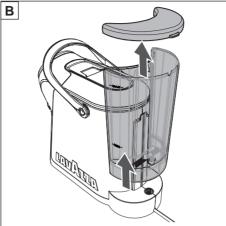




### 11. DISASSEMBLING THE BODY

### 11.1. EXTRACTING THE DRIP TRAY / USED CAPSULE TRAY AND THE WATER TANK ASSY

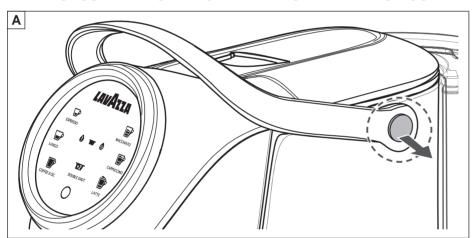




**Figure A**: after having removed the power cable from the socket, remove the DRIP TRAY / USED CAPSULE TRAY.

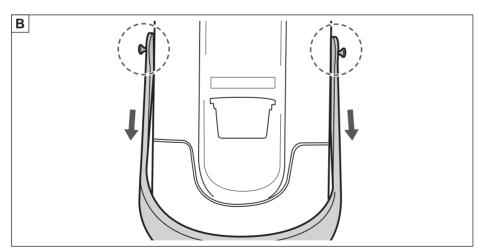
**Figure B**: pull the WATER TANK ASSY upwards to extract it from its seat.

### 11.2. DISASSEMBLING THE SIDE PANELS AND THE TOP COVER



**Figure A**: remove the two HANDLE CAPS of the capsule loading lever (one on each side).





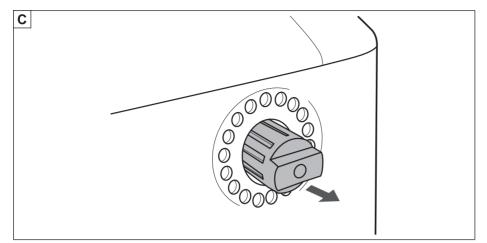
**Figure B**: unscrew the two underlying HANDLE SCREWS (one on each side) and remove the capsule loading lever.



Not

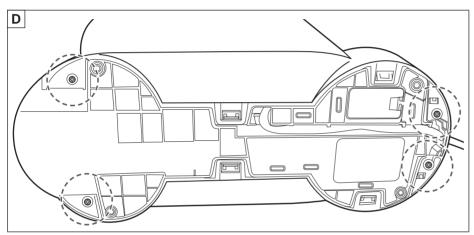
While reassembling, tighten the screws with a torque of 1.6  $\pm$  0.2 Nm.



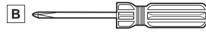


**Figure C**: remove the HANDLE SPACERS (one on each side).





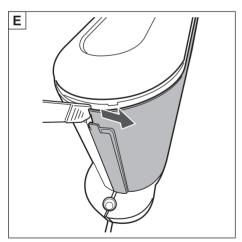
**Figure D**: set the machine horizontally and unscrew the four screws on the base.

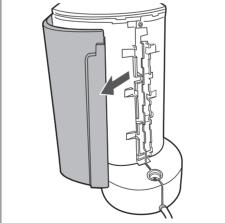




While reassembling, tighten the screws with a torque of 0.6  $\pm$  0.1 Nm.

Set the machine upright again.

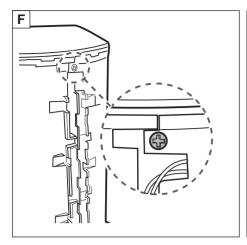




**Figure E**: remove the external side panels (first the left and then the right).

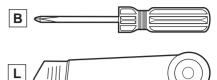


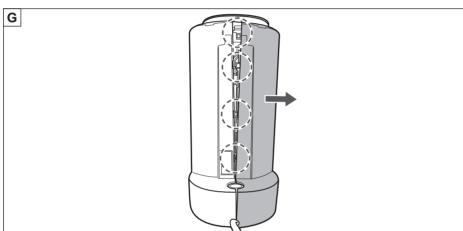






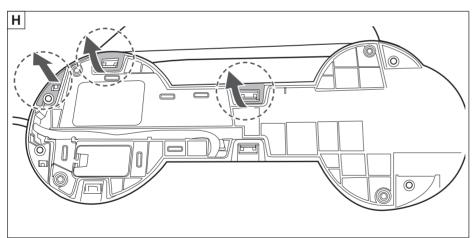
**Figura F**: remove the screw shown and lift the top cover up with the help of a tool.





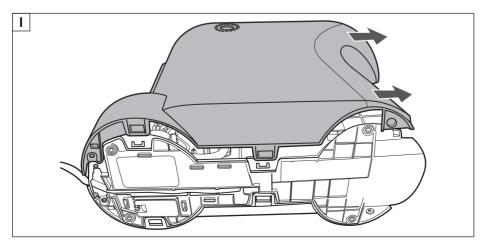
**Figure G**: disengage the small interlocking teeth, found in the rear part of the appliance, from top to bottom, while using the LEFT PANEL as lever with your hand.





**Figure H**: place the machine on the right side and disengage the three mounting slots on the base.

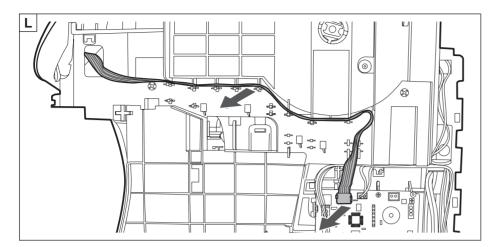




**Figure I**: pull the LEFT PANEL forward and remove it.

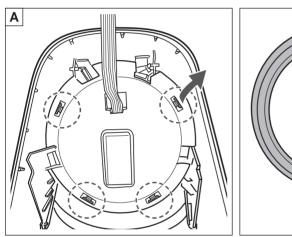


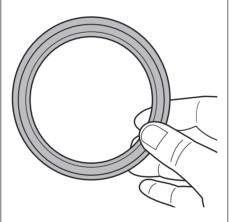
### Repeat the procedure described in Figures G - H - I for the RIGHT PANEL.



**Figure L**: unplug the USER INTERFACE connector, slide the cable out, and completely remove the top cover.

### 11.3. EXTRACTING THE USER INTERFACE





**Figure A**: use your fingers to unlatch the 4 locking points shown and slide out the frame.



**Figure B**: remove the user interface.

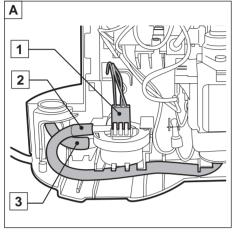




### 12. REMOVING INTERNAL COMPONENTS

The internal parts can be accessed after having removed the body parts.

### 12.1. REMOVING THE VOLUMETRIC DOSER



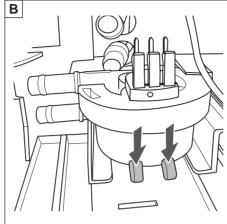
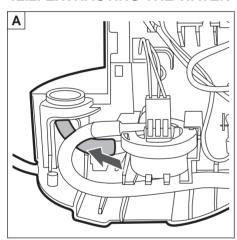
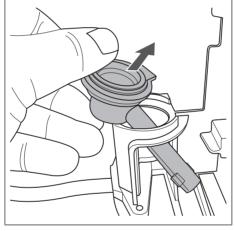


Figure A: remove the wiring (1), the SILICONE PIPE (2) and the black piping (3).

**Figure B**: press the two lower interlocking levers to lift and remove the VOLUMETRIC DOSER.

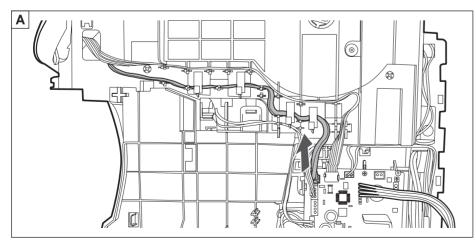
### 12.2. EXTRACTING THE WATER TANK INLET





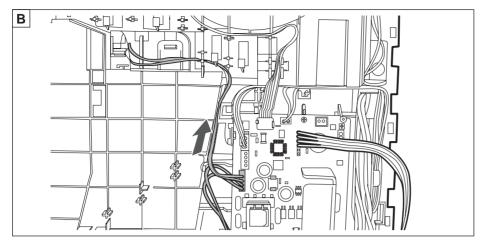
**Figure A**: disconnect the black connection pipe with the volumetric doser and extract the WATER TANK INLET component by pulling it upwards.

### 12.3. REMOVING THE MILK FROTHER SUPPORT ASSY

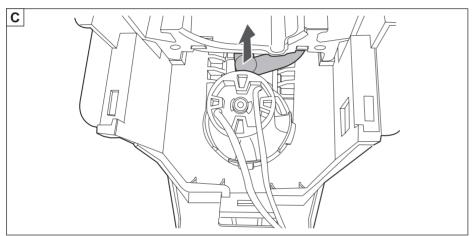


**Figure A**: extract the wires of the MILK FROTHER SUPPORT ASSY and remove them.



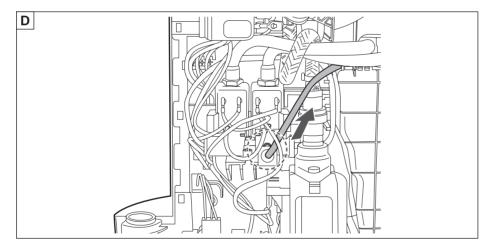


**Figure B**: disconnect the wires of the CAPSULE TRAY / MILK FROTHER PRESENCE MICROSWITCH ASSY.



**Figure C**: remove the SILICONE COFFEE OUTPUT PIPE, found next to the MILK FROTHER SUPPORT ASSY.

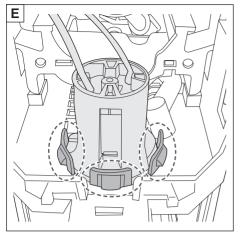


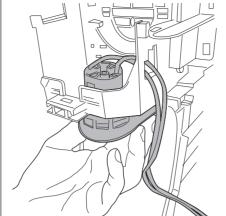


**Figure D**: remove the indicated FORK and the relevant TEFLON PIPE from the solenoid valve unit.



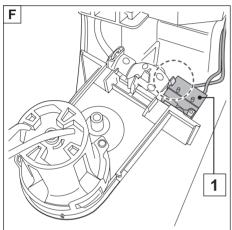






**Figure E**: use a screwdriver to press the three tabs shown while pulling the MILK FROTHER SUP-PORT ASSY downwards with your hand to extract it from the machine.





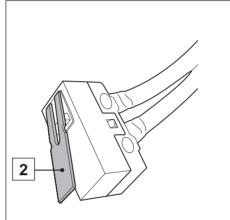
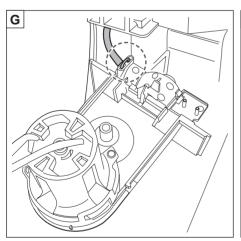


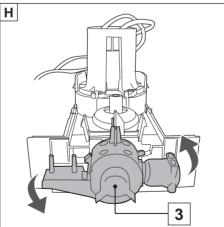
Figure F: remove the MILK FRO-THER PRESENCE microswitch (1) by lifting it upwards and use the indicated tooth as a lever. Facilitate the removal by lightly pinching the activation plate (2) so as to disengage it from its seat.



### Warning

### While disassembling and reassembling pay particular attention not to deform the activation plate.





**Figure G**: remove the indicated TEFLON PIPE after having removed the FORK.



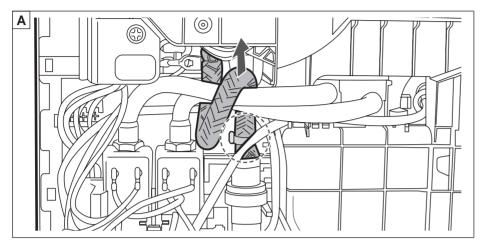
**Figure H**: rotate the MILK FRO-THER INLET ASSY (3) 45° anticlockwise and remove it.



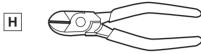
### 12.4. DISASSEMBLING THE PUMP

### Warning

Wait for the boiler to cool off before performing these operations. DANGER OF BURNS.

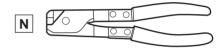


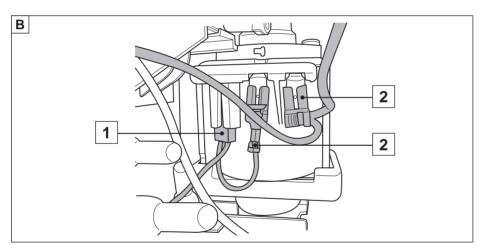
**Figure A**: cut the CLAMP of the high pressure SILICONE PIPE and remove the PIPE.



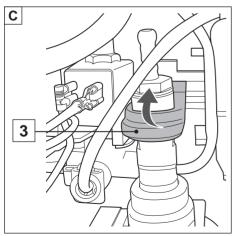
### Warning

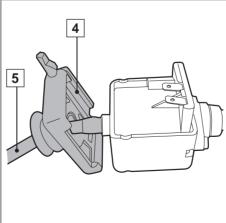
Be careful not to tear the pipe. While reassembling, the CLAMP must be replaced and tightened with the OETIKER PLIERS.





**Figure B**: disconnect the PUMP THERMAL PROTECTION (1) and the two electrical connections indicated (2).





**Figure C**: remove the EP5GW/EVO 230V PIPE from the top bracket (3) and extract it from the machine while also removing the LOWER BRACKET (4).

Then remove the LOWER BRA-CKET and disconnect the SILICO-NE PIPE (5).



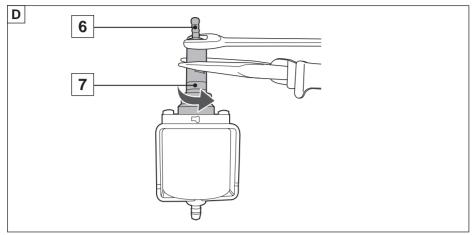
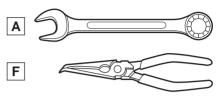
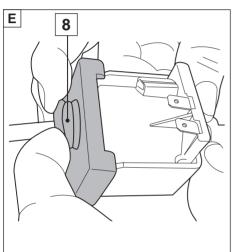
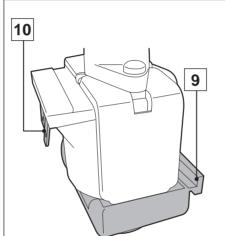


Figure D: remove the HIGH PRESSURE PUMP OUTPUT CONNECTOR ASSY while holding the sleeve stationary (6) and simultaneously turning the connector anti-clockwise (7).

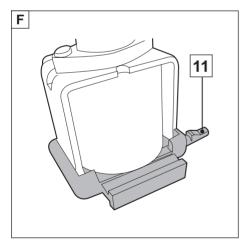


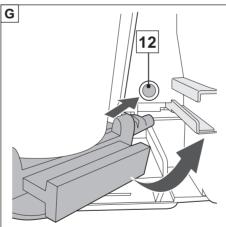






Re-insert the LOWER BRACKET by applying light pressure on the buffer (8), as shown in figure E. Check that the component is in full contact with the pump and that it is positioned correctly: the side fixing point (9) should be opposite to the insertion point of the electrical connections (10).





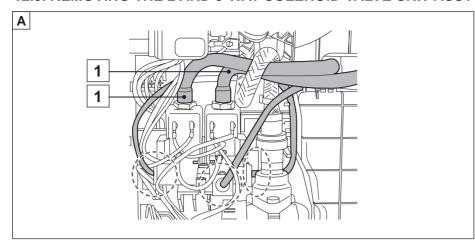


When reintroducing the pump into the machine, make sure to fit the BOTTOM SUPPORT into the guides of the body and reposition the fixing pin (11) in the hole (12) adjacent to the CPU BOARD, as shown in Figures F and G.





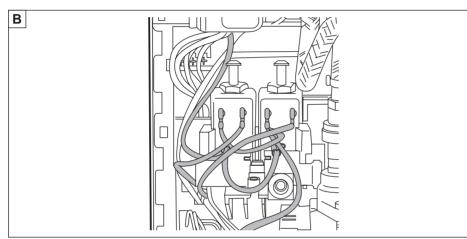
### 12.5. REMOVING THE 2 AND 3-WAY SOLENOID VALVE UNIT ASSY



**Figure A**: remove the three mounting FORKS of the hydraulic connections.



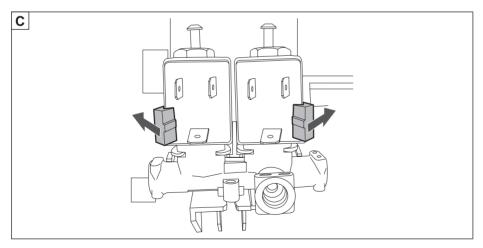
Remove the three corresponding TEFLON PIPES and the two SILI-CONE PIPES (1) placed at the top of the solenoid valve unit.



**Figure B**: disconnect the six wirings.

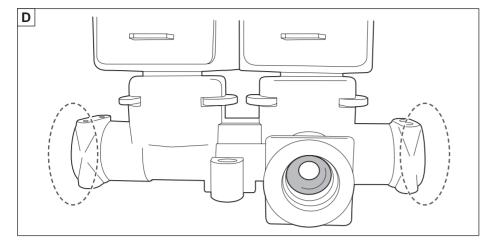
### Warning \_

Take note of the positioning of the wirings before disconnecting them.



**Figure C**: widen the two lateral securing levers to extract the SO-LENOID VALVE UNIT ASSY.

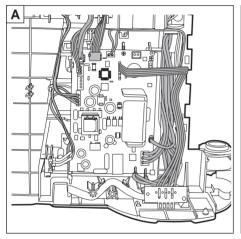


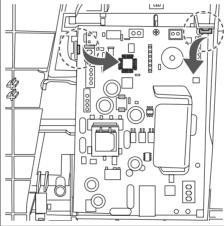


### Warning

When replacing the solenoid valve unit Assy, the pair of O-RINGS within each connection point must be replaced with the TEFLON PIPES, as shown in figure D.

### 12.6. EXTRACTING THE CPU BOARD





**Figure A**: disconnect all the wirings present and remove the electronic card while using the two points shown as lever.

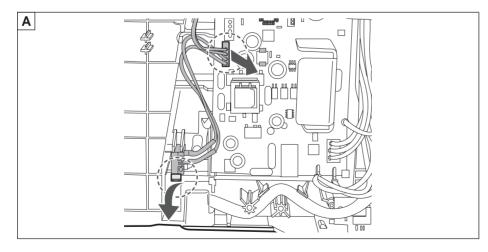


### Warning

Take note of the positioning of the wirings before disconnecting them.

### 12.7. REMOVING THE CAPSULE TRAY / MILK FROTHER PRESENCE MICROSWITCH ASSY

The Assy consists of two microswitches which respectively indicate the presence of the cappuccino maker Assy and the capsule tray.



**Figure A**: disconnect the wiring connection with the CPU BOARD to extract the CAPSULE TRAY PRESENCE microswitch while using the lower tooth shown as a lever.

Follow the steps described in chapter 12.3 to remove the MILK FROTHER PRESENCE microswitch.

Warning

While disassembling and reassembling pay particular attention not to deform the activation plates.



#### 12.8. EXTRACTING THE THERMOBLOCK PROBE

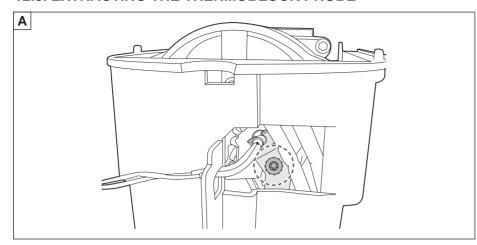


Figure A: loosen the screw of the PROBE fixing plate, found in contact with the thermoblock.



Cut power to the board and slide out the component.

### Warning

Clean the PROBE from any residual thermal grease and while inserting it take care to apply an adequate amount of grease to the contact point with the thermoblock.



While reassembling, tighten the screws with a torque of  $2 \pm 0.1$  Nm.

### 12.9. REMOVING THE THERMOBLOCK AND DISPENSING UNIT

### Warning

Wait for the boiler to cool off before performing these operations. DANGER OF BURNS.

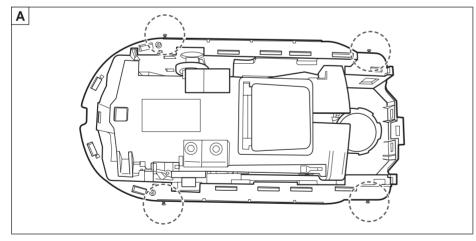
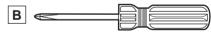


Figure A: unscrew the four fixing screws of the DISPENSING UNIT (two on each side).

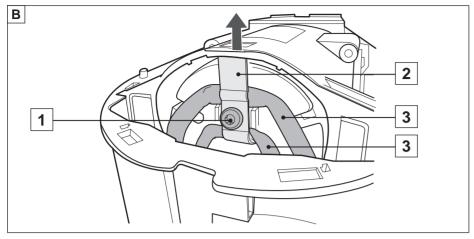




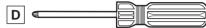
While reassembling, tighten the screws with a torque of  $0.8 \pm 0.1$ Nm.

Remove the screw from the fixing plate of the THERMOBLOCK PROBE, as described in the previous chapter 12.8.





**Figure B**: lift the dispensing unit slightly and loosen the screw (1) of the mounting plate (2) of the THERMOBLOCK THERMAL FUSE ASSY.

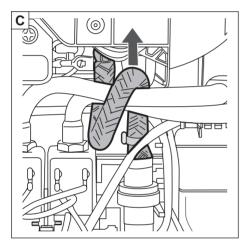


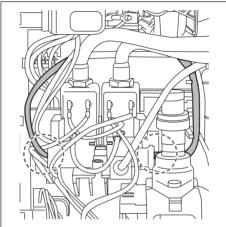
Then disengage the thermal fuses (3) from their seat.



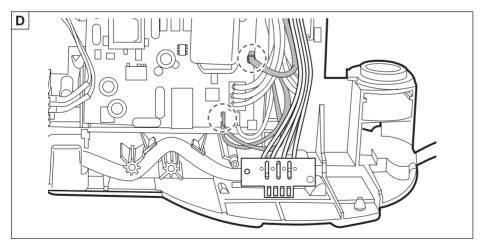
Note

### While reassembling, tighten the screws with a torque of 2 $\pm$ 0.1 Nm.





**Figure C**: set the machine horizontally and disconnect the three hydraulic connections shown, relative to the PUMP and the 2 and 3-WAY SOLENOID VALVE ASSY, as described in chapters 12.4 and 12.5.



**Figure D**: reposition the machine upright and remove the two thermoblock power cables from the CPU BOARD.



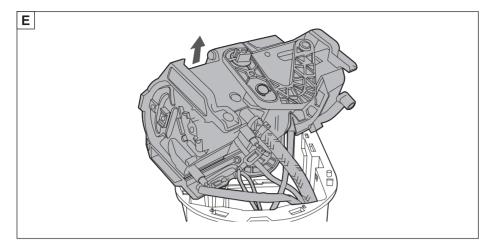


Figure E: lift the DISPENSING UNIT upwards and remove all the connected wiring.

Then remove it from the machine.



The THERMOBLOCK is inserted in the DISPENSING UNIT.

#### 12.9.1. DISASSEMBLING THE THERMOBLOCK

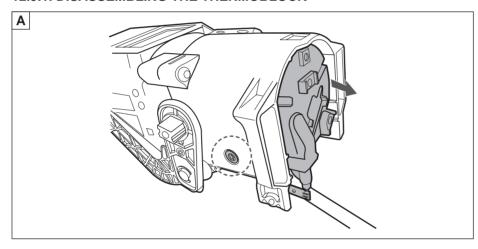


Figure A: unscrew the fixing screws of the thermoblock (one on each side) and extract the component.





While reassembling, tighten the screws with a torque of  $2 \pm 0.1$ Nm.

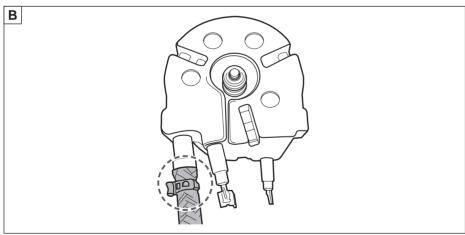
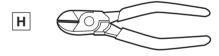
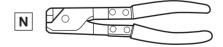


Figure B: remove the high pressure SILICONE PIPE after having cut the fixing CLAMP.

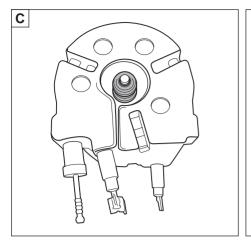


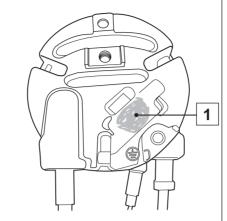
Warning .

Be careful not to tear the pipe. While reassembling, the CLAMP must be replaced and tightened with the OETIKER PLIERS.









### Warning Warning

Before putting the thermoblock back into its housing, the GASKETS indicated in figure C must be replaced.



Take care to remove any residual thermal grease in the contact point (1) of the THERMOBLOCK PROBE and apply fresh grease before setting the PROBE back in place.

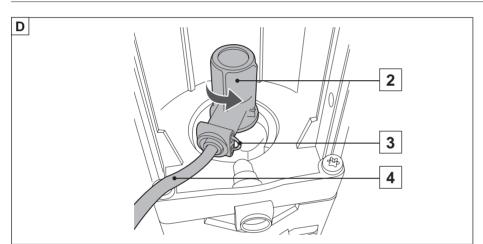
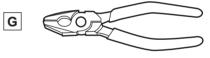
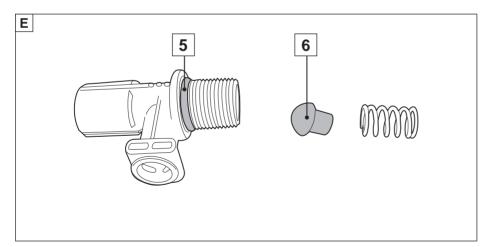


Figure D: remove the THER-MOBLOCK CONNECTION (2) in the dispensing unit by extracting the retaining fork (3), removing the hydraulic connection (4) and unscrewing the THERMOBLOCK CONNECTION by rotating it anticlockwise.





### **Warning**

If the THERMOBLOCK CONNECTION is to be replaced, also replace the O-RING 11X1.9 (5) and if necessary, the RUBBER CAP (6) within, as shown in figure E.



### 12.9.2. DISASSEMBLING THE DISPENSING UNIT

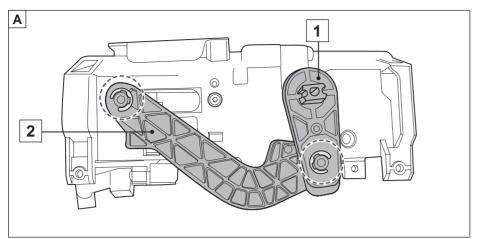
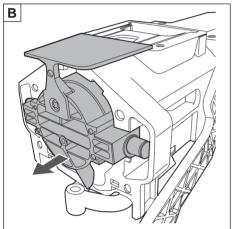
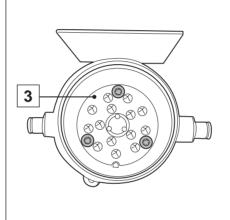


Figure A: remove the cranks (1) and the rods (2) by extracting the Seeger rings on each side (two external and one internal).



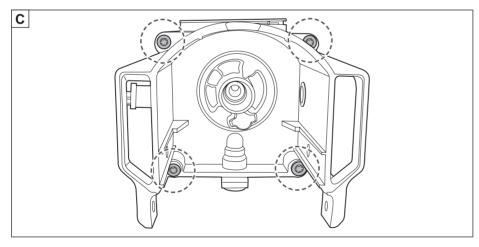




**Figure B**: remove the infusion chamber.

Unscrew the three fixing screws of the CAPSULE TOP PIERCING SUPPORT (3) in order to extract it.

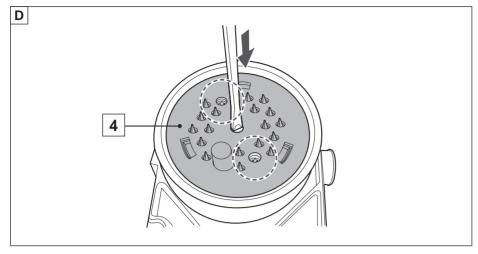




**Figure C**: remove the four bolts of the DISPENSING UNIT, slightly tilt the component and remove it.



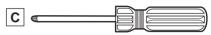


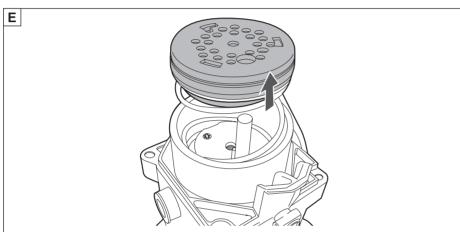


**Figure D**: proceed with the removal of the PIERCING PLATE (4). Use a screwdriver to press the central hole of the plate for the PIERCING TIPS to come out.

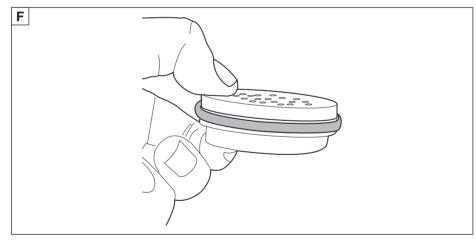


Then unscrew the two screws shown.





**Figure E**: the PIERCING PLATE automatically rises, pushed by the underlying spring and can be easily extracted.



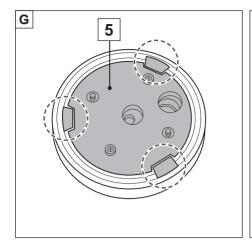
**Figure F**: remove the LIP SEAL of the plate.

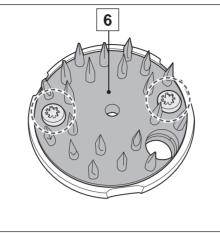




Replace the SEAL and lubricate it. Take care to set it back on the plate correctly.







**Figure G**: from the back of the plate, use the three levers indicated to extract the support of the piercing tips (5).



Lastly, unscrew the two screws shown and remove the PIERCING TIPS (6).



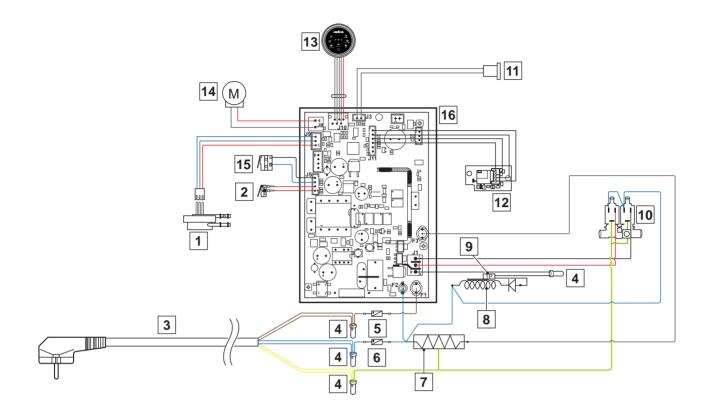


Handle the PIERCING TIPS with care so as to avoid injuring yourself.



### 13. DIAGRAMS

# 13.1. WIRING DIAGRAM



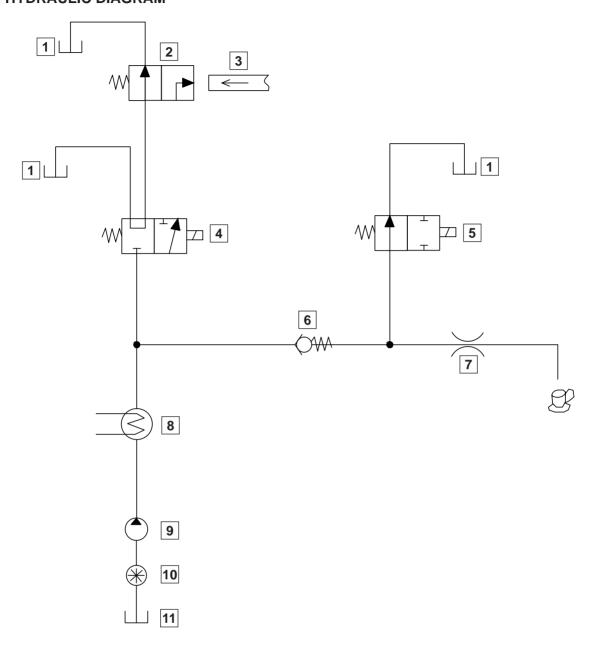
### Key

### **Machine components**

Macini	ne components
1	Volumetric doser
2	Capsule tray presence microswitch
3	Power cable
4	Faston
5	Thermoblock thermal fuse (phase)
6	Thermoblock thermal fuse (neutral)
7	Thermoblock
8	Pump
9	Pump thermal protector
10	2 and 3-way solenoid valve unit
11	Thermoblock probe
12	USB port to update Firmware
13	User interface
14	Milk frother motor
15	Milk frother presence microswitch
16	CPU board



## 13.2. HYDRAULIC DIAGRAM



### Key

### **Machine components**

1	Drip tray
2	Milk frother inlet Assy
3	Cappuccino maker Assy
4	3-way solenoid valve
5	2-way solenoid valve
6	Dispensing valve
7	Capsule
8	Thermoblock
9	Pump
10	Volumetric doser
11	Tank

