



# CM460

**Caple Coffee Machine 460mm  
(Built-In , Sense styling )**



**TECHNICAL INFORMATION**



## CM460 - Caple BI Coffee Machine 460mm Sense styling

# New product information sheet

**Product name:** CM460

**Description:** Fully Automatic built in Coffee machine

**Product code:** CM460

### General features

Stainless steel and black glass

Fully automatic

Settings can be adjusted for making various hot drinks such as short espresso, long espresso, normal coffee, long coffee, warm milk, warm water or cappuccino.

Warm milk and cappuccino can be prepared by using the steam nozzle

Coffee bean grinder

Coffee grinder adjustment to modify how fine the coffee beans are ground to provide a stronger coffee.

Drink volume adjustment to modify the amount of coffee dispensed

Steam nozzle to heat and froth milk

Coffee temperature control

2.5 Litre water tank

Drip tray

Used coffee ground bin and accessories drawer

Stand-by energy saving

Cleaning warning

Water filter

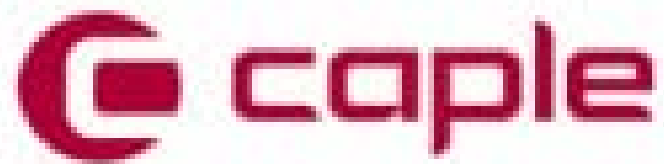
White LED lighting

Electrical connection

Rated load 1.8kW

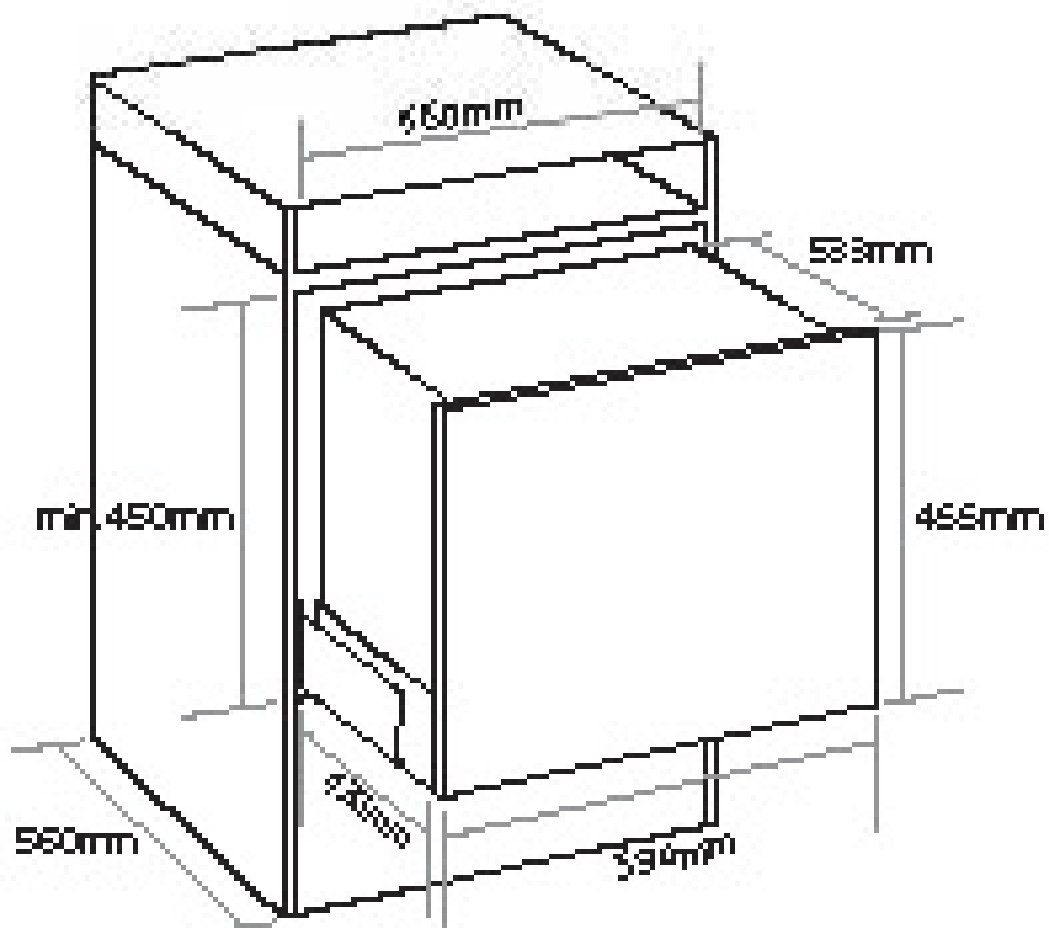
Fuse rating 13A

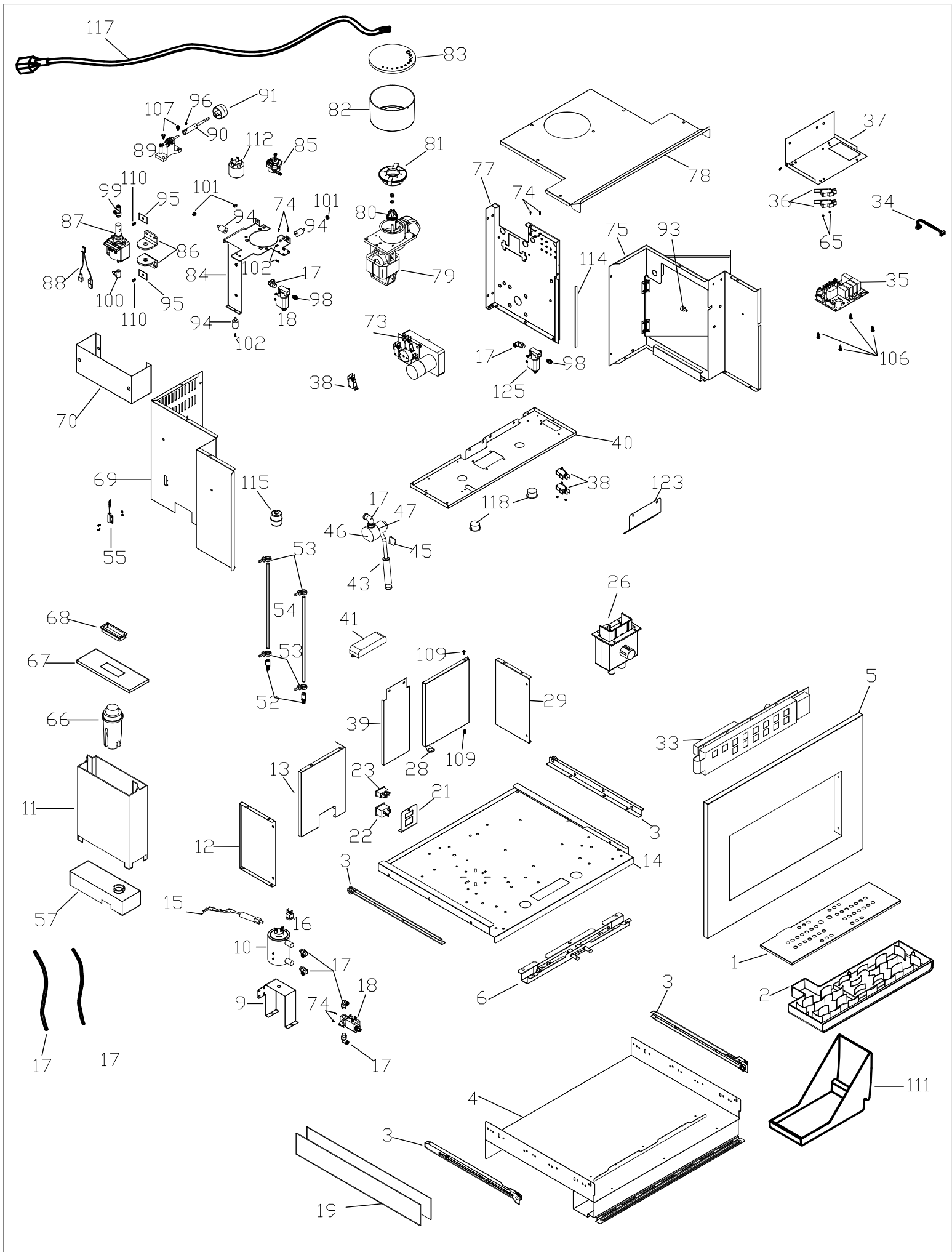




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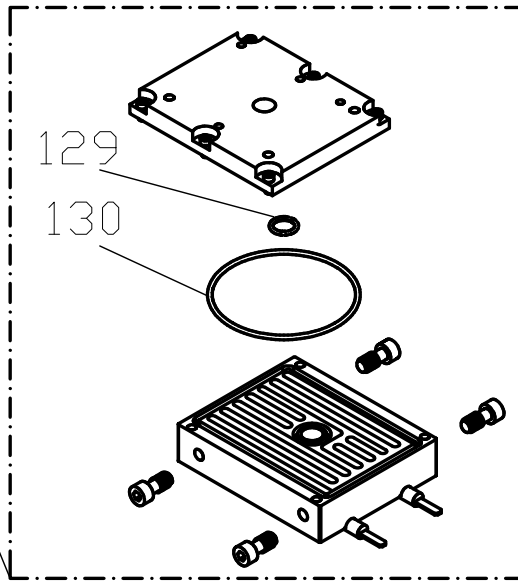
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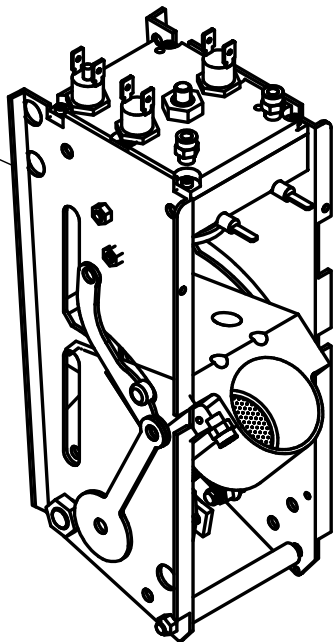


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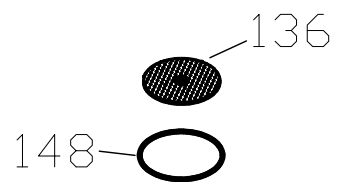
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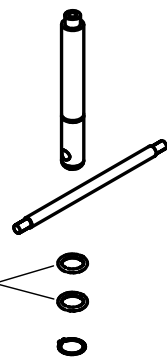
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## CM460 - Caple Built-in Coffee Machine 460mm Sense styling

Item	Code	Description
6	99460008	CLOSURE SYSTEM KIT
15	04043223	PROBE
19	99550117	LATERAL PLATE KIT
21	99000086	PLUG SWITCH SUPPORT
26	99460000	DISTRIBUTION ASSEMBLY
38	04035025	MICROSWITCH WITH WHEEL
41	04041207	TRANSFORMER FOR LED
55	04044004	MAGNETIC SENSOR
102	04001030	SCREWS
106	04033105	POWERBOARD PLASTIC SUPPORT
107	04001745	ZINC SCREWS
112	04042030	FILTER
114	04033650	MAGNETIC ADHESIVE
115	04056012	PLASTIC WATER FILTER
118	04041208	LED SPOTLIGHT CHROME
123	98460017	GROUP PROTECTION
125	04045033	?
127	99460012	GROUP AUTOMATIC MOTORISED
129	04019039	?
130	04019040	?
131	99111100	HEAT EXCHANGER KIT
134	04026031	CONICAL SPRING (TEFLON) FOR DIFFUSER PISTON
136	04063010	FILTER
137	04019051	?
139	04019052	?
141	04043221	TUBE
142	04016070	RIGHT STRAIGHT CONNECTION
143	04043070	SAFETY THERMOSTAT
148	04019045	?
1	98460014	CUP GRID
10	99175230	HEAT EXCHANGER
100	04033500	PLASTIC PIPE
101	04006003	DISTRIBUTION NUT ZINC
109	04017144	DOOR PIN FOR GUARD
11	99550214	WATER TANK
111	99556602	BASE COLLECTION RESERVOIR
117	04032015	CABLE
12	98460003	LEFT GUARD ST/STEEL
13	98460005	LEFT PANEL GUARD ST/STEEL
14	98460012	MACHINE BASE
16	04043036	SAFETY THERMOSTAT
17	04016010	CONNECTOR
18	04045080	?
2	99460001	WASTE RESERVOIR
22	04032011	LIQUID INTAKE
23	04040037	IGNITION SWITCH
28	98460007	DOOR GUARD ST/STEEL
29	98460004	RIGHT GUARD ST/STEEL

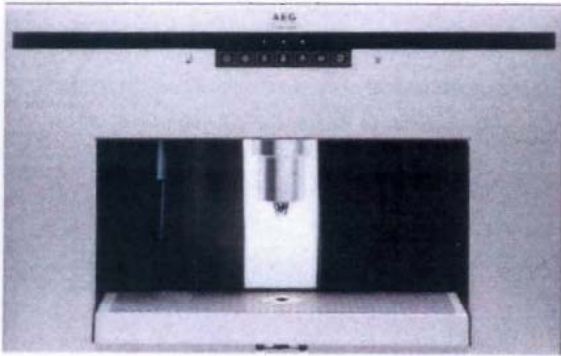


## CM460 - Caple Built-in Coffee Machine 460mm Sense styling

Item	Code	Description
3	04052019	PAIR OF RUNNERS FOR INTEGRATED COFFEE MACHINE
33	04029179	TOUCH SENSOR
34	04029180	POWER BOARD CONNECTING CABLE
35	04029057	MOTHER BOARD
36	04035020	MICROSWITCH WITH LONG HANDLE
37	98460055	POWER BOARD SUPPORT
39	98460006	CONTROL PANEL
4	99460003	"U" MACHINE ASSEMBLY
40	98460011	DISTRIBUTION SUPPORT
43	04017223	STEAM TUBE TERMINAL IN CHROMED BRASS
45	04062220	STEAM TUBE HANDLE
46	99460007	STEAM DISTRIBUTION ASSEMBLY
47	04019010	VITON STEAM DISTRIBUTION ASSEMBLY
5	99460006	PANEL ASSEMBLY
52	04017122	?
53	04033205	WHITE NYLON BAND
54	04022006	SILICONE TUBE
57	99111084	SUPPORT ASSEMBLY WATER TANK
66	04056001	BRITA FILTER FOR TRAY
67	98551100	ST/STEEL COVER FOR FILTER TRAY
68	04062201	BLACK HANDLE
69	98460008	LEFT BACKING
70	99000035	TRAY FIXING BRACKET
73	99111097	HANDLING MOTOR ASSEMBLY
74	04001516	ZINC SCREWS
75	99460005	RIGHT COMPLETE DOOR BACKING
77	99000071	GROUP SUPPORT
78	98460010	MACHINE COVER
79	04017035	COFFEE MACHINE MOTOR KIT
80	04017360	?
81	04017365	?
82	04058212	BELL
83	04058213	COVER FOR BELL
84	99000075	SUPPORT PLATE FOR COFFEE GRINDER
85	04028051	VOLUME METER
86	04046100	STANDARD ANTI-VIBRATION
87	04046020	ELECTRIC PUMP
88	04046202	WIRING THERMOPROTECTOR
89	04017037	SUPPORT COFFEE GRINDER
9	99000065	HEAT EXCHANGER SUPPORT
90	04017143	EXTENSION FOR GRINDING
91	04062023	BLACK GRINDING KNOB
93	04005835	SCREWS
94	04046102	RUBBER ANTI-VIBRATION
95	98171490	ST/STEEL PLATE FOR PUMP SUPPORT BLOCK
96	04009165	?
98	04016080	STRAIGHT FAST GAS CONNECTION
99	04016050	T SHAPE RAPID GAS CONNECTION



## Automatic Coffee Machines Guide to Best Performance.



**The quantity of coffee being ground is not constant.**

- ✓ Maximum time beans can be stored in the hopper is 1 week, for best results remove old beans after 2 to 3 days.
- ✓ If a different brand has been used adjust settings to new brand.
- ✓ Reset back to factory settings.
- ✓ Set the coffee bean grind time back to between settings 4 and 5, in customer instruction book.
- ✓ Set the coffee texture back to a position between 3 and 4 on bean hopper lid.
- ✓ Use only the small Italian coffee beans.



**The milk will not froth up.**

- ✓ Milk needs to be fresh from the refrigerator.
- ✓ Minimum quantity of milk is 100cc. Use a deep jug, stainless jugs perform better but ceramic is sufficient.
- ✓ Rotate the jug while under the steam spout.
- ✓ Do not try to froth milk twice, discard if it will not froth at first attempt.
- ✓ Clean the steam nozzle thoroughly.

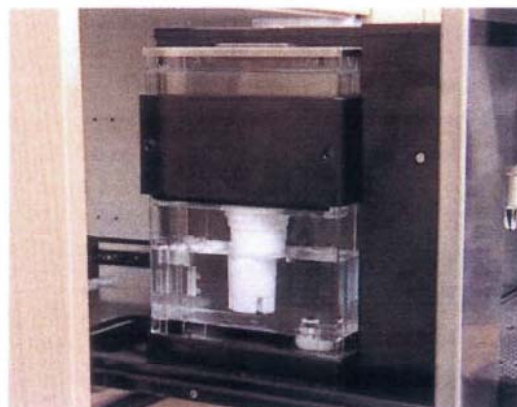
## Automatic Coffee Machines Guide to Best Performance.

Quantity of coffee is insufficient for user needs.  
(Customer wants a big mug)

The machine is designed to make true Italian espresso coffee, which is 30ml. There is an option of a long Italian coffee at 80ml. If a larger cup is required make 2 espresso and top up to required quantity with hot water. The 2<sup>nd</sup> and 3<sup>rd</sup> cups will be the ideal ones to use.

The coffee is not to individual taste.  
(See also the item below)

- ✓ The filter needs changing after 2000 small cups of coffee or every 20 to 24 fills of the water reservoir. Change at least every 3 months.
- ✓ The filter needs fitting tightly into the water container to ensure all the water passes through the 'Brita' filter.
- ✓ The coffee beans are not fresh, the maximum storage times for coffee beans in a packet is 2 weeks. Maximum time beans can remain in the hopper on the machine is 1 week, the ideal time is 2 days.
- ✓ A boiler cleaning cycle may need to be performed, see page 28 of customer user book.
- ✓ The 2<sup>nd</sup> and 3<sup>rd</sup> cups will be the ideal ones to use.



## Automatic Coffee Machines Guide to Best Performance.

**The coffee tastes bitter or burnt**

**(Sometimes referred to as tasting sour)**



- ✓ The setting on the grinder may be set to grind too fine, set the coffee grind to between 3 and 4 on the hopper lid.
- ✓ The coffee beans are old and need changing. Maximum time beans can be stored in the hopper is 1 week, for best results remove old beans after 2 to 3 days.

**The coffee is not hot enough**

- ✓ Pre warm the cups being used.
- ✓ The second and subsequent cups are the ideal coffee's to taste. The ideal temperature of brewed coffee is between 76 to 84 degrees. If a hotter coffee is required warm the milk with the steamer and add this to the coffee.

## Automatic Coffee Machines Guide to Best Performance.

The machine is leaking water

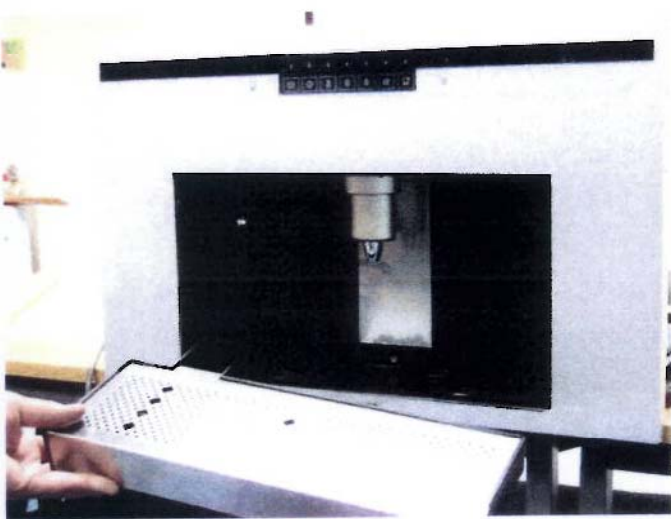
Also

Why does the coffee end up in the spillage tray

- ✓ Empty the drip tray, this could need emptying with as little as 13 cups of coffee. It must be removed to empty the used coffee drawer every 20 cups of coffee.

Water is leaking into the used coffee drawer

- ✓ Check that there are sufficient coffee beans in the hopper, a minimum quantity of 200grams is required.
- ✓ Replace the coffee beans with fresh ones removing the old ones first.
- ✓ Adjust the texture of the ground coffee to between settings 3 and 4 on the hopper lid.
- ✓ There could be insufficient coffee being ground. Access the grind time in the electronics and adjust until the pods in the used coffee drawer are 1 to 1.2 cm thick and are solid enough to hold together when picked up.
- ✓ Reset the standard values in the electronics for the correct amount of water to flow over the coffee

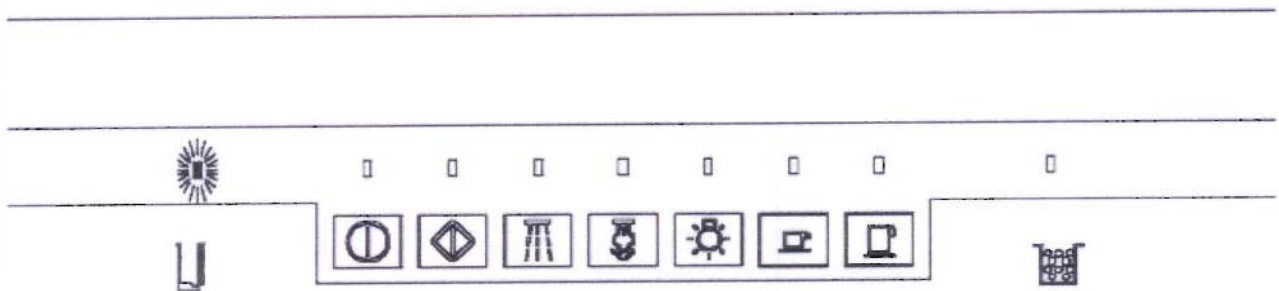


## Automatic Coffee Machines Guide to Best Performance.

The machine will not work and a light above the jug symbol is illuminated.

✓ The water reservoir needs to be filled with water, see cut instruction book.

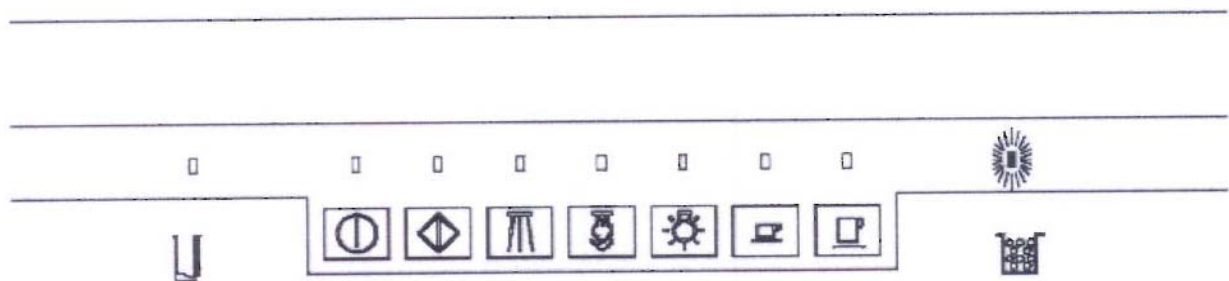
### WATER REFILL INDICATOR



The machine will not work and a light above the basket symbol is illuminated.

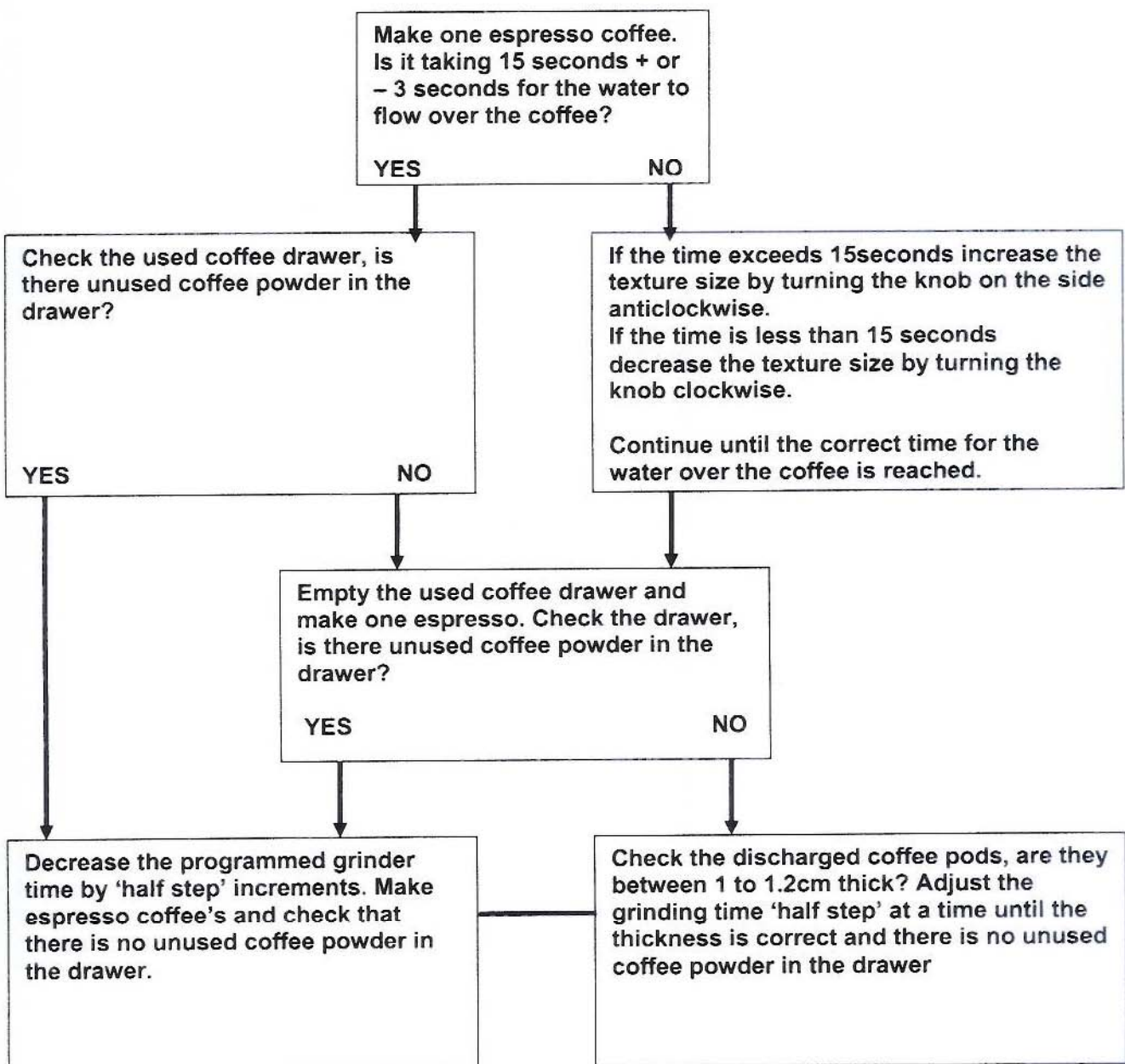
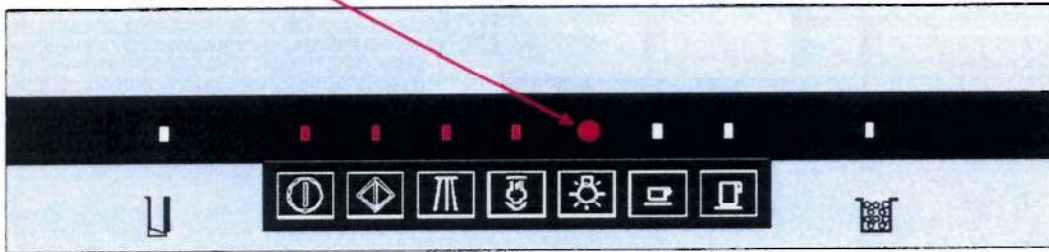
✓ The used coffee drawer needs to be emptied, every 20 cups of coffee the machine stops working until the drawer has been emptied. See cut instruction book.

### "USED COFFEE DRAWER FULL"/ COFFEE BEANS REFILL INDICATOR

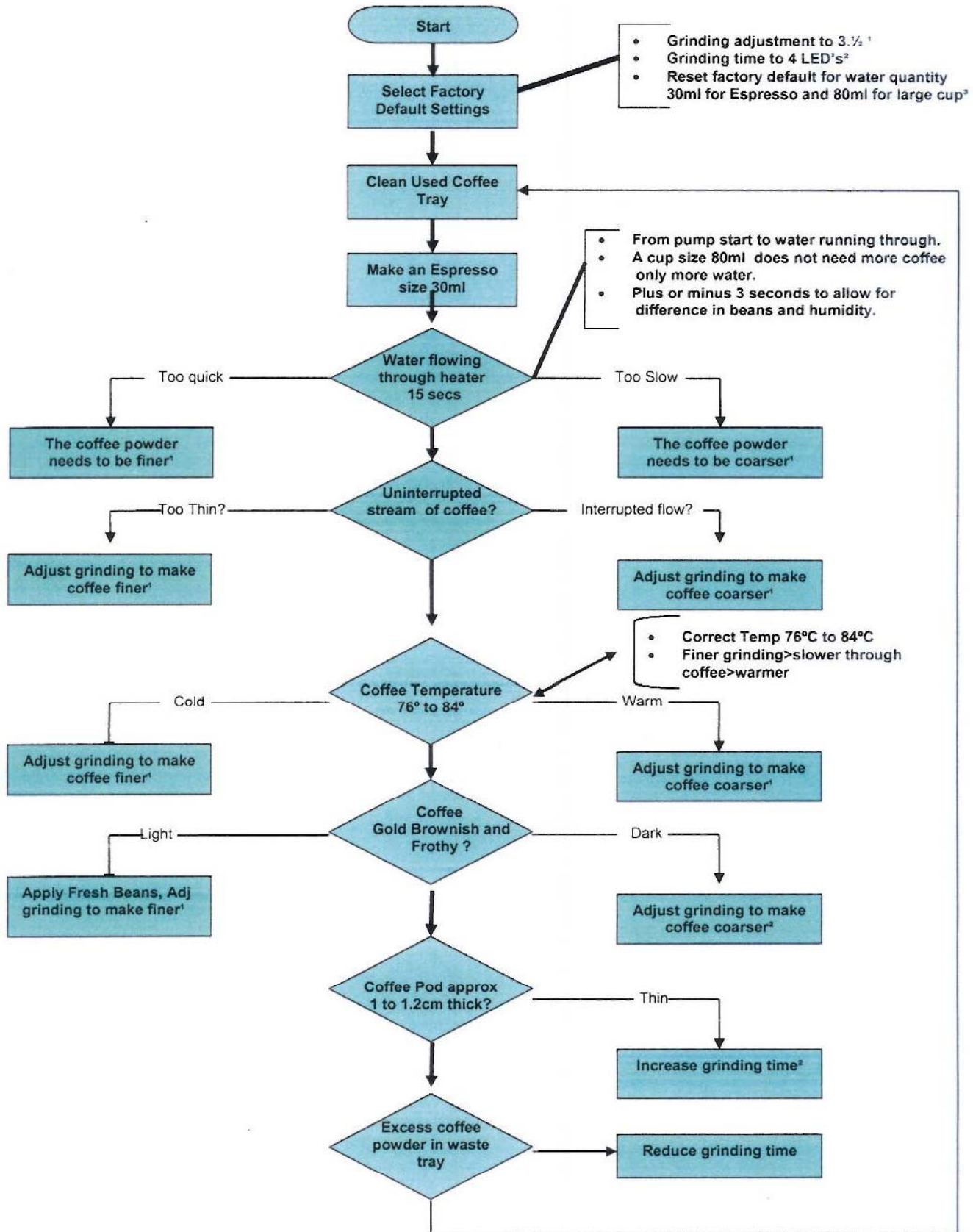


## Adjustments to obtain a good Espresso coffee.

This LED must be fully on or flashing



# AEG model PE9038m Coffee Machine setting




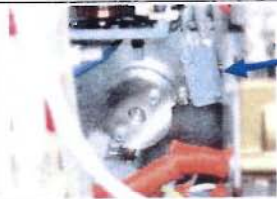


## Automatic Coffee Machines setting the cam on the gearbox. Course Handout

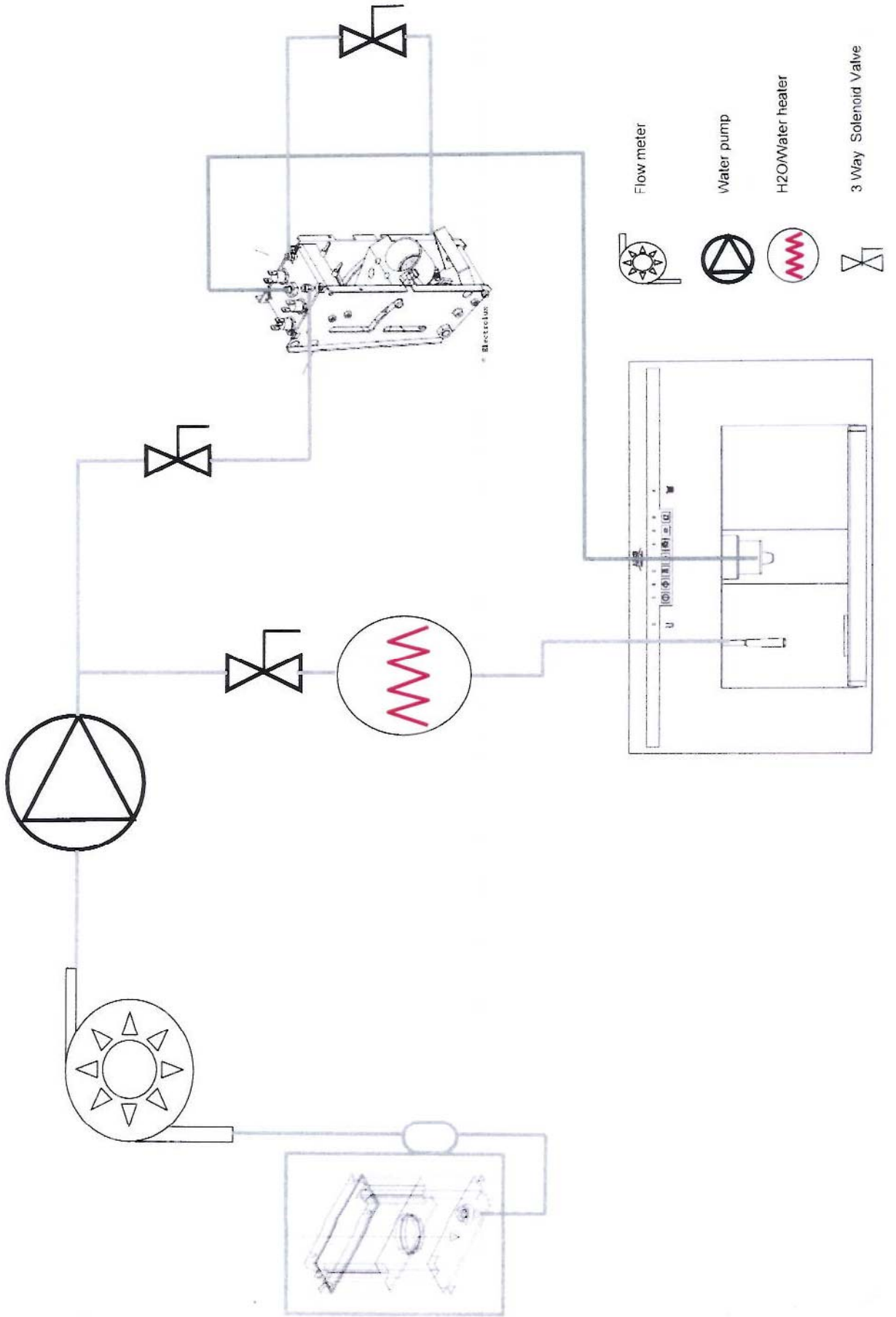
Procedure for correctly positioning the cam on the gearbox.

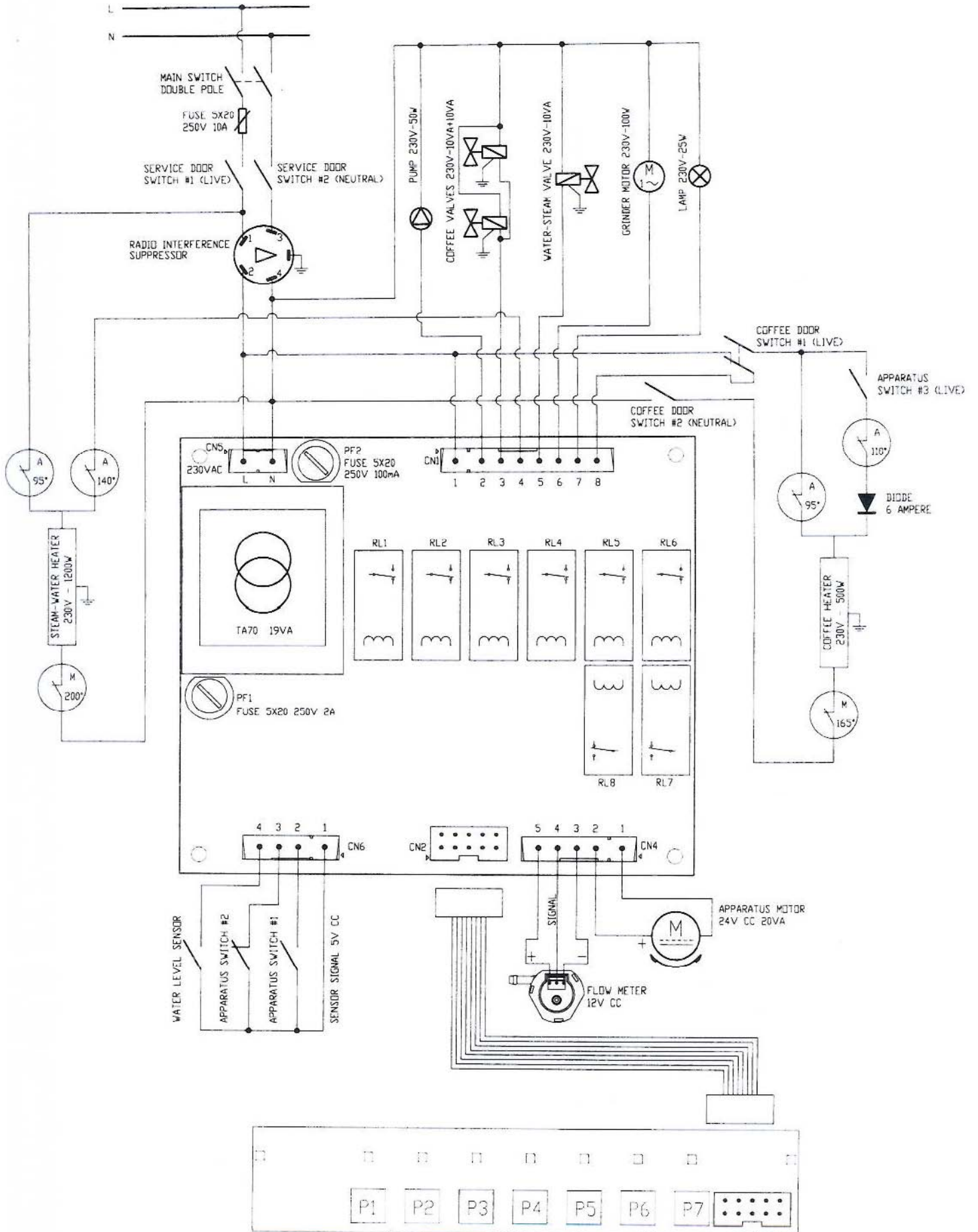
Tools needed for this operation are :- Phillips No 2 screwdriver,  
2.5mm Allen key,

Important, Electrical safety tests to our DATES standards must be completed at the beginning and upon completion of any work.

Step	Description	Actions
1	With all covers on connect the appliance to the electric supply, during the initial 3 minute pre-warming phase the electronics operates the cluster mechanism, opening the coffee hopper. This can be verified by opening the inspection door.	
2	Switch off upon hearing the mechanism stop and remove the electrical connection to the machine.	
3	Remove Top panel and left hand side cover	
4	Check the rotary cam, it should be making the two micro-switches near the base. Adjust the cam by slackening the centre screw if necessary. Re-tighten screw before testing. <b>2 micro-switches</b>	
5	Fit all panels and connect the electrical supply, the machine enters the pre-warming phase again for 3 minutes. During this step the electronics will open and close the cluster, wait until the cluster is closed.	
6	Remove Top panel and left hand side cover	
7	Check the rotary cam, it should be making the single micro-switch which is uppermost. If adjustment is required slacken the rotary cam with a 2.5mm Allen key and adjust until it is operating the micro-switch. <b>Upper micro-switch</b>	
8	Replace all panels and test operation of the cluster several times by dispensing a number of coffees.	

# PE 9038-m Coffee Machine Hydraulic Circuit





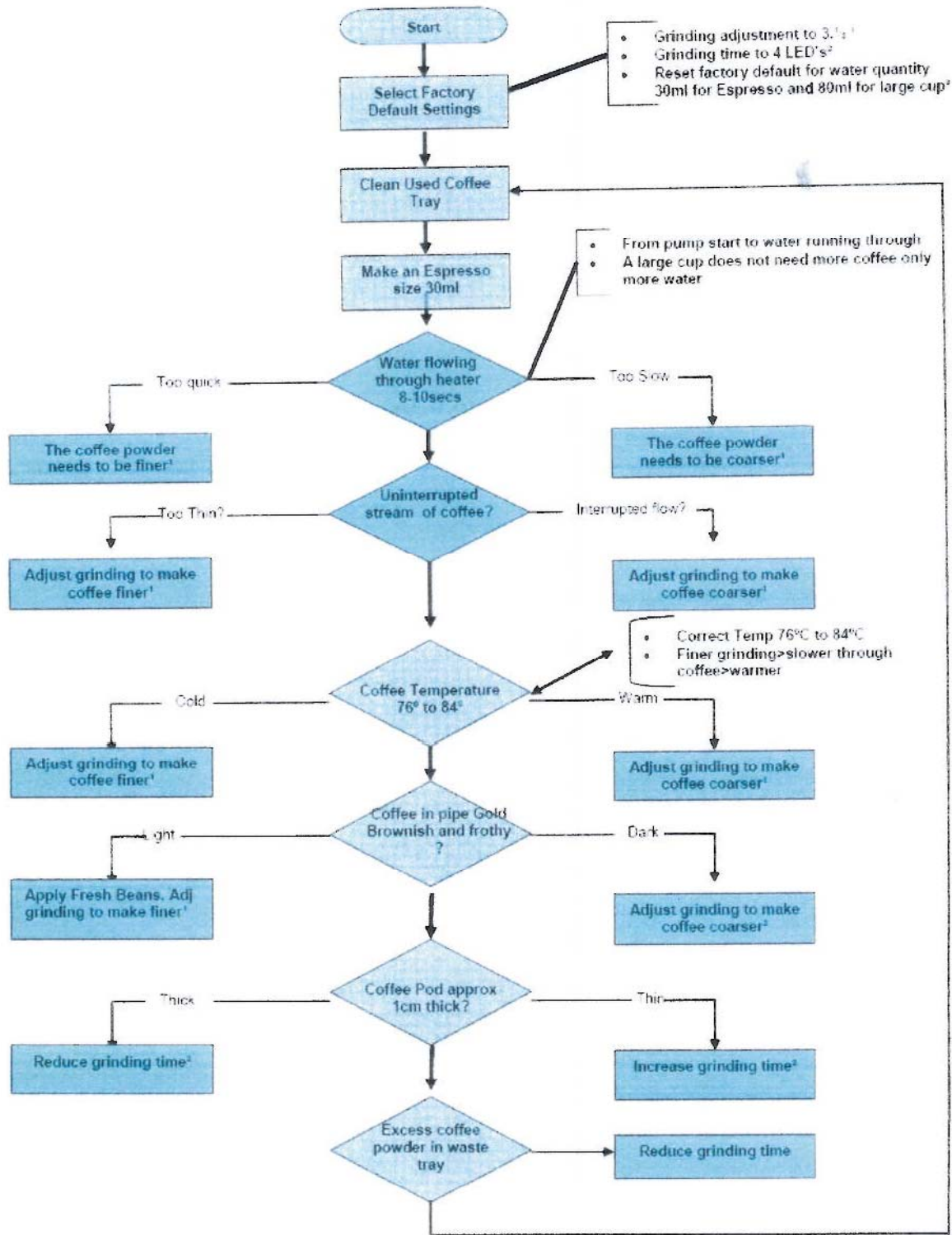
## **Subject: Adjusting the Coffee Grinder**

The information contained in this Bulletin has been compiled to assist in the correct setting up of the grinder on the above models.

Before using the flow chart below, reset the machine to its factory settings. Instructions on how to do this can be found in the user guide and the service manual already on TESS.

It will be necessary to reset all of the following.

- The Coffee grinder adjuster to 3 ½
- The grinder running time to display 4 led's
- The quantity of water dispensed.

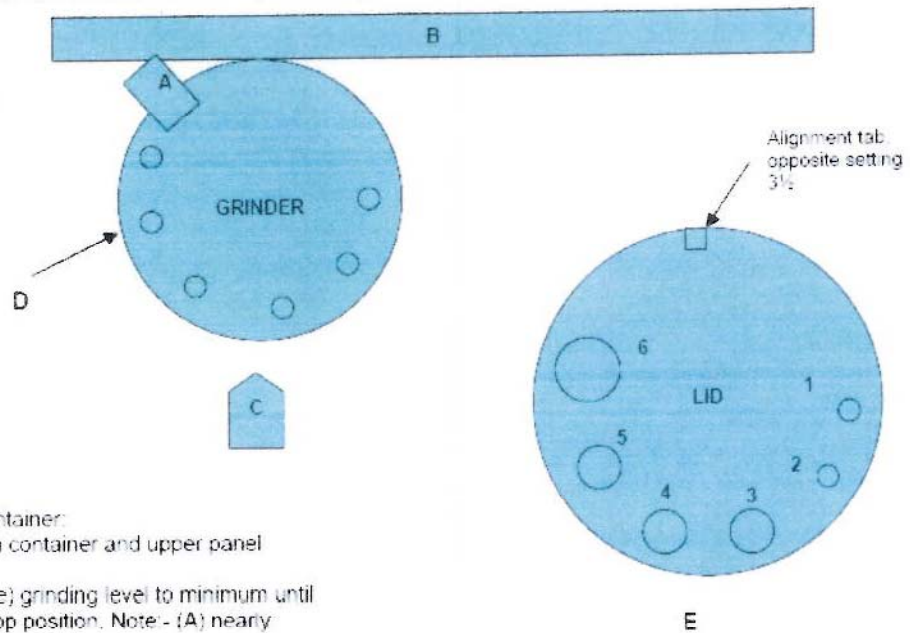


Notes to accompany flow chart above

1) Adjustment of grinding level (fine or coarse coffee grind, fine = bitter coffee and coarse = mild coffee):  
 Turn knob at RH-side.  
 After making adjustment, the 1st Next cup will be a mix of the settings, so make 2 cups and test the second.  
 Additional Note - Turn the knob 4-6 times to notice some change.

2) Grinding time (quantity of coffee powder) from Stand-by mode: Keep Start button pressed for 10 sec. (2nd button).  
 The more LED's illuminate the longer the grind time (coffee) by large cup button, Less by espresso button.  
 Save settings by pressing Start button for 10 seconds again.

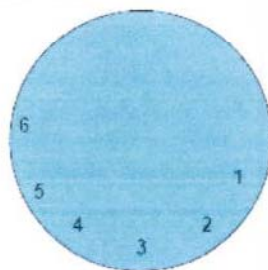
Setting Grinder mechanism to allow correct adjustment by customer -



Correct Positioning of bean container:

- 1) Remove transparent lid from container and upper panel appliance;
- 2) Turn (by knob at the RH-side) grinding level to minimum until the mechanism reaches the stop position. Note- (A) nearly touches bracket (B);
- 3) Place lid on bean container (will only fit one way)
- 4) Position container (incl. lid) on the grinder so smallest indication circle on the lid (E) is pointing to the front (towards indication arrow C on top panel);
- 5) Locate the hole in the grinder (D) catching the container pin;
- 6) Mark this hole so following technicians can locate the correct position.

Factory setting on coffee bean container lid. No 3



Note when replacing Grinder blades:

- Turn cone mechanically towards end position (finest grinding) and then 1/2 turn back so it just can move freely.
- Assemble cone on grinding motor

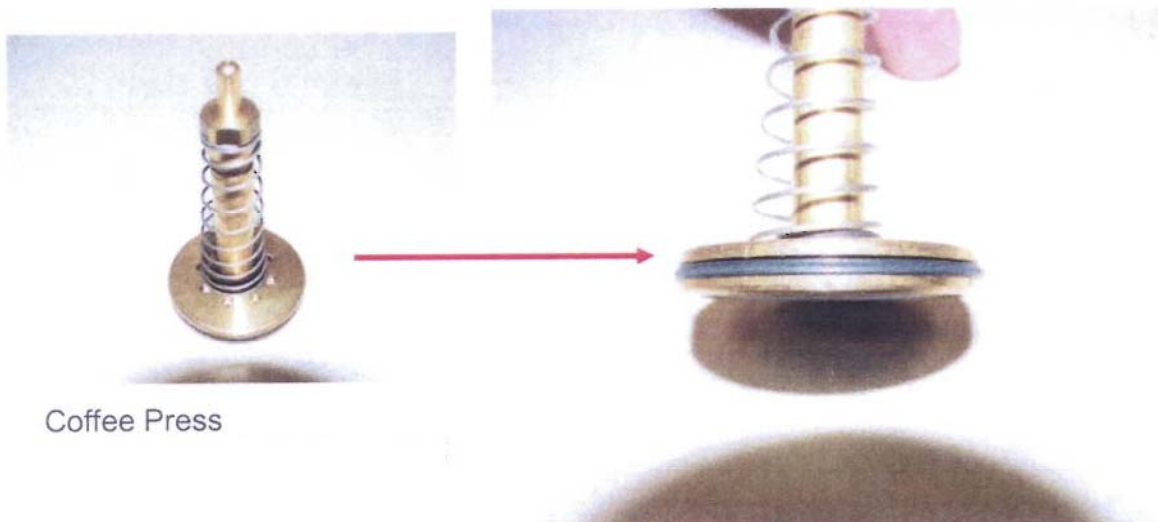
**Subject: Water collecting in the spent coffee container (Coffee press sticking).**

There have been a number of issues regarding the operation of the coffee press on the machines listed above.

This shows itself in a number of ways:-

- Water leaking from the coffee press and collecting in the spent coffee tray.
- The coffee press not resetting causing ground coffee to overflow from the press.
- The automatic coffee maker cluster seizing.

The factory has made a number of changes to the coffee press and the replacement part seen below is fully interchangeable with the earlier versions.

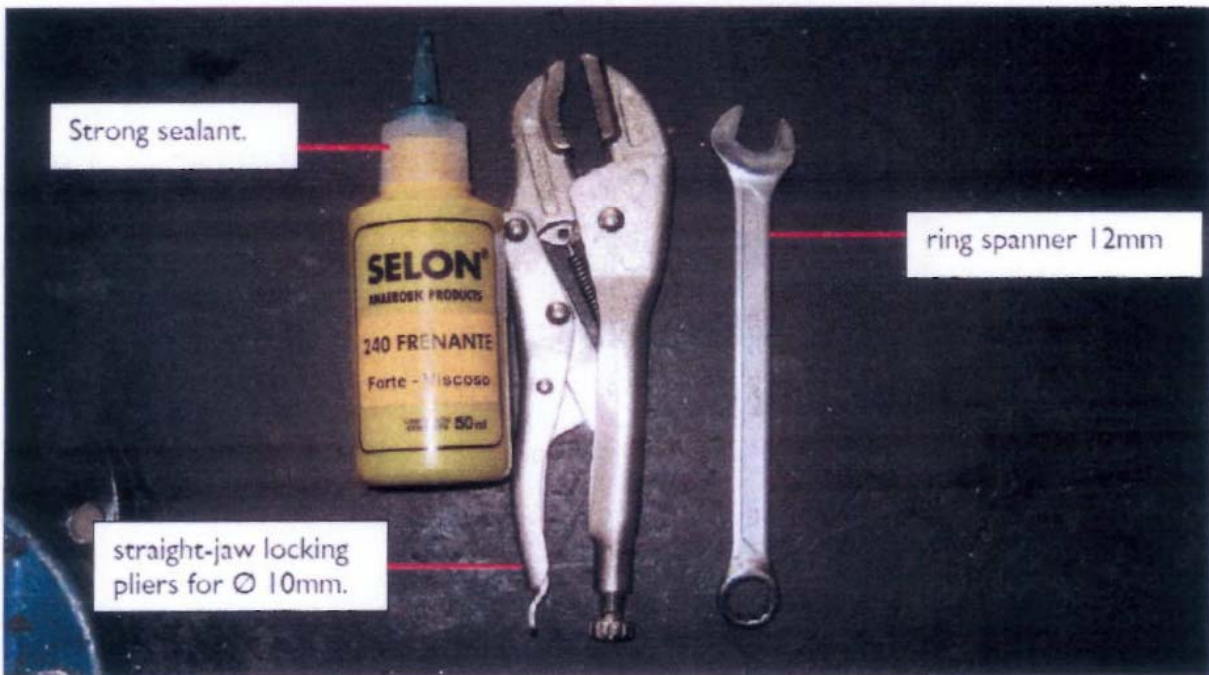


Coffee Press

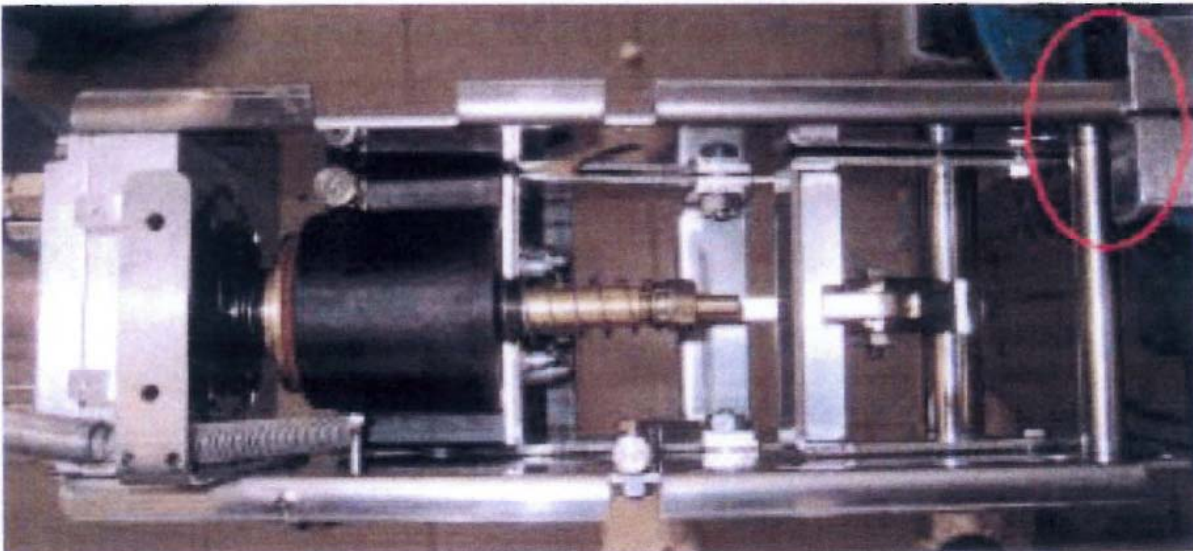
The coffee press comes complete with both internal and external springs - new U shaped seal – pin and locking nut.

## Replacing the Coffee Press

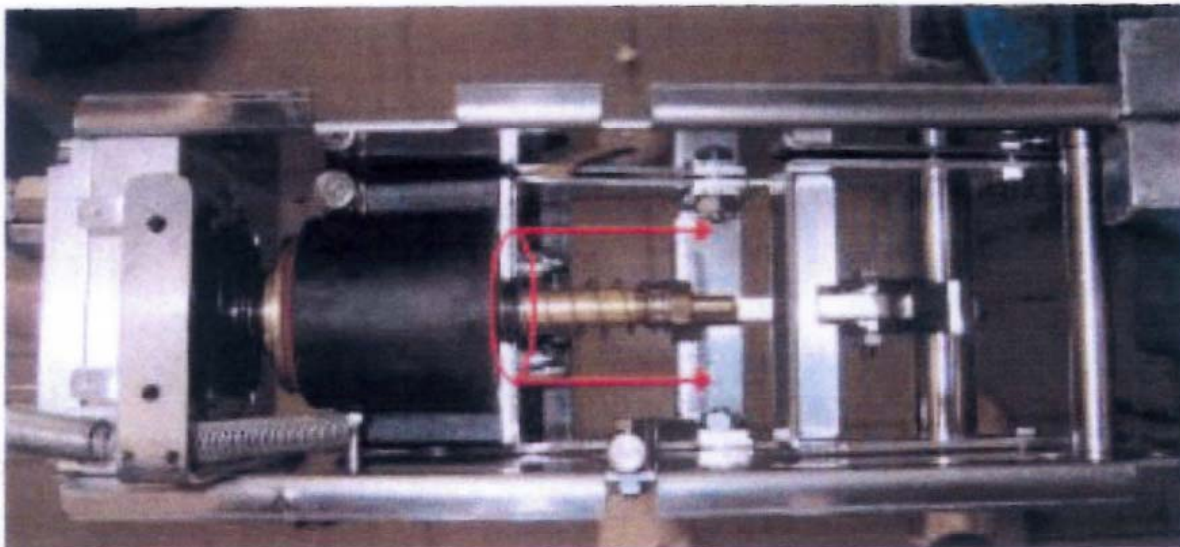
We suggest that the following tools are used to replace the Coffee Press.



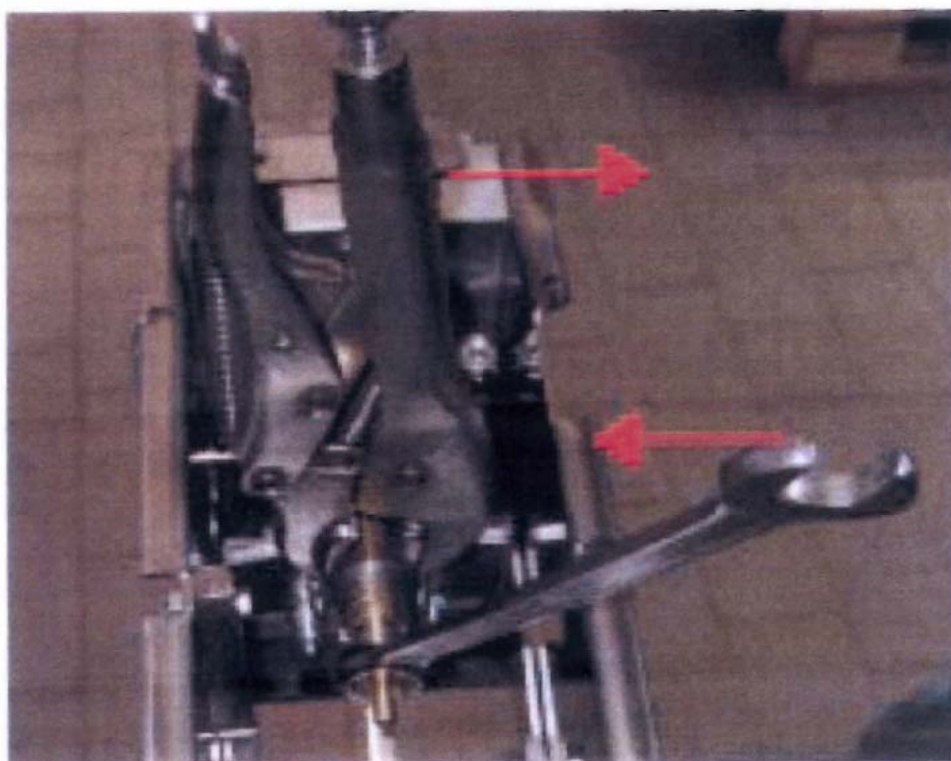
Though not essential it is easier if you grip the unit in a vice to hold it steady as shown below



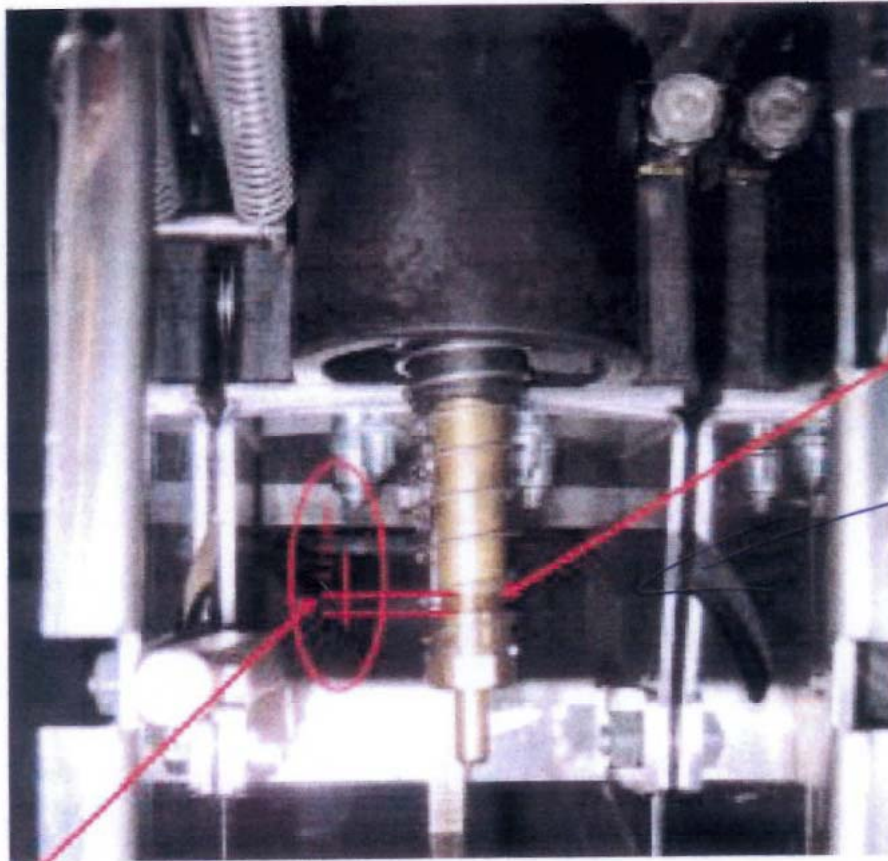
Move the spring in the direction shown below in order to expose the cylindrical part for a couple of centimetres.



Lock the cylindrical part with the grips and unscrew the nut.



Fit the new plunger with a drop of sealant on the thread, then screw up the nut but not completely, leave around 2mm before the end of the thread.



Apply sealant here  
food grade  
Locktight  
577

IMPORTANT  
2mm  
gap.

Initially set this distance to around 2mm. Operate the mechanism by hand to ensure it completes a cycle. If the mechanism jams increase the gap until the pin slides off the bar and completes the cycle. Then refit and setup the machine up as described in bulletin CM07006.

Locktight 577