

Manual for Food Slicer

Model VA 2000 **Display**

D - 58452 Witten

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1. General Information

1.1. Notes regarding the operating instructions

Read the following hints before installing and operating this machine!

Make yourself familiar with this machine by reading this operating instructions carefully.

Within these operating instructions there are indicated the following safety notes and hints:



means Attention. Notes for probable danger and for avoiding mistakes.



means notes and hints regarding certain operation procedures.

1.2. Notes regarding warranty

The installation and initial operation has to be done by an authorised supplier or service technician.

Only trained persons are allowed to operate this machine. When required, the training has to be repeated.

Supervisory and operating staff have to read the operating instructions carefully before initial operation of this machine. Starting, operating and cleaning have to be done according the operating instructions and are only allowed after having been introduced to the way of working.

In case of

- · unauthorised installation
- unauthorised electrical installation
- · wrong operation
- · misuse
- constructional alteration
- detaching security or protecting equipment
- and in case of using non-original Scharfen spare parts

any responsibility from our side is refused.

In above cases the operator acts on his own risk and is responsible himself for damages which might occur.



Therefore, only use original Scharfen spare parts!

In case high pressure or steam cleaning devices or water plugs are used any claims regarding warranty will be refused.

This is valid also for faults and damages which are caused by natural wear and tear.

The pictorial representation might differ from the machine supplied because of regional specific requirements or as a result of technical improvement.

The contents of these operating instructions is not affected by that.

1.3. Notes regarding security

This machine corresponds to legal security and hygienic requirements. Nevertheless there is a risk of getting hurt in case of wrong or inattentive operation or maintenance. Especially for your hands or fingers there is a risk of injury. The operating staff has to be trained carefully how to operate and maintain this machine according to this operating instructions.

Pay attention in any case to the following notes regarding security:



See to it that unauthorised, untrained persons and in particular children cannot start the machine. It is not allowed to detach, to modify or to disregard protecting or security equipment. Otherwise there is a high risk of injury.

Always work with concentration, do not let distract yourself from your work.

Only cut food products as indicated in these operating instructions.

Never carry out experiments. Never try to cut foreign material.

Never cut deep frozen products.

Never check the sharpness of the blade with your fingers.

Never detach the blade without suitable devices.

Never use the machine as a place to put something on or to do other work on.

Take care that the floor space is clean, dry and non-slip.

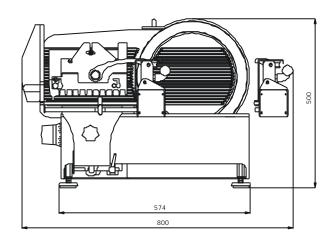
In case the current supply cable or the plug are defective, these parts have to be exchanged or repaired by your after sales service or an electrician.

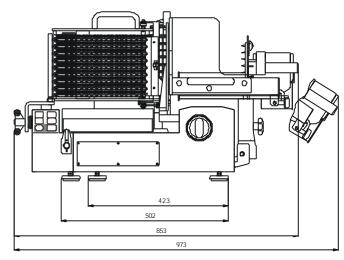
For cleaning pull the plug in any case.

In case of non-typical noise switch off the machine immediately.

In case the fault cannot be put right by yourself, you have to inform your after sales service.

1.4. Dimensions of the machine and technical data





overall dimensions w 800 x I 853 x h 500 mm

counter space required 574 x 502 mm max. cutting size ca. 255 x 195 mm

thickness of slices (infinitely variable) 0 - 10 mm
diameter of blade 300 mm
sound level < 54 db(A)
weight about 75 kg
voltage and cycles see rating plate

power 0,6 kW

Manufacturer: Hermann Scharfen GmbH & Co. Maschinenfabrik KG

Ruhrstr. 76a, D - 58452 Witten, Phone 02302/28277-0

1.5. Description of the machine

This food slicer is fully automatic with integrated shingling and stacking device.

The carriage is moved automatically. For cleaning and sharpening the automatic drive of the carriage can be disengaged.

The blade is driven electrically with a 1-phase or 3-phase gear motor. This gear motor is maintenance-free and aircooled.

By means of a special air circulation the warming up of the motor is very low, especially around the blade.

The automatic carriage is moved by a strong d.c. motor.

The food product is pushed against the blade by a fully automatic end piece holder.

The material used in the food zone corresponds to all requirements of food hygiene.

The complete machine body, the thickness plate, the blade guard and the carriage are made of stainless steel.

The blade is hard chromed.

All visible bearings as well as open sliding surfaces are lubricated only with lubricant suitable for food zones.

For switching the machine on and off there is used a double red/green push button.

Self-starting of the machine after a voltage drop is avoided by the electric control.

There are internal fuses to protect the electronic control and the motors controlled electronically.

The carriage can only be tilted aside when the automatic drive is disengaged and the thickness plate is closed completely.

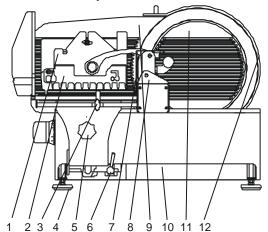
When the carriage is tilted aside, the thickness plate is locked in this position.

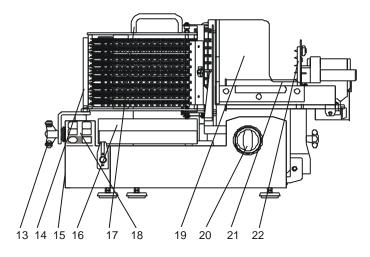
The protecting and security equipment as well as electrical and mechanical components correspond to regulations in force.

The machine is equipped with the following security equipment:

- no self-starting of the machine after a voltage drop
- · fully automatic stop of the blade
- double push-button
- fixed ring around the blade, non-removable
- · central blade protection, fixed, removable
- locked thickness plate when the carriage is tilted aside

1.5.1. General plan of the machine





1 end piece holder

2 comb, end piece holder

3 adjusting bar

4 rubber foot

5 star knob for carriage

6 lever

7 carriage feed plate

8 carriage

9 thickness plate

10 guiding axle carriage

11 blade guard

12 fixed ring

13 star knob stacking device

14 stacking device

15 rating plate

16 receiving plate

17 chain frame

18 keyboard

19 hand protection

20 thickness knob

21 guiding axle, end piece holder

21 plate of end piece holder

1.6. Usage

The following food products can be sliced by taking into account the maximum cutting capacity:

- all kinds of sausages
- ham / bacon
- roast meat / cooked ham
- meat
- - cheese

The following products are not allowed to be sliced because of danger to get injured:



- NON FOOD articles
- food products with bones
- deep frozen food products

The machine has to be installed in a shopping room. The installation in moist rooms is allowed. The room temperature must not go under the limit of 10°C and not over the limit of 40°C.

The machine is drip-proof only.

High air humidity and condensation water may damage the machine. The machine is not splash-proof.

2. Installation and initial operation



First read the operating instructions very carefully!

You have to pay attention to all notes.

Operating procedures have to be carried out as described.

Always work carefully and with concentration, this way you can avoid damages and injuries.

The installation, introduction and initial operation has to be done by an authorised supplier or service technician.

2.1. Checking the contents of the carton

The supplied carton has to have to following contents:

• Scharfen food slicer model VA 2000

as well as the following equipment:

- · chain frame
- stacking device
- receiving plate
- · sharpening device
- · these operating instructions

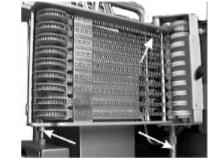
2.2. Installation



The food slicer model VA 2000 has to be installed on a plain, horizontal, non-slip and stable surface. If necessary the machine has to be screwed tight in addition.

Recommended height of the working surface about 800 mm. Pay attention to the required counter space.

Place the chain frame upon the 3 locating bolts.



Place the stacking device upon its location bushing and screw it tight.



Place the receiving plate upon the machine.

2.3. Electrical installation



Before you plug in the machine, you have to check if the current supply is the same as indicated on the rating plate. In case there are discrepancies you have to inform the supplier or technical service.

Under no circumstances plug in the machine!

The socket-outlet has to be equipped with earthing contact. It has to be connected according to customary regulations.

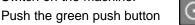
A defective socket-outlet may damage the machine or endanger the operator.

The socket has to be installed at a place which can be reached easily by the operator, so that in case of emergency the plug can be pulled out quickly. In any case the socket must not be under the counter or at a place which cannot be reached easily.

In case it is necessary to exchange the plug, this has to be done by an electrician or the after sales service.

2.4. Checking the direction of blade rotation

Switch on the machine.



→ Display is illuminated.

For machines with 3-phase motor:

Close the thickness plate completely. Push the key "cleaning". On the display there is indicated CLEANING and the blade is rotating now.

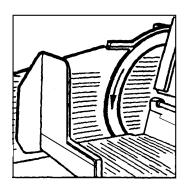


The blade has to rotate in direction of arrow (counter clockwise).

The blade is stopped by pushing again the key "cleaning".



In case the blade rotates in wrong direction, the positions of the poles in the plug have to be changed by an electrician or service technician.



3. Operation

3.1. Important notes before switching on the machine

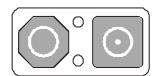
Because of security reasons pay attention to the following notes:



- first read this operating instructions carefully
- take care that the machine is placed on a stable and secure surface
- work with concentration
- never touch the blade

3.2. Switch functions (push button)

green push button = main switch on red push button = main switch off





3.3. Thickness of slices

The thickness of slices is infinitely variable from 0 to 10 mm. In order to adjust the thickness of the slices you have to turn the thickness knob. Turning to the right: thickness plate opens. Turning to the left: thickness plate closes. The scale on the thickness knob serves as adjusting aid.



In case the machine does not start after having pushed the key for stacking or shingling you have to adjust with the thickness knob a value >0,4. Then start again.



3.4. Operation of the end piece holder

Pull the lever of the end piece holder drive in direction of the carriage in order to disengage the lever. Keep the lever pulling while you are moving the end piece holder. In order to engage the lever release the lever and move the end piece holder slightly backwards and forwards.



3.5. Automatic or manual movement of the carriage

The machine is equipped with an automatic carriage movement which can be disengaged. The carriage can then be moved by hand.

= lever in horizontal position

automatic movement = lever in upright position

Adjusting automatic movement

Switch off the machine.

movement by hand

Turn lever counter clockwise in upright position.

Move the carriage forward and backward by hand until it is engaged.

Carriage can no longer be moved by hand now.

Adjusting movement by hand

Switch off the machine.

Turn lever in horizontal position.

Carriage can be moved by hand now.



Always switch off the machine for adjusting the carriage movement!

3.6. Automatic operation

3.6.1. Engaging carriage

Turn lever at the bottom right side of the machine counter clockwise in upright position. Move the carriage forward and backward by hand until it is engaged. Carriage can no longer be moved by hand now.

3.6.2. Loading the carriage and adjusting the thickness of slices



It is possible to slice 2 sausages with smaller calibre at the same time. The slices are placed on the receiving plate side by side.

Lift up end piece holder.





Lay the food product against the back of the carriage.

Adjust the adjusting bar according to the size of the food product.

Disengage the end piece holder and adjust according to the size of the product.

Place the end piece holder upon the food product.

Push the comb of the end piece holder into the food product.

Adjust the thickness of slices with the thickness knob (max. 108 mm).

3.6.3. Adjusting the slicing programme

The following slicing programmes can be chosen for one slicing procedure each.

stacking



· shingling lengthwise



These functions are described in detail in chapter 4.

3.6.4. Adjusting the speed of the carriage

By pushing the keys "carriage faster" or "carriage slower" you can change the speed of the carriage while the machine is in operation. The speed can be adjusted between about 26 to 55 carriage movements per minute.

Pay attention to the fact that sensitive food products have to be sliced with slower speed. If the speed is too high you cannot expect exact slicing results.

3.7. Manual operation

3.7.1. Disengaging carriage

Turn lever at the bottom right side of the machine clockwise in horizontal position. Carriage can be moved by hand now.

3.7.2. Loading the carriage and adjusting the thickness of slices

Lift up end piece holder.

Lay the food product against the back of the carriage.

Adjust the adjusting bar according to the size of the food product.

Disengage the end piece holder and adjust according to the size of the product.

Place the end piece holder upon the food product.

Push the comb of the end piece holder into the food product.

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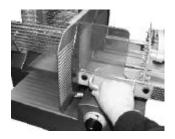


These functions are described in detail in chapter 4.

Move the carriage by hand forward and backward by using the handle in front of the carriage. It is necessary that the carriage is always pushed to the utmost end position, because only then the stacking procedure will be triggered off.

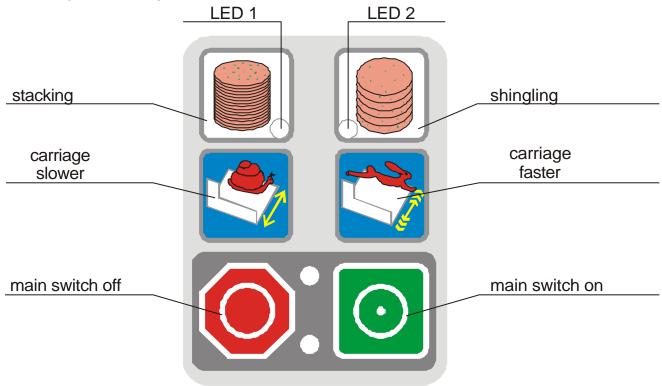


Always use the handle in order to move the carriage. The end piece holder is advanced automatically also during the manual operation of the machine, so that the food product is pushed towards the blade automatically.



4. Slicing functions

4.1. Description of the keyboard



4.2. Starting the slicing programme

You have already put the food product into the carriage and you have adjusted the thickness of slices and the speed.



When the machine is installed the technician adjusts the slicing programmes corresponding to your special requirements. These programmes are saved for the functions stacking and shingling. The application remains unchanged and is loaded after every restart of the machine.

This way you can operate the machine easily. You can start the machine as follows:

- push the green main switch
- then push the key "stacking"



or the key "shingling"



Now the blade is turning and also the carriage is moving automatically if it is engaged. In case the carriage is disengaged and you want to operate the machine manually you have to move the carriage forward and backward by using the handle in front of the carriage. It is very important to push the carriage to the utmost back position in order to trigger off the depositing procedure.

The machine is slicing now until the maximum height of the stack is reached when you have pushed the key "stacking" or until the maximum number of slices is reached when you have pushed the key for "shingling".

The slicing procedure can be interrupted at any time by pushing the key "stacking" or "shingling".

4.3. Display functions

Two basic programmes can be used in a very variable way. You have the possibility to cut up to 9 shingled portions (layers) on top of each other or to cut 2 stacks positioned on the receiving tray one behind the other. Furthermore there can be adjusted the number of slices required per portion. The different features are described below.

The machine is equipped with a small display showing different information. After having switched on the machine there is shown shortly the programme version 'Ul.0' and then depending on the opening of the thickness plate the following:

When the thickness plate is closed completely or is opened less than 0,8 mm the display shows 'OFF'. In this position the machine does not start in the automatic mode as it would not make any sense to start slicing with closed thickness plate.

When opening the thickness plate slightly the display changes from 'U1.0' to the thickness of slices, for example '1.5'. The slice thickness shown on the display corresponds exactly to the thickness of the slices cut. The scale on the thickness knob serves as adjusting aid.

When increasing the slice thickness to more than 7,1 mm the display shows 'OFF' as it is not possible to slice a thickness of more than 7 mm.

If the machine should cut the maximum number of slices per portion, the automatic carriage movement can be started by just pushing the key for stacking or the key for shingling after the slice thickness has been adjusted. As soon as one of the keys has been pushed the display shows '001' and the machine starts slicing after a short moment.

In case the corresponding key is pushed within this short moment again the display changes to '002'. For stacking this means that two stacks are deposited one behind the other on the receiving tray. However, this is only possible if the height of the food product allows this.

For shingling it means that two layers are deposited on top of each other. For shingling there can be made up to 9 layers on top of each other by pushing the key shingling 9 times shortly. The display shows the number of layers adjusted.

In case there is requested a certain number of slices per portion this can be adjusted by pushing the key "carriage faster" or carriage slower". By pushing the key "carriage faster" the number of slices is increased by 1 slice each and by pushing the key "carriage slower" the number of slices is decreased by 1 slice each. As long as there is shown on the display the thickness of slices the machine is cutting the maximum number of slices per portion.

If during the standstill a key is pushed the display changes from the slice thickness to the number of slices adjusted. As soon as the number of slices is adjusted to 0 the display shows again the slice thickness. If for example there should be cut 10 slices the key "carriage faster" has to be pushed 10 times and the display shows '010'. Now the machine can be started by pushing the key stacking or shingling and there will be cut 10 slices and the machine stops when the number of slices is reached. Also for this feature you have the possibility to adjust 2 stacks or up to 9 layers.

For example you could adjust the following slicing programme: You would like to cut 5 layers, each layer should have 8 slices. The display shows the slice thickness adjusted (i.e. '1.5'), by pushing 8 times the key "carriage faster" there will be shown on the display '008' which means that a portion will consist of 8 slices. Then start the machine by pushing the key for shingling 5 times shortly after each other. The display shows 5 and the machine starts. As soon as the machine is started the display changes from the adjusted number of slices '008' and counts to zero. When the 8 slices are cut the receiving tray moves back and the next layer is cut. In case the adjusted number of slices is higher than it is possible to deposit on the receiving tray only the maximum possible number of slices is cut.

5. Slicing of end pieces

Special notes regarding slicing of rests and end pieces of food products:

Before placing the remaining piece of the food product in the carriage you have to cut off the pointed end. Otherwise the food product cannot be held correctly by the end piece holder. It is even better to turn the original cutting side of the food product to the end piece holder.

Move the end piece holder backwards as far as it will go. Lay the food product against the back of the carriage. Adjust the adjusting bar according to the size of the food product. Disengage the end piece holder and push it by hand behind the food product, until the food product is in close contact to the thickness plate.

Adjust the thickness of slices with the thickness knob (max. 10 mm)



Never try to hold the food product by hand, you may hurt yourself seriously! Always use the end piece holder.

Never try to load the carriage while it is moving automatically. Always switch off the machine first, otherwise there is a risk to get injured!

6. Cleaning

Before initial operation and after a longer period of standstill the machine has to be cleaned carefully.

With permanent use of the machine you have to clean it at least one time per day or if necessary also a few times per day. For cleaning proceed as follows:



Risk of getting hurt!

Be careful when cleaning the machine. Especially in the area of the knife there is a risk of injury. Always work with concentration, do not let distract yourself from your work.

6.1. How to proceed with cleaning

Switch off the machine.

Adjust manual movement of the carriage (see 3.).

Pull off the plug.

Close the thickness plate completely by turning the thickness knob to the left. Loosen the star knob of the carriage.

Pull the carriage to the front.

Tilt the carriage aside.



The carriage cannot be tilted aside in case

- the thickness plate is still opened
- the carriage has not been adjusted to manual movement. Always tilt the carriage with care, do not use force!

6.2. Taking off the blade guard

Loosen the knurled knob and hold the blade guard with the other hand.

By pushing against the knurled knob the blade guard is tipped against your hand and you can take the blade guard off.

6.3. Taking off chain frame, stacking device and receiving plate

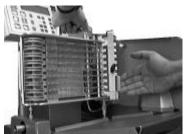
Pull the roll of the chain frame to the left and take off the chain frame upwards.



Always lay down the chain frame on an even flat ground, otherwise there is a risk that the needles of the chains are bent or break.







Loosen the star knob of the stacking device and take off the stacking device sideways.



Take off the receiving plate upwards.



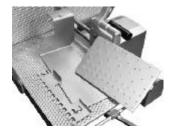
6.4. Taking off parts of the carriage

Lift up the end piece holder.

Loosen the knurled knob of the comb of the end piece holder and take the comb off. Loosen the knurled knob of the plate of the end piece holder and take the plate off. Loosen the star knob of the adjustable bar and lift it up.

Take off the feed plate by pulling it upwards (the end piece holder has to be lifted up).











For cleaning only use usual washing-up liquids. Do not use scratching or scouring cleansing agents or devices.



The machine is only drip-proof. Therefore do not use high pressure cleaning devices, water hoses or similar devices. Furthermore you must not pour water over the machine. Danger of short circuit or machine defect. In such cases any claims regarding warranty will be refused.

6.5. Cleaning the blade

When the thickness plate is closed completely clean the inside of the blade with a wet cloth from the centre towards the edge. Beside this you can let the blade turn by pushing the key "stacking".





Attention! Risk of getting hurt!

Make sure that the thickness plate is closed completely and the machine is switched to manual movement (3.) The display shows 'OFF'

Proceed for the backside of the blade in the same way.

Dry the inside and the backside of the blade carefully.

Put a moist cloth between the blade and the fixed protecting ring. Turn the blade by hand one complete rotation and push the moist cloth against the protecting ring while turning.



6.6. Cleaning the single parts

Never clean detached parts or accessories in a dish washer.

cleaning	detergent	procedure	cleaning device	procedure after cleaning
machine	warm water, detergent,	manually	cleaning rag, cleaning	wash up with clear water,
	acid free from chlorine		brush	dry
machine with	warm water, detergent,	manually	cleaning rag, cleaning	wash up with clear water,
tefloned parts	acid free from chlorine		brush	dry

				dry tefloned parts very carefully
detached parts	warm water, detergent, acid free from chlorine	manually	cleaning rag, cleaning brush	wash up with clear water, dry
blade	warm water, detergent, acid free from chlorine	manually	cleaning rag or sponge	wash up with clear water, dry
sharpening stones	warm water, detergent, acid free from chlorine	manually	cleaning brush	degrease with degreasing agent (spirit or similar)

6.7. Reassembling the parts

Reassemble the parts in reverse order. (6.4. \rightarrow 6.1).

Attention! Risk of getting hurt!

Place the splice bar of the blade guard onto the plastic bolt. Turn the blade guard to the blade and see to it that the flange of the blade guard is positioned in the centre of the blade.

Tighten the blade guard by turning the knurled knob clockwise by hand.

Turn the carriage back. Tighten the star knob of the carriage.

Check again the complete machine.

Only after having checked the machine plug it in for operation.



7. Sharpening the blade

In case the cutting result should no longer be satisfactory or the food products are getting "beards", the blade has to be sharpened.

There cannot be indicated certain intervals for sharpening as it depends on how frequently the machine is used.



Pay attention to the fact that the blade has to be exchanged if the gap between blade edge and the fixed protecting ring is more than 5 mm.

According to security regulations further sharpening of the blade it is not allowed when the gap is more than 5 mm.

7.1. Sharpening device



Every sharpening device is marked with the serial number of the machine. Only this sharpening device may be used for sharpening.

Usage of other sharpening devices can cause serious injuries or damage the machine. Never use another sharpening device.

The sharpening device is equipped with 1 stone for sharpening and 1 stone for taking off the burr.

Never use the sharpening device on an uncleaned machine as the stones will then loose their efficiency. In case this should happen anyway, clean the stones carefully with washing liquid and a brush.

7.2. Mounting the sharpening device



Important! Adjust the machine to manual carriage movement (see chapter 3.4.)

Take off all removable parts (see chapter 6.4.)

Attention! Risk of getting hurt!

Clean the machine carefully, as described in chapter 6.

Turn the carriage back. Tighten the star knob of the carriage.

Put a beer mat or paper felt on the carriage and cut a few strips.

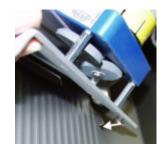
(This way the fat will be totally removed from the blade edge)

Check again if the machine is really turned to manual carriage movement.

Pull the carriage completely to the front.

Remove the beer mat or paper felt.

- Open the thickness plate completely. Display shows
- Position the carriage in the centre.
- · Lift up end piece holder
- Mount the sharpening device in such a way to the thickness plate that the cone of the sharpening device fits into the slit on the bottom of the thickness plate (direction of arrow)
- Pull out the pin on top of the sharpening device in direction of arrow and move the sharpening device over the edge of the thickness plate.
- Move the sharpening device with the pulled out pin to the front in direction of the blade (direction of arrow), so that the pin is engaged in the hole of the thickness plate.
- The sharpening stones are now in the correct position, i.e. the blade edge is positioned between the two sharpening stones.









7.3. Sharpening the blade

- · Switch on the machine
- When the thickness plate is opened the blade can be started by pushing the key "stacking" (display shows 'on').
- Turn the yellow handwheel of the sharpening device in direction 1. By means of this the sharpening stone sharpening the blade is pushed towards the blade.
- Approximately 15 seconds are enough.
- Switch off the machine by pushing the key "stacking" (display shows 'OFF')
- check if there has been built a visible burr at the edge of the blade
- If not: Sharpen again
- Switch on the machine again
- For taking off the burr turn the yellow handwheel in direction 2. Now both sharpening stones are touching the blade.
- Approximately 2 seconds are enough to take off the burr.
- When the sharpening procedure is terminated turn the yellow handwheel to 0.

0 15 sec.

< 2 sec.

7.4. Removing the sharpening device

- Switch off the machine at the red main switch.
- Pull the pin of the sharpening device upright in direction of arrow.
- Tilt the sharpening device aside to the right.
- · Remove the sharpening device.

Now clean the machine entirely from wheel swarf, see chapter 4. Cleaning. First clean the machine with a dry cloth. Then make a complete wet cleaning.



Attention! Risk of getting hurt!

Always work with concentration! Do not let distract yourself from your work! Never check the sharpness of the blade with your fingers.

8. Maintenance

Clean the machine at least one time per day.

If necessary sharpen the blade.

In case the gap between blade edge and fixed protecting ring is more than 5 mm the blade has to be exchanged. If necessary the sharpening stones have to be cleaned or exchanged.

For lubricating only use acid free oil.

Oiling points:

Guiding axle of end piece holder (1 time per week) Guiding axle of carriage (as required)

Exchanging the blade

Remove the blade guard as described in point 6.2.



Attention! Risk of getting hurt!

Upon request there will be supplied a knife removal device. The knife removal device has to be mounted on the blade. For this purpose put the two bolts of the knife removal device into the borings of the blade and fix the device with the star knobs.

Loosen the 4 fixing screws of the blade and take the blade off.

Take off the knife removal device and mount it on the new blade.

Mount the new blade on the machine and fasten it with the 4 fixing screws.

Take off the knife removal device and mount the blade guard.



9. Trouble shooting

<u>trouble</u> <u>solution</u>

grinding noise blade guard has not been mounted correctly

loosen blade guard, mount it again and fix it as

described in point 6.2

blade guard is dirty

clean as described in chapter 6.4

deflector touches the blade

adjust the hexagon socket screws of the deflector

guide roll is jumping needles of the chain are bent

take off the chain frame as described in point 6.3,

straighten the needles with a flat nose plier

stacking device touches stacking device is bent

chain frame take off the stacking device as described in point 6.3,

straighten the fingers of the stacking device

metallic sound star knob of the stacking device is loose

fasten the star knob

slice gets caught by the

deflector

distance between deflector and blade is too large adjust deflector with hexagon socket screws

machine stops automatically short-term voltage drop, switch on the machine again

machine is getting warm wall socket and plug have to be checked by

an electrician.

sausage skin tears or stacks are irregular

sharpen the blade and take off burr

after 3 sec.

The machine is equipped with automatic fuses. In case there are any misfunctions on the machine during operation proceed as follows. Switch off the machine at the main switch. Wait for about 5 minutes and start the machine again. Only if the misfunction occurs again ask for after sales service for checking.

10. Waste disposal

The producer is obliged to take back the machine for waste disposal. For this purpose the machine can be returned to the manufacturer free of charge.