



INSTRUCTION MANUAL

Installation | Maintenance | Use | Safety

Meat Tenderizer

Model

PAC



Image merely illustrates.

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You just acquired a IMG-BRAZIL equipment, higher product quality, safety and efficiency.

Founded in 1989, IMG-BRAZIL is a company respected as one of the best and most complete companies in the manufacturing industry of equipment for gastronomy.

The constant innovation and improvement of its products, using raw materials of the first line, ensuring top quality products, consumed in Brazil and in more than 25 countries worldwide.

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IMG BRASIL PRODUCT MANUFACTURER



IMPORTANT:

**FOR PROFESSIONAL USE. DO NOT USE WITHOUT READING CAREFULLY THE MANUAL.
IF IN DOUBT, CONTACT US:**

IMG-BRASIL Gastronomy Machinery Industry Ltda.

CNPJ 11.193.347/0001-14 - CREA 131726-3

Rod. Antônio Heil – KM 23 Nº 5825 – Bairro: Limoeiro – CEP 88352-502 - Brusque – SC – Brasil

Phone/fax. +55 47 3251-5555 - www.metvisa.com.br

E-mail: sac@metvisa.com.br - export@metvisa.com.br - export2@metvisa.com.br

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WARNING!

Features, photos and figures presented in this manual should be considered for information purposes. IMG BRASIL reserves the right to make modifications as may be necessary without prior notice.

1. Safety Information

1.1 General Instructions

- There are care/precautions that should be observed when assembling, use, maintenance and discontinuing the use of this device;
- Before performing any operation (installation, use (use), maintenance and reuse prolonged interruption in the use of the device), read the manual;
- The device must be used by people trained and knowledgeable in use and safety requirements described in this manual;
- This device is not intended for use by persons (including children) with physical, sensory or mental capacities reduced, or people with lack of experience and knowledge, unless they have received instructions regarding the use of the device or under the supervision of a person responsible for their safety;
- It is recommended that children be supervised to ensure that they are not playing with the device;
- In case of alternation of staff to work with the device, the new operator must be instructed on the rules and the operation of the device;
- The operator must use the appropriate PPE (personal protective equipment). For example: use cap in hair preventing it from locking up in the moving parts;
- The operator must always be alert to situations that can cause risks of accidents and avoid them. For example: avoid working with loose sleeves uniforms, where they can lock in the moving parts, causing accidents;
- After being held reading and clarified all doubts, this manual should be stored carefully in an easily accessible place, known to all the people who will operate the unit and placed the willingness of people to carry out maintenance, for any queries. Whenever there is any doubt, be sure to consult the manual. Do not operate in any way with any questions;
- Upon installation, it is essential to put this manual available for the professionals who will do the same;
- Before you start cleaning and any maintenance, it is essential to disconnect the device from the power network;
- Periodically check the condition of cables and electrical parts.
- Do not turn on the device with the gear box without lubricating oil and check if the rollers and the protection of the rollers are fixed to the front cover and the knobs. Insert only specific products to which the device is intended and never place your hands, fingers or objects in the nozzle or the moving parts with the power on, it might cause an accident;
- Do not leave the device switched on without supervision.



WARNING!

Do not make repairs yourself. Go to technical assistance authorized by the manufacturer. Use only original parts in your device.

2. Technical Features

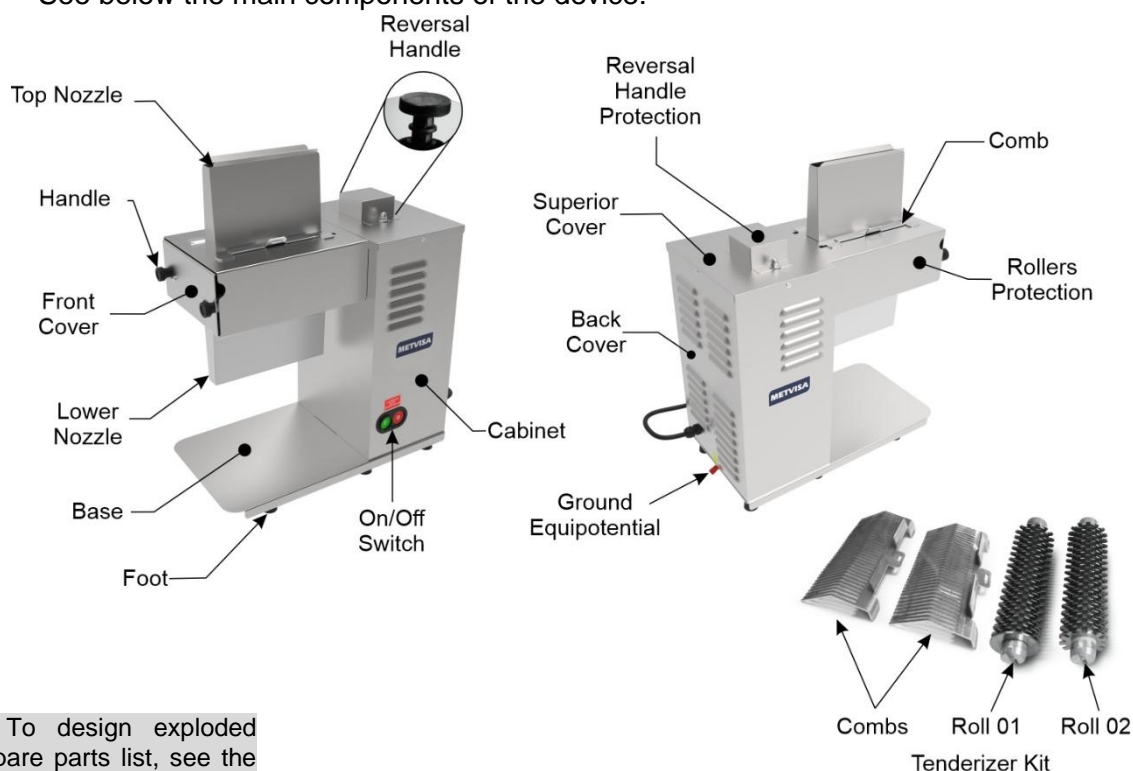
2.1 Main Components

To the device described in this manual, safety in use, cleaning, maintenance and maximum hygiene are guaranteed by design and the special design of all parts, and also used stainless steel and other suitable materials for the contact with the meat.

The device is designed with the following features:

- All metal parts including combs and blades of the rollers, are produced in stainless steel, which has corrosion resistance besides other steels. It is a material resistant from attack by various corrosive agents;

See below the main components of the device:



Note: To design exploded with spare parts list, see the annexes.

2.2 Technical Data

Model	Nominal Measures Width x Height x Length (mm)	Net Weight (kg)	Voltage (V)	Nominal Current (A)	Capacity (kg/h)	Lubricant SAE140 (ml)
PAC110M60N4	419x440x230	23,5	110	5,9	400*	150
PAC220M50N1	419x440x230	24,3	220	2,9		
PAC220M50N2	419x440x230	24,3	220	2,9		
PAC220M50N4	419x440x230	24,3	220	2,9		
PAC220M60N4	419x440x230	23,5	220	3,2		
PAC220M50N7	419x440x230	24,3	220	2,9		
PAC220M50N8	419x440x230	24,3	220	2,9		

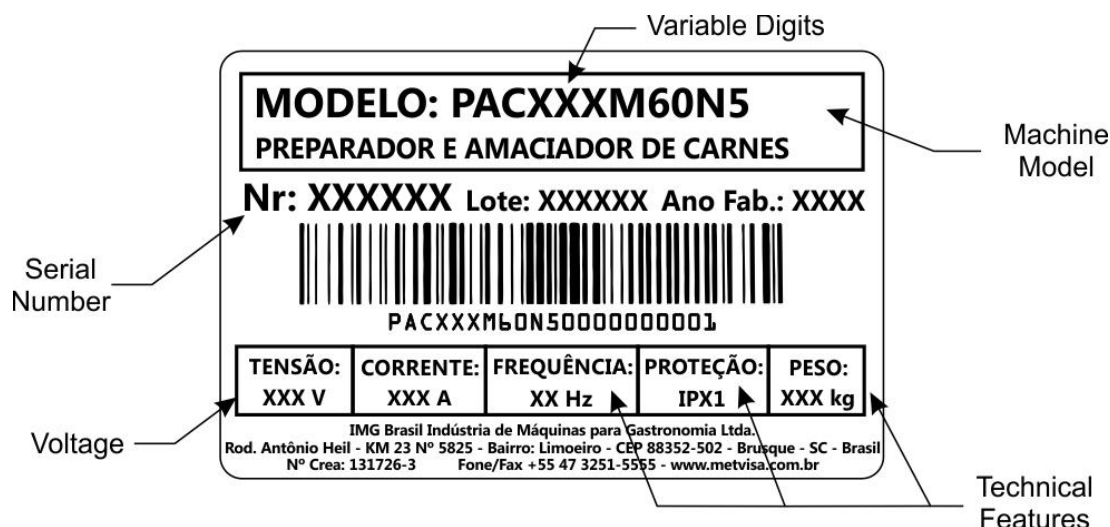
* May vary due to the user's speed and according to the quality of processed meat.

Noise level (device with load): **65 dB**.



WARNING!

Features such as model, serial n° and electrical device voltage are indicated on the data label (figure below). Before installation, check if device's voltage is according to the electrical outlet.



2.3 Supply and Disposal of Packing

The device is packed with wood or cardboard, to ensure the perfect integrity during transportation and is accompanied by the following:

- Instruction Manual for Installation, Maintenance, Use and Safety;
- Guarantee Agreement (for Brazilian market).

IMPORTANT

The packaging components (cardboard, wood, foam, foil, etc.) are products assimilable to urban solid waste and can be disposed off without difficulty. In the event that the device is installed in countries where there are different standards, eliminate the packaging in accordance with current standards. Perform the correct disposal of the product helping to protect the environment. For more information about recycling the same, contact the local authorities, the garbage collect service or the shop where you purchased the product.

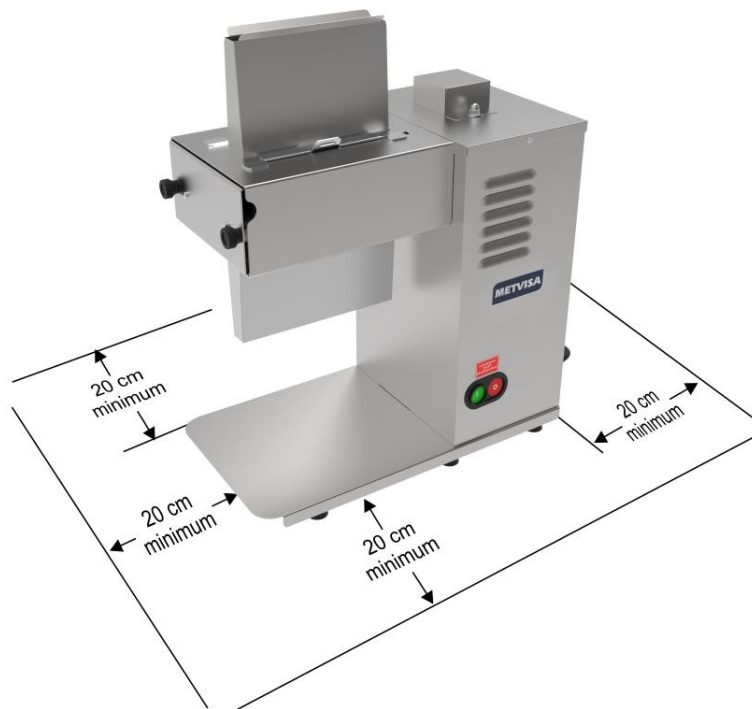
3. Installation

3.1 Device Layout

The connection to the Electrical Outlet and the arrangement for the operation must be performed by a qualified professional. Check if the device voltage is according to the electrical outlet.

During installation, it is essential to indicate this manual for the professionals who will make it.

To ensure the correct operation and safety, you should position the device in a ventilated environment and in wide support surface, well leveled, dry and stable, away from sources of heat and water taps, and an average height 80 cm. Install your device leaving a distance of at least 20 cm around it, doing this you have enough space to perform inspection, maintenance, cleaning and use.



WARNING!

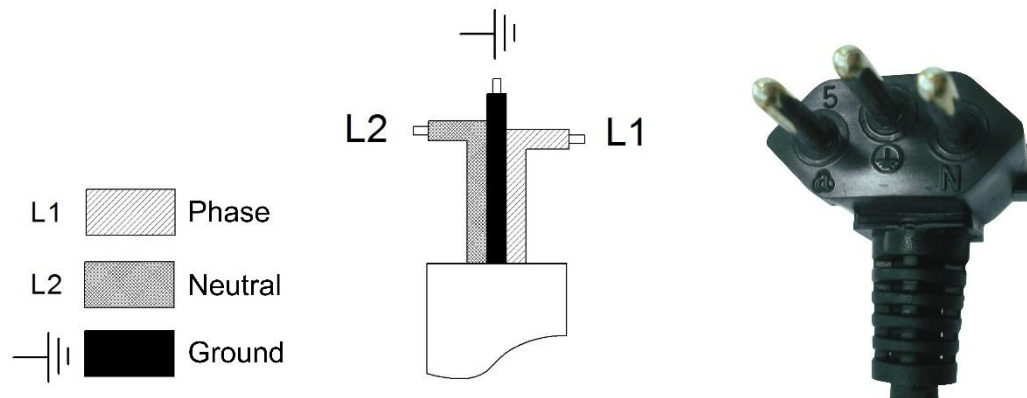
The installation and the place where it will be set must comply with the rules of prevention of risk and safety at work (Regulatory Standard NR-12 for Brazil or as current regulatory standard in others country).

The manufacturer is not responsible for possible direct or indirect damages caused by the non-compliance of the said rules and other instructions in this manual.

3.2 Electrical Connection

The device is supplied with a power cable to be connected to an electrical outlet. If the power cable is damaged, it must be replaced by a new cable. The exchange must be carried out by the manufacturer, dealer or qualified person in order to avoid risks.

In INMETRO version, the power cord plug has three round pins, existing just below each pin a corresponding mark (phase, ground and neutral). It is mandatory to carry out a good ground connection, according to the current regulations.



It is supplied with the device an Equipotential Grounding Terminal (Terminal Block), located on the right of the base.



The Terminal Block shown on figure beside is an additional protection to the main supply grounding, it must be connected to a bar of Grounding Terminals, not depending on the main supply connection, other devices that have accessible metal parts and are stationary, must also be connected to this bar, as well as the workbench, if it is metallic. This way, all devices will be at the same electric potential avoiding harmful electric current.

The devices described in this manual have a single voltage, ie 127 V or 220 V. If voltage changes are required, contact the manufacturer or your authorized dealer.



WARNING!

Before connecting your device, always checks if the main supply voltage is the same as the device voltage. If it is not, proceed changing the voltage on the device as instructed.

The INMETRO version of the device supply voltage is 127 V or 220 V (60 Hz) and CE version is 220 V (50 Hz), as can be seen in the voltage label pasted on the power cord or as indicated on the identification label, which is at the back of the device (see figure on this label in item 2.2 of this manual).

Make sure that the main voltage where the device will be installed the device is compatible with the voltage in those labels.

For more details about the electrical part of the device, see the wiring diagram in the manual.

IMPORTANT

The manufacturer is not responsible for possible direct or indirect damages caused by non-compliance with rules and instructions in this manual.

3.3 Security Measures and User Instruction

The professional who sell the device must instruct the user on the correct operation and must deliver him this instruction manual.

The user must be informed of the necessary safety measures and have to respect them, and also respect all the measures described in this manual.

Your appliance has mechanical protections (see item 1.2 Mechanical Safety) that prevent access to moving parts and electrical components. Removal or tampering with these safety components can cause serious risks to the operator's upper limbs.

4. Device's Use

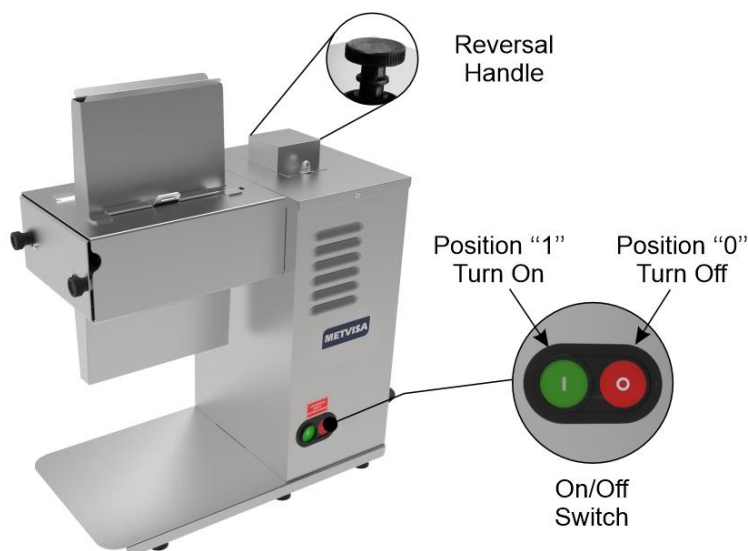
4.1 Utility

The device is designed exclusively to tenderize steaks.

4.2 Commands

The device has an On/Off Switch and Reversal Handle.

The On/Off Switch is located on the front of the cabinet. The Reversal Handle is located on the top cover.



See description of each command:

- **On/Off Switch** - used to turn on and off the device. In position "1" turn on, in position "0" turn off.

- **Reversal Handle** - it is used to facilitate the removal of meat pieces that could eventually stay in the rollers. To move the rolls simply manually rotate the knob counter-clockwise and the meat will be directed to the lower nozzle of the device.

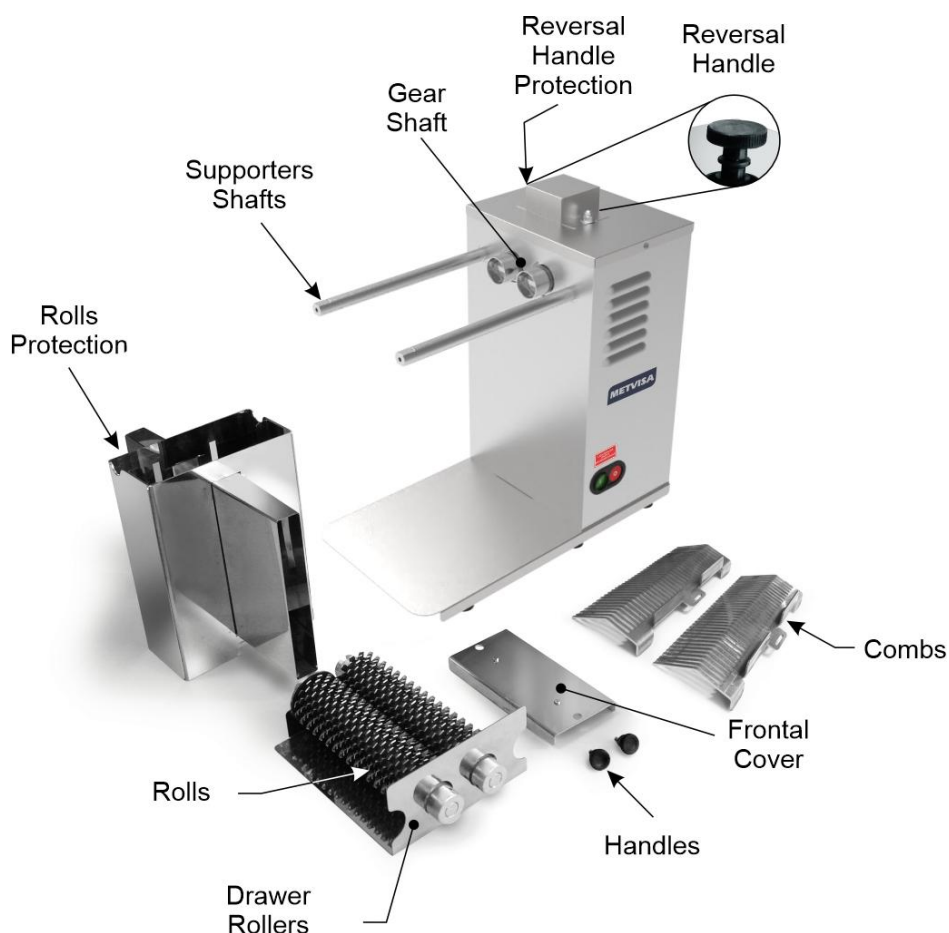
Obs.: Optionally you can also remove the entire nozzle kit (combs, rollers and protection of rollers) to remove the locked meat.

Besides meat removal, the reversal handle also assists in assembling the rollers, because rotate the shafts of the gears facilitating the engagement of the slit of the rolls.

4.3 Operating Procedures

Before operating your device, perform a cleaning of components that have contact with the meat (combs, rollers, front cover, protection of rolls, etc.), to so make sure that the appliance is disconnected from the power outlet. Follow the cleaning instructions in section 5 of this manual.

To facilitate the disassembly and assembly procedure, follow the images of the main components of the disassembled device:



Check the assembly and disassemble procedure described below:

• **Disassembly:**

①

Unplug the cable
from the power
outlet

②

Remove the two
combs pulling up



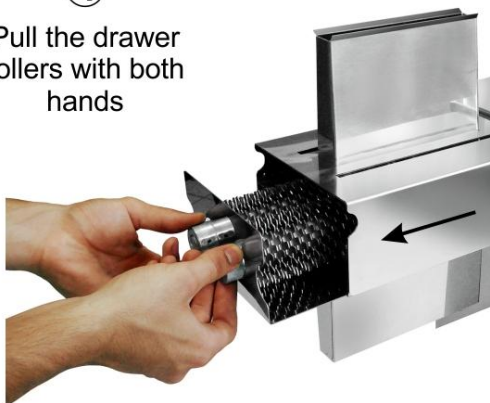
③

Take the handles
out and after the
front cover



④

Pull the drawer
rollers with both
hands



⑤

Attention with
rollers, they have
sharp blades.

Always use
appropriate gloves.



⑥

To remove the
Rolls Protection,
just pull it with
both hands in
your direction.

Unscrew the screws
and remove the reverser
handle protection.



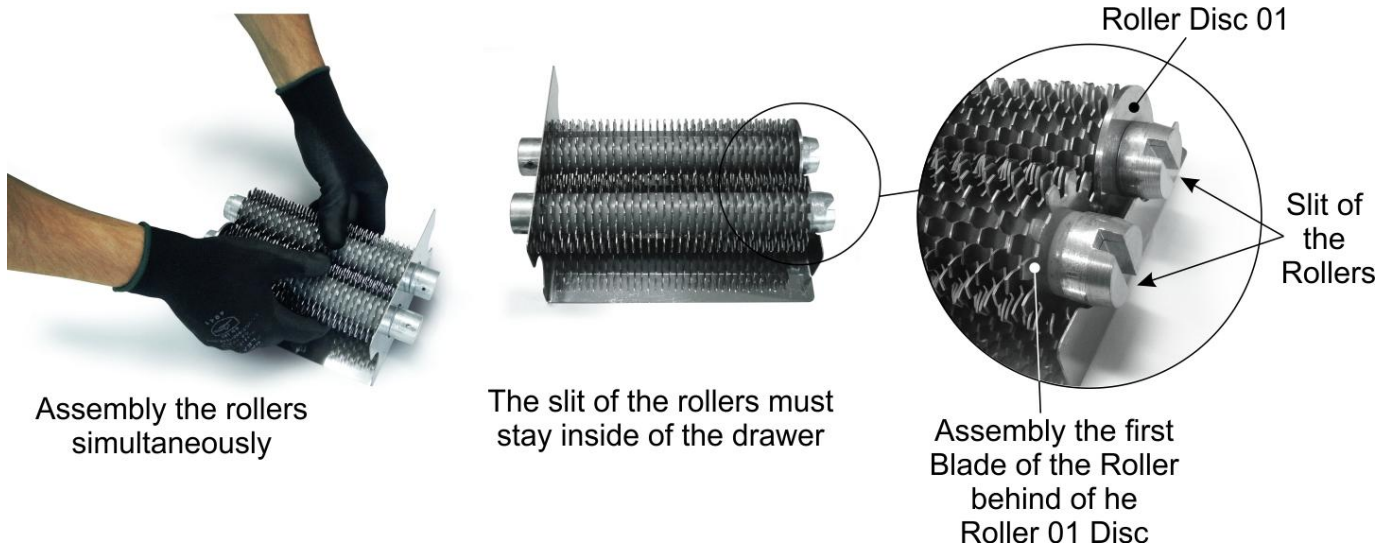
WARNING!

When handling the rolls that contains the blades, take care. The blades are very sharp and can easily cause accidents (cuts, for example) if not handled carefully and with proper gloves.

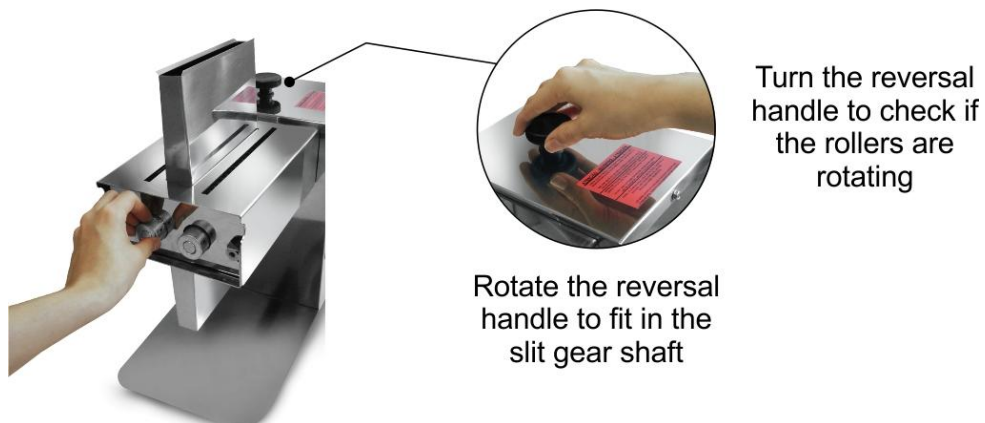
• **Assembly:** The assembly procedure is the reverse of removal. First mount the protection of the rollers. Note that the Protection Guide should stay on top of the Sustainer Shaft.



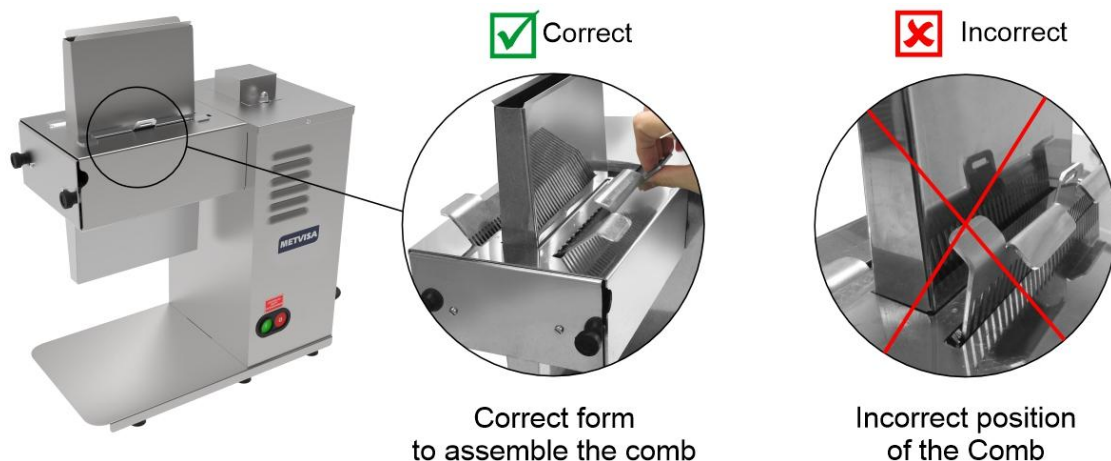
When mounting the roller in the drawer, place the slit of the rolls inside of the drawer. Note that on the roll 01 there is a disc and it should be assembly against the plate of the drawer. Another attention that you must have is regarding the first blade of the roller 02. The blade has to stay behind the disc of the roller 01, as the image below.



After mounting the drawer inside of the Rollers Protection, rotate the rollers until the slit fits the shoulder of the axes of the gears. To check if the rollers are properly seated, turn the knob reverse and see if the two rollers are rotating.



With the rollers seated, assembly the front cover fixing it with the two knobs and the reverser handle protection with the nuts. Finally put the comb with the handle facing out.



Assemble all the pieces perfectly to be guaranteed the safety of the operator and the correct functioning of the device. If any part is not firm, it may not have been properly seated. In this case, repeat the operation and not getting success, contact technical assistance.



ATTENTION!

Never turn on the device without fixing the rollers, and with the protection of the rollers, the front cover and the knobs or the combs out of position because it could cause accidents.

• **Operation:** Before turn on the device, make sure all parts are well fitted, the protection of the rollers attached to the front cover and the knobs, and if the device supply voltage is according to the power outlet.

After checked these items, follow the machine's operating procedure:

- Connect the power cord to the power outlet;
- Press the On/Off switch in position "1" (on) and leave the device turned on for a few seconds;
- Place the meat to be processed in the nozzle and release it. At this point the rollers will send the meat to the bottom nozzle. To tenderize the meat, repeat the procedure as necessary;
- After finish the process, turn off the device by pressing the power button to "0" (off).

IMPORTANT

If during the process the meat lock in the rollers, turn off the device on the power button on the "0" position (off). Rotate the Reversal Handle counter-clockwise and the meat will be directed to the lower nozzle. If you cannot remove the meat locked in this way, you can disassemble the nozzle kit (combs, rollers and protection of rollers) to remove the locked meat.



WARNING!

Never use meat with bone or frozen. Remove as much as possible cartilage and tendons of the meat.

If you notice that the device cannot process the meat or that process is slow, reduce the size and thickness of the meat before inserting it in the nozzle.

Add the meat in the nozzle gradually, only put another meat on the nozzle after the meat in progress come processed out by the lower nozzle, like this will not affect the speed and engine performance, and the life of device.

Failure to follow these guidelines will be considered unsafe act and machine abuse.



WARNING!

Do not remove the protection of the rollers with the device on, also should not put your fingers, hands or objects (such as spoons and knives) into the nozzle, as this might cause accidents.

Any irregularity contact the nearest authorized service.

IMPORTANT

The operator must use the appropriate PPE (personal protective equipment). For example: use cap in hair preventing it from locking up in moving parts and appropriate gloves in addition to ensure hygiene when handling meat, protect the operator during meat processing.

IMPORTANT

The manufacturer is not responsible for possible direct or indirect damages caused by non-compliance with rules and instructions in this manual.

5. Cleaning and Maintenance

5.1 Procedures for cleaning and the use of the Product

Your device was built with first class materials, so use it correctly and get great satisfaction. Keep your device always clean and well maintained, that it will have longer life cycle. You must make a daily cleaning in the device for a good operation and durability.



WARNING!

Before performing maintenance or cleaning, ensure that the On/Off Switch is in position "0" (off) and that the plug is disconnected from the mains.



WARNING!

Do not use water jet to clean the device.

IMPORTANT

This device is not intended to be fully immersed in water for cleaning.

Follow the instructions below to learn what parts that can be immersed and what special care take it.

Demountable parts (rollers, combs, front cover, drawer and protection of rolls) should be removed from the device and washed with warm water and mild soap. Thoroughly clean the corners, eliminating waste from the meat.

The device must be cleaned as many times as possible, to prevent dry food waste stick in the parts. For cleaning, dilute soap or mild detergent in warm water and use with a soft cloth. With a cloth humidified with water, rinse and then dry the parts with a soft, dry cloth.

Never use products or abrasive sponges for cleaning as it may scratch or damage the surface of the pieces. Do not pour water into the unit for cleaning, it can cause electric shock or even burn the device.



WARNING!

Take care when cleaning the rollers, they have blades that are extremely sharp. Handle with care, otherwise, could cause accidents. Same warn for any other cutting part of the device.

Never operate the device without the protection of the rollers attached to the front cover and the knobs because it could cause accidents.

IMPORTANT

The manufacturer is not responsible for possible direct or indirect damages caused by non-compliance with rules and instructions in this manual.



WARNING!

It is extremely important that the products used in cleaning ensure maximum hygiene and are non-toxic.

5.2 Maintenance and Behavior in Case of Malfunctions

The operator must be instructed to perform routine inspections, making small adjustments, cleaning and watch evidence of malfunction that may occur. Examples: check strange noises; power loss; device non-performance the result; oil leak; among others. These actions are indispensable to ensure a longer life of the machine.



WARNING!

When maintenance is made (even if minor adjustments), always disconnect the device from the power outlet.

It is recommended to perform preventive maintenance from 6 in 6 months, checking and adjusting clearances, cleaning the internal parts, etc. By detecting broken or impaired functioning parts, make the replacement, always using original parts.



WARNING!

Never let your device work without oil in the gearbox, it will cause damage.

It is recommended to change the oil every 6 months of use or 800 hours worked.

For oil change, take your device to a closer technical assistance.

This device uses 150 ml of lubricating oil SAE 140.

The preventive maintenance eliminates the inconvenience of staying with the device stopped when most needed, reduces the cost of maintenance and reduce the risk of accidents.



WARNING!

Preventive maintenance requires skilled professional.

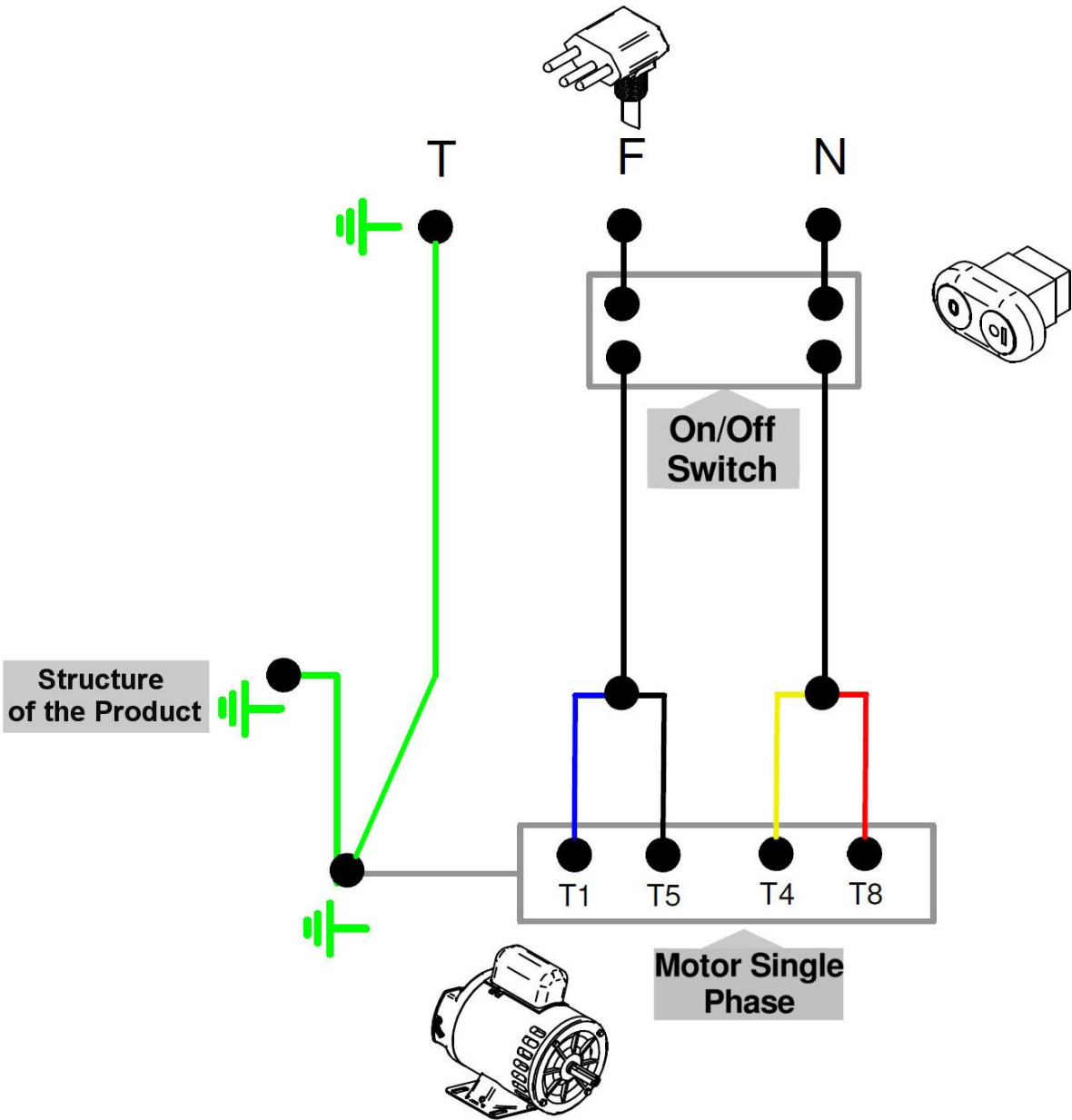
Make sure the device is unplugged from the power outlet.

Whenever you remove any safety item of the device (for example, during cleaning or maintenance), reset in place and confirm that is performing its function properly.

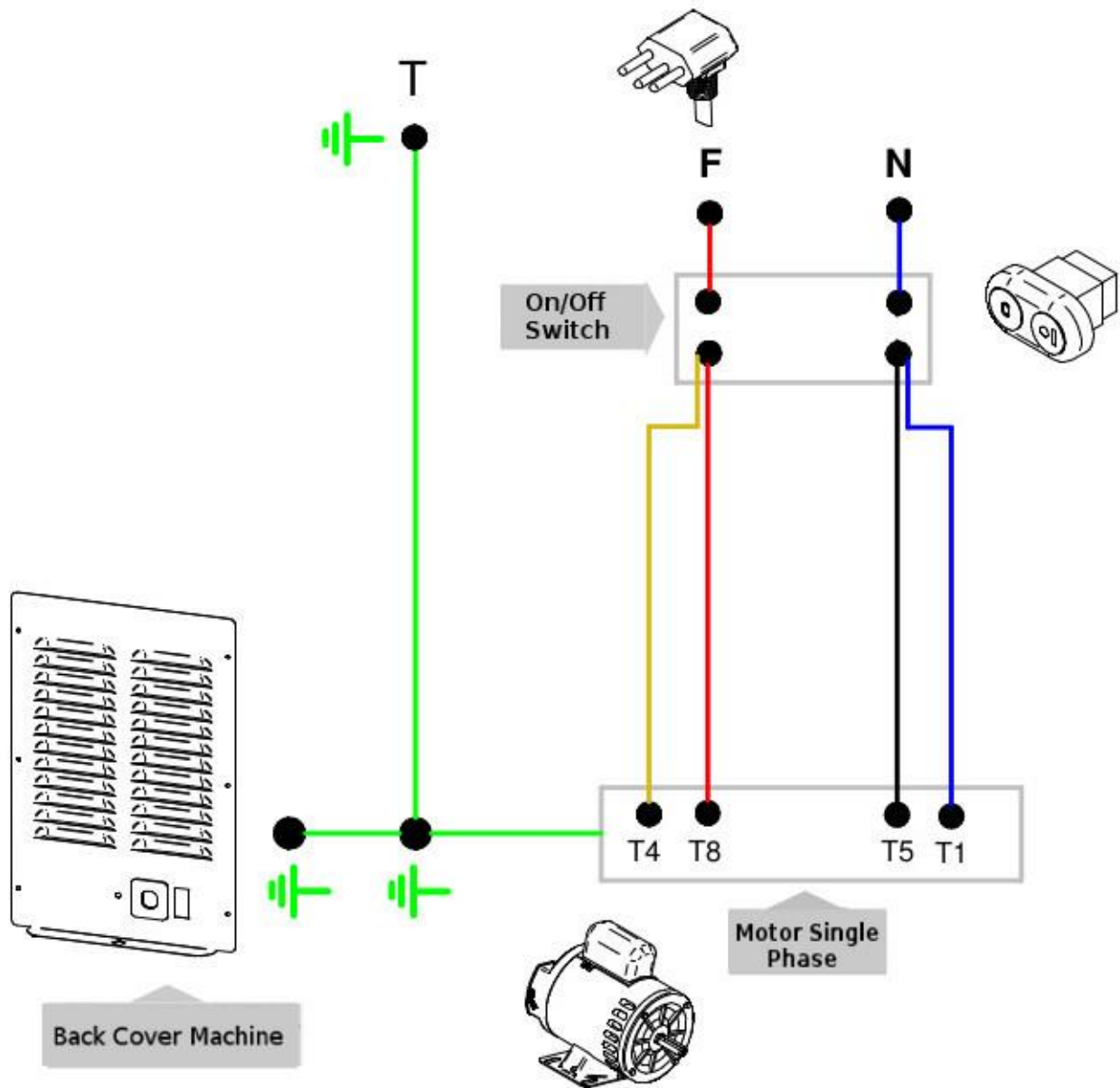
To detect any malfunction or nonconformity, send your device to the nearest service. See list of technical assistance in the link on our website: www.metvisa.com.br

6. Annex

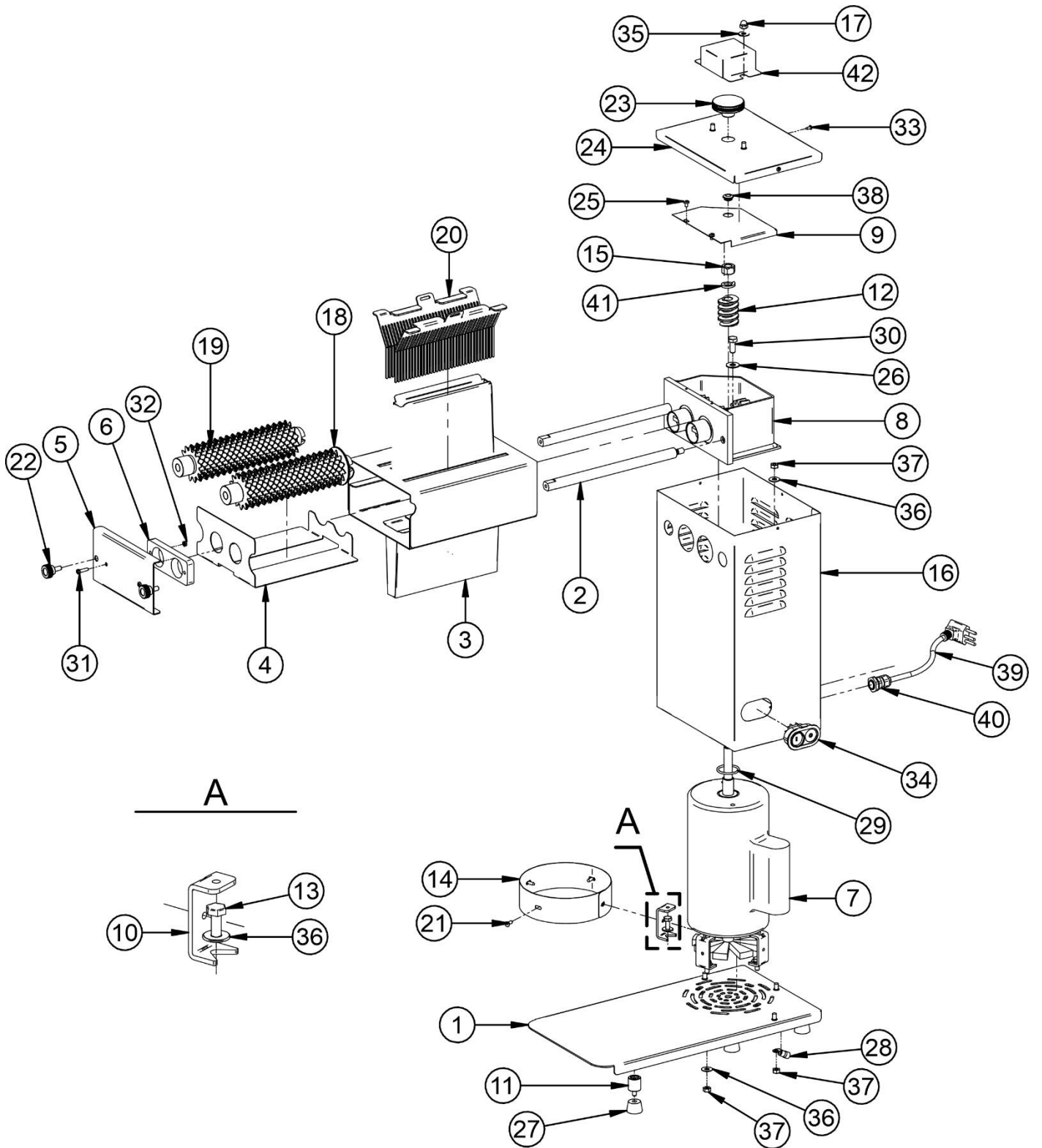
Wiring Diagram – 110 V or 220 V 60 Hz

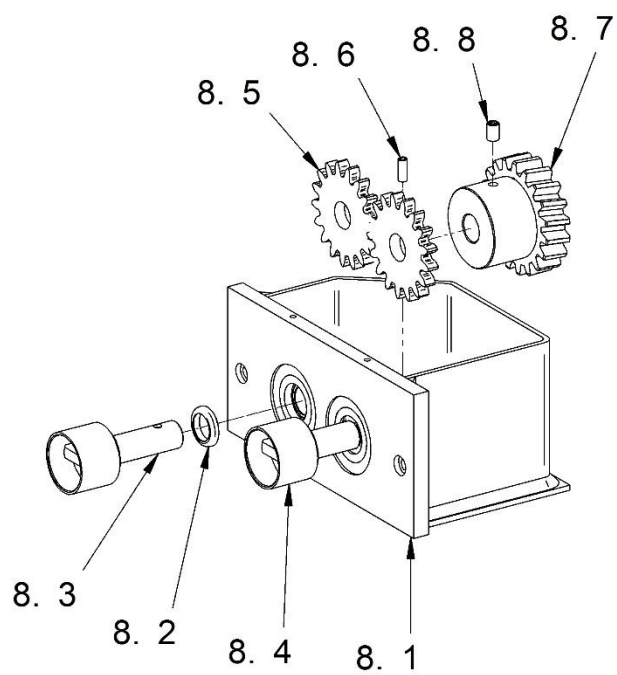


Wiring Diagram – 220 V 50 Hz



Exploded Drawing





Spare Part List

Position	Code	Description	Quantity
1	BAS157	Base	1
2	EIX162	Nozzle Axis	2
3	CJT503	Welded Protection Rolls	1
4	SBT148	Rollers Drawer	1
5	TAP100	Front Cover	1
6	SBT147	Front Rollers Support	1
7	MTE327	Electric Motor Voltage 127V 60Hz	1
	MTE321	Electric Motor Voltage 220V 60Hz	1
	MTE328	Electric Motor Voltage 220V 50Hz	1
8	CJT1186	Gearbox	1
8.1	CCC011	Box	1
8.2	RET011	Retainer	2
8.3	CJT536	Driven Shaft	1
8.4	CJT535	Driver Shaft	1
8.5	EGG086	Gear	2
8.6	PRN012	Grub Screw	2
8.7	CJT740	Driving Gear Set	1
8.8	PRN003	Grub Screw	1
9	TAP101	Cover Gearbox	1
10	SPD061	Motor Spacer	4
11	SPD062	Foot Spacer	6
12	EGG014	Worm Gear	1
13	PRS062	Hex Screw	4
14	CRC1500	Heat directing plate	1
15	POS002	Hex Nut	1
16	GAB299	Cabinet	1
17	POC006	Nut Cap	2
18	RLO016	Roll 1 Stainless Steel with Washer	1
19	RLO017	Roll 2 Stainless Steel	1
20	PTE004	Comb	2
21	RBT004	Rivet	4
22	MNL014	Handle	2
23	MNL009	Handle Short Reversal	1
24	TAP102	Superior Cover	1
25	PCC013	Round Screw	2
26	ARL003	Flat Washer	2
27	PEP010	Foot Rubber with Nut	6
28	TCE023	Equipotential Terminal	1
29	ORG002	O'Ring	1
30	PRS007	Hex Screw	2
31	PCC005	Machine Screw	2

Spare Part List

Position	Code	Description	Quantity
32	POS138	Hex nut	2
33	RBT001	Rivet	3
34	CHE166	On / Off Switch	1
35	ARL010	Flat Washer	2
36	ARL004	Flat Washer	11
37	POS018	Hex nut	8
38	BCH004	Eyelets Rubber	1
39	CBE023	Electrical Cable – PAC220M50N1	1
	CBE029	Electrical Cable – PAC220M50N2	
	CBE001	Electrical Cable – PAC110M60N4	
	CBE030	Electrical Cable – PAC220M60N4 / PAC220M60N4	
	CBE179	Electrical Cable – PAC110M60N7	
	CBE282	Electrical Cable – PAC110M60N8	
40	TCE073	Press Cable	1
41	ARP001	Pressure Washer	1
42	PTC177	Reverser Handle Protection	1
43	----	Electrical Cables and Connectors	----
43.1	TCE013	Female Terminal	1
43.2	TCE004	Fit Terminal	4
43.3	CBE199	Electrical Cable Amendment	1

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CNPJ 11.193.347/0001-14 - CREA 131726-3

Rod. Antônio Heil – KM 23 Nº 5825 – Limoeiro

CEP 88352-502 - Brusque – SC – Brazil

Phone/fax. +55 47 3251-5555 - Site: www.metvisa.com.br

E-mail: sac@metvisa.com.br - export@metvisa.com.br - export2@metvisa.com.br



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