



Manual de Instruções

Mini Serra-Fitas para Ossos Modelos

MP/MPL

37123.8 - July/2011

SUMMARY

1.	INTRODUCTION	02
1.2	Safety Main Components Technical Characteristics	02
2.	INSTALLATION and PRE OPERATION	04
	Installation Pre Operation	
3.	OPERATION	05
3.2	Procedure for Operation Cleaning Cautions With Stainless Steel	05
4. (GENERAL SAFETY RULES	06
4.2 4.3 4.4 4.5 4.6	Operation Fundamentals Practices Cares and Observations before to Switch On the Saw. Routine Inspection. Operation. After the Work Ends. Maintenance Performance Advices.	08 08 09 09
5.	PROBLEMS ANALYSIS and SOLUTIONS	10
	Problems, Causes and Solutions	
	Adjustment and Components Replacement	

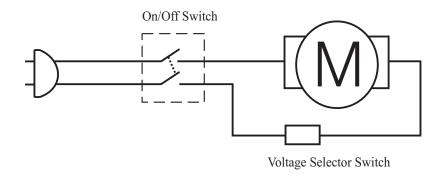
5.2.3 – Cut Regulator Adjustment

The Cut Regulator N°.12 (Pic.01) was developed to help user on the cutting task and to improve safety. Its main function is to provide cuts with the same thickness.

To adjust the Cut Regulator, follow the procedures below:

- Rotate the Maniple N°.16 (Pic.01) anti-clockwise to move the Cut Regulator.
- Using the Spherical Handle N°.17 (Pic.01), move the Cut Regulator horizontally upon the Steady Table N°.07 (Pic.01), increasing or decreasing the distance between the Regulator and the Blade, according to your necessity.
- Rotate the Handle clockwise to lock the Cut Regulator on the desired position.

5.3 Electric Diagram

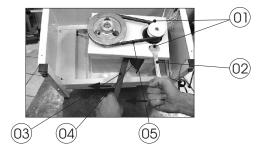


NOTE

When adjusting the belts, check the alignment of the pulleys.

Using a screw driver, unscrew the screws and remove the lower rear lid, to access the pulleys. Using a spanner (9/16") (N°.02 – Pic.12) release the screws N°.01 (Pic.05) turn them anti-clockwise. Then, using a wood lever N°.03 (Pic.05), push the motor N°.04 (Pic.05) in order to stretch the belts N°.05 (Pic.05), and retighten the screws N°.01 (Pic.05).

Picture - 05



5.2.2 – Upper Bearing Adjustment

The adjustment of the Upper Bearing N° .03 (Pic.06) is made in order to centralize the blade on the wheel, and to prevent it from skipping.

To adjust the Upper Bearing, proceed according to description below, keeping the machine disconnected from the power line:

- Loosen the Blade No.06 (Pic.01) by rotating the Handle No.01 (Pic.01) anti-clockwise.
- Take out the upper rear lid (12965.8), removing the screws using a Screw Driver.
- Loosen the three nuts N°.01 (Pic.06) with a 10 mm spanner.
- Using a screw driver, rotate the screw (N°.02 Pic.06) ¼ of a turn anti-clockwise, if it is dislocated frontwards. If it is dislocated backwards, rotate the Screw ¼ of a turn clockwise.
- Tighten the three nuts N°.01 (Pic.13), previously loosen.
- Calibrate the blade according to description on 2.2 Pre-Operation (Page 05).
- Manually rotate the Wheel and check if the Blade is centralized on it. Proceed like this until the blade is centered.

Picture - 06



1. Introduction

1.1Safety

When misused, the Mini Band Saws models MP and MPL can be potentially DANGEROUS. Maintenance, cleaning or any other service on this machine must be made only by properly trained technicians and the power plug must always be disconnected. For your safety, read the following instructions in order to avoid accidents:

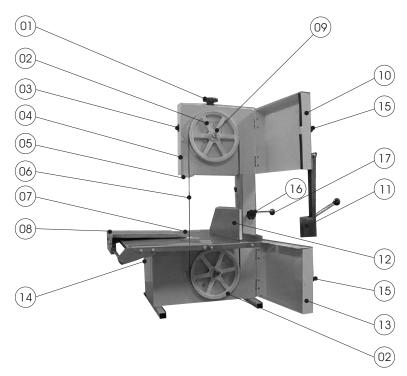
- 1.1.1 Unplug the machine when you need to remove any removable part during cleaning, maintenance or any other operation.
- 1.1.2 Never make use of any tool or instrument that is not originally part of the machine during any operation.
- 1.1.3 Never touch the band blade N°. 06 (Pic.01), even when the machine is off, because it has sharp edges.
- 1.1.4 Never adjust the cut regulator N°.12 (Pic.01) with the blade in movement.
 - 1.1.5 Never use water jets directly upon the machine.
- 1.1.6 Never use clothes with wide sleeves, especially on the wrists during the operation.
 - 1.1.7 Use steel gloves during the cut operation.
 - 1.1.8 Keep your hands away from movable parts.
 - 1.1.9 Never turn the machine on with the doors opened.
 - 1.1.10 When setting the machine, connect the ground wire.



1.2 Main Components

All components of this machine have been made of raw materials carefully selected for each function, according to the test patterns and Skymsen experience.

Picture - 01



- 01-Blade tension control knob
- 02-Wheel (Diameter 225)
- 03-ON/OFF Switch
- 04-Frame
- 05-Blade Guide
- 06-Blade (Width = $\frac{1}{2}$ ")
- 07- Steady table
- 08- Complete movable table (optional)

- 09-Staple
- 10-Upper door
- 11-Complete pusher (optional)
- 12- Complete cut regulator (optional)
- 13 Lower door
- 14- Voltage selector switch
- 15-Knurled Handle
- 16- Handle M8x30mm Stainless Steel.
- 17 Spherical Handle



11001011140		3000
The machine turns on, but when product gets in contact with the blade, it	* Skidding belt.	Adjust tension of belt
stops or spins in low rotation.	* Inappropriate blade tension.	* Calibrate the blade according to description on 2.2 Pre-operation (page 05)
Blade tears frequently	* Dirt on blade or	* Calibrate the blade according to description on 2.2 Pre-operation (page 05).
	* Defective flywheels	* Call Technical Assistance.
* Strange noise	* Skidding blade	* Call Technical Assistance.
	* Faulty ball bearings	* Change the blade.
Difficulty to cut the product.	* Incorrect blade welding	* Do the cleaning according to item (3.2 Cleaning Page 06).
	* Dirt on blade or flywheels	* Calibrate the blade according to description on 2.2 Pre-operation Page 05)
	* Blade out of center	* Adjust the Upper Bearing according to item 5.2.2 of this manual or, in a more serious case,
		call technical assistance.

Causas

Soluções

5.2 Adjustments and Replacement of Components

5.2.1 - Transmission Belts

Problemas

To obtain longer life for belts and a good performance of the machine, the belts must be perfectly adjusted. In case they are loose, they will skid during operation.

One must be careful not to over tighten the belts, because it may cause premature wearing of ball bearings.

To adjust the belt, proceed by following the instructions below:

5 Analysis and Problems Solving

5.1 Problems, causes and solutions

The Mini Band Saw MSK were designed to operate with minimum maintenance. However, some irregularities may occur during its operation, due to the natural wear out caused by the equipment use.

F there is any problem with your machine, check the Table-02 bellow, where you will find some possible solutions.

Table - 02

Problem	Cause	Solution
* The machine does not turn ON.	* Machine is not connected to a power point. * Power outage.	* Connect the electric cable to the power point * Check if there is Electric Power.
* Burnt smell or smoke	* Problem on the internal or external electric circuit of the machine.	* Call Technical Assistance.
		* Call Technical Assistance.

1.3 Thechinical Characteristcs

Tabela - 01

Characteristcs	Unit	MP (painted)	MPL (Stainless Steel)
Voltage	[V]	110 / 220	110 / 220
Frequency	[Hz]	50 ou 60 (*)	50 ou 60 (*)
Power Rating	[CV]	0,33/0,5	0,33/0,5
Consumption	[kW/h]	0,26/0,4	0,26/0,4
Height	[mm]	850	850
Width	[mm]	530	530
Depth	[mm]	530	530
Net Weight	[kg]	25,5	25,5
Gross Weight	[kg]	36	36
Maximum Cut Width	[mm]	210	210
Maximum Cut Height	[mm]	230	230

(*) The machine is equipped with a single frequency motor (50 or 60 Hz)

2. Installation and Pre-Operation

2.1 Installation

Mini Band Saws must be installed upon a stable working surface, preferably with 850 mm height. Check if the voltage of the power supply is the same as the one used on the machine (voltage selector switch N°. 14). If it is not, make sure to adjust it.

He power cord brings a plug with 3 (three) round pins, being that one of them is for the ground wire. It is mandatory that all these 3 pins are properly connected before turning the machine on.

Picture - 03

A = 1200mm (With cut regulator)

A = 700mm (Without cut regulator)

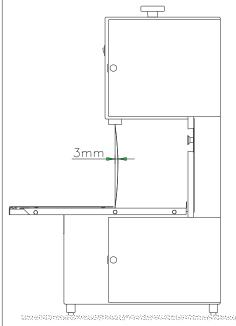


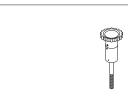
2.2 Pre-Operation

IMPORTANT

Make sure the blade is set with the correct tension before the operation, by rotating the Maniple N°.01 (Pic.01) clockwise. Use the drawing below to identify the correct tension of the blade.

Picture - 04





If the machine is equipped with the Blade Tension Calibrator (Code 13259.4 – optional accessory) turn it until it starts to trip. That's when the tension is properly set.determinada pelo fabricante.

Check if the Mini Band Saw is firm on its position. Before using it, all the parts in contact with the product must be cleaned with water and neutral soap. In order to easily remove the movable parts of the equipment, read carefully item 3.2 Cleaning – Page 6.

3. Operation

3.1 Procedure for Operation

IMPORTANT

Under no circumstances put your hands towards the blade to push the product to be cut. For your safety, wear steel gloves.

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.

4.4 Operation

4.4.1 Advice

conditions.

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

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.

 $\label{eq:Person} \textbf{Person in charge has to be sure that the machine is under TOTAL SAFETY conditions when working.}$

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 WELLAS THE INSTRUCTION MANUAL AND THE TECHNICAL CHARACTERISTICS WRITTEN INSIDE.

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

09

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.

With the machine turned off, adjust the optional Cut Regulator No.12 (Pic.01). To operate the Mini Band Saw, press the ON / OFF Switch No.03 (Pic.01). Place the product to be processed upon the Steady Table No.07 (Pic.01) or upon the optional Movable Table N°.08 (Pic.01), then push it towards the blade N°.06 (Pic.01) leaning it on the optional Cut Regulator No.12 (Pic.01), this way keeping the desired slice thickness. When pulling back the product, be careful so it does not touch the flat side of the blade, preventing it from getting out of the wheels. It is possible to make the cuts using only the Steady Table.

SKYMSEN Hint

In order to ease the sliding of the product to be processed upon the Steady Table. spray a thin layer of water on it.

3.2 Cleaning

To clean the machine, firstly disconnect it from the power point. All the parts that have contact with the meat must be cleaned.

Find below the description of the procedure to take down removable parts:

- 3.2.1 Remove the Upper Door No.10 (Pic.01) and the Lower Door No.13 (Pic.01) by pulling the Knurled Handle N°.15 (Pic.01) horizontally.
- 3.2.2 Loosen the blade N°.06 (Pic.01), by turning the optional Calibrator or the lade tension control knob N°.01 (Pic.01) anti-clockwise, and then remove it from the Upper and Lower Wheels
- 3.2.3 Remove the Staples N°.09 (Pic.01) which fix the Wheels and remove them by pulling them forward.
 - **3.2.4** Wash all the parts with hot water and neutral soap, drying them afterwards.
- 3.2.5 Never use sharp and hard objects, such as knifes, hooks, etc. to clean pieces of meat stuck to the machine. Use a plastic brush to do this cleaning.
- 3.2.6 To reassemble the machine, proceed by following the above instructions inverselv.

IMPORTANT

Put Vaseline on the wheel holes every 15 days. Pay attention to the blade position to avoid inversion. The teeth must be turned to the front of the machine with the inclination downwards.

3.3 CAUTIONS WITH STAINLESS STEEL

The Stainless Steel might present rust points, which are always caused by external agents, especially if the cleaning and sanitization is not constant and appropriate.

The Stainless Steel resistance towards corrosion is due to the Chrome, which in contact with the Oxygen provides the formation of an extremely thin protective coat. This protective coat is formed upon the entire surface of the steel, blocking the action of external agents that cause the corrosion.

When the protective coat is broken, the rusting process is started, and can be avoided by means of constant and appropriate cleaning.

The machine must be cleaned with water and neutral soap or detergent immediately after being used. The water and soap must be applied on a soft cloth or nylon sponge. Then rinse parts with running water and dry them immediately with a soft cloth, this way avoiding accumulation of humidity especially on the machine gaps.

The rinsing and drying are extremely important to avoid the surge of stains and corrosion.

IMPORTANT

Acid solutions, salty solutions, desinfectants and some sterilizing solutions (hypochlorite, tetravalent ammonia salts, iodine compositions, nitric acid, etc) must be avoided, because they do not stay long in contact with the stainless steel.

The above substances attack the stainless steel causing corrosion points (pitting) because they usually have Chlorine on their compositions.

Even the detergents used on domestic cleaning cannot remain in contact with the stainless steel beyond the necessary, and must be removed with water, and the surface must be completely dried afterwards.

Use of abrasives:

Sponges or steel wool, besides scratching the surface and compromising the protection, leave particles that rust and react contaminating the stainless steel. Therefore, such products must not be used for cleaning and sanitizing. Scrapings made with sharp instruments must also be avoided.

Main substances that cause corrosion of stainless steel:

Dust, grease, acid solutions such as vinegar and fruit juice, salty solutions (brine), blood, detergents (except neutral ones), ordinary steel particles, residue of sponges or steel wool and other abrasives.

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.

 $\label{lem:provide} Provide\,space\,for\,a\,comfortable\,operation\,thus\,avoiding\,accidents.$

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.

 $\label{lem:avoid mechanical shocks} A void mechanical shocks as they may cause failures or malfunction.$

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