



INSTRUCTION MANUAL

MEAT GRINDER

Models

PCP-10L

PCP-22L

34977.1- Março/2011



METALURGICA SIEMSEN LTDA.
Rua Anita Garibaldi, nº 262 – Bairro: São Luiz – CEP: 88351-410
Bosque – Santa Catarina – Brasil
Fone: +55 47 3211 6000 / 3255 2000
Fax: +55 47 3211 6020 / 3255 2020
www.siemsen.com.br - comercial@siemens.com.br



E-mail: at@siemens.com.br

- ALÉM DESTAS MÁQUINAS, FABRICAMOS UMA LINHA COMPLETA DE EQUIPAMENTOS. CONSULTE SEU REVENDEDOR.
- ESTE PRODUTO CONTA COM ASSISTÊNCIA TÉCNICA, REPRESENTANTES E REVENDEDORES EM TODO TERRITÓRIO NACIONAL.
DEVIDO À CONSTANTE EVOLUÇÃO DOS NOSSOS PRODUTOS, AS INFORMAÇÕES AQUI CONTIDAS PODEM SER MODIFICADAS SEM AVISO PRÉVIO.

5.2.1 Plate and knife sharpening

Well-sharpened plates and knife will make machine to work with less effort and consequently all components will last longer. Therefore call your nearest technical assistant to sharpen plates and knife periodically.

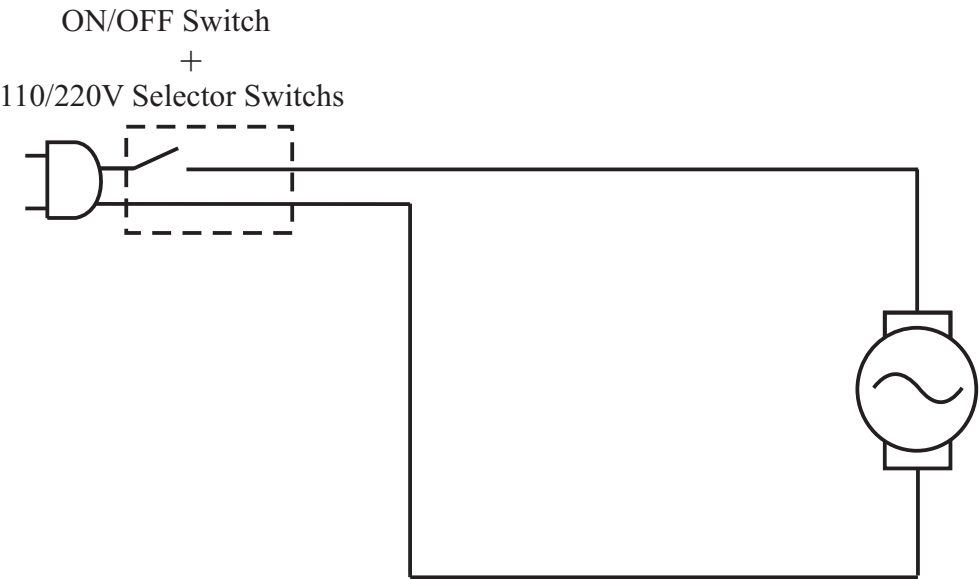
5.2.2 Gear Box

The Meat Grinders models PCP-10L and PCP-22L have gear box lubricated with oil.

To keep your machine in good conditions for a long time check oil level at every 5.000 hours of use. Take your machine to the nearest technical assistant to do this job.

Use 250 ml of oil each time you need to refill gear box. The following oils are recommended: SAE140,APIGL-4 or ANP1006.

5.3 Electric Diagram Mod. PCP-10L and PCP-22L



SUMMARY

1. Introduction	2
1.1 Safety	2
1.2 Main Components	2
1.3 Technical Characteristics	4
2. Installation and Pre Operation	4
2.1 Installation	4
2.2 Pre Operation	4
3. Operation	5
3.1 Grind Device Assembling	5
3.2 Operating Procedures	6
3.3 Starting	6
3.4 Cleaning	6
4. General Safety Practices	8
4.1 Basic Operation Procedures	8
4.2 Safety Procedures and Notes Before Switching the Machine On	9
4.3 Routine Inspection	9
4.4 Operation	10
4.5 After Finishing the Work	10
4.6 Maintenance	10
4.7 Advices	10
4.8 Safety System	10
5. Analyses and Problem Solving	11
5.1 Problems, Cause and Solutions	11
5.2 Components Adjustment and Replacement	12
5.3 Electric Diagram Mod. PCP-10L and PCP-22L	12

1. Introduction

1.1 1.1Safety

When not properly used the Meat Grinders Models PCP-10L and PCP-22L can be potentially DANGEROUS. Servicing, cleaning or any other operation shall be made by trained people.

The following instructions must be observed in order to avoid accidents:

1.1.1 Always unplug the machine when cleaning, servicing or when any other operation is needed.

1.1.2 Never use tools that do not belong to the machine during operation.

1.1.3 Before switching the machine on check if the Grinding Device N°02 (Pic.01) is firm in its position, if all its internal components are assembled as well as if the Pan N°04 (Pic.01) is mounted.

1.1.4 Never spray water or other liquid substances directly at motor, power switch or any other electrical components.

1.1.5 Never use loosen clothes specially shirts with loosen sleeves during operation.

1.1.6 Never put your fingers or any other object but the Stumper N°01 (Pic.01) inside feeding throat.

1.1.7 Keep hands off turning parts.

1.1.8 Never switch the machine on with wet clothes or wet shoes.

1.1.9 Before using the machine make use it is properly grounded.



1.2 Main Components:

All components are made with carefully selected materials, in accordance with Siemens experience and standard testing procedures.

The Barrel N°01 (Pic.02) and the Worm N°03 (Pic.02) receive a superficial treatment to isolate and facilitate cleaning.

Knife and discs are made of hardened material to provide a long life cutting quality.

5. Analysis and Problems Solving

5.1 Problem, causes and solutions

The Meat Grinders were designed to operate with the need of minimum maintenance but the natural wearing caused by longer use of the equipment may occasionally cause some malfunctions.

If such problem occurs with your Meat Grinder refer to Table 02 in which the most common situations are listed with recommended solutions.

Table 02

* The processed meat comes out smashed.	* One of the Barrel internal components is missing or they	* Check the correct assembling order according to Picture – 02.
	* Plate or knife unsharpened.	* Consult item 5.2.1 in this Manual.
* The Grinding Device stops during operation.	* Lack of power.	* Check if machine is plugged in and if there is power at power supply source.
	* Problem in the internal or external electric circuit of the machine.	* Call technical assistance.
	* Worn out or broken gears.	* Call technical assistance.
* Burn smell and/or smoke.	* Motor or other electrical part with problem.	* Call technical assistance.
* The machine starts but Barrel internal components take some time to start turning.	* Motor capacitor.	* Call technical assistance.
* Strange noises.	* Barrel internal components out of place.	* Assemble Barrel internal components correctly.
	* Gears misaligned.	* Call technical assistance.
* Oil leaking through gear box.	* Damaged seal.	* Call technical assistance.

4.4 Operation

4.4.1 Advice

Be sure your hair is not loose in order to avoid getting caught by turning parts which could lead to a serious accident. Tie your hair well up and/or cover your head with a scarf.

The operation performed by not trained or skilled personnel shall be forbidden.

Never touch turning parts with your hands or in any other way.

NEVER operate machine without all original safety devices under perfect conditions.

4.5 After Finishing The Work

4.5.1 Precautions

Always TURN THE MACHINE OFF by removing the plug from the socket before cleaning the machine. Never clean the machine unless it has come to a complete stop. Put all components back to their functional positions before turning it ON again. Check level of oil. DO NOT place your fingers in between belts and pulleys nor chains and gears.

4.6 Maintenance

4.6.1 Danger

Any maintenance with the machine in working situation is dangerous. TURN IT OFF BY PULLING THE PLUG OFF THE SOCKET DURING MAINTENANCE.

IMPORTANT

Always unplug the machine when emergency cases arise.

4.7 Advice

Electrical or mechanical maintenance must be done by qualified personal for such operation.

Person in charge has to be sure that the machine is under TOTAL SAFETY conditions when working.

4.8 Safety System

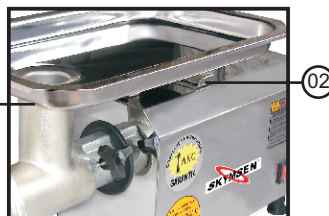
The Meat Grinders have been equipped with a safety system approved by Brazilian ABNT NBR 13767:2002 Norm, in order to avoid the grinder operation when the Pan is taken away.

SIEMSEN has developed a system to at the same time obey the Norm and allow an easy operation of the machine. In case the Pan is taken away the ON/OFF Switch will not be able to switch ON the machine. To allow the machine to operate again, it will be necessary to replace and to fit the Pan on its due place, to restore the machine.

To withdraw the Pan, ALWAYS WITH THE ON/OFF SWITCH TURNED OFF, just lift the front part of the Pan (N°01), where hole is located, and drag it rearwards. The ON/OFF Switch will remain out of use (see picture below).

To replace the Pan, ALWAYS KEEPING THE ON/OFF SWITCH TURNED OFF, just place the Pan support onto the activating pin, drag The Pan forward and introduce the hole in the feeding throat.

When withdrawing or replacing the Pan, it is important to watch how the Pan is fitted into the feeding throat, as well as the fitting of the Pan Support N°02 on the Motor Housing (see picture below).



Picture – 01



- 1- Stumper
- 2- Barrel
- 3- Locking Ring
- 4- Pan
- 5- Motor Housing
- 6- ON/OFF Switch
- 7- Switch Selector

Characteristics	Unit	PCP-10L	PCP-22L
Average Production	[kg/h]	200	300
Voltage (*)	[V]	110 /220	110/220
Frequency(*)	[Hz]	50 or 60 (*)	50 or 60 (*)
Power Rating	[HP]	0,5	1
Consumption	[kW/h]	0,4	0,8
Height	[mm]	340	380
Width	[mm]	312	350
Depth	[mm]	650	730
Net Weight	[kg]	29	32
Gross Weight	[kg]	33	37

(*) Frequency will be only one, indicated on motor characteristics label.

2. Installation and Pre Operation

2.1 Installation

The Meat Grinder must be installed onto a leveled and stable surface, preferably 850mm high from floor.

Before plugging in the machine check the voltage of the power supply source: 110 or 220 V. Then adjust the machine voltage according to the power supply voltage using the Voltage Selector Switch located at rear of machine. Move the Voltage Selector Switch to the desired voltage 110 or 220V.

Grounding is mandatory.

2.2 Pre Operation

IMPORTANT

Do not tighten the Locking Ring too much when assembling the Grinding Device as an excessive pressure on the hole plate and knife may lead to their abnormal wear.

First of all check if the machine is firm in its position. Before operation all parts that get in contact with food must be washed with running water and neutral soap. For doing that follow the below steps:

2.2.1 Remove the Stumper N°01 (Pic.01) and the Pan N°04 (Pic.01).

2.2.2 Remove the Locking Ring N°03 (Pic.01) and then pull out of the Barrel all the internal components.

2.2.3 Holding the Barrel N°02 (Pic.01) loosen locking knob located on the right side of the Barrel and move it left and right pulling it out at the same time.

4.2 Safety Procedures and Notes Before Switching Machine ON

IMPORTANT

Carefully read ALL INSTRUCTIONS of this manual before turning the machine ON. Be sure to be familiar with the instructions and that you have well understood all information contained in this manual. If you have any question contact your supervisor or your nearest Dealer.

4.2.1 Danger

An electric cable or electric wire with damaged jacket or bad insulation could cause electrical shocks as well as electrical leak. Before use, check conditions of all wires and cables.

4.2.2 Advices

Be sure ALL INSTRUCTIONS in this manual have been thoroughly understood. Every function and operational procedure have to be very clear to the operator. Contact your nearest Dealer for further questions.

Any manual command (switch, button or lever) shall be given only after being sure it is the correct one.

4.2.3 Precautions

The electric cable has to be compatible with the power required by the machine. Cables touching the floor or close to the machine need to be protected against short circuits.

Oil reservoir has to be full up to the required level as indicated. Check level and add oil if necessary.

4.3 Routine Inspection

4.3.1 Advice

When checking the tension of the belts or chains, DO NOT introduce your fingers between the belts and the pulleys and nor between the chain and the gears.

4.3.2 Precautions

Check if motors and sliding or turning parts of the machine produce abnormal noises.

Check the tension of the belts and chains and replace the set when belt or chain show signs of being worn out.

When checking tensions of belts or chain DO NOT introduce your fingers between belts and pulleys, nor between the chains and gears.

Check protections and safety devices to make sure they are working properly.

4. General Safety Practices

IMPORTANT

If any item from the **GENERAL SAFETY NOTIONS** section is not applicable to your product, please disregard it.

The following safety instructions are addressed to both the operator of the machine as well as the person in charge of maintenance. The machine has to be delivered to the operator in perfect conditions of use by the Distributor to the user. The user shall operate the machine only after being well acquainted with the safety procedures described in the present manual. **READ THIS MANUAL WITH ATTENTION.**

4.1 Basic Operation Practices

4.1.1 Dangerous parts

Some parts of the electric devices are connected to high voltage points. These parts when touched may cause severe electrical shocks or even be fatal.

Never touch commands such as buttons, switches and knobs with wet hands, wet clothes and/or shoes. By not following these instructions operator could be exposed to severe electrical shocks or even to a fatal situation.

4.1.2 Warnings

The operator has to be well familiar with the position of ON/OFF Switch to make sure the Switch is easy to be reached when necessary. Before any kind of maintenance, physically remove plug from the socket.

Provide space for a comfortable operation thus avoiding accidents.

Water or oil spilled on the floor will turn it slippery and dangerous. Make sure the floor is clean and dry.

Before giving any manual command (switch, buttons, turn keys or lever) be sure the command is the correct one. Check this manual for further details if necessary.

Never use a manual command (switch, buttons, lever) unadvisedly.

If any work is to be made by two or more persons, coordination signs will have to be given for each operation step. Every step of the operation shall be taken only if the sign has been made and responded.

4.1.3 Advices

In case of power shortage, immediately turn the machine OFF.

Use recommended or equivalent lubricants, oils or greases.

Avoid mechanical shocks as they may cause failures or malfunction.

Avoid penetration of water, dirt or dust into mechanical or electrical components of the machine.

DO NOT modify original characteristics of the machine.

DO NOT remove, tear off or maculate any labels stuck on the machine. If any label has been removed or is no longer legible, contact your nearest dealer for replacement.

READ CAREFULLY AND WITH ATTENTION THE SAFETY OR OPERATION INSTRUCTIONS LABELS DISPLAYED ON THE MACHINE, AS WELL AS THE INSTRUCTION MANUAL AND THE TECHNICAL CHARACTERISTICS WRITTEN INSIDE.

3 Operation

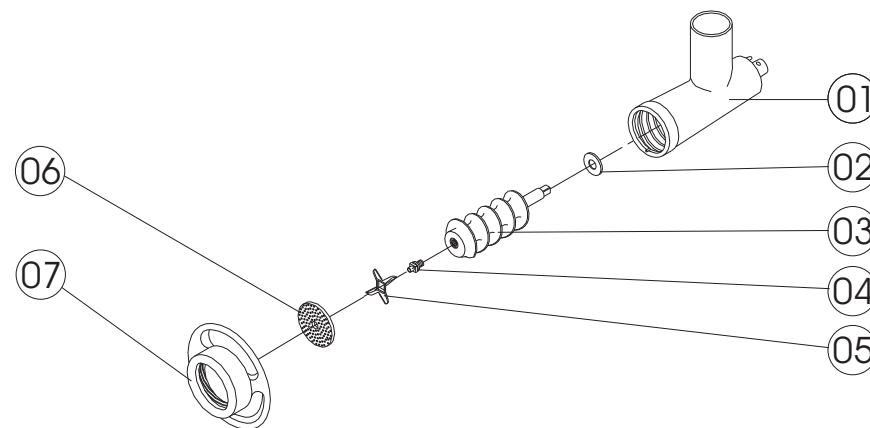
3.1 Grinding Device Assembling

IMPORTANT

Note the correct position of each Barrel internal component. Assembling the components in a different order could cause serious damages to the Grinding Device.

To assemble or disassemble the Barrel internal components follow the below sequence:

Picture - 02



- 01- Barrel
- 02- Fiber Washer
- 03- Worm
- 04- Worm Pin
- 05- Knife
- 06- Plates 3mm, 5mm or 8mm (optional)
- 07- Locking Ring

3.2 Operating Procedures

IMPORTANT

Under no circumstances use your hands or any other kind of instrument to push meat into the feeding throat. Use only the Stumper N°01 (Pic.01) to do this operation.

The processed meat has the function of lubricating the Barrel internal components. Therefore do not run the machine without load, as it would warm up and damage the internal components.

The Meat Grinders Models PCP-10L and PCP-22L are relatively fast machines, therefore they need equally be fed.

To feed the Meat Grinders place pieces of meat on the Pan N°04 (Pic.01) and drive them with your hand towards the feeding throat entry only, then use the Stumper N°01 (Pic.01) to push them into the feeding throat where they will be sucked in.

3.3 Starting

IMPORTANT
The machine will start only if Pan is in its right position.

Be sure that the Barrel internal components are assembled correctly as per order indicated on Picture – 02.

The machine is activated by pushing the ON/OFF Switch N°06 (Pic.01) located on the Motor Housing right hand side.

IMPORTANT
Always switch the machine off before removing the Grinding Device. The machine is silent. Do not leave utensils such as: knives, forks and similar on the Pan.

3.4 Cleaning

To do cleaning proceed as follows:

- 3.4.1 Switch the machine off and unplug the machine from power supply source.
- 3.4.2 Remove the Locking Ring N°07 (Pic.02) and all the Barrel internal components.
- 3.4.3 Loosen locking knob located on the right side of the Barrel N°01 (Pic.01).
- 3.4.4 Wash all components with running warm water and neutral soap.
- 3.4.5 To assemble the Grinding Device follow the above sequence inversely.

IMPORTANT
Do not store the Grinding Device with food inside.

3.4.1 Cautions with Stainless Steel:

The Stainless Steel may present rust signs, which ARE ALWAYS CAUSED BY EXTERNAL AGENTS, especially when the cleaning or sanitization is not constant and appropriate.

The Stainless Steel resistance towards corrosion is mainly due to the presence of chrome, which in contact with oxygen allows the formation of a very thin protective coat. This protective coat is formed through the whole surface of the steel, blocking the action of external corrosive agents.

When the protective coat is broken, the corrosion process begins, being possible to avoid it by means of constant and adequate cleaning.

Cleaning must always be done immediately after using the equipment. For such end, use water, neutral soap or detergent, and clean the equipment with a soft cloth or a nylon sponge. Then rinse it with plain running water, and dry immediately with a soft cloth, this way avoiding humidity on surfaces and especially on gaps.

The rinsing and drying processes are extremely important to prevent stains and corrosion from arising.

IMPORTANT
Acid solutions, salty solutions, disinfectants and some sterilizing solutions (hypochlorites, tetravalent ammonia salts, iodine compounds, nitric acid and others), must be AVOIDED, once it cannot remain for long in contact with the stainless steel:

These substances attack the stainless steel due to the CHLORINE on its composition, causing corrosion spots (pitting).

Even detergents used in domestic cleaning must not remain in contact with the stainless steel longer than the necessary, being mandatory to remove it with plain water and then dry the surface completely.

Use of abrasives:

Sponges or steel wool and carbon steel brushes, besides scratching the surface and compromising the stainless steel protection, leave particles that rust and react contaminating the stainless steel. That is why such products must not be used for cleaning and sanitization. Scrapings made with sharp instruments or similar must also be avoided.

Main substances that cause stainless steel corrosion:

Dust, grease, acid solutions such as vinegar, fruit juices, etc., saltern solutions (brine), blood, detergents (except for the neutral ones), common steel particles, residue of sponges or common steel wool, and also other abrasives.