



METALÚRGICA SKYMSSEN LTDA.
Rodovia Ivo Silveira, 9525 - Bateas
88355-202 - Brusque - Santa Catarina
Caixa Postal 52
Fone: +55 47 3211 6000 - Fax: +55 47 3211 6020
www.skymssen.com - comercial@skymssen.com

61699.0 - INGLÊS

Data de Revisão: 20/05/2019

- BESIDES THIS EQUIPMENT, A COMPLETE RANGE OF OTHER PRODUCTS ARE MANUFACTURED
- CONSULT OUR DEALERS DUE TO THE CONSTANT IMPROVEMENTS INTRODUCED TO OUR EQUIPMENTS
- THE INFORMATION CONTAINED IN THE PRESENT INSTRUCTION MANUAL MAY BE MODIFIED WITHOUT PREVIOUS NOTICE

WWW.SKYMSSEN.COM

INSTRUCTION MANUAL



STAINLESS STEEL MEAT GRINDER, HEAD 98

MODEL
PSP-98T

SUMMARY

1. Introduction.....	3
1.1 Safety	3
1.2 Main Components	5
1.3 Technical Characteristics	6
2. Installation and Pre Operation	7
2.1 Installation	7
2.2 Pre Operation	9
3 Operation.....	10
3.1 Starting.....	10
3.2 Feeding Procedures	10
3.3 Safety System	11
3.4 Head Internal Components Assembling	11
3.5 Cleaning and Sanitizing	12
3.6 Cautions with Stainless Steel	12
4. General Safety Practices.....	14
4.1 Basic Operation Practices.....	14
4.2 Safety Procedures and Notes before Switching the Machine ON	15
4.3 Routine Inspection.....	16
4.4 Operation	16
4.5 After Finishing The Work.....	16
4.6 Maintenance	17
4.7 Warning.....	17
5. Analysis and Problems Solving	18
5.1 Problem, causes and solutions.....	18
5.2 Adjustment and Components Replacement	18
6. Applicable Norms.....	20
7. Maintenance.....	20
8. Electric Diagram.....	22

7. Electric Diagram

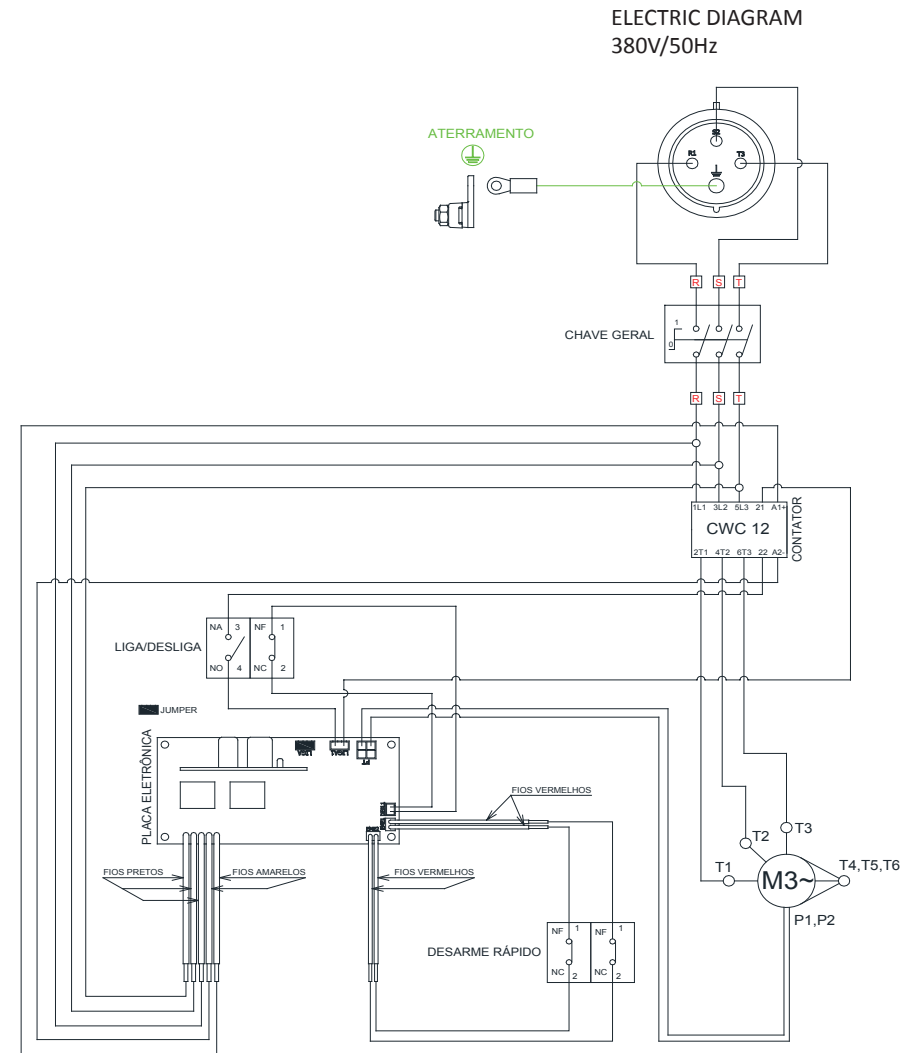


TABLE 02

PROBLEM	CAUSES	SOLUTIONS
The machine does not switch on.	Lack of power. Problem with the electric circuits	Check if machine is plugged in and if there is power in the power supply source. Call technical assistance
Smoke smell or smoke.	Problem in the electric circuit.	Call technical assistance.
The machine switches ON but when the product is placed, the motor stops or turns to slow.	Problem with the electric motor.	Call technical assistance.
Power cord damaged.	Damage during transportation.	Call technical assistance.
Abnormal noises	Problem with the bearing	Call technical assistance.

1. Introduction

1.1 Safety

This equipment has been developed to grind boneless and not frozen meat. When incorrectly used this equipment is a potentially DANGEROUS machine. Maintenance, cleaning or any other service shall be performed by a duly trained person and with the machine unplugged.

To avoid accidents respect the following instructions:

1.1.1 Read all the instructions.

1.1.2 In order to avoid the risk of electric shocks and damage to the machine, never operate it wearing wet clothes or shoes, install the equipment on a wet or humid surface nor dip it in water or any other liquid, and do not spray water directly on it.

1.1.3 The use of the equipment must be always supervised specially when used next to children.

1.1.4 Before cleaning and when not in use or before inserting or removing accessories, maintenance, or other services, disconnect machine from power source.

1.1.5 Do not use the equipment if the cord or the plug is damaged. Do not leave the electric cable on the edge of the table or counter nor let it touch hot surfaces.

1.1.6 Do not use the equipment if it is not working correctly, nor if it has been damaged in any way. In case that happens, take the equipment to the nearest Technical Assistance to check it up.

1.1.7 The use of accessories not recommended by the manufacturer may cause personal hurt.

1.1.8 Keep your hands or any tool out of the machine while operating to avoid personal hurt or any damage to the equipment.

1.1.9 During operation, never wear loose clothes with wide sleeves principally around the wrists.

1.1.10 Before switching the machine ON, check if the Head #02 (Pic. 01) is firm in its position and if all internal components are correctly assembled as shown in Picture 04.

1.1.11 This equipment has been designed to be used in commercial kitchens, such as: restaurants, cafeterias, hospitals, bakeries, butcheries and so on.

This equipment is not recommended to be used:

- when continuous industrial production is necessary.
- work place has a corrosive or explosive atmosphere or it is contaminated with steam, dust or gas.

IMPORTANT

For the operator safety this equipment has a safety system not allowing to be accidentally started after an eventual electricity failure.

IMPORTANT

**Make sure the cord is in perfect conditions for use. If it is not, change it for a new one in accordance with the technical specifications and safety rules.
The substitution shall be made by a qualified professional, and shall respect the local safety norms.**

IMPORTANT

This equipment must not be used by children or any persons with reduced physical or mental aptness, lack of experience or knowledge, unless they are under supervision or have received from the person responsible for safety proper instructions on how to use the equipment.

IMPORTANT

Perforated plates with an oval shape or a bigger diameter than the originals must not be used.

IMPORTANT

Children shall be watched in order to avoid them to play with the equipment.

IMPORTANT

In case of emergency, take the plug of from its socket.

IMPORTANT

Never spray water directly on to the equipment.

5. Analysis and Problems Solving

5.1 Problem, causes and solutions

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

6. Applicable Norms

Brazilian Norm ABNT NBR NM 60335-1

IEC Norm 60335-2-64

When checking the tension of belts or chains DO NOT insert your fingers between belts and pulleys, nor between the chains and gears.
Check protections and safety devices to make sure they are working properly.

4.4 Operation

4.4.1 Warnings

Do not use the machine with long hair that could touch any part of the machine. This might lead to a serious accident. Tie your hair up well and/or cover it with a scarf.
Only trained or skilled personnel shall operate this machine.
Never touch turning parts with your hands or any other way, NEVER operate the machine without any original safety devices under perfect conditions.

4.5 After Finishing The Work

4.5.1 Precautions

Always TURN THE MACHINE OFF before cleaning by removing the plug from the socket.
Never clean the machine unless it has come to a complete stop.
Put all the components back to their functional positions before turning the machine ON again.
Check the level of oil.
Do NOT insert 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 remove the plug from the socket in any emergency situation.

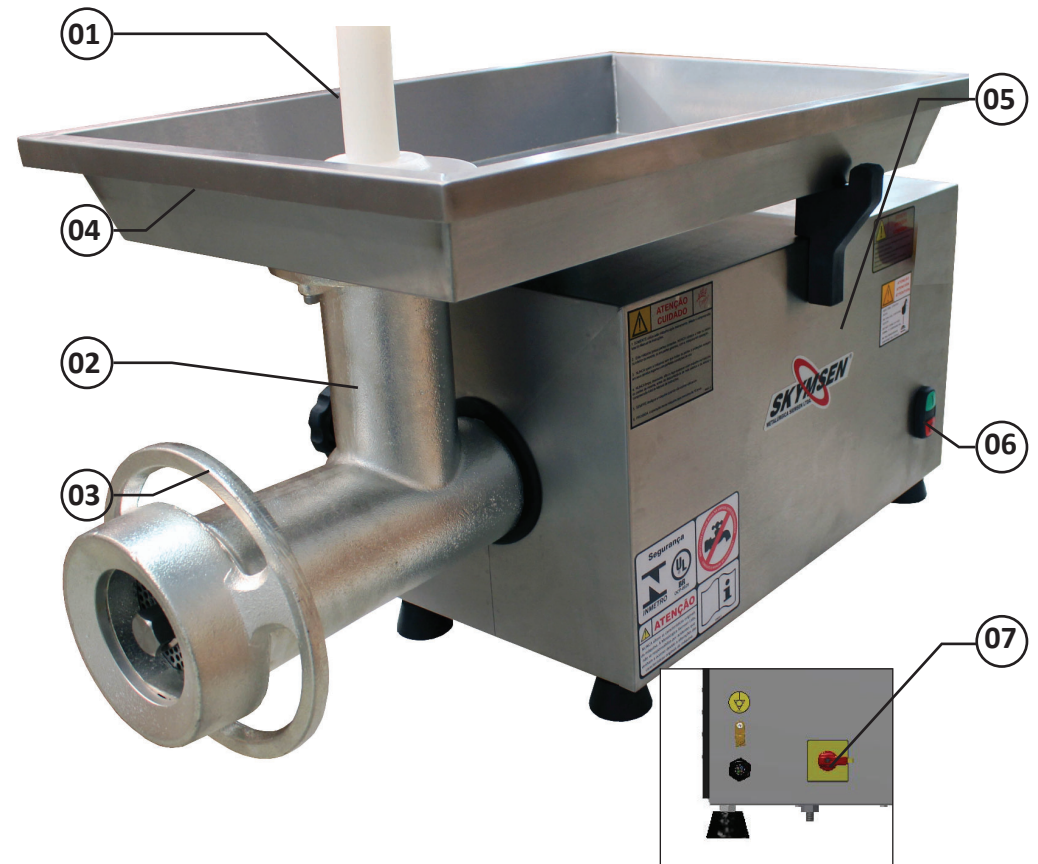
1.2 Main Components

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

The Head #02 (Pic.01) and the Worm #03 (Pic.04) receive a superficial treatment to isolate and facilitate cleaning.

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

PICTURE 01



01- Stumper
02- Head
03- Locking Ring
04- Pan

05- Motor Housing
06- ON/OFF Switch
07- General Switch

1.3 Technical Characteristics

TABLE 01

CHARACTERISTICS	UNIT	PS-98T
Average Production	kg/h	até 450
Voltage	V	380
Frequency	Hz	50
Power rating	W	1700
Height	mm	540
Width	mm	410
Depth	mm	830
Net Weight	kg	53,3
Gross Weight	kg	71,7

* DO NOT remove, tear off or maculate any safety or identification labels stuck on the machine. If any labels have been removed or are no longer legible, contact your nearest dealer for replacement.

4.2 Safety Procedures and Notes before Switching the Machine ON

IMPORTANT

Carefully read ALL INSTRUCTIONS of this manual before turning the machine ON. Be sure to well understand all the 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 might cause electrical shocks as well as electrical leak. Before use, check the conditions of all wires and cables.

4.2.2 Advices

Be sure to well understand all the information contained in this manual. Every operation function or procedure has to be thoroughly clear.

Before using any commands (switch, buttons, lever), be sure it is the correct one. In case of doubt, consult this manual.

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.

The oil reservoirs have to be filled until the indicated level. Check and refill if necessary.

OBSERVATION

For your own safety read all the machine stickers.

4.3 Routine Inspection

4.3.1 Advice

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

4.3.2 Precautions

Check the motor and sliding or turning parts of the machine in case of abnormal noises. Check the tension of the belts and chains and replace the set when belts or chains show signs of wearing.

4. General Safety Practices

IMPORTANT

If any recommendation is not applicable to your equipment, please ignore 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 only 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 Dangers

Some areas of the electric device have parts that are connected or have parts connected to high voltage. These parts when touched may cause severe electrical shocks or even be lethal.

Never touch manual commands such as switches, buttons, turning keys and knobs with your hands wearing wet clothes and/or wet shoes. By not following these instructions operator could be exposed to severe electrical shocks or even to a lethal 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 using any commands (switch, buttons, lever), be sure it is the correct one. In case of doubt, consult this manual.
- * Never touch any manual commands (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 a sign has been made and responded.

4.1.3 Advices

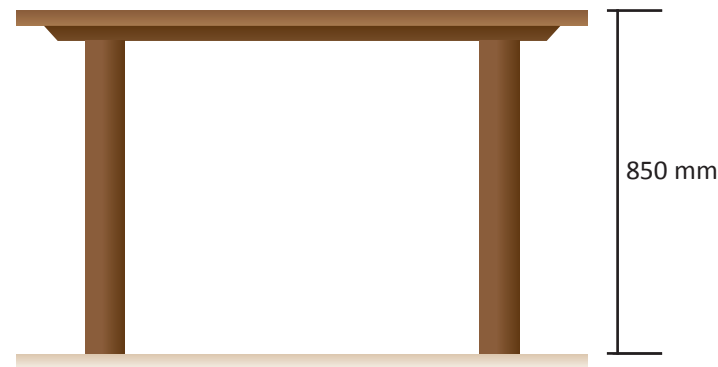
- * In case of power shortage, immediately switch the machine off.
- * Use recommended or equivalent lubricants, oils or greases.
- * Avoid mechanical shocks, once they may cause damages or bad functioning.
- * Avoid water, dirt or dust contact to the mechanical and electrical components of the machine.
- * **DO NOT** change the standard characteristics of the machine.

2.2 Installation and Pre Operation

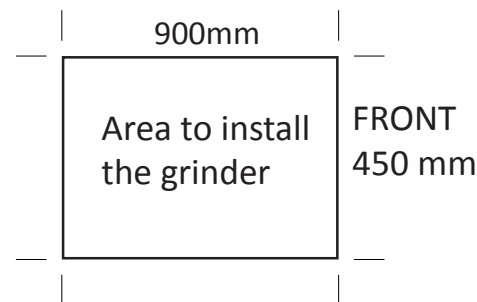
2.1 Installation

2.1.1 Placing

The Meat Grinder must be installed onto a leveled dry and firm surface, preferably 850 mm high.



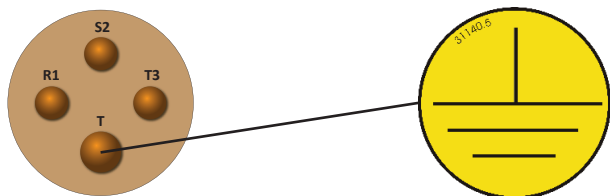
Blue print of the recommended area to install the equipment.



2.1.2 Electrical Installation

This equipment was developed to be used with 380 Volts (50Hz). Upon receiving the equipment, verify the voltage indicated on the cord label.

PICTURE 02



The cord has a plug with four round pins. One of them is the grounding pin. It is mandatory the three pins to be connected before starting to use the equipment.

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.

3.5 Cleaning and Sanitizing

IMPORTANT

Never clean the machine when it is connected to the power point, always unplug

The equipment shall be totally cleaned and sanitized:

- Before being used the first time;
- After every day's operation;
- When it has not been used during a long time;
- Before operating it after a long period unused.

Some parts of the equipment may be removed for cleaning , such as:

- Pan, Stumper, Head and its internal components
- Remove the Stumper #01 (Pic. 01) and the Pan #04(Pic.01) to facilitate the removal of the Head.
- To remove the Head, proceed as below:
 - Remove the Locking Ring #03(Pic.01) and then the Head internal components by pulling them out.
 - Holding the Head #02(Pic.01), loose the locking knob located on the left side of the machine, moving it alternately to the sides and forward.

IMPORTANT

Do not store the Head with product inside.

IMPORTANT

Never spray water directly to the equipment.

3.6 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.

IMPORTANT

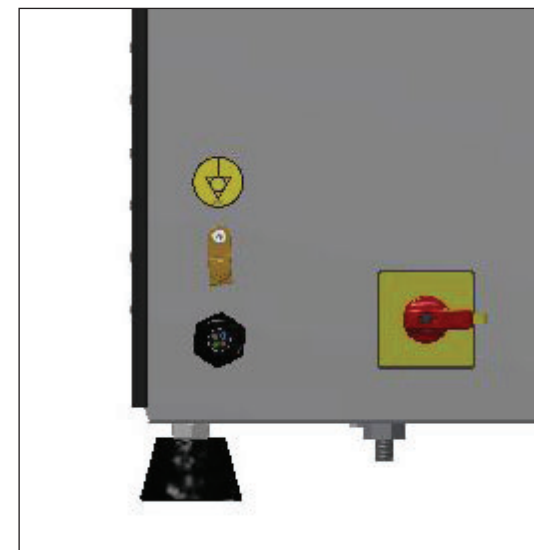
Make sure that the network voltage is the same as the machine voltage indicated on the label of the electrical cord.

The figure shown below indicates the external equipotential connection terminal.

This terminal must be used to make sure that there are no potential differences between equipment connected to the electric grid, lowering the risks of electric shocks.

The different equipments must be connected to each other through their respective terminals of equipotential connection.

PICTURE 03



2.2 Pre Operation

Before using your equipment, wash all the parts that get in contact with the processed food, with water and neutral soap. (Read item 3.5 Cleaning).

Verify if the equipment is stable in its working position.

IMPORTANT

When assembling the head, do not tighten the Locking Ring #03 (Pic. 01) too much to avoid the internal components to brake or being stuck.

3. Operation

3.1 Starting

IMPORTANT

Switch the machine OFF every time the Head must be removed. The equipment is silent. Do not leave any tools as knives, hooks and similar on the Pan.

Be assured the internal components of the Head are correctly assembled, as shown by Picture 04.

To start the machine, follow the instructions below:

- 1 – Place the plug of the machine in the electrical grid;
- 2 – Switch the General Switch #07 (Pic. 01) ON;
- 3 – Verify if the Pan #04 (Pic. 01) is correctly placed in its working position;
- 4 – Press the ON/OFF Switch #06 (Pic. 01) to position “I” to start the equipment.

3.2 Feeding Procedures

IMPORTANT

Under no circumstances use any kind of tool to push the product to be processed inside the Head, mainly not your hands. Only use the Stumper #01 (Pic. 01). The meat processing inside the Head will cool and lubricate the Head internal components. Therefore do not allow the machine to operate empty, because this way it will heat too much and damage its components.

The meat grinder is a high speed machine, therefore it needs a fast feeding.

To feed the machine, place the meat pieces on the Pan #04 (Pic. 01) and drive them with the hands only as far as the Pan mouth. Then, using the Stumper 01 (Pic. 01), push them inside the Head, where they will be drawn by the Worm.

3.3 Safety System

For your safety, this equipment has a security system that prevents its involuntary operation after an eventual electricity failure

IMPORTANT

This equipment has a security system to guarantee the operator integrity. The operation of this equipment must be performed as described in the item “Operation” of this manual. Other procedures to operate this equipment are not safe and must not be used.

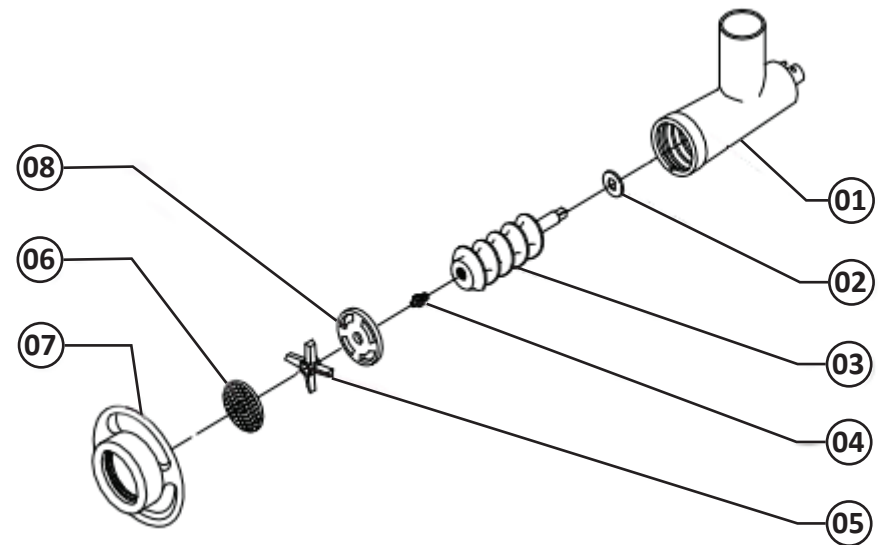
3.4 Head Internal Components Assembling

IMPORTANT

Note the correct position of each Head internal component. Assembling the components in a different order could cause serious damages to the Meat Grinder.

To assemble or disassemble the Head internal components, follow the below sequence:

PICTURE 04



- 01 - Head
- 02 - Fiber Washer
- 03 - Worm
- 04 - Worm Pin

- 05 - Double Knife
- 06 - Plate 5mm, (Optional 3mm e 8mm)
- 07 - Locking Ring
- 08 - Pre Cutting Plate