



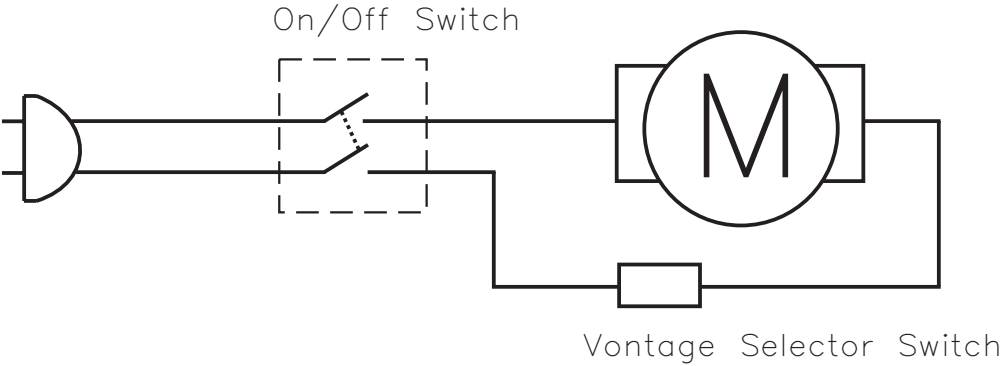
Instruction manual



Band Saw

SPA-218/218L

5.3 Switch on Diagram Mododel SPA-218/218L.



SUMMARY

1. INTRODUCTION.....	02
1.1 Safety.....	02
1.2 Main Components.....	02
1.3 Technical Characteristics	04
2. INSTALLATION and PRE OPERATION.....	04
2.1 Installation.....	04
2.2 Pre Operation	04
3. OPERATION.....	05
3.1 Operation Process.....	05
3.2 Cleaning	05
4. GENERAL SAFETY RULES.....	07
4.1 Operation Fundamentals Practices	07
4.2 Cares and Observations before to Switch On the Saw.....	08
4.3 Routine Inspection.....	08
4.4 Operation.....	09
4.5 After the Work Ends.....	09
4.6 Maintenance Performance	09
4.7 Advices.....	09
5. PROBLEMS ANALYSIS and SOLUTIONS.....	09
5.1 Problems, Causes and Solutions.....	09
5.2 Adjustment and Components Replacement.....	11
5.3 Electric diagram Model SPA-218/218L	12

1.INTRODUCTION

1.1 Safety

If and when the Bone Saws Mod. SPA-218/218L, are not correctly used , they are potentially DANGEROUS machines. Cleaning , maintenance and any other service in the machine shall be carried out by duly trained people, and with the plug off its socket. The instructions below, must be always followed to avoid ACCIDENTS:

- 1.1.1 Take the electric plug off its socket, before to withdraw any moving part , before cleaning, maintenance or any other kind of service.
- 1.1.2 Never use any kind of tools, not belonging to the saw to help cutting .
- 1.1.3 Never touch the blade N° 5 (Pic.01), even with the saw switched off, because the blade has sharp edges .
- 1.1.4 Never adjust the blade guide N° 4 (Pic.01), nor the cut regulator N° 10 (Pic.01) with the saw blade in movement .
- 1.1.5 Do not use water jets directly to the band saw
- 1.1.6 During cutting operation, never wear loose clothes with wide sleeves principally around the wrists .
- 1.1.7 Wear steel gloves during cutting operation .
- 1.1.8 Keep hands away from moving parts .
- 1.1.9 Never switch on the saw with any open doors N° 03 or N° 09 (Pic.01).



1.2 Main Components

All components are manufactured with carefully chosen raw materials in accordance with Siemens experience and testing standards .

5.2 Adjustment and Components Substitution

5.2.1 Belts

Keep the belts properly adjusted in order to guarantee the good functionality of the equipment. Loosen belts shall skid during its operation. There must be careful not to over press the belts, avoiding ball bearing premature wastage.

5.2.2 Blade regulation

With daily use the Band Saw model SPA-218/218L the Blade may suffer a light stretching, because the metal are of an elastic structure. Therefore check the Blade tension before starting to work . Turn clockwise the Blade Tension Regulator N°.01 (Pict.01) until the Blade is at the right working tension to work.

5.2.3 Cut Regulator Adjustment

The Cut Regulator (optional) has been developed to help cutting and for the operator safety. Its main purpose is to assure meat slices homogeneous thickness .

To adjust the Cut Regulator proceed as follows:

Turn the Knob counter clockwise to be able to move the Cut Regulator.

Move the Regulator horizontally in order to obtain the cutting thickness needed.

Finally, turn the Knob clockwise to block it at the desired position.

5.2.4 Blade Guide Adjustment

The Blade Guide shall be adjusted in accordance with the height of the product to be cut. Its purpose is to keep the Blade inflexible and perpendicular to the Table.

To adjust the Blade Guide the Blade must be still and the Band Saw switched off. Proceed as follows:

Turn the Knob counter clockwise to allow a vertical movement.

Adjust the Blade guide as near as possible to the upper height of the product to be cut. However the guide shall not impede the free product movement.

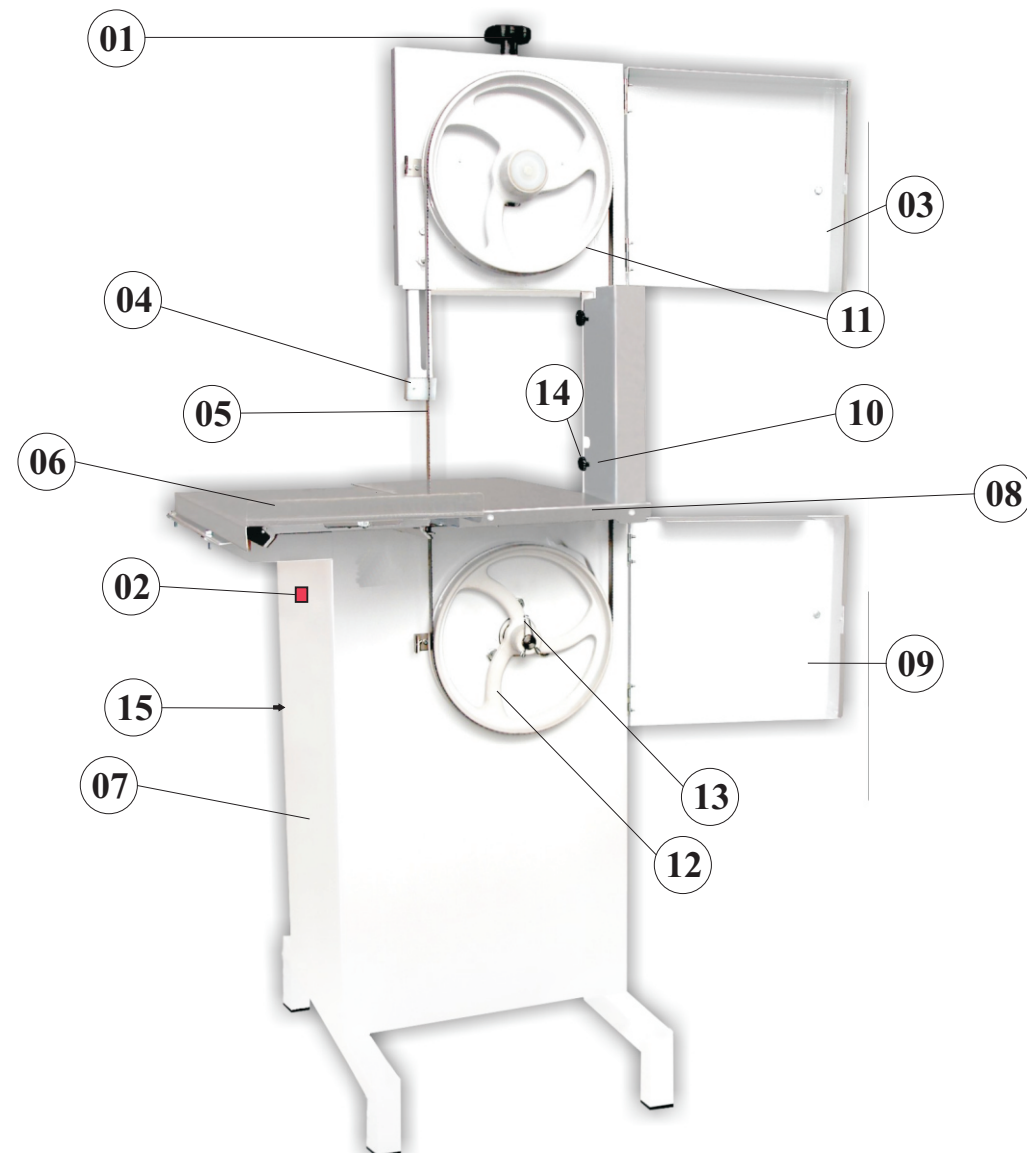
Finally, turn the Knob clockwise to block the Blade Guide at the desired height.

Table - 02
Causes

Solutions

<p>* The saw does not switch on.</p>	<p>* The saw plug is off its socket.</p> <p>* Lack of power.</p> <p>* Problem with circuits of the saw.</p>	<p>* Put the plug on its socket.</p> <p>* Check if there is electric power.</p> <p>* Call Authorized Technical Assistance.</p>
<p>* Steam or burn smell.</p>	<p>* Problem with the internal or external electric circuits of the saw.</p>	<p>* Call Authorized Technical Assistance.</p>
<p>* The machine switches on but when the product gets contact with the blade N°5(Pic.01) the machine stops or works with low speed rotation.</p>	<p>* Skid belts.</p> <p>* Starting capacitor of the motor with defect.</p>	<p>* Call Authorized Technical Assistance.</p>
<p>* Unusual noises.</p>	<p>* Blade slipping on wheels.</p> <p>* The blade is not correctly welded.</p>	<p>* Turn the blade tension regulator. See item 5.2.2.</p> <p>* Change the blade.</p>
<p>* The blade frequently tears.</p>	<p>* The blade or the wheels are dirty .</p> <p>* Fault wheels.</p>	<p>* Clean the saw according to item 3.2.</p> <p>* Change the wheels.</p>
<p>* Difficulty to cut the product.</p>	<p>* The blade or the wheels are dirty.</p> <p>* Wrong tension on the blade.</p> <p>* The blade is off the wheels center.</p> <p>* Blade blunt.</p>	<p>* Clean the saw according to item 3.2.</p> <p>* Regulate blade tension according to item 5.2.1.</p> <p>* Change the blade.</p>

Picture - 01



- 01. Blade stretching knob
- 02. On/off Switch
- 03. Upper Door
- 04. Blade Guide
- 05. Blade (5/8" width)
- 06. Movable Table
- 07. Support

- 08. Fixed Table
- 09. Lower Door
- 10. Cut Regulator (optional)
- 11. Upper Wheel
- 12. Lower Wheel
- 13. Loop
- 14. Cut Regulator Knob
- 15. Voltage Selector Switch

1.3 Technical Characteristics

Table - 01

Characteristics	Unit	SPA-218/218L
Voltage	V	110 / 220
Frequency	Hz	50 ou 60 (*)
Power Rating	CV	0,75 ou 1
Consumption	kW/h	0,55 ou 0,73
Height	mm	1500
Width	mm	625
Depth	mm	640
Net Weight	kg	67
Gross Weight	kg	82
Blade Length	mm	2180
Height x Cutting- Max. X Width	mm	260x263

** The Frequency will in accordance with the motor that the machine shall be equip.

2 INSTALLATION and PRE OPERATION

2.1 INSTALLATION

The bone saws must be installed over a firm working floor.

Check the electric network voltage, if it is 110 or 220 V. Following, settle the machine according to the network voltage through the voltage selector switch, located inside the machine through the rubber cover in the back of the machine.

The electric cord has two round pins and one earth wire. It is obligatory to have the 3 properly connected before using the machine..

IMPORTANT

Be sure that the Blade N° 05 (Pic.01) has the right tension before operating the saw, by turning clockwise the Blade Stretching Knob N°01 (Pic.01).

2.2 PRE OPERATION

First of all check if the Band Saw is firmly standing in its position . Before using it clean the Blade N° 05, Wheels N°11 and N°12 and Doors N° 03 and N° 09 (Pic.01), with water and neutral soap .

To adjust (stretch) the blade N° 05 (Pic.01), turn clockwise the Blade Stretching Knob N°01 (Pic.01).

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.

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.

5 Analysis and Problems Solving

5.1 Problem, causes and solutions

The Band Saws have been designed to need minimum maintenance, however, some performance failures may happen due mainly to natural worn out, caused by the use of the Saw.

If some problem arises with your Bone Saw, check Table - 02 in the next pages, where there are detailed some possible solutions.

Besides, the Company is ready to assist you through your Dealer or Authorized Technical Assistance (Check the attached list of authorized Technical Assistance).

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 .

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, belts, chains or gears 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, chain or gears 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.

3. Operation

3.1 Operation Process

IMPORTANT

Under no circumstances, your hand is to be placed in front of the Blade to push the meat to be cutted.

With the machine switched off , adjust the Blade Guide and the Cut Regulator.

To start the Band Saw, press the On/Off switch on the upper side of the machine. Put the product to be processed on the Movable Table, and push it towards the Blade leaning it on the Cut Regulator to have a uniform thickness slice.

Withdrawing the product, be careful that it does not touch on the back side (flat side) of the Blade N° 07 (Pic.01), doing such will avoid the Blade to jump out of the wheels N° 04 (Pic.01)

3.2 Cleaning

To clean the Band Saw, first of all, switch it off from electric source . All the parts in direct contact with the meat must to be cleaned .

To remove the movable parts, please proceed as follows:

- 3.2.1 Loose the Blade, turning clockwise the Blade Stretching Knob and take the Wheels off N°11 an N° 12 (Pic.01).
- 3.2.2 Take off the loop that fixes the Lower Wheel by pulling it frontwards.
- 3.2.3 Wash all the parts with water and neutral soap, then dry them
- 3.2.4 Never use hard or sharp objects such as: KNIVES, HOOKS, or similar, to clean meat hanging on the saw Doors . Use a plastic brush to remove it and to clean.
- 3.2.5 To assemble the several parts removed, proceed the inverse steps as above described.

IMPORTANT

Place vaseline in the Lower Wheel hub hole N° 12 (Pic 01) every 15 days. Check the Blade position. The right position is with its teeth towards the front side of the Band Saw, and bent down .

3.2.1Cautions 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.

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, the Distributor must instruct the Dealer about the machine operation and safety . 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 a 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.