

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



CONTENTS

“CE” COMPLIANCE DECLARATION	3
IMPORTANT SAFEGUARDS	4
<i>IMPROPER USE</i>	<i>4</i>
<i>ELECTRICAL CONNECTION:.....</i>	<i>5</i>
<i>USING FOR THE 1st TIME:.....</i>	<i>5</i>
<i>RECYCLING THE PRODUCT AT THE END OF ITS SERVICE LIFE.....</i>	<i>6</i>
YOUR DRINK MIXER N°54	7
USING THE APPLIANCE.....	7
<i>START-UP:</i>	<i>7</i>
<i>IDLE POSITION.....</i>	<i>8</i>
<i>CLEANING:.....</i>	<i>8</i>
<i>STORAGE:.....</i>	<i>8</i>
MAINTENANCE.....	9
<i>CHANGING THE MIXING HEADS AND DEFLECTOR:.....</i>	<i>9</i>
<i>Spare Parts:</i>	<i>9</i>
FAULT FINDING.....	10
The appliance does not start.....	10
The appliance stops suddenly after operating for a long time: the motor is very hot.....	10
The machine stops because of an overload:.....	10
The motor runs all the time even without the cup on the cup stand	10
The motor is running but the speed variation is not working.....	10
TECHNICAL SPECIFICATIONS	11
<i>REFERENCE TO STANDARDS.....</i>	<i>11</i>
<i>Wiring diagram 110-120V~ 50/60Hz</i>	<i>12</i>
<i>Wiring diagram 220-240V~ 50/60Hz</i>	<i>13</i>
<i>FIGURES.....</i>	<i>14</i>
WARRANTY CERTIFICATE.....	18
APPLIANCE IDENTIFICATION PLATE.....	18



“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: **DRINK MIXER**
 Type number: **54, 54N, 54L**

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: 2003 : Household and similar electrical appliances. Safety.
- NF EN 60335-2-64 :2004 : Particular requirements for commercial electric kitchen machines

EMC relevant standards used:

- EN 55014-1 +A1+A2:2011, Electromagnetic compatibility, Immunity
- EN 55014-2+A1+A2:2008, Electromagnetic compatibility, Emission
- IEC 61000-3-2 +A1+A2 :2009, Electromagnetic compatibility, Limits for harmonic current emissions
- IEC 61000-3-3 :2008, Electromagnetic compatibility, voltage fluctuations and flicker
- IEC 61000-4-2:2010, Electromagnetic compatibility, Electrostatic discharge immunity test
- IEC 61000-4-3 +A1:2010, Electromagnetic compatibility, Radiated, radio-frequency, electromagnetic field immunity test
- IEC 61000-4-4:2011, Electromagnetic compatibility, Electrical fast transient/burst immunity test
- IEC 61000-4-5:2006, Electromagnetic compatibility, Surge immunity test
- IEC 61000-4-6:2008, Electromagnetic compatibility, Immunity to conducted disturbances, induced by radio-frequency fields
- IEC 61000-4-11:2004, Electromagnetic compatibility, Voltage dips, short interruptions and voltage variations immunity tests

Drawn up in VAULX-EN-VELIN on: **01/01/2015**
 Signatory's position: **CHIEF EXECUTIVE OFFICER**
 Signatory's name: **Aurélien FOUQUET**

Signature:

IMPORTANT SAFEGUARDS

When using, cleaning or maintaining the machine, always follow these instructions:

Read all instructions

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

IMPROPER USE

1. This appliance is not meant to contain solids such as ice cubes, frozen foodstuffs or products, dry products that would jam the motor or damage the mixing heads.

The following solids are accepted in a quantity of less than 20% with 80% liquid:

- Crushed ice
- Powder (soluble coffee, milk,...)
- Balls of soft ice cream.

The mixing heads are not designed to grind, crush or cut but only to mix or emulsify liquid or smooth foodstuffs or products.

2. Never add products or foodstuffs to the cup during preparation or operation.
3. Never exceed the maximum filling level of the cup which may cause products or foodstuffs to overflow during preparation.

Maximum capacity of cup: 0.5 liter.

4. Place the appliance on a smooth, non-sloped surface to ensure it is stable and for the suction feet (14) to adhere properly.
5. You are not advised to operate the appliance with an empty cup.
6. The appliance should neither be cleaned in a jet of water nor with a high pressure spray.
7. For electrocution risk protection reasons, never plunge the base into water or any other liquid.
8. Unplug the appliance before carrying out any work on it: cleaning, maintenance or repair.
9. The use of spare parts other than certified SANTOS original parts is prohibited.
10. Use the appliance if the power cord is damaged. It must be replaced by a special assembly available from an approved SANTOS dealer or from SANTOS itself.
11. Connect several appliances to the same power socket.
12. Use the appliance outdoors.
13. Never place the appliance close to or on a source of heat.
14. This appliance is a professional machine designed exclusively for professional use. It is not designed for household use.
15. 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 appliance is available in with a choice of two voltages for the power supply

- 220-240V 50/60 Hz single phase
- 110-120V 50/60 Hz single phase

Line protection: the appliance should be connected to a standard 2-pole + earth electric socket. The installation should be fitted with an RCD and a fuse rated at 16A. or the relevant value according to local electrical codes, taking into account the unit rated current. **The appliance must be earthed**

CARE:



- Before connecting the machine, 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 machine.
 - or on the identification plate on the last page of this manual.
- If the power cable (10) is damaged, it should be replaced by a special assembly available from approved SANTOS dealers or from SANTOS.

USING FOR THE 1st TIME:

Carefully clean the parts in contact with the food (Fig. A, Fig. B and Fig. C).

- Wash the two cups (stainless steel (1) and plastic (2)) with standard washing up liquid or in the dishwasher.
- Wash the flexible mixing head (4) supplied separately.
- To wash the mixing head (3) and deflector (5) which are assembled on the appliance, take them down as follows:
 - Hold the deflector (5) and unscrew the mixing head (3).
- Wash the mixing head (3) and deflector (5) with standard washing up liquid or in the dishwasher.
- Put the deflector (5) and mixing head (3) back after washing as follows:
 - Bring the two flat surfaces of the deflector (5) in register with those of the motor shaft (6).
 - Screw on the mixing head (3).

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 DRINK MIXER N°54

- The drink mixer N° 54 is designed especially for bars, cafés, hotels, restaurants, cocktail bars, canteens, stores selling fruit juices, cake stores, ice cream parlors....
- The drink mixer N° 54 is designed to mix and emulsify different foodstuffs in liquid and smooth form.
- It is ideal for making:
 - drinks (fruit, vegetable cocktails, punches, syrups,...)
 - drinks with ice cream or crushed ice,....
 - Ice creams, milk shakes, smoothies,...
- The appliance comprises a motor unit fixed to a cast aluminum column. 2 cups are supplied to hold the products: one stainless steel cup and one see-through plastic cup. The top part of the cups has been designed for quick fitting on the cup stand and start up of the appliance.

USING THE APPLIANCE

START-UP:

1. Plug in the appliance.
2. Turn the motor speed knob (7) anti-clockwise to the low speed position (small mark on the knob in front of the operator).
3. Put a small amount of liquid (approximately 0.25 liter) into the bottom of the stainless steel (1) or plastic cup (2).
4. Place the stainless steel (1) or plastic cup (2) on the cup stand (8) (**operating position**) (Fig. A) and the appliance starts up immediately at low speed.
5. Turn the motor speed knob (7) clockwise to high speed (big mark on the knob in front of the operator).
6. Go back to low speed by turning the motor speed knob (7) anti-clockwise to the low speed position (small mark on the knob in front of the operator).
-You have now tested the whole speed range.
7. Take the cup off the cup stand and the appliance will stop.
8. Repeat operations 4, 5, 6, and 7 with the second cup, if required.

TAKE NOTE:

1. *For the first few operations, you are advised to start at low speed to prevent splashing (cup too full).*
2. *You are not advised to operate the appliance with no liquid inside the cup.*



IDLE POSITION

Placing the cup (1) or (2) in the second position (lower position) on the cup stand (8) puts it into the idle or stop position (Fig. E)

NOTE:

Emulsions or mixes are usually obtained in under 1 minute.

TAKE NOTE:

1. The appliance stops when the cup (1) or (2) is removed from its stand (8), however, a rotation movement does persist for a few seconds due to motor inertia: do not allow the cup to be off center so as not to damage the mixing head (3) or (4) and deflector (5).
2. Wait for the motor to stop before removing the cup completely and avoid splashes.

CLEANING:

IMPORTANT:

- When cleaning, stop the appliance and unplug the appliance's power cord (9).
- The appliance must not be cleaned with a water jet, pressurized water or immersed.
- If, during preparation or incorrect handling, food or splashes have got into the cup positioning area or on the cup stand (8), you are advised to clean this area quickly with clean water and check the cup presence detection finger (10) is working properly.

You are advised to clean the appliance as soon as you have finished using it.

It will be easier to clean if you do not wait until food has dried in the cup, on the mixing head or deflector.

All these parts:

- stainless steel cup (1)
- plastic cup (2)
- mixing head (3)
- mixing head (4)
- deflector (5)

must be cleaned with standard washing up liquid or in the dishwasher.

Do not use abrasive products that could damage the parts.

STORAGE:

The stainless steel (1) and plastic cups (2) can be stacked for storage purposes.

MAINTENANCE

Before any servicing of the appliance, it is essential to unplug the appliance from the mains supply (9).

This machine requires no particular maintenance because the bearings are lubricated for life.

If any intervention is necessary to replace parts subject to wear, such as the mixing heads, the deflector, electrical or other components, please refer to the parts list (see the exploded view at the end of this manual).

CHANGING THE MIXING HEADS AND DEFLECTOR:

Taking down the mixing head (3) or (4) and deflector (5)(Fig. A, Fig. B and Fig. C):

- Unscrew the mixing head (3) or (4) by hand holding the deflector (5) to stop the motor shaft (6) from turning.

Mounting the deflector (5) and mixing head (3) or (4)(Fig. A, Fig. B and Fig. C):

- Put back the deflector (5) making the two flat surfaces register with the two flat surfaces of the motor shaft (6). Screw on the mixing head (3) or (4) by hand.

Spare Parts:



IMPORTANT: Use of spare parts other than certified original SANTOS parts is prohibited

Please quote the following **when ordering spare parts** (see references in the exploded view at the end of this manual):

- **type**
- **appliance's serial number**
- **electrical specifications given underneath the appliance.**



FAULT FINDING

Identifying the cause of appliance stoppage precisely.

The appliance does not start

Check:

- the mains supply, the condition of the supply cord (9).
- the cup (1) or (2) is fitted properly on the cup stand (8). Check in particular that the top part of the cup is not damaged.
- the cleanness of the cup (1) or (2) positioning area.

The appliance stops suddenly after operating for a long time: the motor is very hot

The motor is protected by an integral thermal protection. In the event of overheating, the motor stops automatically.

- Switch off the appliance (unplug the power supply cord (9)).
- Wait for the motor to cool down (20 to 45 minutes).
- Plug back in and resume work by placing the cup (1) or (2) on the cup stand (8).

The machine stops because of an overload:

If the motor is jammed (foreign body, object or hard foodstuffs blocking the mixing head), the appliance stops automatically.

- Switch off the appliance (unplug the power supply cord (9)).
- Take the stainless steel (1) or plastic cup (2) off the cup stand (8) and place it on a worktop.
- Remove the objects or hard bits blocking the mixing head.
- Reset the thermal protection device (10) underneath the appliance manually (Fig. F).
- Put the products or foodstuffs to be processed back in the cup.
- Plug back in and resume work by placing the cup (1) or (2) on the cup stand (8).

The motor runs all the time even without the cup on the cup stand

Check:

- the operation of the cup detection finger (10) in the cup stand (8).
- the cleanness of the cup presence detection finger area and clean this area if required (Fig. D).

The motor is running but the speed variation is not working

Check:

- go through the whole speed range of the motor with the motor speed knob (7) (Fig. A) several times.

NOTE:

If one of these problems persists, disconnect the electric power supply (unplug the power supply cord (9)) and call on someone from the maintenance department or contact an approved SANTOS dealer.

TECHNICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS (1)		Single phase	
Model 54			
Supply voltage	(V)	220-240	100-120
Frequency	(Hz)	50/60	50/60
Motor: Rating			
Power input	(W)	120	120
Speed: Minimum	(rpm)	8 000	8 000
Maximum	(rpm)	16 000	16 000
Cup capacity	(L)	0.560	
Dimensions: Height	(mm)	530	
Width	(mm)	182	
Depth	(mm)	186	
Weight: Net weight	(kg)	6	
Weight including packing	(kg)	7	
Noise: (2)	(dBA)	63	

(1) These ratings are provided as a rough guide. The exact electrical specifications can be found on the rating plate.

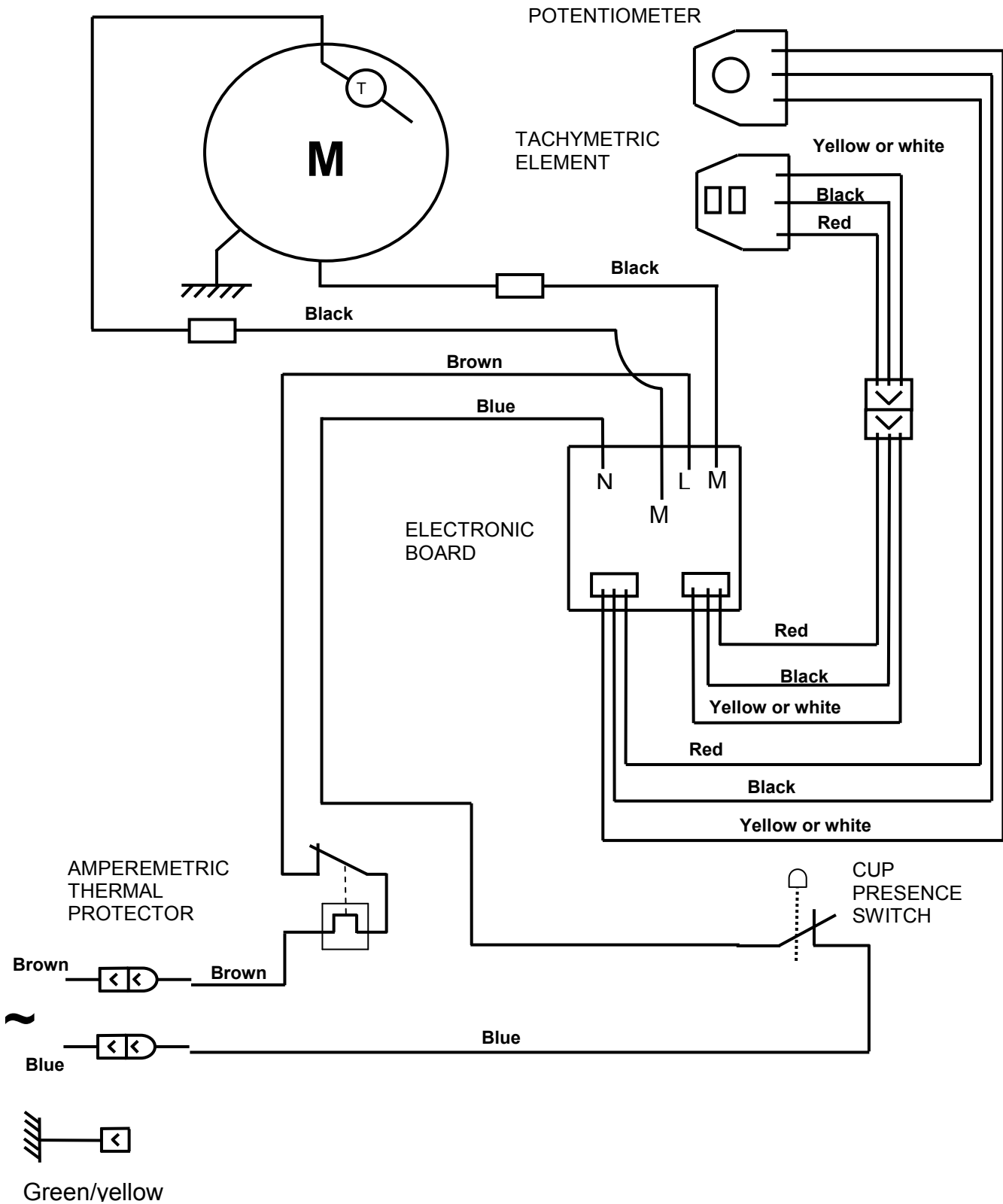
(2) Noise level measured with sound pressure appliance in operation 1 m from its centerline in accordance with standard EN 31201.

REFERENCE TO STANDARDS

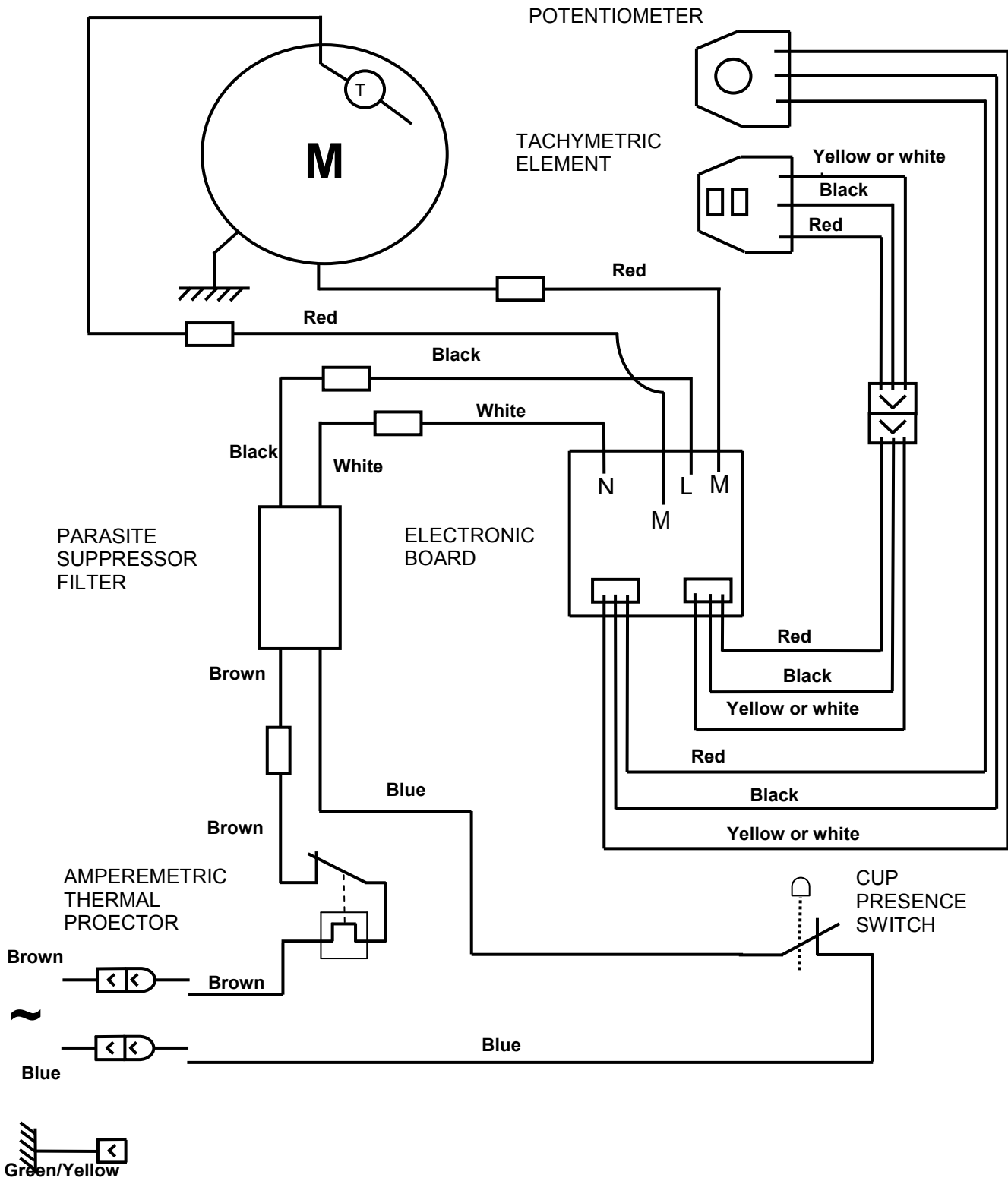
- CE (Europe)
- UL (USA) and cUL (Canada).
- NSF (USA).



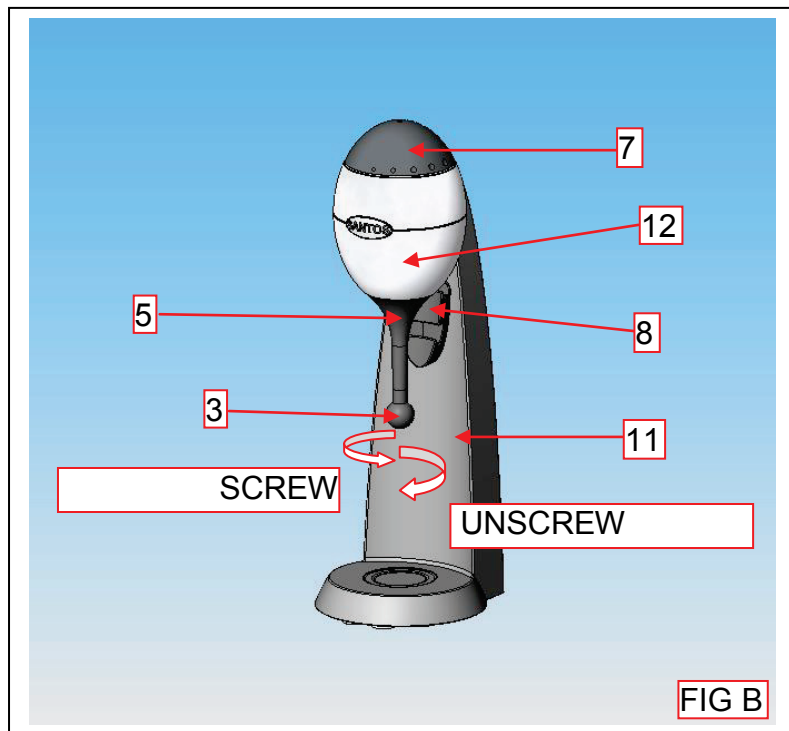
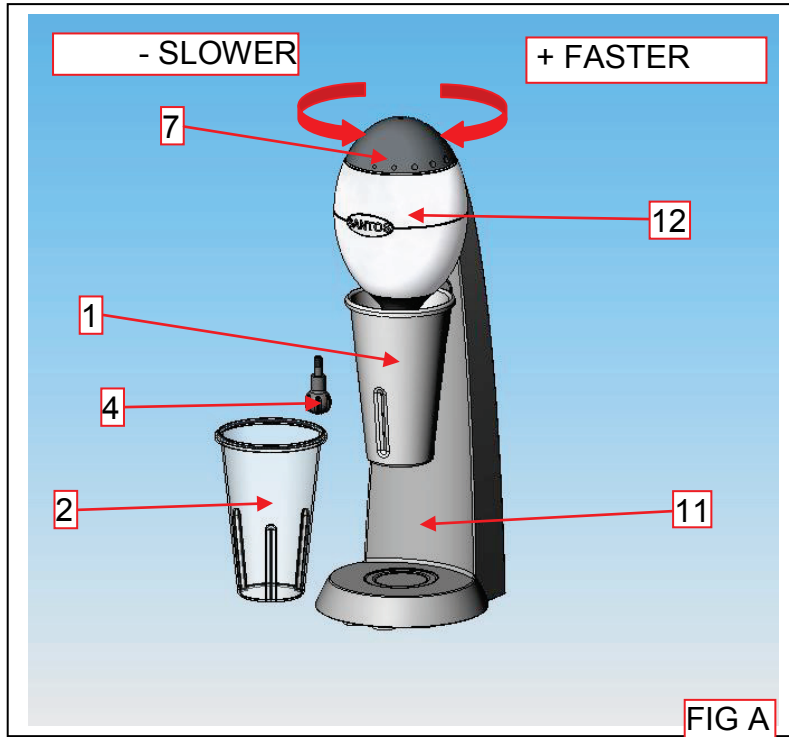
Wiring diagram 110-120V~ 50/60Hz

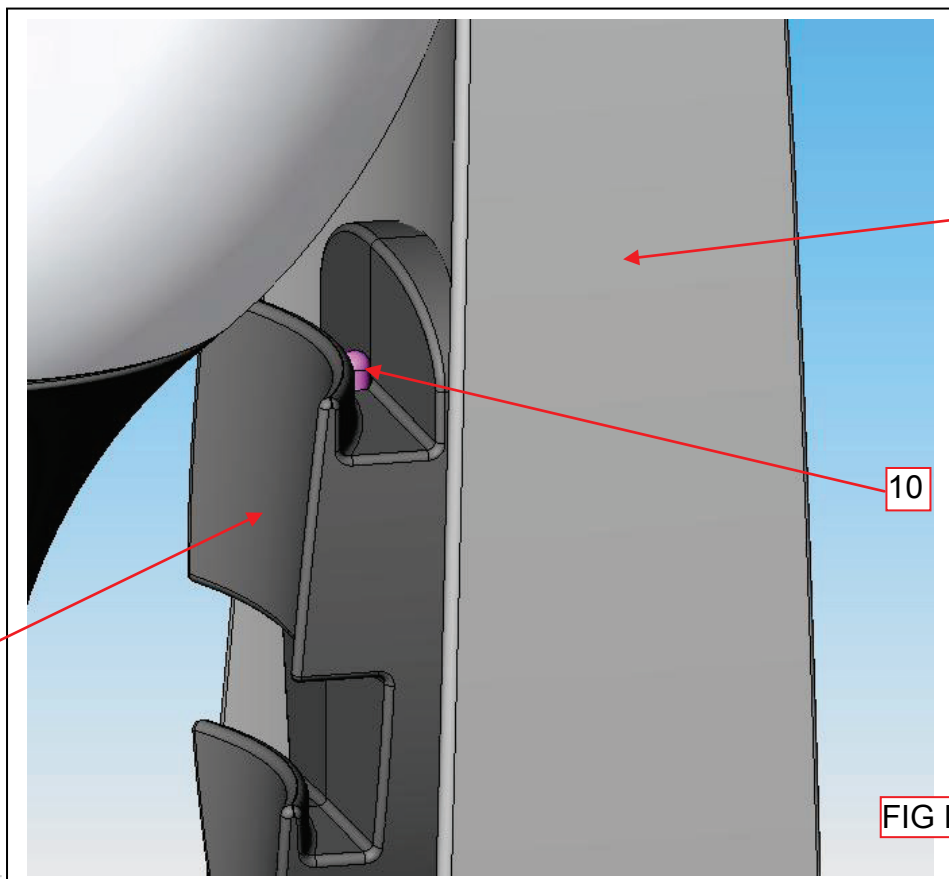
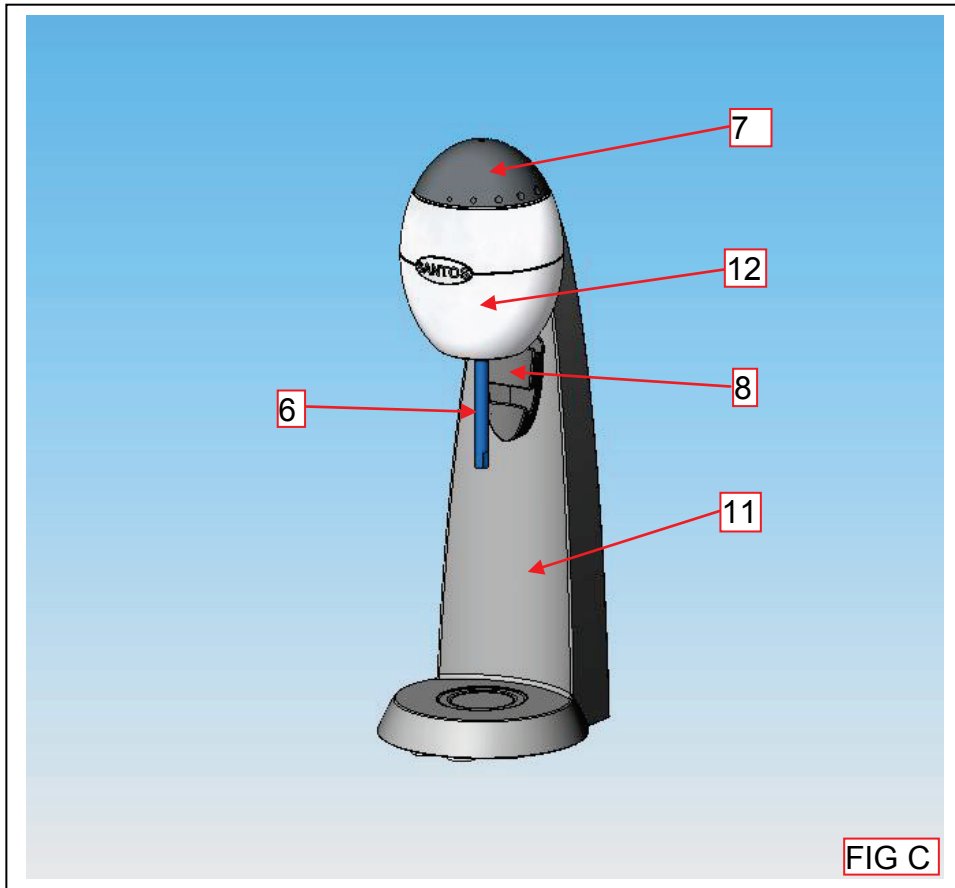


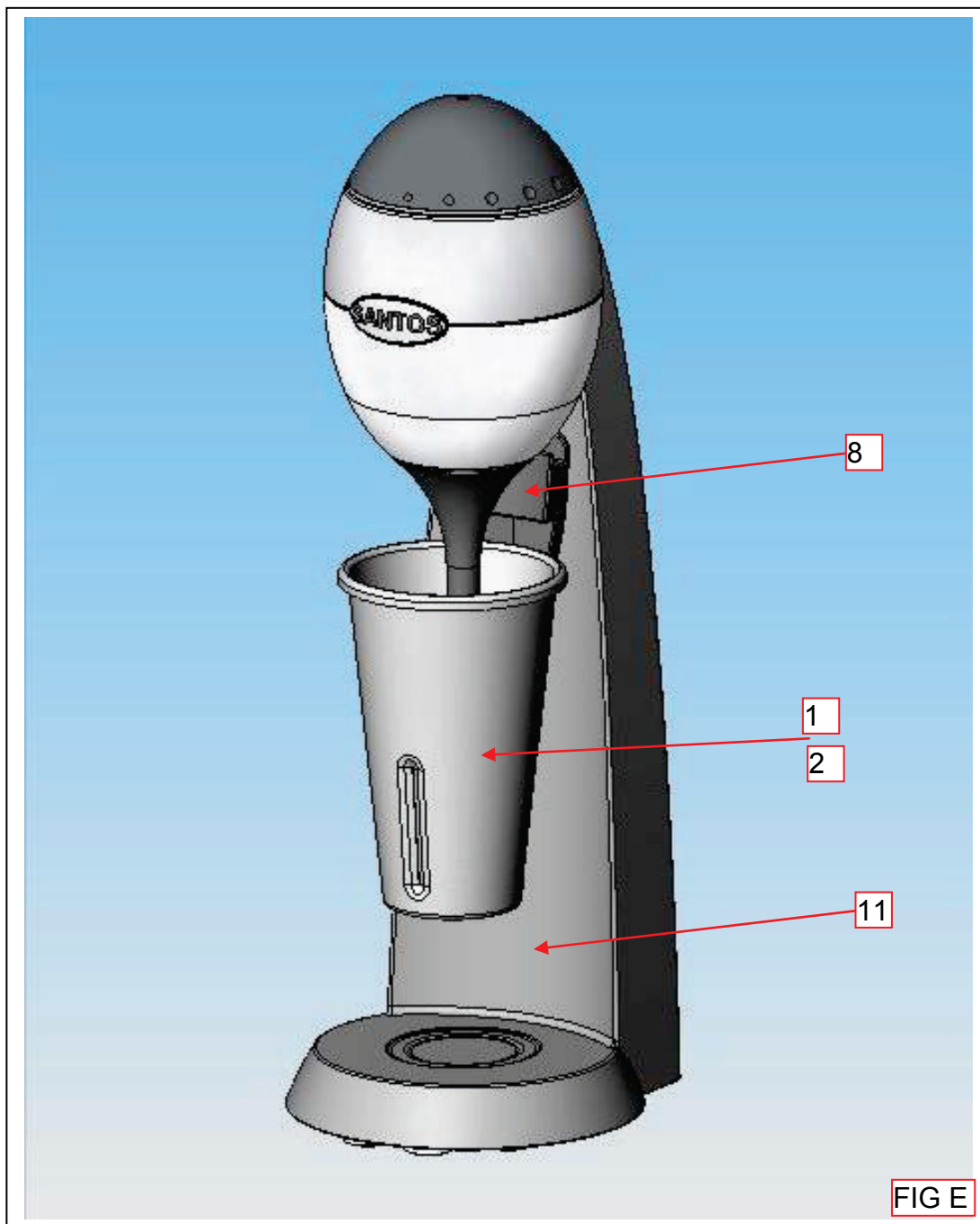
Wiring diagram 220-240V~ 50/60Hz

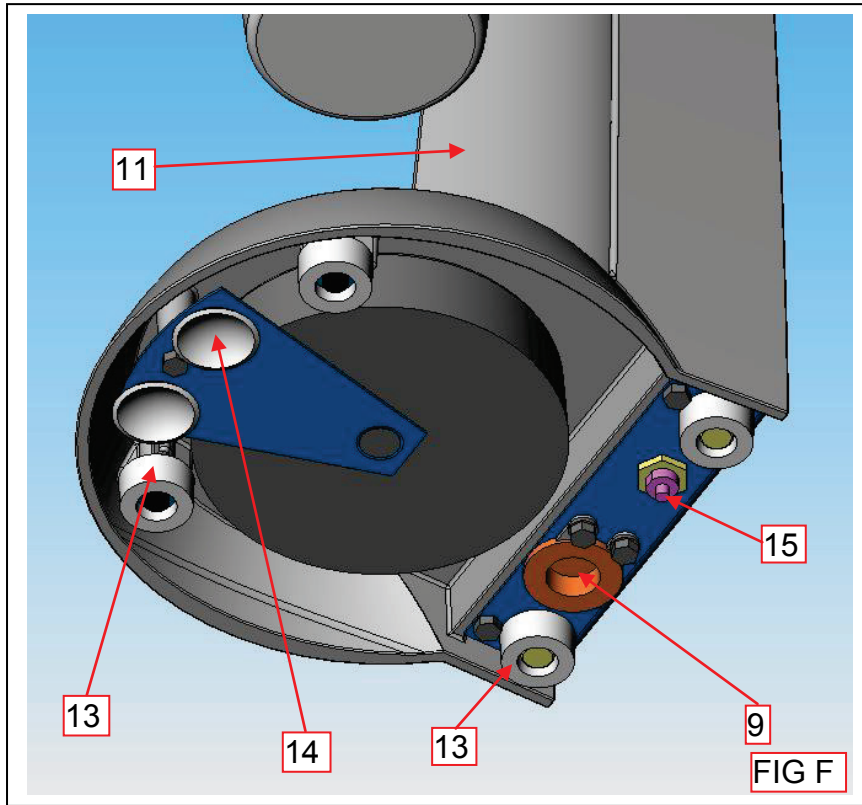


FIGURES









ITEM	Description
1	Stainless steel cup
2	Plastic cup
3	Mixing head
4	Flexible mixing head
5	Deflector
6	Motor shaft
7	Adjustment knob
8	Cup stand
9	Power supply cord
10	Cup detection finger
11	Base column
12	Motor unit
13	Rubber foot
14	Suction foot
15	Overload protector



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 roundtrip 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

