

Meat and bone saw

Carneoline

Model FK 32

Operating instructions

6.067.98.5.10.05 en



Bizerba Service
www.bizerba.com

Alle Rechte vorbehalten
All rights reserved
Tous droits réservés
Reservados todos los derechos
Tutti i diritti riservati
© 08/2014

Bizerba GmbH & Co. KG,
72336 Balingen
P.O. Box 10 01 64
72301 Balingen, Germany
Telephone (+49 7433) 12-0, Fax (+49 7433) 12-2696
Email: marketing@bizerba.com
Internet: www.bizerba.com

Chapter index	
About these instructions	1
About this machine	2
Safety instructions	3
Installation	4
Machine and operating elements	5
Operation	6
Troubleshooting	7
Maintenance	8
Technical data	9
Appendix	10

Contents		Page
1	About these instructions	1 - 1
1.1	Safe-keeping	1 - 1
1.2	Target group	1 - 1
1.3	Symbols used	1 - 1
1.4	Warnings	1 - 2
2	About this machine	2 - 1
2.1	Intended use	2 - 1
2.2	Machine description	2 - 1
2.2.1	Naming of FK 32 components	2 - 3
2.2.2	Accessories	2 - 4
2.3	Directives	2 - 4
2.4	Warranty	2 - 4
2.5	Disposal of the machine / environmental protection	2 - 4
3	Safety instructions	3 - 1
3.1	General notes on safety	3 - 1
3.2	Safety instructions for operation	3 - 2
3.3	Safety instructions for cleaning	3 - 2
3.4	Protective and safety equipment	3 - 3
3.5	Information plates on machine	3 - 4
4	Installation	4 - 1
4.1	Transport and storage	4 - 1
4.2	Installation and assembly	4 - 1
4.2.1	Installation requirements	4 - 1
4.2.2	Electrical connection	4 - 2
4.3	Start-up	4 - 3
4.4	Placing out of operation	4 - 3
5	Machine and operating elements	5 - 1
5.1	Membrane keyboard	5 - 1
5.2	Gauge plate	5 - 1
5.3	Product pusher	5 - 1

5.4	Protective bar with saw blade guide	5 - 2
5.5	Saw blade clamping unit	5 - 2
5.6	Adjustment device for upper wheel	5 - 3
5.6.1	Change saw blade running	5 - 3
5.7	Sliding table with remnant pusher (optional)	5 - 4
6	Operation	6 - 1
6.1	Preparations for sharpening	6 - 1
6.2	Saws	6 - 2
6.3	Sawing with sliding table (option)	6 - 3
7	Troubleshooting	7 - 1
7.1	Fault description	7 - 1
7.2	Procedure	7 - 1
8	Maintenance	8 - 1
8.1	Preparation for cleaning	8 - 1
8.2	Removing components	8 - 2
8.3	Cleaning	8 - 3
8.4	Cleaning plan Sawing	8 - 4
8.5	Preparing the machine for operation	8 - 6
8.6	Care of machine, servicing, maintenance	8 - 7
9	Technical data	9 - 1
9.1	Dimensions FK 32	9 - 1
9.2	Power supply	9 - 2
9.3	Ambient conditions	9 - 2

Appendix

Declaration of conformity

Declaration of conformity for plastic materials with direct food contact

1 About these instructions

Read the instruction manual very carefully before connecting and switching on the machine to ensure that you utilize the full quality and potential of this machine and avoid any potential risks.

This instruction manual covers the use, installation, operating, cleaning and maintenance of the machine.

Our products undergo continuous further development and are subject to different country-specific regulations. Examples of pictures and graphics included in these instructions may vary from the version you have received.

1.1 Safe-keeping

The owner's manual are an integral part of the machine and must be stored close to the machine to be easily accessible to others.

If the machine is sold, the owner's manual must be included in its entirety.



1.2 Target group

The machine may only be operated by trained personnel over the age of 14. This means that the operator has to be familiar with the contents of these operating instructions.

Installation, maintenance and repair must be performed by Bizerba authorized specialists only.

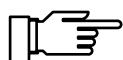
1.3 Symbols used

Various symbols are used in these instructions.

Symbol	Meaning
	Text with arrow prompts you to carry out an action.
	Position number in figure.
<Key>	Text within < > refers to a key.
"Display"	Text inside a " " refers to display text.

Prerequisites are displayed with a gray background.

Notes



These instructions are mandatory for you.

Information



Additional information for better understanding.

1.4 Warnings

Warnings are divided into danger levels by the signal word above the warning symbol.

Structure of warnings and meaning of signal words are described in these instructions as follows.

DANGER



Source of danger with high risk of imminent danger to persons!

The consequences are:

**life threatening injuries,
severe damage to health.**

- Measures to avoid the danger are specified.
-

WARNING



Source of danger with medium risk with potentially threatening danger for personnel!

The consequences can be:

**serious injuries,
damage to health,
serious damage to property.**

- Measures to avoid the danger are specified.
-

CAUTION



Source of danger with slight risk with potentially threatening danger for personnel!

The consequences can be:

**injuries,
damage to property.**

- Measures to avoid the danger are specified.
-

CAUTION

Source of danger, improper use!

Damage to property can result.

- Measures to avoid the danger are specified.
-

2 About this machine

2.1 Intended use

This meat and bone saw is a technical work resource which is only suitable for application at work.

This band-saw machine in desktop version was designed for clean and fast cutting or portioning of meat, frozen meat, bones and other food.

For this reason the machine should only be used for these products.

The products are positioned on the fixed work table and for separation, it is pushed against the saw blade with the material pusher

Approved product taking into consideration the dimensions, chapters 9.1:

- Fresh, frozen or smoked meat
- Meat with and without bones, incl. marrow long bones
- Poultry, fish
- All food products being processed in butcheries, meat processing plants and industrial kitchens.

Note: When slicing/sawing usually one product, we recommend using a special blade belt or saw blade.

The following may not be sliced/sawn due to risk of injury and damage:

- All products not included in the range of application
- All products that represent limit cases only with authorization of manufacturer

Applications

The meat and bone saw is suitable for installation in the sales or preparation area.

The use in wet areas is permitted with suitable electrical installation.

Permissible ambient temperatures from -10°C up to 40°C.

Operating time

This meat and bone saw is designed for continuous operation.

2.2 Machine description

The ON/OFF switch is a membrane push button with signal lamp. The red OFF switch reacts as soon as it is tapped, the green ON switch reacts when it is normally pressed.

The saw blade is driven via the drive disk directly from an air-cooled three-phase motor.

When opening the saw door the drive is switched off using a magnet switch. The follow-up time is approx. 3-4 seconds.

The removable pusher can be inserted together with the product and fastened in upwards position using a star knob.

2

As an option, the product is fed to the saw blade using the sliding table with remnant holder.

The height of the protective bar with the upper saw blade guide can be adjusted using the star knob.

It can be quickly adjusted to any product height of max. 330 mm and clamped.

The adjustable, removable gauge plate allows sawing of equal portions of 10 mm to 290 mm width.

The saw blade deflector and the drive disk deflector prevent meat and fat residues as well as bone splinters from depositing on the drive disk and upper wheel and from being pulled off by the product. The saw residues fall from the deflectors into the collecting bin underneath.

The saw blade clamping unit allows fast replacement of the blade, as well as release during longer standstill periods.

The saw blade rotation can be adjusted by means of an adjustment device at the upper wheel.

All external machine components are made of stainless steel, with the exception of the saw blade.

Work place-related emission noise level value

$L_{pA} = 95 \text{ dB (A)}$.

The value takes into consideration an instable measuring of 3 dB.

Acoustic power level * $L_{wA} = 108.5 \text{ dB (A)}$.

The value takes into consideration an instable measuring of 3 dB.

* The acoustic power level does not submit any data on the radiation characteristic of the machine, i.e. how the sound field around the machine is formed. In addition the measurement was carried out under conditions in the free field. This however are no representative data on the real noise disturbance at a possible workstation near the machine. The acoustic power level is a mean value, which permits similar information regarding sound radiation of similar machine types.

Hearing protection is recommended.

2.2.1 Naming of FK 32 components

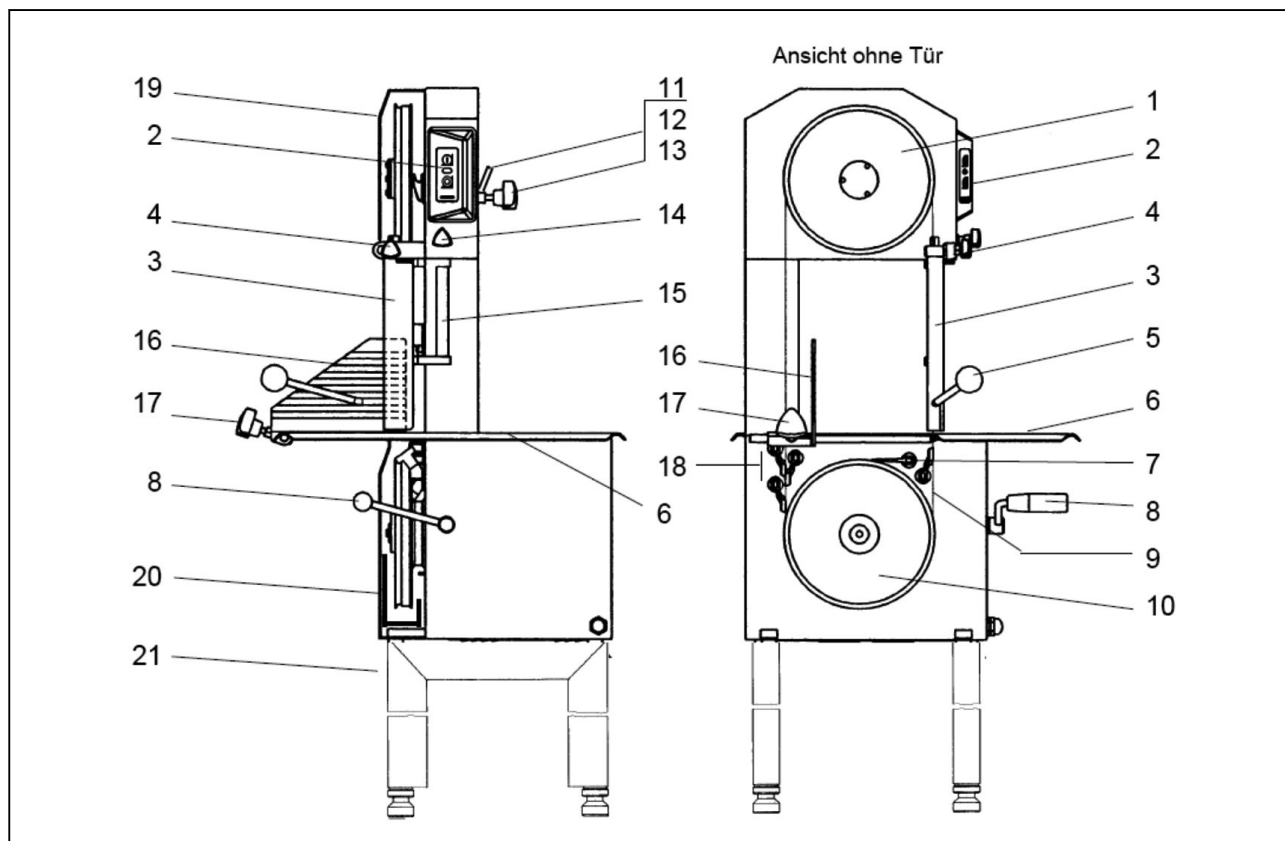


Fig. 1: Naming of FK 32 components

The machine is available in different versions. The figure shows an example:

- ① Deflection roller
- ② ON/OFF switch
- ③ Product pusher
- ④ Star knob, material pusher
- ⑤ Spherical button, material pusher
- ⑥ Work table, optional sliding table
- ⑦ Slice deflector
- ⑧ Lever, saw blade clamping unit
- ⑨ Saw blade
- ⑩ Drive disk
- ⑪ Adjustment device, upper wheel
- ⑫ Handle
- ⑬ Star knob
- ⑭ Star knob, protective bar
- ⑮ Protective bar with saw-blade feed

2

- ⑩ Gauge plate
- ⑪ Star knob, gauge plate
- ⑫ Saw-blade scraper
- ⑬ Saw door
- ⑭ Collecting bin
- ⑮ Base with foot screws, optional with rollers

2.2.2 Accessories



Only use the original Bizerba spare parts and accessories in order to ensure safe and trouble-free operations.

standard

- Universal saw blade, type COMBI 6 Super with hardened tooth tips 2430 mm long
- Operating instructions

optional

- Sliding table with removable remnant holder
- Mobile version
- Special saw blades and blade belts

2.3 Directives

For directives and legal requirements see attachment Declarations of conformity.

2.4 Warranty

We are not responsible for damages caused by:

- Non-compliance with the instruction manual
- or unauthorized and incorrect electrical installation by the customer
- incorrect operation, utilization contrary to terms and conditions
- structural modifications, removal of protective devices
- use of replacement parts and accessory components or third-party resources that are not Bizerba originals
- natural wear and tear

In such cases, the user is acting at his own risk and is responsible for any damage occurred.

2.5 Disposal of the machine / environmental protection

To ensure that the machine is recycled environmentally friendly, return the machine to the manufacturer or the dealer after intended use has expired.

Naturally, Bizerba and its dealers will take back free of charge old machines no longer in operation.

Please contact your specialist in this case.



The application of these disposal regulations are based upon legal regulations of the respective country.

3 Safety instructions

The safety instructions must be observed throughout the installation, operation, cleaning and maintenance procedures.

3.1 General notes on safety

DANGER**Damaged power supply cables or faulty protective devices!**

Risk of life from electric current. Acute risk of injury of operating personnel.

- Damaged supply lines must be replaced immediately with new cables and installed by a professional electrical company or by Bizerba Service.
 - The mains cable must be routed in a way that it is no cause of risk.
 - Protective devices must be checked every day with regards to function before start-up.
 - Protective devices may not be removed, modified or bypassed.
-

DANGER**Open the electrical installation area!**

Risk of life from electric current.

- The electrical installation area may only be opened by Bizerba Service.
 - Pull power plug before moving the machine.
-

WARNING**Unauthorized persons!**

Serious injuries to fingers and hands and damage to health.

- Only trained personnel over 14 years may operate, clean and maintain the machine. Subsequent training sessions should be repeated whenever necessary.
 - Unauthorized persons, particularly children, may not stay in the work area of the machine.
-

3.2 Safety instructions for operation

3**WARNING****Insufficient personal protective unit!****Damage to health.**

- It is recommended to wear ear protection.
- Please wear gloves when handling frozen products.
- Please wear suitable working cloths.

DANGER**Movable parts, especially the saw blade!****Serious injuries.**

- Do not put machine into operation without mounted protective devices.
- Do not put machine into operation with damaged or twisted saw door.
- Always keep a certain distance to the saw blade, use suitable feed units.
- Wait until the saw blade comes to a standstill before removing product from working field.
- Do not decelerate the running down saw blade through lateral pressure.

3.3 Safety instructions for cleaning

WARNING**Saw blade!****Danger of cutting injury also if saw blade is at standstill.**

- Only clean the machine when switched off and the plug is disconnected.
- Wear cut-proof gloves when cleaning and replacing the saw blade.
- Store saw blades securely so that nobody can harm oneself.

WARNING**Missing components!**

The operator can only be protected from injuries and the machine protected against damage if all the components of the machine are assembled properly.

- Check if the machine is complete before it is re-started.
- Check if components are positioned correctly and firmly.
- Only use original Bizerba spare parts and accessories.

3.4 Protective and safety equipment

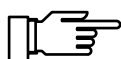
- Door lock, saw protected against switch-on when door open
- membrane keypad, ON switch with protection function against unintended machine start (increased actuating force), OFF switch responds when slightly touched (reduced actuating force)
- Product pusher, product feed unit and saw blade cover
- Protective bar, height adjustable device with upper saw blade guide
- Remnant pusher, product remnant feed unit (option sliding table)



Correct functioning of the protective and safety equipment must be regularly checked.

Check if after opening the door, the saw blade comes to a standstill as soon as possible (it must not take more than 4 sec.).

The operator must define the frequency of checking.



Remaining risks that cannot be excluded by technical measures:

- Risk of tripping/slipping if the work area is not kept tidy.
- Risk of injury if the required personal protective clothing is not worn.

3.5 Information plates on machine

3

DANGER!

Read operating instructions prior to operation to prevent serious bodily injury.

Disconnect power prior to cleaning and maintenance.

Authorized personnel only

Operation, cleaning, sanitation and maintenance of the machine must be performed by qualified and trained personnel only.

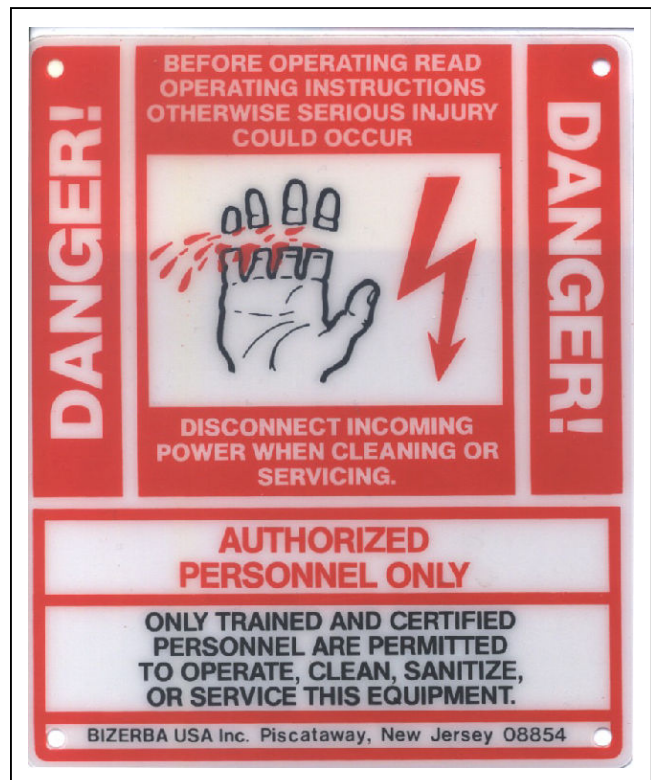


Fig. 2: Warning sign

Beware of hazardous electric charge



Fig. 3: Warning sign: Flash sign

Positions for the saw blade clamping unit, chapter 5.5

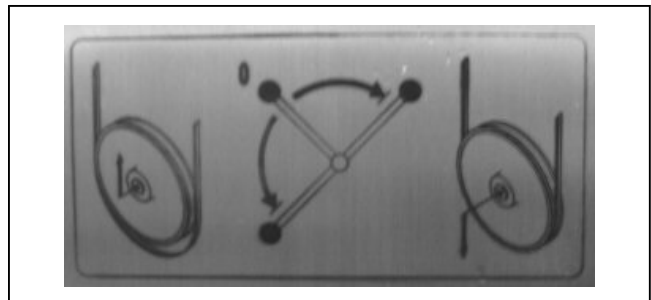
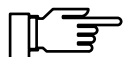


Fig. 4: Information plate

Information plate: Only use and service after the instruction manual has been read

4 Installation

4.1 Transport and storage



When transporting the machine, shoes with toe caps must be worn and suitable lifting devices must be used.

At least two persons are necessary to move the machine. Weight of machine is higher than 25 kg.

4

Before installation, store and transport the machine in the original packaging.

The machine has to be transported and stored in accordance with the symbols on the packaging.

The machine must only be moved with rollers and is only permissible on a surface with a very low degree of roughness and unevenness of not more than 2cm. The machine should only be picked up at appropriate places.

The machine must not be moved during operation.

Unplug power plug before moving the machine!

The electrical supply must not be damaged during this process.

4.2 Installation and assembly

Installation, putting into operation as well as instruction regarding operation, cleaning, maintenance, care and servicing, is initially carried out by the responsible Bizerba Customer Service Agent or the Bizerba specialist.

FK 32 with castors:

For operation the castors must be blocked with the fixing brake.

4.2.1 Installation requirements

The installation surface needs to:

- provide sufficient space , Dimensions, see chapter 9.1
- be horizontal and flat, level unevenness using foot screws.
- be slip-proof and tilt-proof
- be stable and rigid , Machine weight, see chapter 9.1

The work table height is approx. 900 mm.

Provide sufficient work space for operator. For hygienic reasons it should be accessible from at least 3 sides.

4.2.2 Electrical connection

Information on the rating plate

4

Bizerba logo	BIZERBA
Machine type	Model FK 32
Machine description	Meat and Bone Saw
Machine number	...
Production code	X-..
Protection class	IP 55
Electrical data	see specification plate
Manufacturer's address	Bizerba GmbH & Co.KG D-72336 Balingen MADE IN GERMANY



Check before mains connection

Before you connect the machine, check the electric data on the rating plate with the mains data about the power supply.

CAUTION

Incorrect supply voltage!

Damage of electric components, fire hazard.

- Do not connect the machine to the power supply if the power supply data does not correspond to the machine's connection values.
Mains data must be identical.
- Inform Bizerba Customer Service.

Installation of power supply provided by customer

Installation of the power supply to connect our machines must be carried out in accordance with country-specific regulations and the terms and conditions derived thereof. These essentially include the recommendations of at least one of the following commissions:

- International Electro-technical Commission (IEC)
- European Committee for Electro-technical Standardization (CENELEC)

The machine has been built according to Protection Type I and has to be connected to the protective conductor.

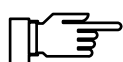
Measures for suppressing interference:

With severely contaminated mains supplies (e.g. when "thyristor-controlled systems" are used) measures must be taken on-site to suppress interferences, e.g.:

- A separate supply line must be planned for Bizerba machines
- In problem cases, install capacitive decoupled isolating transformers or other suppressors into the supply mains prior to Bizerba machines

4.3 Start-up

Initial start-up as well as instructions on how to operate, clean, maintain and service the machine are initially provided by the responsible Bizerba service department or by a Bizerba specialist.



Machine can only be operated if the saw door is closed.

Start test run, check running direction, switch on machine.

➔ Press <I> (green) on the membrane keypad.

The lamp lights up (white) and the drive is in operation.

➔ Observe saw blade at the cutting point.

Saw blade and saw tooth direction should run from top to bottom.

➔ If the direction is incorrect, have the polarity reversed by Bizerba Customer Services or professional electrician.

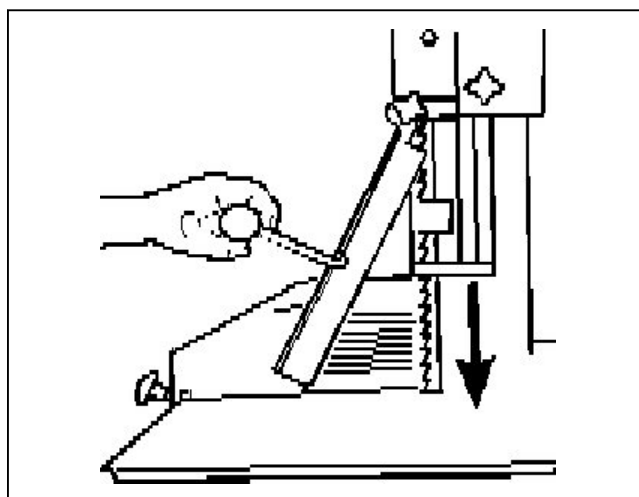


Fig. 5: Transport direction

Switching the machine off

➔ Press <O> (red) on the membrane keypad.

The machine is switched off.



Wait for 5 seconds before switching it on again.

4.4 Placing out of operation

If the machine is not going to be used for a longer period of time:

➔ Switch off machine.

- ⇒ Pull out power plug.
- ⇒ Clean machine as per cleaning instructions.

5 Machine and operating elements

5.1 Membrane keyboard

- ① <I> (green) ON switch
- ② Lamp (white)
- ③ <O> (red) OFF switch (reduced actuating force)

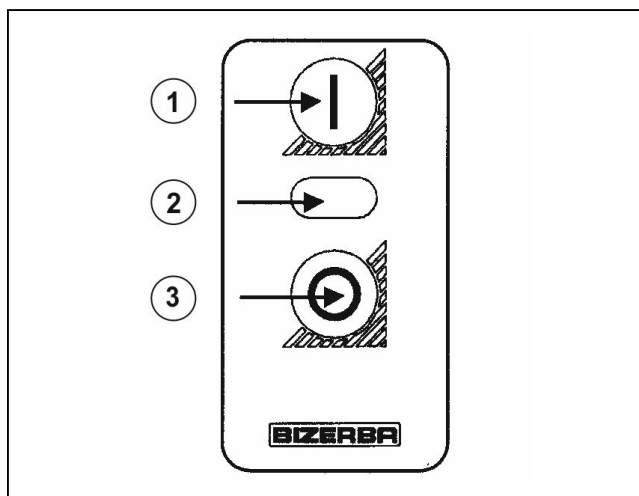


Fig. 6: Membrane keyboard

Pressing the green key starts the drive.

The signal lamp lights up.

When slightly tapping the red foil key, the drive turns off. (follow-up time approx. 3-4 sec.)

5.2 Gauge plate

The adjustable gauge plate allows cutting of identical portions

It can be moved by loosening the star knob.

Setting range is from 10 mm to 290 mm.

The gauge plate is removable and can be tilted in its end position.

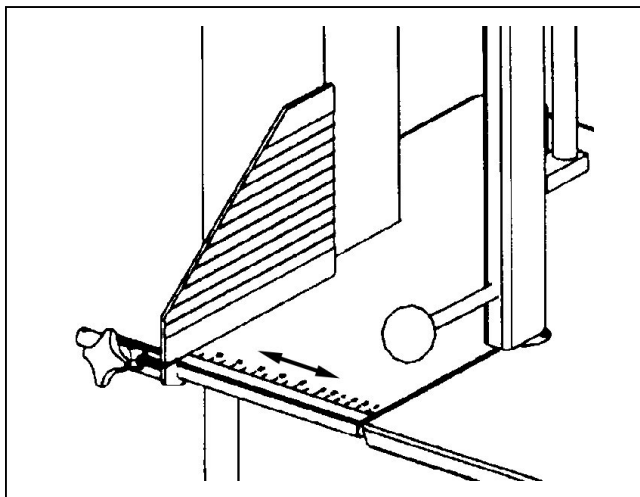


Fig. 7: Gauge plate

5.3 Product pusher

When the machine is at rest, the pusher covers the exposed saw blade between protective bar and saw table.

5

For sawing, the pusher is swiveled away in order to accommodate the product.

During cutting, the left hand rests on the lever knob and pushes the product against the saw blade.

- ① The pusher can be blocked in lifted position using the star knob.
- ② When the saw door is open, the pusher can be removed towards the left in a defined position.

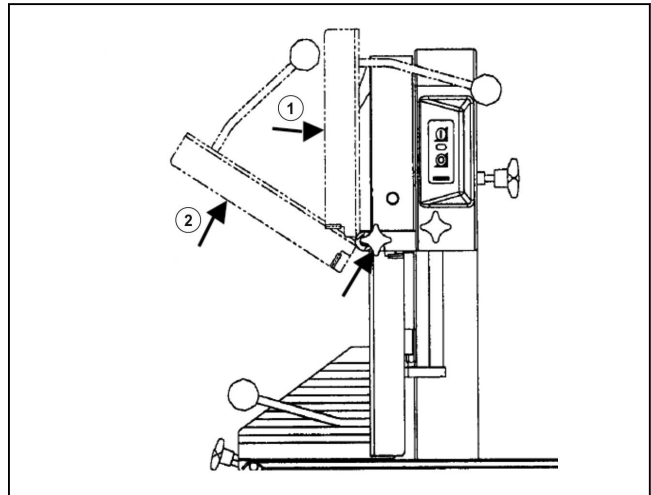


Fig. 8: Product pusher



Sawing without using the product pusher is not permissible.

5.4 Protective bar with saw blade guide

The protective bar can be adjusted in height (max. 330 mm).

- ③ For safety reasons and for better saw blade guiding, it should always be adjusted to the respective product height.
- ④ The protective bar is adjusted by loosening and clamping of the star knob.

The bar is non-removable.

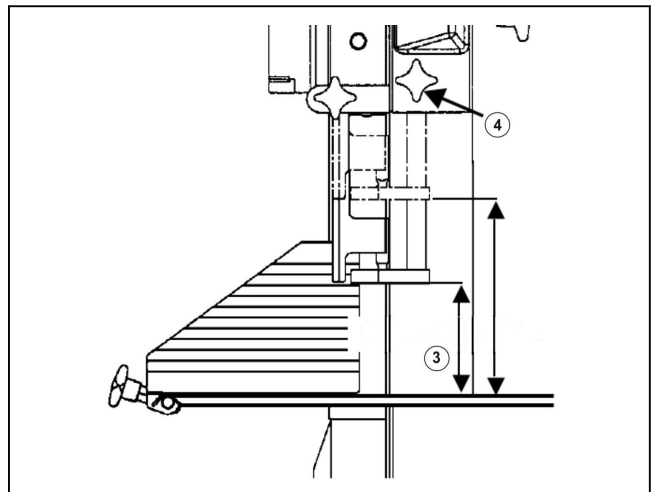


Fig. 9: Protection bar

5.5 Saw blade clamping unit

The lever is located under the saw table.

The swivel range is approx. 180°.

and can be put into 3 different positions with relevant functions:

Position 0 = saw blade without tension:

Position for periods during which the machine is not in use / after work is completed

Position 1 = saw blade with tension: Position for sawing operation

Position 2 = saw blade released: Position for saw blade replacement, saw blade deflector and drive disk deflector are disengaged.

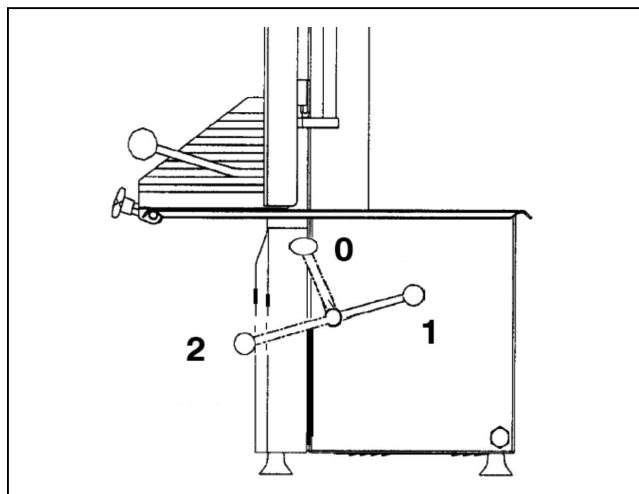


Fig. 10: Clamping unit

5.6 Adjustment device for upper wheel

The adjustment device consists of a locking lever and a threaded spindle with star knob.

It serves to change the axial position of the top wheel and consequently the running position of the saw blade.

- ⑤ Locking lever
- ⑥ Threaded spindle with star knob

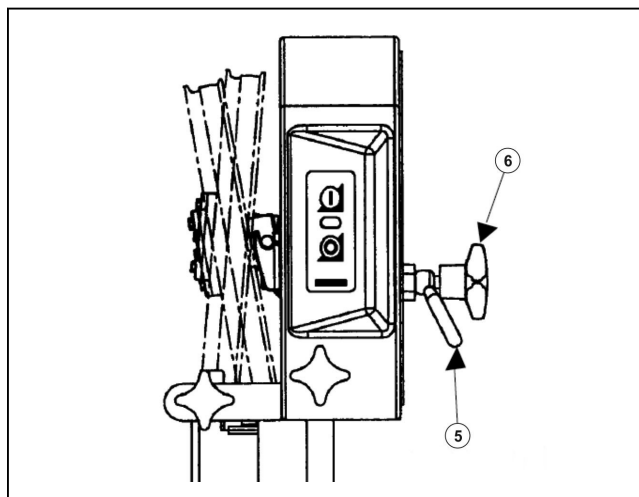


Fig. 11: Adjustment device

5.6.1 Change saw blade running

The circular rotation of the blade is adjusted at the factory to an optimal positioning of the blade and with regard to blade guide and upper wheel,

The back of the saw blade slightly touches the pin inside the guides at a distance of approx. 1 mm from the upper wheel band.

This setting should be checked from time to time, particularly after a saw blade change.

Changing settings

- ➔ Loosen locking lever on rear side.
- ➔ Turn the star knob to slightly change the position of the upper wheel.
- ➔ Turn the disk wheels by hand and check effect.
- ➔ Repeat process until the saw blade run is correct.
- ➔ Fasten setting with locking lever.

⑦ Upper wheel

⑧ Saw blade guide

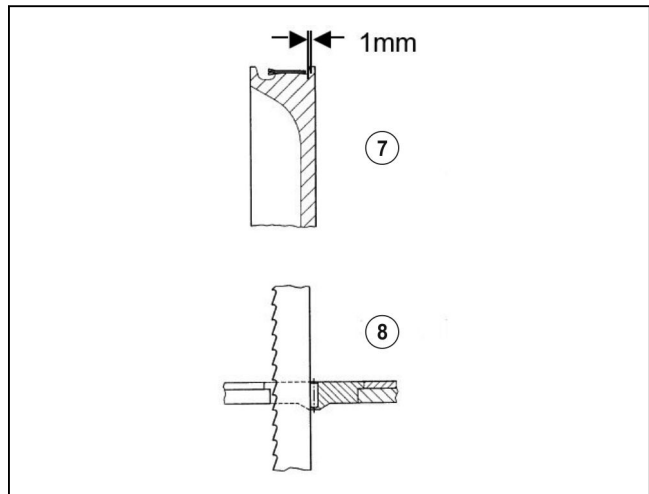


Fig. 12: Adjust saw blade

5.7 Sliding table with remnant pusher (optional)

The sliding table allows for easy feeding of product due to less frictional resistance. Jamming of the product during the cutting process is prevented since it is guided by the rear wall.

In addition, the remnant pusher allows safe cutting of end pieces.

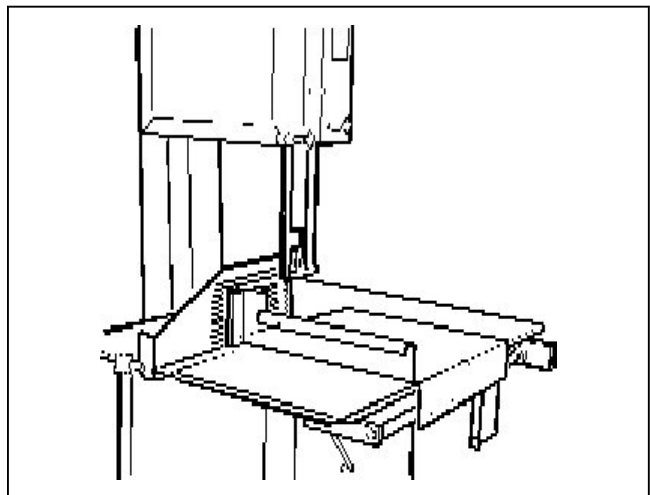


Fig. 13: Sliding table

If required, the remnant pusher should be installed in the rear wall of the table.

When not in use the pusher is located in a bracket under the work table.

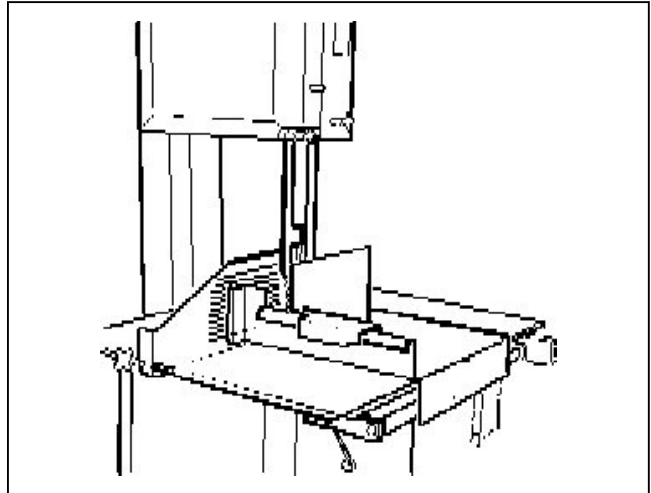


Fig. 14: Remnant pusher

The sliding table cannot be removed, but can be folded under the stationary work table and fastened.

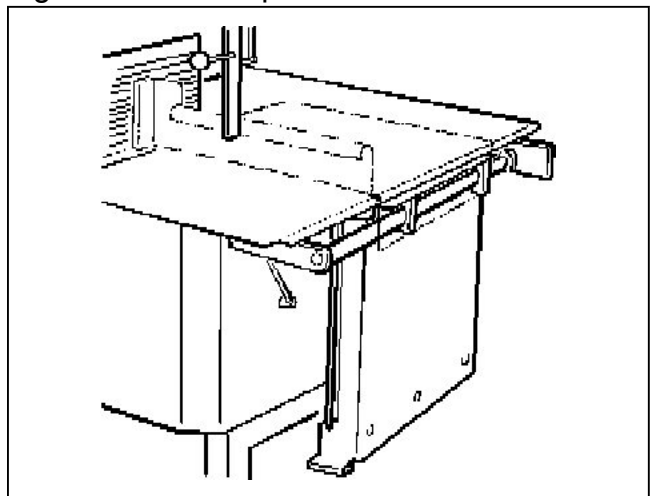


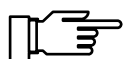
Fig. 15: Sliding table, folded down

6 Operation



Only products approved in compliance with the specifications of this documentation may be sliced. See chapter on Intended Use.

6.1 Preparations for sharpening



The protective bar should always be adapted to the product height!
Sawing without using the material pusher is not permissible.

6

Meat, cutlets and meat bones

- ➔ Cutlets should be cut with the backbone resting on the table and pointing toward the saw blade
- Best cutting results are achieved with well cooled products which are quickly pushed through the blade

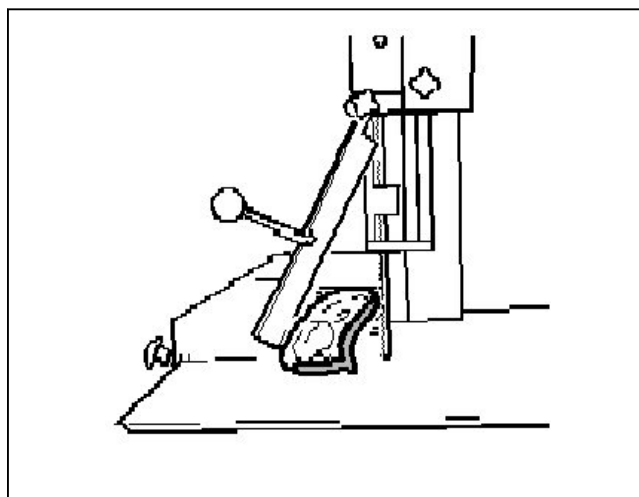


Fig. 16: Insert cutlets

Frozen meat, marrow and long bones

- ➔ When sawing marrow and long bones first cut off the head of the bone in order to provide a proper contact surface and to prevent bones from slipping and getting blocked during sawing.
- ➔ Feed product slowly and with slight pressure to the saw blade. Otherwise the blade might twist (risk of breakage and high wear).

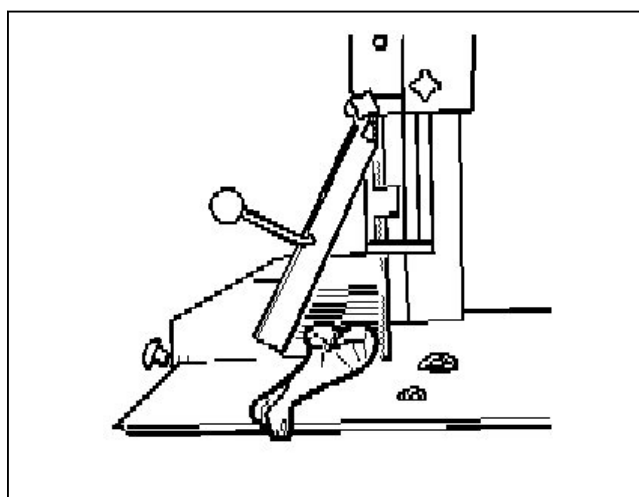


Fig. 17: Insert marrow and long bones

Meat pan

- ➔ For longer cutting periods and in order to speed up operation, place a meat pan behind the machine and let meat pieces drop into it.

6.2 Saws**DANGER****Movable parts, especially the saw blade!****Serious injuries.**

- Do not put machine into operation without mounted protective devices.
- Do not put machine into operation with damaged or twisted saw door.
- Protect yourself sufficiently by wearing protective clothing.
- Always keep a certain distance to the saw blade, use suitable in-feed units.
- Wait until the saw blade comes to a standstill before removing product from working field.
- Do not decelerate the running down saw blade through lateral pressure.

- ➔ Place product on table, to the right of the saw blade
- ➔ Adjust protective bar to cutting height.
- ➔ Set gauge plate to desired cutting width.
- ➔ Take hold of the lever knob of the product pusher with your left hand, swivel it upwards and hold it in position.

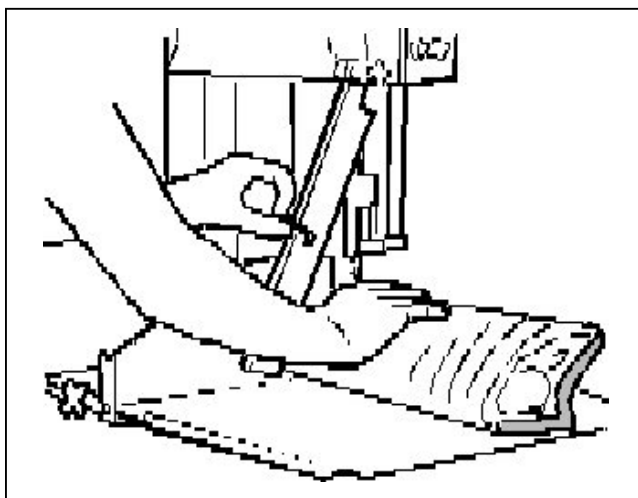


Fig. 18: Inserting the product

and/or

- ➔ or block the pusher in the upward position if the product is large and heavy, see figure on page 5 - 2.
- ➔ Push product to the left toward the gauge plate by ensuring a small distance toward the saw blade.
- ➔ Switch on machine.

- ➔ Using your left hand, move product against saw blade with product pusher.
- ➔ Feed product by holding it with your right hand.

⚠ DANGER Saw blade! Risk of injury.
Do not put your fingers into the sawing field.

- ➔ After cutting, withdraw product, move towards gauge plate and repeat procedure as described above.
- ➔ Feed end pieces toward blade together with new product.
- ➔ Switch off machine.

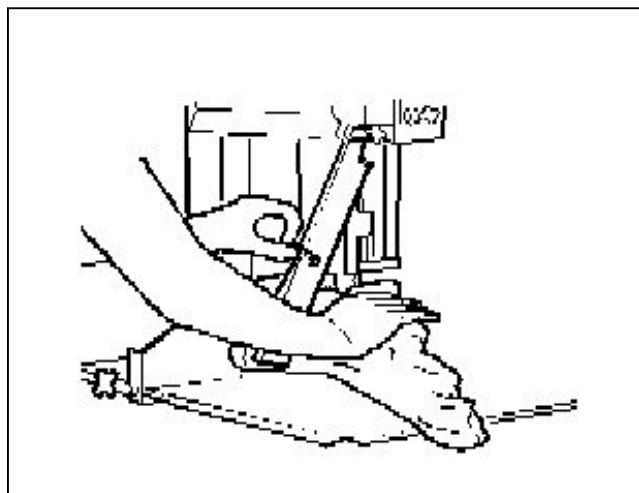


Fig. 19: Saws

For periods during which the machine is not in use and after work is completed, the saw blade should be without tension:

- ➔ Bring clamping unit lever in position 0, see figure on page 5 - 3.



For hygienic reasons empty the collecting bin from time to time and rins it.

6.3 Sawing with sliding table (option)

- ➔ Remove product pusher or swivel it in upward position and block it there, see figure on page 5 - 2.
- ➔ Pull sliding table toward operator
- ➔ Place product on sliding table so it rests on rear wall
- ➔ Adjust protective bar to cutting height.
- ➔ Set gauge plate to desired cutting width.
- ➔ Push product to the left toward the gauge plate
- ➔ Switch on machine.
- ➔ Using your hand press sliding table with product against saw blade for cutting slice.

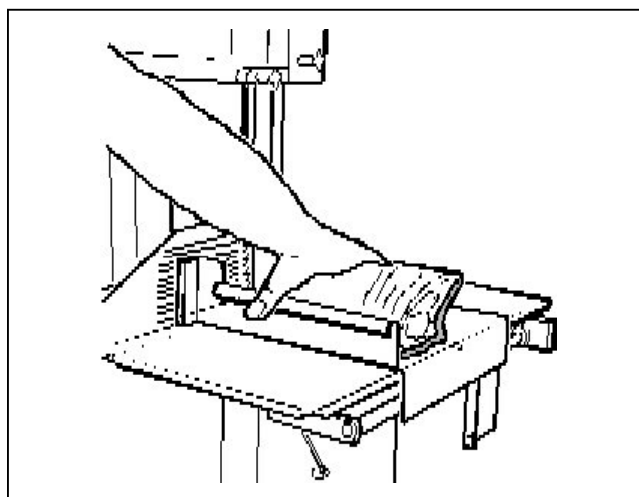


Fig. 20: Sliding table

⚠ DANGER Saw blade! Risk of injury.
Do not put your fingers into the sawing field.

- ➔ Pull back sliding table. Move product to gauge plate for further cutting
- ➔ Switch off machine.

Always use the remnant holder to feed end pieces safely toward the blade:

- ➔ Remove remnant pusher from holder and from the right place on rear wall of sliding table.
- ➔ The remnant pusher will guide and feed the end pieces.
- ➔ Switch off machine.

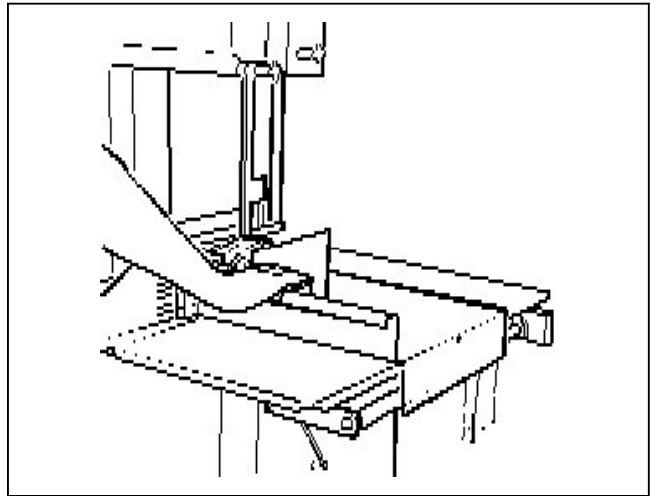
6

Fig. 21: Remnant pusher

For periods during which the machine is not in use and after work is completed, the saw blade should be without tension:

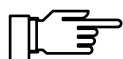
- ➔ Bring clamping unit lever in position 0, see figure on page 5 - 3.



For hygienic reasons empty the collecting bin from time to time and rins it.

7 Troubleshooting

7.1 Fault description



If the saw blade is broken, blocked or stuck, in case of unusual noise, possible damage or injury, immediately switch the saw off.



Should there be a stoppage and the problem cannot be corrected right away, food products have to be removed for protection in compliance with the maximum limit of 30 minutes for products to remain on the machine.

7

The described malfunction can be remedied by the user himself.

Malfunction	Causes	Remedy
Saw cannot be switched on.	Supply voltage interrupted.	Check mains connection.
	Saw door not closed properly.	Close saw door properly.
	Motor circuit breaker responded due to overload.	Let motor cool down for some time.
Bad cutting result.	Saw blade is dull.	Assemble new saw blade.
High cutting pressure and build up of odors.	Saw blade in reverse position (tooth direction).	Correct position.
Saw blade flutters.	Saw blade is too long (wrong product).	Position original saw blade.
	Saw blade without tension.	Bring clamping unit lever in position 1.

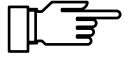
7.2 Procedure

- ➡ Switch off machine immediately if untypical noises are heard or if there is a suspected risk of injury.
- ➡ Call the responsible Customer Service if you are unable to rectify the fault yourself.
- ➡ Please provide your Bizerba customer service point with the following details:
 - Machine type (see rating plate),
 - Machine number (see rating plate),
 - Error description.

This will facilitate preparations by customer service staff.

8 Maintenance

8.1 Preparation for cleaning



Clean thoroughly:

- before putting into operation
- depending on use and application frequency
- if extremely soiled, several times a day
- after end of process
- after a longer down time

8

WARNING



Saw blade!

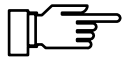
Danger of cutting injury also if saw blade is at standstill.

- Wear cut-proof gloves when cleaning and replacing the saw blade.
- Store saw blades securely so that nobody can harm oneself.

⇒ Switch off machine.

⇒ Pull out power plug.

8.2 Removing components



Do not place parts on top of each other to avoid mechanical damage.

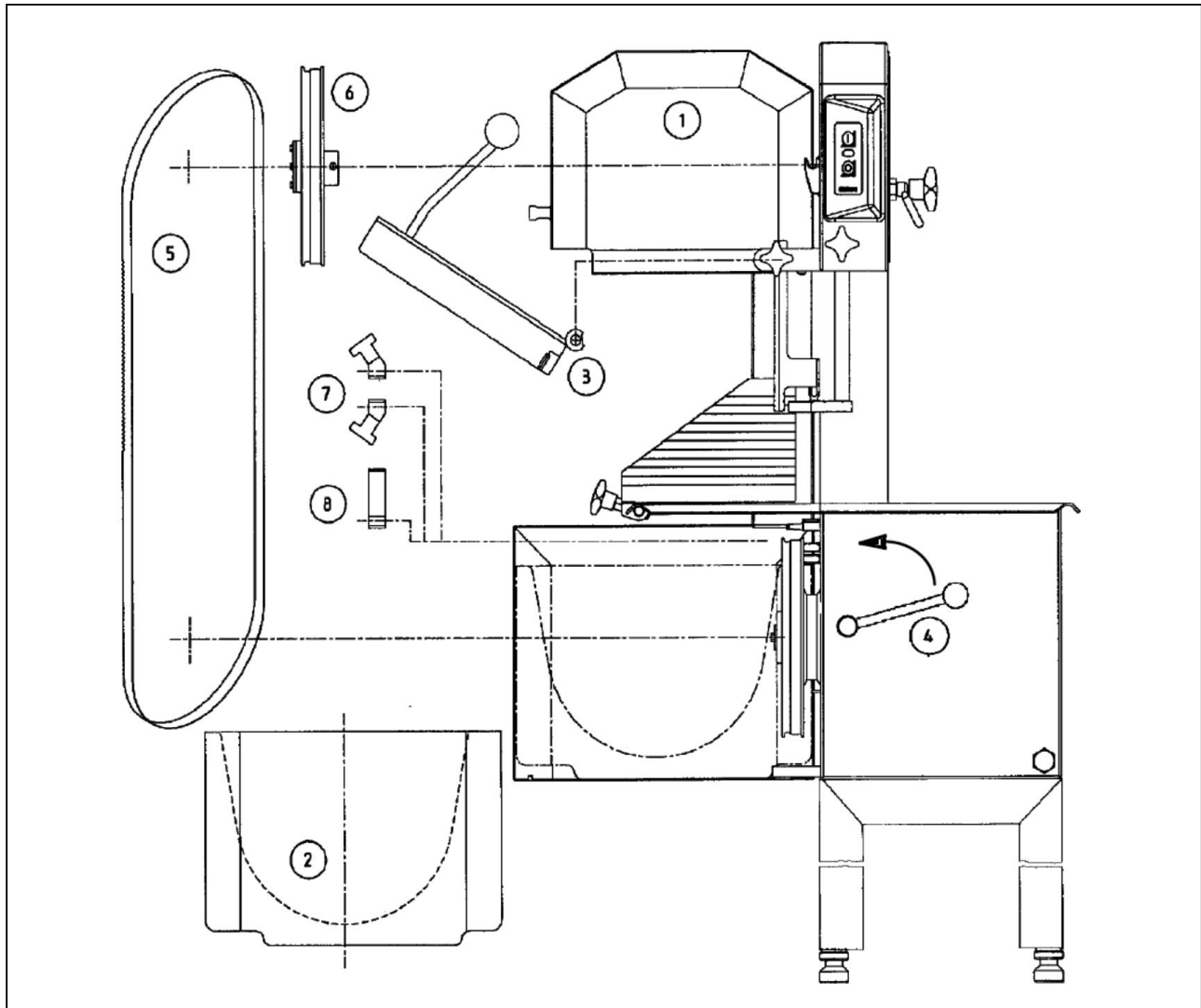


Fig. 22: Removing components

- ➔ Put on cut-resistant gloves.
- ➔ Open saw door ① at handle (magnetic lock).
- ➔ Remove collecting bin ② via the door.
- ➔ Swivel product pusher ③ to the top and remove it from the bolt towards the left side.
- ➔ Loosen saw blade, bring clamping unit lever ④ in position 2.
- ➔ Remove saw blade ⑤ with both hands towards the front.

⚠ WARNING Danger of cutting injury also if saw blade is at standstill. Store saw blade securely so that nobody can harm oneself.

- ⇒ Remove upper wheel ⑥ from bearing lifting it upwards.
- ⇒ Peel off saw blade deflector ⑦ and deflector ⑧ from bearing bolt.

Now the machine is ready for cleaning.

8.3 Cleaning

CAUTION**High-pressure cleaner!**


If water gets into the machine it can damage electric components.

- Do not use a high pressure cleaner for cleaning.
- Clean machine with low pressure smaller 30 bar.
- Only clean membrane keyboard with a moist cloth.

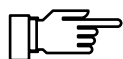
8

- ⇒ Clean removable and non-removable parts according to the cleaning plan. See chapter 8.4.
- ⇒ Remove residues from products from any dismantled and fixed machine parts.
- ⇒ Apply cleaning detergent as per cleaning plan.
- ⇒ Rinse all disassembled and fixed machine parts with drinking water.
- ⇒ Rub machine dry, put the dismantled machine components individually on a clean cloth and let them dry.

8.4 Cleaning plan Sawing

Work steps	Cleaning agents	Procedure	Cleaning devices	Note
Preparatory measures		Switch off the machine, pull out power plug.		
Disassemble all removable parts		in accordance with instruction manual		
Rough cleaning		Remove any product remnants manually	Plastic deflector, plastic spatula, brush	Start immediately after production has finished, if necessary, begin with the removed parts
Cleaning	2% P3 sterile Contact time is approx. 15 minutes	after thorough pre-rinsing with water (max. 50°C, depend. on when grease can be easily removed) foam or manually	Brush, tray, disposable cleaning cloth low pressure foaming device smaller than 30°bar	all disassembled and permanent parts of machine * see comment
Disinfect Additional measure	0.5- 2% P3 alcodes Application time according to product data sheet	spray foam	Manual spray device Low-pressure foaming device	Add. safety: distance to surface when spraying, 0.30 m Recommended application quantity 40-50 ml/m ² * see comment
Acid cleaning Additional measure	max. 3% P3-riksan max. 15 minutes contact time	manually, mechanically spray foam	Brush for removing lime residue Manual spray device Low-pressure foaming device	only if required for lime residue rinse directly after cleaning * see comment
Rinse	Drinking water	Max. 50°C temperature depend. on when grease can be easily removed	Water pipe Low pressure, lower than 30 bar	rest of machine, parts removed * see comment
Check		visually on optical cleanliness		

Work steps	Cleaning agents	Procedure	Cleaning devices	Note
Drying		rub dry or leave to dry	Disposable cleaning cloth	leave the disassembled parts to dry, laid out on a cleaning cloth
Care	Bizerba H1-Service Oil	apply	Disposable cleaning cloth	Product-parts that touch products must be rinsed before commencing operations
Assembly		in reverse order like disassembly, see instruction manual		Personnel must have clean and disinfected hands
Precautionary measures	Cover the machine when the surroundings are cleaned with spray and/or pressurized water			



* Comment: Appropriate precautionary measures have to be taken to ensure that no damage is done to the environment!



If cleaning agents are used that have not been recommended by the manufacturer, damage can be caused to the machine, which is no longer protected by guarantee.



The safety sheets and product sheets supplied with the cleaning and disinfectants must be read.

The cleaning agent can be acquired from the BIZERBA customer services:

Description	Order No.	Packaging unit
P3-steril	50003250000	5 liters
P3-riksan	50003270000	5 liters
P3-alcodes	50003260000	5 liters
Clean station	50003280000	
H1 service oil	94008900022	400 ml

8.5 Preparing the machine for operation

To avoid interferences and injuries, assembly must be carried out carefully and conscientiously.

Attach the components as follows:

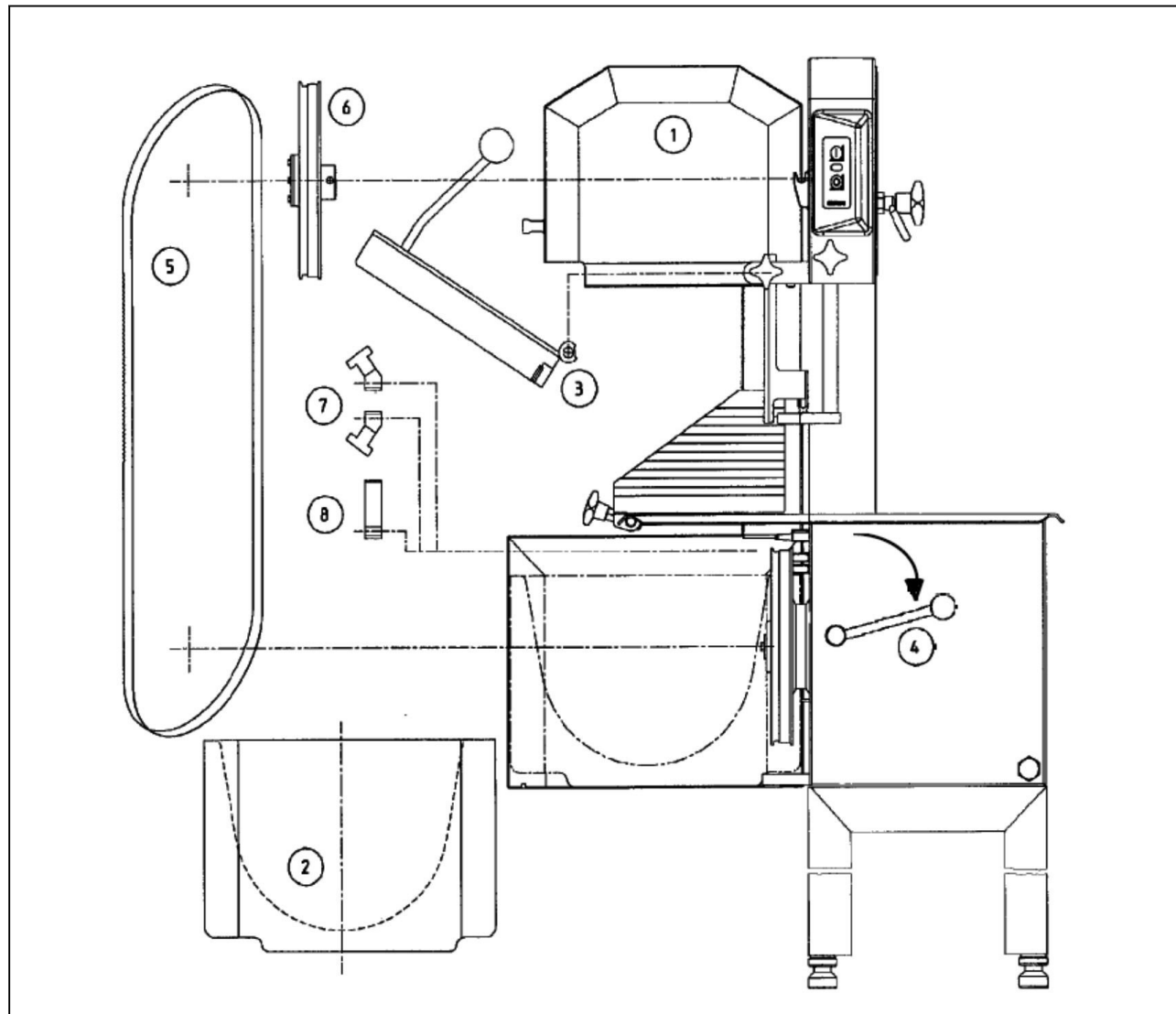


Fig. 23: Mount components

- ➔ Put on cut-resistant gloves.
- ➔ Push the deflector (8) on the bearing bolt.
- ➔ Push the saw blade deflector (7) on the bearing bolt. Pay attention to inner and outer design.
- ➔ Insert upper wheel (6) from top into bearing.
- ➔ Hold saw blade (5) with both hands so that the tooth tips are directed towards the body. Make sure the teeth in the right hand face downwards.

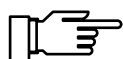
⚠ WARNING Danger of cutting injury also if saw blade is at standstill.

- ➔ Move it into the table at the slot of the table, than push it backwards into saw blade guidance of table and protective bar.
- ➔ Then loop it over the upper wheel and place it on the drive disk by routing it through the deflectors.
- ➔ Check the position of the saw blade in the guidance and on the wheels.
- ➔ Tension saw blade, bring clamping unit lever ④ in position 1.
- ➔ Push product pusher ③ on bolt and engage it in required position.
- ➔ Insert collecting bin ② in saw door.
- ➔ Close saw door ① at handle (magnet lock).

The machine is ready for operation.

8.6 Care of machine, servicing, maintenance

The drive and the movable parts of the saw are maintenance free.



If saw blade is twisted after uninstalling, it has to be replaced.

The following maintenance activities have to be carried out:

- ➔ Replace saw blade if necessary.
 - Removing the saw blade, see chapter 8.2.
 - Mounting the saw blade, see chapter 8.5.
- ➔ Checking the saw blade, see chapter 5.6.1.
- ➔ Check correct functioning of saw blade deflector and drive disk deflector.
 - Replace saw blade deflector and drive disk deflector if necessary.

9 Technical data

9.1 Dimensions FK 32

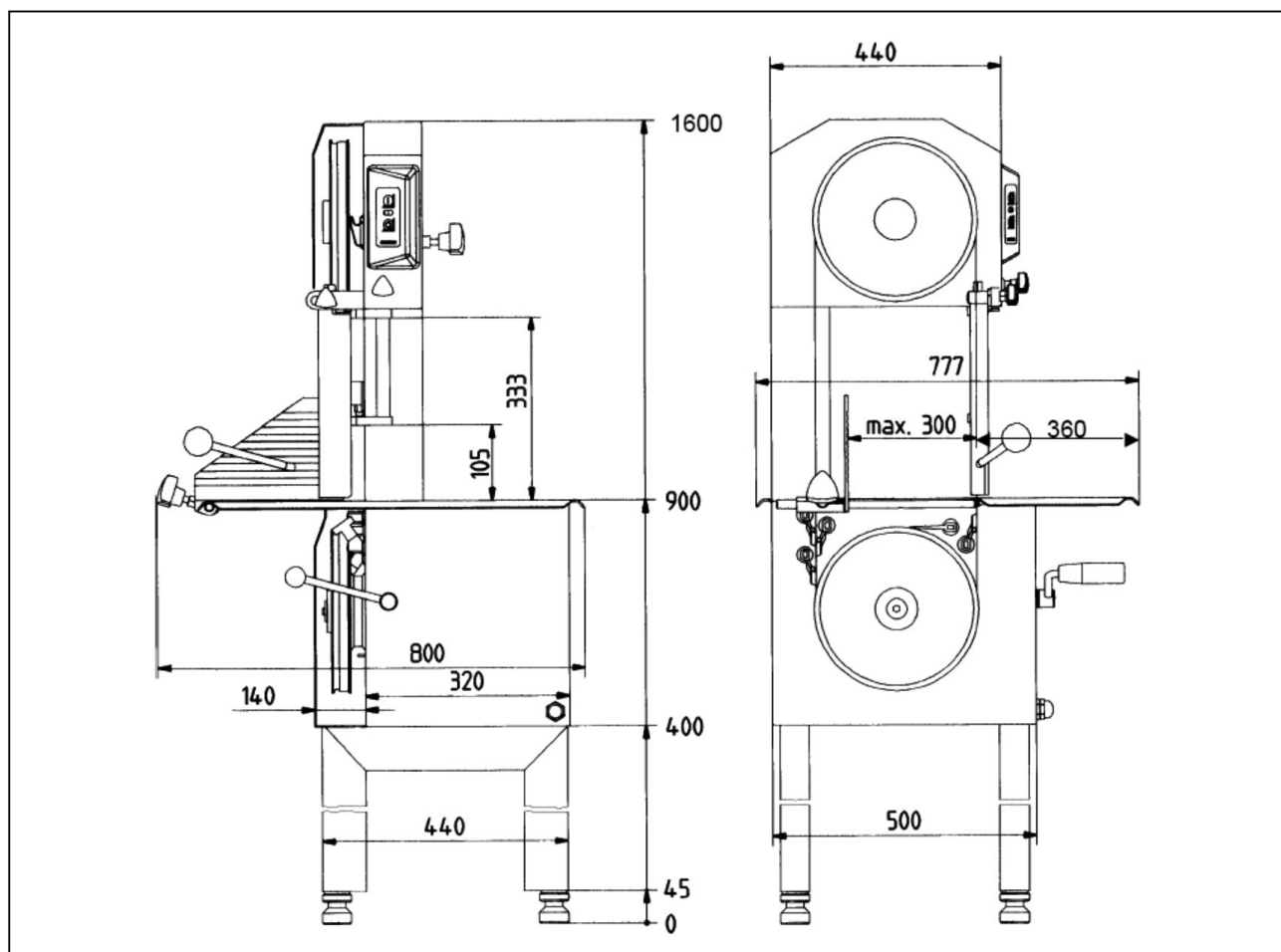


Fig. 24: FK 32

Outer dimensions (max. space requirement):

Length = 800 mm = 31.5"

Width = 777 mm = 30.6"

Height = 1,600 mm = 70"

Installation surface:

Length = 440 mm = 17.3"

Width = 500 mm = 19.7"

Cutting height max. = 330 mm = 13"

Slicing width = 10 - 290 mm = 0.4" - 11.4"

Blade speed = approx. 25 m/s = 82.6 ft/s

Machine weight = approx. 138 kg = 304.2 lbs

Types of current, voltages, power consumptions = see rating plate

9.2 Power supply

Technical data of power supply

- **Mains supply**
Three-phase alternating current, see rating plate
- **Permissible mains voltage tolerance (static) normal**
At 230 to 400V: +6% to -10% of nominal value
- **Mains frequency: 50 (60) Hz**
Permissible tolerance of mains frequency: +2% to -2% of nominal value
Admissible distortion factor of mains voltage: smaller equal 5 %
- Leakage current protective conductor max.: 3.5 mA

9

9.3 Ambient conditions

- **Ambient temperature**
for operation and storage: -10 to +40°C (+14 to +104 degF)
- **Humidity**
Protection class IP 55
- **Relative humidity**
for operation and storage: 90 % (condensation of the unit is not permissible)
- **Air convection**
Free air convection must be able to form around the device in order to avoid overheating.
- **Required lighting**
500 Lux

Appendix

Declaration of conformity

Declaration of conformity for plastic materials with direct food contact



Declaration of conformity

We hereby declare that the design of the machine described below

Designation:	Meat and bone saw
Model:	FK 32
No. of the type examination certificate:	NV 14135
Approval and certification office Food department EC ident. no.:	0556

corresponds to the prototype described in the type examination certificate and the applicable requirements in the following EC guidelines:

Machinery Directive	2006/42/EC
Electromagnetic Compatibility Directive (EMC)	2014/30/EU

Applied harmonized standards:

EMC	DIN EN 61000-6-2; 2006.03 and amendment 1; 2011.06 DIN EN 55011 class A; 2011.04
-----	---

Authorized person for putting together the relevant technical documents:

Berthold Roller, Quality Management, Bizerba GmbH & Co. KG

The basis for the declaration of conformity is the contract documents (Bizerba purchase order documents).

In the event of a modification to a machine of the above description that is not coordinated with Bizerba or not carried out by Bizerba, this declaration loses its validity.

Date: 01.08.2014

Signature of manufacturer:

i. V. 

Title of signatory:

Ralf Steinhilber
Director Food Processing Technology (FPT)
Bizerba GmbH & Co. KG

Declaration of conformity for plastic materials with direct food contact

We herewith declare that the materials used in the following machine

Designation:	Meat and bone saw
Model:	FK 32

are in conformance with the general requirements of the following directives and laws in the valid version at the time of issuance of this declaration:

- Regulation (EU) No. 1935/2004 on materials and articles intended for contact with food
- Regulation (EU) No. 10/2011 on materials and articles made of plastic intended for contact with food

For the plastic parts used which, when properly used, can come into contact with food, laboratory tests were performed by a certified test laboratory. Both the total migration and the specific migrations are below the legal threshold values.

The materials and raw materials used conform to regulation (EU) No. 10/2011.

Specifications on proper use or limitations:

- Type(s) of food that may come into contact with the materials:
mainly frozen meat, sausage and fish as well as bones
- Handling duration and temperature when in contact with food:
Maximum 30 minutes at max. 40°C
- Ratio between the area coming into contact with food and the volume, used to determine the conformity of the material or article:

6

Functional barriers made of plastic are not used in the specified machine.

Information on suppliers or preliminary suppliers can be provided on request.

Date:

22.10.2012

Signature of manufacturer:

ppa. 

Title of signatory:

Andreas Wilhelm Kraut
Chief Executive Officer Development (CEO-D)
Bizerba GmbH & Co. KG