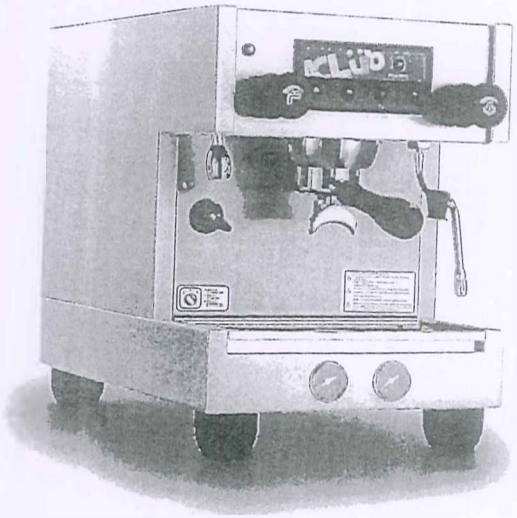

F ESPRESSO MACHINE

Operation manual

Version 2011-00 ---------- Released on 2011.9.9

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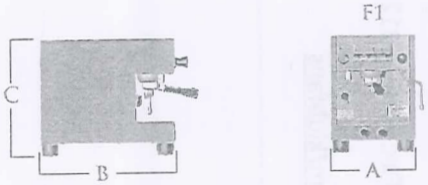
1.Specification



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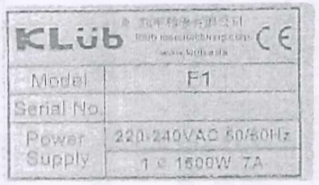
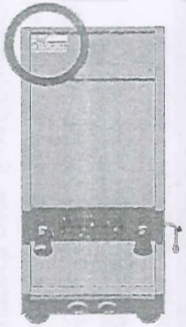
MODEL	GROUP	BOILER CAPACITY	VOLTAGE	WATTS	HERTZ	WEIGHT	DIMENSION (CM)		
							A	B	C
F1	1	3L	220/240	1500	50/60	26KG	31.0	55.5	43.6

Label



Label Position



9.Replacement parts

	Particular	Serviceable life
1	Group gasket	3-6 months, depends on the volume of coffee brewed
2	Pressure relief valve	2 years
3	Safety valve	2 years
4	Filter pad	1-3 months, depends on water quality
5	Filter element (Active carbon)	1-3 months, depends on water quality
6	Group gasket	1-3 months, depends on water quality

8.Trouble shooting

Indication	Status	Possible Cause	Corrective Actions
L	After two minutes ofwater input, indicator still does not show a rise in machine water level. ⚠ It will take more than two minutes to replenish water when the machine is used for the first time.	1.Water level indicator does not function properly. 2. Water intake solenoid malfunctions. Input water flow has been inter rupted. 3. No water input	1. Make sure that the water input switch is ON and that water is flowing into the machine. 2. Turn off the machine. Restart after 3 seconds. 3. Notify local dealer.
E	1. No water output from the brewer. 2. Machine does not reach preset parameters.	1. Coffee grounds are too fine. 2. No water input 3.Water intake solenoid is out of order.	1. Adjust coffee ground fineness. 2. Ensure water input is normal. 3. Notify local dealer
●	Boiler is in automatic water input mode.	Boiler water level is too low, automatic water input system is working.	Indication of an action for reference.
A或B	IC board does not function properly.	Software or hardware error.	1. Turn machine off and restart after 3 seconds. 2. Notify local dealer

⚠ Wait at least 3 seconds to restart the machine after turning it off to ensure previous data stored in memory is erased. Turning on the machine too quickly may cause malfuction of the machine.

2.General

2-1 This operations manual includes instructions for using and maintaining your espresso machine, please keep this manual readily available.

2-2 After unpacking, please check to ensure your machine has not been damaged during shipping and includes all parts/components. Please notify your service representative regarding any questions or concerns before installing. Please note that machine packaging material can be dangerous and should be kept out of reach of children.

2-3 Please confirm that your electricity supply conforms to the espresso machine power requirements. A qualified technician should install the machine in accordance with manufacturer instructions. The manufacturer assumes no responsibility for injury or damage resulting from improper installation.

2-4 Please use an independent and suitable power source for your machine.

2-5 Please use an independent, fuseless breaker appropriate to machine safety requirements. Do not plug your machine into an extension cord.

2-6 Be sure to use a grounded power source to prevent electric shock and ensure operating safety.

2-7 Use the automatic espresso machine for its intended purpose only. Any other usage is inappropriate and may be dangerous. The manufacturer assumes no responsibility for injury, loss or damage resulting from improper machine use.

2-8 Do Not:

a. touch machine with wet hands or feet.
b. touch machine with bare feet.
c. pull on the cord to disconnect machine from power outlet.
d. expose the espresso machine to rain or direct sunlight.
e. permit children or persons not normally qualified to operate basic machinery to use this machine.

2-9 Turn off the power source first before maintaining or servicing your machine.

2-10 Take care when touching machine parts; subject to high temperature heating to avoid injury.

2-11 Clean machine according to instructions provided in this manual to ensure proper operations. (Please refer to Section 7-1, page 21)

2-12 Turn power off if machine functions abnormally and notify qualified service personnel for repairs. Do not permit non-qualified service personnel to attempt repairs. Continuing to use a damaged or otherwise irregularly functioning machine will nullify the manufacturer warranty.

2-13 Use softened water to make coffee or tea. Well / municipal water should be softened to prevent scaling in the boiler, which will shorten the serviceable life of your machine. If a hard water source is used, the filter should be replaced every two weeks –although long-life filters may remain serviceable up to eight weeks. Actual filter replacement scheduling will vary based on volume and quality of water used. (Please refer to Section 7-7, page 28)

- Remove the bottom cap from the filter and extract the spent filter element. Wash the upper and lower caps and then mount a new filter element. Turn the lower shell to secure it to the upper shell and tighten it by hand.

- Open the water inlet and allow water to flow out from the filter gradually for about one minute, for the purpose of cleaning impurities from the filter. Close the water and connect the high-pressure water let hose to the machine.

- Open the water inlet and start the machine by the standard procedures (Please refer to 5-1, page 13).

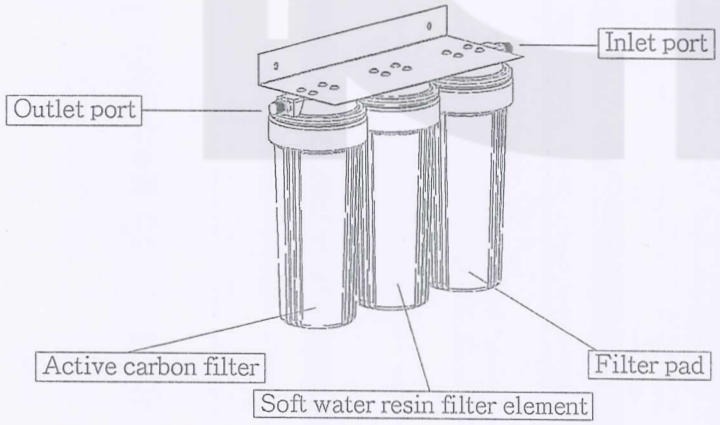
7-6 Water Tray :

Remove and wash the water tray after turning off the machine. Reassemble the water tray when it is dried dried.

7-7 Filter :

A. The manufacturer recommends replacing the filter element on the resin exchange filter after processing 200 Liters of water (about 3,000 – 4,000 cups of coffee). This schedule can be expected to vary based on the quality of water used by your machine.

B. Close the water inlet, place a water container below the filter, and remove the high-pressure water inlet hose from the machine.



2-14 The machine refills water automatically (see Section 5-1, page 13 for initializing). An error code will appear if water flow into the machine exceeds two minutes (see Troubleshooting Section in this manual), and power will be cut off automatically to protect the system. It takes more than two minutes to fill water for the first time. When control panel shows "L" , in order to resume normal functions, restart the system after three or more seconds.

2-15 For ETL listed machine, the heating element will not operate when water in the machine is less than the minimum required level. When starting the machine without any water in the boiler, heating will be delayed for 60 seconds. ◦

2-18 If turning off the machine for long time, please be sure to evacuate the water inside the piping completely. To freeze the water will lead to the damage in the machine. To keep the safety of your machine, please notify your service representative regarding any need on operations in frigid zone or prepare to shut down the machine for long time with complete water evacuation.

3.Operating Precautions ⚠

1.Please study the instructions thoroughly before the operation.

2.Do not use the machine and turn off the power when water intake has ceased.

3.When operating the machine for the first time or replacing the filter, remove the water inlet tube and allow it to drain for about one minute in order to discharge impurities from the water.

4.Please check and confirm normal water supply before turning on power.

5.Please check it if water delivery is normal. If not, the heating element is likely to be damaged.

6.After installing the machine, please check to make sure that, during water intake, the steam pressure gauge indicator is within the blue zone (0.8~1.2bar).

7. The water and steam taps are used to make coffee or tea. The nozzle at the hot water outlet and the steam outlet are very hot -- please do not touch.

8. To avoid overheating, electric wires should be kept untangled and free of obstructions. Do not block air intake or outlet vents on the machine.

7-4 Steam Tube :

A. After forthing milk, use a slightly moistened soft cloth to wipe the steam tube. After wiping, release a steam burst through the tube to remove any residual milk remaining in the nozzle.

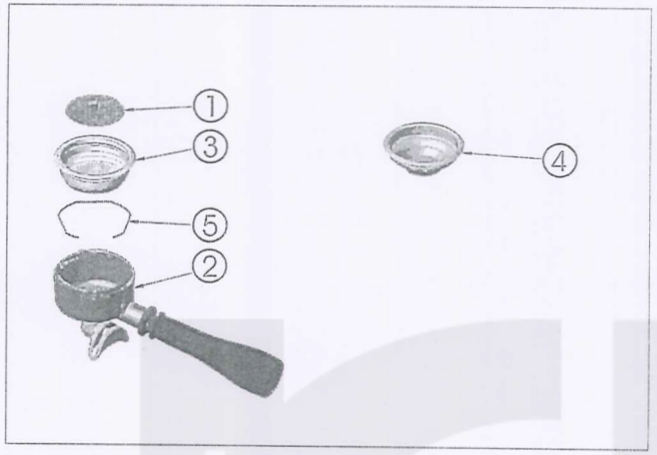
B. If hardened milk residuals remain in the steam tube, disassemble and immerse tube in hot water for about 20 minutes to soften. Reassemble and repeat step (A).

7-5 Boiler :

To extend your boiler' s serviceable life, when the machine is expected to sit idle for a period of days, turn power OFF and open the steam output to discharge steam pressure in the boiler . Continue until the pressure gauge reading falls to zero and steam discharge ends. Once complete, empty and clean the water tray .

⚠ Important: Leave the steam output setting open when steam discharges. Steam output should remain open until the machine is turned on and hot water begins dripping from the steam tube.

• Filter holder diagram :



①	Silica plate
②	Double cup filter holder
③	Double cup filter
④	Single cup filter
⑤	Steel wire

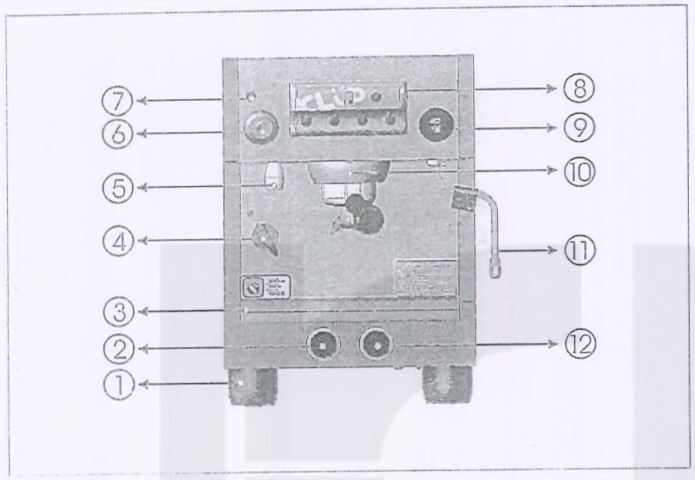
9.Please clean machine components with a soft cloth only. Do not use plastic or wire brushes.

10. Turn the power off and release all boiler pressure if the machine is to remain idle for an extended period of time.

11. After machine power has been switched off, always let the machine set for at least 3 seconds before restarting.

12.Place an appropriate quantity of ground coffee in the filter cup and tamper carefully. Clean all residual coffee from the rim and sides of the filter to keep a good seal and full pressure for steaming and to maximize service life.

4.Machine Overview



F1

①	Foot	⑦	Power indicator
②	Water pressure gauge	⑧	Control panel
③	Water tray	⑨	Steam control knob
④	Power switch	⑩	Brewing group
⑤	Hot water outlet nozzle	⑪	Steam tube
⑥	Hot water control knob	⑫	Steam pressure gauge

	Cleaning operation	Daily	Weekly	Monthly	Annually
	Apply 3 TSP detergent in the filter holder and start the reverse flushing.	◎	◎	◎	◎
	Immerse overnight in 500 ml hot water with 3g detergent		◎	◎	◎
	Immerse overnight in 500 ml hot water with 3g detergent	◎	◎	◎	◎
	Immerse overnight in 500 ml hot water with 3g detergent	◎	◎	◎	◎
	Immerse overnight in 500 ml hot water with 3g detergent	◎	◎	◎	◎
	Immerse overnight in 500 ml hot water with 3g detergent	◎	◎	◎	◎
	Immerse overnight in 500 ml hot water with 3g detergent		◎	◎	◎
	Immerse overnight in 500 ml hot water with 3g detergent			◎	◎
	Replace new element			◎	◎
	Replace new element			◎	◎

• Table of Maitenance

	Items	Check	Tools
1	Reverse flushing		
2	steam nozzle		
3	Filter holder		
4	Filter basket		
5	Copper plate		Brush
6	Group shower plate		
7	Hot water sprayer		
8	Filter pad	To check if the element gets stained	
9	Soft water filter element	To check if the element gets stained	
10	Active carbon filter element	To check if the element gets stained	

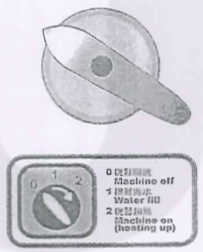
5.Operations

5-1 Turn on the machine:

Check and confirm that water source is in normal working order.

Step 1:

• Turn the power switch to position 1 to initiate automatic system check. If boiler water level is not in the green zone, wait until the automatic water replenishment process is completed before proceeding to the next step.



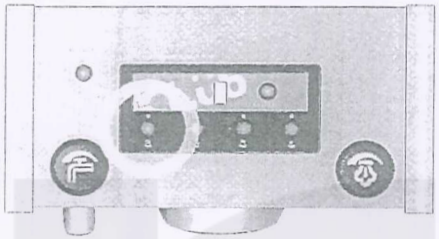
Off

Water intake

If the boiler is empty and it takes 2-3 minutes to refill the water after the installation.

Step 2:

Press the button to check water delivery of the brewing group



Step 3:

Check the water pressure to see if the pressure is 9 bars.

Water pressure: 9 bars

B. During reverse flushing, remove and wash the copper plate and filter element with clean tap water. Wipe with soft cloth (Do not use scrub sponge).

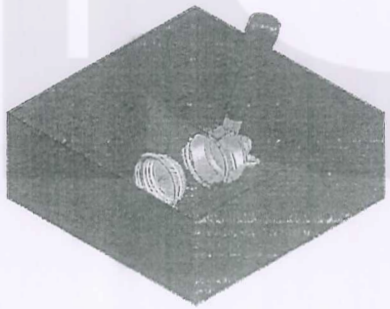
C. If it is unable to sufficiently clean the plate and filter element, immerse the components overnight in a mild cleaning solution of 3 tsp detergent in 500 ml hot water. Rinse and reassemble components before restarting the espresso machine.

7-3 Filter Basket and Basket Handle :

Rinse the handle with hot water after each brewing cycle to dissolve residual oils in the filter basket and outlet nozzle and to prevent oils from affecting the quality of coffee.

A. Disassemble filter basket handle and filter basket. Immerse both in cleaning solution (3TSP of detergent in 1 pint hot water) for 24 hours to dissolve residual coffee oils.

Important: Do not immerse the plastic portion of the handle in the cleaning solution to avoid deterioration.



B. Rinse all components with clean water. Wipe with a soft, clean cloth only (Do not use scrub sponge) .

Step 4:

Please confirm the brewing head' s water delivery is normal before turning on the heating element.

A.To confirm the status of water delivery, please press the brewing button to start the motor and see if water flows through the brewing head.

B.Turn the power switch to position 2 to start the heating element.

C.Do not operate the machine before the steam pressure reaches 1.0 bar (i.e. the needle of steam gauge is within the blue zone.)

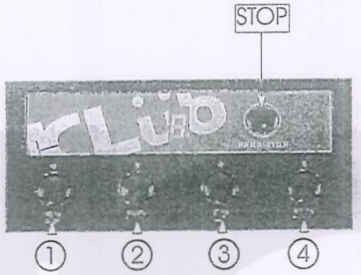
Heating Up

Steam pressure 1.0 Bar

Step 5:

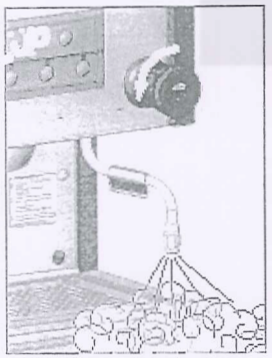
5-1 A · Panel :

Place an appropriate quantity of ground coffee in the filter basket and fix it into the handle seat. Choose desired water output by selecting coffee output volumes ① through ④ . Coffee flow will stop automatically.

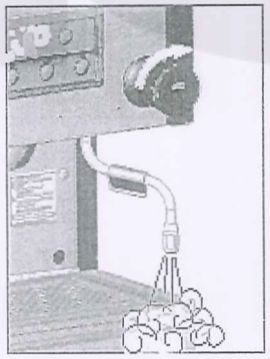


B. Steam Output:

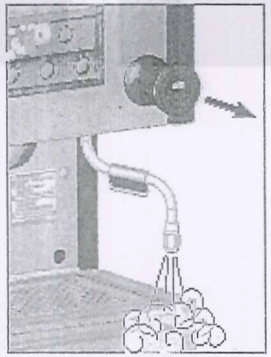
Turn steam knob counterclockwise to draw steam through the steam tube. Steam output will increase the further the steam knob is turned. Turn the knob clockwise to reduce/stop steam output. Pull out the steam knob when needing a good deal of steam for a short period of time.



Turn knob counterclockwise for more steam output.



Turn knob clockwise for less steam output.



Knob can be pull out

7.Cleaning and Maintenance

7-1 Machine Body :

Wipe machine exterior with soft, slightly dampened cloth daily before starting operations. If necessary, a mild, non-corrosive cleaning agent may be applied to the cloth.
Do not spray cleaning agents directly on the machine body to avoid corrosion and possible damage to circuits.

7-2 Brewing System :

After each brewing cycle, remove the handle and press the manual water output button to clean up all residual ground coffee from the filter element. Then, fix the handle to the seat again (Important: Do not force handle or fix it into the seat too tightly). Press the manual water output button, shake the handle to wash the handle seat gasket and clean up residual coffee grounds from the along the inside.

A.Flush the steam outlet in REVERSE daily before shutting off the machine.

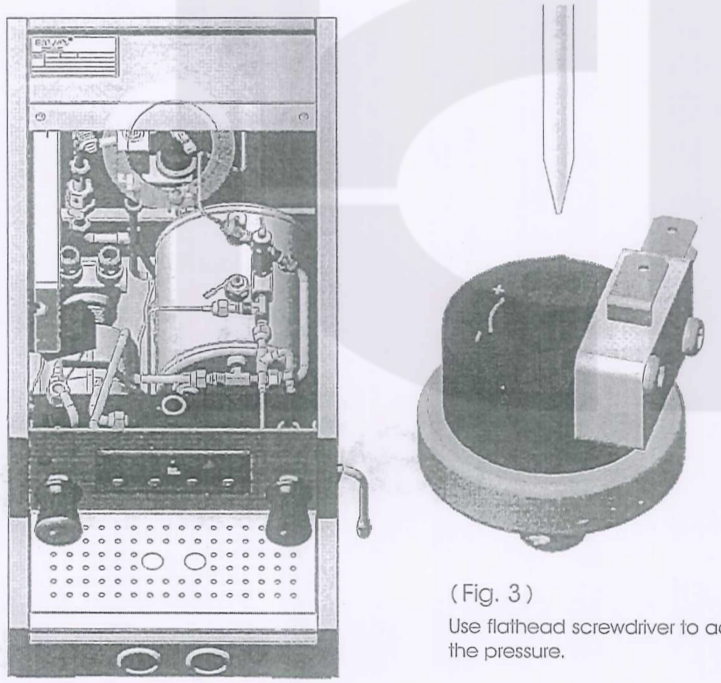
- Remove the copper plate and filter element from the water outlet (be careful, metal components may be hot).
- Place a reverse flushing silica plate in the filter cup, and apply about 2-3 grams of detergent. Fix the handle into the seat and check for tightness.
- To dissolve residual detergent in the machine, press the manual water output button for approximately 4 seconds and release. Repeat this process several times. Press the manual water output button and shake the handle to clean the gasket and the inside of the brewer. Continue the process until water in the filter cup is clear and clean.
- After cleaning, remove the handle. Press the manual water output button to wash out residual cleaning solution in the brewing system. Turn water off after flushing about one minute.

6-2 Steam Pressure

Attention! Turn off the machine before adjustment (The factory default setting is 1 bar).
The adjustment can only be conducted by qualified technicians.

The steam pressure is 1 to 1.2 bar when the water temperature is stable.

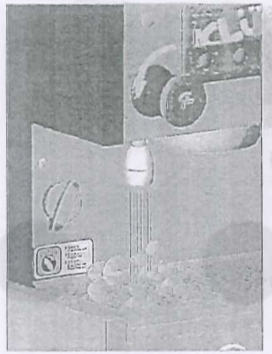
Use slotted screwdriver to adjust the steam pressure. (Fig. 3) Turn the pressure switch clockwise to increase the steam pressure and counterclockwise to decrease the steam pressure (One round is about 0.1 bar).



(Fig. 3)
Use flathead screwdriver to adjust the pressure.

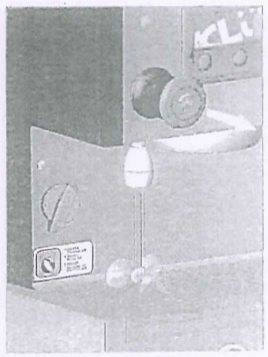
C. Hot Water Output

Turn the hot water knob counterclockwise to obtain hot water through the hot water tube. Hot water output will increase the further the hot water knob is turned. Turn the knob clockwise to reduce/stop steam output. Pull out the hot water knob for hot water supply for a short period of time.



Turn knob counterclockwise for more hot water output.

Turn knob clockwise for less hot water output.

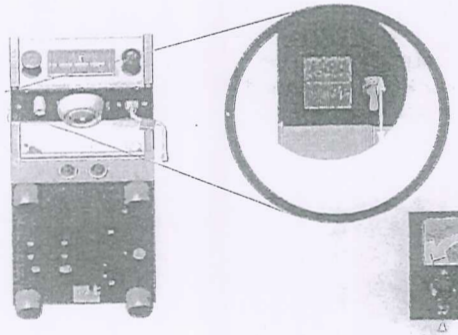


Knob can be pull out

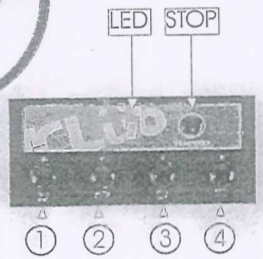
5-2 Output Volume Setup :

The output volume of each button has not been set up before the machine installation.

A.Turn the output volume setup switch ON and press the PROG (setup) button (Fig.1).



(Fig. 1)



(Fig. 2)

B. The output LEDs should be lit, and the LED indicator shows "P," indicating the machine is in setup mode (Fig. 2).

C. To configure key ①, press the key ① button, which should light LED① and switch off all other LEDs. Once desired setup parameters have been set, press key ① again to confirm and exit key ① setup. Meanwhile, the LED indicator shows the required seconds for outlet volume of coffee.

D. At this point, LED ① should be off and LED ②, ③ and ④ should be lit.

E. Repeat steps (B) through (D) to set up key ②, ③ and ④, respectively.

F. After completing setup, turn the output volume setup switch OFF (Fig. 1) to return the machine to normal operational mode.

5-4 Turning off :

Turn off the power (turn power switch to position 0) (Fig. 3).

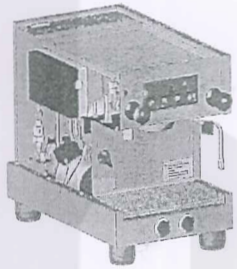
(Fig. 3)
Machine off

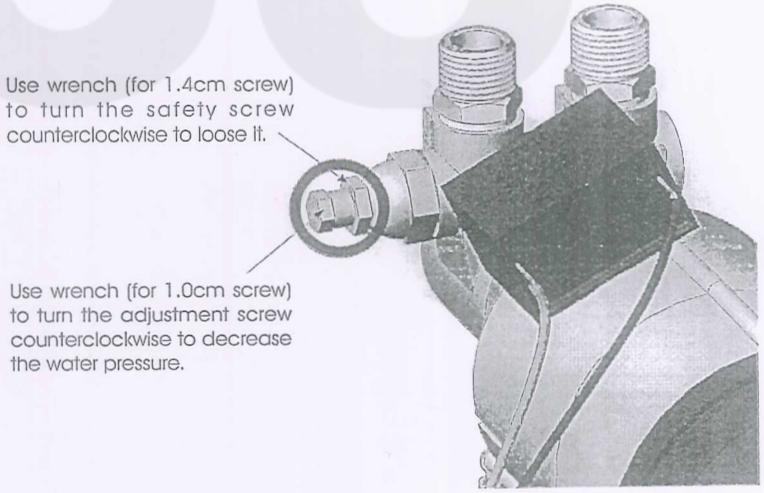
6.Adjustment

6-1 Water Pressure

Attention! The water pressure is set up as 9 bars (the recommended pressure) when the machine is tested in the factory.
The pressure adjustment can only be conducted by qualified technicians.

If you would like to adjust the pressure, use a wrench (for 1.4cm screw) to loose the safety nut and press the button. Turn the adjusted bolt clockwise/ counterclockwise until the needle of water pressure gauge indicates the required pressure.





KLub