

## PORTION COFFEE GRINDER WITH TIMER n°42

### USER AND MAINTENANCE MANUAL



**IMPORTANT:** documents included in this manual to be kept:

- "CE" COMPLIANCE DECLARATION
- WARRANTY CERTIFICATE

Translation of the original version



Coffee grinders - Fruit juicers - Mixers - Blenders - Drinks dispensers - Planetary mixers  
Cheese graters - Ice crushers - Mincers - Vegetable slicers – Dough mixer  
Moulins à café - Presse-fruits - Mixers - Blenders - Distributeurs de boissons - Batteurs  
mélangeurs - Pétrin - Râpes à fromage - Broyeurs à glaçons - Hache-viande - Coupe-légumes

MODELES DEPOSES FRANCE ET INTERNATIONAL  
INTERNATIONALLY PATENTED MODELS



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## "CE" COMPLIANCE DECLARATION

### THE MANUFACTURER:

**SANTOS sas** - 140-150, Av. Roger SALENGRO 69120 VAULX-EN-VELIN (LYON)  
FRANCE

declares that the appliance intended for the professional market described below:

Description: **Portion coffee grinder**  
Type number: **42**

complies with:

- the statutory provisions defined in appendix 1 of the European "machines" directive **n°2006/42/CE** and the national legislation transposing it
- the statutory provisions of the following European directives and regulations:
  - N° 2006/95/CE (low voltage directive)
  - N° 2004/108/CE (EMC directive)
  - No. 2002/95/CE (RoHS directive)
  - No. 2002/96/CE (WEEE directive)
  - N° 1935/2004/CE (regulation) relating to materials and articles intended to come into contact with foodstuffs

Harmonised European standards used to give presumption of conformity with the essential requirements of the above-mentioned directives:

- NF EN ISO 12100 -1 and 2:2004: Safety of machinery - General principles for design
- NF EN 60204-1: 2006 : Safety of machinery - Electrical equipment of machines- General requirements
- NF EN 1672-2: 2005, Food processing machinery – Basic concepts – Hygiene requirements
- NF EN 60335-1: 2013 : Household and similar electrical appliances. Safety.
- NF EN 60335-2-64 :2004 : Particular requirements for commercial electric kitchen machines

Drawn up in VAULX-EN-VELIN on: **01/10/2013**  
Signatory's position: **CHIEF EXECUTIVE OFFICER**  
Signatory's name: **Aurélien FOUQUET**

Signature:

## SAFETY RULES

At the time of use, maintenance or scrapping of the appliance, always ensure that the following elementary precautions are adhered to.

Read the explanatory instructions in full  
**Keep this user manual**

Note: You will find it easier to understand the next few paragraphs if you refer to the diagrams at the end of this manual

### INSTALLATION AND HANDLING



**TAKE CARE:** for all handling operations including unpacking the machine, the coffee bean hopper or its cover must not be used to hold or lift the appliance.

You are advised to have 2 people to handle the machine to avoid any risk of back injury. For ease of use, it is recommended that the machine is placed on a table or work surface so as to have the control panel in front of you (recommended height: 90 cm, to be adapted as required to the user).

### DO NOT:



1. Never use this machine to grind anything other than roasted coffee beans.
2. Never operate the machine with no coffee beans in the bean container.
3. Remove from the coffee beans any foreign bodies which may damage the grinding discs (metal staples, stones, etc.).
4. Never plunge the base in water or any other liquid for reasons of protection against risks of electrocution.
5. **Neither a hose nor a pressure hose should be used for cleaning**
6. Never touch moving parts.
7. The appliance must be unplugged before any intervention on it: cleaning, general care, maintenance.
8. Never use the appliance if the power cord is damaged. It should be replaced by an approved SANTOS dealer, SANTOS, or by a person with similar qualifications to avoid any danger.
9. It is forbidden to operate the appliance on a surface with a slope in excess of 10° with respect to the horizontal plane. The feet of the machine must always be resting on this surface. The machine motor shaft must always be vertical with respect to the surface on which it is placed.
10. The use of spare parts other than certified original SANTOS parts is prohibited
11. Always turn the On/Off switch (12) to "0" when the appliance is not in operation.

12. Never connect several appliances to the same power socket.
13. Never use the appliance outdoors.
14. Never place the appliance close to or on a source of heat.
15. This appliance is a professional machine designed exclusively for professional use. It is not designed for household use.
16. This appliance is not designed for use by people (including children) whose physical, sensorial or mental capacities are impaired or by people with no experience or knowledge, unless they have been supervised or given training in the use of the appliance beforehand by a person responsible for their safety.  
Supervise children to ensure they do not play with the appliance.

### ELECTRICAL CONNECTION:

- The electric power supply for the machine is available in 3 single-phase voltages:
  1. 110-120V 50/60 Hz:
  2. 220-240V 50 Hz:
  3. 220-240V 60 Hz:

Line protection: the appliance must be connected to a standard 2 pole + earth socket. The set-up must be fitted with a differential circuit breaker and a 16A fuse. **Earthing of the appliance is compulsory.**

### TAKE CARE:

- Before connecting the appliance, check that the mains electrical voltage is the same as the voltage for your appliance. Its value is shown:
  - either on the identification plate under the appliance.
  - or on the identification plate on the last page of this manual.



- If the power supply cable is damaged, it should be replaced by an approved SANTOS dealer, SANTOS or a person with similar qualifications to avoid any danger.



**TAKE CARE:** Check that the on / off switch (12) is in **position 0** before plugging the power cord in to the mains power socket.

### 1st TIME USE

Thoroughly clean all parts in contact with the food

Wash the following with a standard dish washing product: cover (1), hopper (2).

## RECYCLING THE PRODUCT AT THE END OF ITS SERVICE LIFE



This equipment is marked with the selective sorting symbol relating to wastes from electrical and electronic equipment. It signifies that this product should be taken over by a selective collection system conforming to the Guideline 2002/96/EC (WEEE) – part Professional Equipment – so that it can be either recycled or dismantled in order to reduce any impact on the environment.

For more information, please contact your Retailer or the SANTOS.

For eliminating or recycling components of equipment, please contact a specialized company or contact SANTOS.

The electronic products not undergoing a selective sorting are potentially dangerous for the environment.

The damaging materials should be eliminated or recycled according to the regulations in force.



## YOUR COFFEE GRINDER

Coffee grinder # 42 is made for hotels, restaurants, cafeterias catering... seeking fresh ground coffee for filter coffee makers or percolators.

The quantity of ground coffee dispensed is adjustable by a timer.

The appliance comprises a cast aluminium base and a steel frame holding the grinding assembly and coffee-bean container.

The coffee-bean container holds up to 2 kg and has a hinged cover.

Coffee grinder # 42 can be used with a filter holder type ground coffee collector for use on coffee makers either with a ground coffee drawer with a maximum of 800 g of ground coffee or percolators (capacity: 5, 10 liters of coffee).

The grinding discs are made of special steel guaranteeing a constant quality grind over time. They can be easily dismantled when worn.

## USING THE APPLIANCE

### STARTING UP:

#### **Switching on:**

The appliance is switched on with the sealed illuminated light switch (12), located on the front.

#### **Starting and Stopping:**

1. The grinder is started with push button (11) located on the front which trips the previously set timer.
2. A timer stops the machine automatically.
3. Push button (11) stays on during the operating time of the timer. Any further pulse or continuous pressing of button (11) when the first measure is being dispensed is not taken into account. You must wait for the timer to end before starting the next dispensing operation.

#### **Stop of timer during operation:**

The timer can be stopped during dispensing by cutting out the power supply to the machine by pressing the On/Off switch (12). This cut-out will reinitialize the timer.

## ADJUSTING THE GRIND

- Turn the grinding disc gap adjuster button (6) clockwise for a coarser grind and anticlockwise for a finer grind. The factory setting is for the finest grind with the grinding discs nearly touching each other.

## ADJUSTING THE DRAWER HOLDER SLIDERS

- Unscrew the 4 adjustment screws (22).
- Center the drawer (13) in the 2 sliders (23).
- Remove the drawer (13).
- Tighten the 4 adjustment screws (22).
- For grinders with a brew basket, proceed in the same way but replace the grind drawer (13) with the brew basket of your coffee maker.

## ADJUSTING THE REQUIRED MEASURE OF COFFEE

The quantity of ground coffee dispensed can be adjusted via an adjuster button of the timer (14), inside the frame of the coffee grinder. This button adjusts the operating time of the machine.

- To adjust the quantity of ground coffee to be dispensed:
  - unplug the appliance
  - take down the rear lower plate to access the adjuster button (14)
  - perform dispensing tests to obtain the desired quantity of ground coffee.

## SERVICING

- Clean the coffee outlet, the coffee-bean container and the inlet of the grinder body from time to time. Always turn the appliance off by putting switch (12) in position "0" and unplug it.

## MAINTENANCE

Before carrying out any work on the appliance, it must in all cases be unplugged from the mains power supply and the motor start capacitor discharged:

### **Discharging the capacitor:**

Use a screwdriver with insulated handle to touch the 2 connectors on the capacitor (13). The appearance of an electric arc shows that the capacitor has discharged.

### **Spare parts:**

This machine requires no specific maintenance. The bearings are lubricated for life. If work is required to replace worn parts such as the grindstones or the electric or other components, refer to the parts list (see exploded view at the end of the manual).



**IMPORTANT:** It is prohibited to use spare parts other than those certified made by SANTOS

For **all spare part orders** (see references in the exploded view at the end of the manual), state:

- **the type,**
- **the machine serial number and**
- **the electrical specifications ()**

recorded under the machine.

### REPLACING GRINDING DISCS



**IMPORTANT:** always replace the 2 grinding discs (19 and 21) at the same time. (Use SANTOS grinding discs ref 00001B).

The 2 grinding discs are identical and can be fitted equally either on the moving plate (19) (moving grinding disc) or on the adjuster cast iron unit (20) (fixed grinding disc).

1. Stop the machine by putting the switch (12) on "0" and unplug the power supply cord.
2. Remove the front top plate (16) not holding the push button, empty the coffee-bean container, remove the fixing rod from the coffee-bean container (4).
3. Remove the coffee-bean container (2) with the cover (1) and coffee inlet nozzle (3).
4. Turn the grinding disc gap adjuster button (6) clockwise as far as it will go to the "COARSE" setting.
5. Remove nuts (7) and dismantle the grinding unit (5), to have access to the grinding discs.
6. Change the grinding wheels (3 fastening screws) after carefully cleaning the supporting surfaces.  
***TAKE CARE:** The slightest small coffee particle under the grinding wheel may prevent the machine from operating correctly. It is recommended that the grinder body is cleaned with a compressed air jet or a dry brush.*
7. Reassemble the grinding unit (5) and adjust the grinding gap to its minimum setting.

### TAKE CARE



- Before tightening the fastening nuts (7) on the grinding unit (5), check that the dial (24) of the grinding wheel adjuster button (6) is set to "COARSE". This precaution is essential to prevent any risk of the grinding wheels being brought too close to each other, which could cause damage to the grinding unit.

## ADJUSTING THE MINIMUM GAP BETWEEN THE GRINDING-WHEELS

This should be done after replacing the grinding wheels.

1. Plug the appliance in and run it empty.
2. Unscrew hexagon socket screw **(25)** on the dial **(24)** using a 2-mm Allen wrench. Check that the dial **(24)** is free to rotate without turning button **(6)**.
3. Turn button **(6)** anticlockwise until the grinding wheels come into contact (a slight sound of friction will be heard) then back one notch in the reverse direction.



### **ATTENTION**

This is a delicate operation, and prolonged contact between the grinding wheels should be avoided, since this could damage them.

4. Turn the appliance off by placing switch **(12)** on "0".
5. Without moving the button **(6)**, place the dial **(24)** on the "FINE" position then tighten the hexagon socket screw **(25)** fully home.
6. Run the machine empty to check that the grinding wheels rotate without touching each other on the finest setting. If this is not the case, repeat the above procedure.



## FAULT FINDING

Identify the exact reason the appliance stopped.

**In every case:** If the problem persists, switch off the power supply to the machine (unplug the cord from the mains socket) and call in the maintenance service or contact a SANTOS approved dealer.

**The machine will not start:**

- Check: the mains power supply and the condition of the power supply cord,
- Note: the switch should be lit when on the "1" position.
- Check that there are no foreign bodies stuck between the grinding wheels.

**The machine stops because the motor has overheated:**

(the metal casing around the motor unit is hot)

***Models 110-120V 50/60Hz only***

In the event of overheating, the motor stops.

The overheating protection system resets automatically; wait for the motor to cool (15 to 30 minutes), before restarting the machine.

**The machine stops because of an overload:**

If the motor is blocked (foreign body, something too hard), the excess current protection system **(15)**, located under the appliance will be triggered automatically and cut off the electrical power to the motor.

- Set the On / Off switch **(12)** to "0" position, disconnect the appliance.
- Correct the fault then press the excess current protection button **(15)**
- Press the On/Off switch **(12)** (position I).

If the problem persists, check the following points:

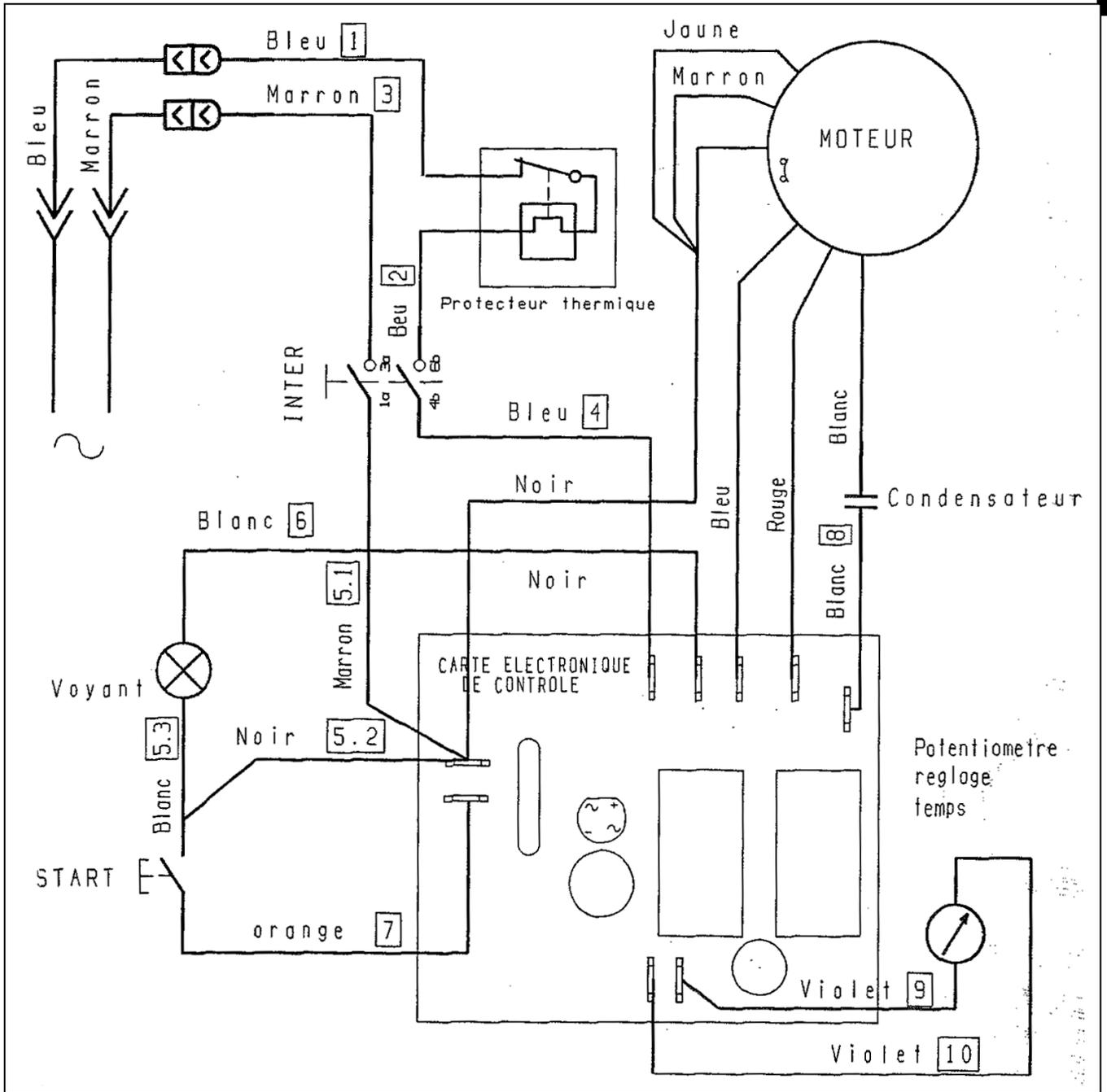
- Check that the grinding wheels do not touch each other.
- Check the state of wear of the grinding wheels (grinding too fine with worn grinding wheels can result in a motor overload like this)
- If there is no foreign body hindering operation of the machine then check and replace the capacitor then the electronic module.

## APPLIANCE TECHNICAL SPECIFICATIONS

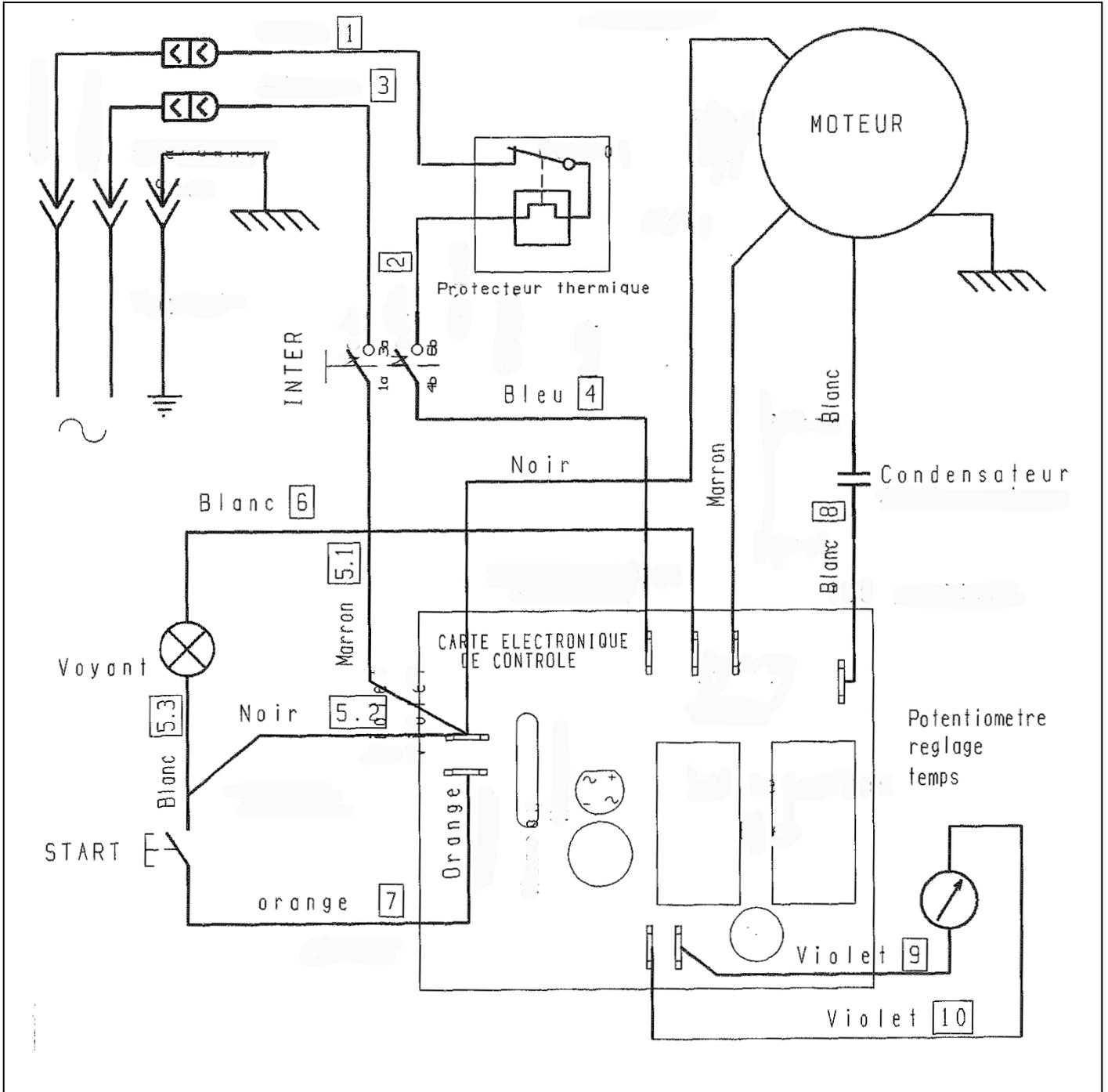
Model		# 42	# 42V1	# 42V4
Supply voltage	(V)	220-240	100-120	220-240
Frequency	(Hz)	50	50/60	60
Motor				
Input power	(W)	600	650	600
Speed	(rpm)	1500	1500/1800	1800
Average output	(kg/h)	15 to 35		
Hopper capacity	(kg)	2		
Grind drawer capacity	(kg)	1.5		
Width of sliders for filter holder	(mm)	172 to 198		
Timer time	(s)			
• 50Hz		2 to 120		
• 60Hz		2 to 60		
Dimensions: Height	(mm)	555		
Width	(mm)	190		
Depth	(mm)	355		
Weight: Net weight	(kg)	20		
Weight including packing	(kg)	21		
Noise: (2) $L_{pA}$	(dBA)	70		
Uncertainty $K_{pA} = 2.5dB$				

- (1) These ratings are given for your guidance. The exact electrical specifications of your appliance can be found on the identification plate.
- (2) Noise level measured in acoustic pressure of appliance loaded as per the standard ISO 11201:1995 and ISO 4871:1996.  
Appliance placed on a work surface at 75cm from the floor. Microphone turned towards the appliance at 1.6m from the floor and 1m from the appliance.

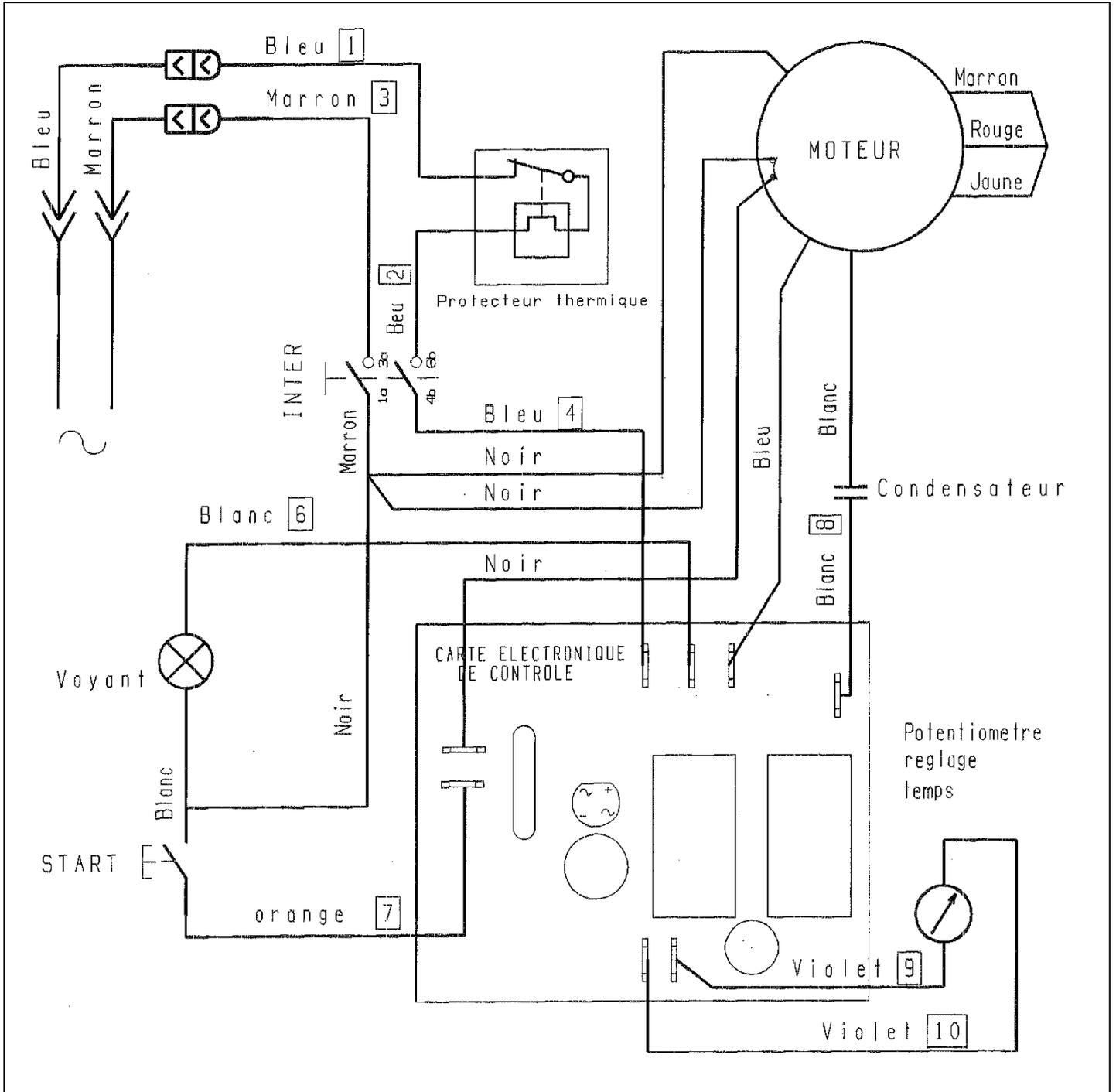
Wiring diagram 110-120V 50/60Hz



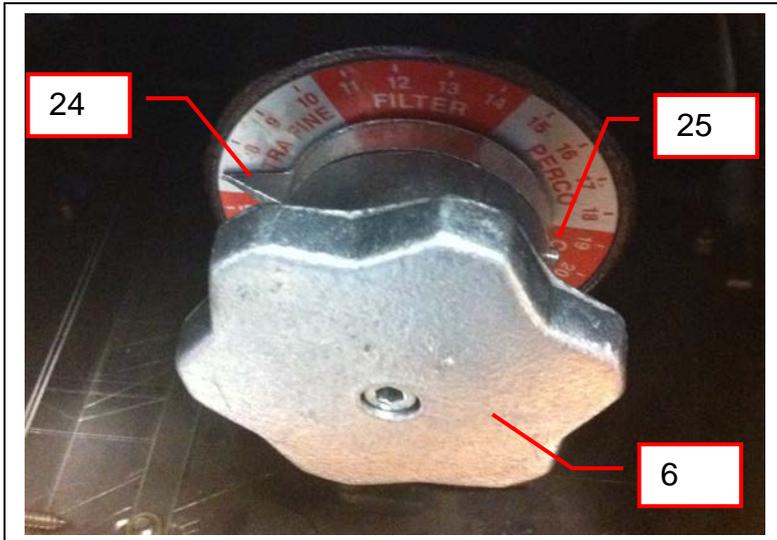
Wiring diagram 220-240V 50Hz

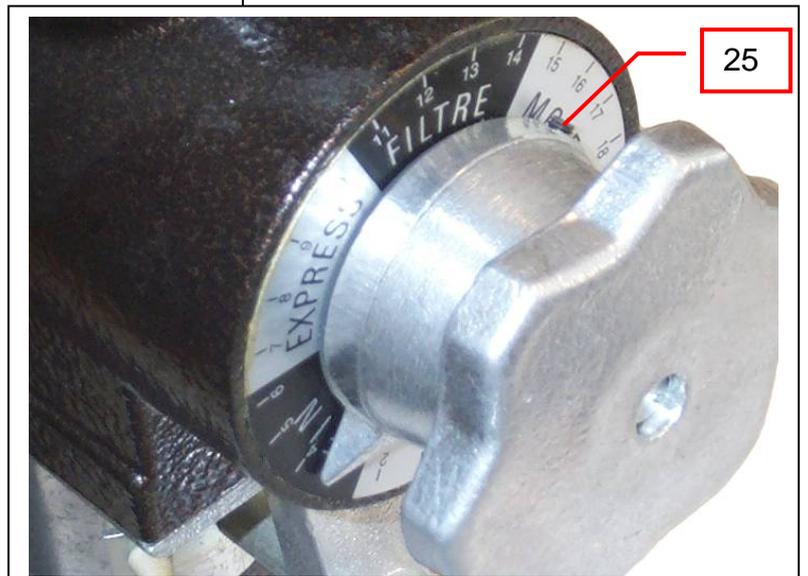
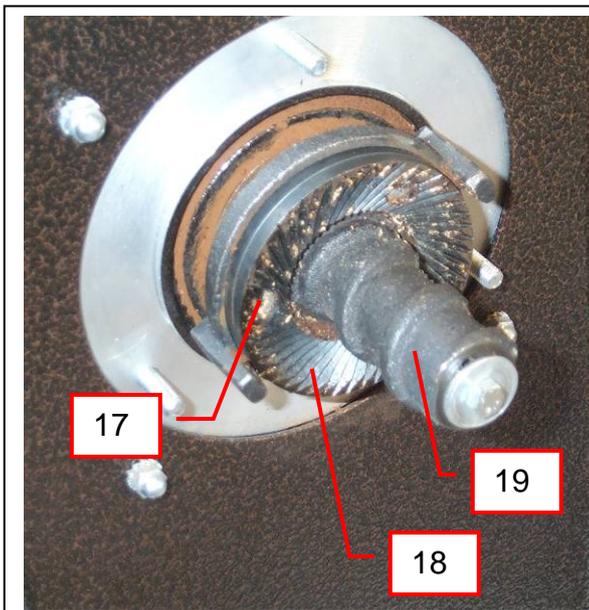
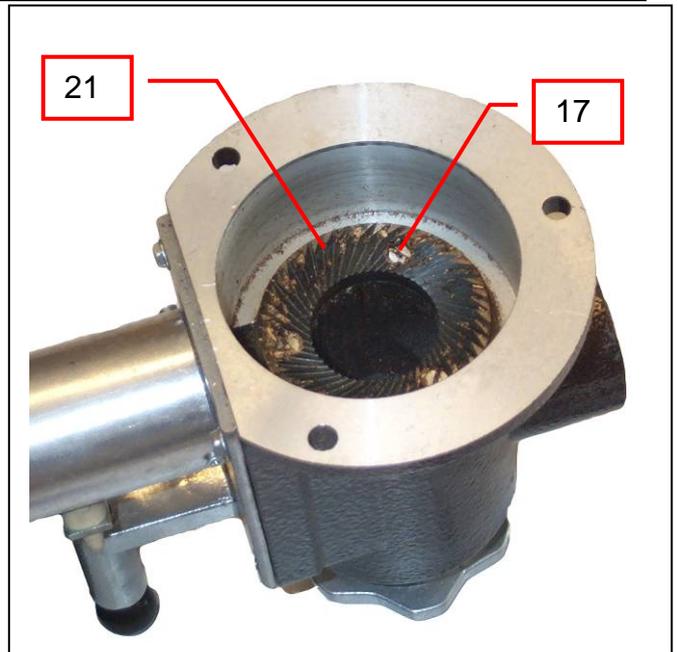
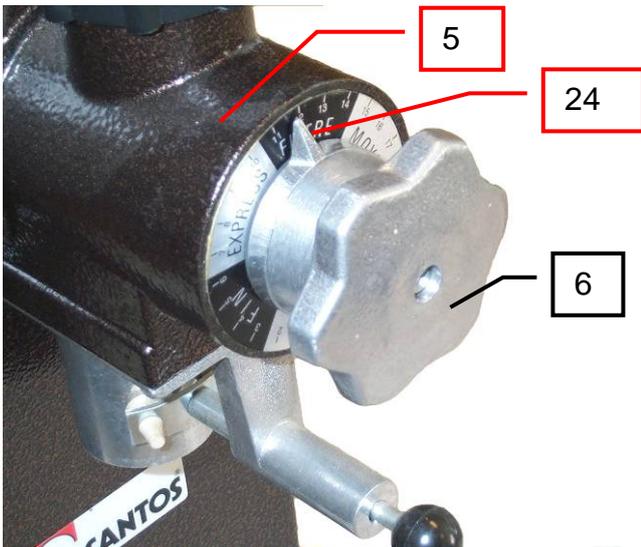
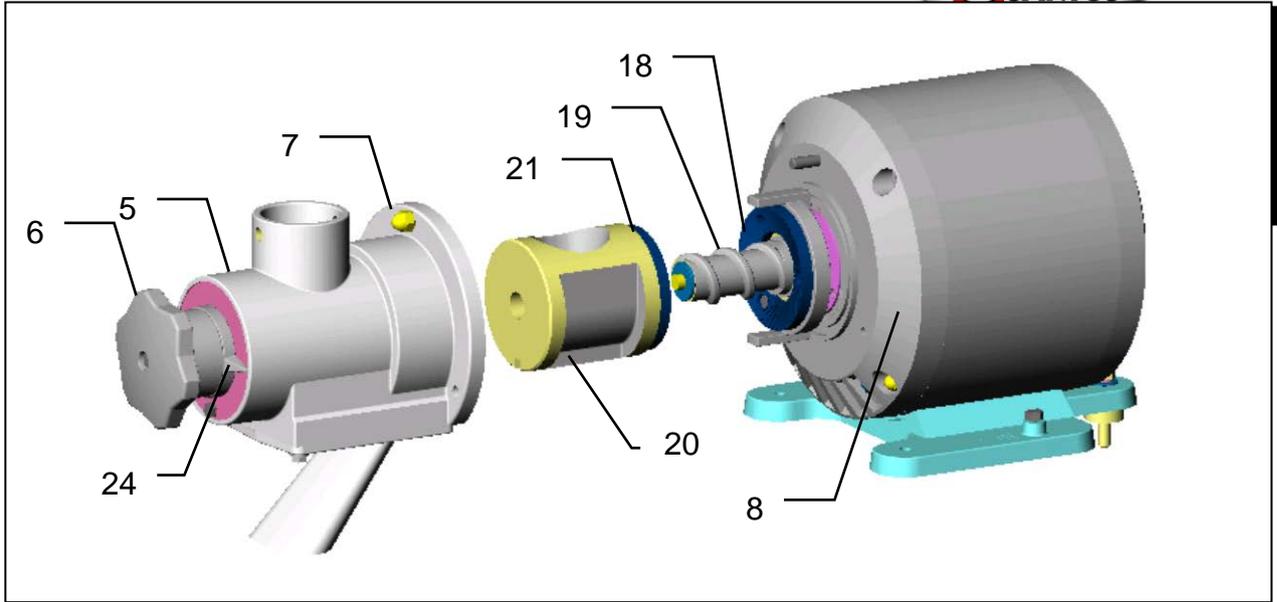


Wiring diagram 220-240V 60Hz



Figures







ITEM	Description
1	Coffee-bean container cover
2	Coffee-bean container
3	Coffee inlet nozzle
4	Container fixing rod
5	Grinder body
6	Grind adjuster button
7	Grinder body fixing nut
8	Motor
9	Stainless plate frame
10	Painted aluminium base
11	Pulse push button
12	On / Off switch
13	Grind drawer
14	Timer adjuster button
15	Thermal cut-out reset button
16	Front lower plate
17	Grinding disc fixing screw
18	Mobile grinding disc
19	Mobile grinding disc carrier plate
20	Grinding unit
21	Fixed grinding disc
22	Adjustment screw
23	Slider
24	Grind adjustment dial
25	Dial fastening screw



## WARRANTY CERTIFICATE

### WARRANTY

Since the 01.01.95, all our appliances comply with CE and possess the CE label. Our guarantee is of 24 months from the manufacturing date mentioned on the descriptive plate, except concerning the asynchronous motors (consisting of a rotor and a stator) which are warranted for 5 years from their manufacturing date. Warranty is strictly limited to the free replacement of any part of origin recognized by us as defective due to a defect or building default and identified as belonging to the concerned appliance. Warranty does not apply to damages resulting from installation or use non-complying with our appliance data sheet (user's manual) or in case of an evident lack of maintenance or disrespect of elementary security electric rules. It does not apply in case of regular wear and tear. Any replacement of parts under warranty will be realized after return of the defective part in our workshops, postage paid, supported by a copy of a conformity statement on which appears the serial number of the appliance. Every appliance is equipped with a descriptive plate conforming to the EC recommendations and of which a duplicate exists in the conformity statement (serial number, manufacturing date, electrical characteristics ...). In case of serious damage judged repairable only in our workshops, and after prior consent from our departments, any appliance under guarantee is sent by the Distributor, carriage paid. In case of repairs or reconditioning of appliances not under guarantee, the round trip transport is payable by the distributor. The parts and workforce are invoiced at the current rate. A preliminary estimate can be supplied.

Coffee grinder not using SANTOS original burrs are not taken under guarantee. The warranty conditions, repairs, reconditioning, of the espresso coffee grinder are the object of a specific note. Our guarantee does not extend to the payment of penalties, the repair of direct or indirect damages and notably to any loss of income resulting from the nonconformity or the defectiveness of products, SANTOS's global responsibility being limited to the sale price of the delivered product and to the possible repair of the defective products.

In case of revelation of an imperfection during the warranty period, the Distributor has to, unless a different written agreement of SANTOS, indicate to his customer to stop any use of the defective product. Such a use would release SANTOS of any responsibility.

## APPLIANCE IDENTIFICATION PLATE

