

Instruction Manual

_____ Wood Band

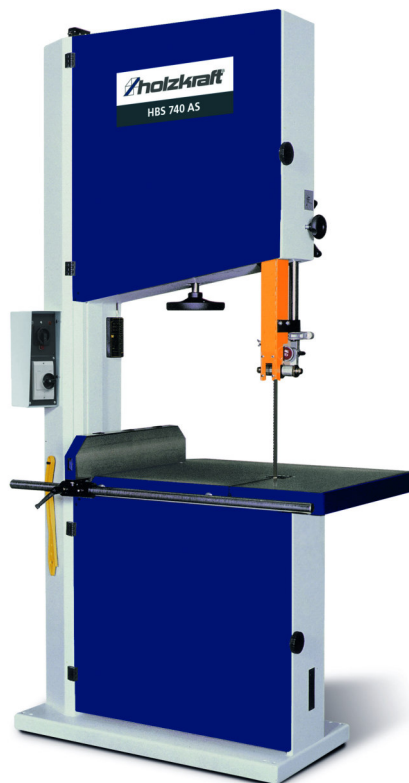
_____ HBS 540 AS

_____ HBS 640 AS

_____ HBS 740 AS

_____ HBS 840 AS

_____ HBS 940 AS



HBS 740 AS

HBS AS-SERIES

Imprint

Product identification

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HBS 540 AS	5152154
HBS 640 AS	5152164
HBS 740 AS	5152174
HBS 840 AS	5152184
HBS 940 AS	5152194

Manufacturer

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Information on the operating instructions

Original operating instructions

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Technical changes and errors excepted.

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1 Introduction

You have made a good choice by purchasing the band saw from HOLZKRAFT.

Read the operating instructions carefully before commissioning.

This will inform you about the proper start-up, the intended use as well as the safe and efficient operation and maintenance of your Wood Band Saw.

The operating instructions are an integral part of the Wood Band Saw. Always keep these operating instructions at the place of use of your Wood Band Saw. In addition, observe the local accident prevention regulations and general safety regulations for the area of application of the band saw.

1.1 Copyright

The contents of these instructions are protected by copyright. Their use is permitted within the scope of use of the Wood Band Saw. Any other use is not permitted without the written consent of the manufacturer.

We register trademarks, patents and design rights to protect our products, patent and design rights, if this is possible in individual cases. We emphatically oppose any infringement of our intellectual property.

1.2 Customer Service

Please contact your dealer if you have any questions about your Wood Band Saw or for technical information. They will be happy to provide you with expert advice and information.

Germany:
Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

Repair service:
Fax: 0049 (0) 951 96555-111
E-Mail: service@stuermer-maschinen.de

Spare part order:
Fax: 0049 (0) 951 96555-119
E-Mail: ersatzteile@stuermer-maschinen.de

We are always interested in information and experiences that result from the application and can be valuable for the improvement of our products.

1.3 Disclaimer

All data in these operating instructions has been compiled on the basis of the state-of-the-art, valid standards and guidelines as well as our many years of expertise and experience.

The manufacturer shall not be liable for damage in the following cases:

- Non-observance of these operating instructions
- Unintended use
- Deployment of untrained staff
- Conversions at one's own responsibility
- Technical modifications
- Use of unauthorised spare parts

The actual scope of delivery may deviate from the explanations and representations described here in the case of special versions, when additional order options are used or due to the latest technical changes.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations valid at the time of the conclusion of the contract shall apply.

2 Safety

This section provides an overview of all important safety packages for the protection of persons and for safe and trouble-free operation. Further task-related safety instructions are contained in the sections on the individual life phases.

2.1 Explanation of symbols

Safety instructions

Safety instructions are identified in these instructions by symbols. The safety instructions are introduced by signal words that express the extent of the hazard.



DANGER!

This combination of symbol and signal word indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING!

This combination of symbol and signal term indicates potentially hazardous situations which may cause death or serious injury if not averted.



CAUTION!

This combination of symbol and signal word indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



DANGER!

This combination of symbol and signal term indicates a potentially hazardous situation which may cause minor or light injuries if it is not averted.



NOTE!

This combination of symbol and signal word indicates a possibly hazardous situation which, if not avoided, may result in damage to property and the environment.

Tips and recommendations



Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for efficient and trouble-free operation.

To reduce the risks of personal injury and damage to property and to avoid dangerous situations, you must observe the safety instructions listed in these operating instructions.

2.2 Responsibility of the operator

Operator

Operators are defined as the persons who operate the wood band saw for commercial or profit-based purposes or provide the machine to third parties for use or application and bear the legal product responsibility in terms of the protection of users, staff or third parties during operation.

Operator's duties

If the wood band saw is used for commercial purposes, the operator of the wood band saw is subject to the legal stipulations in terms of occupational safety. For this reason, the safety instructions in these operating instructions as well as the safety, accident prevention and environmental protection regulations valid at the installation location of the wood band saw must be complied with. In this process, the following shall apply in particular:

- Operators shall obtain information about valid occupational safety regulations and determine additional hazards as part of a risk assessment which result from the specific operating conditions at the wood band saw's installation location. Said risk assessment shall be reflected in operating instructions for wood band saw operation.
- During the entire wood band saw operating time operators must check whether the operating instructions they created meet current standards and adapt the operating instructions where necessary.
- Operators shall clearly manage and specify the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- Operators must make sure that all persons handling the wood band saw have read and understood these operating instructions. Operators must also regularly train staff and notify of the hazards.
- Operators shall provide staff with the required protective equipment and wearing the required protective equipment shall be mandatory.

Operators shall also be responsible for maintaining the wood band saw in a technically perfect condition. For this reason, the following shall apply:

- Operators shall make sure that the maintenance intervals described in these operating instructions are complied with.
- Operators shall regularly check that the safety equipment is fully functional and complete.

2.3 Personnel requirements

Qualifications

The different tasks described in these operating instructions require different levels of skills in terms of the qualifications of operating staff working with the machine.



WARNING!

Risk from inadequately qualified persons!

Inadequately qualified persons are unable to assess the risks when handling the wood band saw, thus putting themselves and others at risk of severe or fatal injuries.

- All work must be carried out by qualified persons only.
- Keep inadequately qualified persons away from the work area.

Exclusively persons of whom it can be expected that they reliably complete assigned tasks shall be authorised to carry out any tasks. Persons whose reactions have been impaired shall not be authorized, e.g. drug users, users under the influence of alcohol or medication.

These operating instructions specify the following personal qualifications for the following tasks:

Operating staff:

Operating staff has undergone an induction by the operator about the entrusted tasks and potential hazards resulting from improper behaviour. Operating staff shall exclusively be permitted to carry out any tasks beyond operation in normal mode if this has been specified in the operating instructions and operators have explicitly entrusted operating staff with the task.

Specialist staff:

As a result of specialist training, expertise, experience and skills in terms of the relevant standards and regulations, specialist staff is able to complete the tasks they are entrusted with and independently identify hazards and avert risks.

Manufacturer

Certain work must be carried out by manufacturer specialist staff only. Other staff is not permitted to carry out this work. Contact our customer service to have the work carried out.

2.4 Personal protective equipment

Personal protective equipment is intended to protect the health and safety of persons at work. Staff must wear the personal protective equipment indicated in individual sections of these operating instructions when carrying out the different tasks on the machine.

The personal protective equipment is described in the following section:



Respiratory protection

Respiratory protection is used to protect the respiratory tract and lungs against the absorption of dust particles.



Head protection

The industrial helmet protects the head against falling objects and bumping against fixed objects.



Hearing protection

Hearing protection helps to protect the hearing from harmful noise and other loud sounds.



Safety goggles

The safety goggles are used to protect the eyes from flying parts.



Protective gloves

Protective gloves are intended to protect the hands from components with sharp objects as well as friction, abrasion, and deep-cut injuries.



Safety shoes

Safety shoes protect feet from pinching, falling parts and slipping on slippery surfaces.



Protective clothing

Protective work clothing is close-fitting work clothing, without protruding parts, with low tear resistance.

2.5 Safety regulations in general



NOTE!

The regulations valid in the country of use must be observed in each case (as amended).



WARNING!

Failure to follow any of the instructions in this manual will increase the risk of an accident.



DANGER!

The residual risk linked to the specific use of the machine must be determined before the machine is put into operation.



WARNING!

None of the maintenance operations not included in this manual may not be performed by the operator himself, but only by personnel authorized by the manufacturer. Such maintenance operations, which are then performed by non-specialized personnel, may endanger the safety of the machine.



DANGER!

All uses not listed in these operating instructions are considered dangerous by the manufacturer and must therefore not be carried out by the operating personnel.



WARNING!

If the instructions given in this manual are not followed, the manufacturer will be released from any responsibility in case of accidents.



ATTENTION!

The machine should not be used by people with mental or physical disabilities. The use is only allowed for products that are considered safe after a specific analysis of the residual risks and only if the protective devices are used and the necessary care is taken.



DANGER!

Operation of the machine is permitted to adult personnel who are properly informed and trained. Children must be kept away from the machine at all times but especially during operation.

2.6 Safety instructions for transport



DANGER!

Before transportation, it is necessary to carefully read all the information about the weight and the possibility of lifting the products.

2.7 Safety instructions for installation



DANGER!

All mechanical and especially electrical installation work must be carried out by experienced and professional personnel.



DANGER!

The minimum maneuvering range, determined by the manufacturing company for the specific machine model, must be strictly observed.



DANGER!

Before connecting the machine to the electrical supply, check that the supply voltage is appropriate.

That the available amperage, the mains frequency, the safety systems of the working line meet the specific requirements of the product.

The electrical connections of the machine must be made by experienced personnel.



ATTENTION!

The performance of the grounding system must be checked, for which qualified and professional personnel must be contacted.

This is extremely important for the safety of the operator. The ergonomics of use must be carefully observed.



DANGER!

- The machine must be connected to a powerful suction system before start-up. 35 m/s must be guaranteed at the suction inlet.
- The machines must be installed in closed rooms and operate at a temperature between 15°C and 35°C. They must not be exposed to water jets, rain or intense sunlight.
- The machine must not be operated near liquid gases or in the presence of high concentrations of combustible dust, or in an environment with potential explosives. The machine must not operate in premises designated by the ATEX directives with a degree and as a type.
- Protect the machine from moisture (risk of short circuit!).



DANGER!

- The floor around the machine must be clean and level. If personnel fall and hit the machine, this can have serious consequences.
- A suitably illuminated room must be selected that can guarantee an average illumination of at least 500 lux.
- The workplace must always be kept clean and tidy. Disorder in the workplace can lead to fires.

2.8 Safety instructions for correct use of the machine



DANGER!

- Read the paragraph on residual risks and make sure to limit them.
- Compare the conformity of the product with the information in the operating instructions. If any equipment is missing or damaged, report it immediately to the manufacturer. It is forbidden to operate the machine under these conditions.



WARNING!

It is forbidden to start the machine if not all the machine parts are mounted or if they do not work properly. The covers must be in place and fastened as intended.



WARNING!

Check the saw blade for damage and replace it as soon as it is damaged or worn in any way.

Personnel are at risk, working times are longer, the quality of machining is reduced accordingly and the life of the machine is also reduced when working with a worn saw blade.



DANGER!

Some machine parts, such as the saw band and motor, can heat up during operation.



DANGER!

- Before, during and after work, the stability of the part must be taken into account by the personnel. Machining operations that affect the stability of the part must not be carried out without first taking any safety measures.
- It is forbidden to machine materials that are highly flammable or that can form explosive mixtures (ATEX).
- Do not machine materials other than those for which the machine was designed. It is forbidden to process materials that have not been authorized.



WARNING!

It is forbidden to start the machine when the suction system is not connected or not in operation.

2.9 Safety instructions for operating personnel



NOTE!

Before starting, using, servicing or otherwise intervening on the machine, the instructions for use and maintenance must be read carefully. Contact and work with the machine is only permitted for persons who are familiar with the handling and operation of the machine.



DANGER!

Repairs, maintenance and upgrades may only be carried out by qualified personnel with the machine switched off (pull out the mains plug!)



DANGER!

Before starting work on the machine, the operator must be trained and sensitized to observe all the instructions given in this operating manual and to follow all the safety regulations for the use of the machine. These operating instructions must always be available to the operating personnel.



WARNING!

- No hanging objects may be worn, especially around the wrists and neck (bracelets, necklaces, scarves, etc.). There is a risk of getting caught and dragged.
- For the operation, the personnel must be in full possession of their mental and physical powers.

Any working method that impairs the safety of the band saw must be avoided.

The operator must help to ensure that no unauthorized persons work on the bandsaw (e.g. also by actuating devices against unauthorized use).

The operator is obliged to check the bandsaw at least once before use (daily) for externally visible damage and defects and to report immediately any changes that have occurred (including operating behavior) that impair safety.

The operator must ensure that the band saw is only ever operated in perfect condition.

- Before switching on the machine, check the correct pick-up of the workpiece!

- When working with the machine, never bring your hands close to rotating parts!
- Do not remove the sharp-edged chips by hand; use hand broom or chip hook!
- Use the protective devices and befe. Do not wear any hanging objects, especially around wrists and neck (bracelets, chains, scarf, etc.). There is a risk of getting caught and dragged.
- Never work without protective devices and keep them in working order. Check that they are in working order before starting work.
- Always secure your workpiece with suitable clamping devices when working. Ensure that there is sufficient support surface.
- Never work under the influence of diseases that impair concentration, overtiredness, drugs, alcohol or medication.
- Remove tool keys and other loose parts from the machine after assembly or repair before switching on.
- Observe all safety and danger notices on the machine and keep them in a perfectly legible condition.
- Keep children and persons not familiar with the machine away from your working environment, the machine and tools.
- The machine may only be used, equipped and maintained by persons who are familiar with it and have been informed about the dangers.
- Do not pull on the power cord to disconnect the plug from the outlet. Protect the cord from heat, oil and sharp edges.
- Make sure that the main switch is in the OFF position when connecting the machine to the power supply to avoid accidental start-up.
- Wear close-fitting work clothes, safety glasses, safety shoes and hearing protection. Tie up long hair. Do not wear watches, bracelets, chains, rings or gloves when working (rotating parts!).
- Immediately eliminate malfunctions that affect safety.
- Never leave the machine in operation unattended and stay with the machine until the tool has come to a complete stop. Then pull out the mains plug to protect against unintentional switching on..
- Before each use of the machine, make sure that no parts are damaged. Damaged parts must be replaced immediately to avoid sources of danger!
- Do not overload the machine! You will work better and safer in the specified power range. Use the correct tools! Make sure that the tools are not blunt or damaged.
- Use only original spare parts and accessories to avoid possible risks of danger and accidents.

2.10 Safety markings on the band saw

The following safety markings are attached to the band saw (Fig. 1), which must be observed and followed.



Fig. 1: Safety labels

The safety markings affixed to the machine must not be removed. Damaged or missing safety markings can lead to incorrect handling, personal injury and damage to property. They must be replaced immediately.

If the safety markings are not visible and understandable at first glance, the machine must be taken out of operation until new safety markings have been applied.

3 Intended use

The wood band saw is designed exclusively for sawing wood or wood-like materials. The band saw is designed and built for use in a non-hazardous environment.

Intended use also includes compliance with all the information in these instructions.

3.1 Reasonably foreseeable misuse

Any use beyond or different from the intended use is considered misuse.

Possible misuses can be:

- Use of the wood band saw for materials other than wood (e.g. the processing of metal).
- Machining of non-fixed or insufficiently fixed workpieces.
- Operating the machine without functioning, intended protective devices.
- Bridging or changing the safety devices.
- Non-observance of the maintenance instructions.
- Non-observance of wear and damage marks.
- Service work by untrained or unauthorized personnel.
- Maintenance work on an unsecured machine.
- Deliberate or careless handling of the wood band saw during operation.
- Installation of spare parts and use of accessories and equipment not approved by the manufacturer.

- Machining of oversized or undersized workpieces so that safe working can no longer be guaranteed.
- Modifications to the machine or the use of modified tool systems..

Misuse of the wood band saw can lead to dangerous situations. Stürmer Maschinen GmbH accepts no liability for design and technical modifications to the wood band saw.

3.2 Residual risks

Even if all safety regulations are observed and the machine is used in accordance with the regulations, there are still residual risks, which are listed below.

- During operation, there is a risk of crushing the upper and lower limbs.
- During set-up and setup work, it may be necessary to dismantle on-site protective equipment. This creates various residual risks and potential dangers of which every operator must be aware.
- There is a risk of damaging the hearing if the machine is used without the appropriate noise protection.
- There is a risk of dust formation, especially in closed rooms or with low-performance suction systems.
- There is a risk of instability of the workpiece during machining depending on its size. Dimensions that exceed the size of the work surface can cause the workpiece to tip over before, during or after cutting. This can be prevented by using holding devices that correspond to the size of the workpiece or by using a larger machine.

4 Technical Data

Model	HBS 540 AS	HBS 640 AS
Work table dimensions	520 x 720 x 860 mm	600 x 885 x 840 mm
Flywheel-Ø	540 mm	640 mm
Speed	950 U/min	520 U/min
max. Cutting height	350 mm	400 mm
max. Cutting width	520 mm	620 mm
Work table inclination	0° bis +20°	0° bis +20°
Band saw blade length (MIN - MAX.)	4200 - 4260 mm	4730 - 4800 mm
Engine power 400 V 50 Hz/P2	1,5 kW (2 PS)	2,2 kW (3 PS)
Weight	240 kg	320 kg
Saw blade width		8-35 mm
Dimensions	870 x 620 x 1970 mm	1050 x 720 x 2180 mm
Ø 1 Suction socket	120 mm	120 mm
Ø 2 Suction socket	120 mm	120 mm
V-belt	3V 425	3V 450
Bearing	6206 2RS	6206 2RS

Modell	HBS 740 AS	HBS 840 AS
Work table dimensions	710 x 1000 x 980 mm	800 x 1160 x 1020 mm
Flywheel-Ø	740 mm	840 mm
Speed	810 U/min	640 U/min
max. Cutting height	450 mm	540 mm
max. Cutting width	720 mm	820 mm
Work table inclination	0° bis +20°	0° bis +20°
Band saw blade length (MIN - MAX.)	5340 - 5420 mm	6000 - 6110 mm
Engine power 400 V 50 Hz/P2	3 kW	5,5 kW (7,5 PS)
Weight	510 kg	730 kg
Saw blade width	10-40 mm	10-45 mm
Dimensions	1180 x 820 x 2430 mm	1410 x 920 x 2650 mm

Modell	HBS 740 AS	HBS 840 AS
Ø 1 Suction socket	120 mm	140 mm
Ø 2 Suction socket	120 mm	140 mm
V-belt	3V 475	A 53
Bearing	6306 2RS	6307 2RS

Model	HBS 940 AS
Work table dimensions	800 x 1250 x 1060 mm
Flywheel-Ø	940 mm
Speed	610 U/min
max. Cutting height	560 mm
max. Cutting width	910 mm
Work table inclination	0° bis +20°
Band saw blade length (MIN - MAX.)	6610 - 6710 mm
Engine power 400 V 50 Hz/P2	5,5 kW
Weight	860 kg
Saw blade width	12-50 mm
Dimensions	1550 x 920 x 2900 mm
Ø 1 Suction socket	140 mm
Ø 2 Suction socket	140 mm
V-belt	3VX 600
Bearing	6308 2RS

4.1 Type plate

Holzbandsäge Wood bandsaw		
Typ Type	HBS 540 AS	Serien-Nr. Serial no.
Artikel-Nr. Item no.	5152154	Baujahr Monat/Jahr Year of manufacture month/year
Motorleistung Motor power	1,5 kW	Netzanschluss Power connection
Max. Schnittbreite Max. cutting width	520 mm	Max. Schnitthöhe Max. cutting height
Gewicht Weight	240 kg	350 mm
 www.holzkraft.de		Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26, 96103 Hallstadt Deutschland / Germany

Fig. 2: Type plate HBS 540 AS

4.2 Noise level

Since there is a correlation between intensity of loudness and duration of exposure, it is not possible to precisely define the need for further precautions and even less their implementation. In addition, the limits of exposure levels may vary from country to country.

This information allows the user of the machine to better assess the risks.



Wear hearing protection!



NOTE!

It should be noted that the duration of the sound exposure, the type and nature of the work area and other machines that are in operation at the same time also influence the noise level at the workplace.

Model	L Aeq (dB A)	L W(A) (dB A)		Lpc (dB C)
HBS 540 AS	84,5	93,7	2,3	<130
HBS 640 AS	84,9	88,4	0,7	<130
HBS 740 AS	77,9	89,5	0,9	<130
HBS 840 AS	82,6	94,4	2,7	<130
HBS 940 AS	84,7	95,6	3,6	<130

specified constant: $k = 4$ dB

L Aeq = average sound pressure level

L W(A) = loudness

Lpc = instantaneous loudness (maximum value)

5 Transportation, packing, storage

5.1 Transport

Check the band saw for visible transport damage after delivery. If you discover any damage to the machine, report it immediately to the transport company or the dealer.

Improper transport is accident-prone and can cause damage or malfunctions to the machine for which we do not grant any liability or warranty. Transport the scope of delivery to the installation site secured against shifting or tipping with a sufficiently dimensioned industrial truck or a crane.



WARNING!

Severe or fatal injuries may occur if parts of the machine tumble or fall down from the forklift truck, pallet truck or from the transport vehicle. Follow the instructions and information on the transport box.

Note the total weight of the machine. The weight of the machine is indicated in the "Technical data" of the machine. When the machine is unpacked, the weight of the machine can also be read on the rating plate.

Only use transport devices and load suspension gear that can hold the total weight of the machine.



WARNING!

The use of unstable lifting and load suspension equipment that might break under load can cause severe injuries or even death. Check that the lifting and load suspension gear has sufficient load-bearing capacity and that it is in perfect condition.

Observe the accident prevention regulations issued by your Employers Liability Insurance Association or other competent supervisory authority, responsible for your company.

Fasten the loads properly.

General risks during internal transport



WARNING: DANGER OF TIPPING

The device may be lifted unsecured by a maximum of 2cm.

Employees must be outside the danger zone, the reach of loads.

Warn employees and, if necessary, advise employees of the hazard.

Machines may only be transported by authorized and qualified persons. When transporting, act responsibly and always consider the consequences. Refrain from daring and risky actions.

Slopes and inclines (e.g. driveways, ramps and similar) are particularly dangerous. If driving on such passages is unavoidable, special care must be taken.

Before starting transport, check the transport route for possible danger points, unevenness and trouble spots as well as for sufficient strength and load-bearing capacity. Danger points, unevenness and faults must be inspected before transport. The removal of hazardous points, unevenness and faults at the time of transport by other employees leads to considerable hazards.

Careful planning of internal transport is therefore essential.

5.2 Packaging

All of the wood band saw's packaging materials and packing aids are suitable for recycling and must always be disposed of using material-based recycling systems.

Packaging materials made of cardboard must be shredded and disposed of as part of waste paper recycling.

The foils are made of polyethylene (PE), padding is made of polystyrene (PS). Dispose of these substances at a recycling centre or hand them over to the relevant waste disposal company.

5.3 Storage

Allow the band saw to cool completely and store it, thoroughly cleaned, in a dry, clean and frost-free environment.

6 Assembly and installation

The following are the individual steps of the installation, which must be carried out exactly in the specified order:

- Read the operating instructions and follow the instructions contained therein for each stage.
- Remove the machine from its packaging.
- Move the machine to the designated and suitable installation site.
- Check the completeness and integrity of the machine and all its components.
- If necessary, set up a work surface.
- Connect the machine to the exhaust system.
- Connect the machine to the electrical system.
- With the motor switched on, check that the saw blade rotates in the correct direction.

After the saw band is inserted:

- Clamp the saw blade properly.
- Manually check the upper alignment of the saw blade on the flywheels.
- Manually check the setting of the saw blade guide..



WARNING!

Danger in case of misuse!

Do not operate the machine until assembly has been completed and the proper condition of all components has been checked with reference to the contents of this manual.

6.1 Lifting

The machine must be lifted by hooking it to the lifting device on the upper side of the rack. See figure 3.

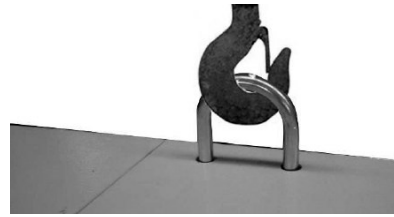


Fig. 3: Lifting device



WARNING!

It is forbidden to lift the machine in any other way and in particular it is forbidden to lift it by the worktop.

6.2 External dimensions - installation

Place the machine on the floor in the selected location. The external dimensions of the machine are listed in the table.

Model	Packing dimensions L x W x H
HBS 540 AS	950 x 520 x 1954 mm
HBS 640 AS	1050 x 670 x 2350 mm
HBS 740 AS	2520 x 600 x 1250 mm
HBS 840 AS	2780 x 640 x 1420 mm
HBS 940 AS	3000 x 670 x 1520 mm

In addition to the maximum dimensions of the workpiece to be machined, at least 1.5 m of free space (Figure 4) must be left around the machine in order to be able to work safely.

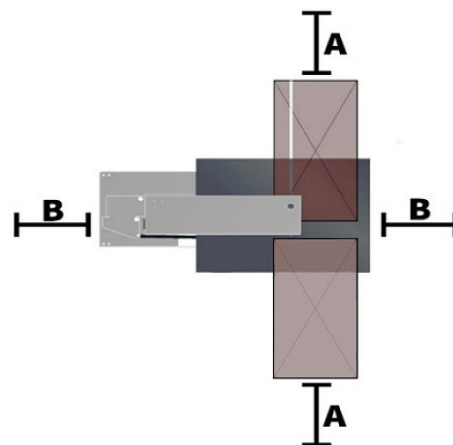


Fig. 4: Space requirement of the machine

At the base of the machine there are four threaded holes and 4 leveling screws, which are used to align the machine. The corresponding screws are included with the machine. There are also four holes for fastening the machine to the floor Figure 5.

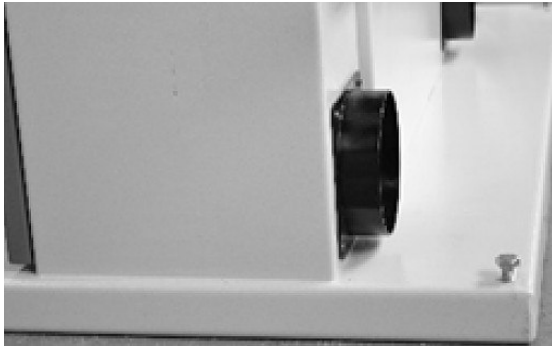


Fig. 5: Fixing the machine

In order to prevent vibrations from spreading, the base of the machine must not be deformed for fastening to the floor. It is also recommended to place vibration-isolating material between the base and the floor.

When the machine is fixed to the floor, there is no risk associated with hand-arm vibration.



DANGER!

Before putting the machine into operation, it must be fixed to the floor with the anchors suitable for the floor.

6.3 Mounting the work surface and adjusting the inclination

Remove all packing elements and proceed as follows to assemble the work surface:

Step 1: Position the work surface on the frame of the machine.

Step 2: Fix the support according to the frame and align it as shown in Figure 6 and tighten the bolts indicated by the arrow..

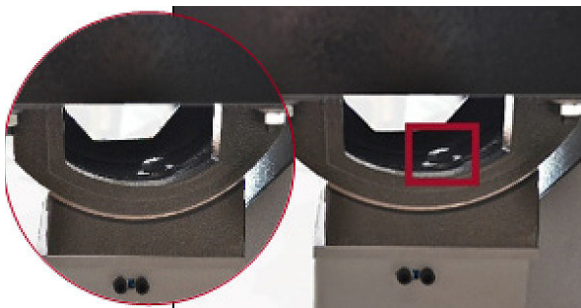


Fig. 6: Mounting the work surface

To change the inclination of the work surface, loosen the screw, Figure 6, slightly. Tilt the working surface. The inclination can be read from the corresponding line graduation.



DANGER!

The stud bolts, see Figure 6, is the only connecting component between the worktop and the frame of the machine.

If it is necessary to adjust the right angle of the working plate to the saw blade, proceed as follows: After installing the saw blade, see "Installing the saw blade chapter, an angle gauge must be placed on the worktop and the inclination must be adjusted with the screws (Figure 7) until the correct right angle between the worktop and the saw blade is achieved..

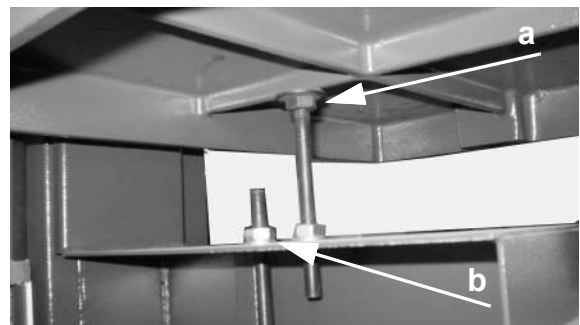


Fig. 7: Setting the right angle of the worktop



DANGER!

Be sure to use the adjustment screw labeled a in Figure 7 and not b, which is used to adjust the belts between the engine and the lower flywheel.

6.4 Connection exhaust system

Each machine has 2 suction openings located in the rear area of the machine.

A minimum air speed of 20 m/s is required for sufficient chip and dust extraction.



Fig. 8: Connection exhaust system

6.5 Install saw band

To install the saw band, release the brake of the motor, which prevents the manual rotation of the flywheels.

When the machine is switched off, in order to release the brake, the lock switch must be actuated by turning it to the release symbol.

- Open the doors to the flywheels.
- Open the flap of the yellow movable guard of the saw blade guide.
- Position the saw blade on the flywheels, check the alignment of the teeth (counterclockwise) and insert it into the guide.
- Tension saw blade via handwheel V until the correct value is reached. The correct tensioning value is visible in the display on the machine column and must correspond to the width of the installed band.
- Check that the saw blade does not touch any rigid parts and that it rests correctly on the surface of the flywheels.
- To change the position of the saw blade on the flywheel, operate handwheel D.
- Close the saw blade guard and the housing again and lock the motor brake again.

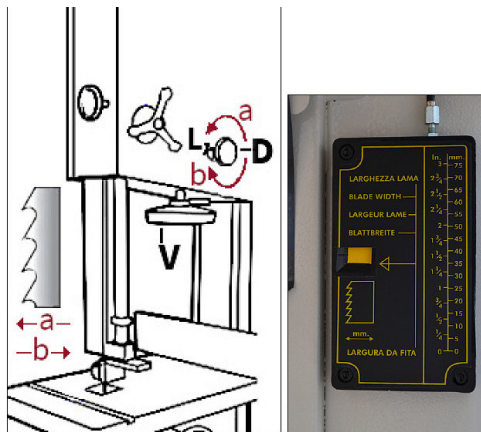


Fig. 9: Install saw blade



DANGER!

After the saw blade has been replaced, always check that the saw blade is properly seated on the flywheels before start-up

7 Electrical connection

7.1 Machines with electromechanical brake

To connect the machine to the mains, see the figure 10.

Three phase machine:

- Remove the cover from the electrical box A and it can be opened (Figure B).
- If the neutral conductor is present, the part of the electrical box connected to the substructure is shown in Figure C.
- Connect the neutral conductor (if present) to the terminal (a) Figure C.
- In the movable part of the control box (Figure D), the phase cables of the supply must be connected to the terminals 1-3-5.
- In the stationary part of the control box (Figure B-C), the grounding must be connected to the corresponding terminal b.
- Close the control box and tighten the screws well.
- Check the correct rotation direction of the tools by starting the motor (teeth meshing with the working surface).
- Reverse two phase cables to change the rotation direction of the tools, if necessary.
- Reassemble the guard properly.

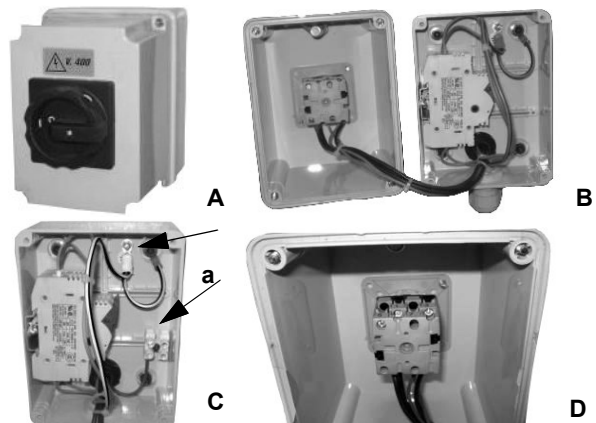


Fig. 10: Machines with electromechanical brake

Single phase machines:

To connect the machine to the mains, see Figure 11.

- Remove the cover from the electrical box A and it can be opened (figure B).
- In the movable part of the control box (Figure D), connect the phase cables of the supply to the two corresponding terminals.
- In the stationary part of the control box (Figure B), connect the grounding to the corresponding terminal b.
- Close the control box and tighten the screws well.

- Check the correct direction of rotation of the tools by starting the motor (teeth engaging the working surface).
- If the direction of rotation is incorrect, the internal connections of the motor must be changed by specialized personnel.
- Reassemble the guard properly.

7.1.1 Machines with electronic brake

Machines with electronic brake are equipped with socket and plug (Figure 10 C) both three-phase and single-phase.

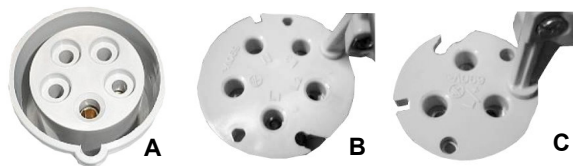


Fig. 11: Machines with electronic brake

To connect the sockets to the supply, proceed as follows, referring to Figure 11.

- Step 1: Remove the insert from the housing.
- Step 2: Connect the phase and ground cables to the insert, paying attention to the phase and ground symbols.
- Step 3: Tighten the screws securing the cables.
- Step 4: Put the insert back into the housing and fix it with the enclosed screws.
- Step 5: The dimensions of the cables must correspond to the receptacle of the specific model.

8 Operation of the Wood Band Saw



DANGER!

Before start-up, the saw blade must be tensioned by operating the appropriate flywheel and checking the tension on the indicator provided for this purpose.

The type of indicator varies according to the type of machine. However, all of them indicate the width of the saw blade, which must be the same as the one used by the operator to obtain the correct tension..

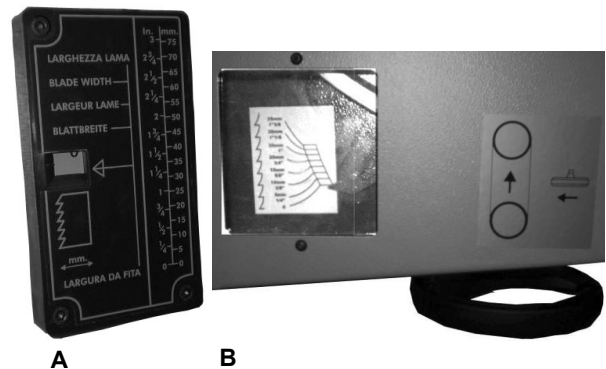


Fig. 12: Display

Excessive tension will cause premature wear or breakage of the saw blade. Insufficient tension causes the saw blade to slip off the flywheel during work.

Figure 12 B also shows the flywheel that must be operated to tension the saw blade, which is located on the shaft under the upper flywheel.



DANGER!

Adjust the movable guard of the saw blade (knob a Figure 14). Care must be taken to position it a few mm away from the surface above the workpiece. Then fix it by means of the corresponding knob (knob b Figure 14).

For cutting particularly small workpieces, it is not possible to lower the guard completely onto the rip fence due to the overlap with it. Therefore, it is necessary to be particularly careful and to use the workpiece pusher instead of approaching the hands to the saw blade to a distance of less than 100 mm.

If the machine is equipped with a cast iron rip fence, a spacer corresponding to the thickness of the workpiece must be inserted between the rip fence and the workpiece. It is necessary to take care of a stable position.

For machines with the rip fence made of aluminum, it must be folded down 90 degrees so that the adjustable

guard can be lowered, see Figure 13, A ("Rip fence in normal position") and B ("Rip fence in position for small and low workpieces").

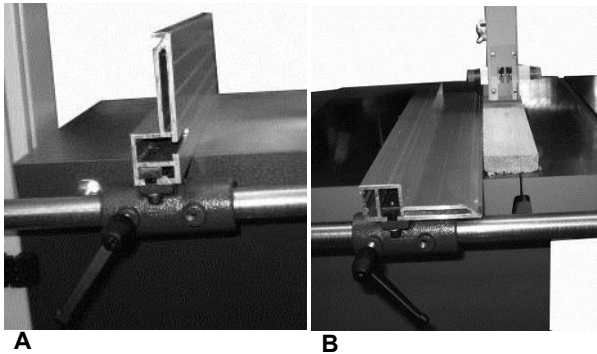


Fig. 13: Position of the rip fence

On the other hand, for the cast iron rip fence, a wooden spacer of 80 mm must be placed between the rip fence and the workpiece to allow the guard to be lowered. (See figure 14)

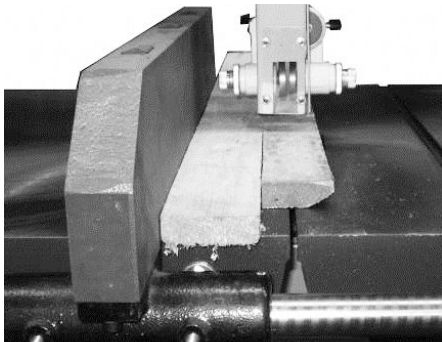


Fig. 14: Cast iron rip fence



DANGER!

Do not use the rip fence with the support surface lowered unless absolutely necessary, as a workpiece with the large thickness may rotate and jeopardize the safety of the machine.

Be very careful with small workpieces and if necessary use the pusher provided.

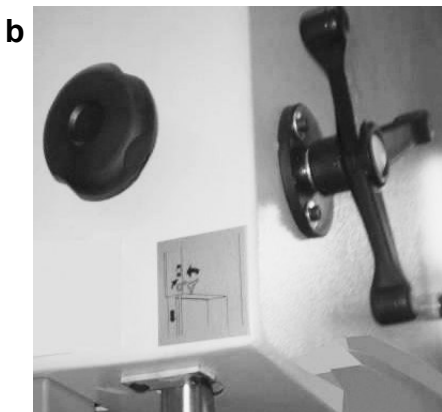


Fig. 15: Set guard

Before the saw can be switched on, check that the upper and lower flaps are properly closed, see Figure 16. Likewise, all fixed and movable guards must be in their proper positions.

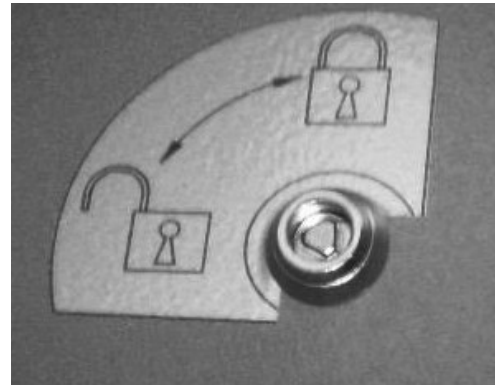


Fig. 16: Lock

After checking that there are no workpieces or foreign objects near the saw blade, the saw can be switched on.

Direct switch-on for band saws with small motors (1-3 HP) (Figure 16 A)

Step 1: Turn the main switch located on the back of the machine clockwise to supply power to the bandsaw. Indicator light A will illuminate.

Step 2: Using the enclosed key, turn the selector switch C clockwise to release the brake lock. The control lamp B lights up.



DANGER!

Before each start of work, check the function of the brake by releasing the brake lock.

Move the stationary saw blade by hand and check whether the saw blade can move freely.

If the brake can no longer be released, there may be a defect in the saw blade.

Step 3: Reactivate the brake by turning selector switch C back to the previous position (indicator lamp B no longer active).

Step 4: Make sure that all emergency circuits are activated and functional.

Step 5: Turn selector switch D clockwise to switch on machine.

The band saw is ready for cutting.

Step 6: To stop the machine, return selector switch D to position 0.

Step 7: To disconnect the bandsaw from the power supply, return the main switch on the back of the machine to position 0.

Manual start-up "star-delta start-up" for bandsaws with larger motors (4-10 hp) (Figure 17 B).

Step 1: Turn the main switch located on the back of the machine clockwise to supply power to the bandsaw. Indicator light A will illuminate.

Step 2: Press the red buttons (D) and turn the selector switch C counterclockwise to release the brake lock. The control lamp B lights up.

**DANGER!**

Before each start of work, check the function of the brake by releasing the brake lock.

Move the stationary saw blade by hand and check whether the saw blade can move freely.

If the brake can no longer be released, there may be a defect in the saw blade.

Step 3: Reactivate the brake by pressing the red button (D) again and turning the selector switch C back to the previous position (indicator lamp B no longer active).

Step 4: Make sure that all emergency circuits are activated and functional.

Step 5: Turn the selector switch E clockwise. If the selector switch does not remain in the new position, check all emergency circuits.

Step 6: Turn the selector switch C clockwise to position Y.

Step 7: Wait until the motor has reached speed (approx. 3-5 seconds).

**NOTE!**

The star-delta starting circuit is used to start larger three-phase motors with reduced power consumption without tripping overcurrent protection devices.

Step 8: Turn the selector switch C one step further clockwise to position Δ.

The band saw is ready for cutting.

Step 9: To stop the machine, turn the selector switch C back to position 0 (turn the selector switch back 2 steps).

Step 10: To disconnect the bandsaw from the power supply, return the main switch on the back of the machine to position 0.

Direct switching on of machines with the electronic brake

Step 1: Press the green switch to start the machine.

Step 2: Wait a few seconds until the machine is ready to cut.

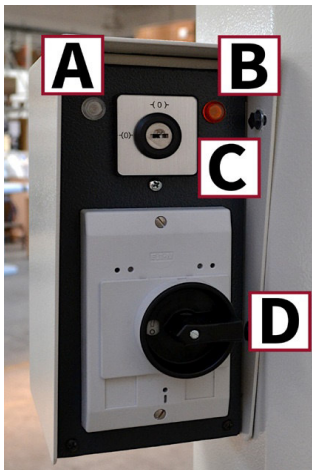
Step 3: To turn off the motor, press either the red switch under the flap or the mushroom-shaped emergency stop switch.

Step 4: Remove the plug from the socket to disconnect the machine from the mains.

**NOTE!**

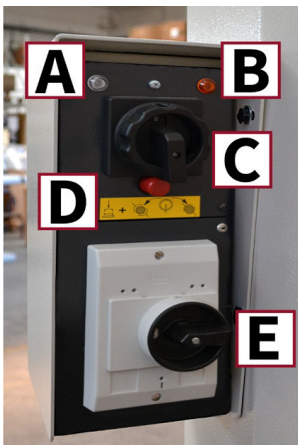
If the machine will not be used for the rest of the day after a cut, the tension of the saw blade must be loosened.

Fig A



- A Power supply control lamp (main switch)
- B Brake control lamp (ON = brake released)
- C Brake selector switch
- D Machine start selector switch

Fig B



- A Power supply control lamp (main switch)
- B Brake control lamp (ON = brake released)
- C Brake and machine start selector switch (Y/Δ)
- D Brake release button
- E Circuit breaker

Main switch:



Fig. 17: Switch on the machine

The following figure shows designs that can be made with the saw, for example.

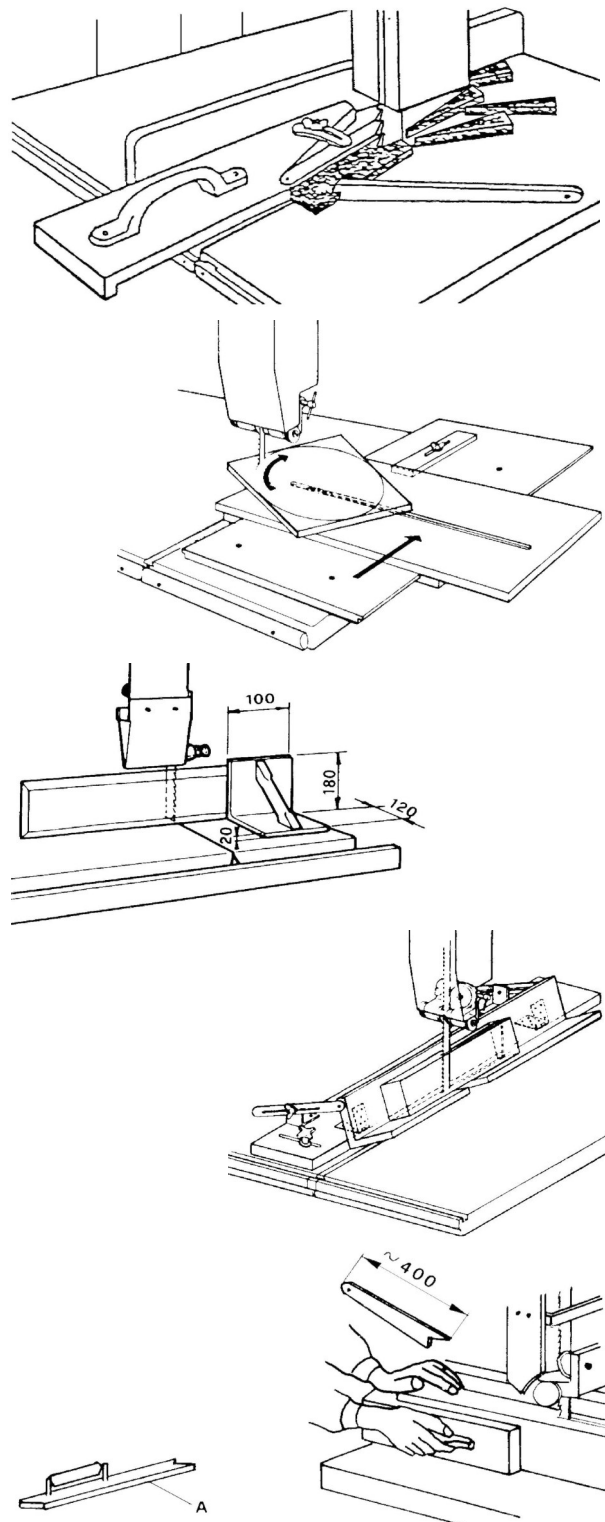


Fig. 18: Examples

The tools shown in Figure 18 are not included as standard (exception: workpiece pusher).

The tools shown are only the sample tools, therefore they were not drawn in detail.

For the mold work, do not perform a particularly tight radius of curvature compared to the width of the saw blade.



DANGER!

- When the machine is switched on, it must never be left unattended.
- After finishing work, the machine must be disconnected from the power supply by pressing the main switch or the connection switch.



ATTENTION!

A saw blade corresponding to the material to be processed must be used.

9 Setting and maintenance

9.1 Adjustment of the saw blade guide



NOTE!

The different machines are equipped with different saw blade guides (see Figure 18). However, the criterion for setting the saw blade guide is always the same and is explained below.

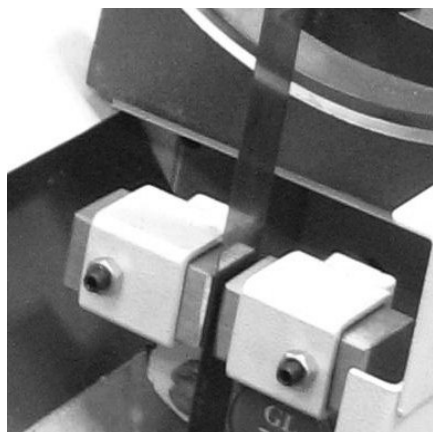


Fig. 19: Adjust saw blade guide

First adjust the upper flywheel (see chapter "Adjusting the upper flywheel"). Then adjust the upper and lower saw blade guides by using the adjustment screws to set the values shown in Figure 19.

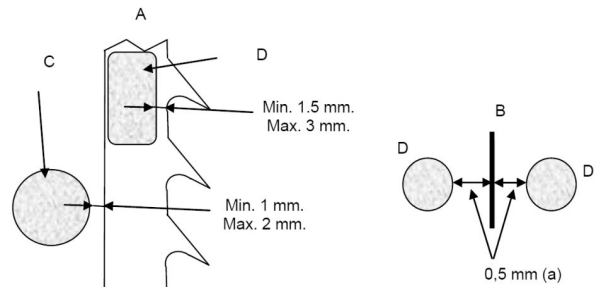


Fig. 20: Adjusting the saw band guide

A = Saw blade side view

B = Saw blade front view

C = Saw blade guide rear

D = Saw blade guide lateral

Attention:

(a) = for ceramic side saw blade guides (Figure 18 a), the distance between saw blade and side parts must be 0.3 mm.

9.2 Scraper and lubrication

The scraper has the task of keeping the surface of the flywheel clean.

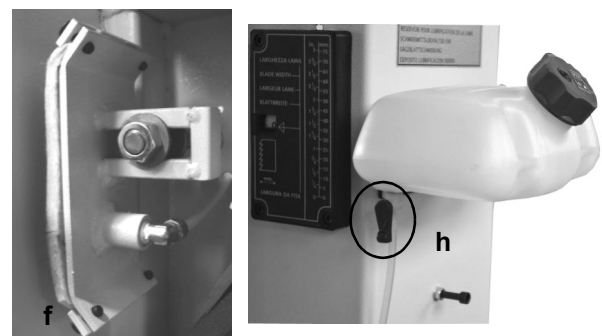


Fig. 21: Scraper and lubrication

The blade in contact with the buffer (Figure 21 f) is cleaned and lubricated.

To ensure that the buffer is always lubricated, the tank must be filled (Figure 21 g); at the beginning/end of the work, open/close the tap (21 h).

9.3 Adjustment of the upper flywheel



DANGER!

With the machine switched off, actuate the switch to release the brake.

Open the doors to the flywheels.

With reference to Figure 22, turn knob D in direction A or B to move the saw blade in direction A or B.

Manually turn the flywheel in the cutting direction and check that the saw blade is in the correct position on the flywheel (depending on the type of saw blade).

After the saw blade has been aligned, the knob D must be moved to the selected position using the lever L provided for this purpose..

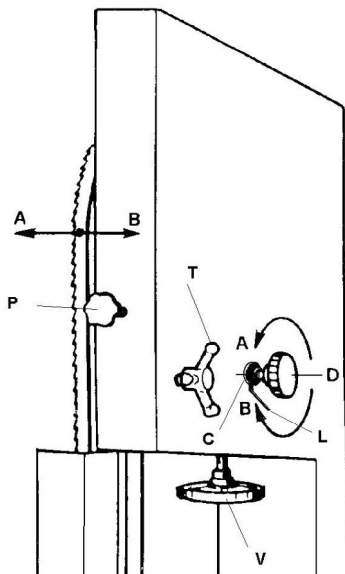


Fig. 22: Flywheel adjustment

When adjusting the upper flywheel, check that the saw blade does not overlap with the upper or lower saw blade guides. The saw blade guides must be adjusted after the upper flywheel has been adjusted.

Adjustment of the flywheel may be performed only and exclusively by company personnel or by authorized technical personnel.

9.4 Brake adjustment

9.4.1 Electromechanical brake

The machines are equipped with electromechanical brakes that guarantee the stop of the moving elements in less than 10 seconds. The braking elements of the braking unit are subject to wear and must therefore be regularly checked and replaced in time to comply with the limits of braking time set by law.



WARNING!

Maintenance of the electromechanical brake must be performed whenever the time of disconnection exceeds ten seconds.

Step 1: Initial state (Fig. 23).

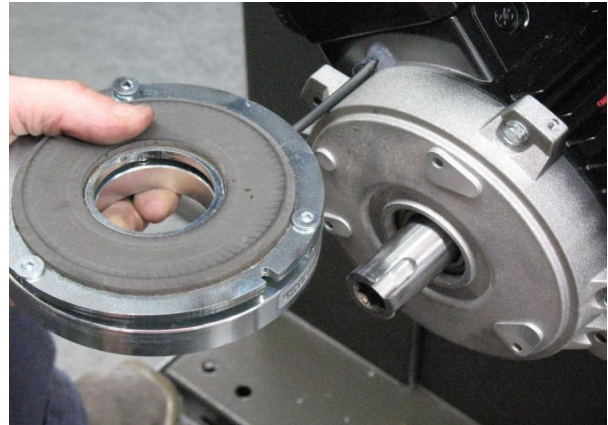


Fig. 23: Brake coil (left)

Step 2: Fasten the brake coil with the enclosed screws (Fig. 24).



Fig. 24: Fix brake coil

Step 3: Insert the spring into the hole of the brake coil (Fig. 25).



Fig. 25: Insert spring

Step 4: Insert the key into the groove provided in the fan wheel (Fig 26).

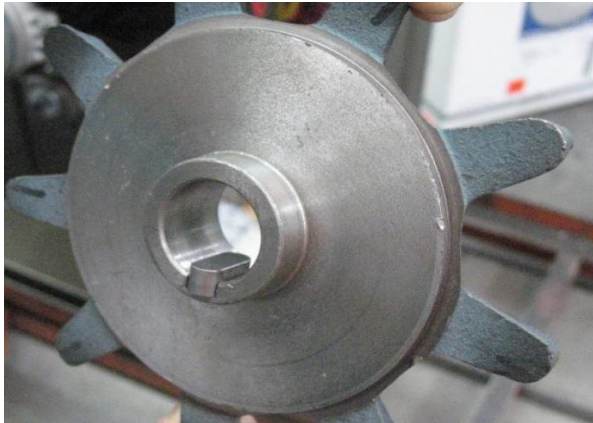


Fig. 26: Insert key into groove

Step 5: Connect the fan wheel to the shaft. Observe the correct position of the key and keyway (Fig. 27).

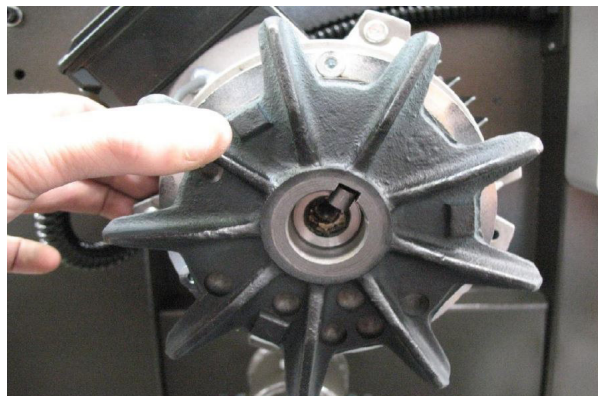


Fig. 27: Place fan wheel on shaft

Step 6: Prepare the fixing screw (Fig. 28). Make sure that the nut is on the edge of the screw.



Fig. 28: Prepare fixing screw

Step 7: Insert the bolt, making sure that the nut is correctly seated in the recess provided on the shaft (Fig. 29).

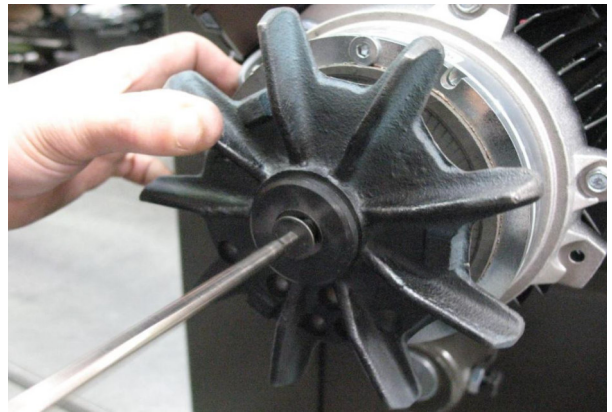


Fig. 29: Fasten fan wheel

Step 8: Screw in the fixing screw until a gap of 0.2 mm is achieved. Use a feeler gauge as an aid (Fig. 30).



Fig. 30: Maintain gap width (0.2 mm)

Test mode:

- Switch to manual operation to test the brake.
- Check whether the fan wheel rotates freely.
- Start the machine and perform the braking process.

Make sure that the fan wheel stop time is less than 10 seconds.

- If necessary, correct the fan wheel stop time by readjusting the fixing screw.

Loosening the screw = fan wheel stops slower

Tightening the screw = fan wheel stops faster

Step 9: Reinstall the fan cover (hood) afterwards (Fig. 31).



Fig. 31: Fan cover

9.4.2 Electronic brake

To adjust the electronic brake, the plate on which the stop/start control is mounted must be removed. The black cover Figure 32 must be removed and the potentiometer must be operated with a screwdriver.

Turning clockwise increases the braking time, while turning counterclockwise decreases it.



Fig. 32: Cover

9.5 Area approach

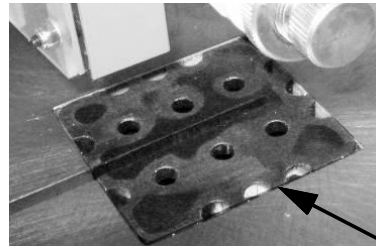


Fig. 33: Area approach

If the guide gap for the saw blade of the machinable insert Figure 33 is more than approx. 3-4 mm larger than the width of the saw blade, it must be replaced with a new one. Pull out the damaged insert and insert a new one. Make sure that the new insert is correctly inserted into the surface.



WARNING!

It must be checked that the new insert does not hinder the sliding of a workpiece along the work surface. Any spikes could endanger the safety of the operator during work.

9.6 Adjust belt

Trapezoidal belts:

after the first hours of work, it is necessary to check the tension of the belts, as they tend to lengthen.

The control is performed by placing a weight of 3-4 kg on an intermediate point of the free belt. The bending must not exceed 5-6 mm.

To adjust the tension of the belts, it is necessary to loosen the screws B (Figure 24). Then, with the help of the nut D (Figure 24), tighten the belts and retighten the screws B.



DANGER!

Proper tension must be maintained, as untensioned belts do not transmit the full force of the motor and can increase braking time. Belts that are too tight tend to heat up.

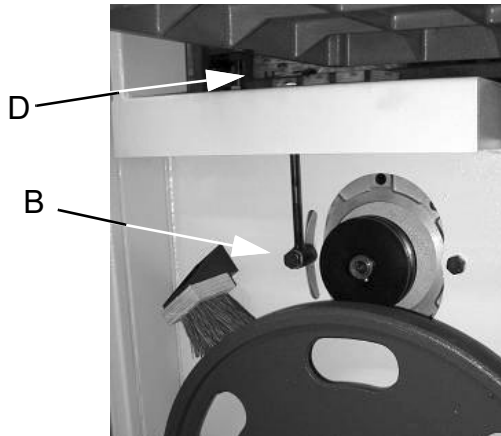


Fig. 34: Adjust belt

To replace the belts, lower the tension as described, remove screw B (Figure 34), loosen screws A (Figure 35), pull the flywheel and shaft off the bracket. For reassembly, repeat the operation in reverse order.



DANGER!

Caution: do not loosen the right-angle screws indicated by the arrows to change the orientation of the lower flywheel during assembly.

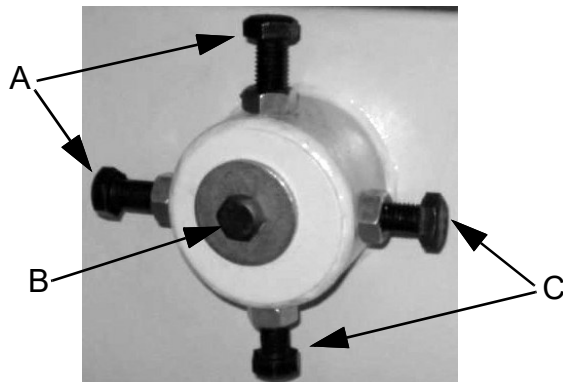


Fig. 35: Replace belt (release tension)

9.7 Buffer flap

Checking the buffer spring of the access flaps to the flywheels is performed as follows:

Step 1: With the machine switched off, open the flaps.

Step 2: Manually slide the frame flap to the side.

Step 3: Release the flap and check if the spring is able to remove the flap from the rack. (See Figure 36)



Fig. 36: Flap

If the spring is worn out, the buffer must be replaced immediately before the machine is used any further.

9.8 Safety locking of the flaps

Check the proper operation of the safety interlock microswitch (if provided) (see Figure 37). The check consists in trying to switch on the saw motor with the door open. Any adjustments are made by operating the microswitch fixing screws, located under the metal guard, and inclining them according to the need for the switch. If the adjustment cannot be made properly, the microswitch must be replaced.

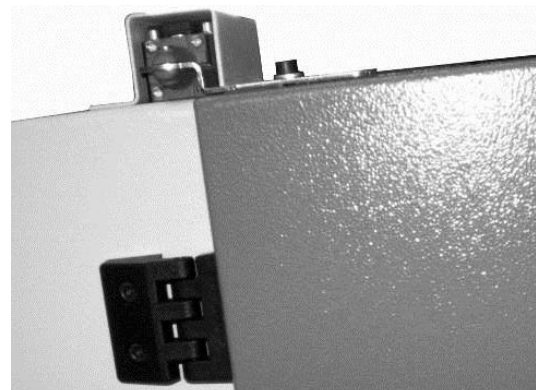


Fig. 37: Safety interlock



DANGER!

If checks show that the machine is not functioning properly, do not put it into operation until the appropriate maintenance work has been carried out.



DANGER!

Technical maintenance personnel must be experienced in, trained for, informed about, and capable of performing specialized maintenance.

10 Care, maintenance and repair



Danger!

Danger to life through electric shock!

There is a danger to life when in contact with live components. Switched-on electrical components can make uncontrolled movements and cause serious injuries.

- Before starting cleaning and maintenance work, switch off the machine and pull the mains plug.
- Connection and repair of the electrical equipment may only be carried out by a qualified electrician.



DANGER!

- Never use solvents to clean plastic parts or painted surfaces. This may cause the surface to dissolve and result in consequential damage.

10.1 Cleaning



CAUTION!

Accumulating sawdust should be regularly removed from the inside of the band saw. Before opening the housing cover, switch off the unit and disconnect the plug. After opening, it can be cleaned with a brush or vacuum cleaner. After finishing each work, remove sawdust and dust from the cooling holes of the motor.



NOTE!

Do not remove the chips with your bare hand. There is a risk of injury from sharp-edged or pointed chips!

10.2 Care after work

The Wood Band Saw must always be kept in a clean condition.



Wear protective gloves!



NOTE!

Never use aggressive cleaning agents for any cleaning work. This can lead to damage or destruction of the device.

10.3 Safety instructions for proper maintenance of the machine



DANGER!

For all maintenance and adjustment work, the main switch must be in position 0 and securely closed, unless explicitly stated otherwise.

Maintenance work must be carried out in accordance with the instructions in this operating manual.



WARNING!

It is forbidden to start the machine when maintenance is required, the safety device has been modified or is not working properly.

- After a scheduled maintenance has been performed, the performed intervention must be registered with date and name of the worker(s). If the result of the check is negative, the necessary maintenance work must be carried out before the machine is put back into operation. If the operating instructions do not contain the relevant information on how to carry out maintenance work, the manufacturer must be informed..



Protective gloves

Wear appropriate gloves for maintenance work in general and when handling tools.

10.4 Maintenance

Pos.	What	How	Control	When	Executor	Note
1	Check safety device	With the machine switched on, open the main switch and close it again.	Beim erneuten Schließen darf sich die Maschine nicht wieder einschalten.	Every month	Operator of the machine	
2	Check the operation of the micro-switch of the safety interlock of the access flaps to the tools (if present).	Open the flap slightly when the machine is running. Be careful not to touch the moving machine parts.	Ensure that the machine switches off.	Every month	Technical maintenance personnel	
		Start the machine with the flap slightly open	The tool must not switch on.			
3	Check the braking time of the tool	The machine should run for at least five minutes before you stop it.	The machine must always switch off within ten seconds after stop input.	Every month	Operator of the machine	Repeat the procedure three times in succession.
4	Check belt tension	See chapter Adjusting the belt		Every 15 days	Technical maintenance personnel	New belt after 8 hours of work.
5	Removal of dust and cutting residues	Blow out the work table, clamp and flywheels with compressed air.		After each use	Operator of the machine	Wear protective goggles and gloves.

11 Disposal, recycling of old equipment

In the interest of the environment, care must be taken to ensure that all components of the machine are disposed of only via the designated and approved methods.

11.1 Decommission

Discarded machines must be taken out of service immediately and professionally in order to avoid later misuse and danger to the environment or persons.

- Dispose of all environmentally hazardous operating materials from the old device.
- If necessary, dismantle the machine into manageable and recyclable assemblies and components.
- Dispose of the machine components and operating materials in the appropriate disposal route.

11.2 Disposal of electrical equipment

Electrical devices contain a large number of recyclable materials and environmentally harmful components.

These components must be disposed of separately and properly. In case of doubt, contact the municipal waste disposal service.

If necessary, use the services of a specialized waste disposal company for processing.



DANGER!

It is forbidden to dispose of the machine as normal household waste.

11.3 Disposal of lubricants

The lubricant manufacturer provides the disposal instructions for the lubricants used. If necessary, ask for the product-specific data sheets.

11.4 Disposal via municipal collection points

Disposal of used electrical and electronic equipment (Applicable in the countries of the European Union and other European countries with a separate collection system for these appliances)



The symbol on the product or its packaging indicates that this product should not be treated as normal household waste, but must be returned to a collection point for the recycling of electrical and electronic equipment. By helping to properly dispose of this product, you are protecting the environment and the health of others. Environment and health are endangered by improper disposal. Material recycling helps to reduce the consumption of raw materials. For more information about recycling this product, contact your local community, municipal waste management, or the shop where you purchased the product

12 Spare parts



DANGER!

Risk of injury through the use of incorrect spare parts!

The use of incorrect or faulty spare parts can be dangerous for the operator and cause damage and malfunctions.

- Only original spare parts from the manufacturer or spare parts approved by the manufacturer must be used.
- In case of any uncertainties, always contact the manufacturer.



Tips and tricks

The manufacturer's warranty is void if non-approved spare parts are used.

12.1 Ordering spare parts

The spare parts can be obtained from the authorised dealer.

Specify the following key data when making inquiries or ordering spare parts:

- Device type
- Item number
- Position number
- Year of manufacture
- Quantity
- desired mode of dispatch (mail, freight, sea, air, express)
- Shipping address

Spare parts orders without the above information cannot be considered. In the absence of information on the mode of dispatch, dispatch will be at the discretion of the supplier.

Information on the device type, article number and year of manufacture can be found on the type plate attached to the machine.

Example

The engine for the Wood band saw HBS 640 AS must be ordered. The engine has the number 62 in the spare parts drawing 4.

By ordering spare parts, send a copy of the spare parts drawing (4) with the marked part (engine) and marked position number (62) to the dealer or spare parts department and provide the following information:

- Gerätetyp: **Wood Band Saw HBS 640 AS**
- Item number: **5152164**
- Drawing number: **4**
- Position number: **62**

12.2 Spare parts drawings

The following drawings should help to identify necessary spare parts in case of service. To order, send a copy of the parts drawing with the marked components to your authorized dealer.

Spare parts drawing 1

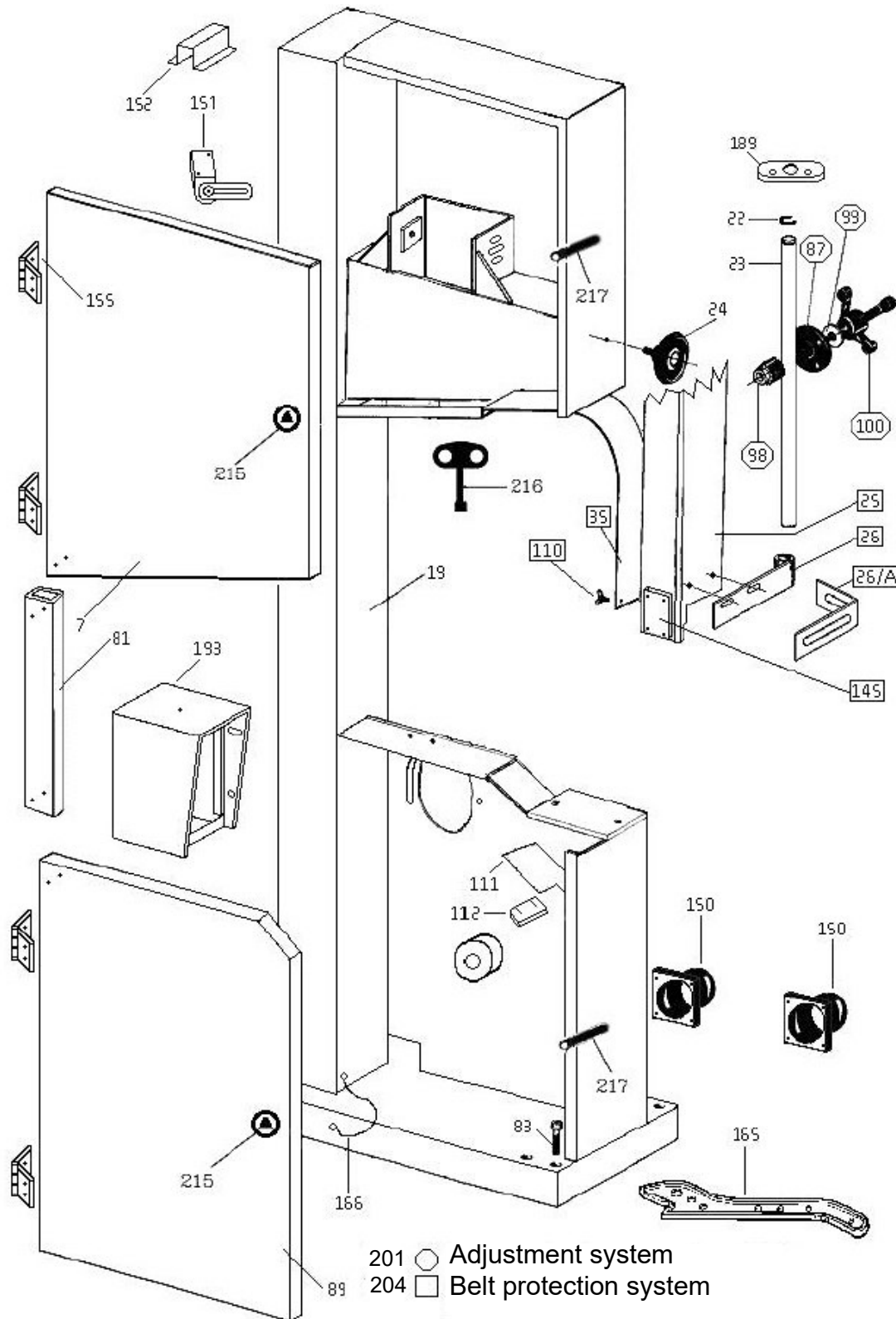
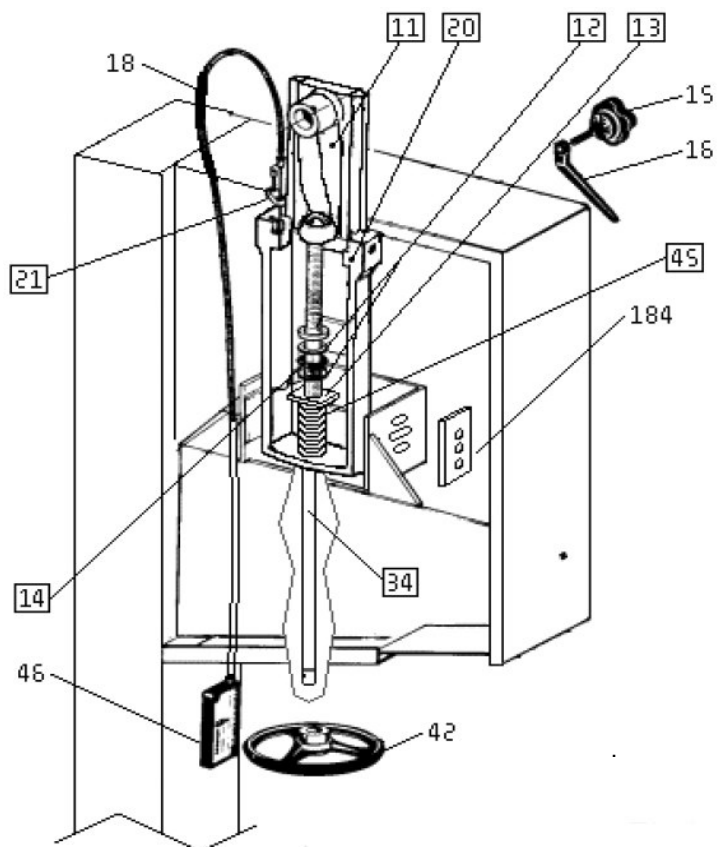
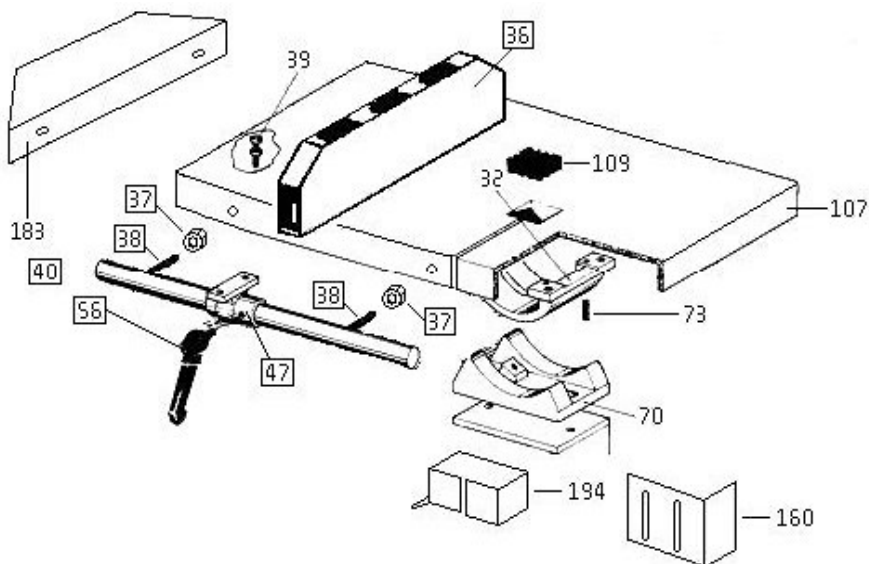


Fig. 38: Spare parts drawing 1

Spare parts drawings 2 and 3A



Spare parts drawing 2: 200. Belt tensioning system



Spare parts drawing 3 A 203. Parallel stop system HBS 540/940

Fig. 39: Spare parts drawings 2 and 3 A

This exploded perspective view shows the assembly of a mechanical device. The main components are labeled with callouts: 32 (a small black square), 36 (a long, multi-ribbed extrusion), 37 (a small circular fastener), 38 (two small rectangular plates), 39 (a U-shaped bracket), 40 (a small rectangular plate), 47 (a long cylindrical rod), 56 (a handle with a black grip), 70 (a curved bracket), 73 (a small rectangular plate), 107 (a large rectangular base plate), 109 (a small black square), 160 (a rectangular plate with two vertical slots), 183 (a long rectangular plate), and 194 (a small rectangular plate). The assembly is shown in a disassembled state, with the components arranged to show their relative positions and how they fit together.

This exploded view diagram illustrates the components of a mechanical assembly. The parts are numbered as follows:

- 1, 2, 3, 4, 6:** A series of small circular components, possibly seals or washers, arranged in a row.
- 8, 17:** A curved, semi-circular component, likely a housing or a guide.
- 59:** A small rectangular block, possibly a magnet or a sensor.
- 60, 61:** A belt and pulley system. 60 is the belt, and 61 is a pulley.
- 62:** A cylindrical component with a flange, possibly a motor or a pump.
- 88:** A small cylindrical component, possibly a pin or a bush.
- 91, 92, 93, 94, 95:** A series of small circular components, similar to 1-4, arranged in a row.
- 132, 135:** A large, circular component, possibly a disc or a plate.
- 134:** A small rectangular block, similar to 59.
- 196, 197:** A gear and a housing component. 196 is the gear, and 197 is the housing.
- 198:** A small rectangular block, similar to 59.
- 199:** A small cylindrical component, possibly a pin or a bush.

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Spare parts drawing 5

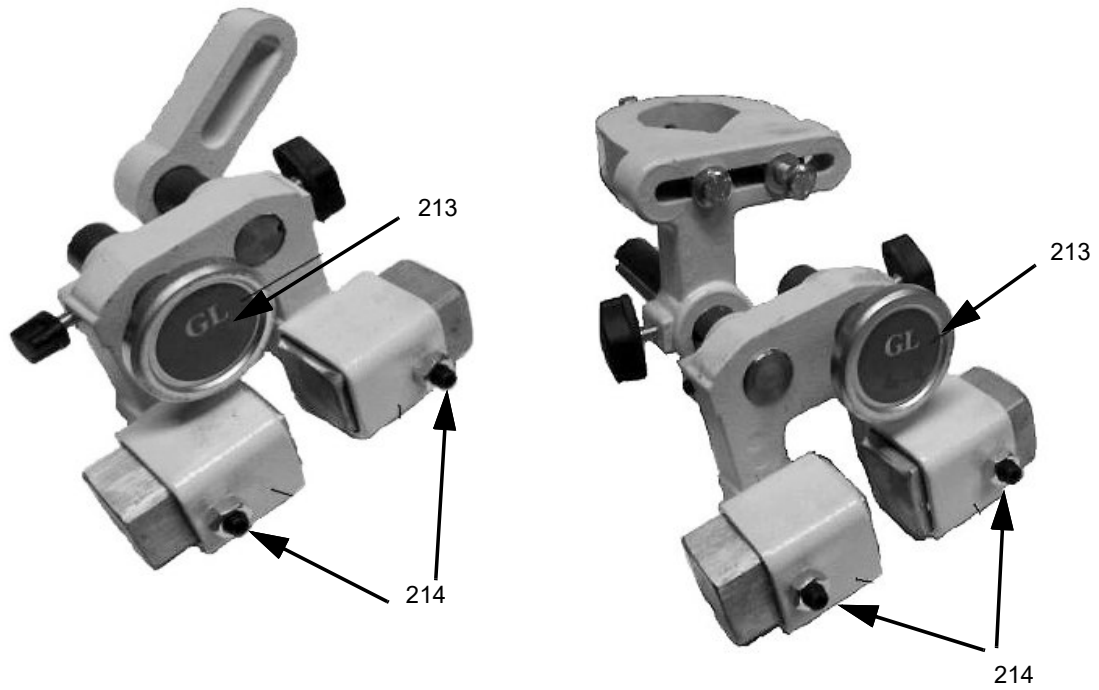


Fig. 42: Spare parts drawing 5

Spare parts drawing 6

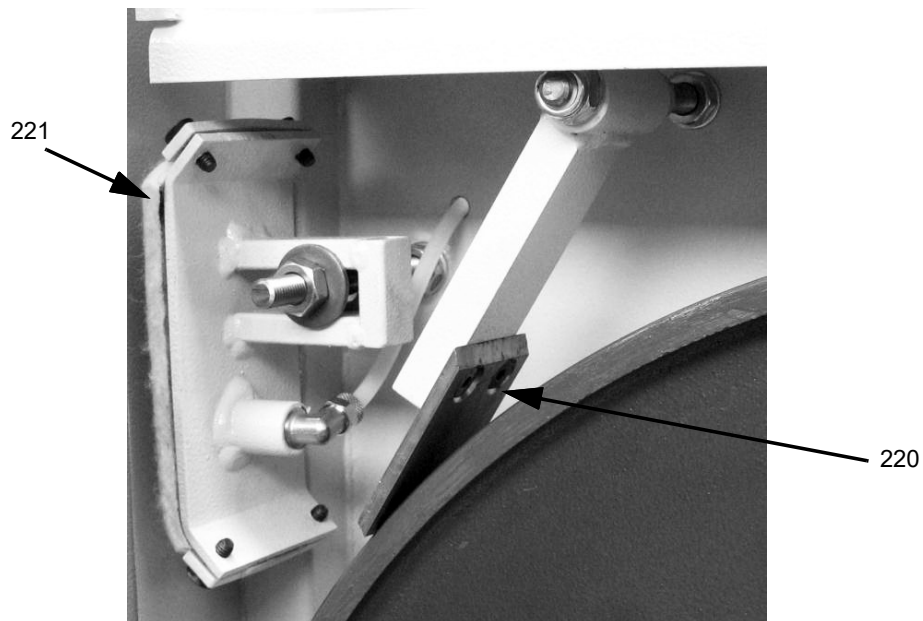
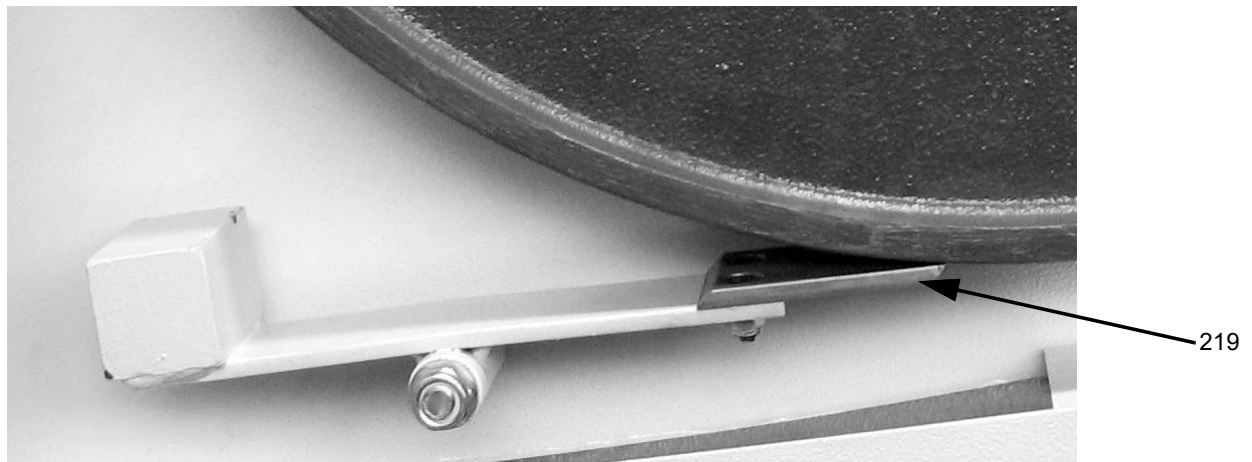
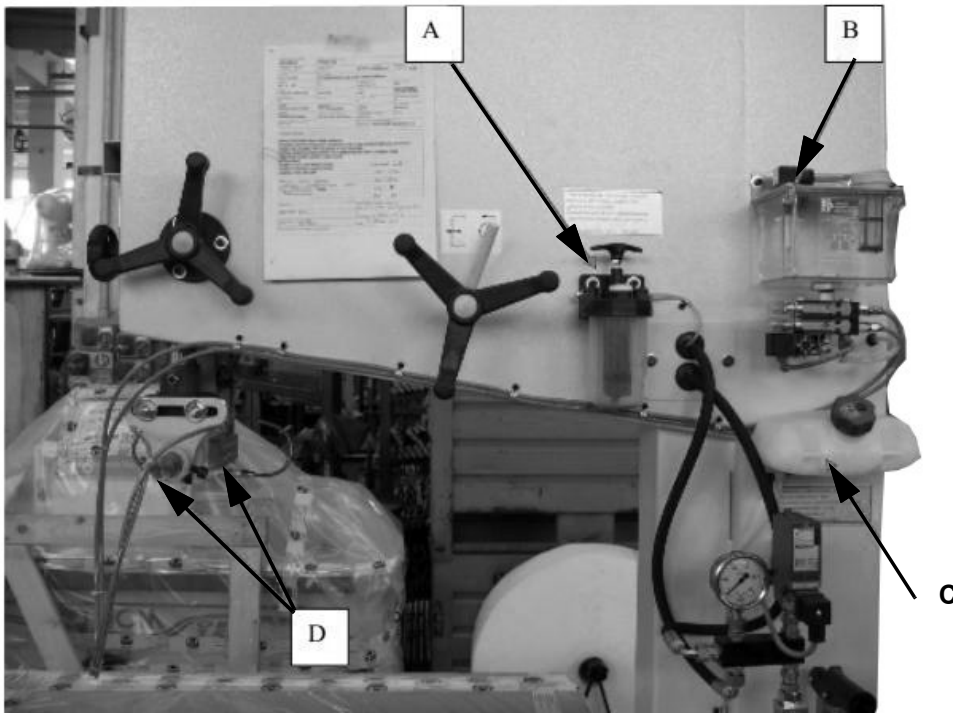


Fig. 43: Spare parts drawing 6

Spare parts drawing 7



- A. Lubrication system for belt tensioning system
- B. Electropneumatic lubrication system (optional)
- C. Lubricant Tank
- D. Nozzles

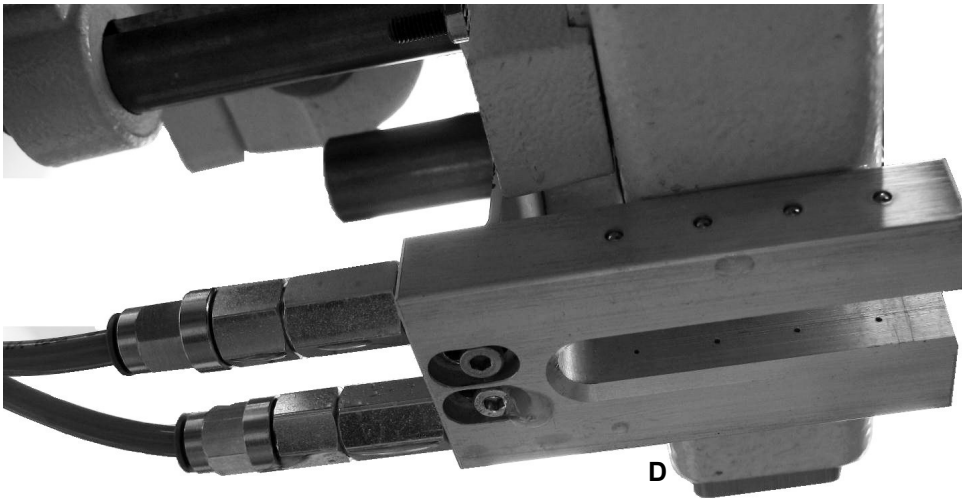


Fig. 44: Spare parts drawing 7

13 Electrical circuit diagrams

Electrical circuit diagram 1 - HBS 540 AS and HBS 640 AS

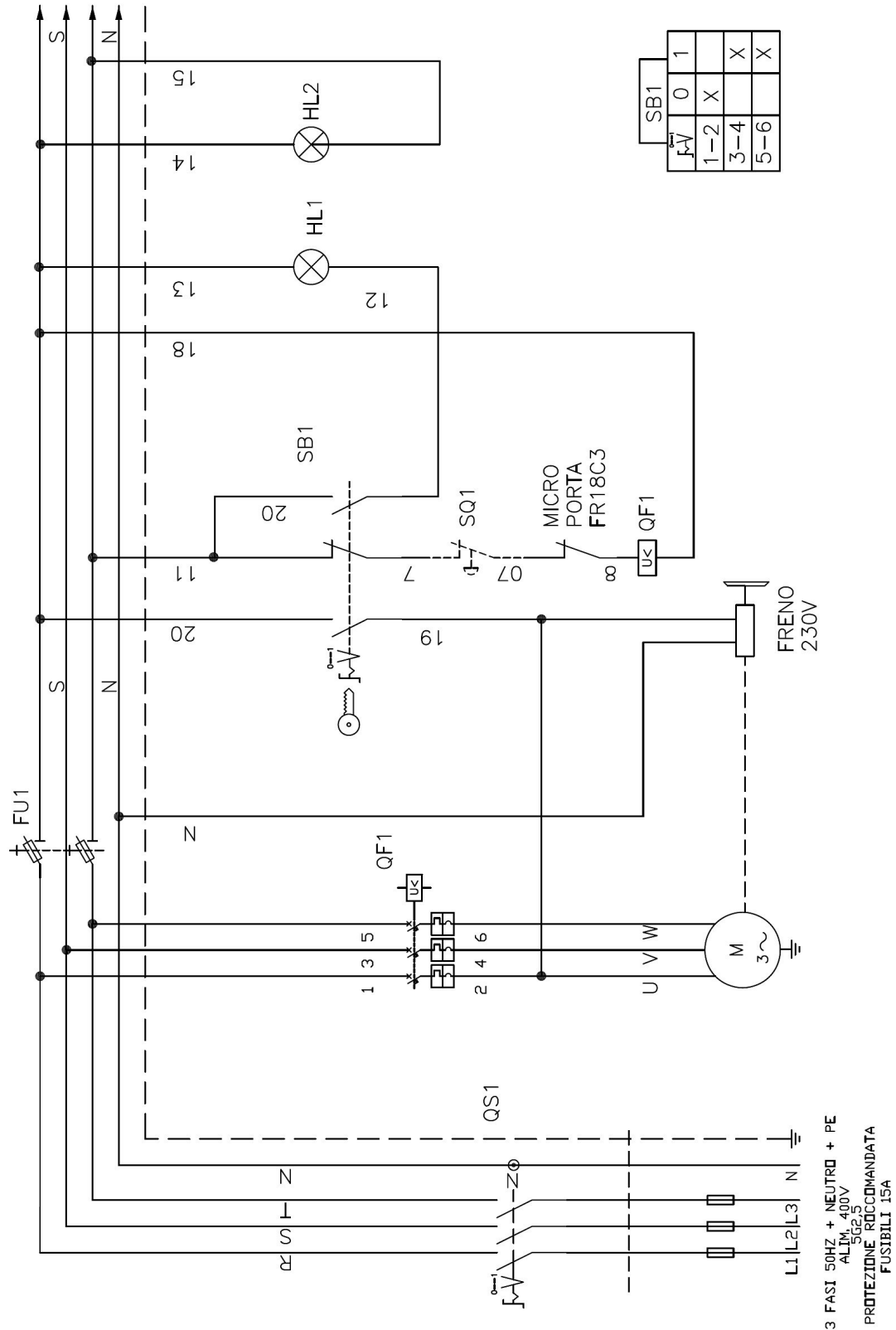
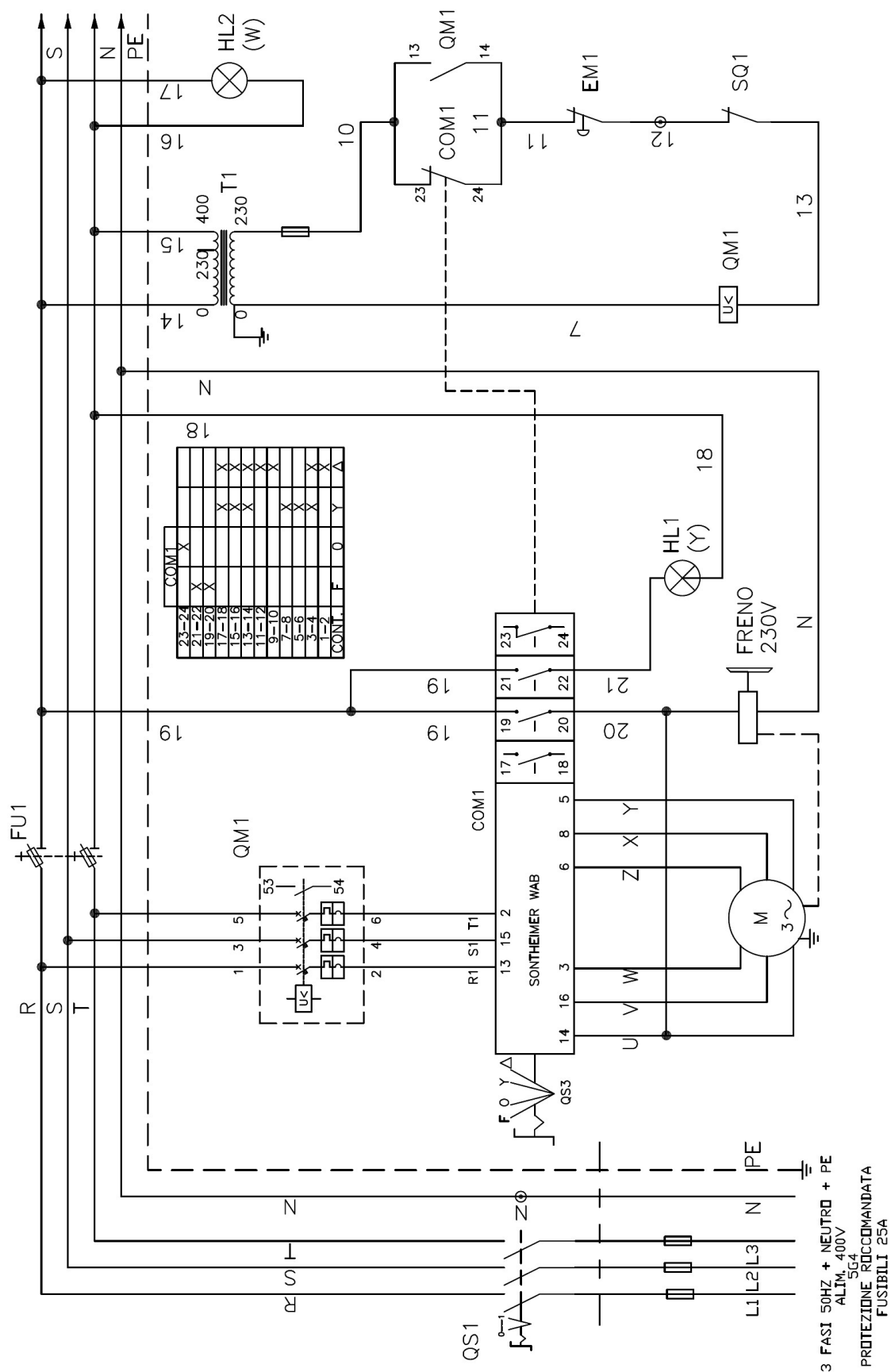


Fig. 45: Electrical wiring diagram 1 HBS 540 AS and HBS 640 AS

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HBS AS-Series | Version 2.14

14 EC-Declaration of Conformity

According to machinery directive 2006/42/EC Annex II 1.A

Manufacturer/carrier: Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

hereby declares that the following product

Product group: Holzkraft® Holzbearbeitungsmaschinen

Type of machine: Wood Band Saw

Designation of the machine *:

- ☐ HBS 540 AS
- ☐ HBS 640 AS
- ☐ HBS 740 AS
- ☐ HBS 840 AS
- ☐ HBS 940 AS

Item number:

5152154
5152164
5152174
5152184
5152194

Serial number*: _____

Year of manufacture*: 20____

*please fill in according to the information on the type plate

complies with all relevant provisions of the abovementioned Directive and of the other Directives applied (hereafter referred to), including their amendments in force at the date of this declaration

Applicable EU directives: 2014/30/EU EMC-Directive
2012/19/EU WEEE-Directive

Applicable EU regulations: 1907/2006/EU REACH-Regulation

The following harmonised standards have been applied:

DIN EN ISO 12100:2011-03	Safety of machinery - General principles for design Risk assessment and risk reduction
DIN EN ISO 13849-1:2016-06	Safety of machinery - Safety-related parts of control systems
DIN EN 60204-1:2019-06	Safety of machinery - Electrical equipment of machines
DIN EN 1005-4:2009-01	Safety of machinery - Human physical performance
DIN EN 614-1:2009-06	Safety of machinery - Ergonomic design principles
DIN EN 19085-16:2022-05	Woodworking machines - Safety - Part 16: Table band saws and band re-saws

Responsible for documentation: Kilian Stürmer, Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 14.04.2022



Kilian Stürmer
Managing Director



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